



INTERNATIONAL HYDROGRAPHIC ORGANIZATION  
MESO AMERICAN & CARIBBEAN SEA HYDROGRAPHIC COMMISSION



**XI<sup>th</sup> Meso American & Caribbean Sea Hydrographic Commission Meeting**  
**10-11 November 2010**  
**Paramaribo, Suriname**

**Minutes of the X<sup>th</sup> Meeting – Bridgetown, Barbados, Nov 4<sup>th</sup>-5<sup>th</sup>**

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## 1. Opening

### Welcome

The Chair opened the meeting with the following words:

*Honorable E. George Hutson, Minister of International Business and Transport of Barbados, Representatives of the International Hydrographic Bureau, distinguished Delegates and Observers, welcome to the 10<sup>th</sup> Meeting of the Meso-American and Caribbean Sea Hydrographic Commission (MACHC),*

*First of all I would like to thank Barbados, through its Port Authority, Captain George Fergusson for hosting this meeting, and achieving it. Also our Cosponsors, UKHO and NOAA, for the support they have given.*

*We are aware of the challenge faced by the Member States of the International Hydrographic Organization in rendering an excellent service to the international maritime community in order to contribute to the safety and security of human life at sea as well as the preservation of the environment.*

*I think that the key to our success is the development of capacity building and the commitment of all MACHC Members States, particularly in working to achieve adequate Electronic Navigational Chart (ENC) coverage by 2010.*

*I believe we have a great challenge ahead of us during these two days. Nevertheless, we are aware of the fact that the IHO needs to do some thorough planning, some mutual support for ongoing development as well as a great cooperative spirit associated with the formulation of resolutions so that the work developed by this Commission can be relevant and useful to the maritime community.*

*We would like to highlight once more our delight at being here in this nice and friendly country. Thank you very much.*

After that, he invited the International Hydrographic Bureau representative Captain (Chilean Navy) Hugo Gorziglia to address the audience. Capt. Gorziglia words:

- *Honorable E. George Hutson, Minister of International Business and Transport of Barbados.*
- *Vice Admiral Fernando PALMER, Chairman of the Meso American and Caribbean Sea Hydrographic Commission*
- *Members, Associated Members and Observers of MACHC*
- *Distinguished guests*
- *Ladies and Gentlemen*

*It is a great honour for me, on behalf of the International Hydrographic Bureau, to address a few words on the occasion of the opening ceremony of the Xth Conference of the Meso American and Caribbean Sea Hydrographic Commission.*

*The International Hydrographic Organization gives great importance to the work of the Regional Hydrographic Commissions and the IHB Directors have under their responsibilities, the task to facilitate and provide support to the Commissions aiming at implementing the decisions agreed at their Conferences.*

*The IHO has 14 RHCs. All have been established: to promote technical cooperation in the domain of hydrographic surveying, marine cartography and nautical information; to stimulate countries in the region to establish and strengthen their hydrographic capabilities and to facilitate the exchange of information.*

*As you can imagine the 14 RHCs have different challenges and priorities. MACHC is one of the RHCs in strong need to improve the capabilities to provide hydro-cartographic and safety to navigation information, products and services, and therefore, this conference shall be seen as an excellent opportunity to work with a regional team spirit.*

*The IHO has made substantial efforts to motivate both, governmental authorities and maritime and port authorities on the transcendental role hydrography and its related disciplines play in national sustainable development. The maritime transport sector, the fishing industry, the tourism activities, the maritime delimitation issues, defense, coastal zone management, ports, just to mention a few areas, all of great socio-economic significance cannot be effective and efficiently developed if reliable and updated hydrographic information is not available. There is not one activity that takes place in the sea that do not benefit from hydrography.*

*Since 1998 group of experts in the field of hydrography, nautical cartography and marine safety information have visited the countries in the region to assess the hydrographic capabilities aiming at providing advice on the way that existing shortcomings could be faced. The IHB has offered each country with a frank, technical and responsible report, describing the national arrangements in place, offering some conclusions and recommendations that if implemented could improve national, regional and international responsibilities internationally agree, such as SOLAS, Chapter 5 Regulation 9, related to Hydrographic Services.*

*To progress in this line, one recurrent advice is the establishment of National Hydrographic Committees or similar coordination bodies. It is with great pleasure that we take note the progress made by Barbados in establishing such committee in 2008. Congratulations.*

*In conjunction with these visits and also contributing to raise awareness on the importance of hydrography and the need to establish national structures that would foster initiatives at both, national and regional levels, MACHC has organized workshops, seminars and short courses. The IHO CBSC stands ready to consider new requirements previously evaluated at the regional level.*

*The IHO expects that within the region, and particularly within the countries not yet having established a HO, its authorities as well as the whole society become aware and strongly committed to recognize the important role hydrography plays in national development. Hydrography must be considered a national objective and should receive the widest support from national governments.*

*This Conference offers the opportunity to make some reflections on where we stand. Has MACHC made some progress? What problems still exist? Which are the priorities? How can MACHC achieve a viable progress in improving safety to navigation in the region? Are MACHC Members ready to identify common targets and assume collectively commitments to move forward? From the IHB side we are particularly interested in learning about the agreements you will reach at this Conference. Mr Chairman and Members of the Commission we wish you a successful conference. The IHB is ready and willing to contribute to the Commission's efforts.*

*Finally I would like to highlight the presence of one of the highest governmental authorities of BARBADOS at this opening ceremony. This is a clear indication that hydrography is gaining the priority it deserves in the general national context.*

*Excellency, please accept our deep thanks to the Government of BARBADOS for hosting this Conference and particularly we thank you for being with us this morning. Your presence is certainly very motivating and encouraging. We are confident on your sustainable and strong support to BARBADOS' hydrographic development. We are aware of the interest of BARBADOS to become an IHO Members and we are ready to provide BARBADOS all the support required to achieve this objective.*

*Finally we would like to thank all those that have been involved in the detailed preparation of this Conference. Barbados Port Authority, the UKHO, NOAA and MACHC Secretariat, to all many thanks.*

*Ladies and Gentlemen, Thank you very much.*

Finally the Chair invited Mr. George Hutson, Minister of International Business and Transport of Barbados, who addressed the audience, highlighting the importance for the Region and, particularly to Barbados, to host the meeting in Bridgetown.

#### **Agenda and Timetable approval**

The Chairman introduced the Agenda (**Doc. MACHC10-01a**) and Timetable (**Doc. MACHC10-01b**) and invited Participants to comment on the documents. Both documents were approved without amendments.

#### **List of Documents**

The Chairman introduced the List of Documents (**Doc. MACHC10-01c**).

#### **Administrative Arrangements**

The Chairman invited Ms. Kelly James, Secretary Assistant, to provide Participants with administrative details. A List of Participants and of Persons of Contacts of each Organization to check and update.

### **2. IX<sup>th</sup> MACHC Minutes approval**

Following the Program, the Chairman presented the IX<sup>th</sup> MACHC Minutes for ratification, once it was already approved by correspondence. As there were no objections or comments, the Minutes were approved by unanimity.

### **3. IX<sup>th</sup> MACHC Actions List review**

The Chairman highlighted that the following point of the agenda was to review the status of action items from the IX<sup>th</sup> MACHC.

He informed the assembly that the Secretary, Captain Wesley Cavalheiro (Brazil), was going to present the review of the status of those actions.

Captain Wesley Cavalheiro pointed out to the participants that they had a paper version of the list of actions (MACHC.10-03) from the IX<sup>th</sup> MACHC Conference. He then advised that he would go over them one at a time. He started reading the document and asking participants to comment on each item.

The following items had their status updated:

- Action 9-8, d): "In process";
- Action 9-13, g): "Complete".

Regarding the Action 9-15, the amendment of MACHC Statutes, Ing. en Chef Yves Guillam (France) ask whether it would be discussed the comments made by Member States and published at MACHC Letter 13/2009. The Chairman asked the Secretary to read the mentioned comments and opened the floor for the discussions. Mr. Guillam expanded France three comments and proposal on Statutes Articles 5b and 6a. The second proposal made by France in MACHC Letter 13/2009 to clean Articles 5d and 4b was rejected. The plenary agreed on Mr Guillam arguments, but nor the proposed text for amendment on Article 5b and postponed the discussion under Agenda item 7, proposals from Member States.

After that Captain Wesley Cavalheiro remarked that they had finished up with the review of IX<sup>th</sup> MACHC List of Actions.

The plenary decided to keep in the action list those items that were not completed.

### **4. IHO / IHB Matters**

The Chairman passed to the next Agenda item which was "IHO Matters", which would be presented by the IHB Director Captain Hugo Gorziglia.

The IHB Representative briefly referred to some items of which participants should be aware and are not covered by a particular agenda item. He referred to some decisions of the 4<sup>th</sup> EIH, highlighting the new definition of Hydrography adopted by IHO, as well as the revised Strategic Plan that was approved.

He also reported on the first IRCC meeting, that constituted the organizational meeting for this new IHO Committee. Emphasis was made on the fact that MACHC Chairman has a seat as member of IRCC, therefore the Commission has a concrete venue to report its experiences and receive feed back from other RHCs on the progress of their programme.

An updated status of ratification of the Protocol of Amendments to the IHO Convention was provided and an explanation on the agreed majority required to have these amendments to enter in force. It was reported that 26 MSs have ratified the Protocol and 48 ratifications was the required majority.

Of particular interest to MACHC was the report on the MOU in the process of signature between IHO and the Association of Caribbean States (ACS). This new vehicle might offer MACHC another opportunity to raise awareness on the importance of developing hydrography in the region, at a ministerial level. It was requested to give attention to a Circular Letter just issued ( 71/2009) and consideration and comments was requested by the IHB representative. The delegate of France strongly supported this action.

On another matter, it was reported on the need to consider providing shallow water bathymetry data to improve bathymetric products such as GEBCO and its global digital atlas. Probably a resolution could be considered for adoption regarding the need to supply shallow water information to the IHO DBDC.

The Commission was informed on the progress achieved by the International Hydrographic Review in its digital form and a call for contributions from MACHC was made.

In the technical field participants were alerted to the content of CL 70/2009 that calls for the adoption of S-100 as recommended by HSSC. This subject was not covered in detail as there is a particular agenda item.

The issue on Assistance in obtaining entry visas for IHO delegations attending IHO meetings and technical events was also reported. (Ref. CL 66/2009).

Details were also provided on the progress made in improving M-3 IHO Technical and Administrative Resolutions and what is next in this regard.

Finally the IHB Representative referred to the IHB effort in maintaining the IHO web page, inviting participants to make wide use of this tool, and to help the IHB to keep its content as updated as possible.

Ing. en Chef Yves Guillam (France) stated that France fully supports the MoU with the ACS and reinforced the importance to invite ACS to attend MACHC Meetings.

The Chairman closed the discussion on this Item.

## **5. National Reports**

The Chairman announced the next Agenda Item, National Reports, and invited the representatives of Full and Associated Members to present the respective reports.

### **Antigua & Barbuda**

Mr. Dwight Gardiner related:

- Antigua & Barbuda takes hydrographic matters very seriously and are pleased to be present at this forum;
- Maritime Authority has now given a mandate to build capacity to take into responsibility very seriously;
- Surveys are conducted by contracting private companies. US and UK also contributes;
- Establishment of a Hydrographic Office foreseen by mid 2010;
- Training and capacity building opportunities discussed here will be looked at very closely;
- ENC coverage: just signed for UKHO to cover it;
- GMDSS land based system to be installed in area soon;
- Port Authority looking at major port expansion in both Antigua and Barbuda.

As there were no comments, the presentation was finalized and he thanked participants for their attention.

### **Barbados**

Mrs. Valerie Browne from Barbados made some brief comments as to where they stood in Barbados. She highlighted:

- Some main areas where surveying is important;
- The National Hydrographic Committee is proving very useful;
- There was no new large scale survey since the IX<sup>th</sup> MACHC;

- There was a small scale survey for two new marines at north of Barbados;
  - UKHO is producing Barbados charts;
  - Barbados is currently involved with Coastal Zone Management;
  - Despite the participation on some training activities, there are still needs on training;
  - Barbados signed a delimitation agreement with France;
  - As oceanographic activity Barbados is operating a tide gauge from two and a half years ago.
- She said that was all he had to report for the time being and thanked the participants for their attention.

### **Belize**

Mr. Andrew Coc related:

- Hydrography belongs to the Port Authority;
  - Hydrography in Belize is in its infancy, but invaluable training has been undertaken from Japan, US, Brazil, Venezuela. More training are foreseen to be undertaken in 2010;
  - On 1<sup>st</sup> Oct 2009 a vessel was commissioned for surveys;
  - Plans continue to complete survey data collection in second port of Belize.
- As there were no comments, the presentation was finalized and he thanked participants for their attention.

### **Brazil**

Captain Carlos Augusto Medeiros de Albuquerque highlighted the surveys completed, chart production – paper and ENC, S-55 update, cooperation arrangement with France, and capacity building experience and offers.

As there were no comments, the presentation was finalized and he thanked participants for their attention.

### **Colombia**

Captain Estaben Uribe Alzate highlighted:

- On capacity building activities, relating the possibilities that exist in Colombia;
- Colombia forecast on extended local tides at the Caribbean area;
- This year we have done 43 surveys and produced charts for yachts and sailboats

As there were no comments, the presentation was finalized and he thanked participants for their attention.

### **France**

France National Report was presented by Ing. en Chef Yves Guillam. He highlighted the surveys completed, chart production – paper and ENC, S-55 update, and capacity building experience and offers.

As there were no comments, the presentation was finalized and he thanked participants for their attention.

### **Jamaica**

Mr. Calvin Thompson (Jamaica) presented the national report as it is in the paper format. As there were no comments, the presentation was finalized and he thanked participants for their attention.

### **The Netherlands**

Mr. Erwin Wormgoor, representative of The Netherlands, provided a brief overview of the Dutch National Report which would include information on their responsibilities, their recent surveys within the Caribbean area and the typical S-55 scoring tables as well as some future development plans. He then highlighted the following points:

- From the surveys made they produced new charts and ENCs. A 100% of ENC coverage of Netherlands responsibility has been achieved; except for the coastal and general usage bands around the Leeward Islands. Cooperation with Venezuela (producer nation) is most important to support the production of these new ENCs. but source data is required from all hydrographic offices to maintain the accuracy of data;
- A solution with Venezuela regarding the producer nation identification chart 4108 and 4023 was agreed. Venezuela resumed the duty of producer nation for both these paper int charts and the corresponding ENCs. This means that on short notice both HO's need agreements on source data exchange, product validation and verification before issuing the new products and permanent communications to guarantee the maintenance of the products with updates.

– Capacity building: open invitation to all present for practical onboard training either in Europe as well as in West Indies. See [www.hydro.nl](http://www.hydro.nl) for details of survey vessels.

As there were no comments, the presentation was finalized and he thanked participants for their attention.

### **Suriname**

Mr. Freddy Delchot (Suriname) presented the national report as it is in the paper format.

UK representative clarified that GB ENC's are an interim solution to cover the Suriname area and will be withdrawn once Suriname ENC's are produced in coproduction with the Netherlands.

As there were no more comments, the presentation was finalized and he thanked participants for their attention.

### **St. Kitts & Nevis**

Mr. Nigel Herbert (St Kitts & Nevis) stated that, despite the lack of resources, St. Kitts & Nevis became an MACHC Associated Member. He highlighted that hydrography relies on an ongoing effort in capacity building but funding remains a problem with regard to meeting SOLAS obligations.

In February 2009 a survey was completed.. Although it is not always seen by relevant authorities, efforts are done to deal with that situation.

In regard to charting, there are no surveys to upgrade them since 1986. The United Kingdom Hydrographic Office (UKHO) provides assistance to St Kitts and Nevis in this respect. Also some charts are provided by the National Oceanic and Atmospheric Administration (NOAA – US).

A GMDSS plan is being produced but funding is still awaited.

In regard to capacity building, training is in demand. Last year two people went to Suriname to do hydrographic training but more training is needed.

A hurricane destroyed many facilities such as tide gauges which are being replaced.

In conclusion, Mr. Herbert said that St. Kitts and Nevis understand the requirement but funding is very limited and asked for assistance from large nations to assist.

As there were no more comments, the presentation was finalized and he thanked participants for their attention.

### **United Kingdom**

The next country to present its National Report was the United Kingdom (UK). Captain Vaughan Nail highlighted the surveys completed, chart production – paper and ENC, S-55 update, and capacity building experience and offers.

He applauded the efforts of St Kitts and Nevis and went on to describe challenges and opportunities of current coverage and future requirements, and went on to describe work being supported by UKHO expressed understanding of the limitations of low resourcing.

A capacity building post was also established and this is one of the most important things the IHO does. UKHO intends to continue with the provision of cartographic and related training.

Then, Capt. Nail went to describe the International Centre of ENC's (IC-ENC) role and difficulties in the area with overlaps, etc. Valuable work has been done over the past two days by the technical groups which will be very welcome..

As there were no more comments, the presentation was finalized and he thanked participants for their attention.

### **United States of America**

The National Report of the United States of America (USA) was presented by Mrs. Kathryn Ries, who highlighted the following points:

- Mapping and charting responsibilities in the US are shared by three different agencies:
  - National Oceanic and Atmospheric Administration (NOAA): mapping and charting for coastal areas;
  - National Geospatial-Intelligence Agency (NGA): intelligence for defense, homeland security, safety of navigation (maritime safety information – MSI), and international charts;
  - Naval Oceanographic Office (NAVOCEANO): global ocean, littoral data to provide operationally significant products and services for war fighters, civilian national, and international customers.
- Reiterate UK's comments regarding gain from dual production, paper and digital and working with CARIS hope to have a combined system up and running and thus to be more efficient;
- Training opportunities; and
- The US National Hydrographer, Captain Steve Barnun, has been replaced by Captain John Lowell.

As there were no more comments, the presentation was finalized and she thanked participants for their attention.

### **Venezuela**

Venezuela National Report was presented by Commander Pablo Rodriguez. He highlighted the surveys made, chart production – paper and ENC, S-55 update, and capacity building experience and offers.

US asked what multibeam echosounders Venezuela is using. In response, Venezuela confirmed they are using Kongsberg.

St Kitts & Nevis asked if the offered training was delivered in English, for it was responded they are done only in Spanish, but, in some cases, there is a possibility to have a simultaneous translation, as it was done in last March in a two weeks hydro training.

US asked if similar courses, as the mentioned two weeks hydro training, are planned to be run, for it was responded if MACHC requests, budget will be proposed to repeat it next year.

As there were no more comments, the presentation was finalized and he thanked participants for their attention.

### **General comments**

The IHB representative, Capt. Gorziglia, expressed his appreciation of training and support to others in capacity building, and also to the hydrographic industry participation.

Regarding the MACHC documents, IHB proposed that due to the importance and general interest, more than only to MACHC Members, the main documents are also to be published on the IHO website, keeping the discussion documents at the website managed by NOAA. The plenary agreed to this proposition.

The Netherlands reiterated their offer of on the job training. Regarding capacity building, initiatives should be discussed at all levels and problem can be tackled in a better way. It is important to know what stage everyone has reached.

As there were no more comments, the Chair finalized the discussion of this Agenda Item.

## **6. MACHC Committees, Working Groups, and Commission Representatives Reports**

Following the Agenda, the Chair opened the floor to Capt. Wesley (Secretary), on behalf of Commander Raúl Martínez Sánchez (Mexico), the INT Chart Committee Chair, to initiate the report presentations of MACHC Committees and Representatives Reports.

### **INT Chart Committee**

Capt. Wesley reported the summary of the meeting held on Tuesday afternoon, at the preliminary discussions. The recommendations to the Commission were:

- To review IHO publication S-11, Part B, on the corresponding data;
- To endorse Colombia's proposal to Venezuela in regard to INT Chart 4023, in order to publish the chart unilaterally, once they do not participate on the process production;
- To endorse the Netherlands consent to amend IHO publication S-11 on the production country of INT Chart 4108 to Venezuela as the producer nation. However, the Commission states this is not sufficient to guarantee the quality of the process. They must have an exchange of source data and information and organize verification. It is of great importance that both data, VE's and NE's, be accepted by the two Hydrographic Services and incorporate accordingly into their own products. It is also important that the draft products of both, paper charts and ENC, be delivered each other for verification of the corresponding area. These kind of proposed procedures are common practice in the IHO community and should become part of the bilateral technical cooperation. Therefore, the MACHC strongly asks to NE and VE to act accordingly.

- Recommends the Commission to approve the HSSC suggestion regarding ToR and RoP for Regional Chart Coordinator and look forward to have one coordinator for both, the INT Chart and the ENCs; and
- Proposes to the Commission to address to IRCC the subject of the HSSC proposal on ToR and RoP for Regional Charts Coordinators, particularly in regard to have one coordinator for both, the INT Charts and the ENCs.

The Commission approved the suggestions made by the INT Chart Committee and also:

- Endorsed IHB representative request to Member States to send copies of new editions of INT Charts to the IHB; and

- Addressed the Chair to communicate with Mexico regarding the resolution on to have one coordinator for INT Chart and ENC, asking his intention to continue as INT Chart Coordinator. In case of a negative response, the Commission accepts Brazil's offer to take on the task.

### **Capacity Building**

The next report was on Capacity Building (CB) matters. The Rapporteur, Capt. Wesley, divided the presentation in two: the first part reporting on the MACHC CB activities and the second on the IHO CBSC 7<sup>th</sup> meeting.

In regard to MACHC CB activities, Capt. Wesley presented the meeting paper MACHC10-06 CB.

In regard to IHO CBSC 7<sup>th</sup> meeting, Capt. Wesley presented the topics related to the Commission and highlighted there are no MACHC proposals for the 8<sup>th</sup> CBSC meeting.

The IHB representative recommended, to avoid any lost, the MACHC CB Plan be part of the X<sup>th</sup> MACHC meeting minutes and asked what proposals may be made for the next CBSC meeting.

UK mentioned that wealthy countries have been supported, so perhaps we could now think about the needs and report back on the next section.

The plenary approved the recommendations made by the Rapporteur, including the review of the CB Plan at the next MACHC meeting. UK offered to be MACHC CB Coordinator and nominated Mr. Jeffrey Bryant, the UKHO's International Capacity Building Manager, to deal with this task.

On the next section, the CB Plan was amended and its final version is as Annex **A** to this minutes.

### **1<sup>st</sup> IRCC**

In the sequence, the Secretary reported on the IHO 1<sup>st</sup> Inter Regional Coordination Committee (IRCC), presenting the discussed Agenda of that meeting. There were no comments on this presentation.

### **1<sup>st</sup> HSSC**

Although there was no MACHC representation at the IHO 1<sup>st</sup> Hydrographic Services and Standards Committee (HSSC) meeting, the Secretary produced the paper MACHC.10-06-HSSC for MACHC participants and presented it.

Mr Phillip Parker (UK), asked now that S-100 was approved and S-101 was likely to follow in 2012, does it mean that in January 2012 all ENC's must be in S-100 format?

The UK representative, Captain Vaughan Nail, also HSSC Chair, standard responded:

– Current standard, S-57, is very useful but a need for another standard is required once it is directly in conjunction with ECDIS performance.

– S-100 is not so much a standard as a toolbox to allow you to build standards. S-101 will be built from S-100 components.

– Two years is a reasonable time to establish a new standard but there will be a large overlap period where ECDIS will need to be compliant with both.

– Stakeholders need to have confidence.

– Small housekeeping tasks could be done by HSSC whereas large issues would be approved by member states. HSSC has endorsed S-100 and it is now with member states for approval.

The Updating of produced ENC's is a task which has not necessarily been fully appreciated. S-65 (Electronic Navigational Charts "Production Guidance") will be used but is not complete. HSSC intend to improve data in S-65 to make it more effective.

### **WWNWS**

In this sequence, Mr. Peter Doherty (NGA – US), also IHO WWNWS Chair, presented the Sub-Committee work.

The Netherlands commented that providing Notices to Mariners is one critical subject and supports the WWNWS initiatives.

France mentioned procedures taught in English but courses are given in French. Trainers were trained and the information saved. Course details are available in French and he thanked WWNWS for support.

Mr. Doherty mentioned he has copies of a CD containing the system and training course available to all who wished.

UK commented that Spanish translation would be great. Mr. Doherty responded that the support for translation was provided under funding of SHOM. No financial support is received. Translation is currently too costly and dual training slows down the course too much. In regard this subject the Commission stated IHB it should be contacted in order to provide a dual language English / Spanish version of the MSI course to be promoted in 2011.

IHB mentioned that the achievement of WWNWS was valuable. A second round of training would be beneficial and should receive support of CBSC. Regarding translation to other languages of course material some collaboration should be made. He also thanked SHOM (France) for training efforts and said some member states have been willing to contribute and for this training has been achieved. A second wave of training is now needed, support is available but no requests are currently being made. Finalizing, he advised all present to be aware of the opportunities and take them.

Barbados mentioned that a post-training action is needed to stimulate and maintain the momentum.

Mr. Doherty responded that he will contact all members and asked for those who have any need to e-mail him, once it is safe, quick, and the best viable option.

### **ENC Committee – Task Group 1**

Mrs. Kathryn Ries reported the summary of the meeting held on Monday at the preliminary discussions. The recommendations to the Commission were:

– To proceed with phase 2 of training:

- Travel arrangements must be communicated to IHO Bureau for Phase 2 training
- GoH country representatives participating in NOAA February 2010 Hydro training (Belize / Guatemala / Honduras)

- 2010 In-country trainers (NOAA/Navy hydrographers)
- Honduras: 11-25 April 2010
- Guatemala: 25 April – 9 May 2010
- Belize: 28 February – 14 March 2010
- GoH countries identify one (1) English-speaking participant for NOAA February 2010 Hydro training for an introductory hydrography course (not for experienced or prior-trained personnel)
- NOAA / GoH Project send letter to GoH countries, inviting them to NOAA February 2010 for Hydro training. Announcement of intent for in-country Phase 2 training.
- NOAA / Navy explore possibility of focused tide station installation and water level analysis training and/or support.
- GoH countries ensure preparations made for in-country training: Prior to NOAA/Navy trainer arrival (Vessel & personnel; Equipment installation).
- GoH countries and other MACHC partners to document hydrographic activity in-kind contributions using format provided by GoH Project Director.
- GoH countries produce progress report and results of Phase 1 Training for MACHC Chair to submit to IHO CBSC.
- GoH countries and ECC WG1 Chair generate & submit request through MACHC Chair for 2011 hydrographic training & support from IHO CBSC.

St. Kitts & Nevis asked if there any plans to advance training to East Caribbean States. Mrs. Ries responded no, but this (Gulf of Honduras Project) can be used as a model that can be replicated.

El Salvador asked if it would be possible to extend GoH Project activities to the Gulf of Fonseca. Mrs Ries replied there is no possible conclusive response, Gulf of Fonseca project has not started as such, only some components for some elements but nothing really conclusive.

IHB commented there is no record of such project (Gulf of Fonseca), whether something has taken place. The key is addressing the region as a whole.

The representative of the Pan American Institute of geography and History (PAIGH), Mr. Paul Cooper, mentioned that a Gulf of Fonseca Plan was proposed to the Inter American Bank about six years ago but since then no progress..

Mrs. Ries stated that millions of dollars are spent on projects which include the Caribbean region. It must be worth looking at existing projects.

Following up this comment, France suggested that MACHC CB Coordinator should work in close liaison with adjacent Regional Hydrographic Commissions, such as the Eastern Atlantic Hydrographic Commission (EAHC), to identify GEF projects that might have some leverage in hydrography. This proposal was unanimously accepted.

Honduras proposed to continue the effort on capacity building. “We don’t want training to be lost. We want action to be taken by this Committee”.

UK thanked Honduras for the comment and reiterates the point previously mentioned that, if no formal requests for training are made, no progress will be made for another year. The IHB have their own thoughts but specific requirements from regional members is the key.

Grenada asked if a similar project – basic training – may be conducted by IHO for the small states in the area.

The IHB representative said that MACHC has produced a 2011 – 2012 CB Plan which includes all requirements, so he didn’t understand the reason for this discussion. Wasn’t the Plan approved?

At this point the Chair said, yes, the Plan was approved, but we are open to new submissions. After some comments from Jamaica, Grenada, and Barbados, the CB Plan (see Annex C) was reviewed and requirements from the plenary registered.

Finally, besides the approval of the recommendations of the ECC TG1, the Commission approved:

- The Commission takes note on Honduras’s comments of the importance to continue the effort of providing training to the countries involved on the Gulf of Honduras project (Belize, Guatemala and Honduras) and requests the CB coordinator to take appropriate action accordingly within the guidelines of the approved CB Plan;

- The CB Coordinator will work with interested countries to develop CB activities and related training for the Gulf of Fonseca; and

- CB coordinator will review Global Environmental Facility projects (VIA THE GEF WEBSITE) to assess if there are other projects in the region that could be leveraged for CB support, as was done for the Gulf of Honduras project.

## ENC Committee – Task Group 2

Mrs. Kathryn Ries reported the summary of the meeting hold on Tuesday morning at the preliminary discussions. The recommendations to the Commission were:

- To institute a formalized communication process to monitor progress, including quarterly reports and possibly one face-to-face meeting in conjunction with the IRCC CBSC meetings, JUNE 2010, USA;
- To achieve adequate regional ENC coverage by Dec 2010;
- To utilize the medium scale INT Scheme as baseline for adequate medium scale ENC coverage (usage bands 2/3);
- To identify production status/gaps;
- To consider producing medium scale ENCs before medium scale INT charts; and
- To coordinate reports and activities as appropriate with the ICC.

UK representatives supported the work and suggested a regular liaison with RENCs, inviting representatives to the Committees meetings. The IC-ENC has being working bilaterally in the region but a multi lateral way of working would be preferable.

The Netherlands supports UK proposal suggesting RENC facilities will provide additional support of a centre of expertise.

France highlighted the importance to have an ENC scheme, in all usage band, before increasing the production. This will avoid futures problems. Also, mentioned that seamless and adequate coverage is a Commission objective , and not just each country's job responsibility.

Venezuela stated that the cells produced by France has some agreement to be discussed. In regard the cell FR250020 (correspondent to INT Chart 4022 covered area) Cmdr. Parra stated:

*“Considering,*

- 1. that the principle of cooperation and synergy involve that the total is more than the sum of parts;*
- 2. that the supreme and end goal which is pursued is the guarantee of the safety of navigation, the human life at sea, and the environment preservation;*
- 3. that is sure Venezuela has the major aquatic space in chart 4022, but also is sure that exist various countries inside this ENC which are co-responsible in the data provision and final generation of the chart, each time the demand of new and better data will be required in the new future standards;*
- 4. that Venezuela is the producer of cell 4022 according to publication M-11;*
- 5. that France already produced and published cell 4022 and also that Venezuela already has produced it since 2006;*
- 6. that is constant worry and praised interest of IHO, MACHC, and all Member States, to strengthen the capacity building activities, which has limited recourses, mainly those countries in development process,*

*Venezuela proposes the following:*

*Venezuela agrees that France continues with the compilation and publication of cell ENC 4022, always and when the following premises are accomplished:*

- 1. that be done a real co-production with Venezuela and all countries area which are involved and as capacity be acquired;*
- 2. the cell ENC 4022 be available to all Hydrographic Services within this region to be managed by the rest of the public organs related with the subject (such as to improve fishing activities, environmental monitoring, safety, search and rescue, etc.);*
- 3. that the generated royalties be employed to complement those funds available to the MACHC CBC and be employed to increase the capacity of the countries inside 4022;*
- 4. that the country prefix of cell ENC 4022 be changed to represent all countries inside 4022, by which is recommended “WC” (West Caribbean” or “OC” (Oriental Caribbean).”*

France responded to Venezuela, supporting the statement, and the value of its principles in general, but recommended that details should be considered, once some aspects are related to IHO CBSC (and also IRCC), responsibility and liability, licensing issues, which depends on other factors and are more complex than the Hydrographic Service desires. Then, France provided the following detailed comments:

- the ENC equivalent to INT 4022 is obviously a compilation chart, and for this very reason, SHOM makes the best use of all available data and all data sources are depicted ; that is the reason why France had submitted a draft agreement to Venezuela in 2007, in accordance with IHO TR A3.4 for data exchange and co-production (no response has been received so far); the dialogue will therefore continue with Venezuela to progress the development of this agreement with the objective to improve safety at sea ;

- it was recalled that these arrangements give the possibility to exchange data and products between the parties; therefore there is no obstacle to provide the ENC equivalent to INT 4022 to Coastal States on request; Venezuela is also kindly invited to distribute a copy of the INT 4022 paper chart to chart producers;
- the idea to create a capacity building fund based on the revenues of sales seems to be a noble idea which should be considered by the CBSC provided MACHC CBC can investigate its feasibility;
- finally, the proposal made by Venezuela for this Commission to adopt "WC" not only for ENC equivalent to INT 4022 but for other ENCs as well, needs to be considered by the MACHC ECC before any implementation as there are some important questions to be addressed (liability, co-production, quality assurance, etc.).

Finally, besides the approval of the recommendations of the ECC TG2, the Commission approved:

- To address the Chair to invite representatives from the Regional Centre of ENCs to attend MACHC future meetings; and
- To consider the premises proposed by Venezuela, addressing the Secretary to present a draft resolution text at the Agenda item 11, List of Resolutions and Actions.

## 7. MACHC Member States Proposals

There were presented the following proposals to this meeting:

**France:** to amend Articles 5 and 6 of the MACHC Statutes, which were initially done at the discussion on Agenda Item 3. After comments made by the representatives of Barbados, US, Netherlands, and UK, the plenary approved a group formed by Barbados, Jamaica, US, and Venezuela which would present to the next Section a draft text for Article 5b, what was done, and being approved. The text proposed by France to Article 6a was accepted without modifications. The final approved amended texts were:

a) Article 5, b):

"The Chair and Vice Chair of the Commission shall be from a Full Member State of the Commission, elected on a rotational basis. Under normal circumstances, the term for the Chair and Vice Chair will be two years. *If the period between Conferences exceeds two years, the term will be extended until the end of the next Conference.*"

b) Article 6, a):

~~The Chair elect of the Commission shall make arrangements for hosting the next Conference in a country in the Region.~~

*"At the end of each conference the Full Members desirous of hosting the following conference shall put forward their candidatures. Proposals for holding the conference in a country of an Associate Member may also be considered. Where no other compelling circumstances exist, priority shall be given to a Full Member state which has not yet hosted a conference, or to the one which did so the longest time ago."*

**El Salvador:** request a Technical Visit in order to take the opportunity of the good moment they are having in regard hydrography and motivate high level authorities to increase investment. This subject were considered under Agenda Item 6 and included in the CB Plan appropriately.

**Jamaica:** proposed that capacity building do not restrict actions to training but also promote technical capacity. This subject were considered under Agenda Item 6 and included in the CB Plan appropriately.

## 8. MACHC Relationships with others organizations

From the expected Organizations to be present (ACS, COCATRAM, FIG, GoH Project, IBCCA and PAIGH), only PAIGH representative was present.

Mr. Paul Cooper presented the PAIGH structure, the work of the Cartographic Committee and future projects, mainly one related to European investment.

After a question from St. Kitts & Nevis, as there were no more questions or comments, he finalized the presentation and thanked for the opportunity.

## 9. Date and Venue of the next meeting

The Secretary reported that at the last meeting, Suriname proposed hosting the 11<sup>th</sup> meeting.

Suriname representative said it was true but he couldn't confirm yet this possibility.

France suggested having the 11<sup>th</sup> meeting in 2011, which was supported by The Netherlands. UK also supported this proposal and added that in between the Committees should have a face to face meeting.

US asked if the reason for this proposal was a financial reason. France responded yes but, also there is important that the technical committees have time to work and present the results for the Commission.

Venezuela stated that due to the maritime traffic in the region, the Commission meeting should be annual.

IHB representative stated that MACHC is one of the Regional Hydrographic Commissions which deserves most attention. Progress is being made so he suggests maintaining annual meetings.

The Chair asked the plenary if France proposal was acceptable. US, St. Kitts & Nevis and, Barbados expressed that, due to the commitments until 2012, annual meetings should be the more acceptable, which was the consensus.

Then the Chair asked Suriname if it would be possible to confirm in a nearest date to host the 11<sup>th</sup> meeting in Suriname, for it was responded yes.

The Secretary suggested an alternative venue in the case Suriname cannot host the next meeting, to which Venezuela offered to consider the possibility.

The final resolution was:

"Date and venue of the next meeting: Suriname, in late October. Suriname must confirm the possibility no later 15 January 2010. If not possible, Venezuela offered to serve as an alternative venue. In this case, VE must confirm the possibility no later 15 March 2010. In case both countries cannot host the meeting in 2010, the Chair will postpone the meeting to 2011."

## 10. Any Other Business

As any other business, there was considered El Salvador submission to become a MACHC Associated Member, which was unanimously accepted and all congratulated and applauded the new member;

## 11. Approval of the List of Resolutions and Actions

The Secretary reviewed each Resolution and/or Action. Despite some minor writing amendments, the main items modified were those related to the agreement between Venezuela and France and Venezuela and The Netherlands. After some discussions, the final wording of the resolutions stated:

- FR/VE to continue discussions on bilateral agreement for data exchange in accordance with TR A3.4 (co-production, distribution of repromats, etc.).
- NL/VE to pursue discussions on bilateral agreement for data exchange in accordance with TR A3.4 (co-production, distribution of repromats, etc.)
- MACHC CB-chair to establish Correspondence Group (CG) to consider the Venezuela proposal to increase the financial means of the CB by the sales/royalties of the INT paper charts and the corresponding ENC's. Report to the next plenary Conference for decision making and correspond with the chair of IHO CBCS and IRCC as solutions might be of interest to other Regional Hydrographic Commissions. (members of CG: BR, NL, UK and VE).
- ENC equivalent to INT 4022 produced by FR (in accordance with IHB letter S3/4230/B dated 13 Jan 2006) should be distributed to MACHC MS.
- MACHC ECC to consider the proposal by Venezuela to use the label "WC" (West Caribbean) for ENC within MACHC (as it is in EAHC for Malacca Strait) rather than national country codes.
- INT 4022 paper chart produced by Venezuela (in accordance with IHB letter S3/4230/B dated 13 Jan 2006) to be distributed to MACHC MS.

Also, the following scratched text was deleted at the above approved Resolution:

- To endorse The Netherlands consent to amend IHO publication S-11 on the production country of INT Chart 4108 to Venezuela as the producer. ~~However, the Commission states this is not sufficient to guarantee the quality of the process. There must have a exchange of data and information and both pass through verification. It is of great importance that both data, VE's and NE's, be accepted by the two Hydrographic Services and incorporate accordingly into their own products. It is also important that the draft products of both, paper charts and ENC, be delivered to one each other for verification of the correspondent area. These kind of proposed procedures are common practice in the IHO community and should become part of the bilateral technical cooperation. Therefore, strongly asks to NE and VE to act accordingly.~~

The final List of Resolutions and Actions is contained in Annex **B**.

## 12. Closure

As last Agenda Item, the Chair remarked that, considering that they have addressed all the items on the Agenda and there were no other issues to be discussed, he wanted to thank all the delegates from the countries which comprised the Meso American Caribbean Sea Hydrographic Commission for their committed participation, for their enthusiastic efforts, their opinions and recommendations which were very valuable to come to terms with important issues. He finalized his farewell speech wishing the participants all the best and a good trip back to their home countries.

  
WESLEY WANDERMUREM CAVALHEIRO  
Captain (Brazil) – MACHC Secretary

Annexes:

- A) MACHC CB Plan;
- B) List of Resolutions and Actions.

## Annex A: Capacity Building Plan



INTERNATIONAL HYDROGRAPHIC ORGANIZATION  
MESO AMERICAN & CARIBBEAN SEA HYDROGRAPHIC COMMISSION



### CAPACITY BUILDING PLAN Programme document for the period 2010-2012

#### 1. INTRODUCTION

##### 1.1. Rationale

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. In addition, the Caribbean endures a hurricane season from June to November; the storms can and do leave a trail of devastation on the islands and their coasts. For these reasons, it is crucial that SOLAS Contracting Governments undertake hydrographic surveys as and when required, that they arrange for the compilation and publication of hydrographic data, the dissemination and keeping up to date of all nautical information necessary for safe navigation.

The 4<sup>th</sup> Extraordinary International Hydrographic Conference approved as the International Hydrographic Organization (IHO) Strategic Directions:

#### **Facilitate global coverage and use of official hydrographic data, products and services**

The IHO will strive to achieve global coverage and availability of high quality official hydrographic data, information, products and services necessary for safety of navigation at sea and for non-navigational uses, e.g. by means of the developing spatial data infrastructure, through:

- coordinating effectively Member State activities for the provision of coherent, standardized and well coordinated hydrographic services, in accordance with regulation 9, of Chapter V of the SOLAS Convention;
- enhancing and supporting cooperation on hydrographic activities among States on a regional basis under the aegis of the Regional Hydrographic Commissions;
- expanding membership of the IHO;
- encouraging and supporting the establishment of new Hydrographic Offices;
- encouraging and supporting the development and promotion of integrated navigation systems and geospatial data infrastructures;
- promoting the use of new technologies and the opportunities offered by globalization and international cooperation.

#### **Raise global awareness of the importance of hydrography**

The IHO will champion the awareness at national, regional and global levels of the importance and benefits of hydrography and the provision of hydrographic services for all marine activities, through:

- ensuring that the role and responsibilities of national Hydrographic Offices are clearly understood at all levels in the marine and public communities;
- supporting and promoting the benefits of national Hydrographic Offices and hydrographic programmes;
- bringing the importance of hydrography on issues affecting safety of navigation at sea, protection of the marine environment, maritime security and economic development to the attention of International Organizations, funding agencies, national governments, maritime stakeholders and others;
- preparing and promoting education and outreach programmes which

involve fostering a well informed citizenry and creation of a public awareness of the importance of hydrography and its role in daily life.

The Strategic Paper of the IHO Capacity Building Sub-Committee classifies Hydrographic Services into three types:

- those which are in Phase 1: Collection and circulation of nautical information, necessary to maintain existing charts and publications up to date;
- those which are in Phase 2: Creation of a surveying capability to conduct coastal and offshore projects; and
- those which are in Phase 3: Produce charts and publications independently.

Nowadays, the rapidly evolving technology has replaced old navigation paradigms and demands continuous investments in education and training so that the Hydrographic Services can continue to provide high quality products and services which satisfy new demands of the maritime community.

MACHC is aware of its Member States' efforts to provide quality service to the international maritime community in order to contribute to the safety and security of navigation and human life at sea as well as the preservation of the environment in its Region and, as part of the IHO community, to contribute with the achievement of the objectives and directions of the Organization.

#### 1.2. Long term aims and objectives

The aims of the Plan are:

- a) to train officers, at various levels, at least to ensure a much needed capability on hydrography and nautical cartography, particularly after natural disaster or other incidents which could affect water depths in harbors and approaches; and
- b) to comply with the IHO resolutions and guidelines regarding hydrographic and nautical cartography activities.

The long term objectives of this Plan are:

- a) to instruct officers in the region on the methods of carrying out hydrographic surveys, on the principles used to scheme nautical charts to improve safety of navigation on contemporary technologies;
- b) to promote the establishment of Hydrographic Services (HS) and the evolution of CB Phases of the established ones.

#### 1.3. Priorities

Despite the gamma of need existed in the Region, for the period of 2010 to 2012, priorities should be set in the sequence of the following list, the first of which are the highest:

- activities which may promote the establishment of HS;
- activities which may improve the capacity of existing HS in Phase 1;
- activities which may concur with the IHO commitment with ENC "adequate coverage";
- activities which may improve the capacity of existing HS in Phase 2; and
- activities which may improve the capacity of existing HS in Phase 3.

The current hydrographic capacity status of Countries / Territories of the Region is in Annex **A**.

#### 1.4. Methodology and Procedures

This Plan must be reviewed each year, and adjustments made as necessary.

Each year the Commission will decide responsibilities for the programmed events of the subsequent year.

The nominated events coordinators will send to the Chair, no later than January 31<sup>st</sup> of each year the detailed event project. The projects must be written in the standards established by the IHO CBSC (see Annex **B**).

Projects supported by IHO CB Fund must follow the IHO CBSC procedures published at the IHO website.

The Chair will check the proposed projects and, if requesting IHO CB Fund support, will send them to the IHO CBSC Chair and Secretary no later than MARCH 15<sup>th</sup>, otherwise, will take the appropriate action.

## 2. Activities

	Activity	Expected output	Objectives
2.1.	<u>Technical visits Type 1</u> Visit to government high authorities	To mobilise high governmental authorities to give importance to hydrographic activities.	To <b>establish</b> a Hydrographic Service in those countries where there was no responsible organ for hydrography activities.
2.2.	<u>Technical visits Type 2</u> Visit to maritime / port authorities	To mobilize 2 <sup>nd</sup> and 3 <sup>rd</sup> staff governmental authorities to develop hydrographic activities.	To <b>establish</b> a Phase 1 Hydrographic Service.
2.3.	<u>MSI Type 1</u> Training on establishment of MSI structure and basic MSI procedures.	To establish a core group of trained persons to deal with MSI.	To <b>establish</b> capacity in MSI so that Maritime Authorities can provide high quality services to comply with the <b>basic</b> requirements for safety of navigation in the area.
2.4.	<u>MSI Type 2</u> Training on update MSI procedures and organizational management.	To improve the skills of a group of professionals in MSI	To <b>improve</b> management capacity on MSI and to promote mutual assistance in the region.
2.5.	<u>Hydrography Type 1</u> Training on the establishment of a hydrography sector and basic hydrographic theory (single beam).	To train a group of professionals in the basics of hydrography theory and management for hiring hydrographic services.	To <b>establish</b> capacity in the mentioned fields so that Maritime authorities can provide the necessary quality products and services to comply with the <b>basic</b> requirements for safety of navigation in the area.
2.6.	<u>Hydrography Type 2</u> Training on basic hydrographic practice (single beam) and data processing.	To train a group of professionals in the basics of hydrography to be capable to produce basic hydrographic services.	To <b>establish</b> capacity in the mentioned fields so that Maritime authorities can provide <b>high quality</b> products and services to comply with the requirements for safety of

	Activity	Expected output	Objectives
			navigation in the area.
2.7.	<u>Hydrography Type 3</u> Training on advanced hydrographic practice (multibeam, acquisition and processing) and management skills.	To train a group of professionals in advanced hydrography to be capable to produce advanced hydrographic services (multibeam).	To <b>improve</b> the capacity in the mentioned fields so that Maritime authorities can provide <b>high quality</b> products and services for safety of navigation in the area.
2.8.	<u>Cartography Type 1</u> Training on basic nautical cartography (paper chart production).	To train a group of professionals in basic of nautical cartography to be capable to produce basic cartographic documents.	To provide the elements necessary to the <b>progress</b> in the provision of standardized products and services to comply with the request of safety of navigation and international conventions signed.
2.9.	<u>Cartography Type 2</u> Training on advanced nautical cartography (digital charts).	To train a group of professionals in basic techniques of electronic navigational charting.	To provide the elements necessary to the <b>progress</b> in the provision of standardized products and services to comply with the request of safety of navigation and international conventions signed.
2.10.	<u>Cartography Type 3</u> Training on nautical chart production using the Hydrographic Production Database (HPD)	To train a group of professionals in advanced techniques of electronic navigational charting.	To provide the elements necessary to the <b>progress</b> in the provision of standardized products and services to comply, in a high level, with the request of safety of navigation and international conventions signed.

### 3. Capacity Building Program

The program of capacity building activities for the period 2011 – 2012 is detailed in Annex C.

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**Annex A to CB Plan**

**MACHC Counties / Territories Capacity Building Phase Stage**

Reference: [http://www.iho-ohi.net/mtg\\_docs/CB/CBA\\_TechnicalVisits.htm](http://www.iho-ohi.net/mtg_docs/CB/CBA_TechnicalVisits.htm)

	Country / Territory	CB Phase*	Last TV	Obs.
1	Antigua & Barbuda	0	2006	Phase 3 provided by UKHO
2	Bahamas	0	2006	Phase 3 provided by UKHO
3	Barbados	1	2006	Phase 3 provided by UKHO
4	Belize	0	2006	Phase 1 status unknown Phase 3 provided by UKHO
5	Brazil	3	2008	
6	Colombia	3		
7	Costa Rica	?		
8	Cuba	3		
9	Dominica	?	2006	Phase 3 provided by UKHO
10	Dominican Republic	?		Phase 2 provided by US/UKHO Phase 3 provided by US/UKHO
11	El Salvador	?	2005	Phase 2 provided by US/UKHO Phase 3 provided by US/UKHO
12	France - French Guyana	3		All Phases provided by SHOM
13	France - Guadelupe & Martinica	3		All Phases provided by SHOM
14	Grenada	0	2006	Phase 3 provided by US/UKHO
15	Guatemala	1	2006	Phase 1 status unknown Phase 2 provided by US Phase 3 provided by UKHO
16	Guyana	0		Phase 3 provided by UKHO
17	Haiti	0	2009	Phase 2 provided by US Phase 3 provided by UKHO
18	Honduras	1	2006	Phase 1 status unknown Phase 3 provided by UKHO
19	Jamaica	1	2006	Phase 3 provided by UKHO
20	Mexico	3		
21	Netherlands - Antilles & Aruba (Leeward)			All Phases provided by NHO
22	Netherlands - Antilles (Windward)			All Phases provided by NHO
23	Nicaragua	?	2005	Phase 3 provided by US/UKHO
24	Panama	?	2005	Phase 2 provided by US Phase 3 provided by UKHO
25	St. Kitts & Nevis	1	2006	Phase 3 provided by UKHO
26	St. Lucia	1	2006	Phase 3 provided by UKHO
27	St. Vincent & Grenadines	0	2006	Phase 3 provided by UKHO
28	Suriname	2	2007	Phase 3 provided by NHO
29	Trinidad & Tobago	1	2006	Phase 3 provided by UKHO
30	UK - Anguilla	3	2006	All Phases provided by UKHO
31	UK - British Virgin	?	2006	Phase 3 provided by UKHO

\* Phase 0 indicates no capacity on hydrography

32	UK - Cayman	2	2006	Phase 1 status unknown Phase 3 provided by UKHO
33	UK - Monserrat	3	2006	All Phases provided by UKHO
34	UK - Turks & Caicos	?	2006	Phase 3 provided by UKHO
35	USA - Navassa	?		Phases 2 and 3 provided by US
36	USA - Puerto Rico & US Virgin	?		Phases 2 and 3 provided by US
37	United States of America	3		
38	Venezuela	3	-	

**Annex B to CB Plan**



**PROJECT SUBMISSION MODEL**

**IDENTIFICATION**

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<b>Project Name:</b>	
<b>Submitting RHC/Country:</b>	
<b>Date:</b>	
<b>Institution executing the project:</b>	
<b>Name of responsible:</b>	
<b>Address:</b>	
<b>Telephone:</b>	
<b>Fax:</b>	
<b>e-mail:</b>	

**GENERAL SPECIFICATIONS**

(Please provide detailed information in Annex of no more than three pages)

<b>Background information</b>	
<i>Justification of the project</i>	

<i>Countries involved</i>	
<b>Exposition of the problem</b>	
<b>General objective</b>	
<b>Specific objectives</b>	
<b>Outputs/Products</b>	
<b>Other deliverables</b>	
<b>Achievements and awaited benefits</b>	

<b>Schedule of activities</b>	
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**RESOURCES**

<b>Contribution by countries</b>	
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<b>involved</b>	
<b>Contribution by other parties</b>	
<b>Contribution expected from CBCFund</b>	
<b>Total Cost (euros)</b>	
<b>Breakdown of costs</b>	

<b>From CBC Fund (item and amount)</b>	
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**PROJECT SUMMARY**

<b>Sponsor RHC</b>	<b>Year of Execution</b>	<b>Country/ Countries involved</b>	<b>Priority/ Status</b>	<b>Project Name</b>	<b>Project Objective</b>	<b>Benefits</b>	<b>Assistance required</b>	<b>Cost</b>	<b>Allocation and Priority (to be filled by CBC)</b>	<b>Contact Person</b>

**Name and Signature of the RHC Chairman .....**

## Annex C to CB Plan

## Capacity Building Program for the period 2011 – 2012

2011

Activity	Beneficiaries Countries / Territories	Responsible	Period	Obs.
Technical Visit Type 1	Costa Rica El Salvador Panama	TBD	TBD	
Technical Visit Type 2	Antigua & Barbuda Barbados Grenada St. Kitts & Nevis St. Lucia Trinidad & Tobago	TBD	TBD	
MSI Type 1	Antigua & Barbuda British Virgin Islands St Kitts & Nevis Grenada Honduras			
MSI Type 2	NAVAREA Coordinators, MSI providers, and British Virgin Islands, Colombia, Jamaica, Suriname	TBD	TBD	Project already submitted by the SWAtHC including participants of MACHC, SWAtHC, and SEPHC
Hydrography Type 1	Antigua Barbados British Virgin Islands Grenada St Kitts & Nevis			
Hydrography Type 2	Antigua Barbados British Virgin Islands Belize El Salvador Guatemala Grenada Honduras St Kitts & Nevis	TBD	TBD	
Hydrography Type 3	HS in Phase 3, Barbados British Virgin Islands Jamaica Suriname Venezuela	TBD	TBD	Project on “hydrographic database” already submitted by the SWAtHC including participants of MACHC, SWAtHC, and SEPHC

Cartography Type 1	Barbados British Virgin Islands Cuba El Salvador Honduras Mexico Suriname St Kitts & Nevis	TBD	TBD	
Cartography Type 2	Barbados British Virgin Islands Cuba El Salvador Jamaica Honduras Mexico Venezuela St Kitts & Nevis Suriname	TBD	TBD	
Cartography Type 3	Colombia Venezuela			

**2012**

Activity	Beneficiaries Countries / Territories	Responsible	Period	Obs.
Technical Visit Type 1	Guyana Antigua & Barbuda Bahamas	TBD	TBD	
Technical Visit Type 2	Dominica Dominican Republic Grenada	TBD	TBD	
MSI Type 1	All HS in Phase 1	TBD	TBD	
Hydrography Type 1	Haiti Jamaica Panama	TBD	TBD	
Hydrography Type 2	3 HS in Phase 2	TBD	TBD	
Cartography Type 1	3 HS in Phase 2			
Cartography Type 2	3 HS in Phase 3	TBD	TBD	
Cartography Type 3	All HS in phase 3	TBD	TBD	

**Annex B: List of Resolutions and Actions**



**INTERNATIONAL HYDROGRAPHIC ORGANIZATION  
MESO AMERICAN & CARIBBEAN SEA HYDROGRAPHIC COMMISSION**



**X<sup>th</sup> Meso American & Caribbean Sea Hydrographic Commission Meeting**

**3-6 November 2009**

**Bridgetown, Barbados**

**X<sup>th</sup> MACHC Resolutions & Actions**

(as agreed at the X<sup>th</sup> Commission Meeting, Bridgetown, Nov 5<sup>th</sup> 2009)

Agenda	Action	Agreements	Responsible Party	Due Date	Status
		<b>General:</b>			
3 (MACHC 8-12)	10-1	Mexico will report on the results of the Mexican pilot project to include the private sector in the production of ENC's	Chair TG2-ECC	30 Nov 2008	Outstanding/Pending  To date, no information has been forwarded from Mexico.
3 (MACHC 9-6)	10-2	MACHC Members should provide update information to IHO C-55 publication and update it at least once a year, reporting this action in the National Report	MACHC Members	on going	In Process
5	10-3	The Commission accepts IHB proposal to post the main documents of its meeting on the IHB website and keep the discussion documents on the website managed by NOAA	Secretary / IHB	06 Nov 2009	
7	10-4	The Commission approves the following amendment of the Statutes proposed by France:  c) Article 5, b):  "The Chair and Vice Chair of the Commission shall be from a Full Member State of the Commission, elected on a rotational basis. Under normal circumstances, the term for the Chair and Vice Chair will be two years. <i>If the period between Conferences exceeds two years, the term will be extended until the end of the next Conference.</i> "  d) Article 6, a):	MACHC Members / Secretary	30 Nov 2009	

Agenda	Action	Agreements	Responsible Party	Due Date	Status
		<p><del>The Chair-elect of the Commission shall make arrangements for hosting the next Conference in a country in the Region.</del></p> <p>“At the end of each conference the Full Members desirous of hosting the following conference shall put forward their candidatures. Proposals for holding the conference in a country of an Associate Member may also be considered. Where no other compelling circumstances exist, priority shall be given to a Full Member state which has not yet hosted a conference, or to the one which did so the longest time ago.”</p>			
10	10-5	Approve El Salvador's application for MACHC membership and welcome the newest Associate Member.	MACHC Members / Chair	06 Nov 2009	
6	10-6	FR/VE to pursue discussions on bilateral agreement for data exchange in accordance with TR A3.4 (co-production, distribution of reprints, etc.)*  (* This Resolution is related to Resolutions nb 10-19, 10-38, 10-39, and 10-51	France and Venezuela	By XI <sup>th</sup> MACHC Meeting	
6	10-7	NL/VE to pursue discussions on bilateral agreement for data exchange in accordance with TR A3.4 (co-production, distribution of reprints, etc.)	The Netherlands and Venezuela	By XI <sup>th</sup> MACHC Meeting	
9	10-8	Date and venue of the next meeting: Suriname, in late October. Suriname must confirm the possibility no later 15 January 2010.  If not possible, Venezuela offered to serve as an alternative venue. In this case, VE must confirm the possibility no later 15 March 2010.  In case both countries can not host the meeting in 2010, the Chair will postpone the meeting to 2011.	Suriname, Venezuela, MACHC Chair	30 Mar 2010	
		<b>Capacity Building:</b>			
6	10-9	The Commission approves the proposed Capacity Building plan as it is published in the minutes of this meeting	MACHC Members / Secretary	06 Nov 2009	
6	10-10	The Commission agrees to have a specific person in charge of CB matters instead of having the Chair in charge of it and accepts UK offer to take the task.	MACHC Members / UK	06 Nov 2009	
6	10-11	The Commission takes note of Honduras comments on the importance of the continuity	CB Coordinator	15 Feb 2010	

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Agenda	Action	Agreements	Responsible Party	Due Date	Status
		on the effort of providing training to the three countries involved on the Gulf of Honduras project (Belize, Guatemala and Honduras) and requests the CB coordinator to identify it as a priority activity in 2011 and beyond within the approved CB Plan.			
6	10-12	The Commission takes note of El Salvador proposal's to promote a basic hydrographic training course in El Salvador for the Caribbean islands and small countries, as well as a Technical Visit to high level authorities, and requests the CB coordinator to take the appropriate action accordingly with the guidelines of the approved CB Plan.	CB Coordinator IHB	15 Feb 2010	
6	10-13	The Commission takes note of Jamaica's comment on CB matters of the necessity to have, besides training, an effort on technical capacity – equipment and survey's platforms – and also the IHB suggestion on to promote events on means to attain support to improve the hydrographic capacity, and requests the CB coordinator to take the appropriate action accordingly with the guidelines of the approved CB Plan.	CB Coordinator	15 Feb 2010	
6	10-14	The Commission will address the IHB to provide a dual language English\Spanish version of the MSI course to be promoted in 2011.	Chair	15 Mar 2010	
6	10-15	The CB Coordinator will work with interested countries to develop CB activities and related training for the Gulf of Fonseca.	CB Coordinator	By XI <sup>th</sup> MACHC Meeting	
6	10-16	CB coordinator will review Global Environmental Facility projects (VIA THE GEF WEBSITE) to assess if there are other projects in the region that could be leveraged for CB support, as was done for the Gulf of Honduras Project.	CB Coordinator	By XI <sup>th</sup> MACHC Meeting	
6	10-17	The CB Coordinator should work in close liaison with the adjacent Regional Hydrographic Commissions, including the EAtHC.	CB Coordinator	On going	
6	10-18	The CB Plan should be reviewed at the next Commission meeting.	CB Coordinator	By XI <sup>th</sup> MACHC Meeting	
6	10-19	MACHC CB-chair to establish Correspondence Group (CG) to consider the Venezuela proposal to increase the financial means of the CB by the sales/royalties of the INT paper charts and the corresponding ENCs. Report to the next plenary Conference	MACHC Chair CG	30 Nov 2009	

Agenda	Action	Agreements	Responsible Party	Due Date	Status
		for decision making and correspond with the chair of IHO CBCS and IRCC as solutions might be of interest to other Regional Hydrographic Commissions. (members of CG: BR, NL, UK and VE)* (*) Resolution related with Res. 10-6.			
		<b>Electronic Chart Committee (ECC) / Task Group 1 (TG1):</b>			
6	10-20	Travel arrangements must be communicated to IHO Bureau for Phase 2 training. GoH country representatives participating in NOAA February 2010 Hydrotraining (Belize / Guatemala / Honduras) 2010 In-country trainers (NOAA/Navy hydrographers) Honduras: 11-25 April 2010 Guatemala: 25 April – 9 May 2010 Belize: 28 February – 14 March 2010	ECC Chair	30 Nov 2009	
6	10-21	GoH countries identify one (1) English-speaking participant for NOAA February 2010 Hydrotraining for an introductory hydrography course (not for experienced or prior-trained personnel)	Belize, Guatemala and Honduras	23 Nov 2009	
6	10-22	NOAA / GoH Project send letter to GoH countries, inviting to NOAA February 2010 Hydrotraining. Announcement of intent for in-country Phase 2 training	ECC Chair	18 Dec 2009	
6	10-23	NOAA / Navy explore possibility of focused tide station installation and water level analysis training and/or support.	ECC Chair	31 Jan 2010	
6	10-24	GoH countries ensure preparations made for in-country training: Prior to NOAA/Navy trainer arrival (Vessel & personnel; Equipment installation)	Belize, Guatemala and Honduras	Mar 2010	
6	10-25	GoH countries and other MACHC partners to document hydrographic activity in-kind contributions using format provided by GoH Project Director.	Belize, Guatemala and Honduras; ECC Chair	28 Feb 2010	
6	10-26	GoH countries produce progress report and results of Phase 1 Training for MACHC Chair to submit to IHO CBSC	Belize, Guatemala and Honduras;	31 Jan 2010	

Agenda	Action	Agreements	Responsible Party	Due Date	Status
			ECC Chair; CB Coordinator.		
6	10-27	GoH countries and ECC WG1 Chair generate & submit request through MACHC Chair for 2011 hydrographic training & support from IHO CBSC.	Belize, Guatemala and Honduras; ECC Chair	15 Mar 2010	
		<b>Electronic Chart Committee (ECC) / Task Group 2 (TG2):</b>			
		Regarding the Electronic Navigational Charts (ENCs): The 1:1 000 000 ENCs:			
3 (MACHC 9-12)	10-28	The UKHO will discuss with Cuba, Venezuela, Colombia and Mexico the 4011 ENC in order to re-define its boundaries based on existing ENC data in the same Usage Band.	UK, Cuba, Venezuela, and Colombia	By XI <sup>th</sup> MACHC Meeting	In Process
3 (MACHC 9-12)	10-29	The UKHO will discuss 4017 ENC with Cuba and US to consider if an existing ENC cell can be adopted instead, redefining its boundaries accordingly.	Cuba, UK, and US	By XI <sup>th</sup> MACHC Meeting	In Process.  Further coordination/dis cussion remains to achieve resolution
3 MACHC 9-12	10-30	Produce a regional ENC scheme, including addressing the overlap of cells between involved Member States, listing the existing cases and tasking their resolution; ECC should advise MS on ENC production, taking into account priority ports and approaches. Report progress to the next MACHC meeting.	TG2 EEC Chair, all MACHC MS	Dec 2010	In progress
6	10-31	Institute a formalized communication process to monitor progress, including quarterly reports and possibly one face-to-face meeting in conjunction with the IRCC CBC meetings, JUNE 2010, USA	TG2 EEC Chair  AND TG MEMBER STATES	On going	
6	10-32	Achieve adequate regional ENC coverage by Dec-2010	MACHC MS	Dec 2010	
6	10-33	Utilize the medium scale INT Scheme as baseline for adequate medium scale ENC coverage (usage bands 2/3).	MACHC MS ECC Chair	Dec 2010	
6	10-34	Identify production status/gaps	ECC Chair	Dec 2010	
6	10-35	Consider producing medium scale ENCs before medium scale INT charts.	MACHC MS ECC Chair	Dec 2010	
6	10-36	Invite RENCs representatives to the WG meetings	MACHC Chair	By XI <sup>th</sup> MACHC Meeting	

Agenda	Action	Agreements	Responsible Party	Due Date	Status
6	10-37	Coordinate reports and activities as appropriate with the ICC.	ECC Chair	On going	
6	10-38	ENC equivalent to INT 4022 produced by FR (in accordance with IHB letter S3/4230/B dated 13 Jan 2006) should be distributed to MACHC MS.*  (* ) Resolution related with Res. 10-6.	France	By XI <sup>th</sup> MACHC Meeting	
6	10-39	MACHC ECC to consider the proposal made by Venezuela to name ENC 4022 "WC" (for West Caribbean) for MACHC (as it is in EAHC for Malacca Strait) rather than national designations  (* ) Resolution related with Res. 10-6.	ECC Chair	By XI <sup>th</sup> MACHC Meeting	
		<b>International Chart Committee (ICC)</b>			
3 (MACHC 9-14)	10-40	UK and US will send the necessary data for Cuba in order to produce Charts nb 4154, 4158, 4166, 4170, and 4149.	UK & US	each 6 months	
3 (MACHC 9-14)	10-41	INT Chart Coordinator should confirm if the MACHC web site INT Chart data base is updated and should take action to update it in the case it is not.	INT Chart Comm. Chair	30 Oct 2008	
3 (MACHC 9-14)	10-42	The INT Chart Committee should produce an INT Chart Plan.	INT Chart Comm. Chair	30 Dec 2008	
3 (MACHC 9-14)	10-43	UK in consultation with Cuba and US will investigate possibility of alternative solution for interim coverage of charts 4017 and 4021.	INT Chart Comm. Chair, UK, US, & Cuba	30 Dec 2008	
6	10-44	The ICC will revise IHO publication S-11, Part B, on the corresponding data. Members States must send their updated data to the Secretary	MACHC Members / Secretary	15 NOV 2009	
6	10-45	The Commission endorses Colombia's proposal to Venezuela in regard to INT Chart 4023, in order to publish the chart unilaterally.	MACHC Members	06 NOV 2009	
6	10-46	The Commission endorses NL consent to amend IHO publication S-11 on the production country of INT chart 4108 to Venezuela as the producer.	INT Chart Comm. Chair	15 NOV 2009	
6	10-47	The Commission endorses IHB representative request to Member States to send copies of new editions of INT Charts to the IHB.	MACHC Members	On going	
6	10-48	The Commission recommends that MACHC the approve the HSSC suggestion regarding ToR and RoP for Regional Chart Coordinator and look forward on to have one coordinator for both, the INT Charts and the ENCs.	MACHC Members	By XI <sup>th</sup> MACHC Meeting	

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Agenda	Action	Agreements	Responsible Party	Due Date	Status
6	10-49	The Commission will address to IRCC the subject of the HSSC proposal on ToR and RoP for Regional Charts Coordinators, particularly in regard to have one coordinator for both, the INT Charts and the ENC's.	MACHC Chair	Jun 2010	
6	10-50	The Commission will communicate with Mexico regarding the above resolution and ask the intention of Mexico to continue as INT Chart Coordinator. In the case of a negative response, the Commission accepts Brazil's offer to take the task.	MACHC Chair	30 NOV 2009	
6	10-51	INT 4022 paper chart produced by Venezuela (in accordance with IHB letter S3/4230/B dated 13 Jan 2006) to be distributed to MACHC MS.*  (* ) Resolution related with Res. 10-6.	Venezuela	By XI <sup>th</sup> MACHC Meeting	