



REPORT
OF THE
4TH CONFERENCE OF THE
CARIBBEAN SEA AND GULF OF MEXICO
HYDROGRAPHIC COMMISSION

17-19 April 2000

PART 1

**4th Conference of the Caribbean Sea - Gulf of Mexico Hydrographic Commission
Kingston, Jamaica, 17-19 April 2000**

1. The 4th Conference of the Caribbean Sea - Gulf of Mexico Hydrographic Commission (CGMHC) was held in the Jamaica Conference Centre, Kingston, 17-19 April 2000, under the chairmanship of Rear Admiral John Clarke, Hydrographer of the Navy and Chief Executive of the United Kingdom Hydrographic Office (UKHO).

Opening Session

2. Rear Admiral Clarke welcomed the Hon Anthony Hylton, Minister for Foreign Trade, Mr Antony Smith, British High Commissioner for Jamaica, and delegates from 17 nations, territories and international organisations (see list at CGMHC 4/01/02.Rev.4). Admiral Clarke's opening address is at Annex A.
3. Mr Hylton, whose portfolio includes responsibility for marine affairs, acknowledged the importance of hydrographic surveying in support of transport, communications, resources and peace – it is an integral part of the nation. He referred to the UN Convention on the Law of the Sea. He stated that Jamaica had recently completed the formalities required for full membership of the International Hydrographic Organization (IHO).
4. Rear Admiral Guiseppe Angrisano, President of the Directing Committee of the International Hydrographic Bureau (IHB), presented Mr Hylton with the IHO crest, to mark Jamaica's accession as the sixty ninth member of the IHO.

Item 1: Administrative Arrangements

5. The Chairman outlined the administrative arrangements. The list of Conference Documents is at CGMHC 4/01/01, and the Programme of Events is at CGMHC 4/01/03 Rev.2.

Item 2: Approval of Agenda

6. The latest version of the proposed agenda, which had been circulated prior to the meeting, was considered and accepted, with the following amendments:
 - Item 7.2 (status of WEND /distribution of ENC's) was combined with Item 10.3 (ENC WG Session), the combined item being taken in Plenary.
 - The Training WG Session (Item 10.1) was cancelled, as Canada (WG Chair) had indicated that CGMHC training needs should be addressed through bilaterals.
 - INT Charting (Item 10.2) was taken in Plenary, rather than as a Working Group session.
 - Item 13 (Reports from the Working Groups) was cancelled, as all items relating to these WGs were taken in Plenary.
 - Under Item 14 (Any Other Business) a presentation by Jamaica on continental shelf delimitation was included.
7. The final version of the Agenda is at CGMHC 4/02/01 Rev.2. Some items were taken out of order to facilitate schedules.

Item 3: Chairman's Report and Review of Actions from the 3rd CGMHC Conference

8. A report, highlighting the activities of the Commission since the 3rd Conference, was presented by France (ICA Bertrand, on behalf of IGA Yves Desnôes, the new Hydrographer), as the outgoing CGMHC Chair (see CGMHC 4/03/01). Efforts had focussed on two initiatives, the Intersessional Meeting of the CGMHC ENC WG, in 1999, and organisation of the joint UK/French CGMHC Study Team visit to countries in the region in order to provide advice on the implementation of GMDSS and the collection and dissemination of nautical information.
9. The status of actions agreed at the 3rd CGMHC Conference was reviewed. Those actions which remain ongoing were included in the list of actions from this meeting (see CGMHC 4/17/01):

3/1: Signing of Statutes: Ongoing.

Action: All nations who have not yet signed the Statutes agreed at 3rd CGMHC (1998) are invited to sign at their earliest convenience. (*Signing sheets available from UK*)

[Post meeting note: CGMHC records indicate that signatories are as follows:

Members: Colombia (1998), Cuba (1998), France (1998), Jamaica (2000), Netherlands (1998), Trinidad & Tobago (2000), UK (1998), USA(1998)

Associates: Guyana (1998), Haiti (1998), Mexico(1994), Panama (2000)]

3/2: Status of Hydrographic Surveys (IHO S-55): Complete.

3/3, and 3/4: Inventory of Surveys: Ongoing.

US(CNMOC) reported only three responses had been supplied and agreed to issue the request again, within three months of this meeting. Collation of an inventory is dependant on the responses.

Action: US(CNMOC) to send out request again within 3 months of this meeting

3/5: GMDSS Arrangements: Discussion deferred to Agenda Item 11.

3/6, and 3/7: Training: Ongoing.

UK presented the Report of the CGMHC Training WG, on behalf of Canada, WG Chair (see CGMHC 4/03/02). Analysis of the limited responses to the training questionnaire had indicated that the most effective methods of delivery of training were the provision of modular training on specific elements, and workshops and seminars on specialised equipment and systems. If possible, such training should be provided through regional facilities. UK commented that the larger Hydrographic Offices (HOs) may be able to assist with training for the smaller counterparts, through bilateral arrangements.

It was agreed that training requirements could not be fully defined, due to the limited response to the questionnaire. Nations which had not previously provided input were invited to complete the questionnaire. UK and France undertook to liaise in considering how better to deliver training in the region.

Actions: All nations who have not yet completed the questionnaire (*available from UK*) to complete and supply to UK, *and*

Those nations attending the Conference for the first time, advise of outstanding actions involving the questionnaire so they may participate, *and*

UK/France to discuss and establish whether training can be delivered in the region.

3/8: Medium Scale INT Chart Scheme: Ongoing. Discussion was deferred to Agenda Item 10.2.

3/9: INT Chart Producer nations: Ongoing. Discussion was deferred to Agenda Item 10.2.

3/10: Large Scale INT Chart Scheme: Ongoing. Discussion was deferred to Agenda Item 10.2.

3/11: Amendment of boundary of INT Chart Region B to include Guyana: Complete. US(NIMA), Co-ordinator of INT Chart Region B, reported that the Co-ordinator of INT Chart Region C1 had agreed that Guyana should be included in INT Region B. Discussion on the possibility of amending the limit to include Suriname and French Guyana was deferred to Agenda Item 10.2.

3/12: Intersessional meeting of the CGMHC ENC WG: Closed. The report from the meeting was deferred to Agenda Item 7.2.

3/13: Arrangements for 4th CGMHC Conference: Closed.

10. Three Decisions of the 3rd CGMHC Conference, not related to the actions above, were reviewed:

CGMHC Decision 3/5: Support for ECDIS Proposal to IMO NAV44: Action closed.

CGMHC Decision 3/6: "Approved" Nautical charts: Action closed.

CGMHC Decision 3/7: IMO-IHO draft UN resolution: Action closed.

IHB reported that the proposed resolution was jointly signed in July 1998. The text was redrafted into a paragraph of a draft resolution, which was adopted as UN Resolution A/53/52 /1998 (see CGMHC 4/03/03). The Chairman noted that the paragraph endorses the world wide importance of hydrography and provides support for the development of hydrographic projects by providing a platform within national plans to raise awareness and assist in obtaining funding.

Item 4: Review of Statutes

11. The Chairman suggested that the current Statutes, as agreed at the 3rd CGMHC Conference (see CGMHC 4/04/01), required no further amendment, other than to attach a revised diagram showing the amended limits of INT Chart Region B to include Guyana, and possibly, eventually, French Guyana and Surinam. He encouraged those nations which have not signed the Statutes, as either Members or Associate Members, to do so. Noting that Colombia became a member of the IHO in late 1999, he invited Colombia to sign the Statutes as a Full Member of the Commission.
12. USA, referring to Article 8(a), sought confirmation that the simple majority of Full Members required for the adoption of Resolutions and Decisions means Full Members *present*. UK commented that that this was the intention when the Statutes were revised by the 3rd Conference. USA proposed an amendment to Article 8(a), in order to clarify the

voting procedure, and it was agreed that any objections to the revised text would be forwarded to the Chairman within 60 days of issue of the minutes.

Action: It is proposed that the word "present" be added at the end of the opening phrase, so that the revised paragraph of the Statute would read:

"The resolutions and decisions of the Conference shall be adopted by the simple majority of its Full Members present,"

Nations to notify the Chairman, within 60 days of issue of the minutes, of any objections they may have to this proposed amendment.

13. USA, referring to IHO Circular Letter 26/98 concerning the implementation of GMDSS, commented that the Statutes do not contain any reference which promotes the promulgation of navigational warnings, and proposed to draft an amendment. UK queried the need for such a reference to be specifically included, and it was agreed that USA and UK would discuss this issue outside the meeting.
[Post meeting note: USA and UK agreed there was no specific requirement for such a reference in the Statutes.]

14. Netherlands, referring to Article 4, noted the need to review the frequency of Commission conferences, now that the recent Extraordinary International Conference had agreed that the interval between IH Conferences will be 2½ years. IHB commented that this will be discussed at the XVIth IH Conference, in 2002.

Item 5: Report from the 2nd Extraordinary International Hydrographic Conference (EIHC)

15. IHB presented a report (see CGMHC 4/05/01) which included the IHO Strategic Plan and Work Programme for 2000-2004. IHB recommended that agenda items for future Regional Hydrographic Commission Conferences should correspond as closely as possible to the Work Programme.
16. USA(NIMA), as one of the CGMHC representatives to the IHO Strategic Planning Working Group (SPWG), noted that much has been achieved through the development of the Strategic Plan and Work Programme, but there remains much to do. US(NIMA) encouraged those CGMHC nations which are IHO Member States to participate in IHO activities, taking advantage of the Internet. Two areas of activity which are of particular significance are the introduction of "virtual" facilities and the involvement of industry in the development of standards and delivery of services and products.
17. USA, noting plans for the SPWG to examine the leadership and structure of the IHB, suggested that the eligibility criteria for election to the IHB Directing Committee required review.
18. The distribution of the Proceedings of the EIHC to CGMHC nations was discussed. In accordance with normal IHO practice IHB will distribute the Proceedings to IHO Member States. With the agreement of the IHB, UK undertook to provide those CGMHC nations which are non-IHO Member States with the EIHC Proceedings, when available.
Action: IHB to distribute final version of the Proceedings of the 2nd Extraordinary IH Conference to CGMHC nations which are IHO Member States, and
UKHO to distribute the final version of the Proceedings to those CGMHC nations which are non-IHO Member States, on request.

[Post meeting note: IHB distributed the Proceedings of the 2nd EIHC to IHO Member States in October 2000]

Agenda Item 6: National Reports

19. Colombia (see CGMHC 4/06/01)
20. Cuba (see CGMHC 4/06/02)
USA noted the significance placed on surveying important ecological areas. Cuba commented that surveys of such areas are of importance for developing tourism, protection of the barrier reefs and oil exploration.
21. Noting Cuba's ECDIS coverage of the Havana-Montreal route, the Chairman of the CGMHC ENC WG queried whether updates are provided and, if so, the mechanisms involved. Cuba confirmed updates are provided.
22. UK queried progress with production of INT charts in Cuban waters. Cuba explained that bilateral arrangements with other nations, which will allow for exchange of data in support of large scale INT charting, are under consideration.
23. France (see CGMHC 4/06/03)
24. Jamaica (see CGMHC 4/06/04)
25. Netherlands (see CGMHC 4/06/05)
26. Panama (see CGMHC 4/06/06)
Panama highlighted the transfer of responsibility for the Canal from USA (since 31 December 1999). The National Geographic Institute of Panama has been responsible for surveying, with US HYCOOP assistance, since 1996. Historically, charts have been produced by US(NIMA). Panama plans to develop their national capacity in order to undertake surveys and produce charts.
27. Trinidad (see CGMHC 4/06/07)
28. United Kingdom (see CGMHC 4/06/08)
In response to user demand 310 charts of waters around the UK will be transferred to WGS84 by March 2003.
29. USA(NOS/OCS) (see CGMHC 4/06/09)
Mr Jadkowski of Maptech, NOAA's Co-operative Research and Development Agreement partner, provided a presentation on the Raster Nautical Charts produced by the Office of Coast Survey, which are available on CD ROM. In addition to the charts the CDs also contain information from relevant nautical publications and photography. Updating is effected via the Internet. The charts can be viewed, free of charge, on the Internet.

30. UK queried whether the viewing facility includes free downloading. Mr Jadkowski explained that the facility is intended to enable to customer to view the product before purchase. While it is possible to print down the 10-12 chart images which comprise the whole chart it is impractical and time consuming.
31. USA(CNMOC)
Survey initiatives in the region include the use of LIDAR off the Yucatan Peninsula. Survey vessels have been deployed off the Caribbean coasts of Panama and Colombia. HYCOOP support has been provided in Belize, Colombia, Honduras, Jamaica and Mexico. HYCOOP is intended to initiate, stimulate and increase amount of hydro survey.
32. USA(NIMA) (see CGMHC 4/06/10)
NIMA provided a brief overview of US NAVTEX facilities on the East Coast of USA and in the Caribbean (Puerto Rico), including B₁ characters and the times of broadcast.
33. Venezuela
The recent natural disaster had meant resources had been diverted from hydrographic activity, but a Strategic Plan for 2000–2010 and beyond is being developed. This Plan includes development of a GPS network, decentralisation to create 6 hydrographic stations responsible for surveys and to act independently, increased capacity to acquire and process data, digitisation of archived data, and ENC production.
34. In the next two months the first students will graduate from national hydrographic surveying courses, previously Venezuelan students undertook such training in Spain, Brazil etc.
35. In response to a UK question concerning the use of NAVTEX, Venezuela explained that this is a responsibility of the Coast Guard. However, there will be dual installations.

Agenda Item 7: Developments since 3rd CGMHC Conference

Item 7.1: Report of the Caribbean Study Team

36. The Chairman outlined the background to the formation of the joint UK/France Study Team, which resulted from discussions at the 3rd CGMHC regarding implementation of the GMDSS in the region. He regretted the poor response from nations to his predecessor's invitation, which meant that several nations did not receive a visit. Of the nations which had accepted, all were visited, with the exception of the Dominican Republic which, regrettably, had proved logistically too difficult to include in the Team's itinerary.
37. UK (on behalf of UK and France) presented a summary report of the activities, conclusions and recommendations of the Study Team visit in December 1998, and some activities since (see CGMHC 4/07/01). The full Study Team Report was distributed by the previous CGMHC Chairman (France) in July 1999, under CGMHC Circular Letter 1/99.
38. Cuba, noting the importance of the Study Team, enquired why they not received a visit. UK explained that the Team only visited those countries which had responded to the invitation extended by the then CGMHC Chairman.

39. UK noted that, since the full Report was distributed in July 1999, there had been no feedback. Much effort had been expended on this initiative and nations' comments would be most useful. This was endorsed by the Chairman, who queried whether all nations had received the Report.

Actions: All nations to inform UK if a copy of the Study Team report is required, *and* All nations to provide comments to UK on action taken following the report and suggestions for further action/initiatives.

Item 7.2 (& 10.3): Status of WEND/Distribution of ENC's in the Region

40. Mr Doug Brown (US(NOS/OCS)), Chairman of the CGMHC ENC Working Group, presented a report of the Intersessional Meeting of the WG, Mobile, 30 April-1 May 1999 (see CGMHC 4/07/ 02). In accordance with Decision 3/4 of the 3rd CGMHC Conference the meeting considered the implementation of the WEND concept in the region. Several reports were presented, providing background for the discussion, plus a paper presented by the UK which examined a number of options for ENC production (see CGMHC 4/07/03)
41. The Intersessional Meeting recommended that the Commission consider the adoption of SHARED as an interim step towards implementation, in the longer term, of WEND. In order to inform the Commission's discussion on the recommendation, the WG Chairman, with UK's support, had prepared a background paper on SHARED in the region (see attachment to CGMHC 4/07/02).
42. The WG Chairman invited the Commission's comments on the recommendation. He suggested the formation of a WG to develop the concept further, by defining the project's scope and objectives, the activities required for implementation and the eventual outputs. He suggested the WG should carry out this work by correspondence, aiming to prepare a draft plan for discussion at an Intersessional meeting of the ENC WG in the margins of Oceanology 2001 (3-5 April, Miami). He commented that some financial assistance may be available to assist with delegates' travel costs.
43. The Commission Chairman, while acknowledging that, for some nations present, the main priority is production of paper charts, stressed that nations cannot ignore the requirement for digital charts and the plethora of commercial products which already exist. He emphasised the need for HOs to make plans, in anticipation of achieving ENC production capabilities. To ensure an effective distribution mechanism unity will be essential; nations may have to make concessions in order to meet the common aim. Electronic charts, particularly ENC's, are complex and there are many serious technical issues, which will require nations to be in agreement on principles. One nation, preferably from within the region, will be required either to link with the original Singapore-based SHARED, or to act as a co-ordinator for a separate Caribbean SHARED. He noted that the original SHARED project is working well and he recommended careful and steady progression in order to avoid the mistakes which have been made when implementing WEND in other regions.
44. France endorsed these remarks, and expressed support for the proposal. France reported they do not plan to produce any ENC's in the Caribbean in the short term, but they have

undertaken some research into routes in the Lesser Antilles in support of their proposals for ENC schemes in the area (see CGMHC 4/06/03).

45. Cuba supported the recommendation to extend SHARED to the Caribbean and enquired about the responsibilities of the co-ordinator. Cuba may provide a vessel as platform for trials. In answer to Cuba's query the Commission Chairman suggested that the WG should consider the production of some ENCs, to assist nations to initiate the process. Routes to be covered should be international, rather than national. The WG should
- Define the scope and aims of the trial
 - Define the role of the co-ordinator
 - Assess the data available for the trial
 - Submit a plan for the trial to the Commission
46. The route(s) for which SHARED could be trialed were discussed. USA(NIMA) suggested considering cruise ship routes, which would afford maximum advantage to all nations of the region, compared with using international trading routes.
47. In response to a question from Cuba regarding the composition of the WG, the WG Chairman stated that all nations of the region would be invited to participate.
Actions: All nations to consider the issues and inform the Chairman of the WG of their potential contributions to the project (including ENC production), for consideration at the proposed WG meeting, *and*
Chairman of CGMHC ENC Working Group to prepare a draft plan for implementing SHARED, in consultation with member states and other interested governments in the region, and distribute the draft plan by 31 December 2000, with a view to meeting at Oceanology 2001 (April 2001) to assess progress.
[Post meeting note: Chairman of CGMHC ENC WG distributed a draft plan in November 2000]
48. The Commission Chairman acknowledged that, although the issues are complex and, for some nations, difficult to comprehend, it is important that as many nations as possible participate. The implementation of WEND must be the ultimate target. IHB noted that the CGMHC decision to develop SHARED, as an interim step towards WEND, reflected the WEND proposals which had been made to the recent EIHC.

Item 7.3: International Coral Reef Initiative (ICRI)

49. Mr Erich Frey (US(NOS/OCS)) reported on the Coral Reef session of the Intersessional Meeting of the CGMHC ENC WG referred to in Item 7.2. The session had considered USA's proposals for improved symbology on nautical charts, to better protect coral reefs. The WG had agreed that the Commission should be invited to make recommendations to the IHO on uniform depiction of coral on nautical charts, in order to improve the protection of these environmentally sensitive areas and reduce the risk to safe navigation.
50. Two videos were played which illustrated the damage caused to reefs by groundings and ship's anchors and chains, then NOS/OCS introduced the ENC WG paper "Safe and Ecologically Sound Navigation: The Coral Reef Issue" which provided background information (see CGMHC 4/07/04) to the proposals for new symbology (see CGMHC4/07/05).

51. It was agreed that the symbology proposals should be passed to the IHO Chart Standardisation Committee (CSC), for consideration of adoption on all nautical charts produced by IHO Member States. The CSC should seek the views of other interested groups, such as the IHO Committee on Hydrographic Requirements for Information Systems (CHRIS), which will consider the implications for ENC's.
- Action:** US(NOS/OCS) to forward the proposal to the IHO Chart Standardisation Committee Chairman, for consideration of adoption of unique symbol for coral on all affected nautical charts.
- [Post meeting note: US(NOS/OCS) forwarded the proposal to the IHO CSC Chairman in June 2000]
52. The relevance of the ICRI to other Regional Hydrographic Commissions was noted and it was agreed that the CSC Chairman should be invited to inform the RHCs of the Initiative (and the proposed symbology). IHB undertook to ensure that it is included on the agenda of RHC conferences.
- Action:** IHO Chart Standardisation Committee Chairman to ensure other Regional Hydrographic Commissions are aware of the Coral Reef Initiative and the proposal.
- Action:** IHB to recommend that the Coral Reef Initiative should be included in the standing agenda for Regional Hydrographic Commissions.
53. US(MapTech, for NOS/OCS) noted that the same symbol should be made available on electronic charts, for both ARCS and BSB formats.
54. US(MapTech for NOS/OCS) suggested that a Web site might be established, to provide free access to information on coral reefs. The Chairman invited the USA to consider the possibility of such a facility.

Item 8.1: Status of IHO and CGMHC Membership within the region

55. IHB presented a report on the status of membership of both the IHO and the Commission (see CGMHC 4/08/01) noting that, since the report was written, Jamaica had become a full Member of the IHO.
56. IHB reported on the visits, immediately before this Conference, to the Dominican Republic and Panama (see Appendices 1 and 2 to CGMHC 4/08/01), and noted both nations' participation in the Conference.

Item 8.2: CGMHC input to the IHO Strategic Planning Working Group (SPWG)

57. US(NIMA) reported that the USA had represented the Commission at every meeting of the SPWG. Each Regional Commission may have a maximum of two representatives on the WG. USA currently represents both the CGMHC and the US-Canada Regional Commission, but it would be preferable for other nations in the CGMHC to represent the Commission.
58. Of the SPWG proposals which were approved by the recent EIHC, those of particular note were the initiatives to restructure the work of the IHB and the continuation of the Professional Assistant (Digital)'s appointment. The EIHC has tasked the SPWG to review the IHO's language policy, an issue of particular relevance to the Commission, given its large number of Spanish speaking nations.

59. The Chairman invited nations to consider
- the need for wider representation of IHO Member States on the SPWG
 - items which the CGMHC would wish to be addressed by the current IHO Strategic Plan and Work Programme
60. Cuba supported the need for smaller nations to have input to IHO strategy and work programmes, and for the Spanish-speaking Member States to be represented on the SPWG. Cuba made a tentative offer to act as one of the CGMHC representatives.
[Later: Cuba confirmed their offer, subject to approval by all nations.]
Action: All nations to consider Cuba's offer to act as CGMHC representative (with US NMOC) on the IHO SPWG, and, within 60 days of the issue of the minutes, inform UK of any objection.
[Post meeting note: Cuba will act as joint CGMHC representative on IHO SPWG]
61. Referring to possible items for submission to the SPWG, IMO noted the currency of charting in the region. Recent mapping workshops in Tobago had highlighted the age of the data from which the charts were compiled. The Chairman commented that this is an issue which IHO is attempting to address through the capacity building elements of the Work Programme.
62. US(NIMA) commented that nations would be better placed to identify potential issues for input to the SPWG once they had sighted the Proceedings of the recent EIHC (Agenda Item 5 refers).
Action: Once representation of the Commission on the SPWG is finalised, UK to notify all nations of that representative, requesting that, within 60 days of the notification, nations provide input on issues to be taken to the SPWG by the representative.
[Post Meeting Note: The next meeting of the SPWG is scheduled to be held in Norfolk, Virginia, 18-19 May 2001]

Agenda Item 9: Presentation by Richard Wylde, SIMA Consultancy

63. Mr Wylde presented two papers. The first paper (see CGMHC 4/09/01) explored the issues raised by the use of different co-ordinate systems, and emphasised the importance of nations establishing clear definitions of the co-ordinate geodesy for their EEZs. In the discussion which followed Mr Wylde emphasised the necessity of ensuring an adequate audit trail for integrity of data and maintenance of comprehensive records of the parameters used in transformations.
64. The second paper (see CGMHC 4/09/02) considered the issues associated with the regulation of (hydrographic) surveying. US(NOS/OCS) reported on NOAA's experience of contracting out surveys to commercial companies. Much has been learned, but now a high quality of data is being achieved. NOAA staff are embarked on the vessels to carry out control. Approx. 70% of NOAA's hydrographic surveys are conducted by contractors. UK also use contractors, though to a lesser extent.
65. In response to a query from Trinidad and Tobago concerning the minimum requirements for registered hydrographic surveyors, IHB explained the work of the IHO/FIG International Advisory Board on Standards of Competence for Hydrographic Surveyors in setting standards for hydrographic training courses offered by HOs and educational

institutions. IHB referred to IHO Publication M-4, which provides guidance for the syllabi of such courses and explains the accreditation process.

Agenda Item 10: International Charts

66. Medium Scale Scheme

Mr Chris Andreasen (US/NIMA), Chairman of the CGMHC INT Chart Working Group and Co-ordinator of INT Chart Region B, reported on activities concerning the medium scale INT scheme since it was agreed in principle at the 3rd CGMHC Conference. In accordance with CGMHC Action 3/8, the proposed scheme was submitted to the CSC and IHB for comment. In response to CGMHC Decision 3/3, concerning Guyana's request to be included in INT Region B, discussions on the amendment to the limits had taken place with Brazil, Co-ordinator of INT Region C1.

67. When commenting on the proposed scheme, the CSC Chairman had suggested a further extension of INT Region B eastwards, to include Surinam and French Guyana. A meeting of Region C1 nations (held in the margins of the recent EIHC) had agreed that Guyana should be included in Region B, but no decision had been taken concerning the inclusion of Surinam and French Guyana. The WG Chairman, noting that Surinam and French Guyana had not yet had the opportunity to comment on the proposal, suggested that, rather than delay the Region B scheme, some additional INT chart numbers should be reserved, pending a decision on the possible extension of the Region B scheme.

68. Venezuela sought clarification of the decision to include Guyana in Region B. The Commission Chairman explained that the limits of INT chart regions are non-political, but, noting the Venezuelan concerns, invited Venezuela to advise him of their objections. **Action:** Venezuela to comment (if necessary) to the Chairman of the CGMHC INT Chart WG, within 60 days of issue of the minutes of this meeting, and Chairman of CGMHC INT Chart WG to inform CGMHC Chairman of the outcome of the discussion.

69. The WG Chairman tabled copies of the latest iteration of the proposed medium scale scheme (CGMHC 4/10/01). He reported that, following comments from the CSC Chairman, UK, France and Netherlands had jointly proposed amendments to the charts in the Eastern Caribbean. After discussion on these amendments it was agreed France and UK would review these amendments in the light of US comments, and the proposed extension to include Surinam and French Guyana, in the annual UK/France liaison meetings and revert to the WG Chairman. **Action:** UK/France to discuss at UKHO/SHOM liaison meetings (May 2000) and comment within 60 days.

70. It was agreed that nations would forward any final comments on the proposed scheme to the WG Chairman, after which it will be promulgated. **Action:** Nations to comment to US(NIMA) within 60 days of issue of minutes. **Action:** US(NIMA), when satisfied that nations' comments have been resolved, to promulgate the medium scale chart scheme.

71. The WG Chairman reviewed the list of Producer Nations for the scheme (see CGMHC 4/10/02) and invited nations to volunteer to produce those remaining charts which had not yet been allocated. UK suggested that, to ensure effective progression of the scheme,

nations should be realistic in assessing their capacity for producing the charts. UK noted their recent discussions with Cuba on possible co-production. In response to a query from Panama concerning the allocation of INT 4120 to both US(NIMA) and Panama, US(NIMA) invited Panama to discuss which nation should undertake the task. Republic of Dominica expressed interest in producing INT 4164 and 4176.

Action: Nations to consider being producer nation for outstanding charts and notify US(NIMA)

72. Large Scale Scheme

The WG Chairman distributed a list of ports which might be included in the scheme (see CGMHC 4/10/03). He invited nations to comment on the list proposing that, unless objections were received, the list should become the basis for the scheme.

Action: Nations to comment to US(NIMA), within 60 days of issue of minutes

73. 1:1 million scheme

The WG Chairman tabled proposals for the scheme, which had been prepared jointly by France, UK and Netherlands. Noting that, for most nations, this was the first opportunity to see the proposals, he suggested nations give them due consideration after the meeting, and forward their comments to him.

Action: Nations to consider proposed scheme and comment to US(NIMA)

74. USA(NIMA) noted the suggestion, which had emanated from the East Asia Hydrographic Commission, of allowing Member States to use another Member's published data in charts at scales of 1:500000 or smaller without a bilateral arrangement. USA was considering referring this to the IHO and, in order to seek CGMHC nations' views, undertook to provide the Chairman with a copy of the EAHC text and the outcome of the discussion, for consideration of its application within the CGMHC.

Action: US(NIMA) to provide text and outcome of discussion to UK, in order to inform the membership.

Agenda Item 11: GMDSS Implementation

Agenda Item 11.1: Report on CPRNW activities and COMSAR

75. Mr Soluri (US/NIMA), Chairman of the IHO Commission on the Promulgation of Radio Navigational Warnings (CPRNW) and NAVAREA IV Co-ordinator, noted IHO Circular Letter 26/1998 (see CGMHC 4/11/01), concerning the implementation of the GMDSS. The CL underlines the need for all RHCs to consider, as a standing agenda item, regional aspects of navigational warning broadcasts.

76. Mr Soluri gave a presentation on the GMDSS, the World-Wide Navigational Warning Service (WWNWS), stressing the respective roles of the National Co-ordinators, the IHO in the WWNWS, and the CPRNW. He explained the mechanisms for disseminating Maritime Safety Information (MSI) by NAVTEX and SafetyNET. This was followed by a joint presentation, first on NAVTEX by Lt Cdr Pink (UK), Secretary of the IMO NAVTEX Co-ordinating Panel, and then on SafetyNET by Mr Soluri who offered to assist nations by providing an interim or permanent Coastal Warning Service via SafetyNET.

77. In conclusion Mr Soluri reminded those nations which, as yet, have made no provision for disseminating MSI, but who were considering doing so, of the importance of deciding

which of their authorities would act as National Co-ordinator. Whichever authority is chosen, will need to be available 24 hours a day, 7 days a week. Once the authority is identified consideration should be given to appropriate training. Mr Soluri offered to provide advice on meeting this requirement.

78. Cdr Blanluet (France) gave a presentation on the status of GMDSS implementation in the French Caribbean (see CGMHC 4/11/02).
79. IHB and France endorsed the need for nations to identify their national co-ordinator as a first priority. France noted the need for co-operation between co-ordinators, and referred to the requirements set out in IHO publication S-53.
- Action:** All nations to note para 6.5 of IHO Publication S-53 and consider how best to establish a National Co-ordinator for GMDSS, and advise NAVAREA IV Co-ordinator US(NIMA) by 31 October 2000.
- Action:** NAVAREA IV Co-ordinator to advise next meeting of the Commission on the establishment of National Co-ordinators.
- Action:** All nations to advise NAVAREA IV Co-ordinator if they wish to take advantage of his offer of provision of interim or permanent Coastal Warning Service via SafetyNET.

Agenda Item 11.2: Report on International Telecommunications Union (ITU) Workshops

80. UK (on behalf of Mr Abdelkader Bairi, ITU Telecommunications Development Bureau) presented a Report on the technical assistance which the ITU had provided in the region for the development of GMDSS (see CGMHC 4/11/03). One element of the development programme is the organisation of a series of workshops to discuss National Master Plans and initiate regional harmonisation. Two workshops have already been held (in Trinidad and Tobago, and in Martinique); a third is planned for Autumn 2000 in Havana, Cuba.
81. In response to an IHB query concerning availability of financial assistance for attending the workshop in Cuba, UK undertook to seek advice from ITU and notify nations.
- Action:** UK to contact ITU (Mr Bairi) to establish availability of funding for attendance at future workshops, and include a reference in the minutes of this meeting.
- [Post Meeting Note: ITU advised that the agencies which have provided assistance include:
- World Bank
 - European Commission
 - Japanese International Credit Agency
 - UN Development Programme
 - Canadian Investment and Development Agency

Further details can be obtained from Mr Bairi:
Telecommunications Development Bureau
International Telecommunications Union
Place des Nations
CH-1211 Geneva 20
SWITZERLAND
e-mail: abdel.bairi@itu.int
Fax: +41 22 733 7256]

Agenda Item 12: Status of International Bathymetric Chart of the Caribbean Sea (IBCCA) Project

82. The Chairman welcomed Nii Allotey Odunton, deputy to the Secretary General of the International Seabed Authority, for this item.
83. Dr Dmitri Travin, IOC/UNESCO Executive Secretary Assistant for Ocean Mapping, presented a report on progress with the IBCCA Project (see CGMHC 4/12/01).
84. In response to a query from the Chairman concerning the status and availability of the IBCCA CD-ROM, Dr Travin explained it should be available in 2001. IHB affirmed IHO's commitment to this project and noted its potential relevance to a range of users, citing the requirement of the UN Food and Agriculture Organisation for accurate bathymetric data on which to base their GIS of fish species.
85. Netherlands commented that IBCCA appears to make GEBCO obsolete. In response to a suggestion from Netherlands regarding the potential use, by IBCCA, of Netherlands' archived data, Dr Travin invited Netherlands to provide IOC with written notification, with a view to further discussion.

Agenda Item 14: Any Other Business

86. Jamaica gave a presentation on Continental Shelf Delimitation (see CGMHC 4/14/01) and suggested that nations seeking advice in defining continental shelf limits should address their enquiries to the Chairman, Commission on the Limits of the Continental Shelf, Division of Ocean Affairs and Law of the Sea, United Nations, New York.
87. IHB reminded the meeting of the role which developed nations and IHB can play in assisting developing nations to establish and enhance their hydrographic capabilities. IHB invited nations to complete the Project Questionnaire (which had been distributed prior to Conference), the results would enable the identification of potential projects which might be initiated.
→ **Actions:** All nations to state their requirements for assistance in developing hydrographic capabilities to the IHB, to allow development of hydrographic projects in the CGMHC area, and IHB to supply UK, for inclusion in the minutes of this meeting, with the precise form of words detailing the information required to allow creation of hydrographic development projects in the CGMHC area.
[Post Meeting Note: See CGMHC 4/14/02. IHB has received completed questionnaires from Cuba, France, Netherlands and Trinidad and Tobago, and invites responses from other nations, in order to make a comprehensive assessment]

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Agenda Item 15: Observer Comments

88. IMO expressed regret that a number of the smaller Caribbean nations were not represented at the meeting.
89. IHB noted the positive steps being taken within the CGMHC towards the development of definite projects. IHB reminded nations that, even if they have no hydrographic capability established, they should have mechanisms for the promulgation of MSI.

Agenda Item 16: Location and Date of Next Conference

90. US(CNMOC) volunteered to be the next CGMHC Chair, and to host the 5th CGMHC Conference at a location on the Gulf coast, the preferred timing being after the XVIth (2002) IH Conference. Noting the XVIth IHC will be held in April 2002, the Chairman proposed the conference be held in the period September-November 2002. This was agreed.

Action: US(CNMOC) to confirm the date and location of the 5th CGMHC Conference.

Agenda Item 17: Closing Remarks

91. The Chairman thanked the representatives from Jamaica, particularly Mr St Francis and his colleagues from the Hydrographic Unit, for providing the excellent conference location and support for UKHO in hosting the Conference. The Chairman was joined by the delegates in expressing appreciation to the interpreters and the staff of the Conference Centre for their contribution to the smooth running of the meeting.
92. Finally the Chairman thanked the delegates for their active participation in the discussions which, he considered, had resulted in a most constructive meeting. This was borne out by the substantial list of actions which had been agreed and should be taken forward over the coming months (see list at CGMHC 4/17/01).

Opening address by Rear Admiral JP Clarke CB LVO MBE

Minister, High Commissioner, Ladies and Gentlemen,

It gives me great pleasure, as the new Chairman of the Caribbean and Gulf of Mexico Hydrographic Commission, to be able to welcome you to the Kingston International Conference Centre for this the 4th Meeting of the Commission.

This is the first time since 1988 that the UK has chaired a regional Commission and it is indicative, I think, of the increasing importance of hydrography in many countries that this role is now able to be undertaken by so many. We are indebted to the staff of the Surveying Directorate here in Kingston for the efforts they have made to make this Conference possible and I must single out particularly Mr Noel St Francis, the Head of the Hydrographic Unit, for the work he has done jointly with the staff in Taunton in the long lead-up to today. From what I have seen of the beautiful surroundings around Kingston, the excellent facilities of the Conference Centre and the helpful staff, I feel we are well on the way to making this a worthwhile meeting.

The Commission has not been idle since its last meeting. The 3rd Conference in Martinique kindled the idea which grew into the joint French/UK Study Team and I look forward both to the discussion of issues arising and to an assessment of the outcome from this significant exercise.

In addition, discussion on issues surrounding the development of Electronic Nautical Charts in the region led to the holding of an Interim Conference in Mobile Alabama last May under the Chairmanship of Mr Doug Brown of the US Office of Coast Survey. I wish to thank him and his staff for their work in this area. Again we will discuss the outcomes from that meeting as we progress here this week.

As many of you will be aware, the expansion of the Hydrographic Commission concept within the IHO owes much to the work of the present President of the Organization, Admiral Angrisano who is with us today. Of course Commissions such as ours can only be truly effective if they are representative of the countries within each area. It is the aim of the Bureau to have the Commissions within the IHO exercise a greater decision making role, ensuring that their views are heard and acted upon by the organization as a whole. Nowhere is this more important than in the influence which the Commission can bring to bear in the Strategic Planning Working Group. You have the opportunity here to make the Caribbean representatives aware of your views on the big issues facing the Organization, allowing them to speak on your behalf.

As I am sure Admiral Angrisano will make clear, the Commissions are increasingly viewed as the power houses within which much of the real work of the IHO can be carried out, taking forward the work of the Strategic Plan and indeed bringing the Plan issues into the agenda of each Conference. The North Sea Hydrographic Commission has done valuable work which has been brought to bear elsewhere: there is no reason why the Caribbean Commission cannot rise to the challenge thus offered.

It would be wrong to imagine, of course, that what we wish to achieve can be carried out in each country equally easily. I think I can speak for the larger countries here if I say that we

are willing to assist, wherever possible, in development of your hydrographic skills and expertise within the umbrella of the IHO and through the bilateral mechanism.

Our Conference has a full agenda. There is considerable variety within it.

I am glad to be able to welcome representatives of seventeen states, territories and organisations with an interest in hydrography in the region. But, as we all know, the potential membership of the Commission is much greater. I will be working with you and the President of the IHB during my term of office, to bring to the notice of the other countries in the area the advantages of active participation in the Commission's work. You can, in turn, help me to achieve greater representation at the next Commission meeting through your work to make this meeting fruitful. Now I am delighted to introduce Mr Anthony Hylton, the Minister for Foreign Trade.