

21st MEETING OF THE IHO CAPACITY BUILDING SUB-COMMITTEE
IHO-CBSC21
Tokyo, Japan
7-9 June 2023

REPORT

1. Opening Remarks, Introductions and Administrative Arrangements

Docs: CBSC21-01A List of Documents (Chair)
CBSC21-01B List of Participants (Chair)
CBSC21-01C CBSC Membership (Chair)
CBSC21-01D ToR and RoP (Chair)
CBSC21-01E ToR for the CB Coordinators (Chair)

The 21st meeting of the IHO Capacity Building Sub-Committee (CBSC) took place in Tokyo, Japan, hosted by the Hydrographic and Oceanographic Department, Japan Coast Guard (JHOD) from 7 to 9 June 2023. The meeting was chaired by Mr Evert Flier Chair of the CBSC.

The meeting was opened by the Chair, who in his opening address thanked JHOD for hosting this meeting and expressed that Japan plays a big role in the IHO Capacity Building (CB). CB is very complex like planting seeds and hoping that they grow which not always happen but in the activities supported by Japan CB most of the beneficiaries continue to work on the area maybe due to the continuous connection that is also an important part of the programme. He expressed the happiness to have the participants in person but, unfortunately three CB Coordinators were not able to attend the meeting.

Dr Masayuki Fujita, Director of the JHOD, welcomed the participants and expressed gratitude for the participants' support. CB is one of the most important subcommittees of the IHO since it provides an important contribute to raise the Hydrographic Capacity. Japan has a long history of cooperation through the Nippon Foundation and also enhanced the JICA Hydrographic course that has a long history of cooperation with 450 participants from 45 countries. The mission of CB is very important and wished that the meeting provides an important contribute to the safety of navigation.

IHO Director Luigi Sinapi expressed the gratitude to the Japan Hydrographic and Oceanographic Department (JHOD) of the Japan Coast Guard for hosting the 3 meetings (IBSC46, CBSC21 and IRCC15) which demonstrates the commitment of Japan and JHOD in supporting the Hydrographic Community. He enhanced the importance of this meeting after the 3rd Session of the IHO Assembly and the start of the 3-year cycle mentioning the approval of a search for new forms of funding, wishing everyone a very fruitful Meeting.

The participants had a group photo and then Ms Noriko Ohori from JHOD provided logistical guidance and information to the participants.

2. Approval of Agenda

Doc: CBSC21-02 Agenda and Timetable (Chair)

The participants were invited to comment on the agenda and timetable and update where necessary. The Chair informed that the time of the group Photo was moved and proposed to reduce the lunch breaks to one hour with the agreement of all. The Secretary informed the meeting that there will be a presentation from JICA and that will try to have the reports from the CB Coordinators not present, by VTC. The agenda was adopted.

Decision 1: to approve the Agenda of the CBSC21 Meeting (doc. CBSC21-02V03).

3. Matters arising from Minutes of CBSC20 and CBSC21 Intersessional (CBSC20 Int) Meetings

Docs: CBSC21-03A Minutes of CBSC20 (Chair)
CBSC21-03B Minutes of CBSC21Int (Chair)
CBSC21-03C Status of Action List from CBSC20 (Secretary)
CBSC21-03D Status of Action List from CBSC21 Int (Secretary)

The CBSC20 and CBSC21 Int Minutes had been available on the website and were open to comments from the members, but none were received. The Secretary went through all actions of the List of Actions from CBSC20 and CBSC21 Int not concluded and updated the information with the current status of each.

Thomas D. mentioned the former IRCC Workshops connected to the SPI's.

On CBSC20/Action 3 – JICA will provide a presentation to this meeting.

Chair clarified that the work related with C-55 is not only related with the future contents but also about the SPI's to IRCC. Thomas D. informed that is important to look ahead for the future, something that is useful and more realistic. Director Sinapi informed that if nothing changes the Secretariat will continue with the measure of the SPI's and the inclusion on the IHO Annual Report.

Regarding CBSC21Int/action 3 Henri D. will provide contribute to Procedure 9 at CBSC22.

Decision 2: to approve the Minutes of CBSC20 and CBSC21 Intersessional Meetings (doc. CBSC21-03A and CBSC21-03B).

Decision 3: to approve the List of Actions from CBSC20 and CBSC21 Int (doc. CBSC21-03C and CBSC21-03D).

4. Reports by the Chair and the IHO Secretariat

Docs: CBSC21-04A Report by the Chair (Chair)
CBSC21-04B Report by the IHO Secretariat (IHO Secretariat)

The Chair described the activities that were executed in 2022 and the respective progress. There were more Technical Visits and other CB activities, but there still some activities that needed to be moved to the following years and this reduce the impact of the budget reduction. But in reality, the budget for the next years will be reduced. However, there are intentions to find additional sources of funding. The 3rd IHO Assembly received a proposal in that sense that attributed a task to IRCC and the Chair would like to discuss this issue during this meeting. The PMB meeting in ROK provided the confirmation that the support to the e-Learning Center will continue, even after the establishment. It is necessary to discuss the Center that have an agenda item attributed. The Empower Women in Hydrography project continued to progress with a stand on the A-3 and some participants that were funded to Attend the Assembly. Also, there was an event related with this project with a great speech by Ms Aviva Cox who reminded that we should think of the name of the project, that it's not about empowering Women they are already empowered, it's about the gender balance and equality. Just looking at this meeting with three woman on the meeting room it is clear that there is the need of some progress. Three of the CB Coordinators unfortunately are not in person in the meeting, we will try to have the reports by VTC, but is not about that, is about to have them with us. The Chair expressed the need to liaise with the countries to improve the situation.

Director Sinapi provided the Report of the IHO Secretariat highlighting that the IHO still with 98 MS. He reported on the outcomes of IHO Assembly with the meeting of the Finance Committee and the meeting of the Heads of Delegations that took place on Monday afternoon, 1 May 2023 at the Grimaldi Forum in Monaco, as well as an event on the Empowering Women in Hydrography (EWH) project. During the Opening Ceremony for the Assembly seven new Member States presented their flags. The Industry and the Member States exhibition occurred in the same period of the A-3 at and the USNS Bruce C. Heezen was present in the Port of Monaco.

The Secretary informed that at IBSC46 there were two important decisions that will have implications on the CB, the first related with the revision of the Standards that probably will imply the adjustment of the courses contents, the other related with the decision to start also the recognition of Subjects of the S-5 Standards in addition to the full courses.

5. Regional Assessment of CB Activities

5.1 Reports of the Regional Hydrographic Commissions (RHC)

<i>Docs: CBSC21-05.1A</i>	<i>NSHC Report</i>
<i>CBSC21-05.1B</i>	<i>MBSHC Report</i>
<i>CBSC21-05.1C</i>	<i>BSHC Report</i>
<i>CBSC21-05.1D</i>	<i>USCHC Report</i>
<i>CBSC21-05.1E</i>	<i>EAtHC Report</i>
<i>CBSC21-05.1F</i>	<i>EAtHC Report</i>
<i>CBSC21-05.1G</i>	<i>SEPRHC Report</i>
<i>CBSC21-05.1H</i>	<i>SWPHC Report</i>
<i>CBSC21-05.1I</i>	<i>MACHC Report</i>
<i>CBSC21-05.1J</i>	<i>SAIHC Report</i>
<i>CBSC21-05.1K</i>	<i>NIOHC Report</i>
<i>CBSC21-05.1L</i>	<i>RSAHC Report</i>
<i>CBSC21-05.1M</i>	<i>SWAtHC Report</i>

The Chair informed that the Nordic HC, the North Sea HC, the Baltic Sea HC and the Arctic RHC will not present a report. They have no CB requirements but nations actively support other regions in CB.

CBSC21-05.1C BSHC Report

Thomas Dehling informed that Lithuania is the only state that is not an IHO MS. They have some projects funded by the European Commission (EC) to fund not only education but also surveys and equipment. There also some good additional expectations of more funded projects that will involve the majority of the MS. The EC is willing to support more projects not only in the Europe but this implies coming up with good projects.

The Chair enhanced that to have approval of this projects requires that the projects are very well prepared which involves specialized resources, having someone that knows how to trigger the right points and have proposals that highlight the importance and a wider effect.

Evert F. and Thomas D. emphasized the importance to have additional information about the process to apply.

Thomas D. mentioned that will be important to use the consultants that are already in the EC by the respective countries.

Director Sinapi mentioned that GEBCO experienced a similar situation with the external advisers.

CBSC21-05.1B MBSHC Report

Emre Gulher presenting by VTC, reported on the workshops on: Cartographic Data Management and on MSDI Development and Implementation. For 2023 they plan to have the funded workshop on MSI development and Implementation. The Courses delivered by the Spanish Hydrographic office with support opportunities for students from other countries were described and the 3-year CB Work Plan was presented.

The Chair thanked and expressed the hope that the CB Coordinator can participate at the next CBSC Meeting in-person.

CBSC21-05.1D USCHC Report

Matt Borbash presenting on behalf of Jen Landry informed that the region identified several computer Based Training courses, and they are willing to contribute to the IHO e-Learning Center. US and Canada both contributed with mentors to the EWH Mentorship program. Then he resumed on the recognized courses by the IBSC available in Canada and US.

Action 1 – USCHC to liaise with the E- learning Center Steering Committee to identify the way to progress on the provision of computer Based Training courses to the Center. (CBSC22)

CBSC21-05.1E EAHC Report

Commodore Dyan Primana from Indonesia informed about the EAHC TRDC Meeting in February 2023, in Indonesia with the election of a new EAHC TRDC Chair Mr Renny Lilik Asmoro. Then the meeting received updated information on the Countries of the region CB Phases.

He reported on the CB activities in 2022 and on the planned activities and proposals for 2024, asking if there are any other regions with activities in Hybrid mode to inform EAHC.

France asked why Brunei a rich country has a poor capacity. UK informed that had a student from Brunei in a Cat.B Course.

Thomas D. thanked EAHC for including the information on Brunei on this report mentioning that maybe they do not need funds but need the knowledge, concluding that CB is much more than only Budget.

Action 2 - CB Coordinators to inform on the hybrid activities available for participants of other regions to be inserted on the IHO Calendar. (Permanent)

CBSC21-05.1F EAHC Report

Henri Dolou presented on Behalf of Julien Smeekaert mentioning that in Africa the mobile phone is more used than the computer. He reported on the seminar in Cabo Verde and the Technical Visit (TV) to Sierra Leone and Mauritania and then, the activities planned for this year were described. A TV to Morocco was done to help to prepare for the IMO Audit and get in touch with IALA that has procedures to prepare IMO audits.

The courses available in Spain, Portugal and France were mentioned and France developed E-learning modules to MSI and Cat B Hydrography courses.

He reported on the challenges of the region, mentioning the need to have a recognized course in African Members States with Nigeria having a school but without a recognized course.

In his opinion is necessary to have an inclusive approach on the TVs and enhanced that there are satellite data dedicated to the marine environment free of charge. During the TV is necessary to contact as much people as possible and the in-person events are very important and this is one of the objectives of the workshops. Also, on the TVs is necessary to have a follow up.

The Chair thanked for the impressive report enhancing that not all nations have access to computers so maybe there could be something to be considered by the IHO.

In relation with the IMO audits Director Sinapi highlighted the strong collaboration with IALA that is very well structured, and asked if there should be an HL Visit after the TV mentioning that the IHO is very engaged with the Mauritania Government.

The Chair enhanced that the involvement of Oceanography on the discussed topics is very important and also recommended the CB Coordinators to read the reports of the Technical Visits.

Lucy F. enhanced the CB support from Portugal and that it is important that the P-5 is updated with the information of the TVs.

Thomas D. mentioned that there was more cooperation in the past with IMO and IALA, about the combination of the HLV with the TV he expressed that there is not a perfect solution depending on the country.

Saied P., about the IHO/IALA TV informed that Iran is happy to have it before the IMO audit.

Thailand mentioned that in the preparation to the IMO audit it would be good to have the checklist in advance.

CBSC21-05.1G SEPRHC Report

Felipe Barrios CB Coordinator presented the report by VTC mentioning that 2022 was a very good year for the region with two funded projects, the “Bathymetric Database Management” in Guayaquil, Ecuador with 15 attendees (11 SEPRHC, 2 SWAtHC, and 2 MACHC) and the P-36 Workshop on MSI in Colombia with 21 attendees (17 SEPRHC, 2 SWAtHC, and 2 MACHC).

Peru sent also an attendee to the SWAtHC P-40 “Port and Shallow Water Survey Course”. Unfortunately, in 2023, no CB activities were funded. The hydrographic offices have funds restrictions, so he was not able to attend CBSC21 Meeting in-person.

The challenges are mainly related to the budget constraints and to the lessons learned, the SEPRHC States work hard to maintain and increase the respective CB. The region presented only one project to 2024.

The Chair enhanced the collaboration with the neighboring regions and the fact that all states passed phase 1 of the CB, so it is difficult to have approved projects in phases 2 and 3 but encouraged him to continue to submit the projects.

CBSC21-05.1H SWPHC Report

Matthew Borbash CB Coordinator presented the Report starting with the activities developed, highlighting the technical Workshop on Hydrographic Governance held back to back with SWPHC20 in February 2023. In 2023 is also planned an MSI Regional Workshop (Fiji 25-27 July). For 2024 the Region has only one proposal for a Workshop on Disaster Response to be held in conjunction with SWPHC21.

He asked if there are some TOR for the NHCC and Thomas D. mentioned that there

are some examples of TOR in C-16, Henry D. mentioned that he has the TOR from Morocco.

Matt B. suggested that a way to get some attention and funding is to put Hydrography as a part of the NSDI.

CBSC21-05.1I MACHC Report

Lucy Fieldhouse the CB Coordinator reported on the activities completed since the CBSC20 highlighting the Seminar on Raising Awareness of Hydrography that preceded MACHC 23 with 11 funded participants. She also mentioned the importance of other regions' invitation for some Members of MACHC to participate in their CB activities. Two High Level Visits (HLV) and 3 Technical Visits (TV) are planned for 2023 along with a Tides Workshop and an MSI Course. The environmental disasters and the number of non IHO MS along with the lack of Hydrographic Governance are the main challenges. On the achievements, the MSDI awareness increased in the region and they continue to look for other regional partners.

The Chair mentioned that the Joint CB cooperation meetings were interrupted, the Secretariat informed that this activities were interrupted due to the COVID situation and did not started yet due to the intensive activity this year because of the A-3. Thomas D. informed that the meetings were informal meetings and started first with IMO and IALA and then expanded to the other organizations that participated as informative meetings.

Decision 4 - CBSC recommended the IHO Secretariat to restart the Join Cooperation meetings.

Decision 5 - CB coordinators should try to Collaborate with other RHCs on CB training of common interest to maximize the use of CB funds (permanent).

CBSC21-05.1J SAIHC Report

Lucy Fieldhouse the CB Coordinator reported on the activities completed since the CBSC20 with 3 Technical Visits (TV) to Tanzania, Comoros and Madagascar, thanking Henry D. for the collaboration in the TV to Tanzania. For 2023, 3 activities are planned, a Seminar on Raising Awareness of Hydrography, an MSI Course and ENC Training for Mozambique.

The CB cooperation developed by Portugal in EAthC and SAIHC was enhanced and the work of the PCA's in the region was acknowledge.

CBSC21-05.1K NIOHC Report

Lucy Fieldhouse the CB Coordinator reported on the Hydrographic Awareness Seminar held in August 2022, Bali Indonesia. For 2023 3 activities are planned, an MSI Course, a Seminar on Raising Awareness of Hydrography and a CB workshop and Regional CB Analysis work.

The region faces communication issues, it is necessary to build sustainable Hydrographic Services and to develop Phase 2 capacity. She also informed on the achievements in the Region.

CBSC21-05.1L RSAHC Report

Saeid Parizi CB Coordinator informed that the region was renamed since before was

the Persian Gulf and that is known as the world Oil Reservoir. The region is composed of 12 coastal states being only 9 IHO Member States. IALA is an observer of the Region that is Chaired by Captain Yahya Al Balushi (Oman). They have 3 activities planned for 2023, a TV to Iran, one S-101 Production Course and one MSI Course. He presented the activities proposed for 2024 and for 2025 with 5 projects for each year.

He informed the Meeting that the region has the availability to conduct courses proposed mentioning that will run the courses and have the instructors. He resumed on the Challenges of the region and on the achievements and lessons learned.

Director Sinapi suggested including also the MBSHC in the cooperation projects.

Thomas D. thanked for the efforts of Saied.

The Chair recognized the effort of Saeid Parizi in the many years of making things work in this very challenging region.

CBSC21-05.1M SWAtHC Report

Helber Carvalho CB Coordinator presented the Report by VTC starting with the assessment of CB Phase stage. The region has 3 full Members, one Associate Member and one Observer. He reported on the activities executed in the region in 2022 with a Hydrographic Awareness Seminar in a hybrid format with 41 participants, a course on "Port and Shallow Waters Survey" with 17 students and a Technical Visit to the National Naval Hydrographic Service (SNHN) of Bolivia, also two representatives participated in the MACHC - Maritime Security Information Workshop – MSI and other two on the SEPRHC - Workshop for Hydrographic Database Administration. For 2023 the region plans to have 3 activities and 4 for 2024.

The challenges in the region are associated with the S-100 implementation, MSDI and Big Data and to encourage Paraguay and Bolivia to join the IHO.

In the Conclusions was expressed the importance of the CB for all countries and the importance in joining forces to optimize resources.

5.2 Update and closure of the 2022 CBWP

Docs: CBSC21-05.2 Closed 2022 CBWP

The secretary informed that the CBWP 2022 was closed at the CBSC21 intersessional meeting and it is available in the respective webpage.

6. Regional or other projects for CB

Docs: CBSC20-06.0 JICA Maritime Cooperation

CBSC20-06.1 JICA Training Course on hydrographic survey

Mr Ikeda from Japan International Cooperation Agency (JICA) presented on the history of JICA cooperation having the safety of navigation as priority and the courses that they have for developing countries. An overview of the projects was provided that are not fixed kinds of projects, being specific towards the identified needs more focused on the technical transfer and in the people development.

Thomas D. mentioned that there are some links with the CB projects, on the other side it will be good to have information on the JICA projects to better manage the CB projects. More than 1000 persons worked to JICA. LS asked if they have connections with other organizations such as NF and Universities and JHOD, they have.

Kentaro K. from JHOD reported on the JICA Training course “Hydrography for Charting and Disaster Management” that is recognized by the IBSC with Category B. The course has a duration of 6 months and is conducted by JICA, having already 450 trainees from 45 countries. Last course in 2022, due to the COVID-19 was delivered in hybrid mode (first half: online, second half: face to face). The process to apply was also described starting with a Survey to the target countries send by JICA. If there are enough requests maybe JICA decides to run a course. JHOD does not accept applications.

Action 3 - CB coordinators to disseminate the information about the JICA Hydrographic Cat. B course and the way to apply, to the members of the respective regions. (Permanent)

7. Outcomes of the 5th meeting of the IHO Council and the Strategic Issues of the CBSC

*Docs: CBSC21-07A Decisions and Actions from C-5 (Secretary)
CBSC21-07B IRCC CL01/2021 (Secretary)*

The Chair considered that this agenda item was covered by the IHO Secretariat Report.

8. Operational issues of the CBSC

8.1 Report of the C-55 PT

The Chair reported on the progress of the PT informing that one issue is the definition of “adequately surveyed” and the need to liaise with the IHO DQWG. PRIMAR was contacted to provide CATZOC information but informed that have not enough staff to prepare the necessary information. The Chair had some meetings with WWNWS to see how C-55 can be linked to the WWNWS website and the WWNWS Chair will do a demonstration of the site at IRCC15. The IHO Secretariat needs to provide a snapshot of C-55 by the end of the year to allow the evaluation of the progress.

The Chair informed that this is the short-term solution, but it is also necessary to think about the long-term solution. Thomas D. agreed with this two steps plan. IRCC and HSSC liaised to have a definition of the adequately surveyed areas, but it is necessary to define the long-term solution.

Director Sinapi explained the need to use long-term SPI's and the intention to proceed with this procedure until 2026. Thomas D. mentioned that on the long term is necessary to think on the SPI's and what should be included or change for the next Strategic Plan.

The Chair mentioned the need to have some guidance from the IRCC or the Council. Thomas D. expressed the concern that the decision on the way to measure the SPI's is not visible to the DQWG community.

The Chair mentioned that this Subcommittee is not the best place to discuss the future solutions that need to be decided outside. Thomas D. agreed but proposed to discuss the way forward at CBSC to not lose too much time and informed that CBSC can address directly the HSPT and the DQWG, since that was agreed with the HSSC Chair.

The Chair mentioned that the starting point is related with, what are the main users of C-55 and what they really need. Johnathan Justi informed on the issues for the States in providing the values and a question is if really C-55 meet the needs of the IMO and if the measures is going to change, it worth's the effort?

Thomas D. expressed the need to have something measurable and the works to everyone. Worldwide is important to have the figures for the areas where we don't have information, so is recommended to not make it too much sophisticated.

The Chair expressed that in his opinion the short term solution might stay longer in use.

Thomas D. mentioned that when a CB Coordinator looks at the region to decide where the funds should be invested, he needs to have figures that helps the decision. The Chair agreed

that is necessary numbers but also have additional information for instance about the traffic in the areas.

Thomas D. mentioned that the users are not happy with C-55 but the IMO is sufficiently satisfied, however, the information is not enough to try to ask support to some donors. Some RHCs have different solutions but they still report to C-55 and their solutions do not fit other regions due to a lack of capabilities. The Chair mention that is necessary to have a better way to input the data and this can be a long-term solution. The Seabed 2030 already does an assessment by areas and the RENCs already have the CATZOC solution. John N. enhanced the need to be very careful about the complexity of collecting data and reporting.

Thomas D. projected the way to measure SPI 1.2.2 and the way to use the CATZOC, since the higher Usage Band implies that there is traffic. Some countries use the CATZOC but some countries are reluctant to use CATZOC since it can provide the wrong focus. Chair informed that France and UK use the CATZOC. He enhanced that for the extension of future C-55: A new CBSC PT was tasked at CBSC20 "to focus on the content of C-55 to better reflect both the requirements for safety of navigations and the use of hydrographic data for non-navigational purposes".

For non-navigation proposes the Chair considers that the Seabed 2030 information is enough in his opinion and expressed the uncertainty about how to develop this further.

Lucy F. informed that IRCC11/Recommendation 5 states: to encourage Member States to use CATZOC to generate the input for C-55 in a consistent and harmonized way. CBSC Report to IRCC12 informed that C-55 is an important external IHO document, used by IMO as source for the status of survey and cartography worldwide. Our present method of inserting data for the survey status is resource demanding for the member states, allows for different interpretations and differentiates for only two depth intervals (<200m, >200m). The C-55RPT was tasked to deal with these challenges. As a temporary solution, accepted by IRCC11, we can now insert data into C-55, extracting CATZOC automatically from the RENC's, and dividing the low depth interval in two: 0-50m and 50-200m. This allows for much needed harmonization of data insertion and for the data becoming more navigationally relevant.

The CBSC will wait for instructions from IRCC.

8. Operational issues of the CBSC (Continued)

8.2 IHO E-Learning Center

Docs: CBSC20-08.2 CB E-learning Project Team (PT Chair)

Helber Carvalho the Chair of the e-Learning Center Project Team (PT) provided a report with the Goal and objectives of the Center. In the achievements was highlighted the establishment of the IHO e-Learning Center (ELC) and the conclusion of the respective Guidelines that are ready for approval. Since December 2021 the ELC registered 447 users from 111 Countries.

The Chair asked if the low completion rate of the course can be associated with the tests, the Secretary informed that there was a general request to test the Center so some participants just connected to test the system and not to complete the courses, this objectives changed on the last times.

The Chair thanked and congratulated the work of the Project Team and ROK for the support to this important project with a great potential.

Thomas D. informed that IRCC will ask the IHO Secretariat to issue a CL to inform the Member States on the establishment of the Center.

Decision 6 – The Guidelines for the E-learning Center (Doc. CBSC21-08.2 – Annex) developed by the respective Project Team were approved.

Decision 7 – CBSC decided to disband the E-learning Center Project Team since the establishment of the Center is completed.

Action 4 – CBSC Chair to request IRCC to create a Steering Committee in liaison with the IHO Secretariat, since the establishment of the E-learning Center is completed, having in consideration the recommendation mentioned in the E-learning Center Guidelines.

8.3 IHO Empowering Women in Hydrography (EWH) Project

Doc: CBSC20-08.3 Empowering Women in Hydrography (EWH) Project update (Secretary)

Leonel M. the CBSC Secretary briefed the Meeting on the achievements of the IHO Empowering Women in Hydrography (EWH) Project highlighting the recognition as a Project of the United Nations Decade of Ocean Sciences for Sustainable Development (2021-2030), the EWH Mentoring Programme, the Survey on the Gender balance, the Letter of intent between IHO and World Maritime University and the 3rd Session of Assembly event Empowering Women in Hydrography.

Nigeria expressed the satisfaction and the appreciation for this project and also recommended to have clear objectives to monitor the outcomes regarding the respective contribution.

The Chair thanked and mentioned the importance of the project and that there is not a one solution fits all, the responses received for the survey conducted by the Secretariat were only 44 and recommended to have a survey every 3 years. Saied P. mentioned that Iran has several women working in Hydrography and proposed to have more detail in the survey. Director Sinapi informed that in the IHO webpage there are already information about the Member States.

The Secretary suggested that if the Project proceed, maybe Iran can be invited to do a presentation, in a webinar, regarding the gender balance in Iran.

The IHO Secretariat informed that the continuity of the project will be discussed soon in a parallel meeting.

Action 5 - CBSC Chair to propose IRCC to invite the IHO Secretariat to issue a CL every 3 years to ask the individual MS figures on the percentage of female's employees and on their numbers on leadership positions, and to report on obstacles to improve gender balance. (IRCC15)

Decision 8 – to have the Gender Equality as a permanent item in the agenda of the CBSC annual meetings. (Permanent)

8.4 CBSC Statistics

Doc: CBSC20-08.4 Statistics (Secretary)

The CBSC Secretary updated the meeting on the CBSC Statistics highlighting that the number of funded activities but not completed has dropped, an evidence that COVID is decreasing the impact. The number of delivered activities are starting to return to normal figures. In 2022 there were 152 students (this excludes the EWH projects and webinars).

Action 6 - CB coordinators to report to the CB Assistant on the students attending remote activities. (Permanent)

8.5 CB Procedures

The changes to Procedure 11 were evaluated and the Secretary asked if in the assessment the column with the NHC or NHCC information should be replaced by Phase 0, in accordance with the CB Strategy, or a new column should be added to include Phase 0 and maintain the column with the NHC or NHCC information since it would be good to maintain this important information.

Decision 9 - On the revised Procedure 11 a new column should be added to include Phase 0 and maintain the column with the NHC or NHCC information.

8.6 Review of the 3-year RHC Work Plans 2023-2025

<i>Docs: CBSC21-08.6A</i>	<i>MBSHC 3-year Work Plan</i>
<i>CBSC21-08.6B</i>	<i>EAHC 3-year Work Plan</i>
<i>CBSC21-08.6C</i>	<i>EAtHC 3-year Work Plan</i>
<i>CBSC21-08.6D</i>	<i>SEPRHC 3-year Work Plan</i>
<i>CBSC21-08.6E</i>	<i>SWPHC 3-year Work Plan</i>
<i>CBSC21-08.6F</i>	<i>MACHC 3-year Work Plan</i>
<i>CBSC21-08.6G</i>	<i>SAIHC 3-year Work Plan</i>
<i>CBSC21-08.6H</i>	<i>NIOHC 3-year Work Plan</i>
<i>CBSC21-08.6I</i>	<i>RSAHC 3-year Work Plan</i>
<i>CBSC21-08.6J</i>	<i>SWAtHC 3-year Work Plan</i>

MBSHC 3-year Work Plan

The three-year Capacity Building Work Plan was not presented but it is available on the CBSC21 webpage.

EAHC 3-year Work Plan

Renny Asmoro from EAHC presented the five-year Capacity Building Work Plan that was discussed at the EAHC Meeting and is revised every year. He mentioned, for 2023, a Basic (Carto) Workshop that probably will be run by individual Members States and in 2025 a Basic (Hydro) Workshop supported by the Members States, having again in 2026 a Basic (Carto) Workshop. The Capacity Building activities enhanced navigational safety in the region but there still are some differences among the Members States capacity.

The Chair enhanced the appeal of the EAHC Members States to contribute to the CB Programme.

EAtHC 3-year Work Plan

Henri Dolou presented on behalf of Julien Smeekaert EAtHC CB Coordinator mentioning that many non-IHO Members States express the need for training in phase 2 and 3, but they don't have access.

The projects planned for 2023, 2024 and 2025-2026 were presented and he reported on the important progress in some countries that now have some important "National" hydrographic capacities (i.e. survey ships) like Morocco, Ghana, Nigeria and Angola. Some ideas on the support to increase the hydrographic capacity are provided on the Report.

The Chair thanked for the Report and for the new ideas and enhanced the non-access to IHO courses of phase 2 and 3 which is very important but not aligned with the CB Strategy.

Thomas D. mentioned the link between the countries that ask for phase 2 and 3 and the fact that the train will be directed to the future decision-makers which could help in convincing the governments to join the IHO, so it should be discussed how to improve this influence.

The Secretary asked if, in case the seminar “20 Years of Capacity Building Actions in EAtHC Assessment and Prospect” is funded, it will be possible to have a presentation to the CBSC on the outcomes and conclusions, since it will be important to the Sub Committee.

Nigeria mentioned that in Africa is necessary to address the ministerial level and to pass the information about the importance of the Hydrography for all the Maritime activities.

SEPRHC 3-year Work Plan

The three-year Capacity Building Work Plan contains the projects proposed to the 2023CBWP but not funded. For 2024 only one project was proposed and there is the intention to present 5 for 2025 CBWP. Information is also provided on the Regular courses, internships, cruises and surveys in the Region.

SWPHC 3-year Work Plan

The three-year Capacity Building Work Plan for 2023-2025 was presented with the request to carry over the Workshop on Disaster Response to 2024.

MACHC 3-year Work Plan

Lucy Fieldhouse MACHC CB Coordinator presented the three-year Capacity Building Work plan that includes for 2023, 5 Visits and a Tides workshop. For 2024, five activities were submitted and also the intentions for 2025 were shown.

SAIHC 3-year Work Plan

Lucy Fieldhouse SAIHC CB Coordinator outlined the four activities funded for 2023, with the Technical Visit to Madagascar already executed. For 2024 five projects were submitted and for 2025 probably will be submitted three in addition to the Technical Visits that will be identified.

NIOHC 3-year Work Plan

Lucy Fieldhouse NIOHC CB Coordinator informed on the funded activities planned for 2023, on the activities submitted for 2024 and also on the intentions for 2025.

RSAHC 3-year Work Plan

Saeid PARIZI, RSAHC CB Coordinator presented the three-year Capacity Building Work mentioning the three activities planned for 2023 with a Joint Visit to Iran by the IHO & IALA and two other activities that were executed with other regions to share resources. For 2024 six projects were submitted, five in conjunction with NIOCH and a

Technical Visit to Iraq a recent IHO Member State. For 2025 more joint activities are planned and also a Technical Visit to Kuwait.

SWAtHC 3-year Work Plan

Helber Carvalho, SWAtHC CB Coordinator presented the three-year Capacity Building Work Plan starting with the activities planned for 2023. He presented also the proposed activities for 2024 and the ones planned for 2025. For the CB activities, when possible, participants from other regions are invited, having an intense cooperation with the neighboring Hydrographic Regions.

8.7 Proposal on the A-3 to establish a task Force to raise Funds

John Nyberg informed on the outcome of the 3rd IHO Assembly to establish a Task Force under IRCC to explore the potential merits, structures, and options for alternate fund generation to support capacity building and other IHO initiatives. One idea was to generate some funds from the sale of ENC's with IC-ENC and PRIMAR and is expected to have some agreement on that. Another way is to present proposals to donors and maybe use some money to contract the right persons to draft the proposals.

It is expected to have in the Task Force representatives from the IHO Secretariat and from the technical part. The Chair informed that GEBCO had a PT for funding and hired two consultants. It is important that the task force has people able to prepare the proposals.

Saeid P. asked about the value of the revenue from the ENCs, the Chair informed that the price is up to the nations, it will be important to agree on the principle. The principle is that with better Capacity Building the ENCs will be better, and the ships will directly benefit, since they will have optimized cargoes and routes. John N. called attention to the fact that the RENCs might want to have an opinion on the ways to spend the money and one option may be the creation of a foundation. Ayo O. expressed the need to reach the best sources of potential financing. The Chair emphasized that when some funds are reached is necessary to invest in ways to get more funds. Jonathan Justi asked if there are any lessons learned from the past tentative to have funds from the World Bank. Thomas D. mentioned that it just deserves to go to these agencies if all is well prepared and includes the effects on the aspects there are interested. Director Sinapi informed that this year there will be a meeting with philanthropes in Monaco.

Thomas D. expressed the expectation that the ideas that were gathered here are presented to IRCC and see the CBSC as an important player in the Task Force.

9. CB Management

9.1 Update on the 2023 CBWP

Doc: CBSC20-09.1 Updated 2022 CBWP (Secretary)

The Secretary informed the meeting on the need to decide if the funded activities of the 2023 CBWP that are not executed in 2023 could be carried on to the 2024 CBWP.

Decision 10 – the funded activities in the 2023 CBWP that are not executed in 2023 could be carried on to the 2024 CBWP.

9.2 Finance Report

Doc: CBSC20-09.2 Finance Report (Secretary)

The Secretary introduced the Finance Report with the balance of 2022 and the expected balance for 2023 if all activities are executed by the estimated values as well as the expected income into the CB fund for 2024. If there is no surplus or any additional contribution the total fund available for 2024 will be 127,962.79 euros. It was enhanced the contribute of ROK with 40,000 euros to the non-earmarked projects.

The Meeting approved the Finance Report.

Decision 11: the Finance Report was approved.

9.3 Management Plan

Doc: CBSC20-09.3 Draft 2023 CB Management Plan (Secretary)

The Secretary presented the 2024 CB Management Plan with all 26 received submissions prioritized by the total of points for each one.

SWPHC CB informed that since the “Workshop on Disaster Response (SWPHC2023-01)” will be carried on from the 2023 CBWP to the 2024CBWP, will withdraw the submission with a value of 35,000 euros.

SAIHC for the same reason withdraw the “Raising Hydrographic Awareness” submission which implied an additional value of 20,100 euros.

Thomas D. mentioned that is good to keep the attribution of funds within the available budget.

The meeting discussed the submissions to be funded. The S-101 activities were discussed and concluded that if the RENCs have courses for the Members available for free, the regions should address the RENCs.

The Secretary recommended that the decision about don't allow to carry over the funded activities from one year to the following should be made in the year before, in order to allow the CB Coordinators to have this information ahead.

Decision 12: to increase the following submissions on Procedure 4 item 9 from 0 to 3 points:

MACHC	High Level Technical Visit to Colombia
SWAtHC	Seminar on Raising Awareness of Hydrography

Decision 13: If there is a surplus in 2023 with will be incorporated in the 2025 CBWP.

Decision 14: In 2024 the CBWP will go back to the normal situation and funded activities not completed in 2024 will not be carried over to the 2025 CBWP.

Decision 15: to select to be funded in the 2024 CBWP the following projects:

EAtHC	Seminar “20 Years of Capacity Building Actions in EAtHC Assessment and Prospect”
EAtHC	Technical visit to Guinea
EAtHC	Technical Visit to DRC
NIOHC	Seminar on Raising Awareness of Hydrography
MACHC	Seminar on Raising Awareness of Hydrography
NIOHC/RSAtHC	MSI (training on establishment of MSI structure and basic MSI procedure)
SAIHC	Technical Visit to Uganda
MACHC	High Level Technical Visit to Colombia
SWAtHC	Seminar on Raising Awareness of Hydrography

Action 7: Secretary to prepare the 2024CBWP in accordance with the approved CBMP and upload it on the IHO Website (Doc. CBSC24-09.3).

9.4 Adoption of the 2024 CBWP

Doc: CBSC21-09.4 Adopted 2023 CBWP (Secretary)

After the approval of the activities to be funded in 2024 based on the CB Management Plan and in accordance with Decision 12, the Secretary drafted the 2024 CBWP (Doc. CBSC21-09.4). The Meeting approved the 2024 CBWP.

Decision 16: The 40,000 euros attributed by ROK to the non-earmarked projects funded the following activities:

- EAtHC Technical Visit to DRC
- NIOHC Seminar on Raising Awareness of Hydrography
- SAIHC Technical Visit to Uganda
- MACHC High Level Technical Visit to Colombia
- SWAtHC "Seminar on Raising Awareness of Hydrography"

Decision 17: to approve the 2024CBWP (doc. CBSC21-09.4).

10. CBSC Report to IRCC15 Meeting

Preparation and review of the CBSC Chair report to IRCC15 Meeting.

The Chair mentioned that the Report to IRCC15 would be drafted following the closing of this meeting and opened the floor for any inputs for items to be included. Not having received any inputs the Chair thanked for the trust put in him, the Vice-Chair and the Secretary.

The Chair asked if it would be necessary to have an additional day on the last day to give more time for members to review the Report.

Decision 18: Members to review CBSC Report to IRCC15 and provide comments (deadline 18:00 UTC +9, 11 June 2023).

11. Any other business

The Secretary deliver a presentation that was prepared by an Intern (Mr. Haruka Maeoka) from the University of Tokyo that joined the IHO Secretariat from January to March 2023. Leonel Manteigas IHO ADCC was his supervisor. The subject of his internship was "Follow-up survey and statistical analysis of the beneficiaries of IHO Capacity Building Programs" having as objective to evaluate the impact of the CB activities through inquires sent to the beneficiaries of IHO capacity building programs.

He sent 295 questionnaires (58 countries) and received 49 (27 Countries) with a response rate of 16,6%.

In accordance with his evaluation 52% of the funds goes to recognized Cat.A and Cat B courses and 88% of the participants are Male.

All responses demonstrated a very positive impact of the CB activities so he concluded that: The programs have a very positive impact and should be continued.

The Chair proposed to refine this questionnaire and do this assessment every 3 years if it is possible.

J. Justi suggested to have an indicator in the IHO Strategic Plan.

The Chair expressed concern with the low participation in the meeting and informed that will report to IRCC15.

Decision 19: Members to review the presentation developed by the Japanese Intern (Haruka) and provide contributes to a future similar project up to CBSC22 Intersessional.

12. Next CBSC Meetings (venue and date)

Decision 20: to have an Intersessional Meeting in 7 February 2024 (TBC).

Decision 21: to hold the next CBSC meetings as (pending confirmation from IRCC):

CBSC22: 5-7 June 2024 – Ecuador

CBSC23: May / June 2025 – Nigeria

CBSC24: May / June 2026 – Peru

For 2026 Monaco could not be the backup as will be following A-4.

13. Review of the List of Actions

Doc: CBSC21-13 Draft list of actions from CBSC21 (Secretary)

CBSC reviewed the List of Actions and decisions *Doc. CBSC21-13* that was drafted during the meeting.

14. Elections of the Chair and Vice-Chair (RoP2.)

The Secretary resumed the process informing that no candidatures were received and asked the participants if anyone opposes to the formal re-election of the Chair and Vice-Chair. Since there was no opposition, Mr Evert Flyer (Norway) was re-elected as Chair and Ms. Lucy Fieldhouse (UK) as Vice-Chair by unanimity.

Decision 22 – Mr Evert Flier (Norway) was re-elected as Chair and Ms. Lucy Fieldhouse (UK) as Vice-Chair by unanimity.

15. Closure

The CBSC Chair closed the meeting thanking the host and all CBSC Members participating in this fruitful meeting for the very good contributions.

The meeting was closed at 13h52.