



5th Caribbean Sea – Gulf of Mexico Hydrographic Commission
Electronic Chart Working Group Meeting
Biloxi, Mississippi USA
5 November 2002

Minutes

1. Welcome and Introductions

RADM Tom Donaldson (USA-Navy), Chair of the CGMHC, welcomed participants and introduced Doug Brown (USA-NOAA) the Chair of the ECWG. LCDR Rafael Ponce (Mexico) was introduced as the new Vice Chair. Due to a reassignment at NOAA, this is Doug Brown's last meeting as Chair. He will be succeeded by Katie Ries (USA-NOAA). Dr. Lee Alexander (USA – University of New Hampshire) serves as Technical Coordinator.

2. Approval of Minutes from Last Meeting

The Minutes of the 4th Meeting held in conjunction with the 16th IHC in Monaco were approved.

3. Background and Meeting Objectives

Chairman provided a brief background and overview of the ECWG. He mentioned that the initial focus was to be an extension of the SHARED Project. However, at the IHO-organized Workshop on ENC production, distribution, and services at GEOMATICA 2002 (Havana, February 2002), it was recommended that the Project focus on capacity building with EC products and services as a final outcome, and be renamed the *CGM Electronic Chart Implementation Project*. To achieve this goal, a Pilot Project should be conducted in a selected, limited area.

The three primary objectives of this meeting are:

1. decide on geographic area of Pilot Project
2. determine the necessary steps (i.e., actions)
3. establish task groups for follow-up actions

4. Status of Hydrography and Charting in Region

Dr. Lee Alexander (USA–UNH) gave a PowerPoint presentation showing where recent hydrography and/or charts in the region exist, as well as where the major shipping routes are. Hans Ferwerda (The Netherlands) asked if there were further data on what ports had been identified by Cruise Line companies as needing improved chart data. Response: This effort is ongoing and updates will be provided to the ECWG over time. Dr. Williams (UK HO) suggested that the primary focus should be on producing official ENCs for major shipping routes, as was the original objective of the Extension of SHARED Project to the Region. It was explained that the scope and focus of this project has changed more to capacity building, facilitating regional intermodal transportation, and marine environmental protection. Dave

MacFarland felt that the Project should include a major port area, and also recommended that the ECWG look at the number of accidents and groundings.

5. Overview and Status of Plan Puebla Panama

LCDR Rafael Ponce (Mexico) gave a PowerPoint presentation that provided background information on the Plan Puebla Panama project, which is aimed at promoting economic development and advancing intermodal transportation in Mexico and Central America. Paul Cooper (USA-Navy) asked if it was known if other countries have established a budget for this Project. Response: None that are known. Denis Fuentes (Panama) asked if the Mexican HO had identified the hydrographic needs for this Project. Response: this is a government initiative and the HO needs to convince the national government of the importance of hydrography.

6. Overview and Status of COCATRAM

Capt. Frederico Bermejo (IHO) gave a PowerPoint Presentation providing some background and the current status of the *Joint COCATRAM/IHO/IMA Project (attached)*. COCATRAM' goals are to contribute to improving the efficiency and safety of the marine transportation system and to develop a regional hydrographic and cartographic center in Central America.

7. Overview of Regional Projects and Funding Opportunities

Dr. Milen Dyoulgerov (USA-NOAA advisor) gave a PowerPoint presentation: *CGMHC Region: Review of Selected Financing and Partnership Opportunities (attached)*. This presentation provided a brief overview of possible funding opportunities which may be accessed to support hydrography and nautical charting development in the region.

Denis Fuentes (Panama) asked if a proposal is made to GEF, must it be environmental? Response: there can be a hydrographic component, but there must be benefits to the environment.

Paul Cooper (USA-Navy) asked what is the approximate time line that is required to obtain funding from international organizations? Response: 1-3 years, depending on the type and size of the project.

8. Overview of Training Opportunities

Dr. Lee Alexander (USA-UNH) briefly introduced the paper: *Some Considerations Related to ENC Training. (attached)*

9. Options for Regional Distribution Services

Dr. Lee Alexander (USA-UNH) briefly introduced the paper: *ENC Distribution Options Based on WEND. (attached)*

10. Next Phase: Discussion of Options

Chairman explained that there are at least four planned or ongoing regional projects in which hydrography could be included:

- COCATRAM
- Plan Puebla – Panama
- Gulf of Honduras
- MesoAmerican Barrier Reef Project

Paul Cooper (USA-Navy) feels that these projects offer good opportunities. Denis Fuentes (Panama) asked who would fund the Pilot Project? The pilot project must be tied to one of these projects that already have some funding, and can include a hydrographic survey component.

Geographic focus (or area) of Project

What type of area(s) should be covered?

- routes or ports (or both)
- commercial or cruise ship
- existing or potential (desired in the near future)

Denis Fuentes (Panama) suggested that a small area of COCATRAM (Bays of Panama) could be selected in which funding may already exist that could be used to achieve hydrographic objectives.

Capt. Tyrone Hidalgo (Guatemala) suggested that the Gulf of Honduras might be preferable since environmental funds have been allocated.

Javier Diaz (Honduras) believes that the Project area should include several countries since cooperative data production and distribution are important Project goals.

Chair summarized:

- project geographic focus should be within COCATRAM area
- Pilot Project Task Group will work out details regarding which specific area warrants attention.

Dr. Wyn Williams (UK HO) commented:

- The Regional Commission should establish the strategy. The ECWG only recommends.
- He feels that the major ports and shipping routes identified earlier offer greater opportunity to produce ENC data in the near time.
- He feels that "lobbying for funds" may be a long-term process.
- If Member States believe that COCATRAM is the best way forward, this should be pursued.

However, ENC training, production and distribution can only be accomplished by actually producing ENC data.

Chairman suggested that bi-lateral arrangements also should be examined.

Denis Fuentes (Panama) responded that without funding, ENC production is not possible.

The other ongoing regional projects offer an opportunity that should be pursued.

Dr. Wyn Williams (UK HO) suggested that this project should be elevated to the Commission level. Chairman noted that the working group should make a recommendation to the Commission to bring to light the importance of digital hydrography to other needs (e.g., environmental). Denis Fuentes (Panama) stated that the capacity for creating ENCs does not currently exist for many countries in the region. If a SHARED-type project is undertaken, it could not be accomplished without financial and technical assistance from the countries that have the appropriate capabilities. If such support isn't possible, other sources of funding will be necessary. To receive this funding, the working group should prove the importance of hydrographic data that could support a range of regional needs.

Dr. Wyn Williams (UK HO) agreed with Panama, but suggests a parallel track focusing on ENC production to support major ports and shipping routes. The UK offers training courses in hydrography, ENC production and distribution that could serve the region.

Denis Fuentes (Panama) responded that training in UK would indeed be helpful. However, regional HOs still require funding (in addition to such training) for ENC production.

Calvin Thompson (Jamaica) commented that he felt the role of meeting has become confused and the stated proposals will not contribute effectively to building regional ENC capacity.

Chairman stated that working group is heading down parallel tracks, both with same goal.

Dr. Wyn Williams (UK HO) noted the importance of the proposed project, but offered that the working group should focus on charting needs in the short term and contribute to such international environmental/developmental initiatives in the longer term.

The Chairman offered to respond to this two-track approach by creating two separate task groups: one for the pilot area as suggested earlier, and one for a region-wide approach to developing ENCs.

Calvin Thompson (Jamaica) stated that the projects should be used to build capacity in as many countries as possible.

Chairman then requested volunteers to chair and serve on the two task groups (Chairman also noted that the U.S. offers full support to the chair).

The task group participants and actions include the following:

Meso-American Pilot Project Task Group

Chair: Panama

Members: Guatemala, Honduras, Mexico, Nicaragua, and U.S.

The long-term goal of this group is to increase regional capacity to conduct hydrography and produce paper, raster and ultimately electronic navigation charts. Hydrography for its own sake does not tend to attract resources, so its uses for purposes other than navigation (such as economic development, environmental protection, etc.) must be demonstrated in order to access funding from international donor organizations. Major regional development (Plan Puebla-Panama; COCATRAM) and environmental projects (Gulf of Honduras; MesoAmerican Barrier Reef Project) funded by organizations such as the World Bank, Global Environment Facility (GEF), etc. are concentrated in MesoAmerica. The task group will initially focus on the Gulf of Honduras project and actively pursue the hydrographic components. If successful, then the project will be expanded to include other countries.

Initial steps include:

ACTIONS:

- Send list of GEF and other national points of contact for the Gulf of Honduras project to all group members (US)

- See if the Gulf of Honduras Project is available in Spanish and send to all group members (US has the lead, but the other countries should see if they can find copies in Spanish in their own countries)

- Guatemala, Honduras, Nicaragua and Panama need to:
 - Read the Gulf of Honduras Project proposal, specifically the sections related to marine transportation/hydrographic needs.
 - Define and document their national needs, objectives, etc. relative to this project area.
 - Make contact with their national (COCATRAM, CCAD, GEF, etc.) representatives. It is very important to establish these contacts to ensure that this project reflects the hydrographic needs.
 - Task group members must “sell” this idea to superiors, if their superiors need to make the overtures to the national points of contact. Also stress that the COCATRAM project is complementary not competitive.
- Get IHB to help develop a hydrographic proposal representative of the region to incorporate into COCATRAM or other regional projects. (US lead)
- Make contact with the IADB Project Coordinator (Michelle Lemay) to let her know that these countries have the interest and expertise to participate in the Gulf of Honduras project. (U.S. will draft a message on behalf of the participating countries, send to these countries for review, and then forward message to Michelle Lemay.)
- All group members will identify upcoming meetings that could be considered as venues for future meetings of the Electronic Chart Working Group. Send these suggested meetings, locations, and dates to Meg Danley, e-mail:meg.danley@noaa.gov. The U.S. Hydrographic Conference 2003 is the most likely option (Biloxi, March 2003) for the next meeting.
- Develop “Terms of Reference” for this task group (U.S. will draft and distribute to other group members for review)

Region-wide ENC Production and Distribution Task Group

Chair: Mexico (tentatively)

Members: Colombia, Cuba, Jamaica, The Netherlands, Panama, Trinidad and Tobago, United Kingdom, United States, and Venezuela

This Task Group decided that the first step to progress the Implementation Project was to provide guidance and direction to the group. To accomplish this, it was considered useful to start with “Terms of Reference” for this Task Group.

After Terms of Reference have been drafted, the logical initial step is to identify the target Routes and Ports. It was decided that we start with the information contained in Dr. Lee Alexander’s presentation. The United States noted that some additional information on routes/ports presented at the Caribbean Shipping Association Conference (October 2002) should be available shortly and will be distributed to the group. The United States also commented on a publication, “The CSA Handbook of Caribbean Ports” which contains information on port traffic and may be useful in the port selection process. A summary of the port traffic information contained in this publication will also be made available to the group.

It was agreed that the choice of routes would be made on an objective basis using a statistical analysis. UK offered to provide a sample table for discussion by the group.

Once routes were identified, a determination of what type of chart coverage (paper, RNC, ENC) already exists will have to be made, followed by identification of which cells are on the chosen routes, who will be responsible for producing them, and how to distribute.

After the above initial steps, future actions would include Training, Production, and Maintenance and Distribution of the products. The United Kingdom is expected to play a significant role in this activity.

A logical, but important consideration, whether we are content to make ENCs from existing paper charts, was deliberated. While it may not be the preferred approach, the group considered the alternatives and concluded that we could not wait for new surveys to be conducted or expend the time needed to go back to original surveys to make ENCs. Thus the group decided that we would make ENCs from existing paper charts in those areas where gaps in recent survey data existed, until such time when new survey data becomes available.

The United States volunteered to place this information on the web site (<http://www.iho-cgmhc.org>).

ACTIONS:

- Draft Terms of Reference for the Task Group by Nov. 30, 2002 (UK Action)
- Share/distribute additional data on routes and ports with the group members by Nov. 30, 2002. (US Action)
- Obtain details of current ENC coverage and future ENC coverage with expected production time frame. (ECWG will send a message to the whole Commission requesting input.)
- Prepare and circulate sample route selection table (UK action)
- Initial selection of routes/ports by the March 2003 meeting. (All Members)

Chairman noted that he will recommend this parallel track, two task group approach to the Commission.

Adm. Andreasen (US NIMA) offered to inform members of the working group where their surveys have been conducted in the region.

Dr. Wyn Williams (UK HO) gave a PowerPoint presentation on the UK proposal for the task group on region-wide ENC production and development: the International Centre for ENCs (IC-ENC). The presentation focused on examining capacity building through ENC training, production, and distribution.

Jean-Luc Deniel (France) commented that IC-ENC is not the only method for ENC distribution; PRIMAR still exists in some countries, for example. The Members have time to consider the best distribution method for the region, as ENC production is a ways off, but

France noted the region must examine all the options for distribution before deciding on one mechanism.

Chairman concluded the meeting by noting that it met expectations and achieved the meeting objectives by selecting a pilot area based on the following criteria:

- Where the Pilot Project can demonstrate value for both regional economic and environmental priorities.
- Where greatest demand exists for charting products and services.
- Where surveys have already been conducted or are planned in the near future.
- Where funding potential and political support is highest.

11. Follow-up Actions

Develop milestones for discussion at next ECWG meeting.

12. Date and Location of Next Meeting

Tentatively Biloxi, Mississippi, USA. March 2003, however, Members are investigating other potential sites.



**DRAFT
TERMS OF REFERENCE**

for the

**MesoAmerican – Caribbean Sea Hydrographic Commission
Electronic Chart Working Group**

1. Background

The Electronic Chart Working Group of the MesoAmerican – Caribbean Sea Hydrographic Commission (MACHC-ECWG) was formed to encourage the production of electronic chart data and to promote the use of official electronic chart data, e.g. Electronic Navigational Charts (ENCs) and Raster Navigational Charts (RNCs), for the region aboard ECDIS-equipped vessels. The overall goal is to demonstrate and facilitate the use of integrated official electronic chart data (ENCs and RNCs) for safe, efficient, and environmentally-sensitive maritime navigation. Recognizing that regional capacity to produce ENCs is currently limited, improving coastal states' ability to acquire data and produce accurate paper and electronic charts has been identified for special emphasis. Respectively, exploring opportunities for alternative uses and support for the acquisition of hydrographic data and services forms an integral part of this effort.

2. Objectives

- a. Facilitate the production and use of official Electronic Chart (EC) data within the region, including Electronic Navigational Charts (ENCs) and Raster Navigational Charts (RNCs).
- b. Improve hydrographic capacity of regional coastal states towards the long-term goal of producing ENCs.
- c. Identify sources for acquiring and installing the necessary equipment, software tools and related training.
- d. Speed up ENC coverage of the region, particularly in key ports and along major shipping routes.
- e. Establish an EC data distribution service among Hydrographic Offices (HOs) within the region.
- f. Increase the awareness of the benefits to using official EC data.

3. Authority

The Electronic Chart Working Group (ECWG) is a special Working Group of the MesoAmerican – Caribbean Sea Hydrographic Commission (MACHC). Its membership and activities are in accordance with the Statutes of the MACHC.

4. Composition and Chairmanship

The ECWG membership consists of representatives from the MACHC, including:

- Full Members (IHO Member States within the Region who are signatories of the Statutes of the MACHC)
 - Associate Members (Regional Non-IHO Members who are signatories of the Statutes of the MACHC)
 - And other Members States of the IHO outside the MesoAmerican – Caribbean Sea Region who contribute to the safety of navigation through their activities in the fields of hydrography, nautical charting or nautical information in the Region and are signatories to these Statutes.
- a. Representatives of entities and/or organizations, which, in the opinion of the Working Group, can provide relevant and constructive contributions to the work of the ECWG, may be invited.
 - b. The ECWG will be chaired by a representative of a Member State. The Chair and the Vice Chair shall be chosen by the Member States represented in the WG, and will serve for a period of two years. Selections of the Chair and Vice Chair should occur at the first meeting of the WG after a Commission meeting. If no WG meeting is scheduled, selections shall be conducted within one year after the Commission meeting and shall be initiated by the existing Chair.
 - c. All members should inform the Chairman in advance of their intention to attend meetings of the ECWG.

5. Procedures

- a. Meetings shall be conducted by the ECWG Chair (or Vice-Chair in his/her absence) and shall generally be held in conjunction with MACHC meetings. Alternatively, the Chairman may call intercessional meetings as considered necessary or at the request of the majority of participants. A participating member shall normally provide meeting facilities and administrative support. Notification of meetings and an agenda with supporting materials will be distributed to participants and associated designated attendees at least 30 days in advance of a meeting. Action items and decisions will be identified at the end of each meeting.
- b. Decisions should generally be made by consensus. However, if votes are required on issues, only Member States may cast votes. Decisions shall be determined by simple majority of those present, or if by correspondence, by the majority of replies received within a pre-determined time frame. Votes shall be on the basis of one vote per Member State represented.
- c. The ECWG should work by correspondence, group meetings, workshops or symposia. The ECWG should meet at least once a year. In those years when the full Commission meets, the ECWG shall meet in conjunction with the Commission.
- d. Permanent or temporary Task Groups may be established by the ECWG to undertake detailed work on specific assigned topics. Specific actions for those Task Groups may be formulated and distributed to all ECWG members and appended to this document for reference.
- e. The ECWG meetings shall generally be conducted in English, unless all the participants agree otherwise and as resources permit. Minutes shall be produced in English, and Spanish, if resources permit.
- f. Within 30 days after a meeting, the Chair will promulgate minutes of meetings, including details associated with the decisions and actions.
- g. Amendments to these terms of reference may be made at any time by concurrence of the participating members.



DRAFT

**Procedures and Task Assignments
for the
MACHC ECWG Task Groups**

Background

At its meeting of 5 November 2002 meeting of the Electronic Chart Working Group (ECWG) of the MesoAmerican-Caribbean Sea Hydrographic Commission (MACHC), formerly the Caribbean Sea – Gulf of Mexico Hydrographic Commission, two needs were identified:

1. Build up national capacity for regional coastal states in need of assistance.
2. Increase ENC coverage of the region, particularly for major ports and shipping routes.

As such, ECWG formed two task groups to address these needs:

- Task Group 1 – MesoAmerican Pilot Project Task Group to improve capacity building of coastal states within a pilot area, towards the medium to long-term goal of producing ENCs.
- Task Group 2 – ENC Production and Distribution Task Group in the short to medium term.

Task Group Procedures

1. Membership is open to all members of the MACHC. Task Group members are encouraged to participate fully in the work of the group, and to share experience and expertise whenever possible.
2. The Chair of the ECWG assigns Task Group Chairs. These individuals can be a representative from a Full or Associate Member of the MACHC.
3. The work of the Task Groups shall mainly be carried out by correspondence, preferably by e-mail. The Task Group Chairs are responsible for providing secretariat support for Task Group activities.
4. The Task Groups shall generally meet in conjunction with the meeting of the MACHC - ECWG. The Task Group Chairs may call intercessional meetings as necessary or at the request of a majority of participants, as resources allow.
5. Meetings shall generally be conducted in English, unless all the participants agree otherwise. Spanish interpretation will be done as resources allow.
6. Minutes shall be produced in English and distributed within 30 days following each meeting. Spanish translation will be done as resources allow.

Goals and Assignments

Task Group #1 - MesoAmerican Pilot Project Task Group

Goal – Improve capacity building of coastal state hydrographic offices in a defined area by conducting a pilot project that demonstrates the benefits of nautical chart production as a means to improve safety of navigation, efficient inter-modal transportation, natural resource management, and growth in core economic sectors of the regional economies, such as tourism.

This Pilot Project involves several stages from conducting hydrographic surveys, to data acquisition/management, to paper nautical chart/RNC/ENC production. This project should demonstrate that hydrography can be used for purposes that extend well beyond navigation. It is also intended that this pilot project build partnerships as well as establish collaborative arrangements under regional development and environmental projects that are being funded by organizations such as the World Bank, Global Environment Facility (GEF), InterAmerican Development Bank (IADB).

Chair - National representative of Panama (Denis Fuentes).

Initial Members - Guatemala, Honduras, Mexico, Nicaragua, Panama, and USA.

Task Assignments -

1. The initial focus should be the IADB-led, GEF funded Gulf of Honduras Project that is presently under preparation. In particular, there is a need to ensure the inclusion of a hydrographic component, and to demonstrate the value of hydrographic data for meeting overall Gulf of Honduras Project goals. Subsequent to this initial effort the ECWG pilot project could be expanded to include other countries within the MACHC region.
2. The next steps include
 - a. Proactively promote hydrographic interests in the Gulf of Honduras project.
 - b. Prepare an Action Plan and Milestones.
 - c. Work with the IHO to develop a complementary hydrographic proposal representative of the region to incorporate into COCATRAM or other regional projects.
 - d. Identify other regional opportunities where hydrographic interests can be integrated.
 - e. Provide a progress report at each meeting of the MACHC ECWG.

Task Group 2 - ENC Production and Distribution Task Group

Goal - Facilitate the production and distribution of ENC data for major ports and shipping routes within the MACHC region. Promote the use ENC data by major shipping companies and cruise lines thereby contributing to safety of navigation, improved efficiency of maritime transportation, and marine environmental protection.

Chair - National representative of Mexico (CAPT. Cornelio Espinosa).

Initial Members - Colombia, Cuba, Jamaica, Mexico, Netherlands, Panama, Trinidad, UK, USA, and Venezuela.

Task Assignments -

1. Recommend a process for selecting ports and routes for priority ENC coverage. Specify appropriate selection criteria and weighting parameters.
2. Identify ENC production responsibilities for the selected ports and routes.
3. Prepare an action plan and milestones.
4. Recommend options for distribution of ENCs to the shipping market.
5. Recommend and, where appropriate, establish cooperative arrangements for ENC production, quality assurance and maintenance.
6. Provide a progress report at each meeting of the MACHC ECWG.

International Hydrographic
Organization



MesoAmerican-Caribbean Sea
Hydrographic Commission

TERMS OF REFERENCE
for the
MACHC ECWG TASK GROUPS

Background

At its meeting of 5 November 2002, the Electronic Chart Working Group (ECWG) of the renamed MesoAmerican-Caribbean Sea Hydrographic Commission (MACHC, formerly CGMHC), identified the need to both build up national capacity for hydrographic data acquisition and nautical chart production, and to speed up ENC coverage of the region, particularly along major shipping routes.

The ECWG decided to form two task groups to address these needs:

- Task Group 1 – Meso-American Pilot Project Task Group to improve capacity building of coastal state hydrographic offices within a discreet pilot area, towards the long-term goal of producing ENCs.
- Task Group 2 – ENC Production and Distribution Task Group to improve ENC coverage of the entire region.

The following are the terms of reference for both of these Task Groups.

Task Group 1- Meso-American Pilot Project

The primary goal of Task Group 1 is to increase regional capacity to conduct hydrography and produce paper, raster and ultimately electronic navigation charts. Hydrography has uses for purposes that extend well beyond navigation (such as economic development, environmental protection, etc.) and the benefits must be demonstrated in order to attract a wider audience. Major regional development and environmental projects funded by organizations such as the World Bank, Global Environment Facility (GEF), Inter-American Development Bank (IADB), etc. are currently concentrated in MesoAmerica.

The Task Group will initially focus on the IADB-funded Gulf of Honduras project and actively pursue ensuring the inclusion of hydrographic components and demonstrating the value of hydrographic data to the project goals. If successful, then the project will be expanded to include other countries.

Preliminary steps towards determining the viability and best approach to including MACHC expertise and input in the Gulf of Honduras project included the following:

- Distributed a list of GEF and other national points of contact for the Gulf of Honduras project to all Task Group members so that they can initiate communications. It is very important to establish these contacts to ensure that this project reflects the hydrographic needs.
- Distributed the Gulf of Honduras Project description in Spanish to all group members.
- Met with the IADB Project Coordinator (Michelle Lemay) to let her know that the MACHC members in the project area have the interest and expertise to participate in and contribute to the Gulf of Honduras project.

Next steps to be undertaken by the Task Group are:

- Read the Gulf of Honduras Project proposal, specifically the sections related to marine transportation/hydrographic needs. Define and document their national needs, objectives, etc. relative to this project area.
- Conduct a "gap analysis" within the Gulf of Honduras to determine current availability of hydrographic surveys and nautical charts within each country's waters.
- Determine appropriate representation from Belize, Guatemala, and Honduras to attend second project meeting to be held in Guatemala in February.
- Request IHB assistance with developing a hydrographic proposal representative of the region to incorporate into COCATRAM or other regional projects.

Task Group 1 will be chaired by a national representative of Panama. The Chairman will be responsible for providing secretariat support to the Task Group.

Membership is open to all members of the MACHC. Inaugural members are Guatemala, Honduras, Mexico, Nicaragua, and United States.

Task Group 2 - ENC Production and Distribution

The primary purpose of Task Group 2 is to overcome the lack of ENCs covering major ports and shipping routes of the MACHC region through promoting the production of ENC data by national hydrographic offices and thereby contributing to improved maritime and environmental safety.

The Task Group will undertake the following tasks:

- Select and prioritize routes for ENC coverage and production using objective criteria (by March 2003)
- Identify ENC production responsibilities along the selected routes
- Prepare an action plan and milestones
- Recommend options for distribution of ENCs to the shipping market

- Recommend and, where appropriate, establish cooperative arrangements for ENC production, quality assurance and maintenance
- Provide a report at each meeting of the MACHC ECWG

Task Group 2 will initially be chaired by a national representative of Mexico. The Chairman will be responsible for providing secretariat support to the Task Group.

Membership is open to all members of the MACHC. Inaugural members are Colombia, Cuba, Jamaica, Mexico, Netherlands, Panama, Trinidad and Tobago, United Kingdom, United States, and Venezuela.

Procedures for Both Task Groups

1. All members of the Task Groups are expected and encouraged to participate fully in the work of the group.
2. Members will seek to share experience and expertise whenever possible.
3. The work of the Task Groups shall mainly be carried out by correspondence, preferably by email.
4. The Task Groups shall generally meet in conjunction with the Electronic Chart Working Group of the MACHC. The Task Group Chairs may call intercessional meetings as necessary or at the request of the majority of participants.
5. Meetings shall generally be conducted in English, unless all the participants agree otherwise. Minutes shall be produced in English, and in Spanish when resources allow.
6. Minutes shall be produced and distributed within 30 days of the end of each meeting.
7. Amendments to these terms of reference can be made at any time but must be approved by the Chair of the MACHC Electronic Chart Working Group.

STRUCTURE OF THE ELECTRONIC CHARTING WORKING GROUP

Proposal

That the structure of the Electronic Chart Working Group (ECWG) and its two Task Groups be amended such that Task Group 1 (TG1) reports directly to the MesoAmerican - Caribbean Sea Hydrographic Commission (MACHC) and that Task Group 2 (TG2) becomes the MACHC ECWG.

Background

Whilst the ECWG does not currently have terms of reference, it is understood that it was brought into existence primarily to both speed up ENC production by hydrographic offices and to encourage shipping to use ENCs. This is embodied in the wording of the original concept for the Caribbean and Gulf of Mexico Electronic Chart Implementation Project.

There are two possible approaches to extending ENC coverage and these are illustrated by the terms of reference of the existing two ECWG Task Groups. One approach is to carry out modern surveys before producing ENCs. This is a long term approach and that taken by TG1. The second approach seeks to extend coverage more quickly by capturing existing paper chart bases in a digital form. This is a shorter-term approach and that taken by TG2.

Rationale for Proposing that TG1 should report to MACHC

The work of TG1, as defined in the terms of reference distributed on 10 January 2003, is primarily concerned with capacity building, the acquisition of hydrographic data and nautical (paper) chart production. Other than as a long-term goal, there is no mention of electronic chart production in the terms of reference for the group. The work of the group appears to be more closely aligned to the aims of Article 3 of the Statutes of the MACHC (i.e. capacity building) than it is to the aims of the ECWG. It is therefore proposed that TG1 should report directly to MACHC on what is effectively a regional hydrographic commission capacity building project.

If this proposal is rejected, it is strongly recommended that the terms of reference for TG1 should be amended (as shown below) in order to link the work of the task group more closely to the aims and objectives of the ECWG. (bold italics text indicates suggested new wording; old text is crossed out).

The primary goal of Task Group 1 is to increase regional capacity to ***support production and distribution of ENCs. This will involve a number of stages including improved data acquisition. As a by-product, the ability to produce up to date paper charts and create digital raster charts may be considered.*** ~~conduct hydrography and produce paper, raster, and ultimately electronic navigational charts.~~ Hydrography has uses for purposes that extend well beyond navigation (such as economic development, environmental protection, etc.) and the benefits must be demonstrated in order to attract a wider audience. Major regional development and environmental projects funded by organizations such as the World Bank, Global Environment Facility (GEF), InterAmerican Development Bank (IADB), etc. are currently concentrated in MesoAmerica.

Rationale for Proposing that the work of TG2 should be transferred to the ECWG

At present there are no terms of reference for the ECWG. Unless the aims and objectives of this group are broader than those of TG2, it is recommended that the work of TG2 should be transferred to the ECWG and the ECWG should adopt the terms of reference of TG2.