



**12th Meso American & Caribbean Sea Hydrographic Commission
Meeting
6-9 December 2011
St. Kitts
Agenda**

Draft Minutes of the Meeting

1. Opening

1.1 Opening Remarks by Hosts

The MACHC meeting was opened by Mr McClean Hobson, Director of Maritime Affairs, St Kitts and Nevis. He commented that St Kitts and Nevis has been a strong advocate for the development of Hydrography and as an Associate Member of the MACHC it was a privilege and honour to host the meeting and to welcome delegates to St Kitts.

He stated that there are many regional hydrographic challenges centered on Capacity Building, training and equipment needs. Mr Hobson also highlighted that Capacity Building and maintaining progress in the field of Hydrography contributes to the sustainability of the islands economic growth.

1.2 Opening Remarks by the Chairman

MACHC chairman, Rear Admiral Nick Lambert (UK) welcomed delegates to the meeting and went on to thank the St Kittians for their remarkable hospitality and the government of St Kitts and Nevis for hosting the 12th meeting of the MACHC. He commented that the meeting was one of the largest Regional Hydrographic Commission gatherings; 25 countries and over 70 delegates.

He outlined the importance of understanding the contribution of Hydrography to the economic infrastructure of Islands States; ensuring the safe navigation of shipping, the ever increasing size of ships and the widening of the Panama Canal. The Admiral also highlighted that one of the successes of the Commission was to bring representatives from Governments, Industry and Commercial sectors together for a common purpose.

1.3 Opening Remarks by Director IHB

Captain Alberto Costa-Neves, IHB, deputizing for Director Captain Hugo Gorziglia, explained the important role that RHCs perform at regional level and their influence with matters relating to SOLAS and the protection of the environment. He also commented on the requirement for Member States (MS) to approve the amendments to the convention on the IHO and applications by pending MS.

1.4 Address by Chief Guest

The Right Honorable Dr Denzil Douglas, Prime Minister of St Kitts and Nevis, welcomed delegates to St Kitts and hoped that the meeting would be beneficial, in the light of the current global environment and the significant economic challenges.

He commented on the importance of MS governments to be fully engaged with the Hydrographic community in order to help protect the lives of people at sea and to find ways and means for

nations to become more involved with the economic activities of international maritime trade for both small and large vessels.

1.5 Agenda and Timetable approval

The Chairman introduced the Draft Agenda (MACHC12-01a) and Timetable (MACHC12-01b) and Members adopted the documents.

1.6 List of Documents

The Chairman commented that delegates were expected to have downloaded the documents from the IHO Web site, as shown on the List of Documents (MACHC12-01c) and have brought them to the meeting.

1.7 Administrative Arrangements

The meeting was held at the Marriott Hotel, St Kitts. A brief outline was given on the administrative arrangements of the meeting. A list of participants of 12th MACHC meeting is placed at Annex A.

2. 11th MACHC Minutes approval

Member States confirmed that minutes of the 11th MACHC (MACHC12-02) were a true reflection of proceedings at that meeting.

3. 11th MACHC Actions List review

Agenda Item	Action	Agreements	Responsible Party	Due Date	Status
General:					
3 (MACHC 9-6)	11-1	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	Permanent	Superseded by 12 th MACHC Action 12.1.1
/3 (MACHC 10-3)	11-2	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	Permanent	Superseded by 12 th MACHC Action 12.1.2
3 MACHC 10-6)	11-3	FR/VE to pursue discussions on bilateral agreement for data exchange in accordance with TR A3.4 (co-production, distribution of REPROMATS, etc.)* (* This Resolution is related to Resolutions No. 10-19, 10-38, 10-39, and 10-51 of the Xth MACHC	France and Venezuela	By XIIth MACHC Meeting	Superseded by 12 th MACHC Action 12.1.4
3 (MACHC 10-7)	11-4	NL/VE to pursue discussions on bilateral agreement for data exchange in accordance with TR A3.4 (co-production, distribution of REPROMATS, etc.)	The Netherlands and Venezuela	By XIIth MACHC Meeting	Superseded by 12 th MACHC Action 12.1.5

Agenda Item	Action	Agreements	Responsible Party	Due Date	Status
5	11-5	MACHC Chair to support Dominica in the application to become an Associate Member. <i>Chair supported Dominica in their application to become a MACHC Associate Member and sought support from MS to carry motion forward.</i>	Dominica MACHC Chair	-	Completed <i>MS supported motion for Dominica to be a MACHC Associate Member.</i>
6	11-6	Regarding the experience in dealing with marine disasters (IHO M3 TR 1/2005), MACHC Chair to check can be implemented, and how, and report to IRCC-3.	MACHC Chair	30 Apr 2011	Completed and included as permanent agenda item at 12 th MACHC Action 12.1.8
6	11-7	MACHC Member States should include MSDI information on their respective National Reports.	Member States	By XIIth MACHC Meeting	Completed and related to 12th MACHC Action 12.1.6
6	11-8	Regarding the hydrographic survey status: - US to evaluate the requirements and potential existing tolls to manage the required information (limits, dates, CATZOC, etc.). Member States to have the required information ready to be available when required.	US Member States	By XIIth MACHC Meeting	Superseded by 12th MACHC Action 12.1.6
	11-9	MACHC accepts the offer of UKHO into nominate Mr. / Mrs. _____ as the Commission representative to the International Hydrographic Review Editorial Board. <i>Chair sought support from MS for Dr Rob Hensley (UK) to be the MACHC representative to the International Hydrographic Review Editorial Board.</i>	UK MACHC Chair	30 Nov 2010	Completed <i>MS supported the nomination of Dr Rob Hensley as the MACHC representative to the Editorial Board.</i>
	11-10	Date and venue of the next meeting: St. Kitts & Nevis, in 1st week of December. St Kitts & Nevis must confirm the possibility no later 30 January 2011. If not possible, Mexico offered to serve as an alternative venue. In this case, ME must confirm the possibility no later 15 March 2011.	St. Kitts Mexico MACHC Chair	30 Jan 2011	Completed
	11-11	MACHC ratifies UK as Chair, in accordance with MACHC Statutes Article 5 c, and elect Suriname as Vice-Chair. Also, take note of the offer of The Netherlands to be the Vice Chair in the subsequent chairmanship period.	BR / UK / SR	10 Feb 2011	Completed

Agenda Item	Action	Agreements	Responsible Party	Due Date	Status
Capacity Building:					
3 (MACHC 10-13)	11-12	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	By XIIth MACHC Meeting, depending on priorities	Superseded by 12th MACHC Action 12.2.1
3 (MACHC 10-15)	11-13	The CB Coordinator will work with interested countries to develop CB activities and related training for the Gulf of Fonseca.	CB Coordinator	By XIIth MACHC Meeting, depending on priorities	Action closed
3 (MACHC 10-16)	11-14	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 XIIth MACHC Meeting, depending on priorities	Superseded by 12th MACHC Action 12.2.2
3 (MACHC 10-17)	11-15	The CB Coordinator should work in close liaison with the adjacent Regional Hydrographic Commissions, including the EAtHC.	CB Coordinator	Permanent	Superseded by 12th MACHC Action 12.2.3
6	11-16	MACHC approves the revision of the Commission CB Plan, which is as Annex to the Meeting Minutes, and includes the merging of the Hydrography Type 1 and Hydrography Type 2 courses to be delivered in 2011 into a single 2 weeks Basic Hydrographic course to maximise resources.	CB Coordinator	30 NOV 2010	Completed
6	11-17	MACHC Chair to send a letter to Panama and Costa Rica, with a copy to the IMO representative in the Region, notifying the intention to pay a Technical Visit in conjunction with the IHB, and asking for possible obstacles.	CB Coordinator / MACHC Chair	15 Mar 2011	Completed

Agenda Item	Action	Agreements	Responsible Party	Due Date	Status
6	11-18	<p>Regarding the GoH Project:</p> <ul style="list-style-type: none"> – The MACH CB Plan will include a Hydro Training Course for the (Belize, Honduras, and Guatemala) for 2011, noting that these 3 nations were also beneficiaries of the Hydro Type 2 course. It was further agreed that these places would be offered to other nations. – The Course Project should be amended in accordance to the Report of the ECC TG1. A letter will be send to the IHO CBSC and IHB exposing the case, sending the amended Course Project, and asking the CB Fund financial support. 	<p>CB Coordinator</p> <p>ECC Chair</p> <p>MACHC Chair</p>	<p>15 Nov 2010</p> <p>15 Nov 2010</p> <p>19 Nov 2010</p>	Completed
6	11-19	<p>MACHC approves an “Implementation Plan of Haiti’s Strategy for the establishment of the Service Hydrographic e Ocenographic de Haiti (SHOH)” (Annex to the XI MACHC Minutes). The proposed activities will be added to the 2011 and 2012 MACHC CB Work Plan for consideration by the IHO CBSC.</p>	<p>CB Coordinator MACHC Chair</p>	<p>1st APR 2011</p>	Completed
3 (MACHC 10-18)	11-20	<p>The CB Plan should be reviewed at the next Commission meeting. The following Member States will take part on the revision: A&B, BR, FR, NE, K&N, UK, with the collaboration of the PAIGH observer.</p> <p>The 2011 revision should have a long term plan (5 years) and consider:</p> <ol style="list-style-type: none"> 1. Assessment of the CB progress made by MACHC to date, against the IHO CB Strategy and CB Work Program performance indicators; 2. Maintenance of the agreed MACHC CB Plan; 3. Consider to held hydrographic trainings courses in venues where data update are need and take the opportunity to conduct the practical activities to get the required data; 4. Refine the action plan (against the IHO CB Strategy and CB Work Program performance indicators again) and in accordance with Member States priority requirements; 5. Prepare a job description for a consultant to address CB issues; and prepare technical specifications for a master plan for the Region; 	<p>CB Coordinator</p>	<p>Permanent By XIIth MACHC Meeting</p>	Completed

		6. If this Strategy is approved by MACHC Member States, a proposed roadmap for the implementation of this new Strategy to be drafted by MACHC CB Coordinator to be submitted for consideration by the CBSC.			
	11-21	To identify the MACHC CB needs to be included in the five years IHO WP 2013-2018 presenting it at the next IHO CBSC meeting.	CB Coordinator	1st Apr 2011	Completed
6	11-22	CB Coordinator to Report the Commission activities to the IHO CBSC, informing the relevant performance indicators, such as the upgrade of CB Phase level of HOs, and the partnership with private sector.	CB Coordinator	1st Apr 2011	Completed
3 (MACHC 10-19)	11-23	Correspondence Group (CG) composed by BR, NL, UK, and Chaired by VE, to finalize the study of the feasibility of the 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 CBSC and IRCC as solutions might be of interest to other Regional Hydrographic Commissions.	CG Chair (VE)	1st Oct 2011	MS agreed to close Action

Agenda Item	Action	Agreements	Responsible Party	Due Date	Status
Electronic Chart Committee (ECC) / Task Group 1 (TG1):					
3 (MACHC 10-25)	11-24	GoH Project 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 2011	Completed
3 (MACHC 10-26)	11-25	GoH countries to produce progress report and results of Phases 1, 2, and 3 Training for MACHC Chair to submit to IHO CBSC Action related to Action 11-22 above	Belize, Guatemala and Honduras; ECC Chair; CB Coordinator; MACHC Chair.	30 Jun 2011	Completed
	11-26	Provide updated MACHC CB Phase 3 Training Submission to MACHC CB. Action related to Action 11-18 above.	US / NOAA	15 Nov 2010	Completed
	11-27	Confirm lodging, training facility, computers availability at EMPORNAC.	Guatemala	10 Nov 2010	Completed

Agenda Item	Action	Agreements	Responsible Party	Due Date	Status
	11-28	NOAA / NAVO SMEs confirm contractor training dates.	US / NOAA	19 Nov 2010	Completed
	11-29	NOAA / GoH Project to send a letter to GoH countries: – Announcement of intent / Invitation for Collaborative Training – Announcement of intent for Belize in-country training	US / NOAA	26 November 2010	Completed
	11-30	Travel arrangements communicated to IHO Bureau for Phase 3 training: – 2010 In-country trainers (NOAA/Navy hydrographers) – Collaborative Training (Guatemala): 24 April – 8 May 2011 – Belize Field Work: 9-23 February 2011	US / NOAA	30 Nov 2010	Completed
	11-31	Confirm personnel and funding for collaborative training session	Belize and Honduras	31 Dec 2010	Completed
	11-32	Document hydrographic activity in-kind contributions using format provided by GoH Project Director:	Belize, Guatemala, Honduras	31 Dec 2010	Withdrawn – Duplicate of Action 10-24
	11-33	Install/level Valeport 740 tide gages and begin data collection of water level tide data: NLT 30 days prior to training	Belize, Guatemala, Honduras	Training held 2-14 May 2011	Completed
	11-34	GoH countries ensure preparations made for In-country / Collaborative Training prior to NOAA/Navy/contractor personnel arrivals: – Facility / lodging availability (Collaborative Training) – Vessel & personnel – Equipment installation – Data collection	Belize, Guatemala, Honduras	April 2011	Completed
	11-35	Facilitate participation of IHB Director in early JAN 2011 meeting of COCATRAM and with the Secretary General of the Central American Integration System to reinforce at the highest political levels the importance of the hydrographic progress achieved to date and the future sustainability requirements.	ECC Chair GoH Project	30 Nov 2010	Overtaken by events

Agenda Item	Action	Agreements	Responsible Party	Due Date	Status
Electronic Chart Committee (ECC) / Task Group 2 (TG2):					
3 (MACHC 9-12)	11-36	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 XIIth MACHC Meeting	Completed
3 (MACHC 10-32)	11-37	Achieve adequate regional ENC coverage by Dec-2010	MACHC MS		Superseded by 12th MACHC Actions 12.3.1 & 12.3.2
6	11-38	MACHC notes of the ECC-TG2 Report on ENC coverage and its recommendations and: - Update Annex A and B. - Include summary statistics; - Include statement indication graphics do not depict MS or MACHC official endorsement of National borders (as per the concern raised by Suriname). MACHC Chair will transmit the report to the IHB, for ultimate communication of the results to the IMO.	ECC Chair MACHC Chair	30 Nov 2010 15 Dec 2010	Completed
	11-39	MACHC approves the ECC-TG2 Work Plan for 2011. ECC meeting will be held in conjunction with IRCC-3 meeting in Niteroi, Brazil	-	-	Completed
6	11-40	MACHC notes the Report presented by ECC-TG2 on "to consider name ENC 4022 "WC" (for West Caribbean) for MACHC (as it is in EAHC for Malacca Strait) rather than national designations", endorses it, and decides that the proposed nomination and given example do not apply to the MACHC Region.	-	-	Completed
International Chart Committee (ICC)					
3 (MACHC 9-14)	11-41	INT Chart Coordinator to update MACHC web site INT Chart data base.	INT Chart Comm. Chair	30 Oct 2011	Superseded by 12th MACHC Action 12.4.1
3 (MACHC 9-14 and 10-42)	11-42	The INT Chart Committee should produce an INT Chart Plan which should include Pacific Area of the region, considering to use national charts of UK and US as interim of the production of the approved charts. A framework should be presented for the Committee work for the MACHC inter-sectional period.	INT Chart Comm. Chair	By XIIth MACHC Meeting	Superseded by 12th MACHC Action 12.4.2
3 (MACHC 9-14)	11-43	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 Oct 2011	Superseded by 12th MACHC Action 12.4.3

Agenda Item	Action	Agreements	Responsible Party	Due Date	Status
3 (MACHC 10-44)	11-44	The ICC will revise IHO publication S-11, Part B, on the corresponding data. Members States must send their updated data to the Secretary. The 2010 / 2011 update will include US information regarding INT Charts 4015, 4016, 4145, 4146, 4147, and 4148 (Resolution / Action 9-14 j)) and those which will arise from the proposal of Venezuela on the changing the limits of INT Charts (Action 11-46 below).	MACHC Members / Secretary	Permanent 24 Feb 2011	Superseded by 12th MACHC Action 12.4.4
3 (MACHC 10-51)	11-45	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. MACHC 10-6 of the Xth MACHC.	Venezuela	By XIth MACHC Meeting	Completed
6	11-46	The ICC to continue the study of the Change of INT Chart limits (4100, 4102, 4104, 4106, 4108, 4110 e 4112), proposed by Venezuela, to coincide INT Chart limits with correspondent National Chart, with the purpose of verifying the possible consequences of the proposed amendments and finalize the subject by correspondence.	ICC Chair	28 Feb 2011	Superseded by 12th MACHC Action 12.4.5
6	11-47	MACHC ratifies ICC recommendation on to do not change the limits of INT Chart 4102 proposed by Venezuela, once it will leave a gap of covering in the Region.	–	–	Superseded by 12th MACHC Action 12.4.5
6	11-48	On the proposal of Venezuela to change the producer of INT Charts 4070 and 4110, MACHC decides to: - keep France as the INT Chart 4070 Producer. - encourage Colombia and Venezuela to co-produce INT Chart 4110.	France, Colombia & Venezuela	–	Superseded by 12th MACHC Action 12.4.6
6 (MACHC 10-48)	11-49	MACHC endorses Resolution 10-48 of the Xth MACHC in to have just one coordinator for INT Charts and ENC, continuing to improve the current coordination of work of both Chairs, looking to merge both Committees in one in a medium term of two years.	MACHC Chair	Dec 2012	Superseded by 12th MACHC Action 12.1.10

The following MACHC 12 Actions were agreed:

Action	Agenda Item	Agreements	Responsible Party	Due Date
12.1. 2	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	Permanent

Action	Agenda Item	Agreements	Responsible Party	Due Date
12.1. 2	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	Permanent
12.1. 4	3	FR/VE to pursue discussions on bilateral agreement for data exchange in accordance with TR A3.4 (co-production, distribution of REPRMATS, etc.)* (*) This Resolution is related to Resolutions numbers 10-19, 10-38, 10-39, and 10-51 of the 10th MACHC	France/Venezuela	By 13th MACHC Meeting
12.1. 5	3	NL/VE to pursue discussions on bilateral agreement for data exchange in accordance with TR A3.4 (co-production, distribution of REPRMATS, etc.)	Netherlands /Venezuela	By 13th MACHC Meeting
12.1. 4	3	FR/VE to pursue discussions on bilateral agreement for data exchange in accordance with TR A3.4 (co-production, distribution of REPRMATS, etc.)* (*) This Resolution is related to Resolutions numbers 10-19, 10-38, 10-39, and 10-51 of the 10th MACHC	France/Venezuela	By 13th MACHC Meeting
12.1. 5	3	NL/VE to pursue discussions on bilateral agreement for data exchange in accordance with TR A3.4 (co-production, distribution of REPRMATS, etc.)	Netherlands /Venezuela	By 13th MACHC Meeting
12.2.1	3	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	By 13th MACHC Meeting, depending on priorities
12.2.2	3	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 13th MACHC Meeting, depending on priorities
12.2.3	3	The CB Coordinator should work in close liaison with the adjacent Regional Hydrographic Commissions, including the EAHC.	CB Coordinator	Permanent

4. IHO / IHB Matters

The Chairman invited the IHB Representative to provide a general overview of the Organization and the Bureau activities

4.1 Status of the ratification of the protocol of amendments to the IHO Convention (Report by IHB).

The IHB commented that According to the information provided by the External Relations Department of the Government of Monaco, to date, 33 Member State Governments have formally notified their approval of the Protocol of Amendments to the Convention of IHO, as approved at the 3rd Extraordinary International Hydrographic Conference (EIHC) in April 2005.

4.2 MACHC to adopt objectives to accelerate the process of ratification of the protocol of amendments to the IHO Convention.

The IHB encouraged those representatives of Member States that have not yet approved the amendments to the Convention to actively follow up this matter with their government authorities.

4.3 MACHC to encourage the approval of pending applications for IHO membership.

The IHB commented that Montenegro, Haiti and Vietnam have applied for membership but have not yet obtained the required number of approvals from Member States. Those IHO Member States, whose Governments have not yet approved the applications made by these three countries, are urged to actively encourage their Government authorities to consider doing so as soon as possible.

4.4 Status of pending Member States in the region for depositing the instrument of Accession.

The meeting was informed that Mauritania, Bulgaria, Cameroon and Sierra Leone, whose application for membership has been approved, have not yet deposited their Instrument of Accession.

4.5 Forthcoming International Hydrographic Conference

The IHB encouraged Member States to attend the 18th International Hydrographic Conference in April 2012 and to be involved in discussions covering a wide range of issues facing the international hydrographic community.

4.6 Update on encouragement to IHO suspended members to rejoin

The IHB urged Member States to undertake all necessary measures to encourage IHO suspended members to rejoin.

5. National Reports

Member States provided the meeting with summaries highlighting salient aspects of their National Reports. The full National Reports can be accessed on the IHO website.

There were a number of recurrent themes that developed from the summaries:

- The need for Capacity Building training and equipment
- Developing nations desire to improve economic infrastructure
- More coordinated and effective response to disasters
- Benefits of regional cooperation

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

MACHC committee and working group chairs reported to MACHC Members on discussions at closed session working group meetings earlier in the day.

6.1 Electronic Chart Committee Working Group (ECC-WG)

Mr. Erich Frey (US), acting chair of the ECC-WG reported that ECC WG 1 will be disbanded as the work has been completed. He confirmed that the work of ECC WG 2 was ongoing and presented a comprehensive report on their activities, which is available on the IHO website (ECC-WG2 Report) http://www.iho-ohi.net/mtg_docs/rhc/MACHC/MACHC12 under the 'presentations made during the meeting' link.

The chairman of the MACHC thanked the participants of the ECC-WG for their excellent work and several MACHC Member States endorsed the comments of the MACHC chair.

The ECC WG 2 report recommendations were as follows:

1. MACHC ECC continue to monitor and update Region B, Atlantic side, ENC scheme for all Usage Bands, per the timetables indicated in Annex A of the ECC WG 2 report.
2. MACHC ECC monitors and updates Region B, Pacific Ocean side, ENC scheme for all Usage Bands, per the timetables indicated in Annex A of the ECC WG 2 report.
3. MACHC ECC to explore options to provide a means to depict ENC schemes on a webpage, as a pilot project.
 - The display should be interoperable and appropriate for GIS applications. Additionally, MACHC Member States should find it easy to update their ENC coverage.
4. As a permanent task, MACHC Member States are invited to provide the ECC with their ENC production plans taking into account:
 - IMO requirements for mandatory carriage and priority regional ports;
 - the availability of adequate survey data for ENC production (bearing in mind that, in some areas, hydrographic offices may not produce ENCs if data are out - of - date or not compliant with S - 44 standards); and
 - the need to address national overlaps and consistency for all Usage Bands.
5. MACHC Chair is invited to provide this report to the IHB as the region's contribution to global ENC coverage so that it may be conveyed accordingly to the IMO.
6. In order to create the IHO worldwide ENC database, all ENC producers are encouraged to make their ENCs available to the RENCs, even if they are also distributed by different channels.
7. If Member Countries are unable to complete their ENC coverage, the MACHC, in partnership with appropriate authorities, should consider options to address this situation, in accordance with the IMO ECDIS Requirements and WEND principles.
8. If MACHC Member States are unwilling either to distribute ENCs or to have another country produce for them, the MACHC Chair will inform the Inter-Regional Coordinating Committee (IRCC). The IRCC will take appropriate action with the WEND Working Group, the IHB, and IMO.

The following Electronic Chart Committee Working Group actions were agreed at the meeting:

Action	Agenda Item	Agreements	Responsible Party	Due Date
12.3.1	6.1	MACHC ECC to continue to monitor and update Region B, Atlantic side, ENC scheme for all Usage Bands, per the timetables indicated in Annex A of MACHC ECC report.	MACHC ECC Member States	By 13th MACHC Meeting
12.3.2	6.1	MACHC ECC monitors and updates Region B, Pacific Ocean side, ENC scheme for all Usage Bands, per the timetables indicated in Annex A.	MACHC ECC Member States	By 13th MACHC Meeting
12.3.3	6.1	MACHC ECC to explore options to provide a means to depict ENC schemes on a webpage, as a pilot project. The display should be interoperable and appropriate for GIS applications. Additionally, MACHC Member States should find it easy to update their ENC coverage.	MACHC ECC Member States	By 13th MACHC Meeting
12.3.4	6.1	As a permanent task, MACHC Member States are invited to provide the ECC with their ENC production plans taking into account: - IMO requirements for mandatory carriage and priority regional ports; - the availability of adequate survey data for ENC production (keeping in mind that, in some areas, hydrographic offices may not produce ENCs if data are out - of - date or not compliant with S - 44 standards); and - the need to address national overlaps and consistency for all Usage Bands.	MACHC Member States	By 13th MACHC Meeting

Action	Agenda Item	Agreements	Responsible Party	Due Date
12.3.5	6.1	ECC to provide an updated report to 13th MACHC and MACHC Chair is invited to provide this report to the IHB as the region's contribution to global ENC coverage so that it may be conveyed accordingly to the IMO.	ECC Chair	By 13th MACHC Meeting
12.3.6	6.1	In order to create the IHO worldwide ENC database, all ENC producers are encouraged to make their ENCs available to the RENCs, even if they are also distributed by different channels.	MACHC ENC producers	By 13th MACHC Meeting
12.3.7	6.1	If Member Countries are unable to complete their ENC coverage, the MACHC, in partnership with appropriate authorities, should consider options to address this situation, in accordance with the IMO ECDIS Requirements and WEND principles.	Appropriate MACHC Member States	By 13th MACHC Meeting
12.3.8	6.1	If MACHC Member States are unwilling either to distribute ENCs or to have another country produce for them, the MACHC Chair will inform the Inter-Regional Coordinating Committee (IRCC). The IRCC will take appropriate action with the WEND Working Group, the IHB, and IMO.	Appropriate MACHC Member States	By 13th MACHC Meeting

6.2 INT Chart Committee (ICC)

Captain (Ret) Carlos Alberto Pêgas Ferreira, Chair of the MACHC ICC gave a comprehensive report on the International charting activities in the region. He also gave a detailed presentation on the Venezuelan INT chart scheme, which is available on the IHO website under the 'presentations made during the meeting' link.

The following actions were agreed at the meeting:

Action	Agenda Item	Agreements	Responsible Party	Due Date
12.1. 3	6.2	The Commission to consider using one website for MACHC documentation. The Chair to circulate a proposal to achieve this.	Chair	By 31st March 2012
12.4.1	6.2	INT Chart Coordinator to update MACHC web site INT Chart data base.	INT Chart Comm. Chair, UK, US, & Cuba	By 13 MACHC Meeting
12.4.2	6.2	The INT Chart Committee should produce an INT Chart Plan which should include the Pacific Area of the region, and consider using national charts of the UK and US as interim products for future production of INT Charts. A framework should be presented for the Committee work for the MACHC interseasonal period.	INT Chart Comm. Chair, UK, US & Cuba	By 13th MACHC Meeting
12.4.3	6.2	Cuba proposed that INT Chart 4017 be produced by another hydrographic service. US offered to produce this chart. Cuba also offered to pass relevant data to the INT chart producer of chart 4021.	US & Cuba	By 13th MACHC Meeting
12.4.4	6.2	The ICC Chair shall send to the Secretary the updates regarding the INT Charts of Venezuela that have changed (see Action 11-46). Members States must send their updated data to the Secretary, include US information regarding INT Charts 4015, 4016, 4145, 4146, 4147, and 4148.	ICC Chair, MACHC Members and Secretary	By 13th MACHC Meeting
12.4.5	6.2	The current limits of the INT Charts 4100 and 4102 shall be maintained . Venezuela will confirm the limits of the new INT Charts, as proposed: 4102A, 4104, 4106, 4108, 4110 and 4112.	ICC Chair, Venezuela	By 28th Feb 2012
12.4.6	6.2	Cuba requested the cooperation of UK, USA, France and Mexico for the production and updating of the INT Charts 4149, 4154, 4158, 4166 and 4170.	Cuba, France, Mexco, UK, US	By 13th MACHC Meeting
12.4.7	6.2	Cuba proposed that the USA maintain updating the INT Chart 4149 and becomes responsible for production of this chart.	Cuba, US	By 13th MACHC Meeting

6.3 Discussion on the adoption of HSSC proposal (Action HSSC1/24) for MACHC Paper INT Charting coordinator to take on the MACHC ENC coordinator role and rename as the Meso-American and Caribbean International Charting Coordination Working Group (MACICCWG)

Member States agreed to the establishment of a Meso-American and Caribbean Sea International Charting Coordination Working Group (MACICCWG). The chairs of ECC-WG and ICC were tasked to liaise and plan/organise their work flow in line with agreed Meso-American and Caribbean International Chart Coordinating Working Group (MACICCWG) Terms of Reference (ToR).

The following actions were agreed:

Action	Agenda Item	Agreements	Responsible Party	Due Date
12.1. 9	6.3	Working Group Chairs and Chart Committee Coordinators are encouraged to produce quarterly reports.	WG Chairs and ECC & ICC Coordinators	Permanent Quarterly
12.1. 10	6.3	ECC & ICC Coordinators to liaise and plan/organise their work flow in line with agreed Meso-American and Caribbean International Chart Coordinating Working Group (MACICCWG) Terms of Reference (ToR).	ECC & ICC Coordinators	Permanent By 13th MACHC Meeting

6.4 Capacity Building

6.4.1 Update on Capacity Building activities and submissions since the last meeting.

Mr Jeff Bryant (UK) gave a presentation on Capacity Building activities, which is available on the IHO website (CB Review) and highlighted:

- Technical visits to raise the profile of hydrography
- Basic Marine Safety Information courses for hydrographic infrastructure.
- Law of the Sea maritime boundary courses

6.4.2 Report on the Antigua course.

Mr Jeff Bryant (UK) gave a presentation on the Antigua course, which is available on the IHO website (Basic Hydro Survey Course - Antigua) and highlighted:

- The aims of the course were met, in that all participants stated that they had gained a good grasp of the fundamentals of national hydrography and nautical charting, coupled with a desire to drive forward the quest to build or enhance national capability. Post course communication has borne out these intentions and is the clearest indication of the course's success.
- The training course proved to be the ideal vehicle to raise the profile of hydrography at the very highest level of national Government with Antigua & Barbuda's President, the Honourable Dr Baldwin Spencer taking a personal interest.

The following actions were agreed:

Action	Agenda Item	Agreements	Responsible Party	Due Date
12.2.4	6.4.2	CB coordinator to prepare a paper on hosting CB training in region and produce a 'how to host CB training' guide.	CB Coordinator	By 30th Jan 2011

12.2.5	6.4.2	Antigua to produce a local report on the Antigua CB Course	Antigua	By 30th Jan 2012
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6.4.3 Report on Haiti Training course and progress since the Haiti Donors meeting at the 11th MACHC.

Three presentations by Paul Cooper, (PAIGH), Bruno Frachon, (FR) and Marie Yvrose Jean, (HT) were given on the Haiti Training course and progress since the Haiti Donors meeting, which are available on the IHO website (Haiti Reports: PAIGH - SHOM - SEMANAH) and highlighted:

- The strong partnerships and dedicated collaborative work undertaken by staff from PAIGH, IHO, SHOM and industry partners: CARIS, Kongsberg Maritime, Hemisphere, and HYPACK.
- The way forward may involve a technical audit.

The following action was agreed:

Action	Agenda Item	Agreements	Responsible Party	Due Date
12.2.9	6.4.3	CB Coordinator to seek opportunities to build on the 'Haiti Hydrographic Surveying and Nautical Charting Workshop' of September 2011, in conjunction with the CBSC Chairman and IHB.	CB Coordinator	By 13th MACHC Meeting

6.4.4 World Bank

There was no discussion by Member States under this agenda item.

6.4.5 Update on the 5 year Capacity Building plan

Mr Jeff Bryant, (UK) gave an overview of the update of the 5 year Capacity Building plan and commented that CB Plan should be reviewed at the next Commission meeting. The following actions were agreed:

Action	Agenda Item	Agreements	Responsible Party	Due Date
12.2.6	6.4.5	The CB Plan should be reviewed at the next Commission meeting. The following Member States will take part on the revision: A&B, BR, FR, NE, K&N, UK, with the collaboration of the PAIGH observer. The 2012 revision should have a long term plan (5 years) and consider: 1. Assessment of the CB progress made by MACHC to date, against the IHO CB Strategy and CB Work Program performance indicators; 2. Maintenance of the agreed MACHC CB Plan; 3. Consider to hold hydrographic trainings courses in venues where data updates are needed and take the opportunity to conduct the practical activities to get the required data; 4. Refine the action plan (against the IHO CB Strategy and CB Work Program performance indicators again) and in accordance with Member States priority requirements; 5. Prepare a job description for a consultant to address CB issues; and prepare technical specifications for a master plan for the Region; 6. If this Strategy is approved by MACHC Member States, a proposed roadmap for the implementation of this new Strategy to be drafted by MACHC CB Coordinator to be submitted for consideration by the CBSC.	CB Coordinator	Permanent By 13th MACHC Meeting
12.2.7	6.4.5	MACHC Chair to send a letter to Dominican Republic and Guyana with a copy to the IMO representative in the Region, notifying the intention to pay a Technical Visit in conjunction with the IHB, and asking for possible obstacles.	CB Coordinator	By 31st January 2012

Action	Agenda Item	Agreements	Responsible Party	Due Date
12.2.8	6.4.5	Netherlands HO to liase with Chair Organisation of East Caribbean States (OECS) to develop proposals for the establishment of regional deployable survey capability in 2012 for MACHC Members, Associate Members and non-Members.	Netherlands HO	By 31st August 2012
12.2.10	6.4.5	CB Coordinator to send Letters to MS about requesting technical visits - St Kitts, etc	CB Coordinator	By 31st January 2012

6.4.6 Presentation by CARIS and Kongsberg on their “Capacity Building Activities in the Region”.

CARIS and Kongsberg gave a joint presentation on their “Capacity Building Activities in the Region”, which is available on the IHO website (Kongsberg and CARIS Capacity Building) and highlighted:

- The dedicated collaborative capacity building work undertaken by staff from CARIS and Kongsberg in the region and other areas of the world.

7. Relevant International Organizations’ Report.

7.1 ACS (Association of Caribbean States)

There was no discussion by Member States under this agenda item.

7.2 CLIA (Cruise Lines International Association)

There was no discussion by Member States under this agenda item.

7.3 COCATRAM (Comision Centroamericana de Transporte Maritimo [Central American Commission of Maritime Transport])

There was no discussion by Member States under this agenda item.

7.4 FIG (International Federation de Geometres)

There was no discussion by Member States under this agenda item.

7.5 IBCCA (International Bathymetric Chart of the Caribbean Sea and the Gulf of Mexico)

Master Chief Petty Officer Dagoberto UrielDavid Viteri, Head of Cartographic Branch, DHN, (CO) gave a presentation on the work of the International Bathymetric Chart of the Caribbean Sea and the Gulf of Mexico, which is available on the IHO website (Presentations made during the meeting – IBCCA) and highlighted:

- The important work of the International Bathymetric Chart of the Caribbean Sea and the Gulf of Mexico and the areas of responsibility of IBCCA members.

7.6 IMO (International Maritime Organisation)

Colin Young, IMO Regional Maritime Adviser (Caribbean) gave a comprehensive presentation on the work of the IMO in the Caribbean Sea and the Gulf of Mexico region, which is available on the IHO website (Presentations made during the meeting – IMO) and highlighted:

- What the IMO is, how it works and what it does.
- The importance to the region of the IMO Integrated Technical Co-operation Programme (ITCP), noting that maritime capacity-building is a major contributor towards ensuring safer shipping and cleaner oceans”.
- Overview of the Voluntary IMO Member State Audit Scheme (VIMSAS).

7.7 OECS (Organisation of Eastern Caribbean States)

There was no discussion by Member States under this agenda item.

7.8 PAIGH (Pan-American Institute of Geography and History)

Paul Cooper, (PAIGH) gave a presentation on the work of the PAIGH, which is available on the IHO website (Presentations made during the meeting – PAIGH) and highlighted:

- The contribution of PAIGH activities to Hydrography and Capacity Building in the region, especially the input to the Haiti Donors meetings and Training courses.

7.9 RTCM (Radio Technical Commission for Maritime Services)

There was no discussion by Member States under this agenda item.

8. Strategy to involve non-Member States in RHC’s activities

There was general agreement by Member States with the inclusive approach taken by current and previous MACHC Chairs to involve non-Member States with RHC activities.

9. Experience in dealing with maritime disasters in relation with IHO guidelines

Capt John Lowell (US) gave a comprehensive presentation on NOAA’s experience in dealing with marine hazard responses, which is available on the IHO website (Presentations made during the meeting – Emergency Response) and highlighted:

- Why Hydrographic Offices (HO) respond to marine hazards
- Distinct types of hazard responses
- Examples of domestic and international responses.

The presentation generated Member State support for HO engagement on hazard responses and highlighted the requirement for HO participation in the field of hazard prevention and associated warning systems related to storms, hurricanes and tsunamis.

The following action was agreed:

Action	Agenda Item	Agreements	Responsible Party	Due Date
12.1. 8	9	MACHC Member States to include 'sharing experience in dealing with maritime disasters' as a standing MACHC agenda item.	Chair	Permanent By 13th MACHC Meeting

10. Marine Spatial Data Infrastructure (MSDI)

Capt Gerd Lang (US) presented an 'overview of MSDI' on behalf of Maureen Kenny, Chair of the IHO Marine Spatial Data Infrastructure (MSDI) Working Group, which is available on the IHO website (Presentations made during the meeting – MACHC MSDI by NOAA) and highlighted:

- Benefits to hydrographic organizations of supporting a MSDI.
- Examples of MSDI at work.
- The MSDI guidance publication for Hydrographic Offices IHO C-17 - Spatial Data Infrastructures: "The Marine Dimension".

The presentation generated discussion on the need to establish a regional MSDI for the MACHC. The MACHC Chair suggested that the name of the regional MSDI should reflect the broad nature of maritime activities in the region with special emphasis on the economic reliance that smaller island states have on the marine environment. Member States agreed to name their regional MSDI as the Meso-American and Caribbean (MAC) 'Marine Economic Infrastructure Programme (MEIP)'.

UK volunteered to chair the MAC MEIP WG to discuss with interested parties in the margins of the meeting how to define the use and purpose of a regional MSDI and to exchange thoughts on the 'Terms of Reference' for the WG. It was agreed that members of the MEIP WG would progress their work during the year by correspondence and telephone conference calls.

Raphael Ponce, ESRI gave a presentation on ideas for a regional MSDI, such as the MEIP, which is available on the IHO website (Presentations made during the meeting – Marine Infrastructure program by ESRI) and highlighted:

- An industry perspective of MSDI with examples of MSDI and some suggestions for the MAC MEIP MSDI.

The following action was agreed:

Action	Agenda Item	Agreements	Responsible Party	Due Date
12.1. 6	10	The Commission agreed to establish a Meso-American and Caribbean Marine Economic Infrastructure Programme Working Group (MACMEIP-WP). The MEIP-WG will be tasked with producing the Terms of Reference/Rules of Procedure and circulating them to MACHC MS for comment.	Volunteering MACHC Members and Industry representatives.	By 28th February 2012

11. Status of Hydrographic Surveying and Nautical Charting Worldwide C-55

The IHB representative gave an overview of the use and nature of C-55 and how to find the publication on the IHO website - http://www.iho.int/iho_pubs/CB/C-55 Bruno Frachon, (FR)

commented that there was a strong link between C-55 and MSDI, and perhaps the C-55 data should form a base layer to a regional MSDI (MAC MEIP).

11.1 Development of C-55

Jeff Bryant gave a presentation on the development of C-55 since IRCC3, which is available on the IHO website (Presentations made during the meeting – MACHC C-55 Development) and highlighted:

- The requirement to improve the presentation and quality of worldwide hydrographic and surveying and nautical charting information in the light of wider developments and use of MSDI.
- A Baltic Sea Hydrographic Commission (BSHC) solution and suggested way forward.

This topic was raised as a proposal and discussed at the 18th International Hydrographic Conference.

The following action was agreed:

Action	Agenda Item	Agreements	Responsible Party	Due Date
12.1.1	11	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	Permanent

12. Crowd Sourcing (CS) Survey Techniques

Presentations by Paul Cooper (CARIS) and Rafel Ponce (Esri) on Crowd Sourcing.

The IHO stated that the IMO currently has Voluntary Observing Ships and suggested that we may be able to use these for CS. CARIS commented that the data needs evaluating as it is still an emerging technology and needs to be compared to existing recent data to ensure accuracy.

The US stated that they are very interested in CS but are concerned about the liability issues of using the data. The quality of CS data will need to be communicated to the user.

FR stated that CS is complementary information to supplement existing data but they have concerns about the lack of tidal correction. The process is similar to what happened years ago when mariners sent their logbooks to the Hydrographic Office (HO) for inclusion in HO products. It will provide a way to identify previously undetected underwater features that could be investigated further by more conventional means - liability means that we cannot just ignore the data.

BVI acknowledged the benefits of CS but had reservations about SOLAS compliancy of the data.

Chair stated that CS is nothing new; it is used regularly in HCA region in the form of “Mud Maps”

FR said maybe it should require IHB specification for the data collected.

See action at Agenda item 11.

13. Satellite Bathymetry

Presentation by Celine Roux (FR) explaining the process of obtaining depths from satellite imagery.

IHB stated that it would be good to use in areas where we currently have no data and asked if in time the technology would achieve S-44 Order 1A? France stated that they would expect it to

reach Order 1B - but not yet. The use of ground truthing means the horizontal datum is Order 1A but currently only a 5m resolution +/- 2m.

UK is currently actively researching the accuracy and use of SB and is looking at obtaining satellite data for the Bahamas where a recent multibeam survey have been carried out for comparison.

US enquired why only certain waters were acceptable. FR stated that the clarity of water and seabed characteristics effect the depths that are obtainable.

The following action was agreed:

Action	Agenda Item	Agreements	Responsible Party	Due Date
12.1. 7	12/13	The Chair to send a letter to IHB encouraging the IHO to consider producing surveying specifications for Satellite Bathymetry and Crowdsourcing data.	Chair	By 31st January 2012

14. IMO Member State Audits

This topic was covered under Agenda Item 7.6.

15. Discussions from Stakeholder Day

The key output from the event was the establishment of the Meso-American and Caribbean Marine Economic Infrastructure Programme Working Group (MACMEIP-WP). This Marine Spatial Planning initiative should better assist regional cooperation with the exchange of maritime and shipping/economic infrastructure information.

The topics and discussions at the Stakeholder Day highlighted the need for Hydrographer's to take account of the views of ship masters and shipping companies – the users. We were also reminded about the role of IMO and forthcoming mandatory IMO Member State Audit Scheme. Finally, there was general agreement by Member States and Observers that the Stakeholder Day was a success and, at times, the source of invigorated debate at MACHC plenary.

16. Any Other Business

There were no topics raised under any other business.

17. Date and Venue of the next meeting

Guatemala offered to host the next meeting, which was supported by US and seconded by SR and BR. Member States agreed that the meeting should take place during November or December 2013. Guatemala was duly appointed host for the next MACHC meeting subject to official approval by Guatemala.

18. Election of Chair and Vice Chair

The MACHC Chair invited Member States to ratify UK as Chair for a further year, as agreed in the MACHC Statutes. US supported the proposal, which was seconded by Brazil. UK was duly appointed Chair of the MACHC for a second year.

19. Approval of the Action List

The draft actions were agreed by Member States and are attached at Annex B.

20. Closing Remarks from the Chair

The MACHC Chair gave heartfelt thanks to St Kitts – our hosts, the Vice Chair, Member States, Observers from organisations and companies, hotel staff and conference staff for their support and valued contributions to the MACHC meeting plenary sessions, working group and committee meetings and Stakeholder and Industry days. He then formally closed the meeting.

List of Participants

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List of Actions

Action	Agenda Item	Agreements	Responsible Party	Due Date	Status
General:					
12.1.1	11	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	Permanent	On going
12.1.2	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	Permanent	On going
12.1.3	6.2	The Commission to consider using one website for MACHC documentation. The Chair to circulate a proposal to achieve this.	Chair	By 31st March 2012	In Progress
12.1.4	3	FR/VE to pursue discussions on bilateral agreement for data exchange in accordance with TR A3.4 (co-production, distribution of REPROMATS, etc.)* (*) This Resolution is related to Resolutions numbers 10-19, 10-38, 10-39, and 10-51 of the 10th MACHC	France/Venezuela	By 13th MACHC Meeting	
12.1.5	3	NL/VE to pursue discussions on bilateral agreement for data exchange in accordance with TR A3.4 (co-production, distribution of REPROMATS, etc.)	Netherlands/Venezuela	By 13th MACHC Meeting	
12.1.6	10	The Commission agreed to establish a Meso-American and Caribbean Marine Economic Infrastructure Programme Working Group (MACMEIP-WP). The MEIP-WG will be tasked with producing the Terms of Reference/Rules of Procedure and circulating them to MACHC MS for comment.	Volunteering MACHC Members and Industry representatives.	By 28th February 2012	Complete MACHC CL 06-2012
12.1.7	12/13	The Chair to send a letter to IHB encouraging the IHO to consider producing surveying specifications for Satellite Bathymetry and Crowdsourcing data.	Chair	By 31st January 2012	Complete - IHB encouraged use of S44 to satisfy Satellite Bathymetry and Crowdsourcing surveying requirement.
12.1.8	9	MACHC Member States to include 'sharing experience in dealing with maritime disasters' as a standing MACHC agenda item.	Chair	Permanent By 13th MACHC Meeting	
12.1.9	6.3	Working Group Chairs and Chart Committee Coordinators are encouraged to produce quarterly reports.	WG Chairs and ECC & ICC Coordinators	Permanent Quarterly	
12.1.10	6.3	ECC & ICC Coordinators to liaise and plan/organise their work flow in line with agreed Meso-American and Caribbean International Chart Coordinating Working Group (MACICCWG) Terms of Reference (ToR).	ECC & ICC Coordinators	Permanent By 13th MACHC Meeting	

Action	Agenda Item	Agreements	Responsible Party	Due Date	Status
Capacity Building:					
12.2.1	3	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	By 13th MACHC Meeting, depending on priorities	
12.2.2	3	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 13th MACHC Meeting, depending on priorities	In Progress
12.2.3	3	The CB Coordinator should work in close liaison with the adjacent Regional Hydrographic Commissions, including the EAtHC.	CB Coordinator	Permanent	In Progress
12.2.4	6.4.2	CB coordinator to prepare a paper on hosting CB training in region and produce a 'how to host CB training' guide.	CB Coordinator	By 30th Jan 2011	Complete
12.2.5	6.4.2	Antigua to produce a local report on the Antigua CB Course	Antigua	By 30th Jan 2012	Complete
12.2.6	6.4.5	The CB Plan should be reviewed at the next Commission meeting. The following Member States will take part on the revision: A&B, BR, FR, NE, K&N, UK, with the collaboration of the PAIGH observer. The 2012 revision should have a long term plan (5 years) and consider: 1. Assessment of the CB progress made by MACHC to date, against the IHO CB Strategy and CB Work Program performance indicators; 2. Maintenance of the agreed MACHC CB Plan; 3. Consider to hold hydrographic trainings courses in venues where data updates are needed and take the opportunity to conduct the practical activities to get the required data; 4. Refine the action plan (against the IHO CB Strategy and CB Work Program performance indicators again) and in accordance with Member States priority requirements; 5. Prepare a job description for a consultant to address CB issues; and prepare technical specifications for a master plan for the Region; 6. If this Strategy is approved by MACHC Member States, a proposed roadmap for the implementation of this new Strategy to be drafted by MACHC CB Coordinator to be submitted for consideration by the CBSC.	CB Coordinator	Permanent By 13th MACHC Meeting	In Progress
12.2.7	6.4.5	MACHC Chair to send a letter to Dominican Republic and Guyana with a copy to the IMO representative in the Region, notifying the intention to pay a Technical Visit in conjunction with the IHB, and asking for possible obstacles.	CB Coordinator	By 31st January 2012	Complete

Action	Agenda Item	Agreements	Responsible Party	Due Date	Status
12.2.8	6.4.5	Netherlands HO to liaise with Chair Organisation of East Caribbean States (OECS) to develop proposals for the establishment of regional deployable survey capability in 2012 for MACHC Members, Associate Members and non-Members.	Netherlands HO	By 31st August 2012	In Progress
12.2.9	6.4.3	CB Coordinator to seek opportunities to build on the 'Haiti Hydrographic Surveying and Nautical Charting Workshop' of September 2011, in conjunction with the CBSC Chairman and IHB.	CB Coordinator	By 13th MACHC Meeting	In Progress
12.2.10	6.4.5	CB Coordinator to send Letters to MS about requesting technical visits - St Kitts, etc	CB Coordinator	By 31st January 2012	Complete
Electronic Chart Committee (ECC):					
12.3.1	6.1	MACHC ECC to continue to monitor and update Region B, Atlantic side, ENC scheme for all Usage Bands, per the timetables indicated in Annex A of MACHC ECC report.	MACHC ECC Member States	By 13th MACHC Meeting	
12.3.2	6.1	MACHC ECC monitors and updates Region B, Pacific Ocean side, ENC scheme for all Usage Bands, per the timetables indicated in Annex A.	MACHC ECC Member States	By 13th MACHC Meeting	
12.3.3	6.1	MACHC ECC to explore options to provide a means to depict ENC schemes on a webpage, as a pilot project. The display should be interoperable and appropriate for GIS applications. Additionally, MACHC Member States should find it easy to update their ENC coverage.	MACHC ECC Member States	By 13th MACHC Meeting	
12.3.4	6.1	As a permanent task, MACHC Member States are invited to provide the ECC with their ENC production plans taking into account: - IMO requirements for mandatory carriage and priority regional ports; - the availability of adequate survey data for ENC production (keeping in mind that, in some areas, hydrographic offices may not produce ENCs if data are out - of - date or not compliant with S - 44 standards); and - the need to address national overlaps and consistency for all Usage Bands.	MACHC Member States	By 13th MACHC Meeting	
12.3.5	6.1	ECC to provide an updated report to 13th MACHC and MACHC Chair is invited to provide this report to the IHB as the region's contribution to global ENC coverage so that it may be conveyed accordingly to the IMO.	ECC Chair	By 13th MACHC Meeting	
12.3.6	6.1	In order to create the IHO worldwide ENC database, all ENC producers are encouraged to make their ENCs available to the RENCs, even if they are also distributed by different channels.	MACHC ENC producers	By 13th MACHC Meeting	
12.3.7	6.1	If Member Countries are unable to complete their ENC coverage, the MACHC, in partnership with appropriate authorities, should consider options to address this situation, in accordance with the IMO ECDIS Requirements and WEND principles.	Appropriate MACHC Member States	By 13th MACHC Meeting	

Action	Agenda Item	Agreements	Responsible Party	Due Date	Status
12.3.8	6.1	If MACHC Member States are unwilling either to distribute ENC's or to have another country produce for them, the MACHC Chair will inform the Inter-Regional Coordinating Committee (IRCC). The IRCC will take appropriate action with the WEND Working Group, the IHB, and IMO.	Appropriate MACHC Member States	By 13th MACHC Meeting	
International Chart Committee (ICC):					
12.4.1	6.2	INT Chart Coordinator to update MACHC web site INT Chart data base.	INT Chart Comm. Chair, UK, US, & Cuba	By 13 MACHC Meeting	
12.4.2	6.2	The INT Chart Committee should produce an INT Chart Plan which should include the Pacific Area of the region, and consider using national charts of the UK and US as interim products for future production of INT Charts. A framework should be presented for the Committee work for the MACHC interseasonal period.	INT Chart Comm. Chair, UK, US & Cuba	By 13th MACHC Meeting	
12.4.3	6.2	Cuba proposed that INT Chart 4017 be produced by another hydrographic service. US offered to produce this chart. Cuba also offered to pass relevant data to the INT chart producer of chart 4021.	US & Cuba	By 13th MACHC Meeting	
12.4.4	6.2	The ICC Chair shall send to the Secretary the updates regarding the INT Charts of Venezuela that have changed (see Action 11-46). Members States must send their updated data to the Secretary, include US information regarding INT Charts 4015, 4016, 4145, 4146, 4147, and 4148.	ICC Chair, MACHC Members and Secretary	By 13th MACHC Meeting	
12.4.5	6.2	The current limits of the INT Charts 4100 and 4102 shall be maintained . Venezuela will confirm the limits of the new INT Charts, as proposed: 4102A, 4104, 4106, 4108, 4110 and 4112.	ICC Chair, Venezuela	By 28th Feb 2012	
12.4.6	6.2	Cuba requested the cooperation of UK, USA, France and Mexico for the production and updating of the INT Charts 4149, 4154, 4158, 4166 and 4170.	Cuba, France, Mexco, UK, US	By 13th MACHC Meeting	
12.4.7	6.2	Cuba proposed that the USA maintain updating the INT Chart 4149 and becomes responsible for production of this chart.	Cuba, US	By 13th MACHC Meeting	