20th MEETING OF THE IHO CAPACITY BUILDING SUB-COMMITTEE IHO-CBSC20

Bali (TBC), Indonesia 1-3 June 2022

1. Opening Remarks, Introductions and Administrative Arrangements

Docs: CBSC20-01A List of Documents (Chair)
CBSC20-01B List of Participants (Chair)
CBSC20-01C CBSC Membership (Chair)
CBSC20-01D ToR and RoP (Chair)

CBSC20-01E ToR for the CB Coordinators (Chair)

The 20th meeting of the IHO Capacity Building Sub-Committee (CBSC) took place in Denpasar, Indonesia, hosted by PUSHIDROSAL the Hydrographic office of Indonesia from 1 to 3 June 2022. The meeting was chaired by Mr Evert Flier the Chair of the CBSC.

The meeting was opened by the Chair, who in his opening address acknowledged how wonderful it was to have a hybrid meeting with in-person participants for the first time since CBSC17 held in Genoa in 2019. To meet in such a lovely venue arranged by excellent hosts PUSHIDROSAL was a great way to "restart". He raised that Capacity Building is a strategic pillar of the IHO and the objective of the CBSC, despite having few resources available, is to try to use them in the best and most effective way.

VAdm Nurhidayat, Chief Hydrographer of Pushidrosal, welcomed the participants to Bali and highlighted the importance of this meeting in particular, considering that several Capacity Building programmes and activities such as training, Category A and B courses and technical visits in each RHC, were delayed for the past two years due to the outbreak of Covid-19. He informed the participants that this international event was strongly supported by the Indonesian Government and to the benefit of Bali's citizens who suffered significantly from the economic consequences of the pandemic and considering the relevance of the subject matter of this Sub-committee. On behalf of the IHO Member States and of the IHO Secretariat, IHO Director Luigi Sinapi expressed his gratitude to the Indonesian Navy and PUSHIDROSAL for hosting such important IHO meeting, highlighting the resilience and ability of the CBSC members and Capacity Building (CB) regional coordinators to deal constructively with the challenges of the well over two years of pandemic, and the smooth running of the CB activities over the past two years.

The organization provided logistical guidance and information for the participants as well as a safety video of the hotel after which the participants were organized for the group photo.

2. Approval of Agenda

Doc: CBSC20-02 Agenda and Timetable (Chair)

The participants were invited to comment on the agenda and timetable and update were necessary. The meeting received no comments so, the agenda was adopted.

Decision 1: to approve the Agenda of the CBSC20 Meeting (doc. CBSC20-02V04).

3. Matters arising from Minutes of CBSC19 and CBSC20 Intersessional (CBSC20 Int) Meetings

Docs: CBSC20-03A Minutes of CBSC19 (Chair) CBSC20-03B Minutes of CBSC20Int (Chair)

> CBSC20-03C Status of Action List from CBSC19 (Secretary) CBSC20-03D Status of Action List from CBSC20 Int (Secretary)

The CBSC19 and CBSC20 Int Minutes had been available on the website and were opened to comments from the members, but none were received. The Secretary went through all actions of the List of Actions

from CBSC19 and CBSC20 Int not concluded and updated the information about the current status of each.

Decision 2: to approve the Minutes of CBSC19 and CBSC20 Intersessional Meetings (doc. CBSC20-03A and CBSC20-03B).

Decision 3: to approve the List of Actions from CBSC19 and CBSC20 Int (doc. CBSC20-03C and CBSC20-03D).

4. Reports by the Chair and the IHO Secretariat

Docs: CBSC20-04A Report by the Chair (Chair)

CBSC20-04B Report by the IHO Secretariat (IHO Secretariat)

The Chair described the activities that were executed in 2021 despite the COVID situation and underlined the support received from Nippon Foundation (NF), Republic of Korea (ROK) and Canada with the Empowering Woman in Hydrography project (EWH) as well as the in-kind contribution from many IHO member states (MS). The pandemic raised the opportunity to use remote participation tools allowing a wider involvement of the community in the IHO meetings, but the real cooperation work remains better through in-person activities as they allow the establishment of relationships, facilitating dialogue and help underpin future communications. This will be the last CBSC meeting before the 3rd Session of the IHO Assembly (A-3) and the last opportunity to report on any item to IRCC to be addressed to the Assembly. The importance of C-55 and also the need to measure changes and the progress overtime was raised. The Chair concluded expressing the wish and hope to go back to full physical CB activities.

Thomas Dehling mentioned that as IRCC Chair he has the intention to give more importance to C-55 regarding the SPIs and improve the way that the MS contribute to this publication, but also develop it to provide it more importance in the future.

Director Sinapi provided the Report of the IHO Secretariat highlighting that the IHO now has 98 MS seeing an increase by 5 States in the last 1.5 years. Reported on the outcomes of Council 5 and the preparations for Council 6 (C-6) and the 3rd Session of the IHO Assembly. stating that the delivery of the SPIs will be addressed at IRCC14. In 2021 the numbers of the IHO outreach increased significantly and the theme of the WHD 2022 will be "Hydrography – Contributing to the UN Ocean Decade. The Director noted that the funded non-executed projects in 2021 were moved to 2022 CBWP and an additional contribution to the non-earmarked funds from ROK enabled further projects to be supported. The number of candidates for the courses sponsored by ROK and Nippon Foundation was again significant. The meeting was also informed on the achievements of the EWH project in the first year and the IHO MS were asked to have more involvement with this project. He also reported on the progress in the IHO e-learning center.

The Chair mentioned the need for CB coordinators to work with their regions and to encourage MS to propose EWH projects, for which funding is available and in relation to the e-Learning Center the need to be provide relevant contents.

5. Regional Assessment of CB Activities

5.1 Reports of the Regional Hydrographic Commissions (RHC)

Docs: CBSC20-05.1A NSHC Report CBSC20-05.1B MBSHC Report CBSC20-05.1C BSHC Report CBSC20-05.1D USCHC Report CBSC20-05.1E EAHC Report CBSC20-05.1F EAtHC Report CBSC20-05.1G SEPRHC Report CBSC20-05.1H SWPHC Report CBSC20-05.11 MACHC Report CBSC20-05.1J SAIHC Report CBSC20-05.1K NIOHC Report CBSC20-05.1L RSAHC Report CBSC20-05.1M SWAtHC Report

The Chair informed that the Nordic HC, the North Sea HC, the Baltic Sea HC and the Arctic RHC will not present a report, however, Thomas Dehling clarified that this regions still have CB Coordinators that are available to provide any inputs if necessary.

CBSC20-05.1B MBSHC Report

Emre Gulher presented the plan for 2021 and the three webinars and the workshop delivered by VTC that were executed as well as the virtual trainings provided by UKHO that were a good example of important CB activities delivered remotely. He also reported on the courses offered by the Spanish Hydrographic Office (HO) and described the MBSHC CB Plan for the 3 years 2022-2024.

CBSC20-05.1D USCHC Report

Jennifer Landry provided the USCHC report mentioning that both Canada and the U.S. are considered to be in Phase 3. The activities completed since CBSC19 were mentioned spporting the Empowering Women in Hydrography Project funded by Canada, the Canadian Hydrographic Service and Canadian Coast Guard project related with the installation of low cost bathymetric (depth) data collection systems onboard vessels operated by Inuit Peoples. The planned activities related with IBSC recognized courses in the region were also stated and was mentioned that both countries are interested in developing e-Learning activities.

CBSC20-05.1E EAHC Report

Peter You informed the number of MS of the region and that the meeting of the EAHC in April 2022 t had very limited discussion due to the VTC limitations, with the expectation that next year the meeting will be in-person. He reported on the regions CB assessment in terms of phases. The Training for Trainers (TFT) course in Basic Hydrography was delivered by KHOA in hybrid mode and had 23 attendees. The plans for 2022-2023 were presented having already the intention to postpone the CBWP 2022 activity P-11 to 2023 and concluded with a resume of the submissions to the CBWP 2023.

Action 1 - IHO e-Learning Center PT to develop guidelines to support the MS to develop and provide contents to the Center.

CBSC20-05.1F EAtHC Report

Julien Smeeckaert reported on the activities completed since the CBSC19 mentioning, in 2021, the cancelation of the seminar on MSI/MSDI [CBWP2021 - P-32] and the execution of the Technical Visit to Congo. Two Technical Visits were executed in 2022 that were very important to the visited countries, Benin and Senegal. The activities planned for 2022 were described including the Seminar that will be held in Cabo Verde before the EAtHC17 meeting. In relation to the challenges within the region he highlighted that there are only 8 IHO members

among the 26 EAtHC States and spoke of how the needs of the Members in the region relate to

the respective phases of hydrographic capacity. The need for French courses in the region was pointed. In relation with the lessons learned with COVID was stated the advantages of the virtual meetings and e-Learning courses with a wider impact and the reduction of the costs but also recognized that the in-person activities are important especially in the practical sessions.

Ayo Olugbode from Nigeria mentioned the difficulty in achieving phase 3 and that Nigeria is about to sign a MoU with Seabed 2030.

Director Sinapi raised the importance of the CB coordinators and that the RHC needs to provide a more incisive role in the MS that need support.

CBSC20-05.1G SEPRHC Report

Felipe Barrios presented the report by VTC raising that the 3 coordination meetings of the region taking advantage of the VTC facilities. A CB regional plan was developed to define a strategy aligned with the IHO strategy such as the migration to S-100, MSDI, management processing and quality control and the use of technologies in hydrographic surveys. The recognized courses in the region were outlined as well as the activities executed in 2021. The CB activities funded and not-funded in 2021 were described along with the activities submittedfor 2022. He mentioned the challenges in the region such as the migration to S-100, the survey of hydrographic and topographic data with AUV's and the budget, with some governments redirecting their priorities reducing resources for HO's. On the achievements and lessons learned the coordinator mentioned that despite the pandemic, budget issues and non-financed projects, the Region works hard to stay at the forefront on the production line, surveys and capacity building, highlighting the development of the course by VTC but that in the hydrographic practical parts the in-person practice is necessary.

The Chair thanked Felipe for the very informative report and recognized the progress in the region and the fact that all members had passed phase 1 raised difficulties in accessing funds for activities The fact that some governments are redirecting funds is a good opportunity to also redirect the hydrographic activities and link them to the ocean literacy. In relation to the CB activities it is necessary to have a combination of in-person and VTC events.

CBSC20-05.1H SWPHC Report

Matthew Borbash presented the Report starting with the particularities of the region that is geographically remote and fragmented with the maritime sector playing a key role in supporting the economic growth and development. The activities completed since the CBSC19 were mentioned highlighting the S-100 workshop in October 2021 and the commencement of the Hydrographic Leaders Programme in February 2022. In relation to the activities planned for 2022-2023, the following were raised - the MSI Regional Workshop – to be held as a virtual event in late 2022 and the Technical Workshop on Hydrographic Governance planned to be held in conjunction with the SWPHC20, in February 2023.

Regarding the challenges in the region, it was mentioned that travel restrictions due to Covid - 19 and the large extent of the region hampered engagement. On the achievements and lessons learned, the Hydrographic Leaders Programme was spoken of. The Programme initially runs from February through August 2022 with future year options, under consideration. The virtual events were sufficient to carry on the RHC business but are not effective in communicating complex capacity building efforts. The SWPHC strategy of preceding its annual meeting with a CB workshop is planned to be used for the next two annual meetings, due to the respective benefits.

CBSC20 was invited to consider a SWPHC request to defer and carry over previously approved (CBSC18 P-07) Technical Workshop on Hydrographic Governance until 2023 and (CBSC19 P-05) Workshop on Disaster Response until 2024.

The Chair mentioned that the decision to carry on activities to the next year will be discussed in other agenda item.

SWPHC- Hydrographic Leaders Programme

Matthew Borbash provided an overview on the Hydrographic Leaders Program that aims to build and encourage a network of leaders in the region who will contribute to:

- Regional alignment with the IHO Strategic Plan 2021 2026
- UN's Shared Guiding Principles for Geospatial Information Management
- Joint Canada-IHO Project Empowering Women in Hydrography.

The steering group was established and had several meetings and a call for nominations was made. The group of Mentors of the programme was created and the programme elements were described as well as the plan of activities.

Nigeria asked if the IHO can develop a template for other regions be inspired. Matthew B. informed that one of the tasks of the group is to make a summary of the activities and make them available in a package to allow other regions to use it.

Luigi Sinapi stated that will be good to bring this initiative to IRCC14.

The Chair recognized the inspirations that came from SWPHC such as the Gap analysis and now this important programme.

CBSC20-05.11 MACHC Report

Lucy Fieldhouse the CB Coordinator reported on the activities completed since CBSC19 mentioning that the region was heavily impacted by the COVID pandemic, and so there was an effort to deliver virtual activities. Several activities planned for 2022 were mentioned, such as 4 technical visits, one MSI course, 2 workshops and a Seminar. The main challenges faced by the region was the impact of the COVID pandemic, the environmental challenges with the yearly increase in the severity of the hurricane season, the lack of IHO Member States and lack of hydrographic governance awareness. In the achievements there was an increase in Phase 1 and Phase 2 capacities, the completion of some CB sponsored courses by elements of the region and the offer of NOAA of at-sea experiences related with the IHO Empowering Woman in Hydrography project. It was suggested to encourage all RHCs to collaborate on CB training of common interest to maximise the use of CB funds and invite the CBSC to continue to explore opportunities with donor organizations.

The Chair agreed that the CB coordinators should engage with other partners and asked how it was measured the increase in the phase 2 capacity. Lucy F. mentioned that was not measured but she knows that there is an increase due to the regional knowledge.

Decision 4 - CB coordinators should try to Collaborate with other RHCs on CB training of common interest to maximize the use of CB funds.

CBSC20-05.1J SAIHC Report

Lucy Fieldhouse the CB Coordinator reported on the activities that were not completed in 2021 with most carried out to 2022 and on the activities funded for 2022. Due to the impact of COVID there has been little capability development in the region since CBSC19. A regional CB Programme to identify the resources that are available within the area and a gap analysis to identify and assess work for the regional CB Workplan are planned.

The work plan for 2024 wsa also described with the respective relation of the activities with the IHO SPI's.

Thomas D. asked about activities involving Malawi and Lucy clarified that Malawi is quite active in SAIHC participating as an associate member of the region. It was also asked also if there was a possibility to have a course for raising awareness by VTC to complement the Technical Visits (TV) and High Level Visits (HLV). The Chair agreed and mentioned that should be something to consider. Thomas D. suggested to have, back-to-back to the assembly a high level workshop that allows the high level entities to be present also at the Assembly. Luigi

Sinapi mentioned that is a good idea that can be explored. Nigeria supported the idea and mentioned that the level of participation is very important and in general in Africa any contact on raising awareness should be done at ministerial level.

Action 2 - CBSC Chair to propose IRCC14 that the IHO Secretariat evaluate the possibility to have a workshop back-to-back to the 3rd IHO Assembly and invite participants from non IHO Members States. (IRCC14)

CBSC20-05.1K NIOHC Report

Lucy Fieldhouse reported on the activities completed since CBSC19 mentioning that the region was heavily impacted by the COVID pandemic, so just a Hydrographic Awareness Seminar was held virtually during 2021 which focused on MSDI Governance. She described the CB activities planned for 2022, that include a TV to Maldives a Seminar on raising Hydrographic Awareness and a MSI course. The challenges faced in the region are related with the impact of COVID, issues with communication and on the access to develop Phase 2 capacity. In relation with the achievements, was mentioned the close coordination between CB coordinators to increase regional benefit from activities and the students of the region that benefited from the Train the Trainer in Basic Hydrography Course, funded by ROK in 1-12 November 2021 and of the GeoMAC course.

CBSC20-05.1L RSAHC Report

Saeid Parizi reported on the members of the region composed by 12 coastal states with only 9 being IHO Member States. IALA is an observer of the Region that is Chaired by Captain Khalid Al Jabri (Oman). He reported on the 3 virtual activities completed since CBSC 19 and the ones planned to 2022, such as the selection of a student from Oman accepted to the GeoMAC Course, the Technical Visit to Iran and the MSI Course that is intended to be a joint collaboration with NIOHC. The region faces several challenges due to political issues, and whilst a few Member States are highly active in IHO programs, some do not participate actively in any programs at all, while some others prefer to work with adjacent regions. He hopes that under Chairship of Oman better cooperation will be supported.

In relation with the achievements and lessons learned, a number of Member States have announced their training needs for the next three years to economize costs for the CBSC program, RSAHC has negotiated and planned a number of activities and trainings, to be conducted jointly with the NIOHC, an adjacent region. It is hoped that the planned activities, will be conducted successfully, and result in the expected outcomes.

Saeid Parizi mentioned also that is important to have both IHO and IALA participating in the TV to Iran.

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

CBSC20-05.1M SWAtHC Report

Helber Carvalho reported on the region membership composed by 3 member states, one associate member and one observer and also presented the respective CB assessment. In 2021, one day before SWAtHC meeting, a Hydrographic Awareness Webinar was arranged, and the rest of the funded activities were postponed to 2022. Three CB funded activities are planned for 2022, a Technical Visit to Bolivia, a Seminar on Raising Awareness of Hydrography and a Port and Shallow Water Survey Course. He reported on the 15 women in leadership in hydrography and cartography positions: 2 in Argentina (SHN); 12 in Brazil (DHN); and, 1 in Uruguay (SOHMA). The main challenges of the region are related with the encouragement of Paraguay

and Bolivia to became full members, the transition to S-100 and the capacity regarding MSDI, MBES data acquisition, processing and quality control.

Shigeru N. expressed the importance of the interregional cooperation and that after the COVID the CB should be adapted to a post covid areas where the interregional cooperation can be very important to share resources.

The Chair mentioned that one of the positive effects of the pandemic is the possibility to have VTC seminars and workshops that can be shared with other regions, enhancing that the SWAtHC is the first region to report on the EWH project numbers.

5.2 Update and closure of the 2021 CBWP

Docs: CBSC20-05.2 Closed 2021 CBWP

The secretary provided a review of the 2021 CBWP activities executed, these were: 2 technical visits (Ivory Coast and Congo); 2 activities funded by ROK sponsoring 3 students at the University of Southern Mississippi (USM); and, the VTC activities P-05, P-23 and P-26 in the MBSHC. One activity (P-10) was cancelled and all other funded were postponed to 2022. The 2021 CBWP was closed.

Nigeria asked about the sponsored courses at University of Southern Mississippi (USM) and if this is a 10 year program, ROK clarified that the sponsorship of courses at USM is decided each year, but the intention is to continue to sponsor these courses.

6. Regional or other projects for CB

Docs: CBSC20-06.1 JICA Training Course on hydrographic survey

Shigeru Nakabayashi reported on the JICA Training course "Hydrography for Charting and Disaster Management" that is recognized by the IBSC with Category B. It is s a well established course that has a duration of six months. If one wishes to attend the training course, the country needs to undertake a "Needs Survey" to be conducted by JICA through diplomatic channels around June 2022. For more details is necessary to ask through the diplomatic affairs but the Hydrographic and Oceanographic Department, Japan Coast Guard (JHOD) can be contacted to support for application.

The Chair asked if there is a list of international contacts, if the participation is fully funded and suggested that guidelines are provided to the CB Coordinators.

- Action 3 Japan to provide information to CB coordinators about the process to apply to the JICA Hydrographic Cat. B course. (end June 2022)
- Action 4 CB coordinators to disseminate the information about the JICA Hydrographic Cat. B course to the members of the respective regions after receiving the information from Japan.

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

Docs: CBSC20-07A Decisions and Actions from C-5 (Secretary) CBSC20-07B IRCC CL01/2021 (Secretary)

The Secretary presented the actions from the 5th Meeting of the Council which impact CBSC activity. In relation with Action C5/06 the Chair mentioned that this can be challenging, and a good example is the increase of the MSI messages after MSI courses.

Thomas D., as IRCC Chair informed the Meeting that a proposal was to be presented to IRCC14, but the proposal is to be finalized. In relation to the IRCC letter 01/2021, IRCC held two workshops and received a proposal from the IHO Secretariat on SPI development. The need to maintain the SPIs simply

and use electronic tools to help measuring were essential for success and will be included in the proposal to IRCC.

About actions C5/16 and C/17 the CBSC will receive presentations on the developments of the IHO e-Learning Center and EWH Project and then will report on the progress to IRCC that will report to C-6.

8. Operational issues of the CBSC

8.1 Report of the CB PT Strategy

Docs: CBSC19-08.1A Capacity Building Strategy (Chair PT Strategy) CBSC19-08.1B IHO Strategic Plan 2021-2026 (PT Chair)

The CB PT Strategy Chair informed the meeting that no further comments were received on the draft revised CB Strategy presented at CBSC19 and proposed its approval. The Chair proposed the meeting to approve the revised CB Strategy and informed that the intention is to submit the CB Strategy to IRCC14 for endorsement and to propose the 3rd Assembly to adopt it. The Meeting approved the revised CB Strategy.

Decision 5 - The revised CB Strategy is approved.

Action 5 - Chair to present the revised CB Strategy as an Annex to the report to IRCC14 for approval and propose the 3rd IHO Assembly to adopt it. (IRCC14)

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 Project Team (PT) provided an update to CBSC of the the meetings that the PT have held to dates as well as on the activities completed so far, including the beginning of the system testing. The planned activities for 2022 include the continuation of the tests and the uploading of the contents to be received. A proposal for the governance structure scheme of the e-Learning Center was presented, and Helber C. concluded expressing gratitude to Republic of Korea and stating that is necessary to proceed with the tests.

Peter Hak commented that is necessary to discuss more the governance model and enhanced the need to receive more contents.

The Chair expressed the need to open out the IHO e-Learning Center and suggested to link it with the IALA Academy. Luigi Sinapi highlighted the importance of the governance structure.

Peter Hak provided comments on the General Manager position that should be discussed within the e-Learning Center PT and informed that in next year ROK will have very limited funds to maintain the Center and asked IRCC and CBSC to consider this issue related with the need of funds to maintain the Center,

Luigi Sinapi mentioned that this information needs to be very well evaluated, first the Government Body needs to meet to try to find possible solutions. Peter Hak mentioned the need to separate the management on the operational part to deal with the students and to maintain the system.

The Meeting decided that the PT members should evaluate the Governance Structured as proposed to present a more detailed proposal and noted that KHOA raised the problem in maintaining the funds and resources necessary for the system management.

Action 6 - PT members to evaluate the Governance Structured as proposed and present a more detailed proposal to the next meeting. (CBSC21 inter)

Decision 6 - Note the concern raised by KHOA to maintain the funds and resources necessary for the system management.

8.3 IHO Empowering Women in Hydrography (EWH) Project

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

Leonel Manteigas the CBSC Secretary and leader of the Project Team IHO Empowering Women in Hydrography (EWH) Project briefed the Meeting on the first-year achievements of the project which included the internships and at-sea experiences offered, the Submission to the 'Call for Decade Actions No. 02/2021' and the Webinar on Gender-balance and empowering leaders. The activities planned for the second year were presented, highlighting the continuation of the internships at the IHO Secretariat, the preparation of an EWH symposium to be held in conjunction with the IHO Council meeting, the development of a mentoring programme and the intention to teami up with other events in the ocean science or maritime domain with gender-equity themes.

Luigi Sinapi mentioned the need to receive offers with other kinds of activities form Member States. In relation with the CB coordinators reports on the RHC gender figures only was received information from SWAtHC. Japan mentioned the need to find the reason for any imbalance, regarding the percentage mentioning that one important factor is the increase rate.

The Chair expressed that the gender imbalance is a lost opportunity since we lose diversity and do not make use of all of the available resources. In relation with the figures on the gender balance the objective is not to classify the countries but to raise awareness. Indonesia supports that the numbers should not be a measure of success since the gender balance is a process that takes time.

Luigi Sinapi mentioned that this project started operationally in last December and what was achieved in the last few mouths its very significant. He underlined also that until now, only one MS offered a project to be associated.

The Chair concluded that this project has been a success.

Action 7 - CBSC Chair to propose IRCC to invite the IHO Secretariat to issue a CL 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. (IRCC14)

Action 8 - CBSC Chair to propose IRCC to invite RHC Chairs to encourage MS to propose in kind proposals to the IHO EWH project. (IRCC14)

8.4 CBSC Statistics

Doc: CBSC20-08.4 Statistics (Secretary)

The CBSC Secretary updated the meeting on the CBSC Statistics reporting, additionally, as was suggested in the Intersessional meeting, on the distribution of projects submitted by the respective CB Phases that shows a higher percentage in the projects from Phase 2. The percentage of the amounts requested by regions was also presented with the submissions from SEPRHC representing 26.2% of the total value of all submissions. The Secretary called the attention for the fact that is necessary to inform the IHO on the students attending the activities, which should also include the remote activities, to have this information in the CBSC database.

Action 9 - CB coordinators to report to the CB Assistant on the students attending remote activities. (Permanent)

8.5 CB Procedures

The Secretary reported that in items 4 and 6 of Procedure 4, the CB Coordinators do not apply the same criteria. Referring to item 4 of Procedure 4, the Secretary suggested that only the external funds should be considered as the formula refers, because all activities will require some internal investment and if the internal funds are also considered, this item will have probably the same value for all activities and would not contribute to the relative rank among the different activities. All recognized the importance of in-kind contributions and Lucy F. suggested just to compute if there are money invested. Thomas D. suggested that for the 2023 CBMP, in item 4, the funds proposed can be initially accepted and in the discussion of the Management Plan the Meeting can change the values. The Chair resumed the discussion, and the meeting will decide during the discussion of the Management Plan.

The Secretary proposed to clarify Procedure 4 item 1 and 2 in relation with the applicability of the points in item 1 and to include Phase 0 in item 2.

The Secretary proposed also to add a new item in Procedure 4 related with ranking higher the activities with lower funds to allow to fund more activities and reach more regions and also to work as an incentive to have more activities by VTC that will reach a wider audience and in some cases are very effective. It was discussed and recognized the problem that is related with the insufficient funds, but the proposal was not approved by the Meeting since the value does not reflect the importance of the submissions.

The Secretary proposed also to, in Procedure 4, item 3, increase the number of states benefitted, but the Meeting did not approve asall regions have different characteristics and some with a small number of Members. There was concern that this may also lead to virtual activities receiving a greater percentage of funding and not reflecting the impact of the objectives and outcomes.

Thomas D. commented that the changes to the Procedure 4 can be studied by a small group of the CBSC that then came up with proposals to improve it. The Chair asked volunteers and since no member was volunteer to integrate this group, it was concluded that CBSC considers that Procedure 4 still adequate and does not need to be revised.

Decision 7 - CBSC Secretary to update Procedure 4 item 1 and 2 to clarify the applicability and to include Phase 0 in item 2.

Decision 8 - CB Coordinators to consider on Procedure 4 item 6 only one submission for each of the 3 most priority levels and the remaining submissions as priority 4.

8.6 CB Management System update

Doc: CBSC20-08.5 CB Management System update (KHOA)

Peter Hak updated the meeting on the CB Management System status informing that KHOA was working on the update of the system due to the fact that the interface was not user-friendly and that by the end of June it is expected that the system is ready to be tested by the IHO secretariat and the CB Coordinators.

Luigi Sinapi thanked for the great support from KHOA provided to the IHO.

Julien S. asked if the system addresses the need to be approved by the RHC Chairs, Peter H. clarified that there is no need to send the submission to the RHC Chair for approval.

Action 10 - CB Coordinators to test the CBMS from 1 July 2022 using the submissions for 2023, reporting if they face difficulties until the end of the year.

Decision 9 - the 2022CBWP funded activities not executed in 2022 can be moved to the 2023CBWP, the non-funded activities should be cancelled from the previous CBWPs.

8.8 Review of the 3-year RHC Work Plans 2022-2024

Docs: CBSC20-08.6A MBSHC 3-year Work Plan CBSC20-08.6B EAHC 3-year Work Plan CBSC20-08.6C EAtHC 3-year Work Plan CBSC20-08.6D SEPRHC 3-year Work Plan CBSC20-08.6E SWPHC 3-year Work Plan CBSC20-08.6G MACHC 3-year Work Plan CBSC20-08.6H NIOHC 3-year Work Plan CBSC20-08.6I RSAHC 3-year Work Plan CBSC20-08.6J SWAtHC 3-year Work Plan

MBSHC 3-year Work Plan

Emre Gülher MBSHC CB Coordinator presented the three-year Capacity Building Work Plan mentioning the workshops planned for 2022 and 2023 and the Technical Visits planed for 2024 with the CB Plan in revision.

EAHC 3-year Work Plan

Peter Hak EAHC CB Coordinator mentioned that the five-years CB plan was discussed in the last meeting of the Region and then he presented the three-year Capacity Building Work Plan with one of each kind of courses for each year (Basic, Intermediate and advanced).

He mentioned that the EAHC Capacity Building Programmes have levelled up the hydrographic capacities and capabilities among the members, built a network of cooperation, and enhanced navigational safety in the region but there is still a technology gap among the EAHC members. He also raised the concern about the need improve the development of S-100 and MSDI.

EAtHC 3-year Work Plan

Julien Smeeckaert EAtHC CB Coordinator presented the three-year Capacity Building Work Plan mentioning the CB activities executed and planned to 2022 and the four submissions to the 2023 CBWP. He also stated that Mauritania expressed the interest to become an IHO member. For 2024 the plan is in discussion but a TV to Democratic Republic of Congo is already planned to be submitted.

SEPRHC 3-year Work Plan

Felipe Barrios SEPRHC CB Coordinator presented the three-year Capacity Building Work Plan mentioning the Regional CB strategic plan that was the base to develop a long, medium and short term strategies.

In relation with the regional CB activities, he reported on the projects funded for 2022 and on the projects submitted to 2023.

All countries in the region have regular hydrographic recognized courses that he described along with the duration and if they are available to foreigne students. He also reported on the planned internships and on the regional on-board experiences concluding that the SEPRHC continues to keep working aligned with the IHO Strategic Plan.

MACHC 3-year Work Plan

Lucy Fieldhouse MACHC CB Coordinator presented the three-year Capacity Building Work outlining those in the first instance that were affected by the COVID pandemic. She reported

then on the CB activities planned for 2022 which includes 4 Technical Visits, 2 workshops a Seminar and an MSI Course. The most relevant achievements are the increase in the capacity in Phases 1 and 2 and that some relevant courses of the CB Work Plan were attended by students of the region. She encouraged all RHCs to collaborate on CB training of common interest to maximize the use of CB funds and invited the CBSC to continue to explore opportunities with donor organizations.

SAIHC 3-year Work Plan

Lucy Fieldhouse SAIHC CB Coordinator outlined those funded 2021 planned activities that were not executed due to the COVID pandemic and are planned to carry over to 2022. The CB activities planned for 2022 include 2 Visits (HLV and TV), 1 workshop, 1 train in ENC production and an MSI Course. Then she mentioned the proposed CB activities for 2023 and the intentions of CB activities for 2024 and informed that Angola asked for a High-Level Visit that was proposed for 2023.

NIOHC 3-year Work Plan

Lucy Fieldhouse NIOHC CB informed that in 2021 the planned activities were affected by the COVID pandemic and only a Seminar on Hydrographic Awareness was held. The CB activities planned for 2022 include a Technical Visit to Maldives, 1 seminar and an MSI Course. The challenges faced in the region are related with the impact of COVID, the lack of communication and the need to develop Phase 2 capacity. In relation with the achievements was highlighted the close coordination between CB Coordinators and the most relevant courses of the CB Work Plan attended by students of the region.

RSAHC 3-year Work Plan

Saeid PARIZI, RSAHC CB Coordinator presented the three-year Capacity Building Work starting to describe the particularities of the region in relation with the members. He reported on the CB activities completed since CBSC 19, with 3 seminars conducted by VTC. For 2022 is planned a Technical Visit to Iran and an MSI Course and it is expected that some candidates of the region are selected for some of the sponsored CB courses. The region has political issues with a direct impact on the activities and decisions. Normally, some members are very active in IHO programs, and some do not participate or prefer to work with adjacent regions. RSAHC has planned a number of activities and trainings, to be conducted jointly with the NIOHC. He expects that with the election of Oman as the RSAHC Chair, the involvement of all Member States in the region improves, and that have a better impact in the CB programs.

SWAtHC 3-year Work Plan

Helber Carvalho, SWAtHC CB Coordinator presented the three-year Capacity Building Work Plan starting with assessment of the members CB Phases only with the non IHO member states, Paraguay and Bolivia, with some limitations in the Phases 1 to 3. He mentioned the respective aims and objectives of the 3 y WP and described the activities planned for 2022, 2023 and 2024. In 2022 is planned a Technical Visit to Bolivia and a Seminar on Raising Awareness of Hydrography.

Thomas D. mentioned the very good provisions that are planned for the CBSC and for the threeyear Capacity Building Work Plan proposed that there is evaluated a change in C-55 with CBSC proposing the content and the uses, then the solution needs to be developed by the IHO Secretariat. The Chair mentioned that do expect that IRCC comes with this input and asked for volunteers to reflected on the C-55 contents and uses.

9. CB Management

9.1 Update on the 2022 CBWP

Doc: CBSC20-09.1 Updated 2022 CBWP (Secretary)

The 2022 CBWP was revised and approved in the CBSC20 Intersessional meeting, the meeting asked the CB Coordinators if they have additional feedback to provide. The Secretary informed the Meeting on the three CB activities executed so far:

- A-01 Technical visit to Benin (EAtHC) Led by SHOM, France / 28 January 4 February 2022;
- A-12 High-level and Technical Visit to Senegal (EAtHC) Led by SHOM, France / 8 15 April 2022;
- P-38 Raising Hydrographic Awareness (SAIHC) Led by UKHO, Maputo, Mozambique / 9-13 May 2022.

9.2 Finance Report

Doc: CBSC20-09.2 Finance Report (Secretary)

The Secretary introduced the Finance Report with the balance of 2021 and the expected balance for 2022 if all activities are executed by the estimated values as well as the expected income into the CB fund for 2023. If there is no surplus or any additional contribution the total fund available is 73,613.87 Euros. The Meeting approved the Finance Report.

The Secretary also took the opportunity to call the CB Coordinators attention to the types of expenses that can be covered by the CBSC Fund that are described in the IHO Regulations and resumed in Procedure 8.

Decision 10: the Finance Report was approved.

9.3 Management Plan

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

The Secretary presented the 2023 CB Management Plan with all received submissions prioritised by the total of points for each one. He described the situation of the CB funds that allows the approval of the activities that have 39 points or more but requires the selection of the ones with 38 points.

The meeting recalled the discussion about the need to look at all proposed activities and decide if some should have different points in point number 9 of Procedure 4. Thomas D. mentioned that it is important to use the procedures to rank the activities however the CBSC should also discuss the priorities and be pragmatic, for example due to the number of activities funded from once region could EAtHC be asked if the S-100 seminar could be executed by VTC and proposed to reduce the respective points, releasing funds for another activity. The Meeting discussed this proposal and approved the reduction the EAtHC S-100 seminar Proc 4 item 9 from 5 to 3 points.

Japan proposed that the CB Coordinators should consider having the projects in hybrid format to open it to a wider number of participants from different members and also from other regions. The Meeting decided that it should be evaluated the possibility to record some seminars and make it available in the E-Learning Center. The Chair, supported by Japan, voiced that whilst attendance at virtual seminars can be greater they do prevent the full participation, so are less efficient. Nigeria underlined the importance of plan TV in conjunction with other organizations (IALA, IMO, etc). The Secretary clarified that the joint Technical Visits has pros, but the cons are that in some Countries a TV is quite demanding and a

joint visit will not allow the full focus on the hydrographic capacity and governance which may turn it less effective.

Luigi Sinapi mentioned that the evaluation of the possibility to have some activities on-line should be made before the submission.

Felipe B. suggested to distribute proportionally the funds to each region and the CB Coordinator will decide on the activities. The Chair clarified that such a division will result in about 5000 euros per each region and that this topic was already discussed several times and never approved.

After adjusting the points of the EAtHC S-100 seminar, to approve two activities with 38 points it will be necessary more 1,386.13 euros. IHO Director Sinapi mentioned that we can go a little over the fund and approve the Technical Visits with 38 points and the other activities with more than 38 points.

Decision 11: to reduce the S-100 seminar of EAtHC Proc 4 item 9 from 5 to 3 points.

Action 11: PT E-Learning and CB Coordinators to evaluate the possibility to record some seminars and make them available in the E-Learning Center. (CBSC21 Int)

Decision 12: to select to be funded the following projects:

- EAtHC Technical visit to Mauritania
- EAtHC Technical visit to S. Tomé e Príncipe
- NIOHC Seminar on Raising Awareness of Hydrography
- SAIHC Technical Visit to Madagascar
- MBSHC Workshop on MSI Development & Implementation
- SAIHC Raising Hydrographic Awareness (for SAIHC Associate and Non-Members)
- RSAHC High Level Technical Visit to Iraq
- MACHC Technical Visit to Costa Rica

Action 12: secretary to prepare the 2023CBWP in accordance with the approved CBMP and upload it in the IHO Website (Doc. CBSC20-09.3).

9.4 Adoption of the 2023 CBWP

Doc: CBSC20-09.4 Adopted 2023 CBWP (Secretary)

After the approval of the activities to be funded in 2023 based on the CB Management Plan and in accordance with Decision 12, the Secretary drafted the 2023 CBWP *Doc. CBSC20-09.4*. The Meeting approved the 2023 CBWP.

Decision 13: to approve the 2023CBWP (doc. CBSC20-09.4).

10. CBSC Report to IRCC14 Meeting

Preparation and review of the CBSC Chair report to IRCC14 Meeting.

The Chair mentioned that the Report to IRCC14 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.

Felipe B. suggested that the List of Actions and Decisions also includes the status of the respective Action.

Decision 14: Members to review CBSC Report to IRCC14 and provide comments (deadline 5 June 2022).

11. Any other business

Thomas D. provided a presentation on the City University of Hamburg course that is available and is a Cat. A recognized course. No funds are available for this course but the fees are minimal, and the quantity of international students is impressive.

It was also decided that will be necessary to revise the future contents and uses of C-55 and for this will be necessary to create a new Project Team.

Decision 15: Create a PT to elaborate on the development of future contents and uses of C-55 (Evert Flier, Lucy Fieldhouse, Ayo Olugbode, Thomas Dehling and Oke Dwiyana).

Decision 16: to note all reports presented at the meeting.

12. Next CBSC Meetings (venue and date)

Shigeru N. on behalf of the Hydrographer from Japan confirmed the offer to host the CBSC meeting in 2023. Director Sinapi mentioned that the offer from Ecuador to host the meeting in 2024 was confirmed. Nigeria offered to host the CBSC23 in 2025 in Nigeria, since the CBSC never had a meeting in Nigeria.

Decision 17: to have an Intersessional Meeting in February 2023 (dates to be defined by the end of August 2022).

Decision 18: to hold the next CBSC meetings as (pending confirmation from IRCC):

CBSC21: 7-9 June 2023 - Tokyo, Japan CBSC22: May / June 2024 - Ecuador CBSC23: May / June 2025 - Nigeria

13. Review of the List of Actions

Doc: CBSC20-13 Draft list of actions from CBSC20 (Secretary)

CBSC reviewed the List of Actions with deadlines and assigned lead. *Doc. CBSC20-13* that was drafted during the meeting.

Hugo G. proposed that in the new meetings the list of actions and decisions should include the percentage of achievement.

Nigeria highlighted that the teams involved in TV and HLV should consider to be engaged at ministerial level. The Secretary and Thomas D. clarified that this already in the Regulations for the TV and HLV. The Chair mentioned that raising this issue should serve as a reminder.

14. Closure

The CBSC Chair closed the meeting thanking all CBSC Members participating in this fruitful meeting and it was important to have it in a hybrid format to allow maximum participation. He also thanked the Vice-Chair, IHO Director Sinapi and the Secretary for all support. A special thank you was addressed to Indonesia for the preparation, for support provided and the professionalism of the staff. The Vice-Chair acknowledge the work of the CBSC Chair for the fruitful and excellent meeting. Director Sinapi mentioned that the Chair summarized very well the outcomes of this meeting and expressed the gratitude to Indonesia and the staff for hosting and organizing this meeting that was the first in-person after 2019.

VAdm Nurhidayat, Chief Hydrographer of Pushidrosal addressed all face-to-face and on-line participants mentioned that was an honor to host all the delegates and the meeting that had very fruitful discussions. Expressed the best regards to the Delegates and respective families and colleagues of the Hydrographic Offices. Wished a good return for the Delegates that will return home and a pleasant stay for the ones that will continue for the IRCC14.