

INTERNATIONAL HYDROGRAPHIC ORGANIZATION



ANNUAL REPORT 2003

PART 1 – GENERAL



ANNUAL REPORT
OF THE
INTERNATIONAL HYDROGRAPHIC
ORGANIZATION
2003

PART I - GENERAL

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INTERNATIONAL HYDROGRAPHIC ORGANIZATION

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President: Vice Admiral (Retd.) Alexandros MARATOS, Greece

Directors: Rear Admiral (Retd.) Kenneth BARBOR, USA

Captain (Retd.) Hugo GORZIGLIA, Chile

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INTRODUCTION

The International Hydrographic Organization is pleased to present its Annual Report for 2003 to IHO Member States and to those organizations, institutions and persons interested in the progress made in international hydrographic affairs.

This Annual Report summarizes the activities carried out by the Regional Hydrographic Commissions, the various Committees, Commissions, Working Groups and Advisory Boards established to handle in detail the variety of IHO related activities.

The Report is in two parts: **Part 1 – General** covers the general activities of the Organization and is given a wide circulation, whereas **Part 2 – Finance** consists of the presentation of the Financial Report, which is for internal distribution to Member States, only.

Part 1 – General is structured in line with the five Programmes described in the Work Programme 2003-2007, approved by the XVIth International Hydrographic Conference in April 2002. In order to facilitate the reading for those readers who are not familiar with the IHO, the contents of the Annual Report are presented in a descriptive manner, in the hope that it will provide adequate information and thus constitute an IHO public relations tool.

Although all the activities carried out in 2003 are important and effectively contribute to achieving the IHO Mission, the Directing Committee would like to highlight some of them, due to the importance they represent in strengthening the Organization. Particular reference is made to the progress of the Strategic Planning Working Group, which is searching mechanisms to increase the efficiency and effectiveness of the IHO. Reference is also made to the establishment of the Capacity Building Committee, which provides the necessary link in establishing new hydrographic services, and which supports the improvement of the capacities of developing hydrographic services, and to the updating of Publication S-55 “Status of Hydrographic Surveying and Nautical Cartography Worldwide”; this updated publication will be a very useful document to the IHO efforts in Capacity Building. Note should also be made of the United Nations General Assembly Resolution 58/240 that welcomed the work of the IHO and its fourteen Regional Commissions and encouraged 1) increased membership in the IHO, 2) transition to Electronic Navigational Charts, 3) increased coverage of hydrographic information and 4) intensified efforts to build capacity to improve hydrographic services and the production of nautical charts.

We could not end this Introduction without referring to the Centenary Celebrations of the General Bathymetric Chart of the Oceans Project - “GEBCO”, which was initiated by H.S.H. Prince Albert I of Monaco, and which is today jointly pursued with the Intergovernmental Oceanographic Commission, with the invaluable and continuous support of the Principality of Monaco.

Finally, the Directing Committee encourages the readers of this IHO Annual Report - 2003 to visit the IHO website - www.iho.shom.fr , where they will find more detailed information on the work of the International Hydrographic Organization.

Thank you.

The Directing Committee

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**WORK PROGRAMME 1
COOPERATION AMONG MEMBER STATES AND
WITH INTERNATIONAL ORGANIZATIONS**

REGIONAL HYDROGRAPHIC COMMISSIONS

NORDIC HYDROGRAPHIC COMMISSION (NHC)

Chairperson: Mr. Jukka VARONEN (Finland)
Vice-Chairperson:
Members: Denmark, Finland, Iceland, Norway, Sweden.
Associated Members:
Observers:
Last Meeting: Norrköping, 6-7/5/03
Next meeting : Helsinki, 2-4/3/04

The 47th Meeting of the Nordic Hydrographic Commission (NHC) was held in Norrköping, Sweden, on 6 and 7 May 2003. A joint Meeting with the North Sea Hydrographic Commission (NSHC) was held on 7 May in order to discuss the work and progress of the SPWG and to decide on issues which were to be discussed in Lima, Peru. There were 14 participants from the five Nordic countries and five more from the NSHC for the common Meeting. VAdm A. MARATOS represented the IHO/IHB, briefing the participants on the GEBCO Centenary Celebrations, the coming Meeting of the Capacity Building Committee, the developments in updating the S-55 Publication and the co-operation with IMO and IALA.



The main items of discussion during the Meeting were the outstanding/ongoing actions, the National Reports, the charting and hydrographic developments in the area, reports from working groups and seminars (multibeam seminar, paper chart production group) and general trends and policy.

Mr. Jukka VARONEN from Finland was elected as the new Chairman of the NHC. The next Meeting will be held in Helsinki on 2 and 3 (or 3 and 4) March 2004.

The Meeting on 7 May, devoted to discussions about the developments of the SPWG and the issues that were to be discussed in Lima, Peru, was chaired by the Chairman of the SPWG, Frode KLEPSVIK, assisted by the other members of the Chair Group, Dr. Wyn WILLIAMS and VAdm A. MARATOS.

NORTH SEA HYDROGRAPHIC COMMISSION (NSHC)

Chairperson: Mr. Göran NORDSTRÖM (Sweden)
Vice-Chairperson: Dr. Wyn Williams (UK)
Members: Belgium, Denmark, France, Germany, Iceland, Netherlands, Norway, Sweden, UK.
Observers:
Last meeting: Norrköping, Sweden, 7/5/03.
Next Meeting: September 2004 in UK.

No ordinary Conference was held during the year. However, as a demand from the Strategic Planning Working Group (SPWG), an Extra Meeting day in connection to and together with the Conference of the Nordic Hydrographic Commission was held on the 7th May 2003 in Norrköping, Sweden. The work of the SPWG was thoroughly discussed under the lead of its chairman, Mr. Frode Klepsvik and two other members of the Chair Group.

The next ordinary Conference will be held in September 2004 in the UK.

EAST ASIA HYDROGRAPHIC COMMISSION (EAHC)

Chairpersons:	Mr. ZHENG HEPING (China) (to November 2003) Mr. Hyung-Nam KIM (Republic of Korea) (from November 2003)
Vice-Chairperson:	Mr. Parry OEI (Singapore)
Members:	China, Indonesia, Japan, Malaysia, Philippines, Republic of Korea, Singapore, Thailand.
Associated Members:	
Observers:	Brunei Darussalam, Cambodia, UK, USA, Vietnam.
Last Meeting:	Shanghai, 11-14/11/03
Next Meeting:	Korea, 2006

The Maritime Safety Administration of China hosted the 8th Conference of the EAHC in Shanghai from 11-14 November 2003, under the Chairmanship of Mr. ZHENG HEPING. The Conference was well attended with members from the People's Republic of China, Japan, Republic of Korea, Republic of the Philippines, Republic of Indonesia, Kingdom of Thailand, Republic of Singapore and Malaysia. The United States, United Kingdom, Democratic People's Republic of Korea, Brunei Darussalam, Socialist Republic of Vietnam and the IHB were present as observers.

Mr. HEPING opened the Conference and welcomed the delegates to the first Commission Conference of the new century. He noted that three years had passed since the last meeting in Jakarta and that world politics and economics had dramatically changed bringing forward higher demands on hydrographic surveying with more precious opportunities and severe challenges. Mr. HEPING encouraged free and open discussion during this Conference meeting as a venue most appropriate to formulate strategic objectives to address the Region's hydrographic issues.

The Chairman's report for the Region and the individual Country reports highlighted the activities and achievements in the Region towards the enhancement of maritime safety and international cooperation.

Eleven technical papers were submitted to the Conference of which six were presented in plenary. The topics were wide ranging and technically advanced.

Additional presentations were provided by the IHB on the update of Special Publication 55, "*The Status of Hydrography and Nautical Cartography Worldwide*", and the WEND Task Group efforts to stimulate the worldwide coverage and availability of ENC. The Chair Group of the Strategic Planning Working Group discussed the status of SPWG efforts. The membership of the proposed council was the focus of much of the discussions in plenary and a subsequent meeting after adjournment.

The Conference concluded with Mr. KIM, Director-General of the National Oceanographic Research Institute (Republic of Korea) assuming the Chairmanship, with Singapore elected as Vice-chair. The tentative schedule for the next Conference was set for September 2006 with an extraordinary Conference proposed for January 2005.

The Conference congratulated the Maritime Safety Administration of China for hosting a superb meeting. The opportunity to exchange technical experiences was welcomed by all and the social program offered an excellent occasion to further friendships and experience the beauty and hospitality of China.

US/CANADA HYDROGRAPHIC COMMISSION (USCHC)

Co-Chairpersons:	Captain D.MACFARLAND (USA (NOAA)) and Dr. D. HAINS (Canada)
Vice-Chairperson:	
Members:	USA, Canada
Associated Members:	
Observers:	
Last Meeting:	Biloxi, USA, 25/3/03
Next meeting:	Ottawa, Canada, 2004

The USCHC met on 25 March 2003 in Biloxi, MS, USA. The brief meeting covered organizational changes, the status of chart production in each country and opportunities for collaboration and exchange.

There were several recent changes and many forecasted changes in personnel. At the Canadian Hydrographic Service, Mr. Denis HAINS has been appointed acting Dominion Hydrographer, while Mr. Tony O'CONNOR attends French language study. Mr. Mike CASEY is assigned as a special assistant for the next year, prior to his retirement. In the U.S., Mr. Dave MACFARLAND retires on 1 June, with Capt. Sam DEBOW slated as his relief. *[NB: Capt. Roger PARSONS actually relieved Capt. MACFARLAND with Capt. DEBOW being selected for RADM.]* Mr. Rick SPINRAD has been selected to replace Mrs. Margaret DAVIDSON at the National Ocean Service in NOAA.

NOAA intends to produce 300 new editions each year with the printing provided by the Federal Aviation Administration. Print on Demand has been expanded to 240 charts. These charts maintained with weekly updates are printed by Oceanografix in response to orders generated by the nearly 1400 agents throughout the U.S. The charts are delivered the next day by FEDEX. NOAA plans to have produced 280 ENC's by year's end covering 40 major U.S. ports. Thirty Great Lake ENC's will be produced this year and the U.S. Great Lakes will be completed next year with an additional 30 charts.

The CHS is focusing on data management with the building of a source database. CHS offers 500 charts on a Print on Demand basis with the printing accomplished in-house. Charts are being updated to NAD83.

With budget pressures continuing, it was agreed to continue to investigate opportunities of cooperation and collaboration between the two countries. The IHB offered to advocate for the benefits of and requirements for hydrographic services to the U.S. and Canadian Administrations if the Commission believed warranted. The next meeting of the USCHC is planned for Ottawa, Canada in conjunction with the Canadian Hydrographic Association's HYDRO2004 scheduled for 24-27 May 2004.

MEDITERRANEAN AND BLACK SEAS HYDROGRAPHIC COMMISSION (MBSHC)

Chairperson:	Ingénieur général de l'armement Yves Desnoës (France)
Vice-Chairperson:	
Members:	Algeria, Croatia, Cyprus, Egypt, France, Greece, Italy, Monaco, Morocco, Russian Federation, Spain, Syria, Tunisia, Turkey, Ukraine, Yugoslavia, Slovenia.
Associate Members:	Bulgaria, Georgia, Israel, Malta, Palestinian Authority, Romania, UK, USA.
Observers:	Albania, Germany, Lebanon, DINMA, IMA, IOC, PRIMAR.
Last Meeting:	Brest, France, 1-4/6/03
Next Meeting :	Tunisia or Morocco, Spring 2004.

The XIIIth Meeting of the MBSHC was held in Brest, France, 1-4 June, under the Chairmanship of the Director of the Italian Hydrographic Service, RAdm. Pierpaolo GAGNETTI.



There were fifty representatives at the meeting from the following countries: Algeria, Bulgaria, Croatia, Cyprus, France, Germany, Greece, Israel, Italy, Monaco, Morocco, Norway, Romania, Serbia and Montenegro, Slovenia, Spain, Tunisia, Turkey, UK, Ukraine, USA, IOC and IMA Trieste. The President of the IHB, VAdm A. MARATOS, represented the IHB. He briefed the representatives on various issues that the IHB is considering, such as ENC production and developments, the newly established Committee on

Capacity Building, the updating of the IHO Publication S-55, the GEBCO Centenary Celebrations etc. Many important items were discussed and several decisions and recommendations were approved. The discussions mainly focused on the following:

- **International Charts.** Implementation and new demands. France will prepare the new edition of the MEDINTCHART catalogue taking into consideration the comments of the Conference Members.
- **Status of Hydrographic Surveys in the Area and the way to achieve a better and more accurate depiction.** Member States and Associate MS shall compile and send annually to Spain, by the end of February, the status of their surveys up to 31 December each year.
- **IHO Publication S-55.** Captain Mike BARITT explained the details of the procedures that will be followed for its updating, as announced in IHB CL 23/2003.
- **The status of the ENC production** was examined. The Commission tasked France, as the new Chair of the Commission, to report to CHRIS, that any changes to the existing Standards will have consequences on the progress of their production of ENCs. Italy gave a presentation on the developments regarding the establishment of the V-RENC.
- **The status of the promulgation of MSI** was discussed and decisions approved for a more effective way of broadcasting the warnings.
- **Programs funded by the European Union.** IMA reported on the developments and progress concerning these projects and the training programs, which will be offered by IMA.
- **PRIMAR Stavanger and IC-ENC.** The representatives outlined the developments in the two RENCs.

The Chairman of the SPWG, Mr. Frode KLEPSVIK, and the Vice Chairman, Dr. Wyn WILLIAMS, briefed the MBSHC representatives on the developments and progress of the work of the SPWG. France is the new Chair of the MBSHC and the next meeting will take place either in Tunisia or in Morocco, in the Spring of 2005.

BALTIC SEA HYDROGRAPHIC COMMISSION (BSHC)

Chairperson: Admiral A. KOMARITSYN (Russian Federation)
Vice-Chairperson: Mr. Janis KRASTINS (Latvia)
Members: Denmark, Estonia, Finland, Germany, Poland, Russian Federation, Sweden.
Associate Members: Latvia, Lithuania.
Observers:
Last Meeting: St. Petersburg, Russia, 2-5/9/03
Next Meeting : Latvia, 2005.

The Xth Meeting of the BSHC took place in St. Petersburg, Russia, from 2nd to 5th September 2003, under the Chairmanship of Mr. Toivo PRELA from Estonia.

Present at the Meeting were delegates from Denmark, Estonia, Finland, Sweden, Latvia, Lithuania, Germany, Poland, Norway, UK and Russia. Vice Admiral A. MARATOS represented the IHB. There was also a representative from the IOC.



Vice Admiral MARATOS informed the representatives on the developments of different issues that the Bureau is working on (updating of S-55 and S-59, progress on the ENC production, formation and

work of RENCs, GEBCO activities, Capacity Building, coming meetings, etc.). Mr. Frode KLEPSVIK and VAdm. MARATOS briefed the meeting on the progress of the SPWG work. The Members recognized the efforts of the Chair Group and expressed their support of the amendments to the Convention, as recognized by the majority of the SPWG Members. Captain Mike BARRITT briefed the participants on the procedures, which have been followed so far by the Bureau.

Some of the items which were presented and discussed concerned the status of hydrographic survey activities in Finland, the new organization of the Finnish Maritime Administration, the progress report of the BSHC WG for monitoring the implementation of the harmonized re-survey plan in the area, the ENC production, and the production of a Regional Bathymetric Chart.

The next meeting will be held in Latvia. Admiral KOMARITSYN is the new Chairman of the BSHC.

EASTERN ATLANTIC HYDROGRAPHIC COMMISSION (EAtHC)

Chairperson: Vice Admiral D. da Silva CARDOSO (Portugal)
Vice-Chairperson: IGA Yves DESNOES (France)
Members: France, Morocco, Nigeria, Portugal, Spain.
Associate Members: Benin, Cameroon, Cape Verde, Congo (Republic of), Guinea, Guinea Bissau, Ivory Coast, Mauritania, Senegal.
Observers: UK , USA.
Last Meeting: Lisbon, Portugal, 15-17/10/02
Next meeting : Morocco or France, 2004.

The EatHC did not plan to have a meeting during this year, nevertheless through the West Africa Action Team it has been very active paying technical visits to 7 countries in the region, and producing

the corresponding reports with valuable information on the status of hydrography, nautical charting and MSI matters. The countries visited were: Democratic Republic of Congo, Republic of Congo, Equatorial Guinea, Benin, Togo, Senegal and Gambia. Also a special meeting with the authorities of Guinea Bissau was arranged. The reports of the WAAT will be analyzed early 2004 and the outcome will be the main subject to be discussed during the next meeting scheduled to be in Morocco or in France, in the third quarter of 2004.

SOUTH EAST PACIFIC HYDROGRAPHIC COMMISSION (SEPHC)

Chairperson:	Captain F. MINGRAM (Chile)
Vice-Chairperson:	
Members:	Chile, Colombia, Ecuador, Peru.
Associated Members:	
Observers:	Panama
Last Meeting:	Lima, Peru, 3-5/11/03
Next Meeting :	2004.

The VIth Meeting of the South East Pacific Hydrographic Commission (SEPHC) was held at the Hotel Las Americas, Lima, Peru, from 03 to 05 November 2003. Representatives from Chile, Colombia, Ecuador and Peru were present, as well as the Hydrographer of Argentina, who was invited to participate as an Observer. Captain H. GORZIGLIA represented the IHB, as Director responsible for SEPHC affairs.

The Peruvian Hydrographer, Rear Admiral Carlos GAMARRA, welcomed all participants to the meeting and identified the main subjects of common interest which would be addressed during the three-day meeting, in particular SPWG activities and the outcome of its last meeting in Singapore, to be reported on by the SPWG Chairman.

The SEPHC Chairman, Captain Fernando MINGRAM (Chile), opened the meeting and welcomed participants, thanking the Hydrographer of Peru for hosting the meeting and for the arrangements and facilities provided to conduct it. He reported on the intersessional activities and the progress made with the actions identified at the last meeting. Afterwards and in accordance with the Statutes, he handed over the chairmanship to Admiral GAMARRA, who became the Chairman until the next meeting.

Captain Hugo GORZIGLIA, IHB Director, reported on the progress of the actions agreed at the last meeting which were to be carried out by the IHB/IHO.

As part of the business of the meeting, the following presentations were given:

- 1.1 The IHO and the Capacity Building Concept (Capt. Hugo GORZIGLIA);
- 1.2 Revision of S-55. Status of Hydrographic Surveying and Nautical Charting Worldwide (Capt. Mike BARRITT);
- 1.3 Progress of the Electronic Chart Committee (WEND) (Vice Admiral Alexandros MARATOS);
- 1.4 Progress of the SPWG and future work programme (Mr Frode KLEPSVIK);
- 1.5 General guidelines for hydrographic surveys in rivers (RAdm. C. GAMARRA) ;
- 1.6 Progress on SPWG activities (Capt. F. MINGRAM)

The following delegations presented papers, as listed here below:

- 2.1 Argentina: The Argentine representative explained the setting up of the South Western Atlantic Hydrographic Commission (SWAtHC).
- 2.2 Chile: « Compilación Hidrográfica : Procedimiento para mejorar la Calidad de la Carta Náutica ». (Lt. Emilio BOASSI).

- 2.3 Colombia: “Estado Actual de la Hidrografía y Cartografía Colombiana” (Capt. Jaime BARRERA).
- 2.4 Ecuador: “Situación de la Carta Electrónica en el Ecuador” (Cdr. Rafael Cabello).
- 2.5 Peru: “Derrotero Electrónico de la Costa del Perú” (Lt. Cdr. Roberto PÉREZ) y “Errores en la Medición de la Profundidad” (Lt. Cdr. Jaime VALDEZ)

Following each presentation, a very interesting discussion took place, in which the IHB Director actively participated in order to identify common ground among participants to coordinate efforts.

Participants agreed on 8 topics, as follows:

- 4.1 Modifications to the Statutes of the Commission;
- 4.2 Relations with Industry;
- 4.3 Updating of S-55;
- 4.4 Support in strengthening hydrography in Central American countries;
- 4.5 River Hydrographic surveys;
- 4.6 Strategic planning;
- 4.7 Cooperation;
- 4.8 Review of decisions of previous meetings.

The VIIth Meeting will take place in 2004, the venue and date to be identified. This will be an extraordinary meeting to discuss the proposal to be put forward by the SPWG at the 3rd Extraordinary International Hydrographic Conference in 2005.

SOUTH WEST PACIFIC HYDROGRAPHIC COMMISSION (SWPHC)

Chairperson:	Mr. F. MAHARAJ (FIJI)
Vice-Chairperson:	
Members:	Australia, Fiji, France, New Zealand, Papua New Guinea, Tonga, UK, USA .
Associated Members:	
Observers:	
Last Meeting:	Wollongong, Australia, 15-16/4/03
Next Meeting:	Suva, Fiji, 10-11/11/04

The 5th meeting of the SWPHC was held at the Australian Hydrographic Office in Wollongong, Australia, on 15-16 April 2003. Australia, New Zealand, Fiji, Papua New Guinea, Tonga, United Kingdom and IHB were present. In opening the meeting the Chair, Capt. Bruce KAFER, Hydrographer of Australia, noted the SWPHC’s high level of activity in areas of the Strategic Planning Working Group (SPWG); the updating and upgrading of S-55, *The Status of Hydrographic Surveying and Nautical Cartography World-Wide*; and the completion of large scale INT CHART scheme for Region L.



The Statutes of the Commission were reviewed for conformance to Technical Resolution 1.3 and additional signatures were obtained from members not present at the last meeting. Legal advice was sought regarding the recording of subsequent signatures. The Australian Government Solicitor opined that additional signatures could be added to a faithful copy of the original Statute and signatures and this copy together with the original, be maintained by the IHB.

A review of the action items from the 4th meeting reflected most actions completed. Of continuing concern, however, was the mechanism and focal point for stimulating funding for hydrographic projects throughout the area. The Secretariat of the Pacific Community and the South Pacific Applied Geophysics Commission will continue to be investigated as potential sources or advocates for project funding.

National reports and presentations from the Australian Maritime Safety Authority, the Commission on Promulgation of Radio Navigational Warnings and the IHB were noted and discussed. Discussions on the updating of S-55 proved helpful, especially with respect to the use of CATZOC vs. other subjective evaluations. The discussion of the current status and future tasks of the SPWG prepared the commission representative for the upcoming meeting in Lima, Peru.

The meeting was concluded with a tour of the Australian Hydrographic Office. The Chair will be passed to the Hydrographer of Fiji and the next meeting was set for October 2004.

**MESO-AMERICAN – CARIBBEAN SEA HYDROGRAPHIC COMMISSION (MACHC)
(formerly: Caribbean Sea and Gulf of Mexico Hydrographic Commission (CGMHC))**

Chairperson:	Rear Admiral T.Q. Donaldson (USA)
Vice-Chairperson:	Mr. C. FRANCIS (Jamaica)
Members:	Colombia, Cuba, France, Guatemala, Jamaica, Mexico, The Netherlands, Trinidad and Tobago, United Kingdom, United States of America, Venezuela.
Associate Members:	Guyana, Haiti, Honduras, Nicaragua and Panama.
Observers:	
Last Meeting:	Biloxi, USA, 4-6/11/02
Next Meeting:	Cartagena, Colombia, 2004

**MESO-AMERICAN CARIBBEAN SEA HYDROGRAPHIC COMMISSION (MACHC)
ELECTRONIC CHART WORKING GROUP**

The Electronic Chart Working Group of the MACHC met in Biloxi, MS, USA, on 24 March 2003, to discuss progress on charting and capacity building initiatives within the region. Of particular note was the favorable potential for funding for hydrographic capacity building through the Global Environmental Fund (GEF) in support of the Environmental Protection and Maritime Transport Pollution Control in the Gulf of Honduras project. Project managers have acknowledged the fundamental role of hydrography in marine environmental protection programs.

After introductory remarks and current status reports, breakout groups were formed to address:

- Submission to the GEF for funding
- Chart production prioritization and responsibility.

In both cases significant progress was achieved. Attendees were buoyed by the prospects of a successful bid for funding to increase the hydrographic capacity in Central America and the enhancement of the electronic chart portfolio for the region. The next meeting was proposed for November 2003 with the location to be determined.

** NOTE: During the 5th Meeting of the MACHC, held in Biloxi, November 2002, the "Study about the establishment or enlargement of the Regional Commission in North East Pacific (IHO Work Programme Task T 1.1.1) was considered and it was decided to enlarge the Commission to include some Central American nations. This resulted in the change of the name of the Commission to "Meso-American and Caribbean Sea Hydrographic Commission (MACHC)" and also in the need to divide the west area of the INT Chart A Region, creating a subregion A1*

SOUTHERN AFRICA AND ISLANDS HYDROGRAPHIC COMMISSION (SAIHC)

Chairperson:	Captain A. KAMPFER (South Africa)
Members:	France, Norway, Republic of South Africa, UK
Associate Members:	Angola, Kenya, Madagascar, Mauritius, Mozambique, Namibia, Portugal, Seychelles, Tanzania.
Observers:	
Last Meeting:	Swakopmund, Namibia, 25-26/9/03
Next Meeting:	Mauritius, 11 or 12/04

The 4th meeting of the SAIHC was held 25-26 September 2003 in Swakopmund, Namibia. The meeting was hosted by Namport located in nearby Walvis Bay. Namport, the national port authority for Namibia, has been designated by the Namibian Government as their point of contact for hydrographic matters. The meeting was chaired by Mr. Albano GOVE of Mozambique. Present at the meeting were representatives of Member States: South Africa, led by the newly appointed Hydrographer of the South African Navy, Captain Aubry KAMPFER, Mr. JAMES of Mozambique, Mr. LANGVIK of Norway, Ing. en Chef LE GOUIC of France and Mr. Gordon TAYLOR of the United Kingdom. Associate members - Malawi, Angola, Namibia, and Kenya - were present. Also present were Rear Admiral BARBOR, IHB; Councilor Adelheid KANDJALA, Deputy Mayor of Walvis Bay and Councilor Hafeni NDEMULA of the Erongo Region.



Mr. Albano GOVE opened the meeting by highlighting two current initiatives of the IHO – the Strategic Planning Working Group and the IHO Capacity Building Committee. In each case, the IHO is looking to the Regional Hydrographic Commissions to provide leadership and constructive input in formulating effective solutions to issues such as the governance of the Organization and proactively meeting the obligations under SOLAS V.

Admiral BARBOR spoke to the three watershed events that have occurred since the last meeting of this Commission:

- 1) The coming into force of SOLAS V obligating coastal states to provide for the collection of hydrographic data and the publishing and keeping up to date of nautical information;
- 2) The Johannesburg World Summit on Sustainable Development that should focus projects of this region and should include hydrography as a fundamental component of sustainable development; and
- 3) The filing before the Commission on the Limits of the Continental Shelf the Russian Federation extended claim of their continental margins. These events demonstrate the importance of hydrography and the obligations of coastal states to provide for the collection, dissemination and updating of nautical information.

The Chairman expertly navigated the agenda calling on countries to present their National Reports and the IHB to report on its workings and, in particular, the status of the work of the SPWG.

RESON, CARIS and C-MAP provided excellent presentations on how they can partner with Hydrographic Offices to improve the efficiency of data collection, data processing and the production of nautical charts and information.

Capt. Mike BARRITT, RN (ret) provided a thorough presentation on the need for, and method of, updating S-55, *The Status of Hydrography and Nautical Cartography Worldwide*. Especially in the SAIHC region, it is critical that the Commission contact non-Member States and provide assistance in answering the questionnaire to any state in the region as necessary.

The proceedings of the recent IHO Capacity Building Committee were discussed and a presentation on the NORSEA project was provided. The NORSEA project has been endorsed by the SADC, but no funding agency has stepped forward to provide assistance. A project proposing the development of a Marine Electronic Highway for the region from the Seychelles, through the Madagascar Strait and around the coast of South Africa has been formulated and is believed to be generating initial funding interest.

The initiatives of the WEND Task Group were presented and methods of enhancing the production of ENC's discussed. Acknowledging the rudimentary state of data collection and charting in much of the region, this Commission must work hard on seeking out assistance projects that advance the current state of affairs.

The UK presented a proposal for coastal states to host a web site where critical safety information could be retrieved. This would be in addition to the Notice to Mariners and serve as a back-up mechanism for the dissemination of such information.

South Africa was elected the next Chairman with Mozambique serving as Vice Chairman. Mauritius was proposed as the next venue, in anticipation of their admittance into the Organization. The need to accelerate the schedule for the next regular meeting was discussed but the members were in favour of calling for an extraordinary meeting, if needed, to discuss SPWG issues before the Extraordinary International Hydrographic Conference scheduled for April 2005. Therefore, the next regular Commission meeting will be September or October 2005.

The meeting adjourned and the delegates were given a tour of Walvis Bay aboard a Namport Tug. The degree of hospitality and organization provided by Namport cannot be overstated! The arrangements for the meeting place, for transportation to the meetings and functions, the administrative assistance and the reception, lunches and Gala dinner were exceptional.

ROPME SEA AREA HYDROGRAPHIC COMMISSION (RSAHC)

Chairperson:	Dr. M.R. GHADERI (Iran)
Vice-Chairperson:	
Members:	Bahrain, Iran, Kuwait, Oman, Pakistan, United Arab Emirates.
Associated members:	Qatar, Saudi Arabia, United Kingdom, United States of America.
Observers:	Regional Organization for the Protection of the Marine Environment (ROPME), Middle East Navigation Service (MENAS).
Last Meeting:	Monaco, 14/4/02
Next Meeting:	2004

The ROPME Sea Area Hydrographic Commission planned to have a meeting in Muscat, Oman, in the second quarter of 2003. Unfortunately due to unforeseen circumstances the meeting was postponed to a later date. The IHB has made all possible efforts and has taken proper coordination actions without success. The IHB has also offered its headquarterd to host the second meeting of this Commission. It is expected that a meeting would take place during 2004.

IHO HYDROGRAPHIC COMMITTEE ON ANTARCTICA (HCA)

Chairperson:	Captain H. GORZIGLIA (IHB)
Vice-Chairperson:	Captain F. MINGRAM (Chile)

Members: Argentina, Australia, Brazil, Chile, China, Ecuador, France, Germany, Greece, India, Italy, Japan, Netherlands, New Zealand, Norway, Peru, Poland, Republic of Korea, Republic of South Africa, Russian Federation, Spain, UK, Uruguay, USA (NIMA & NOAA).

Associated members:

Observers: Ukraine; Council of Managers of National Antarctic Programs (COMNAP); Scientific Committee on Antarctic Research (SCAR); IHO Data Center for Digital Bathymetry (DCDB); General Bathymetric Chart of the Oceans (GEBCO); Standing Committee on Antarctic Logistics and Operations (SCALOP); Australian Antarctic Division; Antarctica New Zealand; International Association of Antarctic Tour Operators (IAATO).

Last Meeting: Monaco, 8-10/9/03

Next meeting: Athens, Greece, 9/04

The 3rd Meeting of the IHO Hydrographic Committee on Antarctica (HCA) was held at the IHB, on 8-10 September 2003. The attendees from Australia, Chile, China, France, Germany, Greece, India, Italy, Rep. of Korea, Poland (first time), Spain, Norway and UK were welcomed by the Directing Committee.

At the meeting, particular mention was made of:

- a) The planned IBCSO Project.
- b) The current project for updating the IHO Publication S-55, which is to include the area covered by S-59, to be launched on 30 July 2004, in Bremen, Germany, in conjunction with a COMNAP-SCAR Meeting.
- c) The IHO Study on the Status of Hydrography and Cartography in remote areas including Antarctica. The need to foster ENC production in Antarctica. The need to report to IMO (NAV 50) on the status of hydrography and nautical cartography, as well as to the UN. Moreover, the need to seek comments on the concepts of establishing an RHC for the Arctic Ocean, or absorbing it into the HCA, for focus on remote areas. The IAATO Report, that gave the delegates a wider understanding of the views of the users of hydrographic products in Antarctica. It was agreed to keep IAATO informed of the INT Chart Scheme in Antarctica, requesting comments on how to best prioritize INT chart and ENC production for the region.



- d) The Committee decided to update the Statutes, as the XVIth IHC had approved a new IHO T.R 1.3, and a new resolution had been adopted at the XXVIth ATCM, referring to Co-operation in Hydrographic Surveying and Charting of Antarctic Waters. Captain GORZIGLIA, IHB Director was confirmed as Chairman and Capt. MINGRAM (Chile) was elected Vice Chairman, in accordance with Art. 5.2 of the Statutes and appointed HCA corresponding Member to the WEND Task Group on fostering ENC production.

- e) The IHO presence at the ATCM was considered a good opportunity to promote Hydrography. The new resolution adopted at the XXVIth ATCM was deeply appreciated as a sign of the interest that ATCM takes in hydrographic issues.
- f) When discussing initiatives to improve cooperation, IAATO agreed to explore ways of increasing cooperation with IHO and it was decided to set up a protocol between IHB and IAATO to establish a regime to enable hydrographic surveyors to conduct surveys in Antarctic waters in IAATO vessels of opportunity.
- g) The need for closer liaison between the IHO and IOC in Ocean Mapping Projects was emphasized, agreeing on the need for a joint resolution to be presented to the IOC Executive Council and IHO Member States. Therefore, the request to Member States to complete the questionnaire was of the utmost importance. The Committee appointed Capt. MINGRAM (Chile) as the contact point to coordinate the completion of the S-55 questionnaire. The IHB was tasked to develop a prototype GIS data base of the future S-55.
- h) Also discussed was the effect of restricting hydrographic activities because of concerns regarding the potential impact on marine mammals through the use of multibeam systems. In the light of the German Federal Environment Agency policy, it is anticipated that specific restrictions might result in frequently interrupted surveys, of little use for charting purposes. The Committee members discussed the venue and date of the next meeting and agreed that the 4th HCA Meeting would be held in Greece, in September 2004 (the exact dates are to be confirmed).

NORTH INDIAN OCEAN HYDROGRAPHIC COMMISSION (NIOHC)

Chairperson:	Rear Admiral SRINIVASAN (India)
Vice-Chairperson:	
Members:	Bangladesh, India, Myanmar, Sri Lanka, Thailand, UK
Associate Members:	France, Seychelles, USA.
Observers:	Malaysia, Oman, Saudi Arabia.
Last Meeting:	



The 3rd meeting of the NIOHC was held at the Hotel Cidade de Goa (Goa, India), from 17 to 19 January 2003. The principal topics discussed are given below :

1. The NIOHC approved the proposed amendments to the Statutes of the Commission.
2. The Commission agreed on the following action plan :
 - a. To continue progress on implementation of the INT Chart Scheme;
 - b. To establish a North Indian Ocean Hydrographic Commission Cooperation Cell (NIOHC-CC) under NIOHC with its ToR;
 - c. To take into account the new Chapter V of the IMO SOLAS Convention;
 - d. To implement the promulgation of radio-navigational warnings in NAVAREA VIII and GMDSS relevant issues;
 - e. To enhance training and education including ENC and specialized equipment;
 - f. To design a logo for the NIOHC.

3. Members of the Commission were encouraged to communicate and interact within the region on hydrographic and nautical charting issues.
4. The NIOHC, in the presence of the SPWG Chairman, discussed topics pertaining to the work of the SPWG. It was decided that comments on the Questionnaire concerning the strengths and weaknesses would be addressed by 15 February to the NIOHC Chairman, who would then forward them to the SPWG Chairman.
5. India will continue as the Chairman of the NIOHC for the coming year. Members agreed to rotate the chairmanship in alphabetic order afterwards.

INTERNATIONAL ORGANIZATIONS

INTERNATIONAL MARITIME ORGANIZATION (IMO)

IMO ASSEMBLY

The 23rd Assembly of the International Maritime Organization (IMO) took place at IMO headquarters in London, from 24 November to 5 December 2003.

The IHO had submitted a draft resolution on the "Provision of Hydrographic Services" to the IMO Maritime Safety Committee in June 2003 and this had been forwarded, via the NAV Sub-Committee, to the 23rd Assembly for approval. This Resolution, which updates Resolution A.532(13) in line with the requirements of the revised SOLAS Chapter V (effective July 2002.), was approved by the Assembly as Resolution A.958(23).



VAdm. MARATOS presenting the IHO plaque to Mr. William O'NEIL, IMO Secretary General

During the Assembly the IHO provided a brochure to all countries and organizations attending, outlining the requirements of SOLAS V-9 and the support the IHO could provide. A briefing aimed at IMO, non-IHO, Member States encouraging them to join the IHO was given at 1330 on Monday, 1 December.

The President of the IHB took the opportunity to present the Secretary General, Mr. William O'NEIL, with an IHO Plaque acknowledging his contribution to the Safety of Navigation as he steps down after 14 years as IMO

Secretary General. This presentation was made in the presence of representatives from the Hydrographic Offices of China, Iran and Algeria.

IMO COUNCIL

During the Council meeting three items of importance to IHO were discussed. First the report of the Sub-Committee on Safety of Navigation, in which the IHO report on the "Status of hydrographic surveying and charting in remote areas" was discussed and accepted. The IHB will provide a follow up report during the meeting of the Sub-Committee in 2004, trying to include comments and observations of the hydrographic, charting and navigational requirements in these areas coming from the touristic agencies operating cruisers in these areas. Second the report of the Sub-Committee on Radiocommunications and Search and Rescue was accepted containing improvements in the "Safety Net Manual". And lastly discussions took place with the Secretary-General and Assistant Secretary-General of IMO, Mr. O'NEIL and Admiral MITROPOULOS, on actions that the two Organizations will co-sponsor for a better information of IMO Member States, not yet Members of IHO, on their obligations for the provision of Hydrographic Services, according to new Regulations of Chapter V of SOLAS.

IMO MARITIME SAFETY COMMITTEE (MSC)

The 77th Meeting of the MSC was held at IMO headquarters in London from 28 May to 6 June 2003. The MSC considered a proposal from the IHO that Resolution A.532 (13) 'Collecting and forwarding of hydrographic data' should be replaced by a new resolution on 'Provision of hydrographic services', reflecting the amended requirements of SOLAS V-9. The MSC approved the draft resolution in principle and forwarded it to the NAV Sub-Committee to agree the final text and submit it directly to the 23rd IMO Assembly in December 2003.

IMO SUB COMMITTEE ON SAFETY OF NAVIGATION (NAV)

The 49th meeting of the NAV Sub-Committee was held at IMO headquarters in London from 30 June to 4 July 2003.

The Sub-Committee considered and recommended, with some amendment, adoption by the MSC or Assembly as appropriate, 6 new or amended Traffic Separation Schemes (Ra's al kuh, Ra's al Khafji, Finisterre, Korsoer and Sprogue, Singapore Strait and the Adriatic). The latter was subdivided into 7 separate traffic separation schemes, 2 precautionary areas and 1 'Area to be avoided' (ATBA) rather than the single scheme submitted. NAV also recommended adoption by the committee of amendments to charting measures in the Torres Strait and mandatory reporting schemes in the Torres Strait and off Cape Finistere. It recommended the committee to adopt ATBAs in New Zealand and Peru.

The Sub-Committee considered the submission by the IHO for the revision of Resolution A.532 (13) 'Collecting and forwarding of hydrographic data'. A revised text was forwarded directly to the Assembly for adoption in accordance with the guidance of the MSC.

As part of its investigation into Large Passenger Ship Safety the Sub-Committee considered a paper submitted by the IHO on the current status of hydrographic surveying and nautical charting for the safety of navigation in remote areas. The Sub-Committee thanked the IHO for its report and invited the IHO to report to NAV 50 on progress made and any specific actions required.

IMO TECHNICAL COOPERATION COMMITTEE

The 53rd session of this Committee was held on 11 and 12 June 2003. No representative from the IHO attended the meeting. Among the subjects discussed, it should be highlighted that IMO will consider the inclusion of fellowships to the IMA short courses on priority maritime safety issues.

Another important decision was the decision to establish a Maritime Security Trust Fund to provide support for national initiatives in developing countries to strengthen their maritime security infrastructure and measures.

IMO COMMITTEE ON RADIOCOMMUNICATIONS AND SEARCH AND RESCUE (COMSAR)

COMSAR 7 was held at IMO headquarters in London from 13 – 17 January.

The International SafetyNET Panel met during COMSAR and an updated list of NAVAREA coordinators was provided to IMO member governments. The International NAVTEX Coordinating Panel presented a report addressing issues to prevent interference between broadcasts. Discussions took place regarding an error in the boundaries of NAVAREA/METAREA XIII as shown in the International SafetyNET Manual. A solution was devised, using the facility to allow the addressing of messages to a temporary geographical area. This would not require amendments to the Manual nor existing receivers. Equipment produced after January 2005 should incorporate the change.

World VTS Guiding Board.

The required 50% of Member States did not support the proposal that the IHO become a full member of the World VTS Guiding Board. The IHO will therefore continue in its role as an observer to this Board, providing technical support and advice when needed.

INTERGOVERNMENTAL OCEANOGRAPHIC COMMISSION (IOC)

IOC ASSEMBLY

The XXIInd Assembly of the Intergovernmental Oceanographic Commission met from 23 June until 04 July at its headquarters in Paris. The Assembly was opened by the UNESCO General Director. During the Assembly, the IOC Executive Secretary, as well as the Chairmen of the major IOC programs, presented reports on their activities. Member States' representatives made comments on the presentations and several Resolutions were adopted.

Delegations were generally led by the Chairmen of the National Oceanographic Commissions of their respective countries, nevertheless, several Heads of Hydrographic Offices were also present.

The IHB was represented by Captain GORZIGLIA, who attended the first 4 days of the Assembly meeting, when matters of particular interest to IHO were discussed, such as:

- a) **Report of the IOC Executive Secretary.** His presentation was complemented by the IHB representative, who reported on the GEBCO Centenary Conference.
- b) **Criteria and Guidelines on the Transfer of Marine Technology.** Presentation that constituted a good information paper regarding the promotion of Capacity Building.
- c) **Training and Technology Transfer in Africa for the Implementation of Article 76 of UNCLOS.** Considering that the program has an hydrographic component, the IHB representative offered support to the leader of this program. Also the IHB representative reported on the efforts made by the EatHC in paying technical visits to several countries in Africa to assess hydrographic capabilities and identify ways for improvement.

The IOC Assembly did not refer expressly to the Ocean Mapping Project, as this matter will be considered by the Executive Council next year.

An important point to note is that the IOC approach to Capacity Building should be considered when developing the IHO Capacity Building strategy and procedures.

**HYDROGRAPHIC COMMITTEE OF THE PANAMERICAN INSTITUTE
OF GEOGRAPHY AND HISTORY (PAIGH)**

The 10th Meeting was held in Viña del Mar (Chile) from 28 to 30 April. Eighteen delegates from 9 countries were present at this Meeting: Argentina, Bolivia, Chile, Ecuador, Mexico, Peru, United States of America, Uruguay and Venezuela. The IHO was represented by Captain GORZIGLIA, IHB Director and contact point between PAIGH and IHO.

The Opening Ceremony was chaired by General Pablo GRAN, Chairman of the Chilean National Commission of PAIGH, communicating words of support from the PAIGH General Secretary. Captain CLEMENTS (Argentina), Chairman of the Committee handed over the Chairmanship to Captain MINGRAM (Chile), who will now be Chairman until the next Hydrographic Committee Meeting.

There were very interesting discussions and exchanges following each presentation, and the Committee adopted the following Resolutions:

1. To undertake the necessary action to recover the original “Committee” status, modified two years ago to Working Group;
2. To request support from PAIGH for technical assistance for the project “Hydrographic surveying to produce a Nautical Chart of Laguna Caceres y Canal Tamengo (Bolivia)”;
3. To encourage an active exchange between the Member States of the Group through participation in hydrographic surveying, on-the-job training and processing of information;
4. To design, install and keep updated a PAIGH Hydrographic Committee WEB page and Forum;
5. To improve skills and knowledge in the acquisition, processing and management of multi beam and SSS data;
6. To organize a Multi Beam Workshop similar to the one conducted in 2002 in USA, together with a Workshop aimed at national decision-makers on “The Power and the Benefits of Hydrography”;
7. To hold the XIth Meeting either in Colombia or Ecuador and the XIIth Meeting in Mexico (to be confirmed);
8. To recommend active participation of PAIGH Members, Members and Non-Members of the IHO;
9. To provide IHO with input for the IHO Manual on Hydrography in relation to fluvial hydrographic surveys.

In conclusion, the participation of an IHB Director representing the IHO was deeply appreciated, as personal contact provides an invaluable opportunity to strengthen relations between IHO Member States and Non-Member States. Bolivia’s participation in the Meeting provided a good opportunity to invite this country to become an IHO Member State.

Furthermore, the presentation made by the IHB and contribution to the discussions, which followed each presentation, were strongly endorsed by participants who appreciated IHO’s guidance and willingness to contribute to the development of the hydrographic capabilities of their respective countries. The IHB helped particularly with Resolutions 1, 6, 8 and 9. Delegates appreciated IHB’s positive and constructive approach.

ANTARCTIC TREATY CONSULTATIVE PARTIES (ATCP)

The Antarctic Treaty Consultative Meetings (ATCM) are held annually to discuss the progress on the Antarctic Treaty System, its activities and programs, including matters arising from the Protocol on Environmental Protection of the Antarctic, with particular emphasis on this subject. Nevertheless,

hydrographic and nautical cartography activities need to be addressed, and therefore the IHB was represented by Captain GORZIGLIA, at the XXVIth ATCM, held in Madrid, Spain from 3 to 20 June, who attended the meeting only on 16 June, when the Agenda covered operational matters, as well as an IHO presentation.

On this occasion there were over 40 Working Documents and over 120 Information Papers, out of which the following are directly or indirectly related to IHO objectives:

- Arctic Shipping Guidelines.
- Advice to Mariners and Vessel Operators on the Environmental Protocol's Obligation.
- Status of Hydrography and Nautical Cartography in Antarctic and Proposals for its Implementation.
- International Polar Year 2007-08.
- Antarctic Treaty Secretariat.

In conclusion, it is clear that the IHO Antarctic activities are well known and appreciated by the ATCM. There was particular interest in what would be the outcome of the 3rd HCA and the progress of S-59. Also, there was strong support for the recommendations included in the paper submitted by IHB entitled "Status of Hydrography and Nautical Cartography in Antarctic and Proposals for its Implementation".

This recommendation resulted in a Resolution adopted by the XXVIth ATCM, highlighting the importance of cooperation in Antarctic waters.

UNITED NATIONS (UN)

UNICPOLOS

The fourth meeting of the UN Informal Consultative Process on the Law of the Sea (UNICPOLOS) was held from 2-6 June 2003 at the United Nations in New York. Of particular note is that one of two topics specifically cited for discussion was safety of navigation and capacity building for the production of nautical charts. After one day of plenary session, a panel discussion began with the focus of nautical charts and capacity building for their production. Rear Admiral Richard WEST, former Navigator of the U.S. Navy and currently the Director of the Consortium for Oceanographic Research and Education (CORE), provided an introduction on the benefits of transitioning to electronic navigational charts. Next Rear Admiral Kenneth BARBOR provided an overview of the International Hydrographic Organization and its capacity building efforts for the production of nautical charts. Other panel members included Ms Anne Christine BRUSENDORFF of the Helsinki Commission and Mr. Gaetano LIBRANDO of the International Maritime Organization. IGA Yves DESNOËS, Director of SHOM provided an overview of nautical charting and its importance for safety of navigation.

The ensuing discussions probed the many important uses of data collected for nautical chart production especially for the delimitation of marine boundaries and the monitoring of the marine ecosystem. The obstacles that prevent effective capacity building were discussed. Many positive examples of bilateral cooperation were noted along with the multilateral examples provided by the IHO. Canada addressed the formation of the IHO Capacity Building Committee and the creation of a trust fund and encouraged States to contribute. Belgium encouraged the partnering with private industry to further the resources available for capacity building. The disparity between IHO membership and that of the IMO was noted. A further summary of the discussions can be found at <http://www.iisd.ca/linkages/oceans/icp4/>.

The final text of the discussion on capacity building for the production of nautical charts recognizes that hydrographic surveys and nautical charting are critical to navigational safety, life at sea, environmental protection, including vulnerable marine ecosystems, and the global seaborne trade. It

highlights the advantages of ENC's in navigational safety, fisheries activities, maritime boundary delimitation, and environmental protection. The text proposes that the General Assembly:

- ✓ welcome the work of the IHO and its regional commissions, encourage States to become IHO members, support the IHO trust fund and examine the possibility of partnership with the private sector;
- ✓ invite IHO and IMO to continue their coordinated efforts and adopt joint measures with respect to enhancing transitioning to ENC's, and to increase coverage of hydrographic information; and
- ✓ encourage intensified efforts to build capacity for developing countries to improve hydrographic services and production of nautical charts.

UN GROUP OF EXPERTS ON GEOGRAPHICAL NAMES (UNGEGN)

Liaison with UNGEGN was maintained, in relation to the IHO work on the Limits of Oceans and Seas (S-23) and undersea feature naming (SCUFN), in accordance with TR A4.2. The UNGEGN Chairperson, Ms. H. KERFOOT (Canada) visited the IHB in April to discuss possible areas of cooperation with IHO. Relevant IHO documents (draft S-23, 4th edition; Gazetteer of U.F.N.; and reports of SCUFN meetings) were provided to Ms. KERFOOT and the UNGEGN liaison to IHO, Mr. R. FLYNN (USA-NGA).

INTERNATIONAL FEDERATION OF SURVEYORS (FIG)

On 14 November 2003, Mr. Adam GREENLAND, Chairman of FIG Commission 4 –Hydrography, visited the IHB and met with Captain GORZIGLIA, Director in charge of IHO- FIG relations and also Capacity Building matters, a subject which is accorded high priority within Commission 4.



The main topics discussed were: the forthcoming Memorandum of Understanding (MoU) to be signed between FIG and IHO which will formalize the existing excellent relationship to handle matters of common interest; the preparation of a one-day technical papers meeting during the 2004 FIG Working Week; the representation of FIG at the IAB on Standards of Competence for hydrographic surveyors and nautical cartographers and Commission 4's possible contribution to the IHOCBC initiatives.

It was decided that an annual meeting would provide an opportunity to strengthen the cooperation between FIG and IHO.

CO-OPERATION AGREEMENT WITH THE INTERNATIONAL CARTOGRAPHIC ASSOCIATION (ICA)

The IHO was represented at the ICA Congress in Durban, South Africa, in August. In particular, the IHB organised on this occasion an IHO Chart Exhibition, with participation by 19 Hydrographic Offices. A jury of experts selected the South African and Ukrainian HOs as the best exhibitors. The IHB representative, Ing. en chef M. Huet, had the opportunity to address the ICA Assembly, outlining recent IHO developments.

A IHO-ICA Memorandum of Understanding, aimed at strengthening cooperation between the two organizations, was approved in December by IHO Member States.

The ICA Spatial Data Standards Commission met in conjunction with the ICA Congress, with Ing. en chef M. HUET attending for the IHB. The Commission progressed its work on modelling Spatial Data Infrastructure (SDI) concepts.

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**WORK PROGRAMME 2
CAPACITY BUILDING**

INTERNATIONAL MARITIME ACADEMY (IMA)

3RD IMA TECHNICAL & SCIENTIFIC COMMITTEE MEETING

In accordance with Article 19 of the “IMO – IMA” Statutes, the IHO is part of the IMA Technical and Scientific Committee, along with various other institutions. The main purpose of the Committee is the promotion and coordination of the IMA teaching activities. Previous meetings of the Committee were held in 1999 and 2002.

The Agenda of the meeting, held in Trieste (Italy), 11 July, included various subjects, amongst which: IMA President's Report; IMA courses for the year 2004; IMA ongoing projects and recommendations concerning the appointment of the new Director of IMA.

The participants were: Mr. David EDWARDS, Director of the Technical Cooperation Division, IMO, Prof. Giacomo BORRUSO, IMA President, Capt. Hugo GORZIGLIA (IHB) representing the IHO, and six other representatives from Italian institutions.

During the technical discussions, it was emphasized that it would be useful to fix the IMA courses program for a two-year period so that people would be informed well in advance of forthcoming courses. The Courses program for 2004 was agreed and, subject to fund availability, three Courses of direct interest to IHO will be run: Nautical Cartography; ENC production, validation and updating (for MEDChartNet Project) and Harbour and Coastal Hydrography.

As regards technical assistance projects, the IMA President reported on the current status of five projects, in which IMA is currently involved: four in the Mediterranean and Black Seas area and one in Uruguay.

Finally, the Committee considered the applications for the post of IMA Director and agreed to recommend to the IMA Board of Directors the appointment of either of the following candidates: Rear Admiral ANGRISANO or Commander MUNER

On 13 November 2003 Professor Iginio MARSON was elected representative President of IMA, as foreseen by the Charter of the IMO International Maritime Academy, in replacement of Professor Giacomo BORRUSO.

CAPACITY BUILDING COMMITTEE (IHOCBC)

Chairman:	Capt. H. GORZIGLIA (IHB)
Vice-Chairman:	Capt. M. BARRITT (UK)
Secretary:	Capt. F. BERMEJO (IHB)
Members :	Australia, Chile, France, Germany, Mozambique, Norway, Pakistan and USA.

The first meeting of the IHO CBC was held at the IHB, Monaco, from 11 to 12 September 2003 under the chairmanship of Capt. Hugo GORZIGLIA (IHB Director). All the Committee members were represented at the meeting, together with 1 observer country (Republic of Korea) and two invited personalities, Dr. David WELLS, representing the Academic sector and Mr. Gordon JOHNSTON, representing the Industrial sector.

Presentations were given by the CBC members and also by the two invited lecturers, Dr. David WELLS and Mr. Gordon JOHNSTON.

The Committee decided to confirm Capt. GORZIGLIA as Chairman of the IHO CBC, with Capt. BARRITT (UK) as Vice-Chairman.

The CBC fully recognized the importance of Regulations 9 and 2 of the new Chapter V of SOLAS Convention. It was unanimously agreed that the Committee should help Member States to raise awareness of the Organization at the high governmental level of coastal nations.

It was agreed that RHC are an important engine for progressing Capacity Building initiatives and that the regional approach in Capacity Building required both international support and bilateral agreements.

The Committee unanimously accepted the definition of Capacity Building as follows:.

WITH RESPECT TO THE IHO, "CAPACITY BUILDING" IS DEFINED AS THE PROCESS BY WHICH THE ORGANIZATION ASSESSES AND ASSISTS IN SUSTAINABLE DEVELOPMENT AND IMPROVEMENT OF THE STATES, TO MEET THE OBJECTIVES OF THE IHO AND THE HYDROGRAPHY, CARTOGRAPHY AND MARITIME SAFETY OBLIGATIONS AND RECOMMENDATIONS DESCRIBED IN UNCLOS, SOLAS V AND OTHER INTERNATIONAL INSTRUMENTS

The Committee recognized that Hydrography is usually inserted as a component of major projects concerning wider areas of development. It was agreed that IHO Capacity Building strategy must reflect the need to engage national administrations effectively, and to raise the profile of the IHO as a point of reference for technical input to projects.

The Committee agreed to establish a 'Task Group', chaired by the Vice-Chairman with Australia, Chile, France, Germany, India and USA, tasked to draft the 'IHO Strategy for Capacity Building', by 31 December 2003.

The updating of the IHO Publication S-55 was considered vital to guide the CBC efforts.

Training was considered to be a basic tool of Capacity Building and, in this sense, the Committee acknowledged the support that the IHO has given to the IMA (Trieste) and the effort of other countries such as India, Japan, UK and USA in the establishment of international courses.

The Committee also agreed that the CBC members will submit their suggested amendments to IHO Publication M-2, which is considered an important tool for increasing the visibility of the IHO.

Considerable discussion occurred on the concept of the IHO Trust Fund. It was concluded that it was more important in the first instance to identify and prioritise candidate projects, and to return to the management of funds in a second phase.

The convenience of a Second Meeting was considered and the Committee agreed that the next meeting should be scheduled in 2004. Australia offered to host the meeting and it was unanimously approved. The date and venue will be decided at a later date, however the delegate from Australia (Capt. KAFER) stated his intention to hold it in conjunction with the next meeting of the SWPHC.

JOINT CAPACITY BUILDING INITIATIVES INVOLVING IHO

PROJECT FOR THE DEVELOPMENT OF HYDROGRAPHY, NAUTICAL CARTOGRAPHY AND SAFETY OF NAVIGATION INFRASTRUCTURE IN CENTRAL AMERICA, IN CO-OPERATION WITH COCATRAM.

The XLI Ordinary Meeting of the COCATRAM Directing Committee was held in Santo Domingo, Dominican Republic. The participation of the IHB Delegation in the XLlth Meeting of the COCATRAM Directing Committee was arranged through the COCATRAM Secretariat. The main purpose of the IHB's presence was to inform the Vice Ministers of Transportation on the progress and status of the joint hydrographic project; which is specifically mentioned in the IHO Work Programme.

The COCATRAM Directing Committee is formed by the Vice Ministers of Transport from the following countries: Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua and Panama.

The IHO was represented by Captain H. GORZIGLIA, IHB Director; Captain F. BERMEJO, IHB Professional Assistant and Mr. Paul COOPER (NAVOCEANO), in his capacity of Capacity Building Coordinator for the Meso-American-Caribbean Sea Hydrographic Commission (MACHC).

Captain GORZIGLIA's presentation included background information from its beginning in 2000 until the notification of the negative decision of the EC to fund the project.

The Vice Ministers thanked Captain GORZIGLIA for his presentation and unanimously endorsed the proposals made. Following an exchange of opinions, the Vice Ministers officially requested the continuation of the support of the IHO and the liaison with the COCATRAM Secretariat to continue the development of the project along the lines proposed. Captain GORZIGLIA thanked the Vice Ministers for their recognition and confidence, and confirmed that actions directed at continuing the project had been already included in the IHO Work Programme, for the following years.

The Vice Minister of Guatemala announced a Donors Meeting scheduled for 2004 aimed at collecting funds for a "package" of regional projects. It was stressed that the hydrographic project should be given high priority within this package and that the IHO's presence at this meeting would be very helpful. Captain GORZIGLIA agreed to consider sending an IHO representative to this event.

STUDY TEAM TO ASSESS THE STATUS OF HYDROGRAPHY, AIDS TO NAVIGATION AND SAFETY OF NAVIGATION IN WESTERN AND CENTRAL AFRICA

A special meeting of the EAHC on Technical Co-operation in Hydrography and Aids to Navigation in Western and Central Africa convened in Lisbon in March 2001 to consider ways of improving the standard of nautical charting and overall safety of navigation in the region. As coordinating nation, France invited all the littoral states in West Africa to consider accepting a visit from the West African Action Team (WAAT). The WAAT comprised of members from those nations which have charting responsibility in the region (France, UK and Portugal) and a representative from US.



Visits have been paid to the following countries on the dates indicated:

- Oct/Nov 2002: Gabon, Nigeria, Ghana, Mauritania, Senegal, Cap Verde, Guinea Conakry and Sierra Leone.
- Mar 2003: Democratic Republic of Congo, Republic of Congo, Equatorial Guinea, Benin and Togo.
- Oct 2003: Senegal, Gambia and Guinea Bissau (meeting outside the country).

Visits are pending to the Ivory Coast and Guinea Bissau and no reply has been received yet from Cameroon, Liberia and Sao Tome and Principe. It is anticipated that the region needs strong support to comply with Phase One of the Stages of Development of Hydrographic Surveying and Nautical Charting Capabilities. Therefore it is planned to organize a meeting early in 2004 aimed at an analysis of the reports, in order to identify further actions.

EUMEDIS 217 PROJECT MEDCHARTNET

The 1st meeting of the Steering Committee of the EUMEDIS MEDChart Net Project and the General Meeting of all the participants were held on the premises of the International Maritime Academy in Trieste, Italy, on 8-9 April 2003, following the kind invitation of Admiral SPANIO, Director of the Academy. The meetings were chaired by VAdm. A. MARATOS and the following 14 Hydrographic Services of the Mediterranean and Black Seas participated in the meeting: Algeria, Croatia, Cyprus, Greece, Israel, Italy, Malta, Morocco, Serbia and Montenegro, Slovenia, Syria, Tunisia, Turkey and Ukraine.

This is a Project funded by the European Union (EU), aimed at supporting the Hydrographic Services of the region in the production of their ENCs, through the provision of hardware, software and training. National charts will also be transformed into ENCs in collaboration with a private company following an international tender, according to the technical specifications of the project approved by the EU. This is a three-year project and will be completed in April 2005.

At the end of the meeting Italy gave a presentation on the developments of the Mediterranean and Black Seas Virtual RENC and it was decided that the various topics, which were identified as requiring immediate action, would be further considered at the Meeting of the Mediterranean and Black Seas Hydrographic Commission, to be held in Brest, France, from 3 to 6 June 2003

PROJECT FOR SAFETY OF NAVIGATION SERVICES ON LAKE VICTORIA

The IHO has been associated with safety of navigation projects on Lake Victoria since it co-convened the Maputo Conference in 1995. One result of this conference was a subsequent seminar to assess the status of navigation on Lake Victoria and recommend programs for its improvement. Shortly after the conclusion of the seminar, the passenger ferry *MV BUKOBA* sank, killing at least 600 people. Since that time, there has been a great desire to institute safety of navigation measures but little substantive progress has been realized.

The French Ministry of Foreign Affairs is prepared to provide €320K to lay the governance and institutional ground work from which future initiatives can benefit. The objectives of this grant include the harmonization of maritime safety regulations and the initial efforts to establish an effective structure to administer safety of navigation regulations in the East African Community (EAC). Part of the constraints placed on the expenditure of these funds was the oversight of the program plan by a Steering Committee, composed of representatives from the EAC Member States and representatives from IMO, IHO and IALA. The first meeting of the Steering Committee was held from 9 to 14 February 2003, to review the input of expert consultants in various aspects of maritime safety and to recommend a way ahead to the EAC

The Steering Committee's overarching recommendation was the establishment of a Lake Victoria Maritime Safety Administration (LVMSA) as a matter of urgency and the adoption of harmonized

legislation and regulations governing maritime safety and security and marine environmental protection. These actions require approval of ministerial bodies within the EAC and the individual Partner States of Uganda, Tanzania and Kenya. There appears to be an opportunity to include provisions for the LVMSA under the Protocol for the Sustainable Development of the Lake Victoria Basin. The draft of this Protocol is nearing completion and adoption by the EAC could take place as early as May 2003. With funding provided by the French Ministry of Foreign Affairs, the IMO has provided an expert in maritime legislation to draft a text for the Protocol that would establish LVMSA. This legislative expert will also work on drafting harmonized legislation and regulations necessary for the LVMSA to operate.

The Steering Committee approved the recommendations of three consultants for the implementation of comprehensive programs in maritime search and rescue, aids to navigation and hydrography. The implementation plans for each of these programs provided a phased approach that could attract initial donor funding while building indigenous capability and establishing revenue mechanisms.

The primary contribution of the IHO in addition to its current overseer role will be assistance from IHO Member States in hydrographic training and in chart compilation as this project progresses.

Although there are provisions for future meetings of the Steering Committee, no date was set pending the approval of enabling legislation by the East African Community and Partner States.

DEVELOPMENT OF HYDROGRAPHY AND AIDS TO NAVIGATION IN THE BLACK SEA

The Working Group on the Safety of Navigation in the Black and Azof Seas (BASWG) held its 6th meeting under the Chairmanship of the Turkish Hydrographer, RAdm. Nazim CUBUKCU alongside the XIIIth meeting of the MBSHC. The following actions were decided:

- Black Sea countries to define their Hydrographic and Cartographic requirements, especially as regards the ENC production and send to Turkey before the next WG meeting.
- IMA to report to BASWG following the meeting with the EU representatives and set the time frame for the implementation of the project in a two-month period.
- ENC production boundaries to be defined, Turkey to prepare a draft scheme for the Black Sea before the next meeting of the WG.
- The next meeting will take place in Ukraine in Spring 2004; Ukraine to inform the MS of the dates, three months prior to the meeting.

TECHNICAL VISITS TO CENTRAL AND WESTERN AFRICA

See under West Africa Study Team.

TECHNICAL VISITS TO CENTRAL AMERICA AND MEXICO

These visits were not carried out in 2003 following the European Union decision not to fund the joint project COCATRAM/IHO/IMA. The attendance of IHO to the COCATRAM Meeting in Santo Domingo was carried out to re-start the project. After a work programme has been approved by both organizations, the technical visits issuing from it will be appropriately scheduled in future Work Programmes.

RESEARCH THE ESTABLISHMENT OF AN IHO SCHOLARSHIP SCHEME FOR STUDENTS FROM DEVELOPING COUNTRIES, AND PROPOSE BUDGET PROVISIONS.

Following the establishment of the new IHO Committee on Capacity Building, it was felt that the subject could be advantageously studied and handled by that Committee and therefore it is now included in its work programme.

MARINE ELECTRONIC HIGHWAY

This is a project of the Global Environment Facility (GEF), implemented by the World Bank (WB), and has an overall objective to develop and establish a marine electronic highway system in these straits for enhanced maritime services, improved navigational safety, integrated marine environment protection and sustainable development of the coastal and marine resources. The WB has agreed to finance the project and a Project Steering Committee (PSC) has been formed in order to provide overall direction/strategies and guidance for the execution of the project. The last Meeting of the PSC was held on 13-15 October in Jakarta (Indonesia).

The PSC is composed of representatives from the three littoral States (Indonesia, Malaysia and Singapore), the WB, IMO which acts as the Executive Agency, the IHO and the International Association of Independent Tanker Owners (INTERTANKO).

The backbone of the MEH is precision navigation and will utilize a network of Electronic Navigational Charts (ENCs) in conjunction with ECDIS, Differential GPS and other maritime technologies. The production of large scale ENCs will be based on the resurvey of the area using state-of-the-art surveying technology of multi beam with DGPS, to obtain quantitative depth information with full coverage of the bottom.

A Technical Committee on Hydrographic Surveys and ENCs has been formed in order to provide technical guidance during the planning and execution of hydrographic surveys and the production of ENCs in which technical experts from the Members of PSC will participate.

The IHB participated actively in the discussions of the PSC providing technical guidance and support for the planning of the survey and the production of the ENCs, the systems needed in the field and the Standards that have to be used.

During the last Meeting of the PSC the WB asked for an MOU to be signed between the Members of the PSC.

RE-INTEGRATION OF SUSPENDED MEMBER STATES
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Suriname, Democratic Republic of Congo, Dominican Republic

During 2003 the following efforts were made by the IHB to reintegrate IHO suspended members:

- **Democratic Republic of Congo (DRC):**
The West African Action Team, a technical body established by the EatHC to assess the status, identify initiatives and propose actions to enhance hydrography, nautical cartography and MSI in the region, paid a visit to DRC in March 2003 and could not find the reasons why their authorities decided to discontinue paying their contribution to the IHO since 1981. After the visit, the IHB sent an invitation to the national authorities to consider the reinsertion of the Democratic Republic of Congo in the IHO affairs. The IHB expressed its strong opinion that this country is losing the possibility and benefits associated to safety to navigation and protection of the marine environment, aspects with a deep relation with the economic and social development of maritime countries. Unfortunately, no reply has been received.
- **Dominican Republic (DR):**
Efforts to reinsert DR were considered to be made in 2004, but due to a meeting of COCATRAM hold in November 2003 in DR, the IHB decided to take advantage of it and to arrange meeting with their authorities. The representative of DR , the Director of the Instituto Cartográfico Militar was very receptive and showed strong interest and willingness to contact relevant Ministries to resolve and assure payment of the contributions. The IHB provided technical information as well as financial information to the Ministry of Foreign Affairs to speed up the process. It is expected that a positive reaction will take place during 2004.
- **Suriname:**
As indicated in the Work Programme, the IHB contacted The Netherlands Hydrographic Office and worked this issue in coordination. Communications between IHB and Suriname (President of the Board of Directors of the Maritime Authority) were established and information requested by Suriname was promptly forwarded by the IHB. It was clear from the exchange of correspondence that Suriname is seriously considering having its rights restored. It is expected that there will be positive news during 2004.

RELATED PUBLICATIONS

M-2 National Maritime Policies and Hydrographic Services

A re-edition of this publication, updated, was forecasted for early 2004. The members of the IHO Capacity Building Committee will send their contributions.

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**WORK PROGRAMME 3
TECHNIQUES AND STANDARDS SUPPORT**

CARTOGRAPHY AND HYDROGRAPHIC INFORMATION SERVICES

**IHO WORLDWIDE ELECTRONIC NAVIGATIONAL CHART
DATA BASE COMMITTEE (WEND)**

Chairperson:	Rear Admiral K.R. SRINIVASAN (India)
Vice-Chairperson:	Capt. B. KAFER (Australia)
Secretary:	Ing. en chef M. HUET (IHB)
Members:	Argentina, Australia, Brazil, Canada, Chile, China, Cuba, Denmark, Finland, France, Germany, Greece, India, Indonesia, Italy, Japan, Korea (Rep. of), Malaysia, Mexico, Netherlands, New Zealand, Norway, Oman, Peru, Philippines, Portugal, Russian Federation, Singapore, South Africa, Spain, Sweden, Thailand, Ukraine, United Kingdom, USA (NIMA & NOAA), Venezuela, IHB.
Observers:	Primar-Stavanger, IC-ENC, OEF, IOC

The 7th WEND Committee meeting took place in Lima, Peru, on 15-16 May. The main outcome was the setting-up of a WEND Task Group aimed at achieving worldwide ENC coverage and updating, uniform data quality, and user-friendly and integrated ENC services. Other important issues related to assistance in ENC production and the ENC coverage worldwide. The meeting acknowledged with gratitude the immense contribution to WEND issues by the former Chairman of WEND, Dr. Peter Ehlers (Germany).

The WEND Task Group, chaired by Mr. Horst HECHT (Germany), met twice at the IHB, on 11 September and 3 December. Issues addressed included a standard presentation on the TG goals and a letter to RHCs' chairs (WEND Letter 2/2003), aiming at getting RHCs' support to increase ENC coverage and quality; strategy for ENC production; schemas for small-scale ENC production; definition of an integrated ENC service; and assistance with ENC production.

Guidelines for the Establishment of ENC Production Boundaries and a statement to achieve user-friendly and integrated services to the mariner were agreed by Member States and have been included in the WEND Principles (TR K2.19).

**IHO COMMITTEE ON HYDROGRAPHIC REQUIREMENTS
FOR INFORMATION SYSTEMS (CHRIS)**

Chairperson:	Mr. O. BERG (Denmark)
Vice-Chairperson:	Capt. R. WARD (Australia)
Secretary:	Ing. en chef M. HUET (IHB)
Members:	Australia, Brazil, Canada, Chile, China, Cuba, Denmark (FRV & KMS), Ecuador, Estonia, Finland, France, Germany, Greece, India, Indonesia, Italy, Japan, Korea (Rep. of), Mexico, Netherlands, New Zealand, Norway, Portugal, Russian Federation, Singapore, South Africa, Spain, Sweden, United Kingdom, USA (NIMA & NOS), IHB.
Observers:	CIRM, DGIWG, GEBCO, IC-ENC, IEC, OEF, IMO, IOC, ISO, Primar-Stavanger, RTCM.

The 15th CHRIS meeting was held at the IHB, Monaco, on 10-13 June. A document on "*liaison mechanisms and guidelines for accredited organisations*", aimed at regulating IHO external liaison,

was prepared then submitted to SPWG. A work plan, providing a detailed programme of activities for CHRIS and its WGs, was agreed, and instructions for submission of proposals to CHRIS and WGs were adopted. Other issues discussed included reaffirmation of the need for ENC consistency worldwide; development of edition 4 of S-57 and a new IHO Presentation Library; and publication of the IHO Data Protection Scheme as S-63.

CHRIS TRANSFER STANDARD MAINTENANCE AND APPLICATION DEVELOPMENT WORKING GROUP (TSMAD)

Chairperson:	Dr. C.R. DRINKWATER (UK), till 3rd October 2003. Mr. M. BROWN (USA/NOAA), from 3rd October 2003
Vice-Chairperson:	Mr. D. VACHON (Canada)
Secretary:	Mr. A. PHARAOH (IHB)
Members:	Australia, Belgium, Canada, Denmark, Estonia, Finland, France, Germany, Italy, Japan, Netherlands, Norway, New Zealand, Singapore, South Africa, Sweden, UK, USA (NOS and USCG), IHB, IC-ENC, Primar Stavanger.
Expert Contributors:	C-Map, HydroService, IDON Technologies, Seven Cs, Universal Systems Ltd.

The TSMAD Working Group which is responsible for the maintenance and development of the IHO Standard Transfer Standard for Digital Hydrographic Data (publication S-57), held its 10th meeting at the Australian Hydrographic Office in Wollongong, in October 2003. This was a landmark meeting for



TSMAD members as it was the last meeting of its long-serving and highly respected Chainman – Dr Chris DRINKWATER. His replacement is the very capable Mr Mike BROWN from NOAA, USA. Tony PHARAOH who has acted as secretary of TSMAD and its sub working group, will continue to support the sub working group, however Mr. Ian HALLS, Hydrographic Sciences, Australia (HSA) has taken over as the new secretary of TSMAD.

The S-57 edition 4 sub-working group held meetings at the Canadian Hydrographic Service (Ottawa) during May, and in conjunction with the TSMAD meeting in Australia. Unfortunately, the Chairman of this group, Mr. Don VACHON had to step down due to work commitments. Mr. Barrie GREENSLADE was elected as the new Chairman, and coordinator of the group's work activities, and he will also act as Vice-Chairman of TSMAD.

CHRIS COLOURS AND SYMBOLS MAINTENANCE WORKING GROUP (C&SMWG)

Chairperson:	Dr. M. JONAS (Germany)
Vice-Chairperson:	<i>Vacant</i>
Secretary:	Mr. C. ROBERTS (Australia)
Technical Coordinator:	Mr. S. HERBERG (Germany)
Members:	Australia, Canada, France, Germany, Norway, United Kingdom, USA (NIMA), IHB.

Other Participants: C-Map (Italy), CARIS (Canada), DnV (Norway), Furuno/Navintra (Finland), IEC/TC80, Imtech Marine & Industry (Canada), Kelvin Hughes (UK), Nippon Sogo System (Japan), OSL (Canada), Raytheon Marine (USA), STN Atlas Marine Electronics (Germany), SevenCs (Germany), Transas Group (Russia), UNH (USA), US Coast Guard, Wismar University (Germany), Xenex Innovations (Canada).

The 14th C&SMWG meeting was held at the CHS, Ottawa, Canada, on 18-20 May. The main agenda items were:

- Drafting activities related to Edition 4.2 of S-52, Appendix 2 and to Edition 3.3 of the IHO Presentation Library, so that these new editions can be published as soon as possible. This included a 3-table colour scheme; and Chart 1 and symbol diagrams.
- Development of a paper based description of the ECDIS symbols, to be included in the new Presentation Library. Inclusion of the digital PL (DAI file) in future editions of the Presentation Library will be optional.
- Funding of the work of the WG related to the maintenance of the colour and symbol specifications (a core IHO responsibility). C&S budget requests will be submitted to the IHB based on the work programme. Cost of the new Presentation Library will be 1500 € for new comers, 500 € as update and free to non-HO C&SMWG attendees.
- Interaction and liaison with other CHRIS WGs, e.g. CSPCWG or TSMAD, with IHO-IEC HGMIO, and with IEC/TC80/WG13.

CHRIS DATA QUALITY WORKING GROUP (DQWG)

Chairperson: Mr. O. BERG (Denmark)
Members: Australia, Canada, France, Germany, Japan, USA (NIMA & NOS).

DQWG activities have been in abeyance all the year. The CHRIS Chairperson has assumed the responsibilities for this group.

CHRIS STANDARDIZATION OF NAUTICAL PUBLICATIONS WORKING GROUP (SNPWG)

Chairperson: Mr. J. MELLES (Germany)
Vice Chairperson: Mr. R.G. WHITE (USA(NIMA))
IHO Members: Argentina, Cuba, Denmark, Estonia, France, Germany, Greece, Italy, India, Italy, Japan, Korea (Rep. of), Russian Federation, Spain, Sweden, Tunisia, UK, USA (NIMA & NOS), IHB.
Expert Contributors: Maptech, C-Map, Nippon Sogo Systems.

The first SNPWG Meeting, under the Chairmanship of Mr. Johannes MELLES, took place at the “Bundesamt Für Seeschifffahrt Und Hydrographie” (BSH) in Hamburg, on 2-4 June 2003.

Although many hydrographic organizations are producing digital nautical publications, the primary focus of this meeting dealt with how the information contained in nautical publications could best be integrated with ENC's for use in ECDIS.

CHRIS IHO DATA PROTECTION SCHEME WORKING GROUP (DPSWG)

Chairperson: Mr. R. SANDVIK (Norway)
Vice Chairperson: *Vacant*
IHO Members: Canada, France, Germany, Norway, UK, IHB.

Expert Contributors: IIC, Japan Radio, Kelvin Hughes, SevenCs.

The IHO Data Protection Scheme Working Group (DPSWG) held its 3rd meeting at the International Hydrographic Bureau (Monaco) on 24 and 25 November 2003. The Meeting, which was attended by members from Primar-Stavanger, UKHO, SevenCs and the IHB, reviewed the current status of the recently issued S-63 publication, and discussed issues relating to its implementation, and the role of the IHB as Scheme Administrator (SA). Earlier in the year (April), a two-day training session had been organized by the DPSWG for IHB personnel, in order to help the IHB taking over as SA.

To facilitate the scheme implementation, the working group has developed a list of Frequently Asked Questions (FAQ), and guidance notes on the implementation of S-63. Both of these are available on the IHO web-site at <http://www.iho.shom.fr/>.

The Working Group has also set up the following two discussion groups on the Open ECDIS Forum (OEF) at <http://www.openecd.org> :

- A DPSWG discussion forum to resolve technical issues relating to the maintenance and development of the scheme.
- An S-63 discussion forum to resolve implementation issues. All appropriate Questions and Answers from this forum will be placed on the S-63 FAQ page.

CHRIS CHART STANDARDIZATION AND PAPER CHARTS WORKING GROUP (CSPCWG)

Chairperson: Mr. P. JONES (UK)
Vice-Chairperson: Mr. J. MAKINEN (Finland)
Secretary: Mr. A. COLEMAN (UK)
Members: Australia, Brazil, Canada, Chile, Colombia, Croatia, Cuba, Denmark, Finland, France, Germany, Greece, India, Indonesia, Italy, Japan, Netherlands, New Zealand, Russian Federation, South Africa, Spain, Ukraine, United Kingdom, USA (NIMA & NOS).
Contacts: IHB, CHRIS Chair, C&SMWG Chair, SNPWG Chair, TSMAD Chair.

This new working group (2003 was its first year of activity) was formed under CHRIS to continue the activities of the former Chart Standardization Committee (CSC). No meeting was held during the year. The work was conducted by correspondence and salient issues addressed by CSPCWG were:

- Definition of working procedures for the new WG.
- Consideration of appropriate chart symbology for Archipelagic Sea Lanes (ASL).
- development of specific chart symbology for Environmentally Sensitive Sea Areas (ESSAs).

The CSPCWG Secretariat also liaised with the IHB on how to improve the lay-out of IHO Publications M-4 and M-11.

IMO-IHO HARMONIZATION GROUP ON ELECTRONIC CHART DISPLAY AND INFORMATION SYSTEMS (ECDIS) - (HGE)

Chairperson: Mr. O. BERG (Denmark)
Members: **IHO:** Canada, Denmark, France, Germany, Norway, UK, USA, IHB.
IMO: Canada, Germany, Japan, Norway, Russian Federation, UK, USA, IMO Secretariat.
Others: CIRM, IAIN, IGS, IMSO

No meetings were held during the year. No subjects were brought to the attention of the Group.

IHO-IEC HARMONIZATION GROUP ON MARINE INFORMATION OBJECTS (HGMIO)

Chairperson: Dr. L. ALEXANDER (Univ. of NH, USA)
Members: **IHO:** Canada, Estonia, Italy, Japan, Norway, UK, USA (NIMA and Navy), IHB.
IEC: Caris (Canada), Navintra (Finland), SevenCs (Germany), C-Map (Italy), Chartworx (Netherlands), Transas (Russia), Maptech (USA), USCG.

The 2nd HGMIO meeting was held at the IHB, Monaco, on 14 June. Issues addressed by the meeting included:

- Assessment of the current status of previously developed or proposed IHO S-57 objects/attributes and display aspects for each of the following MIO categories: Ice Information; Tides and Water levels; Oceanographic Information; and Meteorological Information. For each MIO category, a Task Leader has been assigned and tasked to prepare a short “white paper” that describes the status of IHO S-57 objects, product specifications, proposed colours and symbols, test dataset, any required field trials etc.
- Development of a work plan for the WG and establishment of work priorities.

Other potential topics for future investigation could include: Current Flow; Marine Environmental Protection; and Marine Habitats.

The IHO contributed to the work of IEC/TC80/WG13 (Displays for the presentation of navigation related information) through the Chair of IHO C&SMWG, Dr. M. JONAS (Germany), who represented the IHO at a meeting of WG13 in St. Petersburg, Flo., USA, in May. IHO also cooperates with IEC on the definition and display of Marine Information Objects (see 3.1.5).

DIGITAL GEOGRAPHIC INFORMATION WORKING GROUP (DGIWG)

DGIWG, a collection of geographic information activities responsible for data standardization within NATO, held its annual meeting in Vancouver, Canada from 7 to 11 April.

During the Industry Day/External Organizations Session, the IHB provided an overview of the IHO and its role in the standardization of hydrographic information. A subsequent presentation summarized a study sponsored by the UKHO and NIMA that provided a roadmap by which the IHO’s S-57 standards and the DGIWG’s DIGEST standards could be harmonized and eventually converged. The ensuing discussions addressed the re-establishment of a memorandum of cooperation between DGIWG and IHO that was formulated in the early 1990’s but had become dormant as both organizations migrated their harmonization efforts to the ISO. As both organizations are currently working on new editions to their respective standards, the opportunity exists to ensure further divergence is avoided and substantive harmonization realized. Continued exchange of personnel between the DGIWG Technical Panel and the IHO CHRIS TSMAD was agreed and near term mutually beneficial efforts were discussed.

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION (ISO)

The International Organization for Standardization (ISO) is a non-governmental international organization comprising a world-wide federation of national standards bodies from approximately 130 countries.

The ISO Technical Committee 211 (ISO/TC211) is developing a series of base standards that address a broad field of geographic information requirements. Many of these standards, which are relevant to the further development of the IHO S-57 standard, have been completed or are presently published as Draft International Standards. The IHO is a liaison member of TC211, and was represented by Mr. A. PHARAOH (IHB) and Mr. B. GREENSLADE (UKHO) at the plenary and working group meetings, that took place in Thun (Switzerland) and Berlin (Germany) during 2003.

INTERNATIONAL CARTOGRAPHIC ASSOCIATION (ICA)

The International Cartographic Association (ICA) held its 2003 Congress at the International Conference Centre in Durban, South Africa, on 10-16 August. International Cartographic Conferences, which are held every two years, are major events of the ICA and attract many role players in the cartographic world. More than 700 cartographers were registered at ICC 2003, which mainly consisted of:

- an ICA General Assembly on 10 and 16 August;
- the Conference itself, where numerous papers were presented throughout the week in sessions running in parallel, on cartography-related topics, e.g. Applied Cartography and GIS; Geo-Spatial Database Development; Internet Cartography; Marine Cartography; Mobile Cartography; Spatial Data Infrastructure; Spatial Data Standards; etc.;
- a cartographic exhibition, where various maps and other cartographic products were presented by ICA Member States; and
- a commercial exhibition with participation of companies involved in cartography-related activities.

A Strategic Plan was discussed and agreed at the ICA General Assembly, and several Vice-Presidents were elected (or re-elected) and Professor Milán KONECNY (Czech Republic) was elected President of the ICA for a 4-year mandate. Also the IHO representative, Mr. Michel HUET, had the opportunity to address the Assembly and gave a presentation on the IHO including a review of recent activities and achievements by, or of particular interest to, the IHO, e.g. the new IMO SOLAS Convention, the GEBCO Centenary Conference, or the IHO-ICA-FIG cooperative venture to produce standards of competence for nautical cartographers. He also mentioned a draft IHO-ICA Memorandum of Understanding, prepared by the IHB to strengthen cooperation between the two organizations. This draft MoU was examined and favourably received by the ICA Executive Committee during the week. Papers presented at ICC 2003, some of which might be of interest to the IHO community, were placed on CD-ROM and distributed to participants. Copies may be obtained by contacting the ICA Secretary-General, Ferjan ORMELING : F.Ormeling@geog.uu.nl.

Apart from the ICA Cartographic Exhibition, a special area was kindly allocated to the IHO by the ICC 2003 organisers for an IHO Chart Exhibition, where 19 Hydrographic Offices and the IHB put on a display. The IHO “marine” exhibition had great success with conference delegates. A jury made up of several ICA personalities, including Prof. KONECNY, and chaired by the IHO representative was formed to judge the IHO exhibition. After careful consideration of all displays the jury decided, in accordance with a series of strict criteria, that the prize for best exhibitor should be given to two HOs presenting a large diversity of chart products, including ENCs displayed on a computer simulating an ECDIS, and permanently manned. The two winning HOs were: **South Africa and Ukraine**. The IHB warmly congratulates the winners, who will receive their prize at the next important IHO event, e.g. the Extraordinary International Hydrographic Conference (EIHC) in April 2005, in Monaco.

During ICC 2003, the Joint Board of Geospatial Information Societies (JB-GIS) held its annual meeting, with representatives from ICA, IHO, FIG, IAG (International Association of Geodesy), ISPRS (International Society of Photogrammetry and Remote Sensing), ISCGM (International Steering Committee for Global Mapping) and IMTA (International Map Trade Association). In addition to the above organizations, JB-GIS also includes the International Geographical Union (IGU). JB-GIS can be seen as a forum where areas of common interest to several GIS are discussed, and as a coordinating mechanism for cooperation. The main objective of JB-GIS is to increase cooperation

among member societies and to provide an authoritative contact point for all agencies interested in geospatial information. The meeting was chaired by Prof. Bengt RYSTEDT, ICA President. Chairmanship of the Board rotates annually among the presidents of each member society. Presentations were made by each organization's representative on their main activities over the past year. It was agreed that a website would be created, if possible using the address www.jbgis.org, and that the JB-GIS postal address would be the permanent headquarters of FIG in Denmark. The next meeting of JB-GIS has been planned in conjunction with an ISPRS Congress in Istanbul, Turkey, in July 2004. Up until that date, the JB-GIS Chairman will be Dr. John C. TRINDER, President of ISPRS. Following a suggestion by the IHO representative (Michel HUET), it was agreed that the subsequent meeting would take place in Monaco, on the occasion of the 3rd EIHC, in April 2005. The IHO President, VAdm Alexandros MARATOS, will therefore chair JB-GIS from July 2004 to April 2005.

In addition to the IHB, the following Hydrographic Offices, at least, were represented at ICC 2003: China, Ecuador, Finland, India, South Africa, Sweden and Ukraine.

INTERNATIONAL CHARTS

Small Scale Series (1:2 million and smaller)

The status of these charts at the year's end was:

- INT charts projected	95
- INT charts published	84
- INT charts reprinted by other IHO Member States	80
- Number of IHO producer nations.....	17
- Number of IHO printer nations	15

Medium and Large Scale Series (larger than 1:2 million)

- i) The production of INT charts at medium and large scales by Member States' Hydrographic Offices has continued, in accordance with the schemes prepared by IHO Regional Charting Groups or Committees. Sections of M-11 pertaining to INT Regions 'D', 'E', 'F', 'G', 'H', 'I', 'J', 'K', 'L' and 'M' have been completed.
- ii) INT chart schemes have been adopted in the Regions D (Coord: Netherlands), E (Coord: Germany), F and G (Coord: France), H (Coord: South Africa), I (Coord: Iran), J (Coord: India), K (Coord: Japan), L (Coord: Australia; medium scales only), and M (Antarctica - Coord: IHB).
- iii) INT chart schemes for Region B (Coord: Mexico), C1 (Coord: Brazil), and C2 (Coord: Chile) are in various states of preparation or completion.
- iv) No progress was reported on the preparation of an INT chart scheme for Region A (Coord: USA(NOAA)).

INDUSTRY / STAKEHOLDERS WORKSHOP

For the fourth year in succession, the IHB Directing Committee hosted a workshop at the International Hydrographic Bureau, Monaco, 16–17 June 2003, to foster cooperation between the IHO and Industry/Stakeholders organizations. The workshop which was well attended included about 50 members from hydrographic or navigational equipment manufacturers, data producers, academia, mariners, chart agents and representatives of Hydrographic offices or other national maritime organizations.

Although one of the major subjects was, as in previous years, ENC production (or rather the lack thereof), it appeared that a primary goal of these gatherings, namely to establish a liaison mechanism between “Industry” and the IHO, was coming closer to being achieved. This year’s conference saw some well-prepared proposals from both the IHO and Industry.

A strong warning not to lose the interest of the end users of the hydrographic product was voiced by representatives of both the Industry and Users.

S-44 – IHO STANDARDS FOR HYDROGRAPHIC SURVEYS

Chairperson: Vice-Admiral A. MARATOS (IHB President)
Secretary : Lt. Cdr. S. SHIPMAN (IHB PAH)

Since the publication of the 4th Edition of S-44 in 1998, the Working Group has been placed in abeyance pending the requirement for a 5th Edition.

HYDROGRAPHIC SURVEYING

IHO HYDROGRAPHIC DICTIONARY WORKING GROUP (HDWG)

Chairperson and Secretary: Lt. Cdr. Steve SHIPMAN (IHB)

No meeting of this Working Group took place in 2003.

TIDAL COMMITTEE

Chairperson: Commander John PAGE
Vice-Chairperson:
Secretary: Lt. Cdr. Steve SHIPMAN (IHB)

The Vth Tidal Committee Meeting was hosted by the ‘Dirección de Hidrografía y Navegación, Marina de Guerra del Perú’ at the Hotel Las Americas in Lima, Peru, from 23 to 25 April 2003. The meeting was attended by representatives from: Australia, Canada, Chile, China, Denmark, France, Peru, the United Kingdom and the IHB. A wide range of subjects were discussed and the Final Report is posted on the Tidal Committee page of the IHO web site.

IAG EUREF

A meeting of the European Combined Geodetic Network took place in Frankfurt from 4-5 September. The standards to be met for Space Observations, (GPS, GLONASS, *GALILEO* and Laser), Gravity Observations (Super-conducting and Absolute), Levelling, Tide-gauges and other observations were agreed. Tide-gauge observations must satisfy the general recommendations of the International Oceanographic Commission (IOC) in order to fulfil the standards of the international sea-level centres, networks and services such as the Permanent Service for Mean Sea Level (PSMSL), European Sea

Level Service (ESEAS) and the Global Sea Level Observing System (GLOSS). Special attention has to be applied to the regular fixing of the tide-gauge to ensure the necessary long-term stability and reliability of the measurements. Height differences between the tide-gauge contact point, tide-gauge benchmark, GPS benchmark and possibly other benchmarks should be established at least annually. It was further recommended that all participating tide-gauge stations should be part of the GPS Tide-Gauge Benchmark Monitoring Pilot Project (TIGA-PP).

Whilst ECGN is specifically concerned with Europe, IAG is forming a new inter-commission project, under the same chairman, on vertical reference frames to look at a proposal for a 'World Height System'. The professional assistant for Hydrography (PA(H)) provides a link between these groups and the IHO Tidal Committee and ABLOS.

IHO MANUAL ON HYDROGRAPHY WORKING GROUP (MoHWG)

Chairperson : Captain Hugo GORZIGLIA
Vice Chairperson: Lt Cdr David WYATT
Secretary: Lt. Cdr. Steve SHIPMAN

Due to delays in the receipt of contributions, members of the WG were advised that the second meeting of the Working Group would be delayed until November 2003. In May 2003 a letter was sent to members of the WG, highlighting that Chapters 3, 4, 5 and 7 had still not been received. In view of the time required by the IHB to merge the chapters together and to circulate them to the WG for review, it was further suggested that the final editorial review meeting be held either from the 1 – 3 or 8 – 10 March 2004 -at the IHB. Despite the request to acknowledge receipt of the letter, expedite the production of the outstanding chapters and to state a preference for the date of the meeting, only 4 replies were received.

The IHB did not wish to delay the final meeting beyond March 2004 as this already represents a 13-month delay in the 2-year plan. The IHB believes that this is an important publication which has a key role to play in Capacity Building.

ADVISORY BOARD ON HYDROGRAPHIC, GEODETIC AND MARINE GEOSCIENTIFIC ASPECTS OF THE LAW OF THE SEA (ABLOS)

Chairperson: Prof. Chris RIZOS
Vice Chairperson: Dr. Shin TANI
Secretary: Lt. Cdr. Steve SHIPMAN (IHB)

The end of October 2003 was a very busy period for the Advisory Board on Hydrographic, Geodetic and Marine Geo-Scientific Aspects of the Law of the Sea, ABLOS, and the IHB. The International Hydrographic Organization (IHO), the International Association of Geodesy (IAG) and the Intergovernmental Oceanographic Commission (IOC) of UNESCO jointly sponsor ABLOS.

The first meeting of the Editorial Committee, responsible for producing the 4th Edition of S-51 "A Manual on Technical Aspects of the United Nations Convention on Law of the Sea", was held on Thursday 23rd and Friday 24th October. An outline structure for the book was agreed, along with the identification of those members who would lead the development of various sections. Ron MACNAB, the outgoing Chairman of ABLOS, agreed to take on the role of Chairman of the Editorial Committee.

Anyone who feels that they have something to contribute to this revised publication should contact Steve SHIPMAN at the IHB, sshipman@ihb.mc. It is anticipated that a further Editorial Committee Meeting will be held in April 2004, with the aim of publishing the new edition by the end of 2004.

The ABLOS Annual Business Meeting took place on Sunday 27 and Monday 28 October. Amongst other matters, the Board discussed the issues raised by the S-51 Editorial Committee and endorsed the proposed plan of action. Extensive discussion took place on the future focus for ABLOS. Matters discussed included:

- Forging a scientific consensus on ridge issues in different parts of the world;
- Impact of Article 76 on Marine Scientific Research;
- Global Vertical Reference Network;
- International Cooperation in Ocean Mapping;
- Invited participation in training initiatives.

The Board extended a vote of thanks to Bjorn Geirr HARSSON, who was leaving the Board and who had been a very active member since its inception. The Board was advised that IAG had appointed Dr. Don GRANT, the Deputy Surveyor General of Land Information New Zealand (LINZ), as the replacement for Bjorn.

Professor Chris RIZOS from the University of New South Wales, Australia, an IAG member and current Vice Chairman, was elected as Chairman for the next two-year period. Dr. Shin TANI from the Hydrographic and Oceanographic Department of the Japan Coast Guard, and IHO member of the Board, was elected as Vice Chairman.

The next meeting of ABLOS will take place in October 2004, dates and venue to be confirmed. A full report of the Business Meeting will be placed on the ABLOS website, <http://www.gmat.unsw.edu.au/ablos/index.html>, in due course.

The 3rd Biennial ABLOS Conference, “Addressing Difficult Issues in UNCLOS”, was held at the IHB from 28 – 30 October. 88 delegates (a record for the IHB premises) from 31 countries and representing 22 Member States of the IHO, 10 other government departments, 12 business groups, 9 academic institutions and 3 international organizations attended the conference from 28 to 30 October.

The first day of the conference included 6 tutorial sessions on:

- Height Reference Systems;
- The Normal Baseline;
- Maritime Zones and Jurisdictions;
- National considerations when negotiating a maritime boundary;
- Completing an Article 76 Desktop Study;
- Deepwater Non-Living Marine Resources.

On days 2 and 3 there were 22 papers from leading practitioners in the fields of hydrography, oceanography, geodesy, law, computing, GIS and marine research, which covered many aspects of the Law of the Sea. The conference was well received by the delegates and the papers sparked much debate, which continued in the cafés and bars of Monaco, long after the formal proceedings came to an end. Papers and tutorials are available on the ABLOS website.

The next ABLOS Conference will be held in 2005, probably at the IHB, in October. Exact dates and subject will be agreed at the 2004 ABLOS Business Meeting.

STANDARDS FOR SURVEYING IN NAVIGABLE RIVERS AND INLAND WATERWAYS

This matter has been raised by the IHB at some Regional Hydrographic Commission meetings. There has been found that no general consensus exists on the need to establish standards for surveying navigable rivers, as the characteristics of each of these bodies of water could be extremely different. Moreover, it was indicated that for a same river different methodologies must be applied, due to the rapid changes that affect areas in relation to meteorological factors.

Discussions had indicated that in general terms normal methodologies apply to both coastal zone and fluvial passages hydrography. A Task Group has been established by the SEPHC, chaired by Peru, to prepare a document that would consider some general particularities pertinent to rivers as well as some very particular consideration and practice in force in different scenarios. As soon as the document is available, the IHB will circulate it to all MS for comments and improvement. One of the main outcomes of this action is that those general aspects could be considered in the Manual of Hydrography under preparation.

FIG/IHO/ICA ADVISORY BOARD

The XXVIth Meeting of the IAB was held at the the Lensbury Conference Centre, Teddington Lock (London) UK, from 3 to 7 June 2003. It was hosted and organized by Mr. Gordon JOHNSTON, Advisory Board member, with the support of his firm “Thales Geosolutions”, the UKHO and FIG. The following were present:

Chairperson:	Mr. Svante ASTERMO (Sweden)
Vice-Chairperson:	Lt. Cdr. Steve SHIPMAN (UK). Capt. A. Armstrong (USA), since July 2003.
Secretary	Capt. Federico BERMEJO (IHB)
Members:	Mr. R. FURNESS (Australia), Dr. D. WELLS (Canada), Ms. T. TUURNALA (Finland), Prof. Dr. D. EGGE (Germany), Dr. L. TSOULOS (Greece), Dr. L. SURACE (Italy), Cdre. R.B. JAYARAMAN (India), Dr. M. RAZALI (Malaysia), Mr. G. JOHNSTON (UK)

The Advisory Board welcomed the new member, Cdre. R.B. JAYARAMAN (India) appointed to the Advisory Board by the IHO in replacement of Rear Admiral SRINIVASAN, who had resigned. The



Advisory Board thanked Rear Admiral SRINIVASAN for his outstanding contribution to the tasks of the Advisory Board during the eight years of his term as a Board member.

The Chairman also reminded the Advisory Board that this was the last meeting for Captain GORZIGLIA and Lt. Cdr SHIPMAN who have resigned due to their new appointments at the IHB. He also advised the Advisory Board that

Prof. Dr. Delf EGGE (Germany) and Prof. Luciano SURACE (Italy) had been selected by the IHO as their replacements.

Captain GORZIGLIA summarised the background and development of the new Standards for Nautical Cartographers and the final text was approved. The new publication was available from the IHO WEB site in accordance with the present IHO policy and procedures on publications.

The Advisory Board approved the recognition of the Course submitted by the University of Otago (New Zealand) to the XXVth Meeting and confirmed its recognition at Category A level.

The following courses were considered and recognized :

- I.- THE ROYAL NAVY'S HM2 COURSE at Category B and Option 6.
- II.- ADVANCED TRAINING COURSE ON HYDROGRAPHY FOR OFFICERS - EPSHOM (FRANCE) at Category B
- III. PROGRAMME FOR NATIONAL DIPLOMA IN HYDROGRAPHY OF THE DALIAN NAVAL ACADEMY OF CHINA at Category B level, with Options 1, 2, 3, 4, 5, 6 and 7. Also, it was decided to extend the recognition of the Category A course granted in 2002, to include Options 1, 2, 3, 4, 5, 6 and 7.
- IV. SPECIALIZATION COURSE IN HYDROGRAPHY OF THE PORTUGUESE HYDROGRAPHIC INSTITUTE at Category A level with Options 1 and 2.

The first draft of the Standards was prepared by Captain Hugo GORZIGLIA (Chile) with the valuable support of the International Maritime Academy, and was submitted for consideration to the International Advisory Board who reviewed it at its XXVth meeting, held in June 2002.

The publication was posted on the IHO Web Site and Member States provided valuable comments.

The amended draft was finally approved by the International Advisory Board at its XXVIth meeting (June 2003) and the new Standards entered into force subsequently.

The Advisory Board discussed present learning methods with a special emphasis on "Distance Learning" and the members shared their experiences in this interesting field.

It was also agreed that continuous contact should be maintained between the Advisory Board and the institutions with recognized courses. These institutions should keep their course updated against the Standards of Competence by receiving information from the Board and conducting an internal evaluation of their courses. The use of the IHO Internet Web Site will be encouraged as a means of achieving this.

It was also agreed that the IHO Regional Hydrographic Commissions should provide a focus developing training matters.

The Board duly recognizes the contribution of the National Hydrographic School of India, the International Maritime Academy (IMA), Trieste, Italy, and the Japan International Cooperation Agency (JICA, Japan) to international training within their respective regions and Regional Hydrographic Commissions and recommends that their action be taken as an example for emulation in other areas and Regional Hydrographic Commissions.

The A. Board confirmed the early decision to hold the XXVIIth meeting in Malaysia, from 5 to 8 May 2004. There were several proposals for the location and venue of the 2005 meeting and this will be finalised at a later date.

The Chairman explained that the present Vice-Chairman Lt. Cdr Steve SHIPMAN, as already stated at the opening of the Conference, had to resign from the Board due to his new appointment at the IHB and therefore a new Vice-Chairman should be elected. Captain Andy ARMSTRONG (USA) was unanimously elected Vice-Chairman.

The A. Board thanked Captain GORZIGLIA and Lt. Cdr SHIPMAN FOR their work and effort during their terms of office and wished them success in their new appointments as IHB Director and Professional Assistant respectively.

COORDINATION OF ACTIONS WITH INTERNATIONAL FUNDING AGENCIES FOR THE PROMOTION OF HYDROGRAPHIC TRAINING AND EDUCATION IN DEVELOPING COUNTRIES

It was decided that the IHO Capacity Building Committee would consider this topic within its Strategy.

OCEAN MAPPING

GENERAL BATHYMETRIC CHART OF THE OCEANS (GEBCO)

A major event of the year was the Centenary Commemoration of GEBCO, jointly organized by the IHO and the IOC with the outstanding contribution from the Government of Monaco, which was held in Monaco on 14-16 April 2003 and was a complete success.

The main component of this event was the Conference “*Charting the Secret World of the Ocean Floor. The GEBCO Project 1903-2003*”, which was opened by H.S.H. Prince ALBERT of Monaco who paid tribute to all those who have worked in the GEBCO Project so efficiently for the benefit of mankind. The Conference brought together a selection of very interesting papers on subjects ranging from the early years to the future of GEBCO, with special emphasis on Ocean Mapping in the 21st Century. The Conference was attended by more than 150 specialists who were impressed by the high quality of the presentations, including 3-D dynamic pictures of the seabed and other state-of-the-art developments in digital bathymetry. Associated events were:

- the publication of a 140-page book “*The History of GEBCO, 1903-2003*”, with numerous colour plates, published by GITC bv.
- the Centenary Edition of the “GEBCO Digital Atlas” which includes a gridded version of GEBCO contours presented on a one minute (latitude by longitude) global grid. A copy was distributed to Conference participants.



- a technical ocean mapping exhibition, which included the first bathymetric map of the whole Indian Ocean, generated from gridded data, and bathymetric products of several International Bathymetric Chart (IBC) projects.
- the unveiling of a commemorative plaque by H.S.H. Prince ALBERT of Monaco during the Opening Ceremony.

The Web site continues to be a useful source of information about GEBCO for the community. GEBCO is indebted to NGDC for hosting this site.

The following GEBCO meetings have been planned for 2004:

- Guiding Committee XX : 1-2 April, La Spezia, Italy
- Sub-Committees/Working Groups : 3 April, La Spezia, Italy
- Plenary Sessions : 5-6 April, La Spezia, Italy
- Sub-Committee on Undersea Features: 8-11 June, St Petersburg, Russia

JOINT IHO-IOC GUIDING COMMITTEE FOR GEBCO

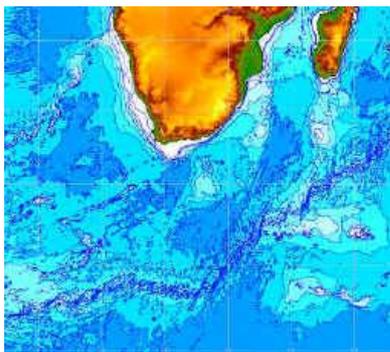
Chairperson: Mr. D. MONAHAN (Canada)
Vice-Chairperson: *Vacant*
Members: **IHO:** Mr. D. MONAHAN (Canada), IGA E. CAILLIAU (France), Mr. A.E. HADJANTONIOU (Greece), Dr. K. YASHIMA (Japan), Dr. M.S. LOUGHRIDGE (USA)
IOC: Dr. H.SCHENKE (Germany), Lic. J.L. FRIAS Salazar (Mexico), Dr. R. FALCONER (New Zealand), Dr. G. UDINTSEV (Russian Federation), Dr. M. JONES (United Kingdom)
Permanent Secretary: Dr. R. WHITMARSH (United Kingdom)

The Nineteenth Meeting of the GEBCO Guiding Committee (GEBCO-XIX) was held at the IHB, Monaco, on 16-17 April.

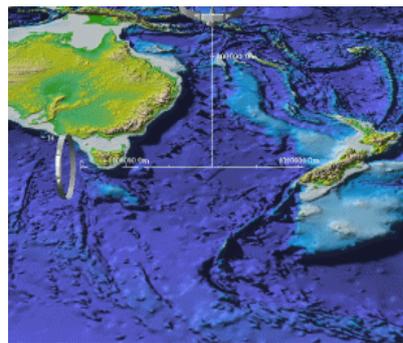
GEBCO SUB-COMMITTEE ON DIGITAL BATHYMETRY (SCDB)

Chairperson: Dr. M. JONES (UK) (retired 17 April 2003, currently vacant)
Members: Canada, Germany, Greece, IHB, Israel, Japan, Russian Federation, UK, and USA.
Secretary: GEBCO Permanent Secretary

The GEBCO Sub-committee on Digital Bathymetry held its 20th meeting at the IHB (Monaco) on Saturday 12th April 2003. The meeting was opened by IHB Director Captain Hugo GORZIGLIA, and was chaired by Dr. Meirion JONES of the British Oceanographic Data Centre. Tony PHARAOH represented the IHB.



Bathymetric contours



GDA gridded data displayed

Example images produced using the GEBCO Centenary GDA - April 2003

The most important issue dealt with during the meeting was the new edition of the GEBCO Digital Atlas (GDA), which was officially launched at the GEBCO Centenary Conference (14-16 April). The new

GDA follows two previous editions, which were released in March 1994 and March 1997. In addition to the existing GEBCO contours, the new GDA also includes new bathymetry for the Arctic and Indian Oceans as well as significant updates for areas of the North Atlantic, the Weddell Sea and the area around New Zealand. Just as importantly, however, it also includes the first release of the GEBCO bathymetric grid, which provides bathymetric data on a one minute global grid.

The new GDA is delivered as a set of CD-ROMs with a Microsoft Windows software interface that allows bathymetric data to be viewed in a variety of projections. It also enables users to select and export contour vector and gridded data, for use in other "third party" applications. For further information about the GDA, visit the BODC web-site at www.bodc.ac.uk or send enquiries to enquiries@bodc.ac.uk

SUB-COMMITTEE ON UNDERSEA FEATURE NAMES (SCUFN)

Chairperson: Dr. H.W. SCHENKE (Germany)
Members: Argentina, Colombia, Indonesia, Japan, Russian Federation, USA.
Secretary: IHB.

The 16th SCUFN meeting took place at the IHB, Monaco, on 10-12 April. 164 names were examined during this meeting, of which approximately 100 new names were accepted and added to the Gazetteer, a majority of them being located in the Arctic Ocean. The current Gazetteer of Undersea Feature Names is provided on the GEBCO website (see www.ngdc.noaa.gov/mgg/gebco/underseafeatures.html).

Dr. R.L. FISHER (USA) has resigned from SCUFN, after more than 20 years of authoritative leadership of SCUFN and a huge amount of work accomplished. Dr. H.W. SCHENKE (Germany) has been appointed as the new Chairman. Argentina, Colombia, Indonesia, Japan, Russian Federation and USA have kindly provided new SCUFN members.

GEBCO Digital Atlas

Cumulative Sales and Distribution of the Second Release of the GDA, up to April 2003, were 1378 copies distributed to 96 countries (of which 1057 were sold including 30 in the past year).

During the Centenary Conference the new 1-minute gridded Centenary Edition of the GDA was released. This represented the culmination of strenuous efforts by many people within GEBCO to meet a tight deadline. The GDA had been shown to a large number of people attending the European Geophysical Assembly in Nice the previous week, which was attended by 11,000 scientists, and had raised considerable interest. The new GDA exhibits great flexibility in the types of displays that can be created and in addition can be used to create profiles of relief, to plan cruise tracks and to enquire about feature and place names.

INTERNATIONAL BATHYMETRIC CHART PROJECTS

The IHO contributes to the following seven IOC regional International Bathymetric Chart projects:

- IBCM (Mediterranean and Black Seas) – www.ngdc.noaa.gov/mgg/ibcm/ibcm.html
Chairperson: Prof. C. MORELLI, Italy

No meeting was held during the year. Following the MBSHC Meeting held in May in Brest (France), the IHB, implementing a decision of the Commission, sent a letter to the States of the area, asking them to make available the digital data used to produce their ENC's to Dr. John HALL (Israel), IBCM Vice-Chair and responsible for the production of the second (digital) edition of IBCM.

- IBCWIO (Western Indian Ocean) www.ngdc.noaa.gov/mgg/ibcwio/ibcwio.html
Chairperson: Prof. W. BETTAC, Germany

No meeting was held during the year. IBCWIO sheets 1-03, 1-06 and 1-09 were published by Russian Federation (HDNO).

- IBCEA (Central Eastern Atlantic) www.ngdc.noaa.gov/mgg/ibcea/start_e.htm
Chairperson: Ing. Gén. A. ROUBERTOU, France

No meeting was held during the year. IBCEA sheet 1-03 was published by Portugal (IHPT).

- IBCCA (Caribbean Sea & Gulf of Mexico) www.ngdc.noaa.gov/mgg/ibcca/ibcca.html
Chairperson: Ing. M.A. REYES I., Mexico

The 8th IBCCA meeting was held in Boulder, Co., USA, on 3-5 March 2003. Colour proofs for IBCCA sheets 1.01, 1.02, 1.03, 1.04, 1.05, 1.06, 1.09 and 1.11 were presented by Mexico (INEGI). After the ultimate corrections have been made, print-on-demand copies can be obtained from INEGI, as well as digital copies on CD. Sheets 1.07, 1.08, 1.13, 1.14, 1.15 and 1.17 were in the final stage of digital editing at INEGI and would be completed by the end of the year. Based on the bathymetric series, it is envisaged to develop IBCCA geophysical/geological series at scale 1:1 Million for magnetic anomalies, gravity anomalies and seismicity. A training session for the benefit of IBCCA members was organised in conjunction with the IBCCA meeting on 6-7 March.

- IBCWP (Western Pacific)
Chairperson: Vacant

No meeting was held during the year. Russian Federation (HDNO), China (NMDIS), Japan (JCG) and Rep. of Korea (NORI) are reportedly progressing IBCWP sheets under their responsibility.

- IBCAO (Arctic Ocean) www.ngdc.noaa.gov/mgg/bathymetry/arctic/arctic.html
Chairperson: Mr. R. MACNAB, Canada

No meeting of the IBCAO Editorial Board was held during the year. Discussions were held with the Russian HO (HDNO) and the All-Russia Research Institute for Geology and Mineral Resources of the World Ocean (VNIIOkeangeologia), to consider performing a joint intercomparison between the Arctic map produced in 2002 by HDNO at a scale of 1: 2.5M from classified data, and the current version of IBCAO at a scale of 1: 6M, derived from data in the public domain. A proposal document has been drafted that identifies tasks and a project timeline for the intercomparison. It was proposed, at the GEBCO Centennial Conference, that the new IBCAO shaded-relief representation be considered a model for future maps in the GEBCO series. Cartography for the current version of IBCAO was completed to match to general parameters of GEBCO Sheet 5.17, i.e. scale, projection, contour intervals, feature names, and geographic labels. Arrangements are underway for printing the map in quantity.

- IBCSEP (South East Pacific)
Chairperson: Capt. R. GARNHAM Poblete, Chile

The 2nd IBCSEP meeting was held in Lima, Peru, on 29-30 October. A general scheme of 1:1 million bathymetric sheets covering the whole IBCSEP area was agreed. It was also agreed that the chairperson of the Editorial Board for IBCSEP would be that of the Regional Hydrographic Commission (SEPHC), i.e. the chair will rotate every two years

IHO DATA CENTER FOR DIGITAL BATHYMETRY (DCDB)

The IHO Data Center for Digital Bathymetry (DCDB) in Boulder, Colorado, has now completed its fourteenth year of operation. The DCDB is co-located with the World Data Center (WDC) for Marine Geology and Geophysics (MGG), Boulder, and the U.S. National Geophysical Data Center (NGDC).

In 2003, the DCDB distributed 427 digital products of marine-related data to international users. New digital bathymetric data were checked for quality and assimilated into the global marine geophysical database from 59 cruises, totalling over 700.000 soundings.

The DCDB and NGDC remain actively involved in Intergovernmental Oceanographic Commission (IOC) projects, participating in the General Bathymetric Chart of the Oceans (GEBCO), and all regional bathymetric chart projects. In March 2003, the DCDB hosted the International Bathymetric Chart of the Caribbean Sea and the Gulf of Mexico (IBCCA) Editorial Board Meeting and administered a training session in Boulder, Colorado.

The DCDB is continuing to digitize older high quality survey sounding sheets for the U.S. National Ocean Service (NOS). These data are being included in the Geophysical Data System (GEODAS).

Progress continues on the development of an international global database of multibeam bathymetry. The DCDB continues to actively seek multibeam bathymetry through contributions from organizations around the world. Currently the multibeam bathymetric holdings include 674 surveys (130.6 gigabytes) from various sources. These data are available from GEODAS.

DCDB data inventories may be searched over the internet using GEODAS functionality, and numerous data delivery options are now available. Hydrographic surveys and marine trackline geophysics data, through GEODAS, have recently been offered for download from the DCDB website, including the option to create a custom user CD of selected data.

New data sets are being integrated at NGDC, due to emergent technologies in sidescan sonar imagery, high-resolution multibeam survey data, and laser Light Detection and Ranging (LIDAR) hydrography. The DCDB will continue to support the data storage and delivery of new forms of data, in addition to the maintenance of established data sets.

DCDB access address: <http://www.ngdc.noaa.gov/mgg/mggd.html>

MARITIME SAFETY INFORMATION

**COMMISSION ON PROMULGATION OF RADIO NAVIGATIONAL WARNINGS
(CPRNW)**

Chairman: Mr. P. DOHERTY
Vice Chairman:
Secretary: Lt Cdr S. SHIPMAN



The 6th CPRNW Meeting was held at the IHB from 13 to 15 May 2003. Representatives from 12 IHO Member States - Australia, France, Germany, India, Iran, Italy, Pakistan, Peru, Spain, Sweden, the United Kingdom and the United States of America – participated. The IHB and two Ex-Officio members (WMO and IMSO) were also present. Of the 12 Member States represented, 8 were NAVAREA Co-ordinators and 1 was a Sub-Area Co-ordinator. Numerous issues related to improving the dissemination of MSI were discussed and the full meeting report will be published on the CPRNW Web page as soon as it has been finalized.

RELATED PUBLICATIONS

B-8 - Gazetteer of Undersea Feature Names

An updated Gazetteer of Undersea Feature Names was made available as an Excel file on the GEBCO Website (www.ngdc.noaa.gov/mgg/gebco/underseafeatures.html) in November. A new edition of the IHO-IOC Gazetteer B-8 is planned in 2004 in a database form.

B-6 -Standardization of Undersea Feature Names

The 3rd edition of the English/Spanish version of this IHO-IOC publication was completed and released on the IHO website in February.

B-7 - Guidelines for the GEBCO

A revised edition of this IHO-IOC publication, updated to April 2003, was issued in April (English). It is available from the IHO website

M-4 – Regulations of the IHO for INT Charts and Charts Specifications of the IHO

A consolidated edition of M-4 (English) was produced, updated to December 2003, and was posted on the IHO website in December. French and Spanish versions will follow.

M-5 – Standards of Competence for Hydrographic Surveyors

No specific topics were considered during the year for the updating of this publication. The Advisory Board will include this matter in its next meeting (Johore Bahru, Malaysia, May 2004).

M-6 –Reference Texts and Journals for Training in Hydrography

New entries for this publication are provided by the members of the FIG/IHO/ICA Advisory Board at each meeting. The Board will decide in 2004 if this publication will be maintained

M-11 – Catalogue of International (INT) Charts

The various chapters of the Catalogue of International (INT) Charts (M-11) have been kept up-to-date from the regional catalogues produced by the INT chart scheme coordinators. A digital version of M-11 should be made available in 2004.

S-23 – Limits of Oceans and Seas

Contacts have been maintained with some HOs with a view to resolving the ultimate still pending issues of S-23, 4th Edition. It is hoped to issue it in 2004.

S-32 - Hydrographic Dictionary

The electronic version of the dictionary is still available in a trial version - see CL7/2001. It is not currently possible to amend existing definitions or add new ones to the live database. Work to resolve this is ongoing.

S-47 – Training Courses in Hydrography and Nautical Cartography

This publication is permanently updated and available both from the IHO Web Site and on CD-ROM upon request.

S-51 – Manual on Technical Aspects of the UN Convention on Law of the Sea

An editorial committee was formed to prepare the 4th edition of S-51. This met for the first time immediately prior to the ABLOS business meeting. Ron MACNAB (Canada) was elected Chairman. A draft outline for the book was agreed and authorship tasks assigned. It is hoped to have the text ready by the end of 2004.

S-52 – Appendix 2 - Colours and Symbols Specifications for ECDIS

Preparation of new editions of S-52 Appendix 2 and of its Annex A, the IHO Presentation Library for ECDIS, were progressed during the year. The new editions are planned for publication in early 2004.

S-55 – Status of Hydrographic Surveying and Nautical Charting Worldwide

Captain Mike BARRITT of the UKHO is leading work on the 3rd edition of S-55. Analysis and collation of the responses to the questionnaire, which are now starting to arrive, is beginning. Antarctica, currently covered by a separate publication S-59, will be incorporated into S-55.

S-58 - Recommended ENC Validation Checks.

Edition 2.0 was released in October 2003. It specifies checks that, at a minimum, should be included in validation software and was previously published as Appendix B1, Annex C of S-57 Edition 3.1.

S-59 - Status of Hydrographic Surveying and Nautical Charting in Antarctica

The Directing Committee places the highest priority on the review and reissue of Special Publication S-55, "Status of Hydrographic Surveying and Nautical Charting Worldwide". Through CL No 23/2003 it was proposed to bring the content of S-59 "Status of Hydrographic Surveying and Nautical Charting in Antarctica" into a common format within the worldwide span of S-55. A project is underway to update S-55 in this new fashion. The Antarctic Hydrographic Committee discussed the management of a regional data-base to support the summary in S-55 and its Vice Chairman was appointed HCA contact to coordinate with the project manager the completion of the S-55 questionnaire.

S-60 - User's Handbook on Datum Transformations Involving WGS-84

The 3rd edition was published in electronic form only in July.

S-62 - IHO Codes for Agencies Producing S-57 Data

Edition 1.2 was produced and posted on the IHO website in March.

S-63 - IHO Data Protection Scheme

Edition 1.0 of this new IHO publication was issued in October (English). It includes a general description of the IHO Standard (security constructs and operational procedures), complemented with several annexes / appendices giving information on procedures to be followed by data servers and manufacturers to participate in the IHO scheme, and on the associated test data and software kernel. It is available from the IHO website. French and Spanish versions are under preparation. The IHB acts as Scheme Administrator (SA) for this IHO standard.

S-64 - IHO Test Data Sets for ECDIS

Edition 1.0 of this new IHO publication was issued in December on CD-ROM with all test data required by IEC Standard 61174 for ECDIS testing, i.e. ENC and RNC test data, and the associated graphic plots.

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WORK PROGRAMME 4 INFORMATION MANAGEMENT AND PUBLIC RELATIONS

IHO WEB PAGE

On 10th March the IHB launched a completely new, revised and expanded IHO web site. The new site, which was designed and developed by the IHB, taking into account the study and recommendations made by New Zealand (LINZ), presents an entirely new format and many new sections. The response to the new site has been very positive, however the IHB recognizes the need to continue its development in order to support the changing requirements of the IHO. The IHB wishes to acknowledge the generous contribution made by the French Hydrographic Service (SHOM), in providing the web hosting facilities for this web site. See CL 18/2003.

REPOSITORY OF CHARTS AND NAUTICAL DOCUMENTS

During the year, 759 new charts / editions were received (974 in 2002), examined and filed in the Bureau Chartroom, in accordance with Article 19 of the IHO General Regulations. In addition, 92 nautical books were received (59 in 2002). Some ENC's and RNC's were also received on CD-ROM. Notices to Mariners have been regularly received, sometimes in digital form, from 48 Member States and from 4 non-MS. Member States are reminded that Article 19 now states that HO's "*shall forward copies of their new international (INT) charts, electronic charts (raster and vector), as well as any nautical publications*" and that delivery to the IHB of copies of their national charts is therefore no longer required. Also MS are invited/encouraged to provide their NtM in digital form.

DISTRIBUTION OF IHO PUBLICATIONS ON CD-ROM

A CD-ROM containing all updated IHO Publications was distributed to IHO Member States in July.

MAINTENANCE OF AN IHB LIBRARY OF REFERENCE BOOKS AND JOURNALS

About 320 new magazines, CD-ROMs and books on hydrography, oceanography and related matters (including the regular subscriptions) as well as various technical brochures were added to the IHB Library in 2003. The Bureau thanks all Member States that have sent copies of their Annual Reports and/or technical publications during the year and encourage them to continue to do so.

Many of the participants who attended the GEBCO Centenary Conference (April 2003) and other meetings held at the IHB took the opportunity to visit and consult the Library.

PUBLICATION COLLATING LEGAL CASES RELATED TO CHARTING AND NAUTICAL ACCIDENTS

This matter is under consideration by the IHB Directing Committee. IHO Member States will be informed about its development during 2004.

PRESENTATIONS MADE

During the Meeting of the Assembly of IMO in November - December 2003, the President gave a presentation on the responsibilities of Member States of IMO for the provision of hydrographic services under the new regulations of SOLAS Chapter V and the way that IHO can support them. It was a very interesting and useful exercise and agreed with the IMO to repeat it in 2004 during the MSC Meeting.

In July the President met in Monaco with the Minister for the Canal of Panama and briefed him on the mission, work and other details of the IHO, the benefits of Panama becoming a Member of IHO and

their obligations for providing Hydrographic Services under the new regulations of SOLAS. He was very interested and the IHB sent him, on his request, a detailed letter for Panama examining the way to become a Member of IHO.

In September the President visited Croatia and together with the Director of the Croatian Hydrographic Institute, Dr. GRZETIC, met in Zagreb with the Secretary of the Ministry of Foreign Affairs and the Deputy Minister of Maritime Affairs, Transport and Communications and briefed them on the activities of the IHO. Both recognized the importance of the Organization for the safety of navigation and the protection of the marine environment.

SELECTION OF THE BEST I.H. REVIEW ARTICLE FOR 2002 – PRINCE ALBERT 1st MEDAL (2007)

The IHO Regional Hydrographic Commissions were asked to select the best article amongst all those published in the April, August and November issues of the International Hydrographic Review. The article selected by the RHC for 2002 was "Hydrographic Services at the Crossroads" by Dr. Peter EHLERS, President of the Federal Maritime and Hydrographic Agency (BSH), Germany. This article was published in Vol. 3, No.3 (New Series), November 2002 issue of the International Hydrographic Review and is now eligible to compete, along with the articles which will be selected for 2003, 2004, 2005 and 2006, for the Prince ALBERT 1st Medal which will be presented at the 2007 I.H. Conference.

RELATED PUBLICATIONS

M-1 Basic Documents of the IHO

The WEB version posted on the IHO WEB site was updated periodically.

P-5 IHO Yearbook 2003

The Yearbook was continuously updated on the IHO WEB site.

P -7 Annual Report 2002

The Annual Report - 2002, Part 1 - General, was prepared by the IHB and distributed to Member States for comments in October. Part 2 – Finance – was distributed in June 2003.

WORK PROGRAMME 5
GENERAL ORGANIZATION DEVELOPMENT

STRATEGIC PLANNING WORKING GROUP (SPWG)

Chairman:	Mr. F. KLEPSVIK (Norway)
Vice Chairman 1:	Dr. W. WILLIAMS (UK)
Vice Chairman 2 :	Mr. H. NISHIDA (Japan)
IHB Representative:	Vadm. A. MARATOS (IHB)
Secretary:	Capt. F. BERMEJO (IHB)

The SPWG continued working in accordance with its Terms of Reference. Three meetings of the Working Group and eight meetings of the Chair Group (formed by the Chairman, Vice Chairmen, the President of the IHB D.C. and the Secretary) were also held. The Group of Legal Experts, formed by representatives of 10 countries, held three meetings. The Reports of the SPWG meetings are summarized below:

SECOND MEETING OF THE NEW IHO STRATEGIC PLANNING WORKING GROUP,
20-22 JANUARY 2003, GOA, INDIA.



The second meeting of the SPWG was held at the Hotel Cidade de Goa, Goa, India, from 20 to 22 January 2003 under the chairmanship of Mr. F. KLEPSVIK (Norway). It was sponsored and organized by the Hydrographic Office of India. All the IHO Regional Hydrographic Commissions were represented at the meeting, together with six individual countries (Bangladesh, Japan, Morocco, Republic of Korea, Tunisia and UK).

The draft Objectives, already submitted to the SPWG members for comments were tabled, discussed and endorsed with some amendments. There was agreement about the importance of reflecting SOLAS V in the Objectives taking into account the extended role of IHO in the future and the regional and global aspects of the aims of the Organization:

The SPWG approved the proposal from the Chair Group to establish two Study Teams to consider specific matters. During the meeting, as a consequence of the progress made on the structure it became clear that the ST can work by correspondence and therefore, all members will be able to participate.

A number of “strawman” proposals were tabled by the Chair Group. The proposals were based on the Strengths and Weaknesses identified in the responses to the Questionnaire and presented different options for a new structure for the organization and the general principles for its functioning. The SPWG preferred the model based on an Assembly, a Council, Secretariat and Permanent Committees. The benefit of a Council was recognized, as an important potential element in order to achieve the required increase in the efficiency, effectiveness and responsiveness of the Organization. The SPWG further developed the general principles for the functioning of this model.

The general approach of the programme for the future SPWG work was also approved

THIRD MEETING OF THE IHO STRATEGIC PLANNING WORKING GROUP, 12-14 MAY 2003, LIMA, PERU.

The third meeting of the SPWG was held at the Hotel Las Americas, Lima, Peru, from 12 to 14 May 2003 under the chairmanship of Mr. F. KLEPSVIK (Norway). Peru's Dirección de Hidrografía y Navegación (DHN), celebrating its 100th anniversary, hosted the meeting and provided administrative support. All the IHO Regional Hydrographic Commissions, except the RSAHC and the SAIHC, were represented at the meeting, together with 10 individual countries (Argentina, Denmark, Finland, Germany, Japan, Mexico, Netherlands, Peru, Russia and UK). The representatives from RSAHC and SAIHC apologized for their absence, which was due to communication problems.

The representatives from the Regional Hydrographic Commissions (RHCs) reported on activities within their respective RHCs.

The Chair Group presented the Draft, Version 2 (11 April 2003) of "A Study into the Organizational Structure and Procedures of the IHO," after called "the Report", already distributed to the SPWG members. It was decided to consider the whole Report through its various sections and chapters.

In addition to various minor amendments, several substantive changes were recommended by delegates to strengthen the first 5 chapters of the Report and associated annexes.

The Chairman's presentation of Chapter 6, "Organizational Model" was followed by a debate over the Organization's proposed new structure. .



There was general agreement that the new organization should be made up of an Assembly, a Council, two major committees and a Secretariat. The new committees will be known as the Technical Committee on Hydrographic Services and Standards, and the Regional and Inter-Regional Cooperation and Coordination Committee. US and Chile objected to the inclusion of a Council in the new structure and there was considerable deliberation over the need for it, with a clear

majority in favour of it. However, although the majority supported the Council, unanimity was not reached on this issue during the meeting. In spite of this, the three-tier Assembly-Council-Committee model was used as the basis for continued discussion of structural issues.

Other details on the structure presented in the Report were also discussed and approved.

The SPWG agreed that the subject was very important and that some type of "industrial advisory group" was necessary to provide strategic input to the proposed Assembly on emerging trends, markets and applications of hydrographic information for consideration, under certain conditions. Guidelines were refined by CHRIS and presented by the IHB for discussion during the "Industry Days" (IHB, Monaco, 15-16 June 2003).

It was decided to task the Chair Group to carry out, with the support of the IHB, a study on the financial implications of the new structure proposed, if accepted. This study, which will include the

assumptions for the present proposal as well as a comparison with the alternative model proposed by USA will be forwarded to the SPWG by the end of June.

Communication about the SPWG process through the RHCs was discussed, and thanks to extensive travel by the Chair Group was found to be generally satisfactory.

The SPWG agreed that a 5th Meeting will be necessary for the completion of the work before the Extraordinary Conference. Therefore, it was decided to hold the 5th SPWG Meeting in Tokyo, 1 to 4 March 2004.

FOURTH MEETING OF THE IHO STRATEGIC PLANNING WORKING GROUP - 9-11 OCTOBER 2003, SINGAPORE.

The fourth meeting of the SPWG was held at the Hotel Pan Pacific, Singapore, from 9 to 11 October 2003 under the chairmanship of Mr. F. KLEPSVIK (Norway). The Hydrographic Department of the Maritime Port Authority of Singapore hosted the meeting and provided administrative support. All the IHO Regional Hydrographic Commissions were represented at the meeting, together with individual



countries (Japan, Korea, Singapore, South Africa, UK and the US).

During the consideration of the Chair Group Meetings reports, the Chairman stressed the project put forward by the Chair Group to hold seminars in various parts of the world to clarify possible questions and provide explanations to the Hydrographers and other national representatives about the documents that will be distributed to Member States in early April 2004. He informed that positive responses have

been received from Greece, Malaysia and Mexico. Confirmation from the United Arab Emirates is still pending and the schedule will be finalized when the confirmation from the UAE will be received.

The members of the SPWG endorsed the project and requested formal notice as soon as possible.

The representatives from the Regional Hydrographic Commissions (RHCs) reported on activities within their respective RHCs.

The SPWG Vice-Chairman 1 explained the work carried out in the development of the Draft Report "A Study into the Organizational Structure and Procedures of the IHO".

He reminded that the intention was to present a format easy to understand and representing general consensus. The endorsement of the SPWG of the structure of the report was then required.

Following some further clarifications from the Chair Group, the suggestions and amendments were adopted and will be included in the Draft Report "A Study into the Organizational Structure and Procedures of the IHO".

After finalizing the discussions about the functions of the Council, the SPWG studied in detail other structural aspects of the document “A Study into the Organizational Structure and Procedures of the IHO” and reached full agreement on all the chapters.

The SPWG studied all the pending questions and produced a series of amendments, which will be inserted in the Draft Amendments of the Convention. There were, however, some details that were referred back to the Legal Experts, who met in Monaco, 3-4 December 2003 to finalize the Draft Amendments to the Convention.. It was also decided to harmonize the text of the Convention to use the same wording agreed in the draft report “A Study into the Organizational Structure and Procedures of the IHO”.

Many countries stated their reservations to accept acceptance procedures described in the draft Article XXI sub-paragraph d). [Accordingly the Portuguese Foreign Affairs authorities, this country officially stated that the proposed Article XXI (concerning provisional application and tacit acceptance) should be reviewed, in order to guarantee that countries that can not make use of these two legal instruments could pursue the traditional form of ratification).

Development of other Basic Documents

The President of the IHB Directing Committee observed that the work to develop General Regulations and Rules of Procedure for the Assembly, Council and Committees had already been commenced and that a list of items concerning those documents should be discussed by the SPWG to facilitate the continuation of the work.

The SPWG confirmed the schedule of its 5th Meeting in Tokyo, Japan, 1–4 March 2004, followed by the WEND meeting. Legal experts will be invited to attend this meeting.

SPWG LEGAL EXPERTS MEETINGS

The First meeting of the SPWG Legal Experts was held at the IHO Secretariat, Monaco, 18-19 June 2003.

It was agreed that the task of the Group was -not to discuss the substance of the SPWG documents but to provide legal advice on the drafting of a proposal concerning amendments to the present Convention, to be submitted to the 3rd Extraordinary Conference (April 2005). Furthermore the group should consider and advise on the legal mechanisms available to bring any amendments that might result from the work of SPWG into force in the most time efficient manner. The proposed text from the legal experts should reflect the majority view of SPWG, while possible alternative views will still be acknowledged in the documents. It was emphasized that the aim of the SPWG is to resolve any alternative option and bring forward one consensus proposal to the Extraordinary Conference.

Several comments were made by the Group members to the 29 Articles of the draft text prepared by the IHB.

The Second Meeting of the SPWG Legal Experts Group (LEG) was held at the BSH, Hamburg, Germany. Delegates from Germany, Italy, Morocco, Norway, UK and USA were present.

The LEG devoted the total time available to examine the draft text of the amendments to the IHO Convention, along with the comments made by the countries above mentioned. A number of issues of a non-legal character were identified and were referred back to the SPWG for consideration and approval.

The LEG was able to finish the Draft Amendments to the Convention, which included many of the suggestions made.

The Third meeting of the SPWG Legal Experts Group was held at the IHO Secretariat, Monaco, 3-4 December 2003.

The President of the IHB Directing Committee reported that a first draft of the General Regulations was being prepared by the IHB. The Legal Experts noted that it may be helpful to have the LE comment on the draft text of the Regulations and that this could take place in part at the Tokyo meeting. It was then decided to include this item in the future Agenda for the 5th SPWG meeting.

The LE Group reviewed the draft amendments to the Convention and further refined the text and the best way to present the SPWG proposals to the Extraordinary Conference was discussed. The Chairman noted that the presentation of all proposals as a package offered many advantages, but that as Rule of Procedure for IHO Conferences N° 45 stipulates "Parts of a proposal or an amendment shall be voted separately, if the President so decides, or if any representative of a Member requests that the proposal be divided". With that in mind, the Chair requested that the representatives from France and USA develop a document that reflects the form in which proposals for amendment to the Convention would be submitted to the 3rd IHO Extraordinary Conference (April 2005).

IHO LEGAL ADVISORY COMMITTEE (LAC)

Chairperson:	Ms. D. WEBSTER (USA)
Vice-Chairperson:	Mr. K. POGSON (Australia)
Members:	Australia, Canada, Cuba, Denmark, France, Germany, Iceland, Japan, Monaco, Norway, Republic of South Africa, Spain, Sweden, UK, USA (NIMA & NAVOCEANO).

During the year, LAC was not consulted by Member States.

REVIEW OF THE WORK PROGRAMME

In accordance with Conference Decision, the Planning Cycle approved was followed for the updating of the Work Programme. Member States were consulted by C.L. and their responses and comments resulted in an amended version of the Work Programme 2004, that was distributed by C.L. 64 of 31 October 2003. The 2004 Work Programme is available on the IHO Web Page.

TRANSLATION SERVICES

Mr. J.P. ALBERTELLI, French Head Translator, retired in September. The Directing Committee appointed Mrs. I. VANKRINKELLEN, who joined the I.H. Bureau as French Translator in 1991, to this position. Furthermore, it was decided not to recruit another French Translator, but to seek support from the IHO Member States to assist with translation tasks, should the need arise.

IHB TECHNICAL MISSIONS

The IHB through its Directors and Professional Assistants have undertaken technical missions as indicated in Annex III.

HOST GOVERNMENT AFFAIRS

The President met in June at the Bureau with Officials of the Ministry of Foreign Affairs of the Principality of Monaco in order to discuss ways for a better and more effective co-operation of the Principality of Monaco and the IHB. Three areas were identified for strengthening the co-operation. Participation of the Principality of Monaco in the Capacity Building Programme of the IHO, as it will be decided by the Members States, through the Capacity Building Committee. Ways to accelerate the voting process by the Member States for the admission of new Members. And finally better

communication between the two parties, when foreign Officials are visiting Monaco, in order that they visit the Bureau and meet with the Directing Committee.

IHO MEMBERSHIP ADMINISTRATION

The Government of Monaco continued to effectively support actions to accelerate the approval of those States who had applied for IHO Membership.

NEW MEMBERS OF THE IHO

The Government of Myanmar officially deposited their Instrument of Accession with the Government of the Principality of Monaco on 9 September, and thus became the 74th Member State of the IHO on that date. The Directing Committee was delighted to welcome this new Member State and announced Myanmar's membership in CL 61 dated 18 September.

PROSPECTIVE MEMBER STATES WHOSE APPLICATION FOR ADMISSION TO THE IHO HAS BEEN APPROVED BY THE PARTIES TO THE CONVENTION

Republic of Bulgaria

As reported in previous Annual Reports, the application for membership of the Organization by the Government of the Republic of Bulgaria was approved by the required two-thirds of the Parties to the IHO Convention on 24 April 1992. At that time the Government of Monaco, as the Depositary Government for the Convention, invited the Government of Bulgaria to deposit its Instrument of Accession to thus complete the IHO membership formalities. Regretfully this last formality has not to date been completed. In an effort to generally improve communications with pending Member States, the Directing Committee decided in June to include these countries on the IHB Circular Letter distribution list with effect from 1 January 2003. This initiative was enthusiastically welcomed by Captain Angel DEMIREV, the Head of the Bulgarian Hydrographic Service, who stated that receiving such information from the IHO would be useful for their future membership and contribution to safety of navigation.

Islamic Republic of Mauritania

As in the case of Bulgaria and as reported in the past, the Government of Mauritania's application to join the IHO was approved by the required two-thirds of the Parties to the Convention on 14 February 1991, and the Government of Monaco, the Depositary Government for the Convention, informed the Directing Committee accordingly at that time. At the same time, the Mauritanian Government was invited to deposit its Instrument of Accession; unfortunately, to date this last formality has not been completed. The Directing Committee has, as in the case of the other pending Member States, included Mauritania on the Circular Letter Distribution List and has also contacted them to urge them to proceed with the deposit of the Instrument of Accession. Meanwhile, Mauritania was one of the African countries which had received a technical visit (in 2002) from the Eastern Atlantic Hydrographic Commission's West African Action Team (WAAT) as part of an ongoing project on Technical Cooperation in Hydrography and Nautical Charting, and another such visit was due to be undertaken in October 2003 which regretfully had to be cancelled.

State of Qatar

The application to join the IHO made by the State of Qatar was approved by the required two-thirds of the Parties to the Convention on 11 November 1993 and the Government of Monaco invited the Government of the State of Qatar to deposit its Instrument of Accession at that time. Regretfully to date this final formality has not been completed. The Directing Committee has approached Qatar once again to urge them to proceed with the deposit of their Instrument of Accession and has also included them on the IHB Circular Letter Distribution List.

PENDING MEMBER STATES WHOSE APPLICATION FOR ADMISSION TO THE IHO IS AWAITING APPROVAL BY THE PARTIES TO THE CONVENTION

Republic of Latvia

The Government of the Republic of Latvia officially applied for membership of the International Hydrographic Organization (IHO) on 5 July 2002 and reported, at that time, a tonnage figure of 507,148 tons. By the end of the year, Latvia's application had received 36 approvals out of a required 46. The Government of Monaco has kindly sent out reminders to those IHO Member State Governments, who have not yet approved Latvia's application, in an attempt to speed up the membership process. The IHB has also sent similar reminders to the Member States.

Republic of Mauritius

The Government of the Republic of Mauritius officially applied for membership of the International Hydrographic Organization (IHO) on 20 August 2001 and reported, at that time, a tonnage figure of 163,013 tons. By the end of the year, Mauritius' application had received 35 approvals out of a required 44 approvals. As in the case of Latvia, the Government of Monaco and the IHB have sent out reminders concerning the pending approval of the IHO membership application from Mauritius in an attempt to speed matters up.

Republic of Romania

The Government of the Republic of Romania officially applied for membership of the International Hydrographic Organization on 10 April 2002 and reported a tonnage figure of 845,186 tons. By the end of the year, Romania's application had received 32 approvals out of a required 47 approvals. The Government of Monaco and the IHB have sent out reminders concerning the pending approval of the IHO membership application from Romania in an attempt to speed the process up. There were two delegates from Romania at the 3rd Biennial ABLOS Conference held at the IHB in October.

Kingdom of Saudi Arabia

The Government of the Kingdom of Saudi Arabia officially applied for membership of the International Hydrographic Organization in September 2002 and reported a tonnage figure of 1,458,309 tons. By the end of the year, Saudi Arabia's application had received 31 approvals out of a required 47 approvals. The Government of Monaco and the IHB have sent out reminders concerning the pending approval of the IHO membership application from Saudi Arabia in an attempt to speed the process up.

MEMBER STATES WHOSE RIGHTS AND PRIVILEGES HAVE BEEN SUSPENDED OR REINSTATED

Of the 74 Parties to the Convention, three - the Democratic Republic of the Congo, Dominican Republic and Suriname - have all rights and benefits suspended in accordance with Article XV of the Convention and Articles 16 and 17 of the Financial Regulations. A two-thirds majority of Member States entitled to vote, therefore, is currently 47.

AMENDMENTS TO THE CONVENTION

The amendment to Article X (2) of the Convention which was approved by the XIIIth I.H. Conference and subsequently submitted to Member Governments through diplomatic channels has not attained the approval of the required two-thirds of the full membership of the Organization and therefore has not yet entered into force.

Decision No. 13 of the XVth I.H. Conference amends Article XXI of the IHO Convention by adding para. 4 which states “4. Any amendment to this Convention that has not entered into force is null and void at the opening of the next Ordinary Session, unless the Conference decides otherwise.” The Government of the Principality of Monaco submitted this amendment to all Contracting Parties for ratification and, to date, this decision has not attained the approval by the required number of Member States.

The XVIth I.H. Conference considered further proposals to amend Article XXI of the IHO Convention and it was decided that this task would be passed on to the new Strategic Planning Working Group who is tasked to make recommendations on the need to revise the IHO Convention. The SPWG is actively working on modifications to the Convention and all proposals for change will be submitted to the IHO Member States in 2004.

ANNEXES :

I: IHB DIRECTOR'S RESPONSIBILITIES

II. IHB STAFF LIST

III. STATEMENT OF OFFICIAL TRAVEL

IV. VISITS TO HYDROGRAPHIC OFFICES

V. MEETINGS HELD AT THE IHB

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IHB DIRECTING COMMITTEE RESPONSIBILITIES

President: Alexandros MARATOS, Vice Admiral (retd.), Greece

- Relations with United Nations; International Maritime Organization; European Union; International Association of Marine Aids to Navigation and Lighthouse Authority; International Commission for the Scientific Exploration of the Mediterranean and Non-Member States.
- SPWG; ABLOS; Maritime Safety Information; Hydrographic Surveying Information Services and INT Chart Scheme and Paper Chart issues.
- Matters referring to IHO Membership and IHB Administration; Host Government Affairs and Public Relations.

Regional Hydrographic Commissions:

- North Indian Ocean Hydrographic Commission
- North Sea Hydrographic Commission
- Mediterranean and Black Seas Hydrographic Commission
- Baltic Sea Hydrographic Commission

Director 1: Kenneth BARBOR, Rear Admiral (retd.), USA

- Relations with the International Cartographic Association; International Organization for Standardization and International Electrotechnical Commission.
- LAC issues as well as on all Cartographic Information Services, including CHRIS, WEND and others related.
- Matters referring to IHB Property and Information Technology.

Regional Hydrographic Commissions:

- Nordic Hydrographic Commission
- USA/Canada Hydrographic Commission
- East Asia Hydrographic Commission
- South Africa and Islands Hydrographic Commission
- South West Pacific Hydrographic Commission

Director 2: Hugo GORZIGLIA, Captain (retd.), Chile

- Relations with the Intergovernmental Oceanographic Commission; all International Bodies related to Antarctic matters and the Pan American Institute of Geography and History, FIG and IMA.
- Capacity Building, Training and Education; Technical Co-operation activities as well as GEBCO and International Bathymetric Mapping Projects.
- Matters referring to Information Management (Publications).
- Work Programme

Regional Hydrographic Commissions and Committee:

- Eastern Atlantic Hydrographic Commission
 - South East Pacific Hydrographic Commission
 - ROPME Sea Area Hydrographic Commission
 - Meso-American-Caribbean Sea Hydrographic Commission
 - Hydrographic Committee on Antarctica
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IHB STAFF LIST**Professional Assistants**

Capt. F. BERMEJO BARÓ, Spain	Training, Technical Assistance and Publications Management
Ing. en chef M. HUET, France	Cartography
Mr. A. PHARAOH, South Africa	Cartography and Data Management
Cdr. S. SHIPMAN, UK	Hydrography
Mr. C. VELARD, France	Administration

Technical, Administrative and Service StaffTranslation

Mr. J.P. ALBERTELLI	Head Translator (retired in September 2003)
Mrs. I. VANKRINKELLEN	French Translator (Head Translator/French from October)
Miss M.P. MURO	Spanish Translator/Web Editor

Graphic Arts and Cartographic Assistant

Mr. D. MENINI

Accounting and Administration Assistant

Miss C. MEYNADIER

French/Cartographic Editor - Librarian

Miss P. BOUZANQUET

Secretariat

Mrs B. WILLIAMS	Head Secretariat
Mrs. C. FONTANILI	Secretary of the Directing Committee
Ms R. CAUDOUX	Document Preparation Assistant (DPA)
Miss M. MOLLET	Communications

Office Management

Mr. R. SEMLALI	Office Manager
Mr. A. MAACHE	General Service Assistant

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STATEMENT OF OFFICIAL TRAVEL

DATE	LOCATION	EVENT	ATTENDEE
15-23 January	Goa, IND	SPWG	VAdm. A. MARATOS
15-23 January	Goa, IND	SPWG	Capt. F. BERMEJO
10 –15 February	Nairobi, KEN	Steering Committee on Lake Victoria	Radm. K. BARBOR
4-9 March	Boulder, USA	8 th IBCCA	Ing en Chef M. HUET
8-10 March	Vancouver, CAN	DGIWG	Radm. K. BARBOR
13-14 March	London, UK	SPWG Chair Group Meeting	VAdm. A. MARATOS
13-14 March	London, UK	SPWG Chair Group Meeting	Capt. F. BERMEJO
19-20 March	Pretoria, RSA	SAIHC/SPWG	Radm. K. BARBOR
24-27 March	Biloxi, USA	USCHC	Radm. K. BARBOR
1-2 April	The Hague, NETH	IC-ENC TEWG Meeting	Ing en Chef M. HUET
7-9 April	Trieste, ITA	IMA	VAdm. A. MARATOS
15- 17 April	Wollongong, AUS	SWPHC	Radm. K. BARBOR
21- 25 April	Lima, PER	IHO Tidal Committee	Lt. Cdr S. SHIPMAN
28-29 April	Paris, FRA	Fixage Training	C. VELARD
28-29 April	Paris, FRA	Fixage Training	C. MEYNADIER
29 April	London, UK	International Chamber of Shipping	Radm. K. BARBOR
5-8 May	Norrkoping, SWE	NSHC	VAdm. A. MARATOS
10-16 May	Ottawa, CAN	TSMAD	A. PHARAOH
12-14 May	Lima, PER	SPWG & Visit HO	VAdm. A. MARATOS
12-16 May	Lima, PER	SPWG	Capt. F. BERMEJO
14-16 May	Lima, PER	WEND	VAdm. A. MARATOS
15-16 May	Lima, PER	WEND	Ing en Chef M. HUET
17-20 May	Ottawa, CAN	C&SMWG	Ing en chef M. HUET
19-27 May	Zurich & Geneva, CH	ISO/TC211 and JSG	A. PHARAOH
27-6 June	London, UK	MSC - IMO	Lt.Cdr S. SHIPMAN
28-30 May	Valparaiso, CHL	PAIGH and Visit HO Chile, Argentina and Uruguay	Capt. H. GORZIGLIA
30-6 June	London, UK	FIG/IHO/ICA	Capt. F. BERMEJO
2-4 June	Hamburg, GER	SNPWG	A. PHARAOH
2-6 June	New York, USA	UNICPOLOS	Radm. K. BARBOR
3-6 June	London, UK	FIG/IHO/ICA	Capt. H. GORZIGLIA
3-6 June	Brest, FRA	13th MBSHC & visit HO	Vadm. A MARATOS
4-8 June	London, UK	FIG/IHO/ICA	Lt. Cdr S. SHIPMAN
16-17 June	Madrid, SPA	ATCM Meeting	Capt. H. GORZIGLIA

DATE	LOCATION	EVENT	ATTENDEE
19-20 June	London, UK	IMO	VAdm. A. MARATOS
24-28 June	Paris, FRA	IOC	Capt. H. GORZIGLIA
30-4 July	London, UK	IMO NAV 49	Lt. Cdr. S. SHIPMAN
9-10 July	London, UK	SPWG Chair Group Meeting	Vadm. A. MARATOS
9-10 July	London, UK	SPWG Chair Group Meeting	Capt. F. BERMEJO
11 July	Trieste, ITA	IMA Steering Committee	Capt. H. GORZIGLIA
31 July	Hamburg, GER	SPWG Legal Experts Meeting & visit HO	Vadm. A. MARATOS
31 July	Hamburg, GER	SPWG Legal Experts Meeting & visit HO	Capt. F. BERMEJO
7-15 August	Durban, RSA	ICC Conference 2003	Ing en Chef M. HUET
1-5 September	St. Petersburg, RUS	BSHC & Visit HO	Vadm. A. MARATOS
4-5 September	Frankfurt, GER	ECGN Meeting	Lt. Cdr. S. SHIPMAN
15-16 September	Split & Zagreb CRO	HO visit & Ministry of FA	Vadm. A. MARATOS
15-17 September	Rostock, GER	IC-ENC TEWG Meeting	A. PHARAOH
19 September	Oberammergau, GER	NATO Geo Course	RAdm. K. BARBOR
19 September	Nancy, FRA	DHYDRO Meeting	Lt. Cdr. S. SHIPMAN
25- 26 September	Walvis Bay, NAM	4th SAIHC	RAdm. K. BARBOR
28-4 October	Wollongong, AUS	TSMAD	A. PHARAOH
6-11 October	Singapore, SNG	ECDIS Conference	A. PHARAOH
7-9 October	Singapore, SNG	ECDIS	Vadm. A. MARATOS
9-11 October	Singapore, SNG	SPWG	Vadm. A. MARATOS
9-11 October	Singapore, SNG	SPWG	Capt. F. BERMEJO
13-15 October	Jakarta, INDO	MEH & Visit HO	Vadm. A. MARATOS
13-16 October	Paris, FRA	GLOSS Meeting	Lt. Cdr. S. SHIPMAN
21-24 October	Paris, FRA	DQWG	A. PHARAOH
27- 31 October	Berlin, GER	ISO/TC211	A. PHARAOH
3-5 November	Lima, PER	SPWG & HO	Vadm. A. MARATOS
3-5 November	Lima, PER	SEPHC	Capt. H. GORZIGLIA
3-5 November	Lima, PER	SPWG	Capt. F. BERMEJO
6-7 November	Guayaquil, ECU	Visit HO	Capt. H. GORZIGLIA
11-14 November	Shanghai, CHN	EAHC	RAdm. K. BARBOR
12 November	Shanghai, CHN	SPWG & HO	Vadm. A. MARATOS
17-18 November	Incheon, KOR (Rep Of)	Visit HO NORI	RAdm. K. BARBOR
17-21 November	Santo Domingo, Dom Rep	COCATRAM	Capt. F. BERMEJO
17-21 November	Santo Domingo, Dom Rep	COCATRAM	Capt. H. GORZIGLIA
26-1 December	London, UK	IMO Assembly	Vadm. A. MARATOS

DATE	LOCATION	EVENT	ATTENDEE
24 – 5 December	London, UK	IMO Assembly	Lt. Cdr S. SHIPMAN
15-17 December	Singapore, SNG	MEH	Vadm. A. MARATOS

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VISITS TO HYDROGRAPHIC OFFICES

President – Vice Admiral A. MARATOS: China, Croatia, France, Germany, Indonesia, Peru, Russia

Director I – Rear Admiral K.E. BARBOR: Australia, Korea (Republic of)

Director II – Captain H. GORZIGLIA: Argentina, Chile, Dominican Republic, Ecuador, Peru and Uruguay.

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MEETINGS IN THE BUREAU**FEBRUARY**

27-28 IHO Working Group on Study of UN Alignment

MARCH

13-14 IHO Data Protection Scheme Advanced Group

APRIL

2 IHO Finance Committee Meeting

10 SPWG Chair Group Meeting

10-11 SCUFN Meeting

12 SCDB Meeting

14-16 GEBCO Centenary

16-17 GEBCO Guiding Committee

MAY

12 NAVTEX meeting

13-15 CPRNW

JUNE

10-13 CHRIS Meeting

12 Restricted Finance Committee Officers' Meeting on IRF and Pension Plans

16-17 IHO Industry Days

18-19 SPWG Legal Experts Meeting

SEPTEMBER

8-10 3rd HCA Meeting

10 SPWG Chair Group Meeting

11-12 IHO Capacity Building Committee

23 Finance Committee Officers' Meeting

OCTOBER

23-24 Technical Aspects on Law of the Sea (TALOS) Editorial Board

26-27 ABLOS business meeting and CARIS Work Shop

28-30 ABLOS

NOVEMBER

25 Finance Committee Officers' Meeting

DECEMBER

3-4 Legal Experts Meeting (SPWG)

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**NEW HYDROGRAPHERS OF THE
HYDROGRAPHIC OFFICES OF MEMBER STATES**

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REPUBLIC OF THE PHILIPPINES

President Gloria MACAPAGAL ARROYO appointed Capt. Rodolfo M. AGATON ~~laston~~ 15 November 2002, with the rank of Commodore, as the new Director of the Coast and Geodetic Survey Department (CGSD) ~~Director with the rank of Commodore~~. Prior to this appointment, he served as Assistant Director of the same office for almost 3 years.



Commodore AGATON has been in the service for more than 29 years. He started his career as a cadet in 1973 at the former Bureau of Coast and Geodetic Survey (BCGS), now the CGSD of the National Mapping and Resource Information Authority (NAMRIA). After his promotion ~~as ensign~~ Ensign

in 1974, he further rose from the ranks to ~~stellar positions: lieutenant junior grade in 1977, lieutenant senior grade in 1981, lieutenant commander in 1984, commander in 1990, and captain~~ higher positions: Lieutenant Junior Grade in 1977, Lieutenant Senior Grade in 1981, Lieutenant Commander in 1984, Commander in 1990, and Captain in 1999.

~~The new~~ This high-ranking official is a graduate of the Mapua Institute of Technology ~~with and has~~ a degree in Mechanical Engineering. He also ~~has completed~~ a graduate degree course in Photogrammetry ~~from~~ the Institute of Aerial and Earth Science, The Netherlands. Further, he has undergone extensive ~~trainings and~~ training and attended many seminars in and out of the country, including the hydrographic course at the Maritime Safety Agency and ~~map compilation training~~ training in map compilation, both in Japan.

ARGENTINA



Captain Miguel CLEMENTS took up the post of Chief of the Naval ~~Hydrography~~ Hydrographic Service on 26 February 2003.

Captain CLEMENTS joined the Argentine ~~an~~ Navy in 1969. During his career, he served on board hydrographic and oceanographic ships, and was Commander of the hydrographic ship "Comodoro Rivadavia".

In the Naval ~~Hydrography~~ Hydrographic Service he held the post of Chief of ~~the~~ Nautical Safety and Oceanography.

He took a degree in Physical Oceanography at the Technological Institute of Buenos Aires and ~~hold a~~ Masterholds a Master's Degree in Maritime Administration and Marine Environment Protection ~~effrom~~ the World Maritime University of Malmö,

Sweden.

He has ~~participated as a representative of his country before~~ represented his country at the IMO Maritime Safety Committee ~~meetings~~ and ~~at meetings of~~ the Safety of Navigation ~~Committee and the~~ Subcommittees of Navigation and Training and Defence ~~of the International Maritime Organization.~~

He regularly attends the Foreign Affairs Ministry Commissions, which are responsible ~~for~~ the ~~commercial~~ waterways of the region.

He is a member of the Competent Authorities ~~evaluating, assessing,~~ on behalf of the International Maritime ~~Organization, the implementation, by the member states,~~ Organization (IMO), ~~the implementation~~ of the International Convention on ~~the Training and Watch of the Sea People (STCW 95).~~ Standards of Training, Certification and Watchkeeping for Seafarers (STCW 95) ~~by the Member States.~~



~~Previously to his nomination~~ Before his appointment as Chief of the Naval ~~Hydrography,~~ Hydrographic Service, he was Undersecretary of Maritime ~~Interests~~ Affairs of the Navy.

EGYPT

Commodore Abdellatif GAMIL RAYAB was born in 1945. He took up the post of Director of the Egyptian Hydrographic Department in January 2003, replacing Commodore Salah Aby ELSADAAT. A brief summary of his educational background and career is given here below:

Education

- Bachelor of Marine Sciences from the Egyptian Naval Academy (June 1965);
- Advanced Maritime Studies Certificate from the Egyptian Maritime High Studies Institute;
- Master Degree in Marine Science from the Egyptian Maritime High Studies Institute.

Career

- Navigation Officer onboard various classes of ship in the Egyptian Naval fleet.
- Supervisor on Sea King Helicopter.
- Assistant to Military Attaché in Rome, Italy.
- Navigation Instructor in the Egyptian Naval Academy.
- In charge of all navigational aspects in the Egyptian Navy.
- In charge of naval training and military cooperation in all joint training with the allied countries.
- Member of the Egyptian National Committee of Seas.

REPUBLIC OF KOREA

Mr. Hyung-Nam KIM was appointed Director General of the National Oceanographic Research Institute at the Ministry of Maritime Affairs and Fisheries, succeeding Mr. Kwang-Ro LEE, in March 2003.

Born in 1951, Mr. KIM's educational background and career are given below:

Educational Background

1987 - Msc. in Marine Engineering, Graduate School of Wales University, UK;



1976 - Bachelor of Economics, Konkuk University, Korea.

Brief Career Summary

- ✓ Currently Director General of the National Oceanographic Research Institute at the Ministry of Maritime Affairs and Fisheries (MOMAF), from 26 March 2003;
- ✓ Served as Director General of International Cooperation, MOMAF, from July to December 2000;
- ✓ Served as Director of Port Policy Division, MOMAF, from August 1996 to January 1998;
- ✓ Served as Assistant Director of Planning and Management Division, Maritime Port and Authority (Former MOMAF), from June to October 1981.

REPUBLIC OF SOUTH AFRICA

Captain Abri KAMPFER was appointed as Hydrographer of the South African Navy in August 2003, replacing Rear Admiral Nick SMIT.

Born in 1959, Capt. KAMPFER joined the Navy from school and after completing his Naval College training, served on minesweepers and minehunters reaching the rank of Commander and the appointment of Commander MCM Forces.



After a short stint ashore, Capt. KAMPFER was appointed as Officer Commanding of the SA Navy survey vessel SAS PROTEA, in December 2000. He completed the Category A Advanced Survey Course at RNHMS Drake and attained a Postgraduate Diploma in Hydrographic Surveying from the Plymouth University (UK).

Captain KAMPFER has also been elected Chairman of the Southern African and Islands

Hydrographic Commission (SAIHC) at the fourth SAIHC meeting, held in Swakopmund, Namibia, on 25 and 26 September.

NIGERIA

Captain Essien David EKPIKEN was appointed Hydrographer of the Nigerian Navy Hydrographic Office (NNHO) in replacement of Captain C. CHUKWUKA.

EDUCATION

Institutions Attended:

1974 - 1975 Nigerian Military School;
2002 - 2003 Zaria Nigerian Defence Academy, Kaduna University of Ibadan (UI)

Institutional Qualifications:

West African School Certificate (WASC)
Nigerian Defence Academy Certificate of Education (NDACE)
Masters Strategic Studies (MSS)

Courses Attended:

1976 - 1977 Sub-Lieutenant Technical Course, Britannia Royal Naval College, BRNC -
Dartmouth UK;
1985 Basic Hydrographic Course, India;
1986 Junior Staff Course - CSC Jaji;
1987 - 1988 Long Hydrographic Course, India;
1990 Senior Staff Course, CSC - Jaji;
2001 - 2002 National War College, Abuja.

APPOINTMENTS

1977	Watch Keeping Officer, NNS;
1982	Jebba Watch Keeping Officer, NNS;
1983	Aradu Instructor, B&D School;
1984	Staff Officer Personnel Admin (SOPA), CSC, Jaji;
1989	Commanding Officer, Hydro School, Port-Harcourt;
1991	Executive Officer NNS LANA Staff Officer Admin.
1992	National War College, Lagos ;
1992 - 1994	Commanding Officer, Dalet Bn, NDA, Kaduna;
1994 – 1995	Commanding Officer, NNS AGU;
1995 - 1997	Executive Officer NNS OLOKUN;
1998 - 2000	Commanding Officer NNS LANA;
2000 - 2001	Chief Instructor (Joint Warfare) CSC, Jaji;
2002 - 2003	Commanding Officer NNS QUORRA.

BRAZIL AND SYRIA

Vice Admiral Lucio Franco DE SA FERNANDES took over from Admiral Julio SOARES DE MOURA NETO on 8 April 2003.

Rear Admiral Mohsen HASSAN took over from Adm. Hassan SULEIMAN as General Director of Syrian Ports in March 2003.

UNITED STATES OF AMERICA (NOAA)

Capt. Roger PARSONS assumed the position of Director of the Office of Coast Survey on 1 September 2003 following the retirement of Capt. Dave MACFARLAND.

Captain Roger L. PARSONS is the Director of the National Oceanic and Atmospheric Administration (NOAA) Office of Coast Survey and is responsible for all aspects of nautical charting and hydrographic surveying in U.S. waters.

Captain PARSONS has served as an officer in the NOAA Commissioned Corps since May 1975 and has more than 28 years of operational and managerial experience with a variety of programs throughout NOAA. He has served aboard six NOAA hydrographic survey and research vessels, including command tours aboard NOAA Ships *CHAPMAN*, *MT. MITCHELL* and *RONALD H. BROWN*. He has conducted hydrographic survey operations along the Atlantic and Gulf Coasts of the United States, the Caribbean, and in Central America. His tour aboard *RONALD H. BROWN* included a year-long around-the-world oceanographic and climate research cruise.

He has served as:

- the Commanding Officer, NOAA Officer Training Center, responsible for the initial training of newly commissioned officers and refresher training for senior officers returning to sea duty;
- Chief of Operations, Atlantic Marine Center, responsible for operational and logistic support to NOAA's East and Gulf Coast fleet;
- NOAA Liaison to the U.S. Naval Oceanography Command, responsible for Navy hydrographic, survey platform, and mine warfare issues; and
- acting Chief of NOAA's Hazardous Materials Response Division, responsible for an interdisciplinary scientific team that responds to oil and chemical spills in U.S. coastal and navigable waters.

Prior to reporting as Director of Coast Survey, Captain PARSONS served as Director of the NOAA Commissioned Personnel Center.

Captain PARSONS obtained a Bachelor of Science Degree in Oceanography and Meteorology from the State University of New York Maritime College in 1975, a Master of Science Degree in Public Administration from the University of Southern Mississippi in 1992, and completed graduate studies in hydrography and oceanography at the U.S. Naval Postgraduate School.

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