

**16th MEETING OF THE IHO CAPACITY BUILDING SUB-COMMITTEE
IHO-CBSC16
Goa, India, 30 May - 1 June 2018**

REPORT

1. Opening remarks, introductions and administration

<i>Docs: CBSC16-01A</i>	<i>List of Documents (Chair)</i>
<i>CBSC16-01B</i>	<i>List of Participants (Chair)</i>
<i>CBSC16-01C</i>	<i>CBSC Membership (Chair)</i>
<i>CBSC16-01D</i>	<i>Draft revised CBSC ToR and RoP (Chair)</i>
<i>CBSC16-01E</i>	<i>ToR for the CB Coordinators (Chair)</i>

The 16th Meeting of the IHO Capacity Building Sub-Committee (CBSC) took place in Goa, India, hosted by the National Hydrographic Office (NHO) of India from 30 May to 1 June 2018. The meeting was opened by VAdm Vinay Badhwar, Chief Hydrographer of the Government of India, and Mr Thomas Dehling, Chair of the IHO Capacity Building Sub-Committee (CBSC).

VAdm Badhwar welcomed the participants and highlighted the success due to the international involvement in Capacity Building (CB), the progress made by the IHO due to the engagement of the Member States and the contribution of ROK and Nippon Foundation of Japan as examples of success stories. The contribution for regional cooperation was also emphasized.

Chair thanked the hosts and stressed the need to consider carefully the matters around CB and the long way CB had come since the first meeting in 2003. He expressed satisfaction that VAdm Badhwar participated in the first two meetings of the then CB Committee (CBC) and has a long contribution to CB.

IHO Assistant Director Alberto Costa Neves thanked the hosts for the efforts in organizing the meeting and called for the participation of all around the table to make CB programme successful. CB is a strategic objective of the IHO and requires the participation of Member States, individuals and the broad hydrographic community.

Chair invited the participants to introduce themselves for the benefit of the meeting. The hosts provided logistics and administrative information.

Chair introduced the documents of this agenda item and invited participants to provide input for eventual updates and to consider the proposed draft amendments to the CBSC ToR and RoP (doc. *CBSC16-01D*). The amendments were subsequently endorsed.

Decision 1: to endorse the revised CBSC ToR and RoP (doc. *CBSC16-01D*).

2. Approval of Agenda

Doc: CBSC16-02 rev1 Agenda and Timetable (Chair)

Participants were invited to comment the agenda and timetable. The inputs from the floor were incorporated into the revision 1 of the Agenda and Timetable (doc. *CBSC16-02 rev1*).

Decision 2: Agenda was adopted as amended (doc. *CBSC16-02 rev1*).

3. Matters arising from Minutes of CBSC15 Meeting

Docs: CBSC16-03A Minutes of CBSC15 (Chair)
CBSC16-03B rev1 Status of Action List from CBSC15 (Secretary)

Chair invited comments for the CBSC15 Minutes that was subsequently approved. List of Actions from CBSC15 was reviewed and updated with the following observations:

- a) Action 15: e-learning for MSI is currently in French and is being translated into English by France. It could potentially be used in the forthcoming MSI training in SWPHC. EAHC expressed interest in hosting an e-learning MSI training in the EAHC/Training, Research and Development Center (TRDC) and Japan highlighted the need to coordinate this development with the NAVAREA coordinators via WWNWS-SC.
- b) Action 24: the EAHC decided to postpone the Technical Visit to Timor Leste and a proposal will be made in future stage depending on the developments in the country.

Decision 3: to approve the CBSC15 Report (doc. *CBSC16-03A*) and Action List, as updated by the CBSC16 (doc. *CBSC16-03B rev1*).

4. Reports by the Chair and the IHO Secretariat

Docs: CBSC16-04A Report by the Chair (Chair)

CBSC16-04B Report by the IHO Secretariat (Secretary)

Highlights were given from the Chair and the Secretary on ongoing issues and the future of the IHO Capacity Building programme.

Chair highlighted that the revised Capacity Building Strategy proves to be very efficient and it is fit for purpose. He mentioned that CB played an important role at the 1st meeting of the Council (C-1) held in October 2017 in Monaco and the work of the CBSC is being appreciated and seen as one of major strategic endeavors of the IHO. The Council endorsed the proposal for increasing the CB support at the IHO Secretariat and the Secretary-General decided that Ms Sandrine Brunel works full time as Capacity Building Assistant from 1 January 2018.

He noted that funds have been growing but are less than needed and to deal with that deficit the CBSC has to stick strictly to the strategy and regulations. Some submissions will be on a waiting list until further funds are available. The question is how to take the IHO CB to the next level and the need to have comprehensive projects in order to attract donor organizations.

The progress in the development of a CB Management System by the efficient support from the Republic of Korea was noted by the meeting, together with the financial support from ROK and Nippon Foundation of Japan. This extraordinary generous ongoing contribution from Japan and ROK have been one major factor in the success of CB programme.

Chair presented the ideas on the organization of the second stakeholders' seminar that is planned to be held in 2019 and on the relevant role played by the CB Coordinators in the success of CB activities and the importance not to change this position too often. He reported on the annual Joint CB Coordination meeting of IHO, IMO, WMO, IOC, IAEA, IALA, FIG and IMPA that took place at the IALA headquarters in St. Germain en Laye in November 2017. The International Maritime Pilot Association (IMPA) participated for the first time. This will strengthen the cooperation. The success of comprehensive projects is very dependent on a good cooperation between the organizations.

The meeting expressed concerns with the lack of cooperation with the IMO and the negative impacts to the IMO Member States that are not Member States of the IHO, and the following action was agreed:

Action 1: Chair to bring the IMO issues to the IRCC and request to encourage Member States to engage with their delegations in the IMO to provide support to the IMO Member States that are not IHO Members to comply with SOLAS Chapter V (deadline: IRCC10).

The Republic of Korea (ROK) expressed its satisfaction to contribute to the IHO's Capacity Building activities. He noted that ROK strives to obtain the budget for the contribution every year, although it is not always certain it could be secured. He added that KHOA Director General hopes that more and

more countries will join ROK in providing both tangible and intangible support to CB activities so that the technology gap among IHO Member States could be reduced.

Secretary briefed the meeting on the impact of the entry into force of the amendments to the IHO Convention and its supporting Basic Documents and on the status of Membership of the IHO. Publicity and Outreach were highlighted, in particular on the theme for the World Hydrography Day 2018 (*Bathymetry – the foundation for sustainable seas, oceans and waterways*), on the progress with the International Hydrographic Review and on the new video produced by Italy on "... become a hydrographer". He also reported progress in the IHO Secretariat infrastructure with an email group cbcs@iho.int created to facilitate communication of CB related activities, the status of the CB Management System, the IHO Geographical Information System (IHO/GIS) and the IHO Country Information System (IHO/CIS).

Decision 4: to note the reports under agenda item 4 (docs. *CBSC16-04A* and *CBSC16-04B*).

5. Regional Assessment of CB Activities

5.1 Reports of the Regional Hydrographic Commissions (RHC)

<i>Docs: CBSC16-05.1A</i>	<i>NSHC Report (oral report)</i>
<i>CBSC16-05.1B</i>	<i>MBSHC Report</i>
<i>CBSC16-05.1C</i>	<i>BSHC Report (oral report)</i>
<i>CBSC16-05.1D</i>	<i>USCHC Report</i>
<i>CBSC16-05.1E</i>	<i>EAHC Report</i>
<i>CBSC16-05.1F</i>	<i>EAtHC Report</i>
<i>CBSC16-05.1G</i>	<i>SEPRHC Report</i>
<i>CBSC16-05.1H</i>	<i>SWPHC Report</i>
<i>CBSC16-05.1I</i>	<i>MACHC Report</i>
<i>CBSC16-05.1J</i>	<i>SAIHC Report</i>
<i>CBSC16-05.1K</i>	<i>NIOHC Report</i>
<i>CBSC16-05.1L</i>	<i>RSAHC Report (not submitted)</i>
<i>CBSC16-05.1M</i>	<i>SWAtHC Report</i>

RHC Members and CB Coordinators updated the meeting on the status of surveys, charts and MSI (C-55) and reported on visits (high-level, technical and follow-up) and on courses, workshops and seminars provided to the RHCs.

a) NSHC Report

The Representative gave an oral report on how CB is discussed in the agenda and how the support is given to countries in need (outside the region).

b) MBSHC Report

The Representative reported the CB activities in 2017 (technical visit to Azerbaijan, ENC Production Course and Seminar on technical aspects of the Law of the Sea (LOS) and the plans for 2018, with a follow up visit to Albania and Georgia, the port and shallow water survey course and the workshop on Maritime Safety Information (MSI). He highlighted the challenges in the region, in particular the need for long courses (including for non-Member States) and short trainings and communication with States in the region.

Meeting discussed the issue of non-Member States in need of phase 2 and phase 3 support as suggested in the report. While the IHO CB Strategy prevents direct funding for non-Member States, there are possibilities for their participation in CB activities by funding their participation (ticket and accommodation). For long courses, options exist with other countries that provide training with minimum or no fees. There was general agreement on the correctness of the Strategy and concerns with relaxing the requirement for being Member State to have access to CB Phases 2 and 3.

Participants also discussed the possibility of securing funds for new Member States joining the IHO either for a technical visit or for a consultant to provide direct support. The meeting considered that CB Coordinators should consider extraordinary submissions when new Member States join.

c) BSHC Report

The Representative gave an oral report on how CB is provided in the region and explained that Baltic States may apply to trainings under the CBWP for activities with a general call via circular letter.

d) USCHC Report

The Representative introduced the available opportunities in Category "A" and Category "B" programmes for Hydrographic Surveyors in USA, and the interaction with the International Cartographic Conference (ICC2017) when the NOAA/Office of Coast Survey promoted an open house event and cartographic exhibition.

He also invited the CBSC to take advantage of the Chart Adequacy Workshop that will take place in USA in 2019 when two seats will be made available to the CBSC. Funding support for the workshop is provided by NOAA, the University of New Hampshire, and the UKHO (Doc. *CBSC16-09.4B* refers). The follow actions were agreed:

Action 2: USA to liaise with the IHO Secretariat for the preparation of the call for candidates to the Chart Adequacy Workshop in 2019 via CL (deadline: September 2018).

Action 3: Secretariat to issue a CL calling for candidates to the Chart Adequacy Workshop in 2019 in accordance with the information provided by USA (deadline: after Action 2).

Chair thanked the USA for offering such support for the IHO CB Programme.

e) EAHC Report

The Representative introduced the report and presented the current status of the EAHC/Training, Research and Development Center (<http://trdc.eahc.asia>) and summarized the assessment of CB Phase stage of coastal States in the region. He reported the CB activities conducted in the region, including those funded outside the CB Fund.

The meeting was informed that many training activities were delivered but there is still a significant level of technology gap among the ten Member States and that developing countries need continuous CB activities to enhance their basic capacity in hydrographic surveying and charting. He highlighted that EAHC region is one of the areas with largest marine traffic in the world and CB is key in managing maritime safety information (MSI) and risk assessment, both reflected in the submissions for the 2019 CB activities.

Participants discussed the need for strong commitment for the development of MSI worldwide and one good example is the development in Nigeria as a result of their participation on a MSI training. The meeting acknowledged the work of Nigeria and France on this success.

f) EAtHC Report

The Representative introduced the report and presented the main CB activities developed since the last meeting: a technical visit to Gambia and to the hydrographic training center in Nigeria. Training assistance was offered to Nigeria MSI Coordinator and France (NAVAREA II Coordinator) started to transmit the coastal warnings of Nigeria via SafetyNET.

He informed the meeting on the planned activities for 2018, with the continuation of the visits to training centers in Gabon and Cameroun, the organization of a regional awareness seminar on maritime geospatial knowledge preceding the EAtHC conference, the promotion of the HydrOMAOC study results, the development of an English version of the MSI e-Learning resource and the development of an e-Learning course on survey specification.

The assessment of the stage of CB phases in the region was presented to the meeting, along with the procedure to prepare the submissions for 2019. He also reported the difficulties and challenges in the West and Central Africa (WCA) sub-region that remain considerable, except for Morocco and Nigeria. Ever-growing needs in term of maritime geospatial knowledge exist and the provision of hydrographic services remain very limited, despite the continuous CB efforts.

He noted that considering the magnitude of the task to develop hydrographic services and the available resources, a different approach for the implementation of the CB strategy may be considered for this region (doc. *CBS16-06F* refers).

g) SEPRHC Report

The Representative introduced the report and presented the main CB activities developed since the last meeting, including the non-IHO activities, and the plans for the 2019-2020 period. He also reported the engagement to attract Panama to participate in the hydrographic activities.

He reported the approach to improve the relationship with other stakeholders looking into synergies and potential financial sources, given the need to promote the hydrographic development in the region. He also noted that CB activities sponsored by IHO and organized by the SEPRHC are fundamentals for the maritime development of the region.

h) SWPHC Report

The Representative of the region introduced the report and started by characterizing the region and the key role played by the maritime sector in supporting economic growth and development in Pacific Island Countries and Territories (PICTs). In this context he presented the status of hydrography in the region and the implementation of the CB activities since last meeting. The status of bilateral arrangements between NZ and Samoa, Cook Islands, Niue and Tonga was reported.

He introduced the Ministry of Foreign Affairs and Trade (MFAT) of New Zealand Aid Programme - Pacific Regional Navigation Initiative (PRNI) with a recent hydrographic risk assessment done in Samoa and a traffic analysis done for Tokelau. He also reported on the Commonwealth Marine Economies (CME) Programme that conducted hydrographic surveys of critical navigation areas and marine habitats in Tonga and the engagement of the Pacific Community (SPC) - Oceans and Maritime Programme.

Progress was reported on gathering data for ENC and paper chart production in the region and the plans for future production, including an extensive programme of Satellite Derived Bathymetry (SDB) for the Cook Islands, Niue, Tokelau and Tonga. The plans for future activities on PRNI to cover extensive hydrographic surveys in Cook Islands, Niue, Samoa, Tokelau and Tonga was reported, with a total 63 ENCs to be produced, including 19 new.

He stressed the challenges faced in the region which has a large geographical extent, with high cost of travel and limited opportunities for meetings. The meeting was informed on the limitations on the capacity of the Capacity Builders and how coastal States are presented with numerous CB and development activities and programmes which can impact their ability to be able to engage meaningfully.

The meeting was informed that there has been considerable progress in CB activities in the region since CBSC15: Vanuatu became an IHO Member in 2017 and Solomon Islands is in the process of becoming a Member; Indonesia became an Associate Member of SWPHC to facilitate the harmonization and coordination of activities; Australia became the Primary Charting Authority (PCA) for Solomon Islands and provided hydrographic training (Category "B" course) to Fiji and New Zealand. He informed the progress made by UK under the CME Programme.

Participants learned of the significant progress made in Fiji with the support from the ROK and other States in the region, the surveys conducted in Papua New Guinea as part of the Asian Development Bank (ADB) Maritime and Waterways Safety Project; the production by USA of six ENCs surrounding Palau; the establishment of a National Hydrographic Committee in Vanuatu and the plans

to survey 10 priority areas and to build a new Hydrographic Survey Unit; the appointment of a National Coordinator for MSI and plans to establish Hydrographic Services in Kiribati; the plans to establish a National Hydrographic Authority and a National Coordination Committee in Niue, the establishment of a National Hydrographic Committee, the appointment of a National Coordinator for MSI and the plans to establish a National Hydrographic Authority in Samoa.

He concluded by emphasizing the strategy of preceding SWPHC meetings with a CB workshop that proved very beneficial. The last workshop had around 40 participants, the large majority from PICTs, all extremely active and contributed to collective and own knowledge of hydrography. He stressed that SWPHC, in collaboration with other international, regional and bi-lateral partners, is committed to carrying forward hydrographic, nautical cartographic and capacity building activities in close alignment with IHO objectives and goals. The meeting then agreed the following:

Decision 5: to note the value and effectiveness of preceding SWPHC meetings with CB related workshops.

Decision 6: to note SWPHC's commitment in carrying forward hydrographic, nautical cartographic and capacity building activities in close alignment with IHO objectives and goals.

i) MACHC Report

The Representative of the region introduced the report and a characterization of the region where it is estimated that over 30% of the world's crude oil passes through the Caribbean which is home to over 50% of the world's cruise shipping. The Caribbean endures a hurricane season from July to November and some storms leave a trail of devastation on the islands and their coasts. The 2017 Atlantic hurricane season was very active with three major hurricanes wreaking havoc in the Leeward Islands, Dominica and Puerto Rico.

He presented the results of the assessment of CB Phase stage of coastal States in the region and the activities completed since the last meeting, including two technical visits, a MSI training and the very successful Hydrographic Awareness Seminar preceding the MACHC18 meeting in November 2017 that not only guarantees attendance but also showcases the importance of regional hydrography and how all coastal states have a part to play, irrespective of size.

Challenges faced in the region were presented as the high number of Small Islands Development States (SIDS) and Central America States with no formal hydrographic infrastructure that are usually reliant on a national Maritime Authority or some other organization for the provision of hydrographic services. Very few of these States are IHO members, including the biggest Flag State in the world.

The meeting was informed on the good level of cooperation with the SWAtHC and SEPRHC, on Mexico's FOCAHIMECA project in building Phase 2 capability in a number of Spanish speaking states and the UK's CME and Overseas Territories Seabed Mapping Programmes that is assisting a number of SIDS with data gathering in their littoral zones. The meeting also acknowledged the participation of IALA as significant in working together with the IHO.

Participants knew about the success story of Venezuela in creating capacity for ENC production that resulted in the first ENCs for the Orinoco River.

j) SAIHC Report

The Representative of the region introduced the report and depicted the region that contains three of the world's 64 major large marine ecosystems - the Benguela current, the Agulhas current and the Somali current. He described the major routes and the shipping lanes along the East Africa coast that carry over 30% of the world's crude oil supplies. This region contains thirteen important commercial ports serving as hubs for traffic emanating from, and destined for Europe, Asia, the Americas and the east and western coasts of Africa. Oil and gas exploration programmes operating throughout the region bring additional risks.

He presented the results of the assessment of CB Phase stage of coastal States and the activities conducted since the last meeting and the activities planned for 2018. He presented the challenges faced in the region

The meeting was informed that one of the most significant challenges is generating engagement from the Associate Members (AM) and that to address this problem, the SAIHC will host its inaugural Hydrographic Awareness Seminar to raise awareness of hydrography, to address technical problems, to foster cooperation and to support the participation to the SAIHC Conference. Apart from Portugal, none of the AM states are IHO members and don't qualify for the higher level training opportunities which are only available to Members.

Participants were informed on the progresses in the region with the steady improvement of the Phase 1 capability based on feedback, the cooperation and joint activities with the NIOHC and the active participation of India over many years in developing hydrographic services in Mauritius while Portugal performs a similar role for the Lusophone African States. The Indian, Portuguese and UK Government's contribution to regional capacity building was acknowledged by the meeting as contributing to improve both the education and data gathering regionally.

k) NIOHC Report

The Representative of the region introduced the report and presented the background of the Indian Ocean that provides major sea routes connecting the Middle East, Africa, and East Asia with Europe and the Americas, around 66% of the world's oil shipments. It is estimated that 40% of the world's offshore oil production comes from the Indian Ocean.

He presented the results of the assessment of CB Phase stage of coastal States, the activities conducted since the last meeting, the activities planned for 2018 and the challenges faced in the region. One of the most significant challenges the NIOHC faces is engaging and communicating with the Maldives and the Red Sea maritime states. Very few of these states are IHO members and thus don't qualify for the higher-level training opportunities which are only available to Member States. In an attempt to generate greater engagement from coastal States the NIOHC will organize a hydrographic awareness seminar to precede the 2019 NIOHC meeting.

Participants were informed on the progresses in the region with the steady improvement of Phase 1 capability based on feedback, the cooperation and joint activities with the SAIHC and with the RSAHC. They were also informed that India has been very active over many years in developing hydrographic services in several Indian Ocean nations, in particular in Mauritius. The meeting acknowledged the Indian and UK Government's contribution to regional capacity building that supported the improvement of both the education and data gathering regionally.

l) RSAHC Report

No report was submitted by the RSAHC and the meeting considered ways to improve the CB coordination in the region and short term actions to mitigate the negative impact on RSAHC Members. The meeting agreed to discuss this under agenda item 9.

m) SWAtHC Report

The Representative of the region introduced the report and presented the main CB activities completed since the last meeting. With the support of the CB activities, Paraguay is more actively engaging in hydrographic surveys in the Parana-Paraguay Waterway and Bolivia is in the process to become an Associate Member.

The meeting was informed on the training and education provided in-kind by Brazil to Mozambique in 2017 for two students in the Category "B" course. In 2018 one Bolivian Officer is enrolled in the Category "A" programme.

The meeting agreed on the following decision:

Decision 7: to note the reports under agenda item 5.1 (Reports from the RHCs, docs. *CBSC16-05.1A* to *M*).

5.2 Update and closure of the 2017 CBWP

Doc: CBSC16-05.2 *Closed 2017 CBWP*

Secretary introduced the 2017 CBWP (doc. CBSC16-05.2) that was subsequently reviewed, updated and closed by the CBSC. Closed 2017 CBWP is in **Annex A**.

Decision 8: to approve the closed 2017 CBWP (doc. *CBSC16-05.2*).

6. Regional projects for CB

<i>Docs:</i> CBSC16-06A	<i>Pacific Region Navigational Initiative (NZ)</i>
CBSC16-06B	<i>CME and Overseas Territories Seabed Mapping (UK)</i>
CBSC16-06C	<i>FOCAHIMECA (Mexico)</i>
CBSC16-06D	<i>Cooperation with Lebanon (Italy)</i>
CBSC16-06E	<i>EAHC-TRDC (EAHC)</i>
CBSC16-06F	<i>Towards a new implementation of the CB strategy in the region (EAHC)</i>

Chair invited for the introduction of reports and presentations on ongoing/new developments in regional projects.

a) PRNI (NZ)

NZ presented the current status of the PRNI developed as a Memorandum of Understanding (MoU) between the Ministry of Foreign Affairs and Trade (MFAT) and Land Information New Zealand (LINZ). The project involves the support from LINZ to Cook Islands, Niue, Samoa, Tokelau and Tonga, and from SPC to Kiribati, Tuvalu and Vanuatu. The outputs are: data discovery; hydrographic risk assessment; capacity building; mitigation measures and establishment of partnerships.

USA informed the meeting about available funding in USA under the Security Cooperation Agency (Department of Defense).

b) CME and Overseas Territories Seabed Mapping Programmes

UK introduced the Commonwealth Marine Economies (CME) Programme that aims to collect marine geospatial data, produce navigational charts, undertake science and provide knowledge transfer required to enable SIDS to develop and protect their blue economies. It is a four-year programme to target 17 Commonwealth SIDS in the Pacific and Caribbean, partnered by the UKHO, the National Oceanography Centre (NOC) and the Centre for Environment Fisheries and Aquaculture Science (CEFAS).

The meeting was also informed about the Overseas Territories Seabed Mapping Programme with the Scope to assess the national hydrography framework (legislation and Governance) and to update surveys and charting to ensure compliance with international obligations, and includes Maritime Boundary Delimitation. It has currently allowed for new surveys and chart updates to several of the UK's Overseas Territories.

The CBSC noted that many RHCs are engaging in risk assessment projects that could be used in the Western and Central Africa (WCA).

c) FOCAHIMECA

The MACHC CB Coordinator, on behalf of Mexico, reported on the status of the Project for Strengthening of Hydrographic Capabilities in Mesoamerica and Caribbean Sea (FOCAHIMECA, from the Spanish). It is jointly run by the Ministry of the Navy and the Mexican Agency for International Development and Cooperation (AMEXCID) as a component of the Maritime Short

Distance Transport Initiative, in collaboration with the Association of Caribbean States (ACS). The objective is to improve the safety of navigation in the region through capacity building.

The meeting appreciated the support provided to the region by several nations and noted the need for coordination among projects.

d) Cooperation with Lebanon

Italy reported on the cooperation agreement with Lebanon for building a National Hydrographic Service with a data-centric approach. It started with capacity building, including the provision of hydrographic education and in the long term the goal is to build hydrographic and cartographic operation capacity, develop the national engagement with stakeholders and to place Lebanon into the international geospatial and hydrographic community.

The meeting was informed on the complete up-to-date new equipment and software received by Lebanon, including the installation and professional courses delivered together with hardware and software and the yearly mentoring of teams in Lebanon.

Participants discussed the value of the IHO Technical Visits for creating awareness, like the one in Lebanon in 2014 and then the value of bilateral agreements from promoting and building hydrographic capacity.

e) EAHC/TRDC

The EAHC CB Coordinator reported on the progress done in EAHC to further enhance the capacity of their human resources and to level up Hydrographic Offices (HOs) capabilities in the region, by establishing the Training, Research and Development Center (TRDC). Main challenges are to apply hydrographic concepts in the daily work as many of the resources and training are in English and the turnover of technical staff is high. The EAHC resolved to jointly find sustainable approach to these challenges and developed a customized Training for Trainers (TFT) in Basic Hydrography and Cartography to mitigate these problems.

As part of the CBWP, several TFT – Basic Cartography and Hydrography were hosted by the Korea Hydrographic and Oceanographic Agency (KHOA) in Busan, Republic of Korea. Since 2013, more than 60 participants and nearly all EAHC Member States have conducted the trainings for their respective officers using the training material. The EAHC annual meetings held in 2018 approved the proposal by the TRDC-Board of Directors to share the experience and best practices with other IHO Member States.

He informed the CBSC on the future plans are to review the course syllabi and content for hydrography and cartography in 2019 and 2020 and that the EAHC is pleased to share this TFT programme model, training course syllabi and content with other Hydrographic Commissions from 2019. He noted that some challenges exist in releasing the training material as they have copyright.

The meeting welcomed the initiative of the EAHC to share this valuable resource with the other RHCs and agreed on the following action:

Action 4: ROK to liaise with Malaysia and UKHO to consider the possibility to release the TFT training material and to report back to CBSC (deadline: November 2018).

f) EAthC

The EAthC CB Coordinator informed the meeting on the challenges in developing hydrographic services in WCA as most coastal States in the region remain unable to provide the hydrographic services necessary for safe navigation and more generally to support the protection and sustainable use of the marine and coastal environments. Additionally, from the 19 coastal States in WCA, only two (Cameroon and Nigeria) are IHO and EAthC Members, nine are Associate Members and eight are Observers of the EAthC.

He stressed that the efforts of the IHO and Member States since 2002 has increased awareness of hydrography, including at a high political level (e.g. Ghana, Togo and Senegal have established a national hydrographic commissions), but not led to significant improvements in hydrographic services. He then questioned the relevance of the implementation of the CB strategy for the EAthC region.

EAthC CB Coordinator highlighted that CB over the last 15 years has mainly focused on targeted actions either on a country (18 coastal States have been visited since 2002, some of them twice) or on a specific theme (awareness or technical workshops and trainings). In the meantime, the importance of a regional holistic approach has been stressed on several occasions as critical for an effective long term development of the hydrographic services amongst WCA coastal States.

He explained that in 2015, the CBSC agreed to support an initiative for the benefit of WCA by developing a regional approach, the HydrOMAOC (OMAOC stands for *Organisation Maritime de l'Afrique de l'ouest et du Centre*, French for Maritime Organisation for West and Central Africa – MOWCA) definition study conducted in 2016 and 2017. Given the magnitude of the task to promote such a global holistic approach, the limited human resources that member states and IHO can devote to it and the limited involvement of the coastal States directly concerned, the establishment of an ambitious regional project has not yet been possible.

He concluded by recommending to limit "conventional targeted" CB actions and concentrate on the insertion of a hydrographic component in more global maritime projects as regional CB project focused only on hydrography is very unlikely to be funded. This holistic approach needs to be consistent with the 2050 Africa's Integrated Maritime Strategy. He also recommended to strengthen IHO's involvement in the implementation of CB in EAthC region through the creation of a post within the Secretariat dedicated to CB for the EAthC region.

The meeting reviewed the recommendations in doc. *CBSC16-06F* and considered that the lack of awareness and lack of synergies is not limited to the EAthC but rather is universal. The meeting agreed that it is important to target economic development and building of infrastructure and that the IHO should not underestimate the power of trainings as a means to engage with States. A key point acknowledged by the participants is the fact that investment in CB may take years to provide fruits.

The proposal for a dedicated position in the Secretariat for the EAthC was considered unrealistic both in terms of financial impact and because the IHO is organized in RHCs and should not be operated by a central office. The IHO CB Strategy is fit for purpose and contains the elements for larger projects already in place but that there is need for a dedicated resource mobilization officer, to be discussed in the next agenda item. The following was agreed:

Decision 9: to acknowledge the CB work done in the EAthC in the past 15 years.

Decision 10: not to endorse the proposal for a dedicated person devoted to the EAthC in the IHO Secretariat.

Action 5: Chair to address the need for resources for Capacity Building (resource mobilization officer) to allow for the comprehensive projects of CB (deadline: IRCC10).

7. Outcomes of the 1st meeting of the IHO Council and the Strategic Issues of the CBSC

Docs: CBSC16-07A IHO Capacity Building Strategy (Chair)
CBSC16-07B Decisions and Actions from C-1 (Secretary)

The meeting discussed the IHO CB Strategy and the way ahead for the CB Strategy, including the development of projects to seek donor funds and how to measure the success of the CB Programme.

Discussion on the Strategy and the implementation of the CB Work Programmes led to the following:

- 1) Cooperation with IALA: it was considered very fruitful in terms of CB, e.g. in Joint Seminars on Safety of Navigation, on joint technical/needs assessment visits and potentially on risk assessment.

Secretary explained that both organizations share agendas and plans for visits and seminars.

- 2) Resource mobilization: examples exist in the International Maritime Organization (IMO) and in the Consortium for Ocean Leadership (COL) to attract and manage resources properly. There will be benefits in improving capacity in the IHO Secretariat to work on this level in CB, including access to donor organization and development of projects. It could potentially use funds available from the CB Fund for a position at the Secretariat (permanent or temporary) or the use of consultants as posed by the Strategy. However, the proposal to increase staff in the Secretariat should be taken conservatively with full consideration for the terms of reference for such a position. The CBSC should present to the IHO Secretariat the tasks to be performed and the objectives to be achieved allowing the Secretary-General to decide how to comply with them.
- 3) Execution of larger projects: the decision to aim at larger projects beyond Hydrography or to keep trainings at technical level should be appreciated and decided by each RHC. This is in accordance with the IHO CB Strategy, but beyond the regional approach to larger projects, should the IHO have global projects to support the development of hydrography in specific areas?
- 4) Industry engagement: Industry can engage in several different ways as partnering in the execution of projects, in providing funds to develop joint projects to be submitted to donor agencies and in providing consultants to prepare projects to be submitted.
- 5) Approaching donor agencies: it can be beneficial to approach donor agencies to offer support and collaboration for geospatial projects that could benefit from hydrographic components. Example is the Open Geospatial Consortium (OGC) and the International Standardization Organization (ISO) that cooperate with the World Bank by providing geospatial standards and expertise. This can only increase the relevance of the IHO.
- 6) Approach for WCA: EAHC Coordinator explained that HydrOMAOC had a needs assessment but it was too general and lacks the risk assessment and the more objective identification on the needs in Hydrography for the Safety of Navigation. He informed the meeting that France is planning to follow the NZ approach for risk assessment.

Secretary introduced the Decisions and Actions from C-1 and the meeting considered that the elements related to the CBSC have been dealt with at relevant agenda items.

8. Operational issues of the CBSC

8.1 Draft CB Procedures 9

Doc: CBSC16-08.1 Draft CB Procedure 9 on Technical Visits (Secretariat)

Secretary introduced the draft CB Procedure 9 on Technical Visits (doc. *CBSC16-08.1*). Action CBSC15/16 the Vice-Chair and the Secretary to *get feedback from the recent visiting teams and liaise with Norway and UK to submit a draft Procedure 9 to CBSC16 considering the need for self-assessment prior to the visit, reference to the IMSAS questionnaire, development of checklists and the access of the existing knowledge in the Secretariat by the Project Leader.*

Secretary reported that no resources were available to accomplish this task but Norway provided feedback from its staff that it is a good procedure and the visiting teams should follow this procedure to make the report usable and fit for purpose and suggested that there is the need for a strong statement from this Sub-Committee to enforce its use by the visiting teams. The following was agreed:

Action 6: CB Coordinators review draft CB Procedure 9 and identify areas that could be simplified and provide input to the Secretary and the Vice-Chair for the technical and high-level visits (deadline: October 2018).

Action 7: Vice-Chair and Secretary to compile the inputs to draft Procedure 9 and provide a new draft to the CBSC for adoption during CBSC17 (deadline: December 2018).

Decision 11: to have one single report for each country visited by an IHO visiting team and to reflect this in Procedure 9.

8.2 CB Management System update

Doc: CBSC16-08.2 CB Management System update (ROK, Secretariat)

Secretary introduced the history of the CB Management System (CBMS) since 2011 and the work done with Norway to define the specifications for contract, overtaken by the increasing number of CB procedures and the need to link data with IHO databases, publications, workflows and a future country profile.

ROK presented the status of the CBMS and the plans for development. The system aims to facilitate efficient operation and management of IHO CB programme, moving to an online-based business process with database construction and systematic data management, improving efficiency for the CBSC and the IHO Secretariat.

He introduced an overview of the system and the plans to be ready for submissions to CBSC17. In the meantime the IHO Secretariat will test and validate it using the submissions from CBSC16.

8.3 C-55 Status and Developments

Docs: CBSC16-08.3A C-55 Status and Developments (Secretariat)
CBSC16-08.3B Review of C-55 (UK and France)

Secretary updated the SC on the status of C-55 and current developments in the IHO Secretariat (doc. *CBSC16-08.3A*), both using the current available text strings to generate graphic outputs and the possibilities for a plain GIS system using geospatial data, linked to S-100 series.

Chair invited UK, on behalf of UK and France, to introduce proposal for review of *C-55 Status of Hydrographic Surveying and Nautical Charting Worldwide* (doc. *CBSC16-08.3B*). He started by presenting the aim of C-55 *to present a clear picture of the worldwide coverage of surveys and nautical charts and of the extent of effective organizations for the timely promulgation of navigational safety information.*

However, the confidence in the indicators are severely limited by the non-uniform approach each coastal State (or their PCA) use to derive the input to C-55, a database that underpins IHO advice to the UN, IMO and other agencies, and is used in particular in the context of IMSAS.

He recommended a short term action to get more standardized and relevant indicators by improving the Guidelines to estimate the C-55 status of hydrographic surveying indicator that should be more prescriptive or at least more documented through sharing of national experiences, and by using the CATZOC survey qualification to derive the C-55 indicator as a standardized methodology could be considered as an interim solution.

The meeting also received a recommendation to review the purpose, use and mechanism for collecting, managing and presenting C-55 data. There should be a dual C-55 indicator on the state of hydrographic surveying: one focusing only on areas of interest for navigation (SOLAS obligations) and the other to reflect the state of global bathymetric knowledge ("Hydrography is Much More than Just Nautical Charts").

Participants discussed the proposal and the need to receive the contribution of data from States and one possible solution could be for the RENCs to provide such data on behalf of Members. They were also informed on the work being done on S-44 that may affect the redefinition of C-55, with maybe a conversion table from S-44 to C-55 and the work in the ARHC to compile data and provide chart adequacy to the Arctic Council were also noted by the meeting.

The meeting considered that the use of CATZOC may put pressure to improve CATZOC. Despite the envisioned problems with CATZOC, it is better than the current input to C-55 based on subjective assessment. There was general agreement that C-55 is not fit for purpose and a revision of the methodology is required, in particular the Hydrographic component, to pursue the use of CATZOC as an interim solution in developing an objective version of C-55 and that the RENCs could be approached to provide CATZOC data as input to C-55.

The CBSC also agreed on the need for a GIS C-55 and to recommend to the IRCC that the GIS version of C-55 available in the IHO Country Information System (CIS) and Geographic Information System (GIS) should be made available to MS. The following was agreed:

Decision 12: CBSC to review C-55 as indicated in doc. *CBSC16-08.3B*.

Decision 13: to establish a C-55 Review Project Team (C-55RPT).

Decision 14: to consider introducing CATZOC information as an interim solution as an indicator for survey adequacy.

Action 8: Chair to invite the IRCC to support the use of CATZOC information as an interim solution as an indicator for survey adequacy and to encourage Member States, via RHCs, to provide CATZOC information for C-55, directly or via RENCs (deadline: IRCC10).

Action 9: Chair to encourage IRCC to invite the IHO Secretariat to make the IHO GIS and CIS available to Member States (deadline: IRCC10).

An ad-hoc drafting group was established during the meeting to draft the Terms of Reference and Rules of Procedure of the C-55RPT. The draft document was presented to the meeting (**Annex B**) and the meeting agreed the following:

Decision 15: to approve the ToR/RoP of the C-55RPT and appoint Norway (Evert Flier), UK (Jeff Bryant) and France (Vincent Lamarre) as Chair, Vice-Chair and Secretary, respectively.

Turkey objected to decisions 12 to 15 and provided the following statement:

"There are difficulties arising during the allocation process of CATZOC values in S-57 and exchange national methodologies from survey data to CATZOC. TR believes that this is purely a technical issue and related HSSC Working Groups are still working on the issue. When the standards are OK and all the HOs have a common reference, using CATZOC in C-55 may be an issue of CBSC".

8.4 Performance Indicators and Statistics

Doc: CBSC16-08.4 Performance Indicators (Chair)

Chair introduced the performance indicators (doc. *CBSC16-08.4*) and the meeting discussed the requirements for the Performance Indicators and the establishment of the relevant statistics related to CB. The work of the Strategic Plan Review Working Group (SPRWG) was also considered.

8.5 National Hydrographic (Coordinating) Committee (NHC/NHCC)

Chair invited the meeting to discuss the importance of the establishment of the National Hydrographic (Coordinating) Committee (NHC/NHCC). There was consensus that the establishment of a NHC is of paramount importance for developing countries and that a collection of legislation and recommendations is beneficial. The following actions were agreed:

Action 10: Secretary to compile legislation and related documents for NHC, best cases, uses, benefits, stakeholders and distribute to the CBSC (deadline: August 2018).

Action 11: CBSC Members to provide comments and feedback to the Secretary on legislation for NHC, according to Action 10 (deadline: November 2018).

Action 12: Secretary to compile inputs and comments from CBSC Members and provide a draft guiding document to CBSC on legislation for NHC, according to Actions 10 and 11 (deadline: CBSC17).

8.6 Review of the 3-year RHC Work Plans 2018-2020

Docs: CBSC16-08.6A MBSHC 3-year Work Plan
CBSC16-08.6B EAHC 3-year Work Plan
CBSC16-08.6C EAHC 3-year Work Plan
CBSC16-08.6D SEPRHC 3-year Work Plan
CBSC16-08.6E SWPHC 3-year Work Plan

<i>CBSC16-08.6F</i>	<i>MACHC 3-year Work Plan</i>
<i>CBSC16-08.6G</i>	<i>SAIHC 3-year Work Plan</i>
<i>CBSC16-08.6H</i>	<i>NIOHC 3-year Work Plan</i>
<i>CBSC16-08.6I</i>	<i>RSAHC 3-year Work Plan</i>
<i>CBSC16-08.6J</i>	<i>SWAtHC 3-year Work Plan</i>

Chair invited the CB Coordinators to provide updates of the 3-year Work Plans of each RHC that has one. The following updates were noted by the CBSC:

- a) MBSHC Plan was updated to include a TV to Bulgaria in 2019, as the Country became a new Member State of the IHO in 2018.
- b) EAHC Plan is in the process of review and it will be submitted to the EAHC Conference in October 2018.

Chair explained the rationale for the 3-year Work Plan and that the level of details required that should be less than those in Procedures 1 and 4. The following was subsequently agreed:

Decision 16: to note the reports under agenda item 8 (docs. *CBSC16-08-6A to J*).

9. CB Management

9.1 Update of the 2018 CBWP

Doc: CBSC16-09.1 Updated 2018 CBWP (Secretary)

Chair invited the meeting for feedback to the 2018 CBWP. The MBSHC CB Coordinator and Norway reported that there is an opportunity for a High-level Visit (HV) to Albania, in order to promote the importance of hydrography in the country, to foster the creation of the legislation and of the hydrographic service.

The EAHC CB Coordinator informed that a proposal to visit Timor Leste will be submitted in the future and recommended the Sub-Committee to cancel activity A-06.

The EAHC CB Coordinator reported the situation of the activities in the region and requested the SC to reduce the budget of P-12 from 15 000 to 3 000 Euros and to postpone P-13 and P-15 to 2019. He informed the meeting on the status of development of e-learning training material with the support of CHS and that a future proposal for funding will be submitted.

Since no project was submitted from RSAHC to the 2019 CBWP, Iran requested whether participation could be granted to RSAHC Members in the NIOHC CB Activities. The meeting agreed to adjust the budget of P-07 from 18 951 Euros to 21 961 Euros in order to allow for two participants from RSAHC to attend the Phase 1 Skills training in India.

The SWPHC CB Coordinator informed the meeting on the status of the technical implementation visits to Samoa and Niue and requested the CBSC to postpone activities A-04 and A-05 to 2019, both approved by the meeting.

The SAIHC CB Coordinator and the Secretary informed the meeting that a request from Angola for a Technical Visit was received and the proposal (Procedure 1 and Procedure 4) for an extraordinary visit was presented to the meeting.

The following was then agreed:

Decision 17: to add 3 010 Euros in activity P-07 of the 2018 CBWP to allow the participation of 2 members from RSAHC in the Phase 1 Skills training to be conducted in India, later in 2018.

Decision 18: to approve the extraordinary proposal for a high-level visit to Angola in 2018.

Decision 19: to adopt the 2018 CBWP (as off 1 June 2018, **Annex C**).

9.2 Finance Report

Doc: CBSC16-09.2 Finance Report (Secretary)

Secretary introduced the finance report for the consideration of the CBSC. Chair suggested the meeting to hold the current surplus forecast of nearly 50 000 Euros in the 2018 CBWP to be used in the 2019 CBWP and the following was agreed:

Decision 20: to approve the Finance Report (doc. CBSC16-09.2).

Decision 21: to transfer the 2018 CBWP surplus to be used in the 2019 CBWP.

9.3 Management Plan

Doc: CBSC16-09.3 Draft 2019 CB Management Plan (Secretary)

Chair invited the CBSC to review and update the draft 2019 CB Management Plan (doc. CBSC16-09.3) and agreed on the final document (**Annex D**). The following was agreed:

Decision 22: to approve the 2019 CB Management Plan (Annex D).

Action 13: Secretary to develop the 2019 CBWP considering the 2019 CB Management Plan (done during the meeting).

9.4 Adoption of the 2019 CBWP

*Docs: CBSC16-09.4A Adopted 2019 CBWP (Secretary, developed during the meeting)
CBSC16-09.4B Chart Adequacy Workshop (USA)*

Chair invited the CBSC to adopt the 2019 CBWP (doc. CBSC16-09.4) drafted during the meeting following the approval of the 2019 CB Management Plan (agenda item 9.3). The meeting also agreed that the following budget from the 2018 CBWP to be transferred to the 2019 CBWP:

- a) A-04 3 300 Euros
- b) A-05 3 000 Euros
- c) P-13 2 600 Euros
- d) P-15 2 600 Euros

with a total to be included in the 2019 CBWP of 11 500 Euros. The following was agreed:

Decision 23: to approve the Adopted 2019 CBWP (Annex E).

10. Report from the CBSC to the IRCC10 Meeting

Chair invited the meeting to contribute to the preparation and review of the CBSC Chair report to the IRCC10 meeting. The CBSC agreed with the following topics for the Chair report:

- a) Chair to bring the IMO issues to the IRCC and request its Members to encourage Member States to engage with their delegations in the IMO to provide support to the IMO Member States that are not IHO Members to comply with SOLAS Chapter V (agenda item 4)
- b) Chair to invite the IRCC to encourage the IHO Secretariat to make the IHO GIS and CIS available to Member States (agenda items 4 and 11).
- c) Highlight the need for resource mobilization (agenda item 6).
- d) The need to develop comprehensive projects (agenda item 6).
- e) The status of CB Coordination in the RSAHC (agenda item 6).
- f) Development of MSDI training material to be delivered in RHCs (agenda item 11).
- g) Stakeholders' Seminar in 2019 (agenda item 11).
- h) Next meetings (agenda item 12).

11. Any other business

*Docs: CBSC16-11A Category "B" Hydrography Programme (Italy)
CBSC16-11B Availability of Training and Consultancy services (Chartwise)*

CBSC16-11C Invitation for a Tsunami training (Chile)

Chair invited participants to introduce any other items and the following were reported:

- a) Italy Cat B: Italy introduced doc. CBSC16-11A and presented the possibilities of training in Italy with a Category "B" recognized programme.
- b) Chartwise: Secretary, on behalf of Chartwise, introduced doc. CBSC16-11B and highlighted the possibilities of tailored trainings and consultancies that are available to support CB activities in RHCs.
- c) The need for training material was identified by RHCs that are willing to deliver trainings for MSDI using available personnel. The following was agreed:

Action 14: Chair to request to the IRCC to task MSDI WG to consider developing basic MSDI training material in order to allow RHCs to deliver trainings with their own personnel (deadline: IRCC10).

Action 15: CB Coordinators to consider making training material available via the IHO website (permanent).

- d) Stakeholders' seminar in 2019: the meeting considered the organization of a Stakeholders' seminar in conjunction with the IBSC (reference 2018-2020 IHO Work Programme), in order to improve CB programme with the participation of academia, industry and other organizations. The meeting agreed to hold the seminar in one and half days before the CBSC17 (27 May pm and 28 May 2019). The following action was agreed:

Action 16: CBSC Members to provide input for the organization of the CB/IBSC stakeholders' seminar (deadline: August 2018).

- e) Invitation for a Tsunami training: the meeting considered the invitation from Chile regarding an invitation for a training on Tsunami to be held in Chile in August 2018. The meeting agreed that this is a great opportunity to prepare plans for readiness and response to disasters. Chair recommended its wide dissemination but there was not enough time for the CBSC to take any additional action.
- f) IHO CIS/GIS: Secretary presented the IHO CIS and GIS and how it can support the work of Member States, IHO bodies, CB Coordinators and Visiting Teams. Participants agreed that this infrastructure, currently available to the IHO Secretariat only, could have a major impact in the work of the IHO if available elsewhere.
- g) RSAHC CB Coordination: the meeting considered the current situation in RSAHC where there is no assigned CB Coordinator which impacts negatively the region and the assessment and the delivery of CB activities in the region, putting navigation at risk with respect to provision of hydrographic services. The meeting agreed that it is necessary to raise the awareness of the importance of having a permanent CB Coordinator in the RSAHC:

Action 17: Chair to write to the RSAHC Chair raising awareness of the importance of having a permanent and operational CB Coordinator (deadline: July 2018).

12. Next CBSC Meetings (venue and date)

Chair invited participants to agree on dates and venue for CBSC17 and CBSC18 and to offer to host CBSC19. The Sub-Committee subsequently decided on the following:

Decision 24: to adopt the dates for future meetings of the CBSC as below:

- a) CBSC17: 29 – 31 May in Italy (venue TBD)
- b) CBSC18: May / June 2020 – Gdynia, Poland
- c) CBSC19: May / June 2021 – Galapagos, Ecuador

d) CBSC20: May / June 2022 – Japan (to be confirmed)

13. Review of the List of Actions

Doc: CBSC16-13 Draft list of actions and decisions from CBSC16 (Secretary)

Chair invited the Secretary to present the draft list of decisions and actions with deadlines and assigned lead, drafted during the meeting (*Doc. CBSC16-13*). Final confirmed List of Actions and List of Decisions are in **Annex F** and **Annex G**, respectively.

14. Closure

Chair ended the meeting at 15h30

END OF THE MEETING

ANNEXES:

Annex A: Closed 2017 CBWP

Annex B: Draft ToRs and RoPs of C-55RPT

Annex C: Updated 2018 CBWP

Annex D: Draft 2019 CB Management Plan

Annex E: 2019 CBWP

Annex F: Draft List of Actions

Annex G: Draft List of Decisions

INTERNATIONAL HYDROGRAPHIC ORGANIZATION
Closed 2017 CBWP

Updated: 01/03/2018

IHO WP Element: Capacity Building Assessment - Technical and High-Level Visits					
No.	Events	Responsible	Budget	Status	Resources
A-01	Technical visit to Gambia	EAtHC	5 000,00 €	Led by SHOM 23-29 July 2017 DONE	IHO
A-02	High-level visit to Seychelles	NIOHC	5 000,00 €	Led by IHO Secretariat 8-12 May 2017 DONE	IHO
A-03	Technical implementation visits to Dominican Republic and El Salvador	MACHC	8 400,00 €	Led by IHO Secretariat 4-7 Dec. 2017/23-26 January 2018 DONE	IHO
A-04	Technical visit to Azerbaijan	MBSHC	5 000,00 €	Led by Turkey 11-15 December 2017 DONE	IHO
A-05	Technical visit to Cambodia (former 2016 CBWP A-07)	EAHC	3 400,00 €	Led by Malaysia 3-5 April 2017 DONE	IHO
A-06	Haiti follow-up visit	MACHC	10 000,00 €	Led by USA 19-22 June 2017 DONE	IHO
A-07	Technical Visit to Cabo Verde	EAtHC	5 000,00 €	Led by SHOM 27 March-1 April 2017 DONE	IHO
		-	41 800,00 €		

IHO WP Element: Capacity Building Provision - Technical Workshops, Seminars, Courses					
No.	Events	Responsible	Budget	Status	Resources
P-01	IHO-ROK Category "A" Programme	Secretariat	50 000,00 €	Led by USM, Hattiesburg, USA 1 August 2017-1 August 2018 DONE	ROK
P-02	ROK Category B Programme (third phase)	Secretariat	60 000,00 €	Led by KHOA, Busan, ROK 3-28 July 2017 DONE	ROK
P-03	IHO-Nippon Foundation CHART Project	Secretariat	195 386,85 €	Led by UKHO, Tauton, UK 4 September-15 December 2017 DONE	Nippon
P-04	Training for Trainers - Basic Hydrography	EAHC	30 000,00 €	Led by KHOA, Busan, ROK 4-15 December 2017 DONE	ROK
P-05	MSI E-learning guided sessions.	EAtHC		CANCELED	
P-06	MSI Course	MACHC	16 027,00 €	Led by UKHO, Barbados 26-30 June 2017 DONE	IHO
P-07	MSI Course	NIOHC	21 974,00 €	Led by UKHO, Fish Hoek, South Africa 5-7 September 2017 DONE	IHO

INTERNATIONAL HYDROGRAPHIC ORGANIZATION
Closed 2017 CBWP

IHO WP Element: Capacity Building Provision - Technical Workshops, Seminars, Courses					
No.	Events	Responsible	Budget	Status	Resources
P-08	MSI Course	SAIHC	14 859,00 €	Combined with P-07 DONE	ROK
P-09	SW Pacific Region Industry Survey Project	SWPHC		CANCELED	
P-10	MBES training for Fiji	SWPHC		POSTPONED	
P-11	Seminar on Raising Awareness of Hydrography	MACHC	15 500,00 €	Led by UKHO, Varadero, Cuba 27-28 November 2017 DONE	IHO
P-12	HydroMOWCA study follow-up	EAthC	15 000,00 €	Led by SHOM 5-9 March 2017/7-10 May 2017 DONE	IHO
P-13	Workshop on ENC production and distribution	MBSHC	9 080,00 €	Led by ONHO, Istanbul, Turkey 2-6 October 2017 DONE	IHO
P-14	E-learning on specifications for hydrographic surveys	EAthC		CANCELED	
P-15	Hydrographic Survey for Disaster Management and Relief	EAHC	16 760,00 €	Led by KHOA, Jakarta, Indonesia 11-15 September 2017 DONE	ROK
P-16	Bathymetry training course using RTK technology	SWaHC	14 400,00 €	Led by DHN, Niteroi, Brazil 2-6 October 2017 DONE	IHO
P-17	Workshop on Bathy Database	SEPRHC	22 000,00 €	Led by CIOH, Lima, Peru 23-27 October 2017 DONE	IHO
P-18	Use of GNSS for tide correction for survey	EAHC		POSTPONED	
P-19	Lidar and Satellite Derived Bathymetry Workshop	EAHC	16 760,00 €	Led by JHOD, Tokyo, Japan 30 Jan. 2018 - 01 Feb. 2018 DONE	IHO
P-20	Advanced Chart Production (Bangladesh)	NIOHC	8 500,00 €	Led by UKHO, Chittagong, Bangladesh 17-21 September 2017 DONE	IHO
P-21	Workshop offshore surveys (geophysical analysis and identification of seamounts)	SEPRHC	29 385,00 €	Led by CIOH, Cartagena, Colombia 23-27 October 2017 DONE	IHO
P-22	Digital Photogrammetry with satellite images	SWaHC	26 200,00 €	Led by SHN, Buenos Aires, Argentina 30 October - 3 November 2017 DONE	IHO
P-23	Workshop on Technical Aspects of Maritime Boundaries	MBSHC	16 120,00 €	Led by ONHO, Istanbul, Turkey 27 November 2017 - 1 December 2017 DONE	IHO
P-24	Advanced Chart Production (Myanmar)	NIOHC	8 500,00 €	Led by UKHO, Yangon, Myanmar 21-25 August 2017 DONE	IHO

INTERNATIONAL HYDROGRAPHIC ORGANIZATION

Closed 2017 CBWP

IHO WP Element: Capacity Building Provision - Technical Workshops, Seminars, Courses					
No.	Events	Responsible	Budget	Status	Resources
P-25	Solomon Islands Nautical Cartographer Development	SWPHC		CANCELED	
P-26	Basic ENC & ENC Production	RSAHC		CANCELED	
P-27	Data management WORKSHOP	SWAtHC	19 500,00 €	Led by SOHMA, Montevideo, Uruguay 20-24 November 2017 DONE	IHO
P-28	PNG Hydrographic Risk Assessment	SWPHC		NOT FUNDED	
P-29	Regional Course in Basic Hydrography and Hydrog. Governance for Lusophone Africa	EAtHC SAIHC		CANCELED	In-kind from IMO
P-30	Regional Seminar on Safety of Navigation in the South West Pacific	SWPHC		CANCELED	In-kind from IMO
P-31	GEBCO Training Project	UNH		Led by UNH, Durham, USA August 2017-August 2018 DONE	In-kind from Nippon*
P-32	E-learning experimentation (MSI) (former 2016 CBWP P-06)	EAtHC	20 000,00 €	Led by SHOM DONE	IHO
	Subtotal of P (Provision)	-	625 951,85 €		

Total	667 751,85 €	
IHO	300 746,00 €	Subtotal IHO
ROK	171 619,00 €	Subtotal ROK
Nippon	195 386,85 €	Subtotal Nippon

C-55 Review Project Team (C-55RPT)
Terms of Reference and Rules of Procedure

References:

- A. IHO Publication C-55 *Status of Hydrographic Surveying and Nautical Charting Worldwide*
- B. IHO Circular Letter 52/2015 dated 15 July - *IHO Publication C-55 - Status Of Hydrographic Surveying And Nautical Charting Worldwide - Request For Updated Information*

Considering that:

- a) some Member States reported difficulties to derive data related to hydrographic surveys to input C-55;
- b) some Member States reported the use of CATZOC to derive the C-55 indicator regarding the status of hydrographic surveying;
- c) the current process for input data to C-55 is prone to errors as observed by the IHO Secretariat while ingesting data;
- d) there is a lack of consistency in the categorization of C-55 survey data adequacy;
- e) current GIS technology may allow C-55 use in a wider and more efficient way and reduce the errors presently observed;
- f) an improved C-55 may contribute for future country maritime profile (as defined by IMO) for coastal States.

The CBSC establishes a C-55 Review Project Team (C-55RPT) with the following Terms of Reference and Rules of Procedure. The C-55RPT shall report to the CBSC.

TERMS OF REFERENCE

- 1. Evaluate the current limitations to input data related to Hydrographic survey status in C-55 as they are presently derived in a subjective manner by States.
- 2. Seek informal comments and suggestions from Member States on their current methods of populating C-55 and on the evaluation on the limitations identified by the C-55RPT.
- 3. Develop a proposal to address the above limitations taking into consideration the comments and suggestions from Member States.

RULES OF PROCEDURE

- 1. The C-55RPT shall comprise of representatives of IHO Member States and a representative of the IHO Secretariat. A membership list shall be maintained and posted on the IHO website.
- 2. The Chair and Vice-Chair shall be a representative of a Member State and will be appointed by the CBSC.
- 3. If a Secretary is required, it should normally be drawn from a Member of the C-55RPT.
- 4. If the Chair is unable to carry out the duties of the office, the Vice-Chair shall assume the Chair with the same powers and duties.
- 5. The C-55RPT should work by correspondence and teleconferences. If meetings are to be scheduled they should happen in conjunction with other meetings.
- 6. Decisions should generally be made by consensus. Votes shall be made via e-mail and on the basis of one vote per Member represented in the C-55RPT and responding to the CL.
- 7. The expected conclusion of the RPT is CBSC17. If progress is slowed, the Chair shall inform the CBSC Chair and, at a minimum, submit a status report to CBSC17 including the expected conclusion of the effort.
- 8. The RPT may liaise with other IHO bodies, international organizations and industry to ensure the relevance of its work.
- 9. No detailed work plan is expected; the approved Terms of Reference will serve this purpose.

INTERNATIONAL HYDROGRAPHIC ORGANIZATION
Updated 2018 CBWP

Updated: 02/06/2018

IHO WP Element: Capacity Building Assessment - Technical and High-Level Visits					
No.	Events	Responsible	Budget	Status	Resources
A-01	Training Center Visits	EAtHC	20 000 €	Led by SHOM, UKHO Ongoing	IHO
A-02	Technical Visit to Guatemala	MACHC	8 000 €	Led by UKHO Dates TBD	IHO
A-03	Technical visit Georgia	MBSHC	2 500 €	Led by Turkey and Ukraine September/October 2018	IHO
A-04	Samoa Technical Implementation Visit	SWPHC		Postpone to 2019	
A-05	Niue Technical Implementation Visit	SWPHC		Postpone to 2019	
A-06	Technical Visit for Timor Leste	EAHC		Canceled	
A-07	High-Level Visit to Albania	MBSHC	1 500 €	Led by IHO Secretariat Dates	IHO
A-08	High-Level Visit to Angola	SAIHC	4 800 €	Led by IHO Secretariat Dates	IHO
		-	36 800 €		

IHO WP Element: Capacity Building Provision - Technical Workshops, Seminars, Courses					
No.	Events	Responsible	Budget	Status	Resources
P-01	IHO-ROK Category "A" Programme	Secretariat	85 000 €	Led by USM, Hattiesburg, USA 1 August 2018-1 August 2019	ROK
P-02	ROK Category B Survey Programme	Secretariat	242 000 €	Led by KHOA, Busan, ROK 12 July 2018-30 November 2018	ROK
P-03	IHO-Nippon Foundation CHART Project	Secretariat	190 421 €	Led by UKHO, Tauton, UK September-December 2018	Nippon
P-04	Regional awareness seminar on maritime geospatial knowledge	EAtHC	20 000 €	Led by SHOM 15-16 October 2018	ROK

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IHO WP Element: Capacity Building Provision - Technical Workshops, Seminars, Courses					
No.	Events	Responsible	Budget	Status	Resources
P-05	Technical Workshop on Implementing Hydrographic Governance	SWPHC	36 000 €	Led by LINZ, Nadi, Fiji 19-23 February 2018 DONE	IHO
P-06	Seminar on Raising Awareness of Hydrography	SAIHC	22 500 €	Led by UKHO, Seychelles 27 August 2018	IHO
P-07	Phase 1 Skills Course	NIOHC	21 961 €	Led by UKHO, India Dates TBD	IHO
P-08	Training Center Visits	EAtHC		Canceled (See A-01)	
P-09	Seminar on Raising Awareness of Hydrography	MACHC	28 500 €	Led by UKHO, Cartagena, Colombia 26-27 November 2018	IHO
P-10	MSI Workshop	SWAtHC	22 200 €	Led by DHN, Niteroi, Brazil 2 Semester 2018	IHO
P-11	MSI Regional Workshop	SWPHC	29 500 €	Led by LINZ, Wellington, NZ 6-10 August 2018	IHO
P-12	HydroMOWCA study follow-up	EAtHC	3 000 €	Led by SHOM Dates TBD	ROK
P-13	MSI E-learning guided session	EAtHC		Postpone to 2019	
P-14	Workshop on MSI	MBSHC	8 990 €	Led by ONHO, Istanbul, Turkey 11-13 September 2018	IHO
P-15	Survey specification e-learning guided session	EAtHC		Postpone to 2019	
P-16	MBES Processing and Data Basing Training for Mozambique	SAIHC	9 604 €	Led by UKHO, Maputo, Mozambique October 2018	IHO
P-17	Port and Shallow Water Survey Course	SWAtHC	16 500 €	Led by SHN, Buenos Aires, Argentina 2 Semester 2018	IHO
P-18	Carto Production DB System Development Workshop	EAHC	23 050 €	Led by MSA, China 3 Trimester 2018	IHO
P-19	Survey Technician training for Mauritius	NIOHC	5 800 €	Led by UKHO, Goa, India Dates TBD	IHO

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IHO WP Element: Capacity Building Provision - Technical Workshops, Seminars, Courses					
No.	Events	Responsible	Budget	Status	Resources
P-20	Maritime Safety Information (MSI) Course	EAHC	26 180 €	Led by Dates	IHO
P-21	Workshop on LIDAR technology and methodology for shallow waters and coastline hydrographic surveys	SEPRHC	29 385 €	Led by INOCAR, Guayaquil, Ecuador 22-26 October 2018	ROK
P-22	Review of Basic Carto Workshop	EAHC	23 050 €	Led by Dates	Not funded yet
P-23	MBES Processing	MACHC	21 367 €	Led by Dates	Not funded yet
P-24	Senior Survey Technician training	NIOHC	7 550 €	Led by Dates	Not funded yet
P-25	Development of a Regional MSDI Workshop	RSAHC	26 293 €	Led by Dates	Not funded yet
P-26	Development of a Regional MSDI Workshop	SAIHC	31 072 €	Led by Dates	Not funded yet
P-27	Workshop on MSDI implementation and development	SEPRHC	22 000 €	Led by Dates	Not funded yet
P-28	MSDI and Data Management Workshop	SWAtHC	13 250 €	Led by Dates	Not funded yet
P-29	Tides & Water Levels Workshop for Spanish Speakers	MACHC	24 154 €	Led by Dates	Not funded yet
P-30	Port and Shallow Water Survey Course	MBSHC	8 000 €	Led by IIM, Genoa, Italy 17-21 September 2018	IHO
P-31	GEBCO Training Project	UNH		Led by UNH, Durham, USA August 2018-August 2019	In-kind from Nippon*
P-32	MBES training for Fiji (former 2017 CBWP P-10)	SWPHC	11 000,00 €	Led by UKHO, Suva, Fiji Dates TBD	IHO
P-33	Use of GNSS for tide correction for survey (former 2017 CBWP P-18)	EAHC	16 760,00 €	Led by Indonesia 9-13 July 2018	IHO
	Subtotal of P (Provision)	-	1 025 087 €		

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IHO WP Element: Capacity Building Provision - Technical Workshops, Seminars, Courses					
No.	Events	Responsible	Budget	Status	Resources

Total	1 061 887 €	
IHO	323 345 €	Subtotal IHO
ROK	379 385 €	Subtotal ROK
Nippon	190 421 €	Subtotal Nippon
Not funded	168 736 €	Not funded yet

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Submitted Projects for 2019

Projects submitted

CB Phase	Number of projects submitted	Amount (Euros)	%
0	11	138 960	24,8
1	5	87 601	15,6
2	6	95 780	17,1
3	3	75 310	13,4
4	6	163 253	29,1
Total	31	560 904,00	100

Estimated resources for non-earmarked projects: 316 409,56

Estimated resources for earmarked projects: 525 421,00

Note: do not edit this page!

Projects accepted in the Approved CBMP

RHC	Number of projects submitted	Number of projects accepted	Amount (Euros)	%
EAHC	4	4	69 620,00	12,2
EAtHC	7	9	60 000,00	10,5
MACHC	3	3	75 989,00	13,3
MBSHC	3	3	40 500,00	7,1
NIOHC	3	3	72 069,00	12,6
RSAHC	0	0	0,00	0,0
SAIHC	3	3	58 106,00	10,2
SEPRHC	3	3	88 100,00	15,4
SWAtHC	3	3	47 120,00	8,2
SWPHC	2	4	60 900,00	10,6
Total	31	35	572 404,00	100,0

Earmarked projects:

IHO/ROK	3	3	335 000,00	63,8
Nippon	1	1	190 421,00	36,2
Total	4	4	525 421,00	100,0

Total of projects

	Total	Needed:	Available:
Total	35	39	1 097 825,00

Note: the 4 projects postponed from 2018 are listed in the 'Number of projects accepted' with budget of 11 500 Euros

Projects submitted by the RHCs (Procedure 1)

Sponsor RHC	Year of Execution	Countries involved	Priority	Project Name	Project Objective	Benefits	Assistance required	Cost (Euro)	Contact Person
EAHC	2019	EAHC (including pending EAHC MS, eg. Vietnam)	1	Risk Assessment for hydrographic surveys and charting management for the safety of navigation Workshop	To EAHC MSs to conduct risk assessment when planning and reviewing survey areas and updating of nautical charts.	To provide common and harmonized guidelines for mid- or long-term planning for surveying and charting.	CB Funds for course fees, accommodation costs and return flights	20 960,00 €	EAHC Chair (Hanafiah bin Hassan)
EAHC	2019	EAHC (including impending IHO MSs, eg. Timor Leste and Cambodia)	2	Management of MSI DB workshop	To further improve the communication between MSs (esp. new MSs Vietnam and Brunei Darussalam) NAVAREA XI Coordinator.	To improve knowledge and awareness of HO's role in MSI infrastructure and to establish network amongst EAHC and selected States in NAVAREA XI.	CB Funds for course fees, accommodation costs and return flights	23 800,00 €	EAHC Chair (Hanafiah bin Hassan)
EAHC	2019	EAHC (including pending EAHC MS, eg. Vietnam)	3	Integration and management of hydrographic data for MSDI	To promote and exchange experience and knowledge on NMSDI infrastructure, standards and policies.	To establish a regional MSDI platform for future data integration for the safety of navigation and non-navigational uses, eg. The for the management of the Blue Economy.	CB Funds for course fees, accommodation costs and return flights	20 960,00 €	EAHC Chair (Hanafiah bin Hassan)
EAHC	2019	Cambodia	4	Technical Visit	To encourage Cambodia to join the IHO and the EAHC.	Technical support for hydrographic survey and nautical charts	CB Funds for course fees, accommodation costs and return flights	3 900,00 €	EAHC Chair (Hanafiah bin Hassan)
EAtHC	2019	Togo	1	Technical Visit	Advice on a way forward	Provide guidance to Togo to build up national hydrographic capability to meet national and international obligations	Travel, accommodation and allowances expenses of the team (2 persons)	5 000,00 €	Cdr. Vincent Lamarre (EAtHC CB Coordinator)
EAtHC	2019	Gambia	2	Technical Visit follow-on	Follow up on recommendations put forward during 2017 TV	Support the dynamics initiated by the GPA in order to concretize the various actions initiated	Support from UKHO (PCA)	5 000,00 €	Cdr. Vincent Lamarre (EAtHC CB Coordinator)
EAtHC	2019	Congo	1	Technical Visit	Advice on a way forward	Provide guidance to Congo to build up national hydrographic capability to meet national and international obligations	Travel, accommodation and allowances expenses of the team (2 persons)	5 000,00 €	Cdr. Vincent Lamarre (EAtHC CB Coordinator)

Projects submitted by the RHCs (Procedure 1)

Sponsor RHC	Year of Execution	Countries involved	Priority	Project Name	Project Objective	Benefits	Assistance required	Cost (Euro)	Contact Person
EAtHC	2019	France	2	Regional Training Centre Site Study	Regional training facilities visit and assessment	To provide, through visit reports, recommendations and guidance in order to build-up a regional training capacity.	Funds to visiting team travel and accommodation costs.	10 000,00 €	Cdr. Vincent Lamarre (EAtHC CB Coordinator)
EAtHC	2019	France All African coastal States within the EAtHC region.	1	MSI E-learning guided sessions.	Organize guided sessions for the on-line MSI course, both in English and French	Better access to MSI educationnal material, cost-efficiency related to MSI courses	Financial support to tutoring fees	2 400,00 €	Cdr. Vincent Lamarre (EAtHC CB Coordinator)
EAtHC	2019	France All African coastal States within the EAtHC region.	1	MSI / Hydrographic Risk Assessment / Survey Specifications Workshop	Through presentations of new innovative approaches and sharing of experience, this workshop should identify concrete initiatives to be implemented	Raising awareness and facilitate the implementation of structured projects	Fundings to organize a regional workshop	25 000,00 €	Cdr. Vincent Lamarre (EAtHC CB Coordinator)
EAtHC	2019	France All African coastal States within the EAtHC region.	2	Survey specifications E-learning guided session.	Organize guided sessions for the on-line survey specification course, both in English and French	Better access to educationnal material, cost-efficiency related to hydrography related courses	Financial support to tutoring fees	2 400,00 €	Cdr. Vincent Lamarre (EAtHC CB Coordinator)
MACHC	2019	MACHC Member States	1	Seminar on Raising Awareness of Hydrography (for MACHC Associate and Non-Members)	To ensure that countries in the MACHC region are made aware that the provision of hydrographic services is an international obligation under treaty law affecting all Member States (MS) of the IMO and also provides significant national infrastructure and long-term economic benefits. The Seminar is configured to assist countries on how they take the necessary steps to meet their obligation noting that most MACHC countries are IMO MS but not IHO MS	Participants will gain a better understanding of the regulatory framework which supports hydrography and how this can benefit a coastal state (Blue Economy etc)	The contribution from the CBSC fund will cover travel and subsistence for one representative from each of the 11 countries involved. The representatives will be expected to stay on for the 20th MACHC meeting and be active participants	28 500,00 €	Jeff Bryant (MACHC CB Coordinator)

Projects submitted by the RHCs (Procedure 1)

Sponsor RHC	Year of Execution	Countries involved	Priority	Project Name	Project Objective	Benefits	Assistance required	Cost (Euro)	Contact Person
MACHC	2019	Antigua & Barbuda, Barbados, Belize, Costa Rica, Dominican Republic, El Salvador, Grenada, Guyana, Haiti, Honduras, Nicaragua, Panama, Saint Lucia, St Kitts & Nevis, St Vincent & the Grenadines	2	Phase 1 Skills Course	The aim is to provide delegates with the skills and knowledge to assess and promulgate navigationally significant information to the wider maritime community	Improving maritime safety and compliance with SOLAS	Fund Travel & subsistence for up to 11 students, together with x1 UKHO trainer	22 179,00 €	Jeff Bryant (MACHC CB Coordinator)
MACHC	2019	MACHC Member States	3	ENC Production and QA	To train a group of professionals to verify and validate S-57 data	Improved knowledge of validation and verification and greater confidence in ENC QA	Fund Travel & subsistence for up to 9 students, together with x1 UKHO trainer	25 310,00 €	Jeff Bryant (MACHC CB Coordinator)
MBSHC	2019	Georgia Malta Montenegro Romania Tunisia Croatia Turkey Egypt Slovenia	1	Workshop on Law of the Sea (Based on Software Application)	<ul style="list-style-type: none"> To provide a supplementary training for the participants of the Workshop on Technical Aspects of Maritime Boundaries (P-23/2017). To consolidate participants the basic technical principles applicable to maritime boundary delimitation with a Law of the Sea Software. 	Increased awareness, knowledge and implementation of the Workshop on Technical Aspects of Maritime Boundaries (P-23/2017).		17 000,00 €	Burak INAN (ONHO)
MBSHC	2019	Georgia Malta Montenegro Romania Tunisia Turkey Egypt Slovenia Cyprus Ukraine	2	ENC Validation	To expand ENC Validation knowledge and get familiar with the validation processes.	<ul style="list-style-type: none"> To have integrity with the ENC Production and Distribution training. To enhance the capabilities of validating ENCs 		20 500,00 €	Burak INAN (ONHO)
MBSHC	2019	Lebanon	3	Technical Visit follow-up	Advise on a way forward	Promote in Lebanon hydrographic services to meet national and international obligations and enhance the existing capacity		3 000,00 €	Burak INAN (ONHO)

Projects submitted by the RHCs (Procedure 1)

Sponsor RHC	Year of Execution	Countries involved	Priority	Project Name	Project Objective	Benefits	Assistance required	Cost (Euro)	Contact Person
SAIHC	2019	Angola, Comoros, Kenya, Madagascar, Malawi, Mauritius, Mozambique, Namibia, Seychelles & Tanzania	1	Seminar on Raising Awareness of Hydrography (for SAIHC Associate Members)	To ensure that countries in the SAIHC region are made aware that the provision of hydrographic services is an international obligation under treaty law affecting all Member States (MS) of the IMO and also provides significant national infrastructure and long-term economic benefits. The seminar is configured to assist countries on how they take the necessary steps to meet their obligation noting that most SAIHC countries are IMO MS but not IHO MS	Participants will gain a better understanding of the regulatory framework which supports hydrography and how this can benefit a coastal state (Blue Economy etc)	The contribution from CBSC fund will cover travel and subsistence for one representative from each of the 10 countries involved. The representatives will be expected to stay on for the 16th SAIHC meeting and be active participants	€ 22 500,00	Jeff Bryant (SAIHC CB Coordinator)
SAIHC	2019	Angola, Comoros, Kenya, Madagascar, Malawi, Mauritius, Mozambique, Namibia, Seychelles & Tanzania	2	MSI Course (3 days)	To establish capacity in MSI so that Maritime Authorities can provide high quality services to comply with the basic requirements for safety of navigation in the area.	Improving maritime safety and compliance with SOLAS	Travel & Subsistence for 2 trainers and 9 students (+1 local)	€ 14 222,00	Jeff Bryant (SAIHC CB Coordinator)
SAIHC	2019	Mauritius, Mozambique, South Africa (augmented by at least two nations from each of the adjoining NIOHC and RSAHC Commissions)	3	MBES Processing (5 days)	To train a group of hydrographic surveyors the techniques required to post process MBES data	Improved knowledge of the processing element of MBES data and greater confidence in its use	Fund Travel & subsistence for up to 10 students, together with x2 UKHO trainers	€ 21 384,00	Jeff Bryant (SAIHC CB Coordinator)
SEPRHC	2019	Ecuador, Peru, Chile, Colombia (1 from MACHC and 1 from SWAtHC, 1 Panam)	1	Workshop "Quality Control of ENC productions"	Train the staff of the Hydrographic Offices of the region in matters of quality control of CNE to maintain a high standard of quality in the production of CNE	Provide methodologies for applying international standards in the processes of quality control in the production of the CNE	2 lecturers	29 500,00 €	TNNV-SU David DELGADO BARRETO

Projects submitted by the RHCs (Procedure 1)

Sponsor RHC	Year of Execution	Countries involved	Priority	Project Name	Project Objective	Benefits	Assistance required	Cost (Euro)	Contact Person
SEPRHC	2019	Ecuador, Peru, Chile, Colombia (1 from MACHC and 1 from SWAtHC)	2	Worshop on Law of the Sea	To learn about the importance and legal responsibility about cartographic, submission of disputes, conducting marine incident cases, provisional measures in Antarctic expedition, advisory in fishing, responsibilities and obligations of states sponsoring persons and entities with respect to activities in the Area	The student will understand essential concepts of the laws of the sea to apply them in hydrographic research's where the role and responsibilities of the hydrographic surveyor as required under professional ethics, industry standards and national/international legislation/conventions.	5 lecturers	28 860,00 €	Director CIOH
SEPRHC	2019	Ecuador, Peru, Chile, Colombia (1 from MACHC and 1 from SWAtHC)	3	Worshop on MSDI implementation and development	To explain to the National Coordinators roles, responsibilities and requirements, including the need to be informed of all events that could significantly affect the safety of navigation within the region with practice exercises	Increment the knowledge's about MSI techniques according IMO, IALA, and IMO standards	3 lecturers	29 740,00 €	Director CIOH
SWAtHC	2019	Argentina, Brazil, Uruguay, as well as SEPRHC, and MACHC	1	Multibeam data processing and bathymetry database worshop	To increase the knowledge and skills to process multibeam information and incorporate them into a hydrographic database.	This training will benefit ENC production by providing high quality products and this will result in a greater safety of navigation. Besides it is expected to comply with IHO S-44 standards on bathymetric data	The contribution from the CBSC fund will cover travel and subsistence for 6 foreign students and 2 trainers	18 200,00 €	Cmdr. Gustavo Jorge Almazan
SWAtHC	2019	Argentina, Brazil, Uruguay, as well as SEPRHC, and MACHC	2	Tide Training	To develop practical and theoretical activities to improve the capacity of Latin American Hydrographic Services on tide analysis and tidal data acquisition/processing	The more qualified hydrographers would benefit the final accuracy of paper nautical charts and ENC production. The main purpose is to meet the IHO (S-44) standards on bathymetric data, specially on tidal corrections.	The contribution from the CBSC fund will cover travel and subsistence for 6 foreign students	13 920,00 €	Capt. Luiz Claudio (DHN)

Projects submitted by the RHCs (Procedure 1)

Sponsor RHC	Year of Execution	Countries involved	Priority	Project Name	Project Objective	Benefits	Assistance required	Cost (Euro)	Contact Person
SWAtHC	2019	Argentina, Brazil, Uruguay, as well as SEPRHC, and MACHC	3	Multibeam Systems Total Uncertainty Workshop	To improve the capacity of Latin American Hydrographic Services on quality control in acquisition and processing using Multibeam Systems.	The more qualified hydrographers would benefit the final quality of acquisition and processing of bathymetric data used by Multibeam Systems. The purpose is to achieve the IHO (S-44) standards, specially by calculating and minimizing errors and uncertainties.	The contribution from the CBSC fund will cover travel and subsistence for 8 foreign students and 2 trainers	15 000,00 €	Lt. Cmdr. Niki Silvera
SWPHC	2019	Palau	1	Technical Assessment & Advice - Palau	Technical and advisory visit to inform, assess current status and note requirements	Understanding of SOLAS obligations and ways in which to meet them. A robust MSI promulgation process. Improved charting of the region.	Funding for travel and subsistence for one person. (NGA to fund second person)	12 600,00 €	David W. Anderson, NGA
SWPHC	2019	Cook Islands, Fiji, French Polynesia, Kiribati, Nauru, New Caledonia, Niue, Palau, Papua New Guinea, Samoa, Solomon Islands, Tokelau, Tonga, Tuvalu, Vanuatu	1	Technical Workshop on Disaster Response Planning and Data Discovery	Practical workshop on Disaster Response Planning and data discovery/mining	The SWPHC has a plan to respond to future natural disasters in the region; PICTs have recommended guidelines for the provision of MSI; and PCAs and PICTs have discovered existing data to improve nautical charts	Fund travel and subsistence costs for 15 people from region to attend the Workshop	42 000,00 €	Adam Greenland (National Hydrographer, LINZ)
IHO/ROK	2019	IHO MSs	1	S-8B Category B Nautical Cartographers	Enhance charting capacity of both paper charts and ENC's through practical exercises.	To train and equip IHO MSs with the knowledge and skills necessary for basic and essential competencies of a cartographer	CB Funds for course fees, accommodation expenses and return flights	110 000,00 €	
IHO/ROK	2019	IHO MSs	2	Training for Trainers – Basic Hydrography	To train a pool of trainers in each IHO Member State so that they can conduct training for their respective offices	To raise new survey officers through a structured training programme in a cost effective way	CB Funds for course fees, accommodation costs and return flights	90 000,00 €	
Total:								760 904,00 €	

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RHC	Priority	Project Name	1	2	3	4	5	6	7	8	9	Total	Phase	Resources
EAHC	1	Risk Assessment for hydrographic surveys and charting management for the safety of navigation	5	10	5	0	6	5	5	0	5	41	0	20 960
EAHC	2	Management of MSI DB workshop	5	10	5	0	6	3	5	-2	5	37	1	23 800
EAHC	4	Technical Visit to Cambodia	5	10	1	0	10	0	5	-2	5	34	0	3 900
EAHC	3	Integration and management of hydrographic data for MSDI	3	1	5	0	6	1	5	-2	0	19	4	20 960
EAtHC	1	Technical Visit to Togo	5	10	1	0	10	5	4	0	5	40	0	5 000
EAtHC	1	MSI / Hydrographic Risk Assessment / Survey Specifications Workshop	5	10	5	0	10	0	4	0	5	39	1	25 000
EAtHC	1	MSI E-learning guided sessions.	5	10	5	0	10	0	5	-2	5	38	1	2 400
EAtHC	2	Technical Visit to Gambia	5	10	1	0	10	3	4	-2	5	36	0	5 000
EAtHC	1	Technical Visit to Congo	5	10	1	0	10	1	4	0	5	36	0	5 000
EAtHC	2	Regional Training Centre Site Study	2	10	5	0	10	0	4	0	5	36	0	10 000
EAtHC	2	Survey specifications E-learning guided session.	3	5	5	0	10	0	4	0	5	32	2	2 400
MACHC	2	Phase 1 Skills Course	5	10	5	2	7	3	4	-1	5	40	1	22 179
MACHC	1	Seminar on Raising Awareness of Hydrography	5	10	5	0	6	5	4	-3	5	37	0	28 500
MACHC	3	ENC Production and QA	3	1	3	2	7	1	4	0	5	26	3	25 310
MBSHC	3	Technical Visit to Lebanon	5	10	1	0	7	1	5	0	5	34	0	3 000
MBSHC	1	Workshop on Law of the Sea	3	1	3	0	6	5	5	0	0	23	4	17 000
MBSHC	2	ENC Validation	3	1	5	0	6	3	5	0	5	28	3	20 500
NIOHC	1	Seminar on Raising Awareness of Hydrography	5	10	5	0	8	5	3	0	5	41	0	22 500
NIOHC	3	Regional MSDI Workshop	3	1	5	2	7	1	3	-2	0	20	4	24 693
NIOHC	2	MBES Processing	3	5	3	0	8	3	4	0	5	31	2	24 876
RSAHC	0		0	0	0	0	0	0	0	0	0	0	0	0
SAIHC	1	Seminar on Raising Awareness of Hydrography	5	10	5	0	8	5	4	0	5	42	0	22 500
SAIHC	2	MSI Course	5	10	5	2	8	3	3	-3	5	38	1	14 222
SAIHC	3	MBES Processing	3	5	3	0	7	1	4	0	5	28	2	21 384
SEPRHC	2	Workshop on Law of the Sea	3	1	3	0	7	3	5	0	0	22	4	28 860
SEPRHC	3	Workshop on MSDI implementation and development	3	1	3	0	8	1	5	0	0	21	4	29 740
SEPRHC	1	Workshop Quality Control of ENC production	3	1	4	0	7	5	5	-1	5	29	3	29 500
SWAtHC	3	Multibeam Systems Total Uncertainty Workshop	3	5	3	1	6	1	5	-1	5	28	2	15 000
SWAtHC	2	Tide Training	3	5	3	1	6	3	5	-2	5	29	2	13 920
SWAtHC	1	Multibeam data processing and bathymetry database workshop	3	5	3	2	6	5	5	-3	5	31	2	18 200
SWPHC	1	Technical Workshop on Disaster Response Planning and Data Discovery	3	10	5	2	7	3	5	-1	0	34	4	42 000

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SWPHC	1	Technical Assessment & Advice - Palau	5	10	1	4	6	5	4	0	5	40	0	12 600
zRHC	Priority	Project Name	1	2	3	4	5	6	7	8	9	Total	Phase	Resources
		Procedure 4 maximum score	5	10	5	5	10	5	5	0	5	50		

Projects submitted by the RHCs (Procedure 4)

RHC	Priority	Project Name	1	2	3	4	5	6	7	8	9	Total	Phase	Priority	Resources	Sum
IHO/ROK		Hydrography survey programme (Category "A", USM, USA)										50			135 000	135 000
IHO/ROK		Nautical cartography programme (Category "B", KHOA, ROK)										50			110 000	110 000
IHO/ROK		Training for Trainers (TFT, KHOA, ROK)										50			90 000	225 000
Nippon		Nippon Chart Project (Category "B", UKHO, UK)										50			190 421	415 421
SAIHC	1	Seminar on Raising Awareness of Hydrography	5	10	5	0	8	5	4	0	5	42	0	1	22 500	437 921
EAHC	1	Risk Assessment for hydrographic surveys and charting management for th	5	10	5	0	6	5	5	0	5	41	0	2	20 960	458 881
NIOHC	1	Seminar on Raising Awareness of Hydrography	5	10	5	0	8	5	3	0	5	41	0	3	22 500	481 381
EAtHC	1	Technical Visit to Togo	5	10	1	0	10	5	4	0	5	40	0	4	5 000	486 381
MACHC	2	Phase 1 Skills Course	5	10	5	2	7	3	4	-1	5	40	1	5	22 179	508 560
SWPHC	1	Technical Assessment & Advice - Palau	5	10	1	4	6	5	4	0	5	40	0	6	12 600	521 160
EAtHC	1	MSI / Hydrographic Risk Assessment / Survey Specifications Workshop	5	10	5	0	10	0	4	0	5	39	1	7	25 000	546 160
EAtHC	1	MSI E-learning guided sessions.	5	10	5	0	10	0	5	-2	5	38	1	8	2 400	548 560
SAIHC	2	MSI Course	5	10	5	2	8	3	3	-3	5	38	1	9	14 222	562 782
EAHC	2	Management of MSI DB workshop	5	10	5	0	6	3	5	-2	5	37	1	10	23 800	586 582
MACHC	1	Seminar on Raising Awareness of Hydrography	5	10	5	0	6	5	4	-3	5	37	0	11	28 500	615 082
EAtHC	2	Technical Visit to Gambia	5	10	1	0	10	3	4	-2	5	36	0	12	5 000	620 082
EAtHC	1	Technical Visit to Congo	5	10	1	0	10	1	4	0	5	36	0	13	5 000	625 082
EAtHC	2	Regional Training Centre Site Study	2	10	5	0	10	0	4	0	5	36	0	14	10 000	635 082
EAHC	4	Technical Visit to Cambodia	5	10	1	0	10	0	5	-2	5	34	0	15	3 900	638 982
MBSHC	3	Technical Visit to Lebanon	5	10	1	0	7	1	5	0	5	34	0	16	3 000	641 982
SWPHC	1	Technical Workshop on Disaster Response Planning and Data Discovery	3	10	5	2	7	3	5	-1	0	34	4	17	42 000	683 982
EAtHC	2	Survey specifications E-learning guided session.	3	5	5	0	10	0	4	0	5	32	2	18	2 400	686 382
NIOHC	2	MBES Processing	3	5	3	0	8	3	4	0	5	31	2	19	24 876	711 258
SWAtHC	1	Multibeam data processing and bathymetry database worshop	3	5	3	2	6	5	5	-3	5	31	2	20	18 200	729 458
SEPRHC	1	Workshop Quality Control of ENC production	3	1	4	0	7	5	5	-1	5	29	3	21	29 500	758 958
SWAtHC	2	Tide Training	3	5	3	1	6	3	5	-2	5	29	2	22	13 920	772 878
MBSHC	2	ENC Validation	3	1	5	0	6	3	5	0	5	28	3	23	20 500	793 378
SAIHC	3	MBES Processing	3	5	3	0	7	1	4	0	5	28	2	24	21 384	814 762
SWAtHC	3	Multibeam Systems Total Uncertainty Workshop	3	5	3	1	6	1	5	-1	5	28	2	25	15 000	829 762
MACHC	3	ENC Production and QA	3	1	3	2	7	1	4	0	5	26	3	26	25 310	855 072
MBSHC	1	Workshop on Law of the Sea	3	1	3	0	6	5	5	0	0	23	4	27	17 000	872 072

Projects submitted by the RHCs (Procedure 4)

RHC	Priorit	Project Name	1	2	3	4	5	6	7	8	9	Total	Phase	Priorit	Resource	Sum	Observation
IHO/ROK		Hydrography survey programme (Category "A", USM, USA)										50			135 000	135 000	Earmarked
IHO/ROK		Nautical cartography programme (Category "B", KHOA, ROK)										50			110 000	245 000	Earmarked
IHO/ROK		Training for Trainers (TFT, KHOA, ROK)										50			90 000	335 000	Earmarked
Nippon		Nippon Chart Project (Category "B", UKHO, UK)										50			190 421	525 421	Earmarked
SWPHC	*	Samoa Technical Implementation Visit (former 2018 CBWP A-04)										49			3 300	528 721	Postponed from 2018
SWPHC	*	Niue Technical Implementation Visit (former 2018 CBWP A-05)										49			3 000	531 721	Postponed from 2018
EAtHC	*	MSI E-learning guided session (former 2018 CBWP P-13)										49			2 600	534 321	Postponed from 2018
EAtHC	*	Survey specification e-learning guided session (former 2018 CBWP P-15)										49			2 600	536 921	Postponed from 2018
SAIHC	1	Seminar on Raising Awareness of Hydrography	5	10	5	0	8	5	4	0	5	42	0	1	22 500	559 421	
EAHC	1	Risk Assessment for hydrographic surveys and charting management for th	5	10	5	0	6	5	5	0	5	41	0	2	20 960	580 381	
NIOHC	1	Seminar on Raising Awareness of Hydrography	5	10	5	0	8	5	3	0	5	41	0	3	22 500	602 881	
EAtHC	1	Technical Visit to Togo	5	10	1	0	10	5	4	0	5	40	0	4	5 000	607 881	
MACHC	2	Phase 1 Skills Course	5	10	5	2	7	3	4	-1	5	40	1	5	22 179	630 060	
SWPHC	1	Technical Assessment & Advice - Palau	5	10	1	4	6	5	4	0	5	40	0	6	12 600	642 660	
EAtHC	1	MSI / Hydrographic Risk Assessment / Survey Specifications Workshop	5	10	5	0	10	0	4	0	5	39	1	7	25 000	667 660	
SWPHC	1	Technical Workshop on Disaster Response Planning and Data Discovery	3	10	5	2	7	3	5	-1	5	39	0	8	42 000	709 660	
EAtHC	1	MSI E-learning guided sessions.	5	10	5	0	10	0	5	-2	5	38	1	9	2 400	712 060	
SAIHC	2	MSI Course	5	10	5	2	8	3	3	-3	5	38	1	10	14 222	726 282	
EAHC	2	Management of MSI DB workshop	5	10	5	0	6	3	5	-2	5	37	1	11	23 800	750 082	
MACHC	1	Seminar on Raising Awareness of Hydrography	5	10	5	0	6	5	4	-3	5	37	0	12	28 500	778 582	
EAtHC	2	Technical Visit to Gambia	5	10	1	0	10	3	4	-2	5	36	0	13	5 000	783 582	
EAtHC	1	Technical Visit to Congo	5	10	1	0	10	1	4	0	5	36	0	14	5 000	788 582	
EAtHC	2	Regional Training Centre Site Study	2	10	5	0	10	0	4	0	5	36	0	15	10 000	798 582	
EAHC	4	Technical Visit to Cambodia	5	10	1	0	10	0	5	-2	5	34	0	16	3 900	802 482	
MBSHC	3	Technical Visit to Lebanon	5	10	1	0	7	1	5	0	5	34	0	17	3 000	805 482	
EAtHC	2	Survey specifications E-learning guided session.	3	5	5	0	10	0	4	0	5	32	2	18	2 400	807 882	
NIOHC	2	MBES Processing	3	5	3	0	8	3	4	0	5	31	2	19	24 876	832 758	
SWAtHC	1	Multibeam data processing and bathymetry database worshop	3	5	3	2	6	5	5	-3	5	31	2	20	18 200	850 958	
SEPRHC	1	Workshop Quality Control of ENC production	3	1	4	0	7	5	5	-1	5	29	3	21	29 500	880 458	
SWAtHC	2	Tide Training	3	5	3	1	6	3	5	-2	5	29	2	22	13 920	894 378	
MBSHC	2	ENC Validation	3	1	5	0	6	3	5	0	5	28	3	23	20 500	914 878	
SAIHC	3	MBES Processing	3	5	3	0	7	1	4	0	5	28	2	24	21 384	936 262	

INTERNATIONAL HYDROGRAPHIC ORGANIZATION
Adopted 2019 CBWP

Updated: 03/06/2018

IHO WP Element: Capacity Building Assessment - Technical and High-Level Visits					
No.	Activity	Responsible	Budget	Status	Resources
A-01	Technical Implementation Visit to Samoa (former 2018 CBWP A-04)	SWPHC	3 300 €	Led by Dates	IHO
A-02	Technical Implementation Visit to Niue (former 2018 CBWP A-05)	SWPHC	3 000 €	Led by Dates	IHO
A-03	Technical Assessment and Advice visit to Palau	SWPHC	12 600 €	Led by Dates	IHO
A-04	Technical Visit to Togo	EAtHC	5 000 €	Led by Dates	IHO
A-05	Technical Visit to Gambia	EAtHC	5 000 €	Led by Dates	IHO
A-06	Technical Visit to Congo	EAtHC	5 000 €	Led by Dates	IHO
A-07	Regional Training Centre Site Study	EAtHC	10 000 €	Led by Dates	IHO
A-08	Technical Visit to Cambodia	EAHC	3 900 €	Led by Dates	IHO
A-09	Technical Visit to Lebanon	MBSHC	3 000 €	Led by Dates	IHO
		-	50 800 €		

IHO WP Element: Capacity Building Provision - Technical Workshops, Seminars, Courses					
No.	Activity	Responsible	Budget	Status	Resources
P-01	Hydrography survey programme (Category "A", USM, USA)	Secretariat	135 000 €	Led by USM, Hattiesburg, USA 1 August 2019-1 August 2020	ROK
P-02	Nautical cartography programme (Category "B", KHOA, ROK)	Secretariat	110 000 €	Led by KHOA, Busan, ROK Dates TBD	ROK
P-03	Nippon Chart Project (Category "B", UKHO, UK)	Secretariat	190 421 €	Led by UKHO, Tauton, UK September-December 2019	Nippon

INTERNATIONAL HYDROGRAPHIC ORGANIZATION
Adopted 2019 CBWP

IHO WP Element: Capacity Building Provision - Technical Workshops, Seminars, Courses					
No.	Activity	Responsible	Budget	Status	Resources
P-04	Training for Trainers (TFT, KHOA, ROK)	EAHC	90 000 €	Led by Dates	ROK
P-05	MSI E-learning guided session (former 2018 CBWP P-13)	EAtHC	2 600 €	Led by Dates	ROK
P-06	Survey specification e-learning guided session (former 2018 CBWP P-15)	EAtHC	2 600 €	Led by Dates	ROK
P-07	Seminar on Raising Awareness of Hydrography	SAIHC	22 500 €	Led by Dates	IHO
P-08	Risk Assessment for hydrographic surveys and charting management for the safety of navigation	EAHC	20 960 €	Led by Dates	IHO
P-09	Seminar on Raising Awareness of Hydrography	NIOHC	22 500 €	Led by Dates	ROK
P-10	Phase 1 Skills Course	MACHC	22 179 €	Led by Dates	IHO
P-11	MSI / Hydrographic Risk Assessment / Survey Specifications Workshop	EAtHC	25 000 €	Led by Dates	IHO
P-12	Technical Workshop on Disaster Response Planning and Data Discovery	SWPHC	42 000 €	Led by Dates	IHO
P-13	MSI E-learning guided sessions.	EAtHC	2 400 €	Led by Dates	IHO
P-14	MSI Course	SAIHC	14 222 €	Led by Dates	IHO
P-15	Management of MSI DB workshop	EAHC	23 800 €	Led by Dates	ROK
P-16	Seminar on Raising Awareness of Hydrography	MACHC	28 500 €	Led by Dates	IHO
P-17	Survey specifications E-learning guided session.	EAtHC	2 400 €	Led by Dates	IHO
P-18	MBES Processing	NIOHC	24 876 €	Led by Dates	IHO

INTERNATIONAL HYDROGRAPHIC ORGANIZATION
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IHO WP Element: Capacity Building Provision - Technical Workshops, Seminars, Courses					
No.	Activity	Responsible	Budget	Status	Resources
P-19	Multibeam data processing and bathymetry database workshop	SWAtHC	18 200 €	Led by Dates	IHO
P-20	Workshop Quality Control of ENC production	SEPRHC	29 500 €	Led by Dates	Not funded yet
P-21	Tide Training	SWAtHC	13 920 €	Led by Dates	Not funded yet
P-22	ENC Validation	MBSHC	20 500 €	Led by Dates	Not funded yet
P-23	MBES Processing	SAIHC	21 384 €	Led by Dates	Not funded yet
P-24	Multibeam Systems Total Uncertainty Workshop	SWAtHC	15 000 €	Led by Dates	Not funded yet
P-25	Workshop on Law of the Sea	MBSHC	17 000 €	Led by Dates	Not funded yet
P-26	Workshop on Law of the Sea	SEPRHC	28 860 €	Led by Dates	Not funded yet
P-27	ENC Production and QA	MACHC	25 310 €	Led by Dates	Not funded yet
P-28	Workshop on MSDI implementation and development	SEPRHC	29 740 €	Led by Dates	Not funded yet
P-29	Regional MSDI Workshop	NIOHC	24 693 €	Led by Dates	Not funded yet
P-30	Integration and management of hydrographic data for MSDI	EAHC	20 960 €	Led by Dates	Not funded yet
P-32	Chart Adequacy Workshop	USA/NOAA		Led by NOAA/OCS, Silver Spring, MD, USA July 2019 TBC	In-kind from USA/NOAA
P-33	Nippon Foundation/IHO-IOC GEBCO Training Course	UNH		Led by UNH, Durham, USA August 2018-August 2019	In-kind from Nippon*
	Subtotal of P (Provision)	-	1 047 025 €		

INTERNATIONAL HYDROGRAPHIC ORGANIZATION
Adopted 2019 CBWP

IHO WP Element: Capacity Building Provision - Technical Workshops, Seminars, Courses					
No.	Activity	Responsible	Budget	Status	Resources

Resources:

IHO = IHO regular budget

ROK = IHO/ROK Programme of Technical Cooperation

Nippon = IHO-Nippon Foundation CHART Project

Nippon* = Nippon Foundation GEGCO Project

Total	1 097 825 €	
IHO	274 037 €	Subtotal IHO
ROK	386 500 €	Subtotal ROK
Nippon	190 421 €	Subtotal Nippon
Not funded	246 867 €	Not funded yet

**16th MEETING OF THE IHO CAPACITY BUILDING SUB-COMMITTEE
IHO-CBSC16
Goa, India, 30 May - 1 June 2018**

LIST OF ACTIONS

N.	Action (Agenda item)	Responsible	Deadline	Status
1.	bring the IMO issues to the IRCC and request to encourage Member States to engage with their delegations in the IMO to provide support to the IMO Member States that are not IHO Members to comply with SOLAS Chapter V	Chair	IRCC10	
2.	liaise with the IHO Secretariat for the preparation of the call for candidates to the Chart Adequacy Workshop in 2019 via CL (5.1d)	USA	September 2018	
3.	issue a CL calling for candidates to the Chart Adequacy Workshop in 2019 in accordance with the information provided by USA (5.1d)	Secretariat	after action 2	
4.	liaise with Malaysia and UKHO to consider the possibility to release the TFT training material and to report back to CBSC (6e)	ROK	November 2018	
5.	address the need for resources for Capacity Building (resource mobilization officer) to allow for the comprehensive projects of CB (6f)	Chair	IRCC10	
6.	review draft CB Procedure 9 and identify areas that could be simplified and provide input to the Secretary and the Vice-Chair for the technical and high-level visits (8.1)	CB Coordinators	October 2018	
7.	compile the inputs to draft CB Procedure 9 and provide a new draft to the CBSC for adoption during CBSC17 (8.1)	Vice-Chair and Secretary	December 2018	
8.	invite the IRCC to support the use of CATZOC information as an interim solution as an indicator for survey adequacy and to encourage Member States, via RHCs, to provide CATZOC information for C-55, directly or via RENCs (8.3)	Chair	IRCC10	
9.	encourage IRCC to invite the IHO Secretariat to make the IHO GIS and CIS available to Member States (8.3)	Chair	IRCC10	
10.	compile legislation and related documents for NHC, best cases, uses, benefits, stakeholders and distribute to the CBSC on legislation for NHC, according to Actions 10 and 11 (8.5)	Secretary	August 2018	

N.	Action (Agenda item)	Responsible	Deadline	Status
11.	provide comments and feedback to the Secretary on legislation for NHC, according to Action 10 (8.5)	CBSC Members	November 2018	
12.	compile inputs and comments from CBSC Members and provide a draft guiding document to CBSC (8.5)	Secretary	CBSC17	
13.	develop the 2019 CBWP considering the 2019 CB Management Plan (9.3)	Secretary	During the meeting	
14.	request to the IRCC to task MSDIWG to consider developing basic MSDI training material in order to allow RHCs to deliver trainings with their own personnel (11)	Chair	IRCC10	
15.	consider making training material available via the IHO website (11)	CB Coordinators	Permanent	
16.	provide input for the organization of the CB/IBSC stakeholders' seminar (11)	CBSC Members	August 2018	
17.	write to the RSAHC Chair raising awareness of the importance of having a permanent and operational CB Coordinator (11)	Chair	July 2018	

**16th MEETING OF THE IHO CAPACITY BUILDING SUB-COMMITTEE
IHO-CBSC16
Goa, India, 30 May - 1 June 2018**

LIST OF DECISIONS

Agenda item 1 Opening remarks, introductions and administration

Decision 1: to endorse the revised CBSC ToR and RoP (doc. *CBSC16-01D*).

Agenda item 2 Approval of Agenda

Decision 2: Agenda was adopted as amended (doc. *CBSC16-02 rev1*).

Agenda item 3 Matters arising from Minutes of CBSC15 Meeting

Decision 3: to approve the CBSC15 Report (doc. *CBSC16-03A*) and Action List, as updated by the CBSC16 (doc. *CBSC16-03B rev1*).

Agenda item 4 Reports by the Chair and the IHO Secretariat

Decision 4: to note the reports under agenda item 4 (docs. *CBSC16-04A* and *CBSC16-04B*).

Agenda item 5 Regional Assessment of CB Activities

Decision 5: to note the value and effectiveness of preceding SWPHC meetings with CB related workshops.

Decision 6: to note SWPHC's commitment in carrying forward hydrographic, nautical cartographic and capacity building activities in close alignment with IHO objectives and goals.

Decision 7: to note the reports under agenda item 5.1 (Reports from the RHCs, docs. *CBSC16-05.1A* to *M*).

Decision 8: to approve the closed 2017 CBWP (doc. *CBSC16-05.2*).

Agenda item 6 Regional projects for CB

Decision 9: to acknowledge the CB work done in the EAthC in the past 15 years.

Decision 10: not to endorse the proposal for a dedicated person devoted to the EAthC in the IHO Secretariat.

Agenda item 7 Outcomes of the 1st meeting of the IHO Council and the Strategic Issues of the CBSC

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Agenda item 8 Operational issues of the CBSC

Decision 11: to have one single report for each country visited by an IHO visiting team and to reflect this in Procedure 9.

Decision 12: CBSC to review C-55 as indicated in doc. *CBSC16-08.3B*.

Decision 13: to establish a C-55 Review Project Team (C-55RPT).

Decision 14: to consider introducing CATZOC information as an interim solution as an indicator for survey adequacy.

Decision 15: to approve the ToR/RoP of the C-55RPT and appoint Norway (Evert Flier), UK (Jeff Bryant) and France (Vincent Lamarre) as Chair, Vice-Chair and Secretary, respectively.

Decision 16: to note the reports under agenda item 8 (docs. *CBSC16-08-6A to J*).

Agenda item 9 CB Management

Decision 17: to add 3 010 Euros in activity P-07 of the 2018 CBWP to allow the participation of 2 members from RSAHC in the Phase 1 Skills training to be conducted in India, later in 2018.

Decision 18: to approve the extraordinary proposal for a high-level visit to Angola in 2018.

Decision 19: to adopt the 2018 CBWP (as off 1 June 2018, **Annex C**).

Decision 20: to approve the Finance Report (doc. *CBSC16-09.2*).

Decision 21: to transfer the 2018 CBWP surplus to be used in the 2019 CBWP.

Decision 22: to approve the 2019 CB Management Plan (**Annex D**).

Decision 23: to approve the Adopted 2019 CBWP (**Annex E**).

Agenda item 10 Report from the CBSC to the IRCC10 Meeting

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Agenda item 11 Any other business

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Agenda item 12 Next CBSC Meetings (venue and date)

Decision 24: to adopt the dates for future meetings of the CBSC as below:

- a) CBSC17: 29 – 31 May in Italy (venue TBD)
- b) CBSC18: May / June 2020 – Gdynia, Poland
- c) CBSC19: May / June 2021 – Galapagos, Ecuador
- d) CBSC20: May / June 2022 – Japan (to be confirmed)