



XVth Meso American & Caribbean Sea Hydrographic Commission Meeting 10- 13 December 2014 Manzanillo, Colima Mexico Minutes of the 15th Meeting Summary MACHO

As approved at 16th MACHC Conference

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1. Formal opening

On Wednesday the 10th of December 2014, Mr. M. Amafo LL.M (Suriname), the Chair of the Meso American & Caribbean Sea Hydrographic Commission (MACHC), welcomed all the participants to the annual MACHC Meeting. A special welcome was extended to the stakeholders, the industry and the relevant International and Regional Organizations, represented at the meeting. On behalf of the MACHC, the Chair congratulated and thanked Mexico for organizing and hosting of the Second Mexican Hydrographic Conference, the industry day and the 15th MACHC meeting. The working groups, members and the IHB were also thanked for their continuous support during the past year. The Chair requested delegates to participate actively in the working groups' sessions, which were scheduled to take place after the formal opening.

After the welcome address by the Chair, Mr. Robert Ward, the President of the International Hydrographic Bureau (IHB) addressed the audience. In his remarks he noted the importance and the purpose of the Regional Hydrographic Commissions (RHC) and that the MACHC is one of the more active RHC within the IHO. The president urged the delegates to engage each other more actively in order to learn from each other's experiences. Everybody's view is important and we need to assist each other to achieve the common goals. The President also noted the importance of capacity building and encouraged the delegates to use every CB opportunity to the fullest in order to improve their country's hydrographic service capability.

In the keynote address, Admiral Carlos Abascal Andrade, welcomed the delegates to Port of Manzanillo, Mexico. The importance of hydrography for sustainable development in the region was underscored. Admiral Andrade also commended Commander Lopez Cruz and his team on the hard work they have done in organizing the meeting and other activities. He further wished the delegates success in their deliberations. After the keynote address the Admiral declared the meeting open.

2. Marine Economic Infrastructure Programme Working Group Meeting

The Marine Economic Infrastructure Programme (MEIP) Working Group, chaired by Mr. Chris Thorne (UK), discussed the MEIP issues during the MEIP working group meeting on 10 December 2014. The summary of the MEIP report can be found under item number 15.1.

3. MACHC Integrated Charting Commission Meeting

After the MEIP working group meeting the MACHC Integrated Charting Commission (MICC), chaired by Mr. John Nyberg (USA), discussed the MICC issues during the MICC meeting. The summary of the MICC report can be found under item number 15.2.

4. Theoretical training and industry day activities

After the formal opening of the MACHC meeting the Mexico organized some theoretical training and industry day activities or the delegates. Several companies had the opportunity to give demonstrations and training to participants.

5. Approval of agenda and timetable

On Thursday, 11 December 2014, the participants were invited to introduce themselves. Hereafter the Chair introduced the Agenda and Timetable (Doc. MACHC15-01b) and invited the participants to comment on the document in case updates are necessary. There were no objections. The Agenda and Timetable were approved.

Audio recording of the meeting was also approved. The audio recordings will be deleted after the minutes of the MACHC 15 meeting are finalized.

6. List of documents

The Chair stated that all the documents are placed on the website of the IHO under the link regarding the 15th MACHC meeting documents and that delegates are to download the documents from the website.

http://www.iho.int/mtg_docs/rhc/MACHC/MACHC15/MACHC15_Docs.htm

All the documents and reports were uploaded to the website when available, so delegates were asked to provide the secretary with all the documentation regarding the meeting. The list of documents (Doc. MACHC 15-01c) was approved by the meeting.

7. List of participants

The delegates were asked to check their information with regard to the list of participants (Doc. MACHC 15-01d) and to advise the secretary of any amendments to the document.

8. Minutes XIVth MACHC Meeting

The Chair took this report (Doc. MACHC 15-02) as being read and invited the meeting to adopt the report as presented with any editorial changes being submitted to the secretary.

The Minutes of the XIVth MACHC meeting were adopted by the meeting.

9. Review Action Items from the XIVth MACHC Meeting

The list of Actions from the XIVth MACHC Meeting (Doc. MACHC 15-03) was reviewed and updated. The responsible persons were asked to respond to the outstanding items. The secretary will streamline the list of actions. The updated version will be placed on the website.

Action	Agreement	Responsible party	Status
14.1.4	The revised WEND Guidelines were approved by the WENDWG and by IRCC5 and will be circulated by the IHB.		WEND Guidelines were approved and are on the IHO

			website
14.1.5	MSs to support the new WEND guidelines and the definition of a cartographic boundary that will be circulated by CL.	MS	Will be circulated by CL
14.1.7	Based on the needs, training for MSI can be developed.	CB Coordinator	Completed
Action	Agreement	Responsible party	Status
14.1.11	MEIPWG Chair to participate in the MSDIWG5 meeting (5-7 Feb 2014)	MEIP Chair	Completed
14.1.13	CB Coordinator to put together a questionnaire to assess how students use the training in their work.	CB Coordinator	Not completed. IHB advised to take this item to CBSC 13. Decision: MACHC proposal to CBSC 13
14.1.16	MS to send their relevant information to the GEBCO.	MS	Permanent item. The Chars asks MS to provide information on how they engage with GEBCO.
14.1.17	MS to send their relevant information to the IBCCA for the 15th MACHC meeting.	MS	Completed.
14.1.21	Invite Trinidad Pilot Organization to MACHC 15.	Chair	The MACHC will continue to invite the T&T pilots.
14.1.22	RENC members to recommend to non-RENC ENC producer nations to join a RENC.	RENC members	Mr. James Harper indicated that he would provide information during his presentation.
14.1.23	UKHO to draft a proposal to IRCC6 and further discussion at MACHC15.	UKHO	The Chair informs the Commission that the topic was raised at the IRCC6 meeting and at the 5 th EIHC. This item will be taken back to the IRCC7 meeting.
14.1.24	RENCs to provide feedback to MACHC and WENDWG regarding the use of ENCs outside the SOLAS/ECDIS environment. (WENDWG action item)	RENCs	Mr. James Harper indicated that he would provide information during his presentation.
14.1.26	Chair to report to IRCC6 the need to investigate the links between Hydrography and Oceanology.	Chair	To be completed at the 7IRCC meeting.
14.1.28	Mexico to lead discussions to	Mexico	This item is on the

ſ	amend article 13 (Mexico to present	agenda as a separate
	a paper at MACHC 15)	agenda item. Mexico
		to present a paper.

10. MACHC statutes

At the 14th MACHC meeting the member states discussed some proposed amendments to the MACHC statutes. This item was introduced by the President of the IHB (see Doc. MACHC 14.04.1) and on the last day of the meeting MSs were given the opportunity to discuss their views with each other. The updated version of the MACHC Statutes was placed on the website for additional and editorial comments. The IHB President introduced this item and asked if there were any objections to the adoption of the amended MACHC Statutes.

As there were no comments from the member states, the MACHC Statutes were adopted as amended at the XIVth MACHC meeting, December 2013 in St. Maarten.

At the 15th MACHC meeting the IHB President also revered to the MACHC Statutes and proposed a small addition to article 11a. with regard to the hosting of meetings.

"The Chair and the host country shall be responsible for the organization of the Conferences and shall *normally be borne by the host country*".

The Chair invited the IHB to send a written proposal to be discussed at the XVIth MACHC meeting regarding the amendment of article 11a.

11. Associate membership Saint Vincent and the Grenadines

The Chair informed the Commission that the Government of Saint Vincent and the Grenadines by letter dated 20 November 2014 had indicated their interest to apply for associate membership of the MACHC at the 15th MACHC meeting.

The Chair invited the delegate from Saint Vincent and the Grenadines to sign the MACHC Statutes and welcomed Saint Vincent and the Grenadines as the twelfth Associate Member of the MACHC.



Mr. M. Amafo, Mr. D. Robin and Mr. R. Ward

12. Mexico paper regarding Spanish as working language

The Chair refers to the 14th MACHC meeting where the Mexican delegation proposed to include Spanish as an official working language for the MACHC. It was decided that Mexico would submit a paper to the 15th MACHC meeting in that regard.

The delegate from Mexico indicated to the Chair that they will not submit a paper any longer. The delegate indicated that Mexico uses Spanish as their working language to do hydrographic works. The hydrographic Seminar in Spanish is a perfect example that Spanish is used as working language. The delegate requests the Chair to bring this issue regarding the usage of Spanish as an official working language of the MACH to the IHO so an acceptable solution can be adopted.

The Chair indicated that this issue is a separate issue and that the proposal to amend the MACHC Statutes is no longer relevant. He further noted that there are many Spanish speaking countries and that there is a CB program for Spanish speaking countries. The Chair notes that there is support within the MACHC to have some kind of inclusiveness of Spanish as a working language.

The IHB President states that the MACHC should use the IRCC as it is appropriate channel to bring this issue before the IHO. There are at least two resolutions indicating that Spanish is not an official working language. The member of the IHO will decide if Spanish will be an official working language.

Actions:

- The MACHC will draft a formal proposal to IRCC 7;
- Mexico to assist the Chair in drafting the proposal;
- Mexico to engage other RHC's where they use Spanish as working language;
- Other RHC's will be informed of the process taking place within the MACHC;
- The proposal will be submitted as a MACHC paper to the IRCC 7 meeting.

13. Invited Countries in the region

The MACHC Chair presented a report on the countries in the region. See presentation under Doc. MACHC15.04.3. Link: <u>http://www.iho.int/mtg_docs/rhc/MACHC/MACHC15/MACHC15-04.3-Invited_countries_in_the_Region.pdf</u>

21 of the 33 invited countries were present at the 15th MACHC meeting.

14 IHO matters

14.1 IHB report

See Doc. MACHC 15.05.1 for full report.

IHB President, Mr. Robert Ward, informed the commission that 41 of the required 48 approvals to the Protocol of Amendments have been received by the Government of

Monaco. President Ward urged the IHO Member States of the MACHC (Colombia, Guatemala, Jamaica, Trinidad and Tobago and Venezuela) who have not yet indicated positive support to the Amendments to the Convention on the IHO to give their support in that respect.

The next Hydrographic Conference will be held as the first Assembly of the IHO if a further seven approvals to the amended Convention are received by the Government of Monaco.

With regard to the Status of Approval of New Member States of the IHO the president indicated that Bulgaria, Haiti, Mauritania, Viet Nam, Brunei Darussalam, Georgia and Sierra Leone have all been accepted for membership of the IHO. Haiti has not yet deposited its instrument of accession with the government of Monaco.

President Ward noted that there are still some States within the MACHC who are not member of the IHO. These are Antigua and Barbuda, Barbados, Belize, El Salvador, Guyana, Haiti, Honduras, Nicaragua, Panama, Saint Lucia, Saint Vincent and the Grenadines and St Kitts and Nevis. He encouraged the respective delegates to advice their Governments of the numerous advantages, benefits and opportunities that IHO members have with regard to hydrography.

The 5th Extraordinary Hydrographic Conference was held in Monaco from 6 - 10 October 2014.

65 of 82 Member States, 2 Pending MS and 21 non MS - none from MACHC were in attendance.

Outcomes of the 5th EIHC are inter alia: the supplementary ways for data acquisition (crowd sourcing, satellite derived bathymetry and data mining) were adopted and with regard to Marine Spatial Data Infrastructures, the transition from maps and charts to geo data was approved.

The theme for World Hydrography Day 2015 is: "Our seas and oceans - still to be explored and charted ". The delegates are urged to raise awareness of the status of survey and charting worldwide.

Actions:

- The delegates from Columbia, Trinidad and Tobago and Venezuela indicated that their Governments agree with the Protocol of Amendments to the IHO Convention. The official letters will be send to Monaco.
- The delegate from Haiti indicated that the elections in Haiti will take place in March 2015 and that the instrument of accession to the IHO will be send hereafter.
- MS are urged to make full use of the CB opportunities provided by the IHO.

• Delegates to encourage their Hydrographic Offices and to engage with other counterparts to participate in the Global Geospatial Information Management (UN-GGIM) meetings.

14.2 IRCC6 report

The MACHC Chair introduced the IRCC6 report (Doc. MACHC 15-05.2), including the decisions affecting the MACHC.

See Doc. MACHC 15.05.2 for full report.

14.3 MACHC Actions IRCC7

The Chair congratulated Rear Admiral Tom Karsten with his excellent leadership as IRCC Chair.

MACHC actions for IRCC 7:

- MACHC paper "Spanish as working language"
- Follow up on MACHC paper regarding Maximizing the use of survey data

The MACHC Chair will consult with the Chairs of the working groups to determine the other MACHC actions for IRCC7.

14.4 HSSC6 report

Mr. Nickolás de Andrade Roscher (Brasil) introduced the HSSC6 report including the decisions affecting the MACHC, see Doc. MACHC 15-05.3 for full report.

MS are urged to attend the HSCC meetings actively. The Chair thanked Brazil for the report and asked Brazil to represent the MACHC again at the next HSCC meeting.

France (as chair of the Hydrographic Dictionary WG(HDGW)) encourages Spanish speaking countries within the MACHC to participate actively in the HSSC WG meetings because there are some benefits for the Spanish speaking community within the IHO.

The IHB also encouraged the Spanish speaking states within the MACHC to participate and further the work of the HDWG.

Action:

• The Spanish speaking countries are encouraged to participate in the HSSC WG and the HDWG meetings.

14.5 WEND¹ report

Mr. J. Nyberg (USA (NOAA)) presented the WENDWG report; see Doc. MACHC 15-05.4 for the presentation.

¹ Worldwide Electronic Navigational Database

Mr. J. Nyberg in his capacity as MICC Chair encouraged MS to participate in the next WEND WG meeting.

Mr. James Harper asked the delegates for their support in order to update the gaps list for missing ENCs.

The Chair thanked Mr. Nyberg for the presentation and asked USA to represent the MACHC again at the next WEND WG meeting.

Action:

• MICC to update the list of ENCs

14.5 IHO-EU network WG report

Lt. Cdr. Eric Langlois (France) presented the IHO-EU network WG report; see Doc. MACHC 15-05.5 for the full presentation.

The Chair thanked the delegate from France for the report. The Commission noted the report.

15. Capacity Building report

Mr. J. Bryant (UK), MACHC CB Coordinator, reported the outcomes of CBSC12 (MACHC Doc. 15-07.3A) and presented an update on the MACHC Capacity Building, see Doc. MACHC 15-07.B for the full report.

Mr. Bryant informed the Commission that the review of the CB strategy was endorsed in 2014. The subCommission still supported the three phases approach. The CB Fund consists of a small fund. Japan and Korea do make some funds available for funding CB projects.

A review of the MACHC CB Plan 2013-2017 was also presented. The CBSC endorsed all three activities for 2015. The CB activities for 2015 are:

- Phase 1 Skills Course for Spanish speakers;

- Workshop on Technical Aspects of Maritime Boundaries;

- A Hydrographic Awareness Seminar preceding the MACHC meeting. The potential sposors are the IHO, IALA and the IMO (the RMA, C. Young will check with the IMO and inform the Commission).

The delegate from Suriname expressed his gratitude to the IHO and the MACHC for the CB training provided through the MACHC CB plan.

The delegate from Mexico gave a presentation on the CB activity held in Nicaragua (see MACHC Doc. 17-07. 3 E for presentation).

The delegate from Brazil gave a presentation on the CB activity (technical workshop on hydro/cartography river survey) held in Peru (see MACHC Doc. 17-07. 3 F for presentation).

The Commission notes that participation from the Industry should be consolidated through partnerships.

The proposed activities for 2016 ²are:

- MSI and Hydro Governance Workshop;
- MSDI and Data Management Workshop;
- SDB Workshop based on the GEBCO cook book;
- Hydrographic Awareness Seminar.

Action:

- IHB to submit a proposal regarding the creation of a rooster of experts.
- CB element to be included on the website (persons trained, experts etc.)
- CB questionnaire to be tabled at IRCC7.

IHB Announcement by President R. Ward

President Robert Ward announced that Princess Charlene of Monaco, the wife of Prince Albert II of Monaco, has given birth to twin babies, Gabriella and Jacques. The twins are born on the 10th of December 2015. Prince Jacques will be next in line to the Monaco throne.

On behalf of the MACHC the Chair congratulates the Prince and Princess of Monaco with the birth of the royal twins.

16. Presentations/papers

16.1 IHO Capacity Building: Industry contribution

For presentation, see MACHC Doc.15-06.1.1.

16.2 Building a Hydrographic Office from scratch

For presentation, see MACHC Doc.15-06.1.2.

16.3 Update on ENCs and RENC activities

For presentation, see MACHC Doc. 15-06.1.3.

16.4 Presentation NOAA on AIS Analysis

For presentation, see MACHC Doc. 15-06.1.4.

Action:

 US to invite the Cruise Lines International Association (CLIA) to make a presentation at the 16th MACHC meeting

² For full report see MACHC Doc. 15-07.3C

16.5 Hydrography integrated systems and platform

For presentation, see MACHC Doc. 15-06.1.5.

17. National Reports

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

- 1. Brazil to engage other countries in the MACHC region and other RHCs to develop a platform in the area of Inland ENC (IENC).
- 2. States to make full use sea riding opportunities to gain experience and share knowledge.
- 3. Technical visit to Haiti postponed to 2016 because of busy political agenda Haiti.
- 4. IALA to assist Haiti in preparing for the technical visit.
- 5. IHO membership of Haiti to be resolved in the first part of 2015.
- 6. ESRI will try to make its data available to Haiti.
- 7. States are urged to assist Haiti, where possible.
- 8. Netherlands to look at the possibility of sea riding opportunities for states.
- 9. Venezuela will make their hydrographic products available to the MACHC.
- 10. Spain to send training information to the MACHC Secretary. (CB Coordinator will coordinate these CB activities).
- 11. Spain to assist Mexico and other MACHC countries with the language issue (resolve the issue regarding recourses).

18. Satellite Derived Bathymetry

18.1 UKHO Satellite Derived Bathymetry Testing update

Mr. Sam Harper (UKHO) gave a update on the UKHO satellite derived bathymetry testing project.

The delegate from Antigua and Barbuda thanked the UKHO for their continued support and for the hydrographic surveys conducted in the English Harbor and other harbors in Antigua and Barbuda.

The UKHO remains committed to work with any provider regarding survey techniques. When using data collection techniques it is important to pay special attention to the data quality (accuracy of data). The IHB fully underscores the importance of data quality. The SDB was developed to measure water columns and not water depths.

18.2 Satellite Derived Bathymetry

Dr. Thomas Heege (EOMAP) gave a presentation on satellite derived bathymetry. For presentation, see MACHC Doc. 15-09.2.

The Chair thanked Dr. Heege for the presentation and extended an invitation to EOMAP for the 16th MACHC meeting.

Actions:

- Uncertainties with regard to SDB have to be dealt with;
- Further information on this topic is needed (presentation for 16th MACHC);
- Emerging data acquisition techniques will be a standing item for the MACHC meetings.

19 Maritime Safety Information (MSI)

19.1 Maritime Watch WWNWS

Mr. Jim Rogers (USA (NGA)) presented on the work of the World Wide Navigational Warning Service and Maritime Safety (see Doc. MACHC15.06.3.1). The title of his presentation was "Maritime Safety Watch: NAVAREA IV / XII". The Chair noted that the coastal state is responsible to issue navigational warnings. The relevant states were asked to update their contact information in the NAVAREA IV list.

The Chair thanked the delegate for the presentation and extended an invitation to the WWNWS for the MACHC 16 meeting.

The MICC Chair informed the Commission of two meetings which are scheduled for 2015:

- International Tsunami Symposium Commemorating 50th Anniversary of the Pacific Tsunami Warning and Mitigation System (20-21 April 2015, USA).³
- Tenth Session of the Intergovernmental Coordination Group for the Tsunami and Other Coastal Hazards Warning System for the Caribbean and Adjacent Regions (ICG/CARIBE EWS-X) (19 - 21 May 2015, Sint Maarten);⁴

Actions:

- MICC Chair to send the information regarding the meetings to the MACHC Secretary.
- Delegates to update their contact information in the NAVAREA IV list.
- MS to respond to the RAC/REMPEITC Carib survey.
- Invite the Caribbean Disaster Agency to attend the MACHC meetings.

19.2 E-Navigation

Mr. S. Bennett (IALA) gave an overview presentation on E-Navigation. E-Navigation is the harmonized collection, integration, exchange, presentation and analysis of maritime information onboard and ashore by electronic means to enhance:

- berth to berth navigation and related services (VTS);
- safety and security at sea; and
- protection of the marine environment.

For the presentation, see MACHC Doc. 15-06.1.6.

The Chair thanked Mr. Bennett for the presentation and extended an invitation to IALA for the 16th MACHC meeting.

³ http://www.ioc-tsunami.org/index.php?option=com_oe&task=viewEventRecord&eventID=1597

⁴ <u>http://www.ioc-unesco.org/index.php?option=com_oe&task=viewEventAgenda&eventID=1634</u>

The IHB complimented Mr. Bennett on the presentation as it was a very comprehensive presentation on what E-Navigation is and its benefits to the industry. Action:

1. Follow up presentation on the developments regarding E-Navigation for the next MACHC meeting.

20 Associate membership Costa Rica

The Chair informed the Commission that the Government of Costa Rica by letter dated 11 December 2014 had indicated their interest to apply for associate membership of the MACHC at the 15th MACHC meeting.

The Chair invited the delegate from Costa Rica, Mr. D. L. Obando to sign the MACHC Statutes and welcomed Costa Rica as the thirteenth Associate Member of the MACHC.



Mr. M. Amafo, Mr. D. L. Obando and Mr. R. Ward

21 MACHC Commissions and Working Groups

21.1 Marine Economic Infrastructure Programme (MEIP) Working Group Report

Mr. Chris Thorne (UK), Chair of the MEIPWG, introduced the MEIP report; see Doc. MACHC 15-07.1 for full report. The MEIP-WG Chair reported on the MEIP developments and asked guidance of the Commission for determining the future of the MEIP WG. The MEIP WG encounters a lot challenges and the direction from the Commission is needed because in the area funding the MEIP WG needs to transform into a self-financing WG.

The Chair thanks the former MEIP chair, Mr. T. Lewis, for the work that the MEIP has done under his leadership.

Mr. Jim Rogers (USA) is elected as the MEIP vice Chair.

The Netherlands, Suriname, United Kingdom, USA, France, Columbia, Mexico, Brazil, Guatemala and IC-ENC have confirmed their participation in the MEIP WG. Other members were invited to contact the MEIP Chair to indicate their willingness to join the MEIP WG.

The Chair called upon the Commission to support the MEIP WG in their work.

On the 13th of December 2014 the MEIP Chair presented the MEIP proposal to the Commission (See Doc. 15-07.1). This MEIP project arose from the 12 Meeting of the MACHC in St Kitts in 2011. The aim of the project was to make the link between hydrography and its economic benefits.

The MEIP concept is based on the Spatial Data Infrastructure.

The proposals from the MEIP are:

- Incremental approach;
- Encourage participation;
- Using existing opportunities.

The Chair thanked the MEIP Chair for the report. The USA indicated their support to the proposal from the MEIP. The USA also supported the development of a MACHC ENC for implementation and the participation of the MACHC within the IHO MSDI WG. The Netherlands is the vice Chair of this WG and has indicated their willingness to represent the MACHC within the IHO MSDI WG.

The IHB referred to the TOR of the MEIP regarding the promoting of databases but the TOR does not imply the creation or building of databases. The USA supported by ESRI clarified that there is no need to create a new database.

Decisions:

• The MEIP WG will use the existing structure or database from NOAA. Timeframe: next MACHC meeting.

Actions:

- The MS are urged to make the necessary contributions (information, data) to the MEIP WG.
- If there is a need to revisit the TOR, the MEIP Chair should present a paper to the Commission.

21.2 MACHC Integrated Charting Commission (MICC) Working Group Report

Mr. J. Nyberg (USA (NOAA)), MICC Chair, introduced the MICC report; see Doc. MACHC 15-07.2A for the full report. The MICC Chair reported on the MICC developments and proposals followed by consideration by the Commission.

In 2014, the MICC held two conference calls (March 19 and June 19) and one face-to-face meeting on October 5, in conjunction with the Extraordinary International Hydrographic Conference in Monaco. The MICC WG also on December 11, 2014 just prior to the MACHC Conference. Between calls and meetings, participants communicated primarily via e-mail

and the new revised MACHC Committees website at <u>http://www.iho-machc.org/</u>, where summary minutes of these calls and meetings can be found.

The MICC made the following recommendations for 2015:

1. MICC continues to monitor and update the Region B, both for the Atlantic and Pacific side, ENC scheme for all Usage Bands, per the timetables indicated in Annex A.

2. As a permanent task, MICC invited all MACHC Member States to provide the MICC with updates to their ENC production plans.

3. In order to create the IHO worldwide ENC database, the MICC encourages all ENC producers to make their ENCs available through Regional Electronic Navigational Chart Coordinating Centers (RENCs), even if they are also distributed by different channels.

4. If Member States are unable to complete their ENC coverage in the designated timeframes, the MACHC, in partnership with appropriate authorities, should pursue options to address this situation, in accordance with the IMO ECDIS Requirements and the WEND principles.

5. MICC continues to monitor and update the Region B INT Chart scheme for all scales for both the Atlantic and Pacific sides.

6. As a permanent task, MICC invited all MACHC Member States to provide the MICC with updates to their INT Chart schemes and production plans.

7. MICC encouraged Member States to synchronize the release of new (and updated editions) "INT Charts" and "ENCs" as best as possible.

8. MACHC Chair was invited to provide this report to the International Hydrographic Bureau (IHB) as the region's contribution to global (ENC and INT) chart coverage so that it may be conveyed as appropriate to the IMO.

The MS took note of the presentation.

The Chair thanked the MICC Chair for the report.

Actions:

- UKHO to form a correspondence group in order to develop a risk management tool.
- The direction forward is approved.
- MICC to cover the inland ENCs. (MICC Chair to contact IC-ENC and the IHG for the inland ENC standard).
- IC-ENC to participate in MICC WG.
- Work plan MICC WG is approved.

• Members are invited to contact the MICC Chair if they wish to participate in the MICC WG

21.3 MACHC Capacity Building

See item 15.

22 Reports from relevant International and Regional Organisations

22.1 Organisation of Eastern Caribbean States (OECS)

Dr. Asha Singh, Head Ocean Governance Unit, OECS Commission, presented the report" Sustainable Ocean Governance in the OECS: The importance of Hydrographic Data".

For full report see MACHC Doc. 15-08.e. The Chair thanked the OECS for the presentation and for attending the meeting. He invited the OECS to attend the next MACHC meeting and to give an update on the OECS project.

The Chair invited the OECS to look at ways to consolidate the relationship with the IHO and the MACHC. The IHB suggested that the IHO and the OECS sign an MOU in that regard.

Actions:

- OECS to become an observer to MACHC.
- OECS to join MEIP WG.
- OECS to work together with the MACHC in order to develop common areas of collaboration (e.g. donor ship for MACHC projects).

22.2. Commission Centro Americana de Transporte Maritimo (COCATRAM)

The representative from COCATRAM gave an oral presentation on the developments within his organization.

The Chair thanked the delegate for the presentation and extended an invitation to COCOTRAM for the next MACHC meeting.

22.3 International Association of Marine Aids to Navigation and Lighthouse Authorities (IALA)

Mr. Stephen Bennett; Programme Manager IALA WWA gave a presentation on behalf of the IALA and the IALA World-Wide Academy. For the full presentation see MACHC Doc. 15-08.b.

The Chair thanked Mr. Bennett for the presentation and the IALA for the training provided to the MACHC region and extended an invitation to the IALA for the MACHC 16 meeting. The Chair encouraged the MS to discuss the planning technical visits with the IALA.

22.4 International Maritime Organisation (IMO)

Mr. C. Young (IMO Regional Maritime Adviser for the Caribbean) on behalf of the IMO gave a brief report on the 1st Session of the Sub-Committee on Safety of Navigation, Communication and Search and Rescue (NCSR), the 94th Session of the Maritime Safety Committee (MSC), the 64th Session of the Technical Cooperation Committee and an update on the IMO Member State Audit Scheme and developments in the region. The IMO Assembly, at its 28th session, endorsed that IMO Members that are not yet members of IHO should consider joining the IHO.

Within the region, at the High-Level Symposium held in Jamaica in 2013 the ministers responsible for maritime transport and their representatives committed themselves to the provision of adequate hydrographic services for ships navigating in the Caribbean region in accordance with applicable international instruments within the framework of regional and national maritime policies.

In that regard, the Council for Trade and Economic Development, COTED) of the CARICOM Community (CARICOM) established a Maritime Transport Committee (MTC), through its Regional Transport Commission (RTC), to consider the Jamaica 2013 High-Level Symposium Resolution. The MTC is developing a matrix of maritime projects for the consideration of the RTC.

For the full presentation see MACHC Doc. 15-08.d.

The Chair thanked the RMA for the presentation and extended an invitation to the IMO for the next MACHC meeting.

Action:

• MS to complete their Maritime Profile within the GISIS database.

22.5 Pan American Institute of Geography and History (PAIGH)

Mr. Paul Cooper of CARIS also represented PAIGH at the meeting and provided an update on the PAIGH activities (see Doc. MACHC 15-08.f).

Mr. Cooper informed the Commission that the U.S. Hydro 2015 Conference, presented by The Hydrographic Society of America, will be held at the Gaylord Hotel in National Harbor, MD, on March 16-19, 2015. The conference will include technical sessions and a poster session on the latest developments and applications in hydrographic surveying, multibeam and side scan sonar, data management, electronic charting, marine archaeology, and related topics.

The Chair thanked the PAIGH for the presentation and invited the PAIGH to the 16th MACHC meeting.

22.6 Panama Canal Authority

The representative from the Panama Canal Authority gave a presentation on the developments within the Panama Canal Authority. For the full presentation see MACHC Doc. 15-08.m.

The Chair thanked the Panama Canal Authority for the presentation and invited the Panama Canal Authority to the 16th MACHC meeting.

22.7 Caribbean Memorandum of Understanding on Port State Control (CMOU)

Amb. Dwight Gardiner as Chair of the CMOU gave a brief presentation regarding a perspective on the synergies that exist between the CMOU and the MACHC (see Doc. MACHC 15-08.j).

The Chair on behalf of the Commission congratulated Amb. Dwight Gardiner on his appointment as Antigua and Barbuda's Ambassador Extraordinary and Plenipotentiary.

The Chair thanked the CMOU for the presentation and invited the CMOU to report on the outcome of the conducted CIC's at the 16th MACHC meeting.

22.8 Radio Technical Commission for Maritime Services (RTCM)

Mr. R. Ponce presented a report on behalf of the RTCM. For the full presentation see MACHC Doc. 15-08.g.

The Commission took note of the report.

The Chair thanked Mr. Ponce for the report.

22.9 Instituto Nacional de Estadistica Y Geografia (INEGI)

The representative of INEGI presented an update on the Project for MSDI development in the Islands of the Caribbean Sea. For the full presentation see MACHC Doc. 15-14.

The Chair thanked the delegate for the presentation and invited Mexico to present an update on the progress at the 16th MACHC meeting.

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

The representative of the IBCCA presented the "Reporte del Editor Principal del Proyecto de la Carta Batimétrica Internacional del Mar Caribe y Golfo de México (IBCCA)". For the full presentation see MACHC Doc. 15-08.c.

The Chair thanked the IBCCA for the presentation.

23 Report 5th EIHC

IHB President, Mr. R. Ward, presented a report of the 5th EIHC held in Monaco, October 2014.

A number of States present at the 15th MACHC meeting were also in attendance at the 5th EIHC. Three reports were considered at the conference (Staff regulation and revision of the regulations, the CB Strategy and the report and review of the technical capacity of the Secretariat).

MSDI, SDB⁵ and CSB⁶ were also an important topic at the conference. The SDB has potential and should be considered for the future to gather or collect data. Ba

The Chair thanked the IHB for the report and encouraged the MS to get involved in the WG of the IHB and to attend the future meetings. The Chair also thanked the IHB for the support to the MACHC.

24. Maritime Funding

24.1 Invited Organisations

The Chair presented a report on the Organisations that were invited to attend the 15th MACHC meeting. See MACHC 15-13.1 for the full presentation.

The Organization of Eastern Caribbean States (OECS), International Maritime Organization (IMO), Caribbean Memorandum of Understanding on Port State Control (CMOU), Commission Centroamericana de Transporte Maritimo (COCATRAM) and the Panama Canal Authority attended the 15th MACHC meeting.

Conclusion:

• 5 of the 22 invited Organizations were present at the 15th MACHC Meeting.

Action:

• The MACHC should keep inviting the relevant Organisations to attend the MACHC meetings.

24.2 Invited Financial Organisations

The Chair presented a report on the Financial Organisations that were invited to attend the 15th MACHC meeting. See MACHC 15-13.2 for the full presentation.

25. Any other business

The UK will be hosting a shallow survey conference in September 2015. The focus will be on common data set activities.

26. Date and Venue of the next meeting

The Chair informed the Commission that Antigua and Barbuda offered to host the 16^{th} MACHC meeting. A letter was received from the Antigua and Barbuda Department of Marine Services and Merchant Shipping (ADOMS) stating that the Government of Antigua and Barbuda approved the hosting of the 16^{th} MACHC meeting. The MS present approved the hosting of the 16^{th} MACHC meeting. The proposed dates for the 16^{th} MACHC meeting are 10 - 12 December 2015. A Safety of Navigation Seminar on the 7 and 8^{th} of December 2015 will precede the 16^{th} MACHC meeting. The chair will inform members accordingly when the final dates for the 16^{th} MACHC have been set.

⁵ Satellite Derived Bathometry

⁶ Crowd Sourced Bathometry

Candidates for hosting of the 17th MACHC meeting are invited to send their proposals to the IHB and MACHC Chair.

27. Election of Chair and Vice Chair

The Chair informs the Commission that the Netherlands (current vice Chair) has indicated their desire to take over the position as Chair MACHC. Antigua and Barbuda and Brazil support the nomination of the Netherlands for the position as incoming Chair.

The Chair also informs the Commission that Mexico has indicated their desire to become the new vice Chair of the MACHC.

The USA and Columbia as Members of the MACHC support the nomination of Mexico as incoming vice Chair.

Decision:

- The Netherlands (Mr. Marc van der Donck) is elected as the incoming Chair.
- Mexico (Mr. R. L. Cruz) is elected as the incoming vice Chair.

The Chair congratulates both gentlemen on their election as Chair and vice Chair of the MACHC and wishes them success in leading the MACHC to greater heights.

28. Closing

The Chair thanked the Government of Mexico for organizing and hosting the Second Mexican Hydrographic Conference, the Hydrographic Seminar, the Industry Day activities and the 15th MACHC meeting.

On behalf of the Commission he expressed the gratitude for the excellent organization of the aforementioned events. He also thanked the translators for a job well done.

The Chair was also commended on his excellent leadership during the meeting.

The Chair presented some gifts to the IHO President, the MICC Chair, the former MEIP Chair (Mr. T. Lewis) and the CB Coordinator. The Netherlands also presented Mr. Amafo as the outgoing Chair with a gift.

The IHB complimented the MACHC on the excellent meeting. The MACHC is one of the active RHCs of the IHO and he looks forward to the further development of the MACHC.

The Chair concluded the meeting by thanking the Members, the industry, the International and Regional Organizations and all the participants for their contributions and also commended them on the outstanding work delivered.

Meeting closed.