INTERNATIONAL HYDROGRAPHIC ORGANIZATION



ANNUAL REPORT 2008

PART 1 - GENERAL

Published by the International Hydrographic Bureau – Monaco

ANNUAL REPORT

OF THE

INTERNATIONAL HYDROGRAPHIC ORGANIZATION

2008

PART I - GENERAL

Published by the International Hydrographic Bureau Monaco

MEMBER STATES OF THE INTERNATIONAL HYDROGRAPHIC ORGANIZATION (IHO)

ALGERIA ARGENTINA AUSTRALIA BAHRAIN BANGLADESH BELGIUM BRAZIL CANADA CHILE CHINA COLOMBIA CONGO (ZAÏRE)* CROATIA CUBA CYPRUS		MONACO MOROCCO MOZAMBIQUE MYANMAR NETHERLANDS NEW ZEALAND NIGERIA NORWAY OMAN PAKISTAN PAPUA NEW GUINEA PERU PHILIPPINES POLAND PORTUGAL
DEMOCRATIC PEOPLE'S REPUBLIC KOREA	C OF	QATAR REPUBLIC OF KOREA
DENMARK		REPUBLIC OF KOREA REPUBLIC OF SOUTH AFRICA
DOMINICAN REPUBLIC*		ROMANIA
ECUADOR		RUSSIAN FEDERATION
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GERMANY		SRI LANKA
GREECE		SURINAME
GUATEMALA		SWEDEN
ICELAND		SYRIAN ARAB REPUBLIC
INDIA		THAILAND
INDONESIA		TONGA
IRAN		TRINIDAD & TOBAGO
IRELAND		TUNISIA
ITALY		TURKEY
JAMAICA		UKRAINE
JAPAN		UNITED ARAB EMIRATES
KUWAIT		UNITED KINGDOM
LATVIA		UNITED STATES OF AMERICA
MALAYSIA		URUGUAY
MAURITIUS		VENEZUELA
MEXICO		

* Rights of membership suspended Pending Member States: Bulgaria, Cameroon, Haiti, Mauritania, Montenegro, Sierra Leone.

INTERNATIONAL HYDROGRAPHIC BUREAU

DIRECTING COMMITTEE

President: Vice Admiral (retd.) Alexandros MARATOS, Greece *Directors*: Captain (retd.) Hugo GORZIGLIA, Chile Captain (retd.) Robert WARD, Australia

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INTRODUCTION

The Directing Committee is pleased to present the Annual Report of the International Hydrographic Organization for 2008. The Report will be of interest to Member States, accredited Non-Governmental International Organizations (NGIOs) and to all those who have contributed to the work of the IHO or who have an interest in the work of the Organization, hydrography, safety at sea, protection of the marine environment or the wider use of hydrographic information.

The Report consists of two parts:

Part 1 -**IHO Programme.** Part 1 describes the progress of the IHO Work Programme in 2008, as reflected through reports of the meetings of the Committees, Working Groups and the other bodies of the Organization.

Part 2 – **Finance.** Part 2 presents the status of the finances of the Organization for 2008 at the close of the financial period in accordance with Article 11 of the Financial Regulations. It includes the External Auditor's Annual Report as required by Article 20 of the Financial Regulations.

Steady progress was made in 2008 with the maintenance of existing technical standards and guidelines with significant progress being achieved on the development of a first draft of the new IHO Geospatial Standard for Hydrographic Data to be known as S-100. The IHO website was also comprehensively revised.

Progress towards global coverage of ENCs was a particular focus during 2008. The WEND Committee considered the matter carefully at its meetings in Tokyo and the IHB continued to monitor progress throughout the year, providing extensive briefings and input to IMO as part of its considerations on the introduction of a mandatory carriage requirement for ECDIS.

The Hydrography of Inland Waters Working Group and the Maritime Spatial Data Infrastructure Working Group completed their reports under the guidance of the Committee on Hydrographic Requirements for Information Systems (CHRIS). The reports and their recommendations will be considered by the 4th Extraordinary International Hydrographic Conference (4th EIHC) in 2009.

Support to the IHO technical program was greatly enhanced by the generosity of the National Oceanographic Research Institute (NORI) of the Republic of Korea and the Hydrographic Department of the Japan Coast Guard who each seconded one officer to assist with ongoing work at the IHB.

Nine RHCs and the HCA met during the year. Unfortunately the RSAHC was unable to hold its planned third meeting which was postponed until 2009. The main topics considered at the various meetings were related to ENC, MSI, CB and new developments such as MSDI, but the production, availability, quality, distribution and update of ENC captured the highest attention.

Capacity Building activities have continued to be monitored by the CBC. The 2008 effort consisted mainly of technical visits paid to 11 countries, the support for the provision of nine short courses and joint work with IOC in the frame of the COAST-MAP-IO Project and with IMO on awareness seminars and workshops organized for the benefit of the Caribbean States and the South Pacific Island States. The announcement during 2008 of the establishment of the International Maritime Safety Security Environment Academy IMSSEA in Genoa was a most welcome development. This will enable the IHB to assist with courses mainly in hydrography and nautical cartography, which were discontinued with the closure of the International Maritime Academy (IMA) in Trieste since 2005. Particular thanks are due to the CBC for its hard work in the preparation of material in support of the World Hydrography Day and its 2008 theme of Capacity Building.

The very close cooperation with IMO, IALA, IOC, FIG, WMO, ATCM, COMNAP and IAATO, as well as with others continued throughout the year. Of particular note was the support provided by the Antarctic Treaty Consultative Committee (ATCM) to hold the Seminar "Importance of Hydrographic Activities in Antarctica" organized by the IHO/HCA at ATCM XXXI in Kyiv, Ukraine in June. Also the close cooperation that has continued between the IHO, the IMO, the IOC and the WMO on capacity building so as to consolidate programmes and avoid superposition and duplication.

The IHO Strategic Plan Working Group (ISPWG) concluded its work and its report and proposals have already been passed to Member States for consideration and comments in order to be examined during the 4th EIHC. The Staff Regulations Working Group (SRWG) continued its work and its report will be ready for consideration by Member States by the end of 2009 in accordance with Decision 18 of the XVIIth IHC.

In March 2008 Haiti applied to become a Member of the Organization. Its application is now under consideration by Member States in accordance with Article XX of the IHO Convention. 20 Member States had approved the Protocol of Amendments to the Convention on the IHO by 31st December 2008.

The excellent cooperation that exists with the Government of Monaco continued in 2008. The Bureau is grateful to the Government of Monaco for undertaking and progressing the renovation of the Bureau's premises, without any financial obligation on the Organization as well as for their support in handling the diplomatic processes needed for applications by new Member States and approval of the amendments to the Convention.

WORK PROGRAMME 1 COOPERATION AMONG MEMBER STATES AND WITH INTERNATIONAL ORGANIZATIONS

1. IHO REGIONAL HYDROGRAPHIC COMMISSIONS

8th MEETING OF THE NORTH INDIAN OCEAN HYDROGRAPHIC COMMISSION (NIOHC)

Goa, India, 15-17 April

Chairperson: Rear Admiral MONCRIEFF (UK) Vice Chairperson: Rear Admiral NETRPRAPA (Thailand)	
 Members: Bangladesh, Egypt, India, Myanmar, Sri Lanka, Thailand, United Kingdom. Associate Members: France, Pakistan, Seychelles, USA. Observers: Malaysia, Oman, Saudi Arabia. IHB Representatives: Vice Admiral MARATOS, Lt. Cdr. SHIPMAN 	

The 8th meeting of the NIOHC took place in Goa, India, from 15 to 17 April, under the Chairmanship of RAdm. MONCRIEFF, UK National Hydrographer. Representatives from Bangladesh, France, India, Myanmar, Oman, Pakistan, Saudi Arabia, Sri Lanka, Thailand, UK and USA participated in the meeting, as well as a representative from the Intergovernmental Oceanographic Commission (IOC). VAdm MARATOS represented the International Hydrographic Bureau.

During the meeting many topics of interest to the Region were discussed and decisions were taken. Following the IHB report on the main inter-sessional activities of the Organization, the Commission considered issues concerning the status of hydrographic surveying and charting in accordance with S-55, the activities of States in the Region in the promulgation of Maritime Safety Information (MSI), the progress in implementing the INT Chart Scheme, the developments with the production of ENCs and the possible support needed, the Capacity Building activities and the request to the Capacity Building Committee for training during 2009. It was decided that India and Saudi Arabia will represent the NIOHC on the IHO Council, under the new structure of the Organization, when it is implemented. Commission Members presented their national reports on their activities. Other issues of a technical nature were also discussed.

The next meeting will take place in Seychelles or Bangladesh under the Chairmanship of RAdm. RAO, the Director of the Indian Hydrographic Service.

29th MEETING OF THE UNITED STATES – CANADA HYDROGRAPHIC COMMISSION (US- CHC)

Ottawa, Canada, April

Co-Chairpersons: Dr. NARAYANAN and Captain BARNUM

Members: Canada, United States of America **IHB Representatives**: Captain WARD, Mr. PHARAOH





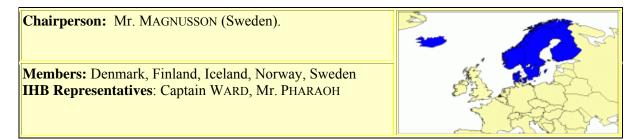
The USCHC held its annual meeting in Ottawa, Canada, in April. At this meeting the USCHC renewed its Memorandum of Arrangement that has been in effect since 1974. Several issues of mutual interest were discussed at this one-day event including the resolution of Electronic Navigational Chart (ENC) coverage in boundary waters, spatial data infrastructures. the emerging hydrographic geospatial data standard for marine data and information - S-100, and the pending establishment of Navareas in the Arctic region. Both Canada and the United States remain active on several Committees and Working Groups of the International

Hydrographic Organization (IHO). Through collaborative participation at these events the USCHC continues to further the goals of the IHO to improve maritime safety and security and overall knowledge and protection of the marine environment.

The annual international hydrographic conferences, held alternately in Canada and United States, continue to provide a forum for the professional development of the hydrographic community in North America. The Conference was held in May, in Victoria, British Columbia, Canada. As usual it included a well attended industry tradeshow and water demonstration component which provided a venue for equipment and service providers to display the most recent technological innovations.

52nd MEETING OF THE NORDIC HYDROGRAPHIC COMMISSION (NHC)

Norrkoping, Sweden 6-8 May



The 52nd Meeting of the Nordic Hydrographic Commission (NHC) was held in Norrkoping, Sweden, from 6 to 8 May, under the Chairmanship of Mr. MAGNUSSON, Director of the Swedish Hydrographic

Service. Representatives from Denmark, Finland, Iceland, Norway and Sweden attended and the IHB was represented by VAdm MARATOS who updated the participants on the important issues of the Organization during the inter-sessional period. He specifically referred to the question of the approvals received so far for the Protocol of Amendments of the IHO Convention and he emphasized the need to accelerate the internal procedures for approval. He also referred to the developments regarding the status of ENC production, cooperation with other international organizations, in particular IMO, IOC and IALA, the submission to the next IMO/NAV meeting on the ENC developments based on the decisions of the X-WEND meeting held at the Bureau at the end of October 2007, the preparations for the 4th Extraordinary International Hydrographic Conference that will take place in early June 2009 and the celebrations of the WHD. He responded to various questions from the participants.

The participants discussed various topics of interest to the region and in particular they referred to the coverage and technical details of the ENCs, the progress of surveying operations, the progress of the work of the ISPWG, the developments with INT charts, the progress with SDI within the countries in the area.

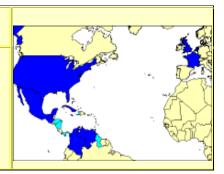
The next meeting will take place in Finland, from 21 to 23 April 2009, under the Chairmanship of Mr.VARONEN.

8th MEETING OF THE MESO-AMERICAN AND CARIBBEAN SEA HYDROGRAPHIC COMMISSION (MACHC)

Niteroi, Brazil, 09-10 October

Chairperson: Rear Admiral OCAÑA (Mexico)

Members: Brazil, Colombia , Cuba, France, Guatemala, Jamaica, Mexico, The Netherlands, Trinidad and Tobago, United Kingdom, United States of America, Venezuela. Associate Members: Antigua & Barbuda, Barbados, Guyana, Haiti, Honduras, Nicaragua and Panama.



IHB Representatives: Captain GORZIGLIA, Captain BERMEJO

The 8th Meeting of the MACHC was held in Niteroi, Brazil, from 9 to 10 October. The following members were present:

Barbados, Brazil, Cuba, France, Guatemala, Mexico, Netherlands (The), Suriname, UK and USA.

Belize and Honduras as well as the IHB and some commercial companies attended the meeting as Observers.

The meeting was opened by the Chairman, RAdm. OCAÑA (Mexico). Capt. GARCEZ, representing the Brazilian Hydrographer, and Capt. GORZIGLIA (IHB Director) welcomed the participants and noted the importance of the event in the coordination of the hydrographic and cartographic effort in the region. Colombia and Venezuela sent their apologies for not attending due to last minute commitments.

The Chairman summarized the work carried out since the 8th meeting and reviewed in detail the actions agreed. The IHB representative provided a report on the main IHO subjects of interest to the Commission, such as the status of ratification of the Protocol of Amendments to the IHO Convention, IHO/IMO related matters, mainly carriage requirements and the on-line ENC catalogue, progress concerning the adoption of the new IHO and GEBCO structure, Capacity Building matters, World

Hydrography Day; the future of the International Hydrographic Review and Haiti's application to become an IHO Member. MACHC Members agreed to inform the IHB within one week of any potential support to be offered to Haiti in the technical visit the IHB was programmed to make in October.



National Reports were provided and the following reports were tabled by the participants:

- 1) MACHC CB Report (Brazil). The need to produce a regional CB programme was highlighted.
- 2) ISPWG Report (Cuba). Informative on this WG's work and matters under discussion.
- 3) WEND matters (USA). Outcome of the last WEND meeting and guidelines for applying WEND principles.
- 4) TSMAD matters (USA). The close relation between the mariner and the marine environment protection through protected areas was highlighted.
- 5) HCIWWG matters (Brazil). Informative conclusions on the work carried out by the WG.
- 6) Electronic Chart Committee (USA). Situation on the ENC scheme and production, including situations to be solved.
- 7) INT Chart Committee (Mexico). Situation on the production of INT Charts and situations that require close collaboration to accelerate the production of these charts.
- 8) MACHC Forum (Brazil). Establishment of this tool to be used when discussing different matters that require interaction between MACHC members.
- 9) MACHC Statutes (Brazil). Proposal and adoption of changes. Inclusion of the position of Vice Chair; the limits of the Commission; the obligations of the Chair and Secretary of the Commission were agreed.
- 10) Council Representation (Brazil). Presentation of alternatives and discussion.
- 11) Liaison with IOC (IBCCA) and PAIGH. Information on joint activities. A report on the multi beam echo sounder practical training course held in Mexico was provided.

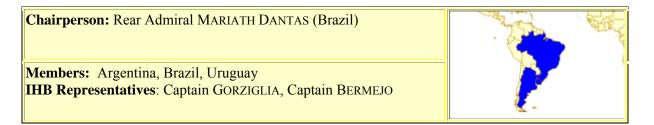
Different actions were agreed by MACHC and will be progressed during the inter-sessional period. The Director of the Gulf of Honduras Project made a presentation on the status of the Project. Countries involved: Belize, Guatemala and Honduras are in the process of receiving the instruments and equipment provided under the project. Training and hands-on activity were due to start in the following months. Support from the CB Fund anticipated for this activity will be required in March 2009, but arrangements and coordination were to take place before the end of 2008.

The MACHC Members unanimously elected Brazil and UK as Chairman and Vice-Chairman, respectively.

Following a kind invitation from Barbados, the Commission decided to hold the 10th MACHC meeting in Barbados, in the last week of October 2009, with the exact dates to be determined later.

2nd MEETING OF THE SOUTH WEST ATLANTIC HYDROGRAPHIC COMMISSION (SWAtHC)

Rio de Janeiro, Brazil, 18-19 March



The meeting was held at the Directorate of Hydrography and Navigation in Rio de Janeiro, Brazil, under the Chairmanship of VAdm. MARIATH. There were 11 participants from South West Atlantic Countries attending the meeting, besides the IHB representatives, Capt. GORZIGLIA and Capt. BERMEJO.

The country reports from the three member countries were introduced and discussed. Other reports considered were:

- Report of the Cartographic Planning and the Strategic Planning Working Groups.
- Report of the Hydrographic, Cartographic Inland Waters Work Group
- CBC program
- Technical support in developing a regional Hydro-Cartographic Plan

The following action list was agreed:

- To submit, by 1st April to the CBC, proposals of Capacity Building related to:
 Multibeam workshop in 2008;
 - Participation in the "e-navigation" workshop alog the CHRIS meeting.
 - Multibeam course in 2009.
 - o Adjustment of the present scheduled activities:
 - 2009 ENC- Updating course;
 - 2010 Workshop on hydrographic surveys in ports and shallow waters;
 - 2011 Workshop on Spatial Data Bases processing and administration.
- To approve all reports tabled at the meeting.

- To approve the new Terms of Reference of the Cartographic Planning Committee (before the Cartographic Planning Working Group).
- To appoint the following representatives:

CHRIS / HSSC	SHN (alt. DHN)
IRRC	President RHC (alt.Vice President)
CBC	DHN (alt. SHN/SOHMA)
ISPWG	SOHMA (alt. DHN).

- To invite the Hydrographic Offices of Bolivia and Paraguay to attend the next meeting.
- To request the HCIWWG to establish and clarify the definition of "inland waters".
- To nominate the President of the RHC as the representative in the future IHO Council.
- To transfer the Chairmanship of the Commission to Uruguay on 3 May 2008.

The next meeting will be held in Montevideo in the second half of March.

13th MEETING OF THE BALTIC SEA HYDROGRAPHIC COMMISSION

Rostock, Germany, 19–21 August

Chairperson: Mr. LIULYS (Lithuania) Vice-Chairperson: Mr. JONAS (Germany)

Members: Denmark, Estonia, Finland, Germany, Latvia, Poland, Russian Federation, Sweden. Associate Members: Lithuania. IHB representatives: Vice Admiral MARATOS, Lieutenant Commander SHIPMAN



The 13th Conference of the Baltic Sea Hydrographic Commission (BSHC) took place in Rostock, Germany, from 19 to 21 August, under the Chairmanship of Mr. LIULYS, the Hydrographer of Lithuania. Twenty eight delegates participated from the following eight States: Denmark, Estonia, Finland, Germany, Sweden, Latvia, Lithuania, Poland, Russia and United Kingdom as observer. Prof. EHLERS, President of the Federal Maritime and Hydrographic Agency of Germany accepted to conduct the conference as acting chair. Capt. WARD represented the IHB and informed the delegates on the progress made in the process of approval of the Protocol of Amendments to the IHO Convention, pending applications for IHO membership and the principal topics for consideration at the 4th EIHC. The IHB Director also highlighted the IHO commitment to IMO to achieve adequate ENC coverage ahead of any general mandatory carriage requirement for ECDIS, the plans for the implementation of the Hydrographic Services and Standards Committee (HSSC) and the Inter-Regional Coordination Committee (IRCC) on 1 January 2009, the current status and impact of S-100, and the intended launch of a revised IHO website by 1 September 2008.

The delegates discussed various topics: the possibilities of an S-44 workshop will be examined, technical matters affecting the integration of Editorial and Pre-print Stages on a database solution for the Production of Nautical Books were presented, and a regional approach to the harmonization of ENCs was adopted. Under strategic issues, the marine policy of the EU Commission was considered, and it was decided to put the matter of Marine Spatial Data Infrastructure (MSDI) on the standing agenda of BSHC, in view of the growing importance of hydrographic offices as contributors. There

was also discussion on some other topics concerning Capacity Building developments, and a concerted development of regular national re-survey schemes was adopted.

Finally, to mark their forthcoming retirements, the delegates and the IHB representative expressed their sincere thanks to the valuable work done by Peter Ehlers and Horst Hecht to the benefit of the BSHC over a long duration and their outstanding contributions to hydrography in general.

The next meeting of the BSHC will be held in Denmark in 2009.

8th MEETING OF THE SOUTH EAST PACIFIC HYDROGRAPHIC COMMISSION (SEPHC)

Cartagena de Indias, Colombia, 12-14 May

Chairperson: Rear Admiral PEÑA (COLOMBIA)

Members: Chile , Colombia , Ecuador , Peru. Observers: Panama IHB representatives: Captain GORZIGLIA, Captain BERMEJO



The 8th Meeting of the South East Pacific Hydrographic Commission (SEPHC) was held in Cartagena de Indias, Colombia, from 12 to 14 May.

Representatives from Chile, Colombia, Ecuador and Peru attended the meeting. The IHB was represented by Capt. GORZIGLIA and Captain BERMEJO.

Captain SOLTAU (Colombia) chaired the meeting, on behalf Rear Admiral PEÑA, who was unable to attend.

The outgoing Chairman, Captain GARZÓN (Ecuador) thanked the members of the Commission and the IHB for their support, stressing the special input from the Capacity Building Committee.

He listed the following actions carried out following the 7th Meeting of the Commission:

- Development of a methodology to update the IHO publication S-55 by the H.O. of Colombia.
- Workshop on Fluvial Hydrographic Surveys held in Iquitos (Peru) in September 2007.
- Seminar on Electronic Nautical Charts, held in Valparaíso (Chile) in August 2007.
- Feasibility study for the creation of a Regional Center for Dissemination of Hydrographic Information.
- Development of virtual fora.
- Proposals to the Capacity Building Committee from the member countries addressing the IHO Working Programme 2008-2012.
- Bilateral and multilateral agreements of co-operation signed by the Commission.

Captain GARZÓN, in accordance with Article 7 (a) of the Statutes, handed over the chairmanship of the South East Pacific Hydrographic Commission to the General Maritime Director of Colombia.

Capt. GORZIGLIA presented a report on the most important projects achieved by the Organization during the inter-sessional period, including the following facts:

- Increase in IHO membership.
- Decisions and findings of the XVIIth I.H. Conference.
- Regional Hydrographic Commission activities.
- Technical work.
- Relations with international organizations.
- Relations with hydrographic industry.
- Capacity Building.
- Preparation of the 4th Extraordinary I.H. Conference.

The countries participating presented national reports that were considered and endorsed by the Commission.

After the presentations, the delegates, with the support and suggestions made by the IHB representative, entered into an interesting discussion on matters of common interest, exchanging experiences and establishing cooperation points.

8th MEETING OF THE IHO HYDROGRAPHIC COMMISSION ON ANTARCTICA (HCA)

Niteroi, BRAZIL, 6-8 October

Chairperson: Captain GORZIGLIA (IHB) Vice Chairperson: Commodore NAIRN (Australia) Secretary: Ing. en chef HUET (IHB) Members: Argentina, Australia, Brazil, Chile, China,	
Ecuador, France, Germany, Greece, India, Italy, Japan,	See 🚫 🥳 🏹 🖓
Korea (Rep. of), New Zealand, Norway, Peru, Russian	(· · · · · · · · · · · · · · · · · · ·
Federation, South Africa, Spain, United Kingdom, Uruguay,	-E-S-
USA.	
Observer Organizations: Antarctic Treaty Secretariat	
(ATS), Council of Managers of National Antarctic	
Programmes (COMNAP), Standing Committee on Antarctic	
Logistics and Operations (SCALOP), International	
Association of Antarctic Tour Operators (IAATO),	
Scientific Committee on Antarctic Research (SCAR),	
International Maritime Organization (IMO),	
Intergovernmental Oceanographic Commission (IOC),	
General Bathymetric Chart of the Oceans (GEBCO),	
International Bathymetric Chart of the Southern Ocean	
(IBCSO), IHO Data Center for Digital Bathymetry (DCDB),	
Australian Antarctic Division, Antarctica New Zealand.	

The 8th Meeting of the Hydrographic Commission on Antarctica (HCA) took place at the Brazilian Hydrographic and Navigation Directorate (DHN), Niteroi, Brazil, 6-8 October, organized and hosted by the DHN. Fifteen IHO/HCA Member States were present (Argentina, Australia, Brazil, Chile, Ecuador, France, Germany, India, Italy, Norway, Peru, Spain, United Kingdom, United States and Uruguay) and the representatives of international organizations (IOC, COMNAP and IAATO) and international programs (GEBCO and IBCSO).



The Chairman provided a report on the activities conducted since the last meeting and proposed several actions to the Commission for consideration during the meeting.

The following topics were considered:

- Membership status. The membership has grown to 21 IHO/HCA Members.
- Election of the Vice-Chairman. RAdm. MONCRIEFF (UK) was elected.
- Status of S-55 in Antarctica.
- HCA activities in the light of the IHO Work Program, mainly including the INT Chart and ENC schemes and chart production.
- Results of the Seminar on the Importance of Hydrography in Antarctica given at the last Antarctic Treaty Consultative Meeting in June 2008 in Kiev, Ukraine. The HCA agreed to hold a similar seminar on the occasion of the 2009 COMNAP Council that will be held in Punta Arenas, Chile, in August 2009.

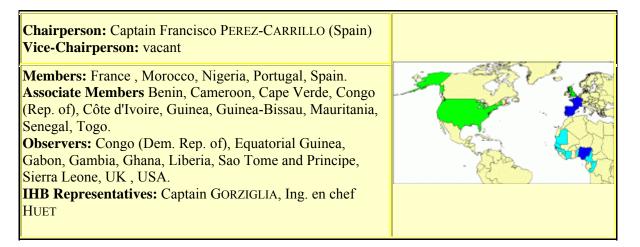
An ad hoc meeting of the HCA Hydrographic Survey Work Program Working Group (HSPWG) was held to identify initiatives to be proposed to HCA. The HSPWG is led by UK with the participation of Argentina, Australia, Chile, Germany, Greece, Spain and USA. COMNAP and IAATO expressed their willingness to participate and offered their support and contribution as observers.

The Commission agreed on several actions to be carried out during the inter-sessional period, with clear identification of the responsibilities and deadlines.

Following a kind invitation received from the Hydrographic Office of South Africa to host the next HCA Meeting, the Commission agreed to hold the 9th HCA meeting in Cape Town, South Africa, 12-14 October 2009.

10th MEETING OF THE EASTERN ATLANTIC HYDROGRAPHIC COMMISSION (EAtHC)

Lomé, Togo, 3-5 December



Over 50 participants attended the 10th Conference of the Eastern Atlantic Hydrographic Commission (EAtHC), hosted by the Government of Togo. The Conference was held at the Mercure SARAKAWA Hotel in Lomé, with participants from the following countries:

- Members of the EAtHC: France, Nigeria, Portugal and Spain. Morocco sent apologies for not attending.
- Associate Members of the EAtHC: Benin, Guinea, Senegal and Togo. Cameroon, Guinea Bissau, Côte d'Ivoire, Mauritania and the Rep. of Congo did not attend.
- Coastal Countries' Observers: Gambia, Ghana and Togo. D.R. of Congo, Equatorial Guinea, Gabon, Liberia, Sao Tome and Principe and Sierra Leone did not attend.
- Other Observers: USA, UK, PMAWCA, IMU of Accra and the IHB.

Mr. DOGBE, State Minister, Ministry of Post and Telecommunications of Togo, representing the President of the Republic, welcomed the participants and declared the conference open. During the Opening Ceremony the following authorities made statements: Capt. PÉREZ CARRILLO, Director of IHM (Spain) and Chairman of EAtHC; Adm. KODJO ADEGNON, Director of the Port of Lomé; Mr. LEBGAZA, General Director of Maritime Affairs; and Capt. GORZIGLIA, IHB Director. The IHB was also represented by Ing. en chef HUET.

Immediately after the opening and as part of the ceremony, an agreement between France and Togo for the development of hydrography and cartography in Togo was signed. Mr. RENAUX, Ambassador of France in Togo and Mr. DOGBE, Ministry of Post and Telecommunications of Togo, signed the agreement on behalf of their respective countries.

Amongst other items, the agenda of the conference included aspects related to the management of the Commission, and accordingly a report on the activities since the last conference in Dakar in 2006 was provided by the Chairman. Nigeria was designated Vice-Chair of the Conference and will therefore assume the Chairmanship of the EAtHC for the next two years.

The Conference reviewed the actions list agreed at the last conference. It followed a detailed report provided by the IHB on the status of the IHO Work Program. The presentation reviewed all five IHO Programs, highlighting the elements more related to the Commission, which included the main ongoing activities and the organization of the next EIHC.

Delegates presented their National Reports. One of the issues to be highlighted is the creation of the Working Committee on Hydrography, Oceanography and Safety of Navigation of Togo, with an approach that can be used as a reference by other countries in the region. Capacity building was given high priority in the discussions, and France was designated to represent the Commission's interest in the CBC and will identify the most important needs in terms of training and equipment. The capacity building work programme with regard to the Commission was examined and France, as Commission representative to the CBC, was tasked to consolidate the region's needs. The procedures established by the CBC were also explained as well as the importance of keeping updated IHO publication S-55.

Regarding the provision of hydrographic services, the Conference considered the INT Chart situation in the region and the radio navigational warnings within NAVAREA II. In this context it was agreed that the Maritime University of Accra in Ghana would host an EAtHC MSI course, in July 2009, as well as a Basic Practical Hydrographic Surveying Course earlier in 2009, an activity pending from 2008. The Conference was also briefed on the progress made by the ISPWG in updating the IHO Strategic Plan.

The EAtHC approved an action list that will constitute the Commission's work program for the intersessional period.

The 11th EAtHC Conference has been planned in late 2010 in Accra, Ghana.

2nd COORDINATING MEETING OF THE EAST ASIA HYDROGRAPHIC COMMISSION (EAHC)

Chiangmai, Thailand, 23-25 January

The 2nd Coordinating Meeting of the East Asia Hydrographic Commission (EAHC) was held in Chiangmai, Thailand, from 23 to 25 January. The meeting was attended by all the regional Member representatives: China, Indonesia, Japan, Malaysia, Democratic People's Republic of Korea, Republic of Korea, The Philippines, Singapore, and Thailand. Captain WARD represented the IHB and provided a briefing on the status of global ENC coverage and on various measures for consideration by the EAHC members. The Chairman of the EAHC, Mr. OEI (Singapore) presided.

The purpose of this annual meeting was to provide direction and guidance to the EAHC Working / Task Groups and Committees; collectively address IHO or IMO related issues affecting the safety of navigation in the region; kick start new projects for example, the EAHC Capacity Building Committee meeting; monitor the progress of projects and to assign resources; and provide an opportunity for Member States to raise and highlight new concerns for EAHC's consideration.

Two key outcomes of the meeting were :

- a) To prioritise and assign the region's resources to work on ENC coverage, availability and consistency. This included work carried out by the EAHC ENC Task Group on the harmonisation of ENCs and to jointly produce a new edition of the South China Sea ENCs.
- b) To realign the EAHC's training focus towards "training the trainer" and to harvest the wealth of experienced experts from within the region as lecturers. This would help accelerate the EAHC efforts in its Capacity Building program. The inaugural training courses on Quality Assurance (QA) of multibeam surveying and QA of ENCs would be held in June to coincide with the 3rd World Hydrography Day's theme of Capacity Building.

The 3rd EAHC Coordinating Meeting is planned to take place in late January 2009 hosted by China, or alternatively Japan.

8th MEETING OF THE BLACK AND AZOV SEAS WORKING GROUP (BASWG)

Kiev, Ukraine, 25-26 March

The 8th Meeting of the BASWG was held in Kiev, Ukraine, on 25 and 26 March, under the Chairmanship of RAdm. IPTES, the Director of the Turkish Hydrographic Office. Representatives from Turkey, Romania, Georgia and Ukraine participated in the meeting and the IHB was represented by VAdm. MARATOS. Representatives from Spain, which is the NAVAREA III Coordinator for the promulgation of Maritime Safety information (MSI) in the Mediterranean and Black Seas, also participated.

The following issues were discussed and decided:

- The WG drafted the Terms of Reference and Rules of Procedures. These were to be circulated to all Member States for approval and then sent to the Chairman of the Mediterranean and Black Seas Hydrographic Commission (MBSHC).
- The International Chart Scheme was reviewed and a few amendments were identified which were to be forwarded to France, as the MBSHC Coordinator, for consideration.
- The WG reviewed the ENCs scheme in bands 1 and 2 and would inform France, as the Coordinator, for consideration and acceptance.
- With the support of the NAVAREA III Coordinator, discussions took place as to whether the Black Sea will become a sub-Area of NAVAREA III. Turkey agreed to act as the sub-Area Coordinator. Turkey, Romania and Georgia were in favour and Ukraine against. The matter was to be referred to the CPRNW for consideration.
- The status of bilateral agreements in the area was discussed and the needs for training. The Chair was to communicate with the CBC Chair to discuss this issue.

It was decided that the next meeting would be held in Constanta, Romania in February or March 2009.

CANADIAN HYDROGRAPHIC CONFERENCE

Victoria, Canada, 4-8 May

The Canadian Hydrographic Conference and National Surveyors' Conference was held in Victoria, Canada, from 4 to 8 May. The Conference followed the theme "Bringing Land and Sea Together" and was a combined event organized by the Canadian Hydrographic Association and the Association of Canada Lands Surveyors.

The Conference covered a wide range of hydrographic topics. Capt. WARD presented a comprehensive paper on behalf of the IHO on the development and expectations of the new IHO Geospatial Data Standard for Hydrographic Information – S-100. The paper was well received, with very favourable comments being made on the way that the standard was being developed and the fact that great effort was being made to enable all potential stakeholders to contribute both to the development of the standard and also its maintenance and further expansion.

2. INTERNATIONAL ORGANIZATIONS

INTERNATIONAL MARITIME ORGANIZATION (IMO)

12th SESSION OF THE COMSAR SUB-COMMITTEE

Royal Horticultural Halls, London, UK – 7-11 April

The 12th session of the IMO COMSAR Sub-Committee was held at the Royal Horticultural Halls in London from 7 – 11 April. The IHO was represented by VAdm. MARATOS, Lt. Cdr. SHIPMAN and the Chairman of CPRNW. The Coordinators from NAVAREA I (UK), II (France), III (Spain), IV (USA), IX (Pakistan), XII (USA), XVII and XVIII (Canada) and XIX (Norway) were present.

The Sub-Committee reviewed the report of the CG established at COMSAR 11 on extending the WWNWS to Arctic waters. The report was accepted and the CG re-established with new ToR in order to advance the task of bringing the 5 new Arctic NAVAREAS to Operational Status.

The Sub-Committee considered submissions by the IHO and approved the proposed amendments to Resolutions A.705(17) (Promulgation of Maritime Safety Information) and A.706(17) as amended (World-Wide Navigational Warning Service) and to the issue of a revised COMSAR Circular regarding the details of NAVAREA Co-ordinators. The Sub-Committee also noted the IHO report on the outcome of CPRNW 9.

Members of the CPRNW WG (Canada, France, Norway, Spain, Turkey, UK, USA, Inmarsat, WMO and IHB) reviewing the WWNWS documentation, set up at CPRNW 7 in 2005, met in the week following COMSAR. The meeting completed the draft revision of the Joint IMO/IHO/WMO Manual on Maritime Safety Information which will now be considered at CPRNW 10 in August prior to submission to IHO and WMO Member States for agreement and subsequent submission to COMSAR. The WG also completed a preliminary review of IHO Publications S-53 and S-53 Appendix 1, and the International SafetyNET Manual.

84th and 85th SESSIONS OF THE IMO MARITIME SAFETY COMMITTEE (MSC) IMO HQ, London, 7-16 May and 26 November to 5 December

The 84th session of the IMO Maritime Safety Committee (MSC) was held on 7-16 May, at the newly refurbished IMO Headquarters Building in London.

The report of COMSAR 12, COMSAR 12/15 which is available on the IHO web site was not discussed due to the close proximity of the two meetings. This was to be considered at MSC 85 in November / December 2008. The urgent items emanating from NAV 53 had been considered at MSC 83 in October 2007 and only those remaining items were considered at this 84th session.

The 85th session of the IMO Maritime Safety Committee (MSC) was held at the IMO Headquarters Building in London from 26 November to 5 December and took the following actions:

- Approved the amendments to resolution A.705(17) on the Promulgation of Maritime Safety Information.
- Approved the amendments to resolution A.706(17) on the IMO/IHO World-Wide Navigational Warning Service.

- Endorsed the issue of the COMSAR circular on the list of NAVAREA Co-ordinators.
- Adopted 14 new or amended Routeing Measures.
- Adopted the proposed amendments to the General Provisions on Ships' Routeing, subject to confirmation by the Assembly.
- Approved the amendments to SOLAS regulation V/19 with respect to a mandatory carriage requirement for ECDIS, with a view to adoption at the 86th Session in May 2009. The dates for the phased implementation, as prepared by NAV54, were approved.
- Approved the SN Circular on "Transitioning from paper chart to electronic chart display and information systems (ECDIS) navigation".
- Approved the strategy for the development and implementation of e-navigation.
- Approved the framework for the implementation process for the e-navigation strategy along with the time frame for implementation of the strategy, requesting other international organizations to participate in the implementation of e-navigation.
- Endorsed the NAV Sub-Committee's decision that the Chairman along with the Secretaries of the COMSAR, NAV and STW Sub-Committees should jointly develop a co-ordinated approach to implement the e-navigation strategy, and
- Approved the draft SN Circular detailing an amendment to SN/Circ.243 on Guidelines for the presentation of navigational-related symbols, terms and abbreviations relating to a new symbol for the presentation of an AIS Search and Rescue Transmitter (AIS-SART).

The IHO was represented by VAdm. MARATOS and Lt. Cdr. SHIPMAN (IHB) at both meetings.

58th SESSION OF THE TECHNICAL COOPERATION COMMITTEE (TC58) MEETING IMO Headquarters, London, 10-12 June

The 58th session of the IMO Technical Cooperation Committee (TC58) was held at the IMO Headquarters Building in London, from 10 - 12 June. The IHO was represented by Lt. Cdr. SHIPMAN.

The delegations welcomed Mrs. M. N. MBANEFO, in her new role as Director of the Technical Cooperation Division and as Secretary of TC58. The Committee reviewed the report on the Integrated Technical Cooperation Programme (ITCP) for the period 2006-2007 and discussed the sustainable funding of the ITCP. The Committee also considered a consultant's report on "Impact Assessment of technical co-operation activities during 2004-2007".

A report on 20 years of the IMO's Women in Development (WID) programme was also received together with a report on developments and fellowships at the World Maritime University (Sweden) and the International Maritime Law Institute (Malta). The Italian delegation reported that they expected the International Maritime Academy to reopen in late 2008, either at Trieste or in Genoa.

Under Agenda Item 9 "Work of other bodies and organizations" the IHO reported on its Capacity Building Activities. This report was very well received with some 13 delegations speaking in support of the IHO's work on Capacity Building.

The Committee re-elected Mr. OWUSU-MENSAH of Ghana as Chairman for 2009 and elected RAdm. OLIMBO of Italy as the Vice Chairman for 2009. The 59th session of the TCC will be held in June 2009 on dates yet to be decided.

54th SESSION OF THE SAFETY OF NAVIGATION SUB-COMMITTEE (NAV)

IMO Headquarters, London, 30 June – 4 July

The 54th session of the Safety of Navigation Sub-Committee (NAV) of the IMO was held at IMO Headquarters in London, from 30 June - 4 July. The IHO was represented by VAdm. MARATOS, Capt. WARD and Lt Cdr. SHIPMAN. Many Heads and representatives of hydrographic offices also attended. The Sub-Committee had a very full agenda, of which:

- Routeing of Ships, ship reporting and related matters;
- Amendments to the general provisions on ships' routeing;
- Development of an E-Navigation Strategy; and
- Development of carriage requirements for ECDIS

were of most direct relevance.

The Sub-Committee decided to propose a mandatory carriage requirement for ECDIS to be phased in between 2012 and 2018 depending on class of ship and tonnage. An exemption for ships due for retirement within 2 years of the relevant implementation date was also agreed. Draft amendments to SOLAS Regulation V/19 and an SN/Circular entitled "Guidance on Transitioning from Paper Chart to ECDIS Navigation" were prepared. The Sub-Committee adopted the following definition for an Adequate ENC Coverage:

Sufficient ENC availability is equivalent to the best available paper chart coverage of either a Hydrographic Office providing global coverage or the Hydrographic Office of the coastal State.

The recommendations of the Sub-Committee will now go to the Maritime Safety Committee (MSC) for adoption.

The Sub-Committee finalized a draft strategy for e-navigation for consideration by the MSC. A work programme item on the "Development of an e-navigation strategy implementation plan" for the period 2009-2012 has also been requested. ECDIS and the availability of ENCs are a major element of the strategy and the IHO was requested to continue providing the Sub-Committee with annual updates on ENC availability and capacity building activities for the provision of ENCs of the waters of developing States and Small Island Developing States.

The Sub-Committee approved 7 new / revised Traffic Separation Schemes, 5 other routeing measures and 2 new / amended Mandatory Reporting Systems all of which will now go to the MSC for adoption at its 85th session in November.

Following a proposal by Norway, the United Kingdom and the IHO, the Sub-Committee agreed to an amendment to the General Provisions on Ships' Routeing (Resolution A.572(14) as amended) to align the symbology used for archipelagic sea lanes and routeing systems boundaries with those included in IHO publication M-4. This will now go to the MSC for adoption and approval by the Assembly.

The IHO informed the Sub-Committee, in document NAV54/INF.7, of its adoption of the following revised standards and specifications: the 5th Edition of S-44; Edition 3.4 of S-52 Appendix 2, Annex A; and Edition 1.1 of S-63 all of which are referenced in IMO Resolutions.

The 55th session of the Sub-Committee on Safety of Navigation is provisionally scheduled to be held from 27 - 31 July 2009.

INTERGOVERNMENTAL OCEANOGRAPHIC COMMISSION (IOC)

41st IOC EXECUTIVE COUNCIL

Paris, France, 24 June – 01 July

The 41st Executive Council (EC) of IOC met from 24 June to 01 July in Paris, France, to review the progress and to adopt resolutions pertaining to the IOC Programs. 40 Member States out of 136 have a seat on the EC. The Heads of the following Hydrographic Offices were also present: Brazil, Canada, Chile, Germany and Turkey. Other delegations included hydrographers and /or oceanographers from IHO Member States, such as Argentina, Colombia, Ecuador, France, Peru and Venezuela. The IHO was represented by Capt. GORZIGLIA.

At the Opening Ceremony the IOC Executive Council was addressed by UNESCO's Director-General, Mr. MATSUURA, and by Lic. VALLADARES, President of IOC. UNESCO's decision to increase IOC resources for the 2008-2009 biennium by US\$ 500,000 was highlighted; the progress made in the establishment of a regional tsunami warning system; the assistance in determining the outer limits of Member States' continental shelf and the 50th anniversary of IOC in 2010. The IOC President stressed the importance of cooperation with IHO in the field of capacity building.

Following the presentation of the report by the IOC Executive Secretary, Dr. BERNAL, the IHO representative highlighted the existing cooperative activities being carried out by IOC and IHO under the current MoU, especially with regard to cooperation in tsunami studies, where bathymetry constitutes a vital component. The IHO confirmed its readiness to fully cooperate with IOC in the development of inundation maps and related coastal bathymetric activities required for the regions, in particular the Indian Ocean.

The GEBCO GC Chairman, Mr. MONAHAN, introduced the new Terms of Reference and Rules of Procedures for the GEBCO Guiding Committee and its two Sub-Committees. The IHO representative informed the IOC EC that the IHO Member States had approved these texts in March. He also stressed that despite these modern and updated texts, GEBCO's effectiveness and efficiency would depend on the support provided by the two co-sponsoring organizations, IOC and IHO. The Executive Council approved the revised texts. China expressed its willingness to provide an IOC representative to fill the vacancy on the Sub-Committee on Undersea Features Names (SCUFN).

The IHO representative highlighted the importance of comprehensive bathymetry to contribute to tsunami modeling and mitigation, as well as the importance of public awareness, and recommended that, at a regional level, tsunami warning systems operators might wish to consider contacting the appropriate IHO regional hydrographic commissions to obtain available bathymetry to support the work. He also encouraged the IOC EC to keep the Ocean Mapping Program going and properly funded, including both the GEBCO and the International Bathymetric Charts regional projects.

The IOC President and participants at the Executive Council appreciated the contribution made by the IHO.

COAST-MAP-IO PROJECT IOC-IHO Assessment Visit, Maldives, 2-4 April



A technical assessment visit was conducted by an IOC-IHO expert team in the Maldives from 2 to 4 April, as part of the IOC COAST-MAP-IO project. This project addresses the need for countries bordering the Indian Ocean to acquire and fully exploit coastal bathymetric data for the development of various products required for preparedness and mitigation of ocean-based extreme events. Its objectives are:

- To enhance available expertise to locally produce accurate bathymetric and topographic maps on either side of the high tide-line.
- To provide modeling capacity for Tsunami arrival, run-up and inundation in coastal areas.
- To provide the necessary tools and training for national agencies responsible for Disaster Management and Preparedness to exploit the bathymetric and land datasets for the development of targeted maps and services, including inundation maps.

The objective of the assessment visit were to determine the level of capacity, identify focal points and national partner agencies, as well as existing data sources for coastal bathymetry and land topography in Maldives.

The team was welcomed by the Ministry of Construction and Public Infrastructure (MCPI), and was able to meet and discuss with institutions in the Maldives likely to be concerned with the Coast-Map-IO project, in particular the Coast Guard. A courtesy visit was paid to the Minister of Construction and Public Infrastructure.

Due to the importance of bathymetry in the project, the MCPI, with their experience in hydrographic surveying, should play a key role in the establishment and management of the COAST-MAP-IO bathymetric and topographic database, providing they receive appropriate training and equipment. The surveys conducted and planned by the Indian Navy Hydrographic Office in Maldives waters, in cooperation with the Maldives Coast Guard, should provide very useful bathymetric data for COAST-MAP-IO.

INTERNATIONAL FEDERATION OF SURVEYORS (FIG)

FIG WORKING WEEK

Stockholm, Sweden, 14 to 19 June

The International Federation of Surveyors (FIG) held their annual Working Week, WW2008, entitled "Integrating Generations" in Stockholm, Sweden from 14 – 19 June. The IHO was represented by Lt. Cdr. SHIPMAN. Mr. ASTERMO, former Hydrographer of Sweden was Chairman of the Organizing Committee / Conference Director. WW2008, which was held jointly with a UN-Habitat Seminar, was attended by almost 1000 delegates from 95 countries. The Opening Ceremony included Keynote Addresses by Mr. CARLGREN, Swedish Minister for the Environment and Climate; Dr. TIBAIJUKA,

Executive Director of UN-Habitat; Dr. GHANI, Chairman of the Institute of State Effectiveness (Afghanistan); and Professor ENEMARK, President of FIG.

Commission 4 "Hydrography" held their annual meeting during which Mr. JOHNSTON, current Chairman of the FIG/IHO/ICA Advisory Board on Standards of Competence, reported on the outcome of the 2008 Board meeting. Lt. Cdr. SHIPMAN reported on the recent issue of the 5th Edition of IHO publication S-44. Two Working Groups of Commission 4 reported on the activities with respect to "A Marine Cadastre" and "Promoting the economic benefits of Hydrography". It was agreed that this WG would prepare a leaflet on the "Economic Benefits of Hydrography" for release during the next FIG Congress. The IHB will assist in the preparation of this leaflet. Further details and a full report will be available from the FIG website: www.fig.net. Commission 4 organised three sessions on "Coastal Zone Administration"; "Hydrographic Information Management"; and "Hydrographic Surveying in Practice". All papers presented are available from the FIG web site. Commission 4 also organised an interesting visit to the Swedish Maritime Administration's "Eastern Region's Vessel Traffic Service" which was led by Mr. OLSSON, the Swedish member of the Working Group which produced the 5th Edition of S-44.

The FIG WW2009 entitled "Surveyors' Key Role in Accelerated Development", will be held in Eilat, Israel, from 3 - 8 May 2009 and the 2010 FIG International Congress will take place in Sydney, Australia from 11 - 16 April 2010. The 7th FIG Regional Conference "Spatial Data Serving People" will be held in Hanoi, Vietnam from 19 - 22 October 2009.

ANTARCTIC RELATED ORGANIZATIONS

31st ANTARCTIC TREATY CONSULTATIVE MEETING (ATCM)

Kiev, Ukraine, 1–13 June

The 31st Antarctic Treaty Consultative Meeting was held from 1 to 13 June in Kiev, Ukraine. On this occasion one Committee – the Committee for Environmental Protection (CEP) -and three Working Groups were created: the Legal & Institutional Working Group, Tourism and Non-Governmental Activities Working Group and the Operational Matters Working Group. There was also a two-hour seminar, organized by the IHO/HCA, on the "Importance of Hydrographic Activities in Antarctica".



Representatives from 36 countries and 8 international organizations participated and considered 56 Working Papers (WP) and 126 Information Papers (IP) submitted by various countries and international organizations, together with 12 documents submitted by the AT Secretariat. Dr. LYTVYNOVIK, Director of the National Antarctic Center of Ukraine, opened the Meeting. Opening Addresses sent by the President of Ukraine and by the Minister of Foreign Affairs were read out. Mr. KOMISARENKO, Ukraine was appointed Chairman of the XXXIst ATCM. The Government of the Principality of Monaco announced its recent signature of the Treaty, thus becoming the last country to have acceded to the Treaty. The IHO was represented by Capt. GORZIGLIA, who attended the meeting from 2 - 10 June.

Capt. GORZIGLIA, IHB Director

Various documents related to the IHO objectives were presented. The complete list can be consulted at the following web page <u>www.atcm2008.gov.ua</u>.

A meeting was held with Mrs. LANDAU, Executive Secretary of IAATO, Mr. GUICHARD (COMNAP Executive Secretary) and RAdm. CATALAN, Chair of the COMNAP Working Group on Ship Operations. It was agreed that during 2009 and 2010 similar seminars should be arranged when the COMNAP and IAATO general meetings take place. This idea will be further explored following the meeting scheduled for both organizations this year.

The 30th ATCM accepted the IHO's offer to hold a Seminar on "The Importance of Hydrographic Activities in Antarctica" at the 31st ATCM. The Seminar was opened by Capt. GORZIGLIA (IHB), who explained the objective of the event.

Over 300 persons attended the Seminar that contributed to raise awareness of hydrography and to encourage strong support of WP 38 and its proposed resolution that recommends Governments to proceed as follows:

- 1. To encourage their national programme vessels and other vessels, as appropriate, to collect hydrographic and bathymetric data on all Antarctic voyages, as practicable.
- 2. To cooperate with the HCA to improve hydrographic surveying and charting in the Antarctic region including working to:
 - a. clarify with HCA requirements for the collection of hydrographic data of sufficient quality for use in the development of electronic navigational charts and,
 - b. identify priority areas for the collection of additional hydrographic and bathymetric data.
- 3. To forward any Antarctic hydrographic and bathymetric data collected to the relevant international chart producer for charting action.
- 4. To endeavour to find additional resources towards improving hydrographic surveying and charting in the Antarctic region.

It was decided to invite the IHO to report on the progress of hydrographic surveys and nautical charting in Antarctica at the 32nd ATCM which will be held in Baltimore, USA, from 6 to 17 April 2009. This meeting will coincide with the 50th anniversary of the Antarctic Treaty.

It is important to note that the ATCM approved a very important resolution regarding the importance of hydrographic surveys and nautical charting in Antarctica and adopted the IHO report. The IHO Antarctic activity is very well known and its importance appreciated. The HCA made a positive contribution to the IHO objectives by holding the Seminar and thought will be given to organizing similar events for COMNAP and IAATO audiences in 2009 and 2010, respectively.

INTERNATIONAL ASSOCIATION OF MARINE AIDS TO NAVIGATION AND LIGHTHOUSES AUTHORITIES (IALA)

The IHO has continued to be represented at meetings of IALA's E-Navigation Committee. Mr. LIANGYU of the Shanghai Maritime Safety Agency attended the fourth meeting in Shanghai, China from 25 - 29 February and Ingénieur Général LAPORTE, France, attended the fifth meeting in Paris from 15 - 19 September. Ing. Gen. LAPORTE also represented the IHO at an inter-sessional meeting of the E-Navigation committee's working group on Operations and Strategy in Paris from 14 - 18 January.

Mr. SMITH of the UK Hydrographic Office attended meetings of IALA's World VTS Guiding Board as an IHO Observer in January 2008. VAdm MARATOS and Capt. WARD visited the Paris offices of

IALA to discuss matters of common interest with the Secretary General of IALA in accordance with the MoU between IHO and IALA.

UNITED NATIONS

IHO'S PARTICIPATION IN THE UNITED NATIONS ENVIRONMENT PROGRAMME

The International Hydrographic Bureau was invited by the Government of Monaco to participate in the United Nations Environment Programme Civil Society Forum and its 10th Special Session of the Governing Council/Global Ministerial Environment Forum which took place at the "Grimaldi Forum" from 19-22 February in Monaco.

The IHO was offered a spacious exhibition area to display panels to inform UNEP participants on the role of the IHO, its aims and objectives. This was an excellent opportunity to promote the activities of our Organisation and to increase awareness of the importance of Hydrography in supporting safety of navigation and protection of the marine environment.

The UNEP Forum was attended by over a thousand participants. The mission of the UNEP is to provide leadership and encourage partnership in caring for the environment by inspiring, informing, and enabling nations and peoples to improve their quality of life without compromising that of future generations.

MISCELLANEOUS

PORT MANAGEMENT ASSOCIATION OF WEST AND CENTRAL AFRICA 31st EXECUTIVE COUNCIL

Abidjan, Côte d'Ivoire, 21-25 April

The PMAWCA invited the IHO to attend the 31st Executive Council in Abidjan, Côte d'Ivoire, from 21 to 25 April. Capt. GORZIGLIA, IHB Director, represented the IHO and attended the Maritime Safety, Environmental Protection and OperationS Committee meeting where the work focused on reviewing the past activities. He gave a presentation to the PMAWCA Board of Directors that included a brief description of the IHO, the SOLAS Convention, in particular Regulation 9 of Chapter V covering "Hydrographic Services", the status of hydrography in the region, the IHO Capacity Building effort in the area and Conclusions and Recommendations.

The following conclusions were agreed by the participants:

- a) There is a need to develop hydrographic capabilities in the region as the lack of charts and capabilities to advance were not sustainable in modern times.
- b) A resolution should be drafted and adopted which will request Maritime Authorities to consider this matter with some urgency. It was noted that hydrography is a governmental problem where ports can play a role, but political willingness is required.
- c) The importance of raising awareness at governmental level through the maritime authorities in the region was noted. Hydrography needs to be made better known to other relevant persons, agencies and activities.
- d) The identification of priority projects and request for support from funding agencies for their implementation were highlighted. The need to improve safety of navigation and protection of the environment will be maintained as a priority.
- e) Training was identified as a necessary step forward to generate a basis for development.

f) Participation of PMAWCA - Members and the Secretary General - in the forthcoming EAtHC meeting was strongly supported. Togo indicated that they were seriously considering hosting the meeting and a final decision would soon be taken.

INTERNATIONAL RADIO-MARITIME COMMITTEE (CIRM) ANNUAL MEETING Dublin, Ireland, 21-23 April

The International Radio-Maritime Committee (CIRM) held its annual Conference in Dublin, Ireland, from 21 to 23 April. CIRM is the body representing the maritime electronics industry in the development of international regulations and standards and is recognized by the IHO as a Non-Governmental International Organization. CIRM maintains an active role in the IHO Committee on Hydrographic Requirements for Information Systems (CHRIS), with a number of its members also participating as Expert Contributors in various CHRIS Working Groups. Captain WARD represented the IHO at their Annual Meeting and provided an update on issues and activities of interest to CIRM members.

Topics covered during the meeting of interest to Member States included a progress report on the revised test specifications for ECDIS (IEC 61174), the E-Navigation Concept, Portable Pilot [navigation] Units and future Interface standards for all bridge equipment.

CIRM's brief includes communications systems, navigation systems and security and significant time was given over to the progress of Long Range Identification and Tracking systems that are mandated from the end of this year on all ships.

ACCREDITATION OF THE INTERNATIONAL MARITIME PILOTS' ASSOCIATION (IMPA) AS A NON-GOVERNMENTAL INTERNATIONAL ORGANIZATION (NGIO)

In October, the IHO Member States approved the accreditation of the International Maritime Pilots' Association as an NGIO. The Directing Committee is confident that the IMPA will positively contribute to the work of the IHO in view of its existing active participation in relevant international maritime fora. IMPA has enjoyed accredited consultative membership at the IMO for many years and IMPA delegates make significant contributions to various aspects of the work of IMO through their participation in its many Committees and Working Groups. More information on the IMPA may be found on their website: www.impahq.org.

MEMORANDUM OF UNDERSTANDING BETWEEN THE IHO AND THE EUROPEAN UNION COMMISSION

Members of the North Sea Hydrographic Commission (NSHC) raised concerns that initiatives of the European Union Commission (EC) on important maritime issues were lacking proper hydrographic input. In particular it was identified that Member States were not being consulted by the EC. While on some occasions there were national responses to the EC on specific topics, it was agreed that there was a need to coordinate responses and influence the EC from within the IHO structure. The NSHC has decided to establish a Working Group on "European Union (EU) Marine and Maritime Policies" to be Chaired by France.

On Friday 25 January, France organized a meeting in Brussels with the EC officials on maritime issues in order to examine the relationship between the EU institutions and HOs through the IHO. The objectives of the meeting were:

- To raise awareness on HOs capabilities, missions and responsibilities and existing networks;
- To give insight into the IHO and its activities;
- To provide an overview of the IHO contribution to the establishment of the EU Maritime Integrated Policy;
- To improve EU institutions/agencies-EC-IHO partnership;
- To identify any actions that could benefit from initiatives during the French presidency of the EU Council.

The meeting was very fruitful for both sides, allowing the opportunity: to highlight the importance of hydrography on all issues concerning safety at sea, pollution of the marine environment, security and development; to understand the specific maritime initiatives and needs of the EC and; to discuss how future cooperation can be better organized and the need for expert participation in meetings on specific topics of interest to both parties. It was decided to formalize this cooperation through a Memorandum of Understanding (MoU) between the IHO and the EC so that Member States could be better informed on developments concerning cooperation with EC.

OFFICIAL LAUNCH OF INDONESIAN ENCs

Jakarta, Indonesia, 11 December 2007

ENCs of 18 international ports and three ENCs covering key archipelagic sea lanes through Indonesian waters were created in just six months by Jawatan Hidro-oseanografi (JANHIDROS), the national hydrographic office of Indonesia. This was the first part of an accelerated ENC production programme that aims to see Indonesia achieve full ENC coverage by 2009.

The Hydrographer of Indonesia RAdm. RANPANGELEI hosted an opening ceremony onboard the Indonesian survey ship *Leuser* in front of over 100 guests and a large media contingent. A short sea cruise provided the opportunity to see the ENCs in use. The guest of honour at the ceremony was His Excellency H. HARIJOGI, Secretary General of the Ministry of Transportation. Mr. OEI, Hydrographer of Singapore, represented the East Asia Hydrographic Commission. Capt. WARD represented the IHB. This launch of Indonesia's ENCs covered the most important trade routes and ports in Indonesia and marked a steadily increasing level of hydrographic activity and cooperation that is taking place in the East Asia region. The Indonesian ENCs help complete the ENC coverage from Japan and Korea, through the Indonesian Archipelago to the East Coast of Australia.

JANHIDROS is an active member of the East Asian Hydrographic Commission, where regional hydrographic interests and capabilities are regularly coordinated to the benefit of all the participants. JANHIDROS is also deeply involved in the IMO / World Bank project to establish the world's first *Marine Electronic Highway* in the Malacca Strait and Singapore Strait.

WORK PROGRAMME 2 CAPACITY BUILDING

1. ESTABLISHMENT OF THE INTERNATIONAL SAFETY, SECURITY AND ENVIRONMENT ACADEMY (IMSSEA)

On 12th September, the Chairman of the "Accademia Italiana della Marina Mercantile" (Italian Shipping Academy), informed the IHB about the creation of the "International Maritime Safety, Security and Environment Academy" (IMSSEA) affiliated to the International Maritime Organization (IMO).

The IHB expressed its appreciation of this news and its confidence that with the partnership of the Italian Navy Hydrographic Institute (IIM), the reactivation of international hydrographic and cartographic programs could be achieved in the short to medium term. At a joint meeting that took place on 28th October, the following actions were agreed:

- 1. The Academy will study a Draft Cooperation Arrangement proposed by the IHB to formalize the relationship between IMSSEA, IMO and IHO. As soon as the text is finalized the IHB shall provide it to IMO for consideration.
- 2. The IHB will explore the convenience and viability of delivering a short course at IMSSEA in 2009 that could be used to verify the procedures the Academy is developing with regard to announcement, application and selection of participants.
- 3. The Academy will develop the procedures required to prepare, evaluate and confirm an annual program containing the course to be delivered, and the procedures for announcement, application and selection of participants.
- 4. The IHB will identify, in conjunction with the Academy, the courses that could be suggested to IMO to be included in the Technical Cooperation Committee Work Program for the period 2010/2011.
- 5. The IHB will provide support to the IIM, as and if required, for the preparation of the submission to the IAB of hydrographic surveying and nautical cartographic programmes.

On 28 November, Capt. GORZIGLIA, represented IHO the at the inauguration ceremony of the International Maritime Safety Security Environment Academy and (IMSSEA), which took place in the "Stazione Maritima" of the Port of Genoa, Italy.

The Secretary General of IMO and authorities from the Province of Genoa, the Port of Genoa, the Coast Guard, the Ministry of Foreign Affairs, amongst others, attended the ceremony. Also present at the event were representatives from the Navy, the maritime sector and students from the Italian Shipping Academy.



Mr. Maurizio ZINI, Director of IMSSEA and Captain Hugo GORZIGLIA, IHB Director

The ceremony included several presentations: Mr. ZINI, Director of IMSSEA and Prof. MASSOLO, President of the Italian Shipping Academy outlined the objectives and challenges for the new Academy, highlighting the cooperation that has already started with IHO. RAdm. MITROPOULOS, IMO General Secretary, congratulated the Italian authorities for their initiative to establish IMSSEA and wished every success for the future training of new generations of seafarers. This new Academy - arm of the IMO - offers an excellent venue for training due to its location in the Port of Genoa.

At the end of the ceremony, the IHB Director presented an IHO crest to IMSSEA and, at the same time, the Director of IMSSEA presented a commemorative plate of the inauguration.

2. CAPACITY BUILDING COMMITTEE

6th MEETING OF THE IHO CAPACITY BUILDING COMMITTEE IHB, Monaco, 27-29 May

Chairperson:	Capt. H. GORZIGLIA (IHB)		
Vice-Chairperson:	Mr. J. KRASTINS Latvia)		
Secretary:	Capt. F. BERMEJO (IHB)		
Members:	Australia, Brazil, Chile, France, Germany, India, Japan, Korea, Mexico,		
	Mozambique, Norway, UK, USA		

The 6th meeting of the IHO CBC was held at the International Hydrographic Bureau, Monaco, from 27 to 29 May, under the chairmanship of Capt. Hugo GORZIGLIA (IHB Director) and with three new members from Japan, Norway and UK and two observers from Madagascar and IOC.

The Chairman provided a general overview of the activities undertaken since the last meeting, and the following main topics were considered by the Committee:

- General IHO CB Activities not under the CB Work Programme, mainly co-operation with IMO and IOC.
- World Hydrography Day.
- S-55 Progress.
- Capacity Building Fund.
- 2007 CB WP. Executed and Pending Activities, including Technical visits paid, Workshops, Seminars and Short Courses organized.
- Management Plan, that was updated by the Committee, following the submissions made by the RHCs.
- CBC draft document on "Procedures".
- IHO Resolution T1.3.

In accordance with the updated Management Plan, the CBC Work Programme 2008 and to the Draft Work Programme for 2009 were adjusted and agreed.

The Chairman reminded the Committee that, from 1st January 2009, a new IHO structure will enter into force, the CBC becoming the Sub-Committee on Capacity Building, reporting to the Inter-Regional Cooperation Committee (IRCC). He requested the Committee members to give consideration to the nomination of a new CBC Chairman at the CBC 7. The newly elected CBC Chairman should be prepared to attend the first meeting of the IRCC, which will be held immediately after the closure of the 4th Extraordinary IH Conference. The CBC Chairman is a member of the IRCC.

The representative of the Republic of Korea confirmed the invitation made at the CBC 5, and the Committee agreed to hold the 7th meeting in Seoul from 11 to 13 May 2009, with South Africa as an alternative venue.

CAPACITY BUILDING WORK PROGRAMME

The Capacity Building Committee approved the CBC Work Programme for 2008 and the Draft Work Programme for 2009. Both are available to Member States from the CBC Web page of the IHO site.

CAPACITY BUILDING PROCEDURES

The CBC approved a set of Procedures to improve CB assessment, provision and accountability. The five Procedures are indicated below:

- 1) Procedure and model for submitting a requests of support to the CBC.
- 2) Procedure to be followed by RHCs before submitting requests of support to the CBC.
- 3) Reviewing process to be followed by the IHB, prior to include request in the Draft Management Plan.
- 4) Procedure to be followed by the CBC when considering submission requesting support.
- 5) Procedure for performance assessment. This includes the study and develop of the existing Tables of Performance Indicators discussed.

CAPACITY BUILDING ASSESSMENT

Technical Visits

The following visits were paid or are in preparation to the countries and areas indicated below:

- 1. Uruguay, Brazil, Argentina (CBC Chairman)
- 2. Bahrain, Cuba and Haiti (IHB)
- 3. Maldives (IOC/IHO Team within the COAST-MAP Project.)
- 4. Angola and Malawi (Coordinated by the SAIHC Chairman)
- 5. Albania, Malta and Romania (Coordinated by the MBSHC Chairman)

CAPACITY BUILDING PROVISION

Technical Workshops

In cooperation with IMO, an IMO-IHO Workshop on Hydrography was held in Paramaribo, Suriname in November.

Technical Seminars

Also in cooperation with IMO, a Seminar on Raising Awareness of Hydrography in the Island States of the South Pacific was organized in Suva, Fiji, in October.

Short Courses

Course	Date and place	Area/ Countries participant
1. Course on Maritime Safety	Cadiz, Spain,	MBSHC - Malta, Tunisia, Algeria,
Information	11-13 March	Syria, Suriname, and Spain
2.Support for attendance to multi-beam	Goa, India	Algeria, Estonia, Fiji, Kenya,
courses	10-22 November	Mauritius, Myanmar, Oman, Serbia,
		South Africa and Tanzania.
Support for attendance to multi-beam	Niteroi, Brazil	MACHC - Argentina, Colombia,
courses	24-28 November	Cuba, Chile, Suriname, Uruguay
Quality Assurance in Multibeam	Singapore	EAHC – Indonesia, Japan, Malaysia,
surveying and post processing course	16-19 June	Philippines, Rep. Of Korea, Thailand,
		Vietnam
Quality Assurance in ENC Production	Bangkok	EAHC -
	4-6 November	
Introduction to Hydrographic	Nairobi (Kenya)	Kenya, Madagascar, Malawi,
Surveying	20-24 October	Mozambique, Namibia, Seychelles,
		Tanzania, Uganda.
Regional Data Exchange Workshop	Cartagena,	SEPHC - Chile, Ecuador and Peru
	Colombia	
	28-31 October	
ENC QA Workshop	Niteroi, Brazil	SWAtHC - Argentina, Colombia,
	5-6 November	Costa Rica, Honduras and Uruguay.

Projects

The IHO also cooperates with other international organizations in developing and providing joint projects, with a view to supporting the progress of hydrography, nautical cartography and related sciences world wide. Some of these projects are listed below:

Gulf of Honduras

This project, approved and funded by the InterAmerican Bank of Development and GEF supports the development of environmental protection in the area of Belize, Guatemala and Honduras. the IHO is providing support, especially through the Meso American and Caribbean Hydrographic Commission, to develop the hydrographic component of the project.

Black and Azov Seas Working Group

Established by the Mediterranean and Black Seas Hydrographic Commission, this Working Group is in charge of developing a project of hydrographic development of the area. A meeting was held in 2008 (See under MBSHC).

Marine Electronic Highway for the Malacca and Singapore Straits (MEH)

A Memorandum of Agreement has been signed between the Ministry of the Environment of Indonesia and the Batam Industrial Development Authority for the provision of the Project Management Office located in the Harbour Office of Batu Ampar. The Republic of Korea has contributed additional funds to enhance MEH-based infrastructure.

Sea Power Symposium

Organized between the Navies of the Mediterranean and Black Sea countries. Meetings are held, periodically since 1998. The IHO is represented by the IHB and has participated in all the meetings held.

The countries involved in the project are Albania, Georgia, Greece, Italy, Morocco, Spain, Turkey and UK.

Western Indian Ocean Marine Highway Development and Coastal And Marine Contamination Prevention Project

The project's medium to long-term global environmental goal is to reduce the risk of ship-based environmental contamination (such as oil spills from groundings and illegal discharges of ballast and bilge waters) and to strengthen the capacity of countries to respond to oil or chemical spill emergencies in the region. The project is co-funded by the GEF, the governments of Comoros, Kenya, Madagascar, Mauritius, Mozambique, Seychelles, South Africa, and Tanzania and other partners.

3. MISCELLANEOUS

CO-ORDINATION MEETINGS WITH OTHER INTERNATIONAL ORGANIZATIONS

The IHO has established partnerships with other international organizations, aiming at providing Capacity Building to developing countries. Among these activities, the following should be noted.

Coordination meeting on Capacity Building matters with IMO, IOC and WMO

Following an initiative from the IHB, the responsible officers for Capacity Building matters in the IMO, IOC and IHO decided to hold annual meetings to consider matters such as the procedures established in each organization, their Work Programmes and Funding mechanisms, the experiences gained in the provision of CB, the experience with Funding Agencies and Organizations, the Status of joint co-operation projects and the areas of common interest.

The second meeting of the IHO, IMO and IOC representatives was held in October. IALA will be invited to join the other parent organizations at the next meeting.

Joint IOC/IHO cooperation

In the light of project ICO COAST MAP -10, the IHB has been participating jointly with IOC in technical visits to assess the situation of selected countries in the Indian Ocean.

Other "ad hoc" co-ordination meetings have been held with IMO, IOC, FIG and other organizations within the frame of joint projects in development.

CONTRIBUTION OF THE REPUBLIC OF KOREA TO THE IHO CAPACITY BUILDING FUND

The Republic of Korea made its annual financial contribution to the CBC Fund in accordance with a Memorandum of Understanding signed in 2006. The IHB Directing Committee is grateful to the Government of the Republic of Korea for making this financial contribution to the IHO Capacity Building Fund. The funds contribute to enhancing the Capacity Building efforts of the Organization for establishing and improving the hydrographic and cartographic capabilities, especially of Developing States.

JAPAN HYDROGRAPHIC ASSOCIATION CB PROJECT

The IHO concluded a Memorandum of Understanding (MoU) with the Japan Hydrographic Association (JHA) acting on behalf of the Japan Hydrographic and Oceanographic Department (JHOD) for the implementation of a Capacity Building Project aiming at developing and promoting human capacity building of technical personnel in developing countries, particularly in Asia and its adjacent regions in nautical cartography.

4. FIG/IHO/ICA INTERNATIONAL BOARD ON STANDARDS OF COMPETENCE FOR HYDROGRAPHIC SURVEYORS AND NAUTICAL CARTOGRAPHERS

31st MEETING OF THE FIG-IHO-ICA IAB

Sydney, Australia, 07-11 April

The 31st meeting of the FIG/IHO/ICA Board was hosted by Australia and held at the HMAS Penguin Naval Base in Sydney (Australia).

The main items considered by the Board were the new Guidelines for submission of courses and Internal Assessment of Courses, the procedures for internal assessment, the reduction of period for resubmission of courses (10 to 6 years) the IAB Terms of Reference and Rules of Procedure and the study of funding/cost-recovery mechanisms.

Review of courses

The courses submitted to the IB were reviewed and the results are shown in the table below:

Course	Decision
Specialization Course of the Italian Hydrographic Institute.	Re-recognized at Category A with Options 1, 2 and 5.
Course Programme in Hydrography from Skilltrade – STC.	Recognized at Category B upon receipt of complementary information.
Course in Hydrography from the University of Technology of Malaysia (UTM).	Re-recognized at Category A with Options 2 and 7.
Hydrographic Education Programme of the University of Otago (New Zealand).	Re-recognized at Category A.
Group Training Course in Information Management for Maritime Activity and Disaster Prevention of Japan Coast Guard and Japan International Cooperation Agency.	Re-recognized at Category B.
Advanced Course in Hydrography of the Japan Coast Guard Academy.	Re-recognized at Category A with Option 1.
Applied Hydrography Education Certificate Programme of the Middle East Technical University (Ankara, Turkey).	Rejected. New submission required.

The updating of M-5 "Standards of Competence for Hydrographic Surveyors" and M-8 "Standards of Competence for Nautical Cartographers" will be carried out by the Board Members with input from the parent organizations, in accordance with the Board's Terms of Reference.

Individual Recognition

Following the mandate received from the parent organizations, the Board agreed that the best approach to this matter was to establish a procedure to recognize national schemes, or programmes, for the certification of individuals. The experience of existing bodies, such as the Australasian Hydrographic Surveyors Certification Panel (AHSCP) and the ACSM from USA, provided the Board with some examples to follow in developing a framework for such a procedure. The Board intended to work on this topic during the inter-sessional period and consider a provisional text by 1st October.

The 32nd meeting will be held in Genoa, Italy.



The IAB members and other participants

WORK PROGRAMME 3 TECHNIQUES AND STANDARDS SUPPORT

1. CARTOGRAPHY AND HYDROGRAPHIC INFORMATION SERVICES

CHRIS AND ITS SUB-COMMITTEES

20th MEETING of CHRIS Niteroi, Brazil, 3-7 November

Chairperson:	Capt. V. NAIL (United Kingdom)	
Deputy Chairperson:	Dr. M. JONAS (Germany)	
Secretary:	Ing. en Chef M. HUET (IHB)	
Members:	Argentina, 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 (NGA, NOAA,	
	NOO, USCG and ACOE), IHB.	
Observers:	CIRM, CLIA, DGIWG, GEBCO, HGMIO, IC-ENC, ICS, IEC/TC80,	
	IMO, IOC, OEF, PRIMAR, RTCA, RTCM.	



The Committee on Hydrographic Requirements for Information Systems (CHRIS) met in Niterói, Brazil from 3 to 7 November for its 20th and last meeting (CHRIS20). 21 Member States, including five from South America and three Non Governmental International Organizations were represented. The meeting was held in two parts, with a Regional Capacity Building Seminar on ENC Production being held on 5 and 6 November. The CHRIS meeting was preceded by the usual Chair Group coordination meeting comprising the chairs of the various CHRIS subordinate bodies.

The meetings were hosted by the Brazilian Directorate of Hydrography and Navigation at their premises in Niterói. CHRIS20 was chaired by Capt. Nail (UK). A reception for CHRIS delegates and participants of the Capacity Building Seminar was hosted by the national Hydrographer VAdm. Palmer on 5th November.

The 20th meeting was the last meeting of CHRIS. On 1 January 2009 the CHRIS will be retitled Hydrographic Services and Standards Committee (HSSC) at which time it will incorporate all the IHO technical Working Groups and oversee all the technical aspects of the IHO Work Programme.

The Committee reviewed the CHRIS work program and the progress made by its various subordinate working groups (WGs).

The existing governance and administrative arrangements for the hydrographic geospatial information infrastructure (GII) that is now supporting the development, maintenance and extension of IHO digital data standards and specifications, especially S-100, was reviewed and agreed by the Committee.

The Marine Spatial Data Infrastructures WG (MSDIWG) presented their report on the level and nature of the IHO's role in assisting Member States in their support of national spatial data infrastructures. The Hydrography and Cartography in Inland Waters WG (HCIWWG) also presented their report on the level and nature of IHO involvement in the hydrography and cartography of inland waters. The Committee commented on both reports which will now be submitted to the 4th Extraordinary International Hydrographic Conference in June 2009 for consideration by all Member States.

The Committee invited France to lead a study into a standardized approach for defining the length of coastlines and to report back to the HSSC next year. Interested Member States and other Stakeholder groups should contact the study coordinator Ing. en chef DÉNIEL: *deniel@shom.fr*. A correspondence group, also led by France will study the standardisation of Temporary and Preliminary Notices to Mariners intended for use with ENCs and report back to the HSSC. The Committee also agreed to initiate a study on how a standardized dynamic water height function could be achieved in ECDIS using S-57-based ENCs.

The Committee agreed that the HCIWWG had completed its work. As a result, the HCIWWG was disbanded. The Committee also determined that it was not appropriate for the previously co-sponsored Harmonization Group on Marine Information Overlays (HGMIO) to become an IHO WG as a result of the withdrawal of the involvement of the International Electrotechnical Commission. Accordingly the HGMIO will continue as an independent coordination and harmonization group, advising and cooperating with the IHO as required.

MARINE SPATIAL DATA INFRASTRUCTURE WORKING GROUP (MSDIWG)

1st Meeting, IHB, Monaco, 4-5 February 2nd Meeting, IHB, Monaco, 10-11 September

Chairman:	Mr. J. PEPPER (United Kingdom)		
Vice Chairman:	Mrs. M. KENNY (USA)		
Members :	Argentina, Australia, Brazil, Canada, Denmark, Estonia, Finland, France, Germany, Italy, Japan, Republic of Korea, Latvia, Nigeria, Netherlands, Norway, Slovenia, Spain, Singapore, Sweden, UK, USA, IHB.		

The IHO/CHRIS Marine Spatial Data Infrastructure Working Group (MSDIWG) held its inaugural meeting at the IHB, Monaco, on 4-5 February. The MSDIWG was established by the CHRIS Committee following a decision by the 17th IH Conference in May 2007, to identify the Hydrographic Community inputs to National Spatial Data Infrastructures (NSDI). The meeting was attended by the Chairman of the MSDIWG, Mr. PEPPER (UKHO) and representatives of the HOs of Australia, Denmark, Estonia, Finland, France, The Netherlands, Norway, Slovenia and USA, and members of the IHB, plus an expert contributor from SeaZone (UK).

The meeting reviewed the current status of SDI development in each participant's country. It was noted that the EU initiative INSPIRE (Infrastructure for Spatial Information in the European Community) will apply to European HOs. The meeting also supported the new IHO Geospatial Standard for Hydrographic Data, S-100, which was considered to be the relevant standard for marine SDI development.

The meeting agreed to produce an IHO SDI Guide, aiming at assisting IHO Member States in their dealings with SDI. It was agreed that the guide should cover all SDI aspects, including Spatial Data Strategy/Policy, People/Networking, Data Management, Frameworks / Standards, and Dissemination. It was intended that a final draft of the guide be submitted to the 20th CHRIS meeting in November for review / approval. The meeting split up into small working groups to develop a questionnaire to assess the level of readiness of HOs to contribute to an SDI. A draft was prepared, which would be finalized by correspondence and sent to Member States.

The 2nd MSDIWG meeting took place at the IHB on 10-11 September, with 13 attendees, and was chaired by Mr. Pepper (UK). The main purpose was to analyse the results of the questionnaire sent to Member States with CL 41 and prepare the MSDIWG report to CHRIS-20. Discussions centred on the research findings and suggestions for an IHO role, and its supporting activities going forward were formulated. The following conclusions were drawn up:

- The exercise served its purpose to measure the current and future aspired status of MSDI within Member States providing headline information to enable MSDIWG to understand the issues involved.
- The analysis provided evidence that there is a need for assistance in developing Hydrographic Office roles in MSDI/NSDI which will enable the IHO to define its role and possible help it can give to Member States as they work towards a fully optimised MSDI.
- Clear pointers have been articulated of the areas where training and knowledge transfer are required. These are mainly in data management, MSDI framework development, data standards and dissemination. There is a need to develop and disseminate guidelines and procedures in these areas.
- Capacity and capability across the HO community will be improved through increased resources, funding and policy development.

The meeting also drafted inputs to an <u>IHO Marine SDI Guidance Document</u> ("Cook Book"), which is intended to assist IHO Member States to be better prepared to develop and / or join MSDI at their National or Regional level.

TRANSFER STANDARD MAINTENANCE AND DEVELOPMENT (TSMAD) WORKING GROUP

15th Meeting, IHB, Monaco, 14th to 18th January
16th Meeting, Cape Town, South Africa 5-9 May
17th Meeting, Seattle, USA 8-12 September

Chairman: Deputy Chairman: Secretary: Members: Mr. GREENSLADE (UK) Mr. VACHON (Canada) Mr. PHARAOH (IHB) Australia, Belgium, Canada , Denmark, Finland, France, Germany, Italy, Japan, Korea, New Zealand, Norway, South Africa, Sweden, UK, USA, UNH, C-Map/dKart, SevenCs, ESRI, CARIS, IIC and IC-ENC. IHB Director Capt. WARD, welcomed TSMAD members to the IHB and to the 15th meeting of the working group. He noted that the imminent release of the new Geospatial Standard for Hydrographic Information, (S-100) was generating significant interest, and he requested that TSMAD should endeavour to complete the standard as soon as possible. S-100 should be released for a trial period so that interested parties will have an opportunity to familiarize themselves with the standard, and are able to provide valuable feedback.

The meeting, which was chaired by Mr. GREENSLADE (UKHO), was attended by Member State representatives from Australia, Canada, Denmark, Finland, France, Norway, Sweden, UK and the USA. Representatives from the following stakeholder organizations also participated in the meeting; CARIS, ECC, ESRI, Jeppesen, T-Kartor, SevenCs, HGMIO and IEHG.

At the conclusion of the meeting, the content of most of the S-100 component documents had been completed however their structure and layout needed further harmonization.

The 16th meeting was attended by Member State representatives from Australia, Canada, Denmark, Finland, France, Germany, Norway, South Africa, UK and the USA. Representatives from the following stakeholder organizations also attended; CARIS, Furuno, Geomod, IIC, Jeppersen, Seven Cs and Transas.

Some of the important issues discussed during the meeting included a proposal by France which presented a method of improving ENC consistency at display level rather than at the data level.

A new S-100 WIKI development forum was demonstrated. The forum will be used for S-100 and S-10X development work. (For further information see http://groups.google.com/group/s-100/web/s-100-draft-version-0-0). A brief report on the results of TSMAD S-101 Stakeholders user requirements workshop, held during March, was provided. Several issues, highlighted during the workshop, were discussed. These included; the implementation of dynamic tides, S-101 Discovery Metadata, the need for a fixed (e.g. 5MB) cell size, and the use of navigational purpose.



The 17th TSMAD Working Group meeting took place in Seattle, USA from 8 to 12 September. Member State representatives from Australia, Canada, Denmark, Finland, France, Germany, Japan, South Africa, Sweden, UK and USA attended the meeting. Representatives from the following stakeholder organizations also participated: CARIS, C-Map/Jeppesen, IIC, IC-ENC, EEC, SevenCs, ESRI and T-Kartor.

Some of the important issues discussed and progressed during the meeting included the development of the S-101 ENC product specification, the development of a marine environmental protection data product specification, the re classification of the CATZOC criteria for ENCs, and the issuing of T & P notices for ENCs.

In addition to this, several sub groups were also tasked to review and respond to the numerous comments received concerning the draft edition of S-100.

IC-ENC/PRIMAR Joint TEWG Meeting (JTEWG)

Stavanger, Norway 15 April

Meeting Chairperson:	Ms. KOLBEINSON (PRIMAR)
Meeting Secretary	Ms. SANDSTÅ (PRIMAR)

The meeting was attended by Member State representatives from; Australia, Belgium, Croatia, Denmark, Estonia, Finland, France, Germany, Iceland, Latvia, Netherlands, Norway, Poland, Portugal, Russia, Spain, Sweden, and the United Kingdom. Several representatives from PRIMAR and IC-ENC also attended the meeting.

ENC Consistency was one of the most important issues discussed during the meeting. A presentation outlining the findings of the Baltic Sea ENC Harmonization Working Group was provided by Denmark. The aim of this WG was to identify and analyze inconsistencies between ENCs in their region and to present a report that included conclusions and recommendations. UK also outlined their harmonization efforts which are based on the consistency recommendations from 2004 (CL47/2004). France provided a presentation on improving ENC consistency. This included a method of applying portrayal rules to achieve harmonization.

The issuing of Temporary and Preliminary (T&P) Notices to Mariners was also discussed, and it was noted that of the 18 data producers present at the meeting, only five were issuing both T and P notices.

5th MEETING OF THE CHART STANDARDIZATION AND PAPER CHART WORKING GROUP (CSPCWG)

Sydney, Australia, 18-21 November

Chairman:	Mr. JONES (United Kingdom)	
Vice-Chairman:	Mr. WOOTON (Australia)	
Secretary:	Mr. COLEMAN (United Kingdom)	
Members:	Australia, Brazil, Canada, Chile, Colombia, Croatia, Cuba, Denmark,	
	Finland, France, Germany, Greece, India, Indonesia, Italy, Japan,	
	Netherlands, New Zealand, Norway, Pakistan, Russia, South Africa,	
	Spain, Sweden, Ukraine, U.K., USA.	

The Chart Standardization and Paper Chart Working Group (CSPCWG), the WG of the IHO CHRIS Committee setting the chart standard, held its 5th meeting in Sydney, from 18-21 November, hosted by the Australian Hydrographic Service. The 15 cartographic experts in attendance representing the Hydrographic Offices of Australia, Canada, Denmark, Finland, France, Germany, Netherlands, New Zealand, Norway, Sweden, United Kingdom, USA, and the IHB, were welcomed by Mr. Michael PRINCE, AHS Director for Charting. The meeting was chaired by Mr. Peter JONES (UK). Below is a summary of the main points discussed.

The production of an INT1/S-52 symbol combined document, jointly by NGA and NOAA, has been significantly delayed, with no progress having been made since last year. Such a document is reportedly awaited by the chart users, i.e. the mariners, and it had been envisaged to adopt the US INT1/S-52 as an IHO publication. There may be a need to look at another option to produce this document.

It was agreed to develop new symbols or specifications for the following cases:

- Symbol for the entrance of a tunnel for pipelines / submarine cables.
- Specification for showing bridge supports, following the Cosco Busan collision with the Bay Bridge (San Francisco) in early 2008.
- Symbol for offshore renewable energy installations (OREI), i.e. ocean wave energy.
- Symbol pattern for unsurveyed and inadequately surveyed areas.
- Specification for platform with superstructure removed.
- Symbol for shellfish beds.
- o Abbreviation MRCC for Maritime Rescue Co-ordination Centre.

A draft of the new section B-600 of M-4 *Chart Maintenance* was reviewed. It will provide an explanation of the current methods of promulgating information and some guidance on assessing new information to decide which method of promulgation may be appropriate.

CSPCWG, as the body responsible for IHO Publication M-15 - *List of Booklets on Chart Symbols and Abbreviations published by various Maritime Countries*, has recommended that this publication be discontinued on the grounds that it is obsolete and no longer considered to be useful. CSPCWG also endorsed a new lay-out for the presentation of INT chart metadata in IHO Publication M-11 Part B - Catalogue of INTernational Charts. The ongoing review of S-49 - *Guidance for Mariners' Routeing Guides* by a sub-group led by Germany was noted.

The 6th CSPCWG meeting has been scheduled to be held in the second half of November 2009 at the IHB, Monaco.

18th MEETING OF THE COLOURS AND SYMBOLS MAINTENANCE WORKING GROUP (C&SMWG)

(new name: DIPWG from November 2008)

Cape Town, South Africa, 7-9 May

Chairman:	Dr. JONAS, Germany (BSH)	
Deputy Chairman:	Mrs. POWELL (NOAA)	
Members:	Australia, Brazil, Finland, Germany, Norway, United Kingdom, USA	
	(NGA, NOAA and USCG), IHB.	
Other Participants:	DCIEM/DND (Canada), DnV (Norway), IC-ENC (UK), Furuno	
	(Finland), Geomod (France), HydroService (Norway), IEC/TC80,	
	Jeppesen (Canada, Germany and Italy), CARIS (Canada), Kelvin	
	Hughes (UK), OSL (Canada), Raytheon Marine (USA), SAM	
	Electronics (Germany), SevenCs (Germany), Transas (Russia), UNH	
	(USA), Wismar University (Germany).	

The South African Navy Hydrographic Office hosted the 18th Meeting of the Colours and Symbols Maintenance Working Group (CSMWG) in Cape Town, South Africa, from 7 to 9 May. Dr. JONAS (BSH, Germany) chaired the meeting, with 28 persons in attendance, 11 of whom represented the private sector. C&SMWG-18 was held in conjunction with a TSMAD meeting, as these WGs have a number of subjects in common in connection with the development of the new IHO geospatial data standard S-100 and the future ENC product specification S-101. A combined C&SMWG-TSMAD meeting took place on 7 and 9 May.

Following the publication of a new edition of the IHO Presentation Library (PresLib) in January, the future of this standard was addressed in the light of the S-100/S-101 developments. A draft IHO portrayal model, in line with the relevant ISO TC211 standard (known as ISO 19117), was presented, which should pave the way for the development of a hydrographic portrayal register, as part of the future IHO hydrographic registry. The IHO portrayal model will be improved to cover the PresLib

Conditional Symbology Procedures (CSP). Taking account of the fact that very few ECDIS users have accepted the so-called ECDIS simplified symbols, it was agreed that those symbols will be dropped in the next edition of the PresLib. Only the traditional cartographic symbols, with which the mariner is familiar, will remain in use; however they will need significant improvement in terms of graphical quality and colours.

The meeting reviewed a list of 15 objects which are not symbolized in the current PresLib and decided on how they should be displayed on a case by case basis. With a view to satisfying repeated requests from ECDIS users for an IHO document showing the ECDIS/ENC symbology, it was agreed that the next edition of INT 1 (in English, by BSH) will include an additional column showing the ECDIS symbols, as provided by US-NGA who are preparing a new edition of their "Chart 1" including all ECDIS symbols.

9th STANDARDISATION OF NAUTICAL PUBLICATIONS WORKING GROUP (SNPWG) Brest, France 25-26 April

Chairman: Deputy Chairman: Secretary: Members: Mr. ACLAND (UK) Mr. NYBERG (USA) Mr. OFFENBACK (NGA) Argentina, Brazil, Denmark, Estonia, Finland, France, Germany, Japan, Republic of Korea, Netherlands, Spain, Sweden, UK, USA,



The meeting was attended by IHO representatives from Argentina, Brazil, Denmark, Estonia, France, Germany, Japan, Korea, Netherlands, Spain, Sweden, UK, USA, and Venezuela. Technical experts from the following organizations were also present; CARIS, Jeppesen Marine and NOVACO.

Much of the SNPWG development work is being carried out by three sub-

working groups (Americas, Western European and Northern European Sub WG's) between meetings. Brief reports on the progress of these groups were provided during the meeting.

A number of attributes and feature classes were approved for inclusion in the NPUB register.

A sailing directions pilot study was co-presented by Germany (BSH) and Jeppesen Marine. This demonstrated how content from a single BSH sailing directions chapter could be mapped to the object model being developed by the SNPWG. The work included an XML schema (developed by Jeppesen Marine) and the production of sample outputs. The content of the sailing directions had been restructured to support the SNPWG model.

5th MEETING OF THE IHO-IEC HARMONIZING GROUP ON MARINE INFORMATION OBJECTS (HGMIO)

Bath, UK, 25-26 September

Since its beginning in 2001, HGMIO has reported regularly to IHO CHRIS and to IEC TC80. However, the HGMIO work program has been monitored primarily by CHRIS rather than IEC TC80. Direct IHO Member State involvement in HGMIO has been minimal, with the majority of participation by representatives of maritime safety administrations, NGIOs, and commercial providers developing specific MIOs in support of sea ice coverage, status of Aids-to-Navigation (AtoN), and Marine Protected Areas (MPAs). In July, IHB contacted the Chairman of IEC TC80 concerning the future governance arrangements for HGMIO. The Chairman of IEC TC80 informed the IHB that that IEC no longer had a need to retain a formal relationship with HGMIO. This, in effect, meant that HGMIO had become a de-facto CHRIS WG.

At the 5th meeting of HGMIO 5 on 25-26 September, in Bath, UK, the future of HGMIO was discussed. It was agreed that it would now be more appropriate for the Group to become an independent technical group. As such, HGMIO could be retired as a CHRIS Working Group. However, it would continue to exist as an independent Harmonization Group on Marine Information Overlays (HGMIO), and would continue to deal with both static and dynamic MIOs.

The conclusion of HGMIO5 was subsequently confirmed by the CHRIS at its 20th meeting in October. This means that the HGMIO is no longer an integral part of the IHO work program.

WEND

11th WEND MEETING Tokyo, Japan, 1-5 September

Chairman:	Capt. KAMPFER (South Africa)	
Vice-Chairman:	Capt. BARNUM (USA)	
Secretary:	Ing. en chef HUET (IHB)	
Members:	Algeria, Argentina, Australia, Brazil, Canada, Chile, China, Cuba,	
	Finland, France, Germany, Greece, India, Indonesia, Italy, Japan,	
	Korea (Rep. of), Malaysia, Mexico, Netherlands, New Zealand,	
	Norway, Oman, Peru, Portugal, Russian Federation, Singapore, South	
	Africa, Spain, Sweden, Thailand, Turkey, Ukraine, United Kingdom,	
	USA (NGA & NOAA), Venezuela, IHB.	
Observers:	PRIMAR-Stavanger, IC-ENC, OEF, IOC, CIRM and ICCL.	

The 11th meeting of the Committee on WEND met in Tokyo from 2 to 5 September 2008 under the Chairmanship of Capt. KAMPFER (South Africa). The meeting was attended by representatives from 29 Member States, both RENCs, several accredited Non-Governmental International Organizations (NGIOs), and the President and a Director from the IHB. An ECDIS Stakeholders' Forum was held midway through the meeting.

The principal topic for discussion was a review of the WEND Principles – and in particular the need for guidance notes concerning the harmonization and quality of data in ENCs. As a result, the Committee prepared and agreed a WEND Committee paper - *Guidelines for the Implementation of the WEND Principles*. This paper is posted on the IHO website at:

www.iho.int-Committees & WGs-Guidelines for the Implementation of the WEND Principles

The WEND Committee also considered a *Data Chain Certification Concept* presented by RTCA and invited the RTCA delegate to convene an informal correspondence group to further study its potential application to the chart and nautical publications data distribution chain. The Committee considered mechanisms to better coordinate the scheming and production of small and medium scale ENCs on a regional basis. The meeting concluded with discussion on the transition arrangements for WEND activities to be taken over by the Inter-Regional Coordination Committee (IRCC) from January 1 2009. The Committee recommended that the IRCC consider establishing a Task Group similar to the WEND TG to undertake specific tasks related to the ongoing development and implementation of the WEND concept.

4th ECDIS STAKEHOLDERS' FORUM

Tokyo, Japan, 3-4 September

ECDIS Stakeholders' Forum (ESF) is a meeting for Industry and HOs to discuss topics of relevance in the interest of safety of navigation. Mr. Horst HECHT (BSH, Germany) served as Chair for the 4th ESF. Attendance at this Stakeholders' Forum was the largest ever (approximately 150 persons).

Presentations were given on subjects related to ENC production, coverage and distribution, including by service providers and data distributors. Each presentation was followed by the opportunity for questions, comment and discussions. For many presentations there were no significant questions or comments made; nevertheless, participants appeared to be grateful for the information that was provided. The greatest amount of discussion and feedback centred on ENC distribution and the difficulties currently being encountered by ENC retailers and by mariners at sea. A number of examples were given. Some end-service providers expressed doubts that the ENC distribution chain will be able to face the "tsunami" of demands when ECDIS carriage requirement is enforced. The principal messages from Stakeholders to the IHO can be summarized as follows:

The IHO Member States must co-operate more closely to harmonize the supply of ENC services, and to facilitate the use and uptake of ENCs, and in particular:

- Greater harmony is required in ENC pricing.
- Greater flexibility is required in how ENCs can be purchased, including "pay per view", "pay as you go" and other innovative data service models. "Price per ENC" is not necessarily the best or only pricing model for the 21st century.
- ENC licensing must be better harmonized license management is presently a difficult management task both for ENC retailers and for navigating officers.
- ENC retailers prefer a "one-stop shop" to obtain ENC coverage. Currently this is not possible because not all ENCs are available through RENCs.
- All ENC producers must follow a standard method of providing Temporary and Preliminary Notices to Mariners for ENCs electronically. It is confusing, time consuming and unacceptable for some HO's to provide T&P notices via local NtoMs (in some cases, not even in English).

WEND TASK GROUP ON ENC COVERAGE

IHB, Monaco, 28-29 January

The IHO WEND Task Group (TG) on ENC coverage held a meeting at the IHB in Monaco on 28 and 29 January. The meeting was attended by the Chairman of the TG, Mr. HECHT (Germany), Mr. CARPENTER (UK), Ing. en Chef GUILLAM (France). The Directing Committee and the technical Professional Assistants of the IHB, together with Mr. SMITH (UK), Ms. KENNY (USA) and Mr. TIMONEN (Finland) also participated in the meeting.

The meeting reviewed progress on the Task Group's analysis of global ENC coverage and discussed how this and related information on ENCs should best be incorporated in the IHO's submission to the IMO Sub-Committee on the Safety of Navigation (NAV54), when it considers mandatory carriage requirements for ECDIS. The group also discussed the main elements of the IHO ENC Catalogue and its relation to other catalogues, as well as the responsibilities of IHO and IMO for updating the joint PRIMAR/IC-ENC information paper "Facts about electronic charts and carriage requirements".

WEND TASK GROUP ON ENC HARMONIZATION, COVERAGE AND DISTRIBUTION

Lisbon, Portugal, 23-24 June

The IHO WEND Task Group (TG) on ENC coverage held a meeting in Portugal at the Headquarters of the European Maritime Safety Agency (EMSA). The meeting coincided with World Hydrography Day celebrations hosted by EMSA and organised by the North Sea Hydrographic Commission, as the IHO representatives to EMSA. The WEND TG meeting was attended by the Chairman of the TG, Mr. HECHT (Germany), Ing. en Chef GUILLAM (France), Mr. SMITH (UK) and Capt. WARD (IHB Director).

In the context of worldwide availability of ENCs, the TG reviewed the effectiveness of the Worldwide ENC Database (WEND) concept and in particular whether the WEND Principles provided clear guidance on the roles, responsibilities, obligations and options for States in the production, maintenance and distribution of ENCs.

The meeting developed various proposed improvements and clarifications to the WEND Principles which were submitted to the WEND meeting in Tokyo 1-5 September for consideration.

GEBCO PROJECT

24th GEBCO SUB COMMITTEE ON DIGITAL BATHYMETRY (SCDB) MEETING

Tokyo, Japan, 26 to 27 May

Chairperson:	Dr. Smith	
Secretary:	Dr. Whitmarsh	
Members:	Dr. CARRON, Mr. CHERKIS, Dr. GOODWILLIE, Mr. HADJIANTONIOU,	
	Dr. HALL, Dr. LOUGHRIDGE, Mr. MACNAB, Capt. POPOV, Mr.	
	RANKIN, Dr. SCHENKE, Dr. SHARMAN, Mr. TANI	

Subject to the approval of the new terms of reference for GEBCO, (by the IHO and the IOC), the SCDB will be renamed as the "Technical Sub-Committee on Ocean Mapping (TSCOM)".

Several reports on progress made since the previous SCDB meeting were presented. These included a report by the Digital Atlas Manager, the Director of the IHO Data Centre for Digital Bathymetry (DCDB), the GEBCO bathymetric editor and the IHB.

Other issues discussed during the meeting included: the collection of shallow water bathymetry, data policy issues and adopting and expanding the prototype of the next bathymetric grid.

During a Science Day which took place on the 28th May, presentations on the following topics were provided: The History of Bathymetric Surveying around Japan, Interferometric surveying using AUV, Multi-beam echo sounding on AUV, the GEBCO visual Library - Proof of concept, Results of the SCUFN WG on the revision of B-6 and Crustal movements deduces by seafloor geodetic observations.



GEBCO Guiding Committee and SCDB Meetings

25th GEBCO GUIDING COMMITTEE MEETING

Tokyo, Japan, 29–30 May

Chairperson: Secretary: Members: Mr. MONAHAN (Canada) (IHO) Prof. WHITMARSH (UK) (IOC) Ingénieur général CAILLIAU (France) (IHO) Dr. FALCONER (New Zealand) (IOC) Lic. FRIAS (Mexico) (IOC) Dr. JAKOBSSEN (Sweden) (IOC) Dr. FOX (USA) (IHO) Dr. SCHENKE (Germany) (IOC) Dr. TURKO (Russia) (IOC) Dr. YASHIMA (Japan) (IHO) Cdr. LUSIANI (Italy) (IHO)

The meeting was attended by representatives from the IHO and IOC, and included the chairs of the sub committees and the director of the IHO Data Centre for Digital Bathymetry.

During his presentation on the activities of the Sub-Committee on Digital Bathymetry, Dr. Walter Smith reported on the work carried out on the new GEBCO grid which included shallow water bathymetry provided by hydrographic organizations.

A report on the activities of the Sub-Committee on Undersea Feature Names was provided by Dr. Schenke. Two significant tasks that are being undertaken include reformatting the Gazetteer of Undersea Feature names into a geospatially enabled database, and the production of a new edition of the IHO B-6 publication (Standardization of Undersea Feature Names).

Cdr. Lusiani reported on the activities of the Outreach Working Group and noted that the book "History of GEBCO" is being translated into Italian.

Other important issues that were discussed included: The Nippon Foundation/GEBCO Training Project, regional mapping projects, the printing of GEBCO maps, other mapping projects, Google and web mapping, updating of IHO M-3, inundation mapping and "How to start the clock with the anticipated new Rules of Procedure for GEBCO".

21st MEETING OF THE GEBCO SUB-COMMITTEE ON UNDERSEA FEATURE NAMES (SCUFN) Jeju Island, Republic of Korea, 19-22 May followed by the 3rd SYMPOSIUM ON APPLICATION OF MARINE GEOPHYSICAL DATA AND UNDERSEA FEATURE NAMES 23-24 May

Chairman:	Dr. SCHENKE (Germany)
Members:	Mrs. TAYLOR (USA) (IHO)
	Dr. OHARA (Japan) (IHO)
	Lic. REYNOSO (Argentina) (IHO)
	Lic. FRIAS (Mexico) (IOC)
	Mr. CHERKIS (USA) (IOC)
	LCdr. AVTAR (India) (IHO)
	Dr. HAN (Rep. of Korea) (IOC)
	Dr. DOBROLYUBOVA (Russia) (IOC)
Secretary:	Ing en chef HUET (IHB)

The Republic of Korea's National Oceanographic Research Institute (NORI) hosted the 21st Meeting of the IHO-IOC GEBCO Sub-Committee on Undersea Feature Names (SCUFN) on Jeju Island, 19-22 May 2008. The meeting was chaired by Dr. SCHENKE (Germany) and attended by 23 participants from Argentina, Brazil, Germany, Hungary, India, Japan, Republic of Korea, Mexico, New Zealand, Russia, USA and IHB. The participants included 9 out of the 11 current SCUFN members, plus the secretary (IHB). A welcome speech was given by Mr. WOO, Director of NORI and Chairman of the Korean Committee on Marine Geographical Names. The meeting welcomed Ms. DOBROLYUBOVA (Geological Institute of the Russian Academy of Sciences) as a new member appointed by IOC.

In total, the meeting considered 48 names, 29 of which were new name proposals received at the IHB, as the SCUFN Secretariat, from Argentina, Brazil, Japan, Republic of Korea and Russia. After careful examination of each proposal, including the supporting survey data / bathymetry and the reason for the choice of name, the meeting eventually accepted 33 new names for inclusion in the GEBCO Gazetteer of Undersea Feature Names, which is maintained at the IHB. Additionally, 9 names/features will be placed in a "reserved" section of the Gazetteer, pending further clarification / supporting documentation or the submission of an alternative name. As a result, a new GEBCO Gazetteer will be generated as an Excel file, for use in GEBCO and IBC products, and by Member States when new editions of INT charts / ENCs are prepared.

The meeting reviewed and agreed the English part of a new 4th edition of IHO-IOC publication B-6 *Standardization of Undersea Feature Names.* The new edition takes account of the revised Terms of Reference and new Rules of Procedures for SCUFN, which have recently been approved by Member States. The meeting also acknowledged the submission of the following draft language versions of B-6, 4th edition: E/French, E/Spanish, E/Russian, E/Japanese and E/Korean. The non-English part of each language version will be updated to reflect the changes agreed at the meeting. It is intended to have the five language versions of B-6, 4th edition published by the IHB at the same time.

Other topics addressed by the meeting included:

- A review of the IHO-IOC Undersea Feature Name Proposal form, in view of its improvement and modernization, and its harmonization with the form used by ACUF (Advisory Committee on Undersea Features, of the US Board of Geographic Names). As a result, a new form has been agreed.
- Consideration of reports on the GEBCO Gazetteer by the British Oceanographic Data Centre (BODC) and the German Alfred Wegener Institute (AWI), and of proposals for improving the Gazetteer. This will result, in particular, in corrections to the Gazetteer and

additional positions to a number of features in the Gazetteer, in order to better define their shape and areal extension.

• Consideration of a report on the examination of 73 "unnamed" seamounts in the central Pacific Ocean, which were identified from the GEBCO Digital Atlas. The study was conducted by a SCUFN member, Walter Reynoso-Peralta (Argentina), based on the best available bathymetry. This has revealed that 5 seamounts have already been named and that 9 seamounts do not exist.

The 2009 meeting of SCUFN has been planned to be held in Brest, France, following an invitation from the French Hydrographic Office (SHOM).

The 3rd Symposium on Application of Marine Geophysical Data and Undersea Feature Names, organized by the Korean Cartographic Association and sponsored by NORI, took place in the same location on 23 May 2008. Various papers, most of them relating to undersea feature naming, were presented on this occasion. This included a review of SCUFN and ACUF procedural similarities and differences, and a method of determination of sea limits in the Southern Ocean, based on the existing bathymetry.

NIPPON FOUNDATION - GEBCO TRAINING PROJECT YEAR 5

In January, the Nippon Foundation confirmed the funding of the above mentioned program and the IHO Member States were invited to consider applying for this programme. Information about the course can be found at <u>www.gebco.net</u>.

COMMISSION ON THE PROMULGATION OF RADIO NAVIGATIONAL WARNINGS

10th MEETING OF THE CPRNW

Rio de Janeiro, Brazil, 25-29 August

Chairman:	Mr. DOHERTY (USA)	
Secretary:	Lt. Cdr. Shipman (IHB)	
Members:	Argentina, Australia, Brazil, Chile, Croatia, Ecuador, Egypt, France,	
	Germany, Greece, India, Iran, Italy, Japan, Monaco, New Zealand,	
	Pakistan, Peru, South Africa, Russia, Spain, Sweden, Turkey, UK,	
	WMO, WMO-ETMSS, IMO, IMSO.	

The 10th meeting of the CPRNW was held at the Directorate of Navigation and Hydrography in Rio de Janeiro, Brazil from 25–29 August and was attended by 33 representatives from 15 Member States including 13 NAVAREA Co-ordinators and 1 Sub-area Co-ordinator. Observers from the IHB, WMO and Inmarsat also attended.

The meeting finalized the revised text of the Joint IMO/IHO/WMO MSI Manual / S-53 which was subsequently sent to Member States and the WMO for comment prior to submission to IMO COMSAR for adoption. The meeting received Self Assessments from all but two of the 21 NAVAREAs as well as reports from the IMO SafetyNET Panel, the NAVTEX Co-ordinating Panel and the WMO. The meeting provided input to the Joint IMO/IHO/WMO Correspondence Group on Arctic MSI Services. The full report of the meeting is available from the CPRNW section of the IHO web site.

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION (ISO)

27th ISO/TC 211 PLENARY MEETING

Tsukuba, Japan, 4-5 December

The International Organization for Standardization's Technical Committee 211 (ISO/TC 211) is responsible for the development of the 1900 series of geographic information standards. At its plenary meeting that took place during December the following publications were approved for advancement to the Draft International Standard stage:

- ISO/CD 19118, Geographic information Encoding
- ISO/CD 19142, Geographic information Web feature service
- ISO/CD 19143, Geographic information Filter encoding

It was also decided that ISO 19101:2002, Geographic information –Reference model need to be revised.

Review of Published Standards/Technical Specifications

It was agreed that a systematic review of the following documents should be undertaken;

- ISO 19110:2005 Geographic information Methodology for feature cataloguing
- ISO 19119:2005 Geographic information Services
- ISO 19107:2003 Geographic information Spatial schema
- ISO 19109:2005 Geographic information Rules for application schema
- ISO/TS 19127:2005 Geographic information Geodetic codes and parameters
- ISO 19115:2003 Geographic information Metadata

Implementation of Registries

The plenary recognized that the work on implementing proposed registries and their services (see ISO 19135, ISO/TS 19127, ISO/RS 19145 – N 2357) should be expedited, and decided to establish an ad hoc group on registry services to advise the committee on what is needed to achieve this, and how to proceed. It was noted that in particular the issue of Geodetic Codes and Parameters needs to be considered. The ad hoc group will provide a preliminary report for consideration at the 28th plenary meeting.

Ad hoc Working Group on Spatial Data Infrastructures

ISO/TC 211 recognized the importance of standards for spatial data infrastructures (SDI) and has tasked an ad hoc group to prepare an SDI workshop at the 28th plenary meeting.

The 28th plenary and working group meetings are scheduled to take place from 25 to 29 May 2009 in Molde, Norway. Further information is available from the ISO/TC211 web site (http://www.isotc211.org/).

ADVISORY BOARD ON LAW OF THE SEA

ABLOS 5th CONFERENCE IHB, Monaco, 15-17 October

Chairman: Vice chairman: Members: Chris RIZOS (Australia) Chris CARLETON (UK) Dr. GRZETIC (Croatia), Mr. TANI and Prof. KUSUNOKI (Japan), Cdr. BASHIR (Pakistan), Prof. SJÖBERG (Sweden), Prof. BISNATH (Canada), Mr. BLICK (New Zealand), Capt. NAUTIYAL (India), Mr. BROWN (UK).



The 5th ABLOS Conference entitled "Difficulties in Implementing the Provisions of UNCLOS" was held at the IHB in Monaco on 15 - 17 October. It was very successful attracting a capacity audience of 90 delegates from 30 countries with 23 papers being presented during 9 sessions. The Government of Monaco kindly hosted a reception for all the delegates and accompanying persons in the Atrium of the Casino. Papers submitted and presentations given during the Conference are available for download from the IHO web site www.iho.int > Committees > ABLOS > 5th Conference.

ABLOS 15th BUSINESS MEETING

IHB, Monaco, 14-15 October

The Conference was preceded by the 15th ABLOS Business Meeting which was held on 14 - 15 October. The meeting was well attended with only 1 member of ABLOS not being able to attend. The ex-officio members from UN-DOALOS and the IHB and five Observers also attended the meeting. The meeting elected Professor Chris Rizos, IAG – Australia, as the new Chairman and Chris Carleton, IHO – UK, as Vice Chairman. They assumed their positions following the closure of the 5th Conference. The report of the 15th Business Meeting is available from the ABLOS section of the IHO web site.

WORK PROGRAMME 4 INFORMATION MANAGEMENT AND PUBLIC RELATIONS

1. INFORMATION MANAGEMENT

IHO PUBLICATIONS

All IHO publications are available on the IHO Web Site (www.iho.int) and can be downloaded by IHO Member States.

Non-Member States, organizations, institutions and individuals can also acquire most publications directly from the website. Certain other documents otherwise only available to Member States may be requested by application to the IHB.

Re-structuring of names and prices of the IHO publications

In November, by CL 98, a new structure of the publications into 5 categories, P, M, CB; B and S was proposed. It was also proposed that that most publications should be free of charge if downloaded via the Internet, as well as some other changes in the schedules of prices and distribution.

Ref. CL 98

Prince Albert 1st Medal for Hydrography

In November, a C.L. was issued seeking Member States' approval of a proposed new procedure for the selection and award of the Prince Albert 1st Medal for Hydrography.

PUBLICATIONS PRODUCED IN 2008

B6 - Standardization of Undersea Feature Names

The 4th Edition of the IHO-IOC publication B-6, English/French version, was issued in November and posted on the IHO website under Standards and Publications > Bathymetric Publications.

English/Spanish, English/Russian, English/Japanese and English/Korean versions of the 4th edition of B-6 are in the process of being updated and will be released as soon as they are available.

Ref. CL 96

M-1 - IHO General Regulations

An amendment to Article 8 of the IHO revised General Regulations concerning the Hydrographic Commission on Antarctica (HCA) was approved by the IHO Member States. The new text is given below:

Full membership is reserved for Member States within the region. In the unique case of the Antarctic region, membership of the Hydrographic Commission on Antarctica (HCA) is reserved for Member States whose governments have acceded to the Antarctic Treaty and contribute resources and/or data to IHO INT Chart coverage of Region M.

Ref. CL 11, 53

M3 - IHO Resolutions

1. The proposed changes resulting from a review undertaken by the capacity building committee of Technical and Administrative resolutions K4.2, K4.3 and R6.2 were agreed by the IHO Member States and will be incorporated in the Repertory of Technical and Administrative Resolutions of the IHO, Publication M-3, in due course.

Ref CL 17

- 2. In March, the changes to Technical Resolution K4.4 proposed by ABLOS were approved. *Ref. CL 5, 28*
- 3. At the proposal of the Tidal Committee, Technical Resolutions A2.5, A2.8, A2.9, A6.1 to A6.9, G1.1 to G3.3 and K1.7 were reviewed. A new TR A2.16 was subsequently agreed by Member States.
- 4. In July, a new Resolution R4.2 concerning translation of IHO publications was approved and inserted in M-3.

Ref. CL 20, 57

Ref. CL 19

The GEBCO Guiding Committee completed its review of relevant TRs and proposed that: A4.3 be retained unchanged; A5.1, A5.2 and A5.3 be amended and that K2.1 be deleted. The IHB proposed an editorial correction to TR A4.3 to align paragraph 1a with the text already approved by Member States in Circular Letter 24/2008. The GGC also provided suggested amendments to TR A1.5 and these were forwarded to the CHRIS Chair Group which had previously been asked to review this resolution. The CHRIS Chair Group considered that the detailed text provided by the GGC was more appropriate to other publications than to a Technical Resolution.

Ref CL 62, 85

At the proposal of the Paper Chart Working Group, Resolution B2.35 was amended.

Ref. CL 27

M-4 – IHO Chart Specifications

1. The German Hydrographic Office (BSH) published, on behalf of the IHO, the 6th edition (2008) of the official English language version of INT 1 "Symbols, Abbreviations and Terms used on Charts".

C.L. 37

2. Following recommendation by the Chart Standardization and Paper Chart Working Group (CSPCWG), a proposal was put forward to Member States to discontinue Publication M-15 *List of Booklets on Chart Symbols and Abbreviations published by various maritime countries*, and cancel Technical Resolution K1.1.

C.L. 105

3. The CSPCWG continued the review of Part B of M-4. The WG completed Sections B-440 to B-449, which was accepted by Member States. In addition, new specifications B-510.4 "Language on charts" and B-431.6 'mooring ground tackle' were adopted, as well as that magnetic anomalies be shown in magenta and that the list of international abbreviations be transferred from INT1 to M-4 in B-122. As a result, a revised version 3.005 (2008) of M-4 was posted on the IHO Web site in October. The WG also completed a revision of Sections B-450 to B-479, which was approved in December, as well as revised specifications for charting 'mangroves' in B-312.4 and use of the term 'Recommended' in B-434.

Ref: CL 27, 71, 76

M-11 – Guidance for the Preparation of International Chart Schemes and Catalogue of INT Charts

M-11 is permanently maintained by the IHB in liaison with the 14 regional coordinators of INT chart schemes. Revisions were posted on the IHO website in July and December. A new limit between INT Regions 'B' and 'C1' has been agreed by the relevant Regional Hydrographic Commissions, i.e. MACHC and SWAtHC. The status of INT chart series at the end of 2008 is shown in the table below. Of particular note, 31 new INT charts, or new editions, were published during the year in Region 'E'.

Region	Coordinator	Commission/Committee	(1)	(2)	(3)
1 :10 Million			25	24	21
A (NW Atl. & NE Pac. Oceans)	USA/NOS	US/CHC	NS	15	15
B (Meso-America & Caribb. Sea)	Mexico	MACHC	59	10	6
C1 (SW Atl. Ocean)	Brazil	SWAtHC	62	17	4
C2 (SE Pac. Ocean)	Chile	SEPHC	44	7	2
D (North Sea)	United Kingdom	NSHC & NHC	207	203	173
E (Baltic Sea)	Finland	BSICC/BSHC	225	195	61
F (Med. & Black Seas)	France	MEDINTCHART/MBSHC	239	160	96
G (East Atl. Ocean)	France	CHATINTCHART/EAtHC	171	102	72
H (SE Atl. & SW Ind. Oceans)	South Africa	SAIHC	107	64	45
I (NW Ind. Ocean)	Iran	RSAHC	110	39	7
J (North Ind. Ocean)	India	NIOHC	134	83	7
K (E. Asia & NW Pac. Ocean)	Japan	EAHC	291	81	17
L (SE Ind. & SW Pac. Oceans)	Australia	SWPHC	61	49	33
M (Southern Ocean)	IHB	НСА	100	60	11
TOTAL			1835	1109	570
(1) Schodulad (NS $-$ Not Stated)	(2) Dublished	(2) Doprinted by a	thar M	C	

(1) Scheduled (NS = Not Stated) (2) Published

(3) Reprinted by other MS

M-13 - IHO Manual on Hydrography - French version

A draft French version of M-13, initially prepared by the Tunisian Hydrographic Office (Service Hydrographique et Océanographique – SHO), then improved by the Canadian Hydrographic Service (CHS), is being finalized at the IHB.

M-15 - List of Booklets on Chart Symbols and Abbreviations published by various maritime countries

Member States were requested in December to indicate whether they agree that M-15 be discontinued and, consequently, that TR K1.1 be deleted from Publication M-3 *Resolutions of the IHO*

Ref. CL 105

M-16 - National Hydrographic Regulations

The new IHO publication M-16 "National Hydrographic Regulations" was completed with the inputs of the IHO Member States. M-16 collates copies of national regulations that may be used as a reference in establishing a National Hydrographic Office and/or a National Hydrographic Committee.

The original language of non-English texts has been maintained in order to avoid any misunderstandings following an "internal" translation.

Ref: CL 9

<u>P-5 – IHO Yearbook</u>

This publication is continuously updated and is available on the WEB site only.

P-7 – Annual Report

The IHO Annual Report 2007 was produced by the IHB and distributed in printed format.

Ref: CL 44

S-23 - Limits of Oceans and Seas

CL 86/2007 reported on the results of discussions that took place during the XVIIth International Hydrographic Conference (IHC) concerning developments that might lead to the publication of the fourth edition of IHO Special Publication 23 (S-23), "*Limits of Oceans and Seas*" and also on the absence of agreement between the Member States involved in the naming of the area between the Korean Peninsula and the Japan Archipelago. The IHB received no comments from Member States in response to this reference. Meanwhile the Directing Committee continued to receive regular requests for S-23 related information to which it is unable to respond satisfactorily. Following a suggestion of the BSHC, Member States were consulted about the publication of an IHO document, organized on a regional basis, which would list those names agreed and recommended by the relevant Regional Hydrographic Commission (RHC). The development and management of this document would in many ways be similar in nature to M-11 which depicts the charting schemas for International Charts which are agreed and coordinated primarily through the RHCs. Meanwhile, according to the BSHC suggestion, edition three of S-23 could continue to serve as the reference document for those regions where such an agreed and more up to date reference is not yet available.

The responses received did not show the necessary support for this proposal and therefore the IHB will explore other means to address this subject.

<u>S-44 – IHO Standards For Hydrographic Surveys</u>

In February, a printed copy of the 5th edition of this publication was sent to Member States. The IHB thanks Ecuador for its very prompt preparation of a Spanish text of the draft 5th Edition. A French text will be prepared as soon as possible.

The WG, having completed its task, is now disbanded.

S-47 – Training Courses in Hydrography and Nautical Cartography

In July, Member States were reminded to regularly provide information so as to keep this publication up to date. Following information received, the IHB updated the publication. The updated October 2008 version of S-47 is now available on the IHO website

Ref. CL 56, 86

Ref. CL 78

Ref. CL 22

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

New editions 4.3 of S-52 Appendix 2, and 3.4 of its Annex A *Presentation Library for ECDIS*, both prepared by the Digital Information Portrayal Working Group (DIPWG – formerly, CSMWG) were published in January, taking account of the changes made to the IMO Performance Standards for ECDIS and those associated with the publication of S-57 edition 3.1.1.

Ref: CL 29

51

In order to keep this publication up to date, Member States were requested in December to provide updated information whenever there was a significant change and also to provide an annual update even if there was no change to the data. An S-55 updating questionnaire was provided and can also be

A new edition 1.1, prepared by the Data Protection Scheme Working Group (DPSWG), was published

Administration (NOAA) and the UK Hydrographic Office, on behalf of the IHO, was published in

<u>S-55</u> – Status of Hydrographic Surveying and Nautical Charting Worldwide

S-64 – IHO Test Data Sets for ECDIS

downloaded from the IHO web site.

S-63 - IHO Data Protection Scheme

in March.

December.

A new edition 1.1, prepared mainly by the US National Oceanographic and Atmospheric

<u>S-65 - ENC Production Guidance</u> A new edition 1.1, incorporating in its Annex A "*Recommendations for Consistent ENC Encoding*", was published in April.

S-66 - Facts about Electronic Charts and Carriage Requirements

Member States agreed to make this document, jointly developed by PRIMAR and IC-ENC, an IHO publication, to be allocated the sequential number S-66. The CHRIS Committee, at its 20th meeting, agreed that the IHO Hydrographic Services and Standards Committee (HSSC - the successor of CHRIS from 1 January 2009) should be the owner of S-66. At the request of CHRIS, the IHB has invited the PRIMAR / IC-ENC Joint Information WG (JIWG) to conduct a revision of this document prior to publishing it as S-66. As agreed by Member States, the IHB will go on to seek co-sponsorship of S-66 with IMO.

Ref: CL 16, 64, 106

REPOSITORY OF CHARTS AND NAUTICAL DOCUMENTS

During the year, approximately 450 new charts / editions were received (562 in 2007), and filed in the Bureau Chartroom. This included 220 INT charts (269 in 2007). Member States are reminded that, in accordance with Article 19 of the IHO General Regulations, a copy of any new International (INT) chart published, or new edition, should be forwarded to the IHB. Provision of copies of national charts is not required. A number of ENCs were also received, as well as 156 nautical publications (147 in 2006). Following an arrangement with the Bibliothèque Nationale de France in Paris, most of the national charts held at the IHB (approximately 15,000 charts) were moved in June to their premises in Paris. Only International charts plus the UKHO worldwide chart series are now being kept in the IHB paper chart collection.

TRANSLATION SERVICES

The IHB continued to provide translation services in French and Spanish.

Cooperation from the French and Spanish-speaking Member States was very helpful in the production of versions of several publications and the IHB thanks those States for their support.

Ref. CL 102

Ref: CL 36

Ref: CL 5 (2009)

Ref: CL 45

IHB LIBRARY

More than 500 new magazines, CD-ROMS and books on hydrography, oceanography, cartography and related matters (including the regular subscriptions) as well as various technical brochures were added to the IHB Library in 2008. The Bureau thanks all Member States that have sent copies (digital or paper) of their Annual Reports and/or technical publications during the year and encourages them to continue to do so.

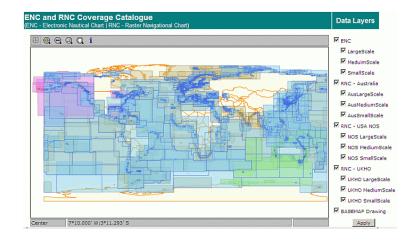
MAINTENANCE OF IHB COMPUTER AND NETWORK SYSTEMS

Following upgrades and replacements of IHB servers during 2006 and 2007, no changes were made to the IHB servers during 2008. The existing wireless access points were upgraded in order to improve WIFI coverage throughout the IHB. An additional ADSL line was installed to increase Internet bandwidth to the IHB. The IHB continues to administer the S-63 security scheme and security server.

The IHB is grateful to the Japan Hydrographic and Oceanographic Department for the secondment of Mr. Shigeru NAKABAYASHI to assist with the work of the IHB and in particular with IT and GIS systems.

DEVELOPMENT AND MAINTENANCE OF IHB GIS DATABASE INFRASTRUCTURE

The IHB continues to develop and expand its Geographical Information System databases to support internal and external requirements. In response to an IMO request to make ENC and RNC coverage information available, the IHB implemented an online web map service which is accessible from the IHO web site. The new coverage catalogue shows ENC data limits and provides access to limited metadata about individual cells. The IHB is grateful to PRIMAR and IC-ENC for their cooperation and assistance and for providing global coverage data.



IHO WEB SITE



IHO ENC/RNC Coverage Catalogue

The IHO web site continues to be an important focal point for various sources of IHO information. It also provides an online resource for meeting documents, publications and other sources of information.

A revised and reconfigured IHO web site was implemented during 2008. The site makes use of templates and a content management system which has resulted in greater uniformity between web pages. The IHB is grateful to the National Oceanographic Research Institute of Korea (Rep) for the secondment of Mr. Joon Ho JIN to the IHB. Mr. JIN has assisted with the development of the new web site and has taken over the task of IHO webmaster.

2. PUBLIC RELATIONS

AWARDS

MEDAL OF SERVICE TO CAPTAIN BERMEJO NATIONAL DAY OF MONACO – 19 NOVEMBER 2008



One of the important events that takes place on the National Day of the Principality of Monaco is the medal ceremony by His Serene Highness Prince Albert II of Monaco.

This year, Captain Federico BERMEJO was awarded the medal for 20 years loyal service to the I.H. Bureau at a ceremony that took place at the Oceanographic Museum on 18 November.

THE HYDROGRAPHER OF SINGAPORE AWARDED AN HONORARY DOCTORATE OF SCIENCE

September 2008

The University of Plymouth in the UK awarded an Honorary Doctorate of Science to Parry OEI, the National Hydrographer of Singapore, in recognition of his outstanding contribution to international hydrography and safety of life at sea. Dr. OEI is pictured with Mrs. Barbara BOND, formerly Deputy Chief Executive at the UKHO and presently Chair of the Board of Governors and Pro-Chancellor at the University of Plymouth.



WORLD HYDROGRAPHY DAY

The IHB celebrated World Hydrography Day (WHD) on 20th June, providing material to media, giving interviews and by hosting a reception where members of the Monaco Government and other officials, diplomatic authorities, representatives from maritime industry, local television and reporters and others were present. The President, in welcoming the guests, provided a brief statement on the importance of WHD. He drew attention to the Organization's interest and contribution to Capacity Building, as a vital tool to assist the IHO in achieving its mission and objectives, which was the theme of WHD 2008 as approved by Member States.

Protection of the marine environment is one of the major objectives of the IHO and its Member States' Hydrographic Offices. Hydrographic information, data, products and services are used by many different organizations, maritime industry, academia and others to study the marine environment and increasingly to study the effects and consequences of climate change. The theme for WHD 2009 will be "HYDROGRAPHY – PROTECTING THE MARINE ENVIRONMENT".

WORLD HYDROGRAPHY DAY – CELEBRATIONS IN LISBON

Lisbon, Portugal, 24 June

The International Hydrographic Organization, represented by the North Sea Hydrographic Commission (NSHC) vice-chair, Ingénieur général de l'armement Gilles BESSERO (France), celebrated World Hydrography Day at the European Maritime Safety Agency on 24 June. The event provided an excellent opportunity to inform the authorities, EMSA staff, public and media about the activities of National Hydrographic Offices and underlined the importance of capacity building, as a vital tool to assist the IHO in achieving its mission and objectives. A demonstration was provided by EMSA and PRIMAR staff on an ENC Web Mapping Service (WMS) that supports safety of navigation. The day before, the staff of the Portuguese Hydrographic Institute (IHPT) provided a very comprehensive tour and gave a very informative presentation on the Portuguese Hydrographic Service, followed by a reception.



VAdm.DE BRITO and VAdm Maratos at the World Hydrography Day in Portugal

WORK PROGRAMME 5 GENERAL ORGANIZATION DEVELOPMENT

1. IHO RE-STRUCTURING

IHO STRATEGIC PLAN WORKING GROUP (ISPWG)

Chairman: Vice-Chairmen: Members: I.G.A. BESSERO (France) Capt. CAVALHEIRO (Brazil), Capt. DE HAAN (Netherlands) Australia, Canada, Cuba, Chile, China, China Hong-Kong, Finland, Germany, India, Italy, Japan, Mozambique, Pakistan, Portugal, Republic of Korea, Republic of South Africa, Singapore, UK, Uruguay, USA.

In May 2007, the XVIIth IHC decided the establishment of the ISPWG in accordance with its terms of reference. The Chair (France) and Vice-Chairs (Netherlands and Brazil) were designated by the Conference. Chairs of the Regional Hydrographic Commissions (RHCs) and individual Member States were invited to participate. The ISPWG worked mainly by correspondence. Exchanges were conducted mainly by e-mail. A specific on-line forum was opened in early November 2007, with Lt. Cdr. SHIPMAN of the IHB acting as the moderator. All the interim documents were posted on the ISPWG forum and on the ISPWG page of the IHO web site.

The discussion paper was initiated by the Chair Group, composed of the Chair, Vice-Chairs and the President of the IHB Directing Committee. The discussion paper was submitted to the ISPWG members for comments. A revised edition was then prepared by the Chair Group and circulated to ISPWG members for final approval. The ISPWG met in plenary face-to-face session once, in Tokyo, Japan in September, while the Chair Group had four meetings. The final report was prepared by the Chair Group and approved by the members of the ISPWG and provided to the Bureau in December, in order to be circulated to Member States for comments and be considered by the 4th EIHC.

IHO WORKING GROUP TO REVIEW IHB STAFF REGULATIONS (ISRWG)

Chair:	Ms. HERING (Germany),
Vice Chair:	Miss DAVIS (UK)
Australia:	Mr. HINCKSMAN
Pakistan:	Cdr. Ahmad PN,
USA:	Ms. WARD
IHB:	VAdm MARATOS

Decision No 18 of the XVIIth IHC established a Working Group (WG) to study and propose a new edition of the IHB Staff Regulations. The Conference also approved the Terms of Reference, the Chair and Vice-Chair and the composition of the WG. The WG worked during 2008 by correspondence progressing various items. During a face-to-face meeting of the WG that took place at the Bureau in August, the progress of the work was examined and a decision was taken on the way forward, so that the work will be completed by the end of 2009.

AMENDMENTS TO THE CONVENTION

As reported in the previous Annual Reports, the modifications to the Convention on the IHO proposed by the Strategic Planning Working Group and approved in April 2005 by the 3rd Extraordinary International Hydrographic Conference were submitted by the Government of Monaco in July 2005 to all Contracting Parties for approval.

Up to the end of 2008, the Government of Monaco had reported the approval of the amendments to the IHO Convention by the following 20^1 Member State Governments: Australia, Cuba, Cyprus, Denmark, Estonia, Finland, France, Germany, Japan, Republic of Korea, Latvia, Mexico, Morocco, Netherlands, Norway, Pakistan, Spain, Sweden, Tunisia and UK.

With regard to those amendments to the Convention which are pending from the XIIIth and XVth I.H. Conferences, Article 20 of the Protocol states:

"The amendments adopted during the XIIIth and XVth Conferences which have not entered into force according to Article XXI (3) of the Convention, shall not hereafter enter into force".

IN ACCORDANCE WITH Article XXI (3) of the IHO Convention, the amendments here above mentioned from Article 1 to Article 20 shall enter into force for all Contracting Parties three months after notifications of approval by two-thirds of the Member States have been received by the Depositary.

2. IHO MEMBERSHIP ADMINISTRATION

IHO MEMBERSHIP ADMINISTRATION

The Department of External Relations in Monaco continues to support the IHB most effectively with applications from new States being forwarded rapidly to the Member State Governments for approval, the status of pending Members is regularly monitored and the IHB is kept up to date with regard to the approvals received for each application. The IHB Directing Committee expresses its sincere gratitude to Monaco for the valuable assistance provided in this domain.

New IHO Member States

No new Member States joined the Organization in 2008.

States whose applications for admission to the IHO have been approved

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 in 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 complete the IHO membership formalities. Regrettably, this last formality has not yet been completed. The Directing Committee had hoped that, with Bulgaria joining the European Union in 2007, the membership procedure for this country would be accelerated and looks forward to welcoming Bulgaria into the IHO in the near future.

Ref: CLs1/2009, 52/90, 55/93

¹ Note by the IHB : Total approvals in January 2009 = 21 (Democratic People's Republic of Korea)

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 in 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.

Ref: CLs1/2009, 44/89, 25/90, 55/93.

States (in alphabetical order) whose applications for admission to the IHO are awaiting approval

Republic of Cameroon

Cameroon officially applied for membership of the IHO in June 2004 and reported a national tonnage figure of 100,000 tonnes at that time. Cameroon's application has now received 47 approvals out of a required 48 and the Directing Committee hopes that this country will shortly receive the missing vote and that Cameroon will become a full IHO Member State in 2009.

Ref: CLs 1/2009, 36/2004

Republic of Haiti

Haiti applied for membership of the IHO in June 2008 and reported a national tonnage figure of 5892 tonnes. Haiti's application has so far received 33 approvals out of a required 52 and the Directing Committee hopes that the approval procedure will progress rapidly.

In the meantime positive contacts have been established between the IHB and the Ministry of Foreign Affairs of Haiti: Captain Hugo GORZIGLIA, IHB Director and Chairman of the IHO Capacity Building Committee made a very useful technical visit to Haiti in October. Furthermore, Captain GORZIGLIA will be attending the 14th Ordinary Meeting of the Ministerial Council of the Association of the Caribbean States (ACS) which will be held in Haiti from 28-30 January 2009.

Ref: CLs 1/2009, 50/2008

Republic of Montenegro

Montenegro officially applied for membership of the IHO in August 2007 and reported a national tonnage figure of 18,492 tonnes. To date Montenegro's application has received 46 approvals out of a required 49.

Ref: CLs 1/2009, 75/2007

Republic of Sierra Leone

Sierra Leone officially applied for membership of the IHO in January 2006 and reported a national tonnage figure of 110,000 tonnes. Sierra Leone's application has so far received 42 approvals out of a required 49. The Directing Committee hopes that this approval procedure will be completed in the near future.

Ref: CLs 1/2009, 17/2006

Member States whose rights and privileges have been suspended

Of the 80 Parties to the Convention, two - the Democratic Republic of the Congo and the Dominican Republic - 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 52.

Ref: Decision no. 2 of 3rd EIHC, CL01/2008

3. IHO WORK PROGRAMME

In accordance with Article 8 of the IHO Financial Regulations, the IHB, through IHB CL 61/2008 dated 22 July requested the Finance Committee Members to review and provide comments on the proposed IHO 2009 Budget by 30 September.

The proposed IHO 2009 Work Programme and Budget were prepared in line with the 2008-2012 Work Programme and the Five-Year Budget approved by the XVIIth I.H. Conference.

Member States' approval of the Proposed IHO Budget for 2009 was received in November.

Comments and/or changes proposed by Member States, if any, will be considered by the IHB when preparing the final version of these documents.

SECONDMENT OF PERSONNEL TO THE IHB FROM THE REPUBLIC OF KOREA AND JAPAN

Support from Member States to achieve the 2008 Work Programme and also the internal work at the IHB, was given by means of two secondments as indicated below:

- 1) In accordance with IHO Administrative Resolution T4.2, the National Oceanographic Research Institute (NORI) of the Republic of Korea kindly made Mr. JIN Joon-Ho available to the IHB in February 2007 for a period of one year. Mr. JIN effectively replaced Mr. CHOI Shin-Ho who completed his period of secondment in December of the previous year. Mr. JIN has worked at the IHB primarily on activities related to the administration and maintenance of the IHO website and the SCUFN database.
- 2) In October, in accordance with IHO Administrative Resolution T4.2, Mr. NAKABAYASHI joined the IHB on secondment from the Hydrographic Department of the Japan Coastguard for an initial period on one year. Mr. NAKABAYASHI has been employed on making improvements to the IHB's IT systems, and in particular enhancing the management and use of the increasing number of databases at the IHB.

The Directing Committee would like to thank NORI and the Japan Coast Guard for the secondment of their officers, who have enhanced the capabilities and capacity of the Bureau.

PREPARATION OF THE FOURTH EXTRAORDINARY INTERNATIONAL HYDROGRAPHIC CONFERENCE

In accordance with the XVIIth I.H. Conference Decision No. 16, the 4th Extraordinary International Hydrographic Conference will be held in Monaco from Tuesday, 2 June to Thursday 4 June 2009. Collateral meetings on 1 June (which is a public holiday in Monaco and France) will precede the Conference. Other collateral meetings can take place on 5 and 6 June 2009, if required. The Conference will meet in plenary session and will examine the Report of the IHO Strategic Plan Working Group (ISPWG), the Report of the Working Group on Hydrography and Cartography of Inland Waters (HCIWWG), the Report of the Working Group on Marine Spatial Data Infrastructures (MSDIWG), as well as the Progress on the Ratification of the Protocol of Amendments to the Convention. Other relevant proposals will also be considered

CCL 1 to 5

4. HOST GOVERNMENT AFFAIRS

Relations with the Host Country continued to be very good. The Department of the External Relations of Monaco monitors the progress made with the request of States to become Members of the Organization, in accordance with the procedures of Article XX of the IHO Convention and the approval of the Protocol of Amendments to the IHO Convention, as was approved by the 3rd Extraordinary International Hydrographic Conference in 2005.

As reported elsewhere in this report, at the end of the year, twenty Governments of IHO Member States had notified their approval of the Protocol of Amendments.

The Directing Committee very much appreciates the interest and support of the Government of Monaco in the renovation and maintenance of the IHB premises. Renovation of the Conference Room was completed during the year.

The Directing Committee attended the celebrations of the National Day of Monaco on 19 November.

APPENDICES :

I. NEW HYDROGRAPHERS FROM MEMBER STATES

II. NEW HYDROGRAPHIC VESSELS

III. VISITS TO THE IHB

IV. VISITS TO HYDROGRAPHIC OFFICES AND

MEETINGS HELD AT THE IHB

V. IHB DIRECTING COMMITTEE AND RESPONSIBILITIES

VI. IHB STAFF LIST

VII. IHB TECHNICAL MISSIONS

APPENDIX I - NEW HYDROGRAPHIC AUTHORITIES

NEW HYDROGRAPHER OF BRAZIL

From April



Vice-Admiral Luiz Fernando PALMER FONSECA was born in Rio de Janeiro, RJ, Brazil, on 30th October 1949. In 1968 he joined the Brazilian Naval Academy on Villegagnon Island, Rio de Janeiro. Upon graduation, in 1971, he was commissioned as an Ensign and was assigned to the Hydrographic Survey Ship CANOPUS. He specialized in Hydrography at the Directorate of Hydrography and Navigation in 1975. He attended numerous military courses, including the Command and Staff Course at the Brazilian Naval War College and the Strategy and Policy Course at the Brazilian War Higher College.

He served on various Brazilian survey ships, and was Commanding Officer of MESTRE JOÃO DOS SANTOS, ORION, and CANOPUS, as well as the Tall Ship CISNE BRANCO and Training Ship BRASIL. His duty ashore included Head of the Brazilian Lighthouse and Aids to Navigation Authority, the VIth Naval District, the Sea Studies Institute ALMIRANTE PAULO MOREIRA, and Instruction Center ALMIRANTE WANDENKOLK.

Amongst the numerous decorations he received are the following: Naval Order of Merit, Military Order of Merit, Gold Military Service, Armed Order Merit, Air Order Merit, Seaman Merit, Naval Minerva Medal (Chile), and the Bolivian Naval Merit (Bolivia).

NEW HYDROGRAPHER OF THE REPUBLIC OF KOREA



Mr. Ye-Jong Woo, born on 20 August 1959 in Cheonan, Republic of Korea, was appointed Director General of the National Oceanographic Research Institute (NORI) of the Ministry of Land, Transport and Maritime Affairs on 21 March , after having served as Director of the Security Division of the National Defence University in 2007-2008.

He graduated from the Dankook University in 1981. His first post was at the Korean Maritime and Port Administration in 1985. He then worked in various divisions, such as the Fishery Resources Management at the Headquarters of the Fisheries Resources Bureau, Finance and Planning at the Planning and

Management Bureau of MOMAF.

A brief summary of his career is given here below.

Academic Background

Feb. 1981 - Bachelor Degree in Community Development, Dankook University, Korea

Professional Career

March 2008 - Director General, National Oceanographic Research Institute (renamed as Ministry of Land, Transport and Maritime Affairs in 2008);

Jan. 2007- Feb. 2008	Director, Security Division, National Defence University;		
Jan. 2005-Dec. 2006	Vice President, Northeastern Asia Logistics Planning Group,		
	Headquarters for Policy and Public Relations Bureau, Korea		
	Maritime Institute;		
July 2003-Dec. 2004	Director, Finance and Planning Division, Headquarters for Planning and		
	Management Bureau, Ministry of Maritime Affairs and Fisheries		
	(MOMAF);		
Jan.1997-Jun.2003	Director, Fishery Resources Management Division, Headquarters for		
	Fisheries Resources Bureau, Ministry of Maritime Affairs and Fisher		
	(MOMAF)		
Mar. 1985-Dec. 1996	Director, Port Logistics Division, East Sea Regional Maritime and Port		
	Administration;		
	(renamed as Ministry of Maritime Affairs and Fisheries in 1996)		

NEW HYDROGRAPHER OF THE NORWEGIAN HYDROGRAPHIC SERVICE

Captain Gerry LARSSON-FEDDE was born on 23 April 1966 in Bergen, Norway and, after working 2 years as an Able Seaman, studying at the Maritime Academy and at the Petty Officer school, he joined the Naval Academy in Bergen, Norway in 1988. He graduated in 1991 with the rank of sub-lieutenant.

From 1991 until 1997 he had various assignments in the Norwegian Navy, the last 2 years as commanding officer on fast patrol boats.

In 1997 he left the Norwegian Navy to work for the Norwegian Coastal Administration as a pilot apprentice, and for the next three years he worked as a pilot on the northern coast of Norway. During this period he also initiated a project on the use of portable laptops with electronic charts for the pilots. Today all pilots in Norway and Sweden are using laptops with electronic charts.

He then joined Royal Caribbean Cruises in 2000 where he worked as 1st officer, Chief Officer and Staff Captain before moving into a position as Sr. Superintendent for audits and training in RCI's cooperate office in Miami; after about a year in this position he moved on to become Director of Nautical Operations. In 2004 he returned to sea as Captain on MARINER OF THE SEAS and then VOYAGER OF THE SEAS, two of the world's largest cruise ships.

On 20th February 2008 he took up the position as Director General of the Norwegian Hydrographic Service.

APPENDIX II - NEW HYDROGRAPHIC VESSELS

NEW THAI HYDROGRAPHIC VESSEL

"H.T.M.S. PHARUEHATSABODI"

"HTMS PHARUEHATSABODI" was commissioned on 14 February 2008. The ship was built in the UniThai dockvard at Laem Chabang, in Chon Buri province, by a consortium between UniThai Shipyard Engineering Co., Ltd. and Schelde Naval Shipbuilding from The Netherlands.

The naming of the ship has followed Thai tradition and been named after a celestial body – in this case Jupiter – which is also the name used for the day "Thursday". Accordingly, the ship first put to sea on Thursday 14 February.

The peacetime role of HTMS PHARUEHATSABODI will be as a surveying ship operating in the specific economic area of Gulf of Thailand and Andaman Sea. She will also act as a training ship and undertake various other environmental missions, including mine-clearing operations.

Mission Profile

- Hydrographic mapping survey and oceanographic survey _
- Survey for environment conservation of sea & shoreline _
- Supporting the marine scientific research
- Supporting sea rescue tasks
- Supporting oil spill cleaning
- Supporting training of Mine warfare fleet
- Supporting the training course for students both inside and outside Royal Thai Navy.

Ship Description

Hull Construction:

The hull, deck and superstructure are constructed from mild steel Marine Grade A.

Principal Dimensions :

- -Length overall 66.3 m.
- Length on waterline 61.3 m. _
- Beam Moulded 13.2 m.
- Depth Moulded
- 6.5 m. Draught 3.25 m
- Displacement 1,344 Tons and 1,636 Tons full loaded
- Maximum Speed 12 knots
- Endurance 3.000 nautical miles at 10 knots.

Hydrographic Survey System :

- **Exploration Computer System** -
- Multi Beam Echo Sounder (MBES)
- Single Beam Echo Sounder (SBES)
- Side Scan Sonar (SSS)
- Ultra Short Base Line (USBL)
- Motion and Reference Unit (MRU)
- Draught Indication System
- Tidal Measurement System
- Seawater Collection System
- Seawater Measurement System

- Expendable Bathythermograph (XBT) / Sound Velocity meter (XSV)
- Current Flow Measurement System
- Current Meter System
- Sediment Collection System
- 2 Survey Boats
- Oceanography Equipment

Capabilities:

The vessel will operate continuously without additional supply for at least 15 days. The ship will be able to survey up to sea state 5.

The vessel will operate at the maximum continuous speed of at least 12 knots, at trial draught and 100% MCR (Maximum Continuous Rating of the electric propulsion motors). In the case of operating at low speed, the vessel will be able to operate at speed between 0-6 knots without creating an interference signature with survey equipment.

Complement

- Ship Commander
- Chief officer and Chief engineer
- Commissioned officer
- Warrant officers
- Petty officer
- Privates
 - Total

- 1 person
- 2 persons
- 16 persons
- 16 persons
- 24 persons
- 12 persons
- 71 persons

APPENDIX III - VISITS TO THE IHB

CHILEAN HYDROGRAPHER

20th June

On 20th June, Captain Cristian SORO, Hydrographer of Chile, paid a visit to the IHB and was received by the Directing Committee with whom he had a working meeting. The main topics discussed were the challenges the IHO is facing and the work being done by the IHB in this regard. Captain SORO explained the main activities in progress and the development programme of the Hydrographic and Oceanographic Service of the Chilean Navy (SHOA).

On the occasion of the celebration of the World Hydrography Day (WHD), Captain SORO presented an interesting document to the Directing Committee on work undertaken at SHOA entitled "Performance Indicators for a more Effective, Efficient and Modern Management", that describes the experience gained by SHOA in developing these very helpful tools to optimize internal working processes. The Directing Committee thanked Captain SORO for such a useful document and congratulated SHOA on the work achieved and its willingness to share this experience with other Hydrographic Offices. The document will serve as a valuable information source for the IHO Strategic Planning Working Group, that is dealing with "performance indicators".

Captain SORO was invited to sign the Visitors Book and also to participate in the reception that the IHB held on the occasion of WHD. Afterwards, he met with Captain GORZIGLIA, IHB Director, to discuss various matters related to the SEPHC, Capacity Building Committee and the entry into force of the new IHO structure in January 2009.

JAPAN COASTGUARD SHIP "KOJIMA" 11th July

On Friday 11th July, the Commanding Officer of the Japan Coast Guard Ship "KOJIMA", Captain Manabu SAKIYAMA, paid a courtesy visit to the IHB, accompanied by the Navigation Officer and Mr. Juichi TAKAHARA and Mr. Koji TAKAHASHI, Minister and First Secretary of the Japanese Embassy in Paris, France, respectively. The delegation was received by Captain Hugo GORZIGLIA, IHB Director.

"KOJIMA" is a training vessel from the Japan Coast Guard and takes on board over 50 cadets in training. The cadets also visited the IHB and Captain GORZIGLIA made a presentation on the role and objectives of the IHO as well as the importance of hydrography to safety of navigation, protection of the marine environment and other important related activities. Several cadets asked questions regarding subjects such as the relation between IHO and IMO and the measures the IHO was taking to coordinate the ENC production and distribution worldwide. Commander Steve SHIPMAN (IHB) also contributed to the presentation.

A short tour of the IHB facilities was made and Captain SAKIYAMA was impressed by the coordination work carried out by the IHB. Finally, Captain SAKIYAMA and Captain GORZIGLIA exchanged crests of their respective units and the distinguished visitor was invited to sign the "Livre d'Or" (Visitors' Book).



APPENDIX IV – VISITS TO HYDROGRAPHIC OFFICES AND MEETINGS HELD AT THE IHB

VISITS OF THE IHB DIRECTING COMMITTEE TO HYDROGRAPHIC OFFICES

Capt. GORZIGLIA:	Argentina, Bahrain, Brazil, Cuba, Uruguay
Capt. WARD:	Brazil, Fiji, Japan, Portugal, United Kingdom

MEETINGS IN THE BUREAU

JANUARY

14 18 15th TSMAD Meeting

FEBRUARY

04 05 1st MSDIWG Meeting

MARCH

04 06 S-101 Users Request Worksh	iop
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APRIL

11 Finance Committee Officers' Meeting

MAY

27 29	6th CBC Meeting
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JUNE

AUGUST

04 05 Staff Regulations Working Group

SEPTEMBER

10-112nd MSDIWG Meeting28European Heritage Day

OCTOBER

- 14 15 15th ABLOS Business Meeting
- 16175th ABLOS Conference

NOVEMBER

14 Finance Committee Officers' Meeting



APPENDIX V - IHB DIRECTING COMMITTEE RESPONSIBILITIES

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

- Relations with: the United Nations; International Cartographic Association; International Maritime Organization; World Meteorological 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 and GEO.
- CPRNW; ISPWG; ABLOS; LAC; Maritime Safety Information; Hydrographic Surveying Information Services
- Matters concerning IHO Membership and IHB Administration; Host Government Affairs and Public Relations.
- IHO Finances and Budget
- IHO Re-structuring Staff Regulations

and the following Regional Hydrographic Commissions:

- North Indian Ocean Hydrographic Commission
- North Sea Hydrographic Commission
- Mediterranean and Black Seas Hydrographic Commission
- South Africa and Islands Hydrographic Commission

Director 1: Captain (retd.) Hugo GORZIGLIA (Chile)

- Relations with: the Intergovernmental Oceanographic Commission; all International Bodies concerned with Antarctic matters; the Pan American Institute of Geography and History; FIG and the Academic Sector (education and training).
- Capacity Building, Training and Education and Technical Co-operation activities.
- GEBCO and International Bathymetric Mapping Projects.
- Matters referring to Information Management (Publications).
- IHO Work Program
- IRRC matters

and the following Regional Hydrographic Commissions and Committee:

- Eastern Atlantic Hydrographic Commission
- South East Pacific Hydrographic Commission
- ROPME Sea Area Hydrographic Commission
- Caribbean and Gulf of Mexico Hydrographic Commission
- South West Atlantic Hydrographic Commission
- Hydrographic Commission on Antarctica

Director 2: Captain (retd.) Robert Ward (Australia)

- Relations with the International Organization for Standardization and International Electrotechnical Commission.
- Marine Cartographic matters including CHRIS and its Working Groups; WEND; Tidal Committee and other related international organizations and bodies, such as NAV within IMO and DGWIG.
- Spatial Data Infrastructure matters and related international organizations and bodies.
- Matters related to IHB Property and Information Technology.
- HSSC matters.

and the following Regional Hydrographic Commissions:

- Nordic Hydrographic Commission
- Baltic Sea Hydrographic Commission
- US/Canada Hydrographic Commission
- East Asia Hydrographic Commission
- South West Pacific Hydrographic Commission



APPENDIX VI – IHB STAFF LIST

Professional Assistants			
Capt. F. BERMEJO, Spain	Capacity Building, Training, and Publications Management		
Ing. en chef M. HUET, France	Cartography		
Mr. A. P HARAOH, South Africa	Data Management and Cartography		
Lt. Cdr. S. Shipman, UK	Hydrography		
Mr. C. VELARD, France	Administration and Logistics		
Translators			
Mrs. P. B OUZANQUET, France	French Translator/Librarian		
Miss M.P. M URO, Spain	Spanish Translator/Web Editor		
Mrs. I. VANKRINKELEN, France	Head French Translator		

Technical, Administrative and Service Staff

Mrs. R. CAUDOUX, Belgium	Publications and Document Preparation
Mrs. C. F ontanili , UK	Secretary of the Directing Committee
Mr. A. MAACHE, France	General Services
Mr. D. MENINI, France	Graphic Arts and Cartography
Mrs. C. M EYNADIER, France	Accounting and Administration
Mrs. M. MOLLET, France	Communications
Mr. R. SEMLALI, France	Office Manager
Mrs. B. W ILLIAMS, UK	Head Secretariat



The IHB Personnel in 2008 Standing up, from left : Mr. Semlali, Mr. Pharaoh, Mr. Huet, Mr. Maache, Capt. Ward, VAdm. Maratos, Capt. Gorziglia, Capt. Bermejo, Mr. Jin, Mr. Menini, Mr. Velard, Mr. Nakayabashi and Lt. Cdr. Shipman

Sitting down, from left: Mrs. Mollet, Mrs. Vankrinkelen, Mrs. Williams, Mrs. Caudoux, Mrs. Fontanili, Mrs. Meynadier, Mrs. Bouzanquet and Ms. Muro.

(Mr. Jin and Mr. Nakayabashi are temporary staff members on secondment from the Republic of Korea and Japan).

APPENDIX VII - IHB TECHNICAL MISSIONS

DATE	NAME	MEETING	DESTINATION
JANUARY			
15 17	MARATOS	IALA	Paris, FRA
15 17	WARD	IALA	Paris, FRA
25	MARATOS	NSHC & EU Commission	Brussels, BEL
22 28	WARD	2nd Coordination Meeting EAHC	Chiangmai, THA
22 20	11 IIII	2nd Coordination Mooting Di Mic	
FEBRUARY			
13 14	PHARAOH	INSPIRE	Milan, ITA
14 22	GORZIGLIA	SWAtHC Cartographic Programme	ARG, BRA and URU
18 2	HUET	Int Seminar ENC	Tokyo, JAP
MARCH			
3 07	GORZIGLIA	Technical Visit	Havana, CUB
3 07	BERMEJO	Technical Visit	Havana, CUB
11 12	WARD	Digital Ship	Oslo, NOR
12 14	MARATOS	IMarEST	London, UK
13 14	GORZIGLIA	Joint IMO-IHO CB Meeting	London, UK
13 14	BERMEJO	Joint IMO-IHO CB Meeting	London, UK
17 20	GORZIGLIA	SWAtHC 2	Rio, BRA
17 20	BERMEJO	SWAtHC 2	Rio, BRA
25 26	MARATOS	BASWG	Kiev, UKR
31 02	WARD	IMDIS 08	Athens, GRE
51.02	WARD	IMDIS 08	Athens, OKL
APRIL			
1 04	HUET	Coast Map IO	Maldives
7 09	MARATOS	COMSAR 12	London, UK
7 11	SHIPMAN	COMSAR 12	London, UK
7 11	BERMEJO	IAB 31	Sydney, AUS
12 15	WARD	MEH Tech PSC	Malaysia
14 17	PHARAOH	Joint Tech Exp Mtg	Stavanger, NOR
14 18	MARATOS	NIOHC 9	Goa, IND
14 18	SHIPMAN	WWNWS Document Review	London, UK
20 23	WARD	CIRM tech conf	Dublin, EIR
20 23 21 23	GORZIGLIA	PMAWCA	Abidjan, Ivory Coast
21 25 21 25	MARATOS	NSHC 28	Elsinore, DK
21 25	PHARAOH	SNPWG 9	Brest, FRA
21 23	THARAOIT	SINI WO 9	Diest, FRA
MAY			
3 07	GORZIGLIA	Technical Visit	Bahrain
5 09	WARD	Canadian Hydrographic Conference	Victoria, CAN
6 07	MARATOS	NHS 52	Sweden
6 09	HUET	CSMWG 18	Cape Town, RSA
5 09	PHARAOH	TSMAD 16	Cape Town, RSA
6 16	SHIPMAN	MSC 84	London, UK
8 14	MARATOS	MSC 84	London, UK
10 15	GORZIGLIA	SEPHC 8	Cartagena, COL
10 15	BERMEJO	SEPHC 8	Cartagena, COL
10 13	HUET	SCUFN 21	Jeju KOR
	PHARAOH		Tokyo, JAP
26 30	гпакаОн	GEBCO GC 25 + SCDB 24	TOKYO, JAP

DATE	NAME	MEETING	DESTINATION
JUNE			
2 06	WARD	MEH, TSC	Malaysia
2 11	GORZIGLIA	ATCM 31	Kiev, UKR
9 13	SHIPMAN	TC 58	London, UK
16 19	MARATOS	100 th Council IMO + WHD UKHO	London, UK
16 19	SHIPMAN	FIG Working Week	Stockholm, SWE
21 25	WARD	WEND TG	Lisbon, POR
23 24	MARATOS	WHD	Lisbon,POR
23 01	GORZIGLIA	IOC Executive Council	Paris, FRA
30 03	MARATOS	NAV 54	London, UK
30 04	WARD	NAV 54	London, UK
30 04	SHIPMAN	NAV54	London, UK
AUGUST	WARD		
12 13	WARD	IALA,	Paris, FRA
18 21	WARD	BSHC 13	Rostock, GER
24 01	SHIPMAN	CPRNW 10	Rio, BRA
29	WARD	IUCN HQ	Geneva, CH
SEPTEMBER			
1 05	MARATOS	WEND 11	Tokyo JAP
1 05	WARD	WEND 11	Tokyo, JAP
1 05	HUET	WEND 11	Tokyo, JAP
8 12	PHARAOH	TSMAD 17	Seattle, USA
24 26	WARD	HGMIO 5	Bath, UK
24 26	HUET	HGMIO 5	Bath UK
OCTOBER			
6 10	GORZIGLIA	HCA 8 & MACHC 9	Rio, BRA
6 10	HUET	HCA 8	Rio, BRA
13 16	GORZIGLIA	IOC/IMO/WMO CB 2 nd Meeting, Paris	Paris, FRA
13 16	BERMEJO	IOC/IMO/WMO CB 2 nd Meeting, Paris	Paris, FRA
14 17	MARATOS	Seapower Symposium,	Venice, ITA
16 26	WARD	IMO-IHO B Seminar	Fiji
20 23	GORZIGLIA	Technical Visit	Haiti
20 24	MARATOS	Int. Sci and Tech Conf	Gdynia, POL
NOVEMBED			
NOVEMBER	WADD	CUDIS 20	
1 10	WARD	CHRIS 20	Rio, BRA
1 10	HUET	CHRIS 20	Rio, BRA
17 24	HUET	CHRIS / CSPCWG	Wollongong, AUS
25 05	SHIPMAN	IMO MSC85	London, UK
DECEMBER			
1 05	PHARAOH	ISO/TC211	Tsukuba, JPN
2 05	GORZIGLIA	EatHC 10	Lomé, Togo
2 05	HUET	EAtHC 10	Lomé, Togo
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