INTERNATIONAL HYDROGRAPHIC ORGANIZATION



ANNUAL REPORT 2007

PART 1 - GENERAL

ANNUAL REPORT

OF THE

INTERNATIONAL HYDROGRAPHIC ORGANIZATION

2007

PART I - GENERAL

MEMBER STATES OF THE INTERNATIONAL HYDROGRAPHIC ORGANIZATION (IHO)

ALGERIA MONACO
ARGENTINA MOROCCO
AUSTRALIA MOZAMBIQUE
BAHRAIN MYANMAR
BANGLADESH NETHERLANDS
BELGIUM NEW ZEALAND

BRAZIL NIGERIA
CANADA NORWAY
CHILE OMAN
CHINA PAKISTAN

COLOMBIA PAPUA NEW GUINEA

CONGO (ZAÏRE)* PERU

CROATIA PHILIPPINES
CUBA POLAND
CYPRUS PORTUGAL
DEMOCRATIC PEOPLE'S REPUBLIC OF OATAR

KOREA REPUBLIC OF KOREA

DENMARK REPUBLIC OF SOUTH AFRICA

DOMINICAN REPUBLIC* ROMANIA

ECUADOR RUSSIAN FEDERATION

EGYPT SAUDI ARABIA

ESTONIA SERBIA
FIJI SINGAPORE
FINLAND SLOVENIA
FRANCE SPAIN
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

Pending Member States: Bulgaria, Cameroon, Mauritania, Montenegro, Sierra Leone.

INTERNATIONAL HYDROGRAPHIC BUREAU

DIRECTING COMMITTEE

President: Vice Admiral Alexandros MARATOS, Greece
 Directors: Captain Hugo GORZIGLIA, Chile
 Captain Robert WARD, RANR Australia (from 1st September)

^{*} Rights of membership suspended

CONTENTS

Page

INT	RODUCTION	v
COC	ORK PROGRAMME 1 OPERATION AMONG MEMBER STATES AND WITH INTERNATIONAL GANIZATIONS	1
1.	IHO Regional Hydrographic Commissions	12 IC) 24667
2.	International Organizations International Maritime Organization (IMO) - 11 th Session of the IMO COMSAR Sub-Committee - 57 th Session of the Technical Co-operation Committee of IMO - 53 rd Session of the IMO Safety of Navigation Sub-Committee - 83 rd Session of the IMO Maritime Safety Committee - 25 th IMO Assembly	11 12 12
	Intergovernmental Oceanographic Commission (IOC)	14
	International Federation of Surveyors (FIG)	
	Antarctic Related Organizations	19
	International Association of Marine Aids to Navigation and Lighthouse Authorities (IALA) - 2 nd and 3 rd Meetings of the IALA E-NAV Committee - IALA E-Navigation Seminar	21
	Pan-American Institute of Geography and History (PAIGH) - 12 th Meeting of the PAIGH Hydrographic Committee - IHO-IEC Harmonization Group on Marine Information Overlays (HGMIO)	22

	Miscellaneous	
	- International Radio-maritime Committee meeting	25
	- The IOC: Global Sea Level Observing System (GLOSS) Group of Experts	
	10 th Meeting	25
	- Africa Ministry of Transport Meeting	
	- The IHO recognized as a participating organization in the Group on Earth	
	Observations (GEO)	27
WC	ORK PROGRAMME 2	
CA	PACITY BUILDING	29
1.	International Maritime Academy (IMA)	29
2.	Capacity Building Committee (IHOCBC)	29
	- 5 th Meeting of the IHO Capacity Building Committee (CBC)	29
	- Capacity Building Programme	
3.	Technical Cooperation Projects	32
	- On-Going Projects	
	- Other Projects with IHO Involvement	
	- Contribution of the Rep. of Korea to the IHO Capacity Building Fund	33
4.	Miscellaneous	34
	- IMO-IOC-IHO Meeting on Capacity Building Matters	34
	- Nippon Foundation	35
wc	ORK PROGRAMME 3	
	CHNIQUES AND STANDARDS SUPPORT	37
1.	Cartography and Hydrographic Information Services	37
	CHRIS and its Sub-committees	
	- 19 th Meeting of the IHO Committee on Hydrographic Requirements for	
	Information Systems (CHRIS) and 3 rd ECDIS Stakeholders' Forum	37
	- 4 th Meeting of the CHRIS Chart Standardization and Paper Charts Working	
	Group (CSPCWG)	38
	- 14 th TSMAD Meeting and 2 nd TSMAD/CSMWG Meetings	39
	- TSMAD Sub-Working Group meeting on the S-100 application schema work item	
	- 17 th Meeting of the IHO Colours and Symbols Maintenance Working Group	
	(C&SMWG)	41
	- 7 th and 8 th Standardization of Nautical Publications Working Group (SNPWG)	42
	- 6 th Meeting of the IHO Data Protection Scheme Working Group (DPSWG)	43
	WEND	44
	- 5 th WEND Task Group Meeting	
	- WEND Extraordinary Meeting	
	- WEND Meeting of the IHO Member States	46
	International Cartographic Association (ICA)	46
	- ICA 23 rd International Cartographic Conference	
	- ICA Spatial Data Standards Commission	48
	TIDES	
	- 8 th Meeting of the Tidal Committee	49

	GEBCO Project	
	- 24 th Joint IOC-IHO GEBCO Guiding Committee	50
	- 20 th Sub-Committee on Undersea Feature Names (SCUFN)	51
	- 23 rd Meeting of the GEBCO Sub-Committee on Digital Bathymetry (SCDB)	52
	Commission on the Promulgation of Radio Navigational Warnings	53
	- 9 th Meeting of the Commission on the Promulgation of Radio Navigational	
	Warnings (CPRNW)	53
	Working Group on S-44	53
	- 3 rd Meeting of the Working Group on S-44	53
	International Organization for Standardization (ISO)	54
	- 25 th ISO/TC 211 Working Group and Plenary Meetings	54
	Advisory Board on Law of the Sea	
	- 14 th ABLOS Business meeting	54
_		
2.	TrainingFIG/IHO/ICA International Advisory Board on Standards of Competence for	55
	Hydrographers and Nautical Cartographers	55
	- 30 th Meeting of the FIG/IHO/ICA International Advisory Board on Standards	
	of Competence for Hydrographers and Nautical Cartographers	
	International Courses	
	- 10 th Hydrographic Course at the National Hydrographic School, Goa, India	56
3.	Miscellaneous	56
	- GEOMATICA 2007 - IHO Workshop on Marine/Hydrographic Spatial Data	
	Infrastructures	56
	ORK PROGRAMME 4	
IN.	FORMATION MANAGEMENT AND PUBLIC RELATIONS	59
	IHO Publications	59
	Repository of Charts and Nautical Documents	62
	Translation Services	
	IHO Web-site	
	IHB Library	
	Maintenance of IHB Computer and Network systems	
	Development and Maintenance of IHB GIS Database Infrastructure	
	Professional Assistant for Data Management at the IHB	
	Prince Albert 1 st Medal for Hydrography 2007	
	World Hydrography Day	65
XX 74	DDV BDOCD AMME 5	
	ORK PROGRAMME 5 INERAL ORGANIZATION DEVELOPMENT	67
1.	IHO Re-structuring	67
	IHO Strategic Plan Working Group (ISPWG)	67
	Legal Advisory Board	
	IHO Working Group to review IHB Staff Regulations (ISRWG) XVIIth IH Conference	
	Re-structuring of the IHO Committees and other Groups	

2.	XVIIth IH Co	onference	68		
3.	IHO Member	ship Administration	69		
4.	IHO Work Pr	ogramme	72		
5.	Host Government Affairs		73		
APP	APPENDICES				
	Appendix I	New Hydrographers from Member States	A-1		
	Appendix II	Visits to the IHB			
	Appendix III	Visits to Hydrographic Offices and Meetings held at the IHB	A-9		
	Appendix IV	IHB Directing Committee and Responsibilities	A-11		
	Appendix V	IHB Staff List	A-13		
	Appendix VI	IHB Technical Missions	A-15		

INTRODUCTION

The International Hydrographic Bureau is pleased to present Part 1 of the Annual Report of the Organization for 2007 to IHO Member States and to all those who are interested in the technical and administrative developments of the IHO, which contribute to issues affecting safety at sea, protection of the marine environment, development and security.

The IHO Annual Report consists of two parts:

Part 1 – Technical and Administration. This part summarizes the technical and administrative work of the Organization for 2007 as it is described within its Work Program. It describes the activities of the Regional Hydrographic Commissions, Committees, Working Groups and Advisory Boards and the administrative developments of the Bureau and the Organization. It also highlights the cooperation with other international organizations, institutions, academia and maritime industry.

Part 2 – Finance. This second part presents the status of the finances of the Organization for 2007 at the close of the financial period in accordance with Article 11 of the Financial Regulations. It includes the External Auditor's Annual Report in accordance with Article 20 of the Financial Regulations.

The main event in 2007 was the XVIIth International Hydrographic Conference that took place in May. The technical and administrative activities of the Organization for the past five years were examined in detail. The Conference approved the revised IHO General Regulations and IHO Financial Regulations and the Rules of Procedure for the Assembly, Council and Finance Committee that will be put in place when the revised IHO Convention enters into force. Also the Terms of Reference and Rules of Procedure of the two new main Committees of the Organization that will be implemented on 1st January 2009, under the new structure of the technical bodies of the Organization, were examined and approved.

Various other important issues to the Organization were considered during 2007, aiming to better respond to the needs and requirements for the provision of hydrographic services and support the activities and needs of the IHO Member States. Worth highlighting in brief are the following:

- The CHRIS meeting, under its new Chairman, Captain Vaughan NAIL of the UKHO, continued to pursue the developments of the new standard S-100. Three new Working Groups were established. The Data Quality Working Group was re-established, in order to consider, among other things, how ISO quality standards and specifications should be applied to hydrographic data. As a result of the decisions taken during the XVII IHC a Marine Spatial Data Infrastructure WG has been established in order to prepare a report identifying the level and nature of the IHO's role in assisting Member States in their support of national spatial data infrastructures. Also a Hydrography and Cartography in Inland Waters WG was established to prepare a report on the level and nature of IHO involvement in the hydrography and cartography of inland waters. These two reports will be considered at the 4th Extraordinary International Hydrographic Conference that will be held in June 2009;
- In conjunction with the CHRIS meeting an ECDIS Stakeholders forum was convened attended by representatives from a range of stakeholder groups including equipment manufacturers, data distributors, shipping managers and GIS software developers, where various issues of interest to IHO and stakeholders concerning the use of ECDIS and the ENC developments were examined;
- An Extraordinary meeting of the WEND Committee and a subsequent meeting of IHO Member States were organized, in order to examine the status of the production of ENCs and to discuss and decide the actions that are necessary to achieve adequate coverage, availability,

consistency and quality of ENCs by 2010, in accordance with Decision 20 approved at the XVII IHC;

- Capacity Building activities continued to provide important support especially to developing States, in order to enhance their hydrographic capabilities. Technical visits were organized in various States, with the support of France, India, New Zealand and UK. Different courses and workshops were organized on a variety of subjects, hosted by Colombia, Jamaica, Mozambique, Peru and Saudi Arabia;
- In 2007 nine meetings of Regional Hydrographic Commissions (RHCs) took place and discussions on hydrographic, cartographic and safety to navigation issues of regional interest were discussed. Worth mentioning is the first meeting of the newly established South West Atlantic Hydrographic Commission;
- Very close and effective cooperation with IMO, IALA, IOC, FIG, WMO and ICA continued in 2007. Worth noting is the support that the Organization provided to IMO in its consideration of mandatory carriage of ECDIS and in developing an e-Navigation strategy as well as the support provided to the IOC in its Coast Map - Indian Ocean Project to improve coastal mapping capacity;
- Excellent cooperation with the Government of Monaco continued in 2007. The Bureau is grateful to the Government of Monaco for their support in the maintenance of the premises and in their agreement to continue IHB access to and use of the terrace for the benefit of the Organization.

The Directing Committee invites those interested in the details of the work of the Organization to visit the IHO web site www.iho.int.

WORK PROGRAMME 1 COOPERATION AMONG MEMBER STATES AND WITH INTERNATIONAL ORGANIZATIONS

1. IHO REGIONAL HYDROGRAPHIC COMMISSIONS

7th MEETING OF THE NORTH INDIAN OCEAN HYDROGRAPHIC COMMISSION (NIOHC)

Pattaya, Thailand, 27 February-2 March 2007

Chairperson: Rear Admiral MONCRIEFF (UK)

Vice Chairperson: Rear Admiral NETRPRAPA (Thailand)

Members: Bangladesh, Egypt, India, Myanmar, Sri Lanka,

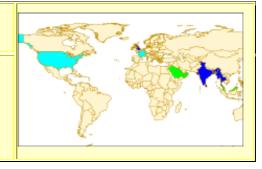
Thailand, United Kingdom.

Associate Members: France, Pakistan, Seychelles, USA.

Observers: Malaysia, Oman, Saudi Arabia.

IHB Representatives: Vice Admiral MARATOS, Lt. Cdr.

SHIPMAN



The 7th meeting of the NIOHC took place in Pattaya, Thailand from 27 February to 2 March, under the Chairmanship of Rear Admiral Ian MONCRIEFF, the UK National Hydrographer. Thirty-five representatives participated from 15 States and Organizations. Admiral MARATOS represented the IHB.

The Welcome Address was given by Admiral SUCHART YANOTHAI, Assistant Commander-in-Chief, Royal Thai Navy. Rear Admiral Ian Moncrieff presented the opening remarks and Vice Admiral Alexandros Maratos addressed the meeting. In his report to the Commission on the activities of the Organization, Admiral Maratos highlighted the status of the approval of the Protocol of Amendments to the IHO Convention, the preparations for the XVIIth International Hydrographic Conference in May, the decisions taken by the last WEND and CHRIS meetings, the developments on Capacity Building, S-55 and S-44. He also explained the cooperation with IMO, IALA and IOC, the results of the first celebration of the World Hydrography Day (WHD), the establishment of the South West Atlantic Hydrographic Commission and concluded with the status of voting for the entry of new Member States into the Organization.

Following discussions, it was agreed to revise the Statutes so that Associate Members can host meetings of the NIOHC.

There were discussions on various issues regarding response to any future emergencies or disasters in accordance with CL 89/2005, the status of hydrographic surveying, nautical charting and MSI/GMDSS, the implementation of the INT Chart scheme, ENC production and assistance needed were discussed and certain decisions were taken. Captain Mike BARRITT, Vice-Chairman of the

Capacity Building Committee, presented the Capacity Building activities and the requirements for training support in the area were identified.

The Commission members discussed the procedures that they need to put in place for the selection of their Members to the IHO in the future Council without reaching a decision. It was agreed that the Members would write to the Chairman, providing their position and stating whether they are interested in having a place on the Council. The results of the two seminars held in Germany in November 2005 and in Cuba in February 2007 concerning developments with the Marine Spatial Data Infrastructures were presented.

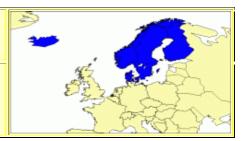
51st MEETING OF THE NORDIC HYDROGRAPHIC COMMISSION (NHC)

Copenhagen, Denmark, 17-19 April 2007

Chairperson: Mr. ESKILDSEN (Denmark).

Members: Denmark, Finland, Iceland, Norway, Sweden IHB Representatives: Rear Admiral BARBOR, Captain WARD (cines 1st Sentember), Mr. BUARAOH

WARD (since 1st September), Mr. PHARAOH



The 51st meeting of the Nordic Hydrographic Commission (NHC) took place in Copenhagen, Denmark, from 17 to 19 April 2007, under the Chairmanship of Denmark. Representatives from Denmark, Norway, Finland, Sweden and Iceland were present. Vice-Admiral MARATOS represented the IHB.

After the approval of the Agenda and a review of the actions from the previous meeting of the NHC, Admiral MARATOS briefed the participants on various issues of interest. In particular, he reported on the progress of the approval of the Protocol of Amendments to the Convention, the preparations of the XVIIth IHC, the main decisions and actions taken by WEND and CHRIS, the progress and outstanding issues with S-55 and S-44, liaison with other international organizations and especially IMO and IALA, actions that have been undertaken by CPRNW and the celebrations for the World Hydrography Day.

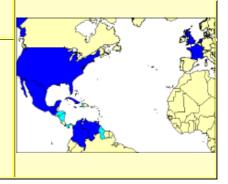
8th MEETING OF THE MESO-AMERICAN AND CARIBBEAN SEA HYDROGRAPHIC COMMISSION (MACHC)

Niteroi, Brazil, 8-10 October 2007

Chairperson: Rear Admiral DEL ANGEL RIVAS (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 Meso-American and Caribbean Sea Hydrographic Commission (MACHC) was hosted by the "Diretoria de Hidrografía e Navegação" of Brazil at its premises in Niteroi.

Representatives from Barbados, Brazil, Colombia, Cuba, France, Guatemala, Mexico, The Netherlands, Norway, Suriname, UK, USA, IHB and commercial companies attended the meeting, which was chaired by Cdr. Mario GÓNGORA on behalf of Rear Admiral DEL ANGEL (Mexico).

The Chairman summarized the work carried out since the 7th meeting. He mentioned the need to amend the Statutes to include a Vice-Chairman and other items that required updating, such as the limits of the Commission area. It was decided to create a Working Group composed of Brazil, France, Mexico, UK, USA, with Brazil as Chairman, to revise the Statutes and to propose amendments. The final draft should be approved at the next meeting of the Commission.

He also noted that only four members of the Commission - Cuba, Mexico, Netherlands and UK - had ratified the Amendments to the IHO Convention approved by the Extraordinary International Hydrographic Conference in 2005.

Capt. GORZIGLIA summarized the results of the XVIIth I.H. Conference and presented the decisions related to the new structure of the Organization.

The following reports were tabled:

- 1) ISPWG: a working group set up by the XVIIth I.H. Conference to re-draft the IHO Strategic Plan.
- 2) Reports from the MACHC INT Chart Committee and the Electronic Chart Committee. These Reports included information about the status of regional production of INT charts and ENCs and were endorsed by the Commission.
- 3) The CPRNW Chairman, the representative of Guatemala and Mr. VILLALOBOS presented reports respectively on the MSI Course held in Jamaica, the present status of the Gulf of Honduras project and the Multibeam Standard Operating Procedures Operational Workshop. Colombia recommended continuing these activities with adequate funding provided by the CBC Fund.
- 4) The UKHO representative provided a report on Radio Navigational Warning Broadcasts and a proposal from USA/NOAA on "International Marine Environmental Protection Products Specification" was also considered by the Commission for subsequent consideration by CHRIS.
- 5) The representative of the Land Surveys Association of Jamaica presented a report about the Workshop on National Spatial Reference Systems also held in his country.

Following a proposal from Brazil and the previous agreement to extend zone B through C1 towards the equator, it was agreed to liaise with CHRIS to have the necessary changes made to the IHO publication M-11.

As there were no representatives from Venezuela present, it was not possible to confirm that Venezuela would host the 9th Meeting; the Chairman agreed to contact Venezuela and inform the Commission of the availability of this country. The representative from Suriname kindly offered to host the next meeting as an alternative.

Brazil was nominated as the future Vice-Chairman of the Commission, following approval of the amendment to the Statutes.

1st MEETING OF THE SOUTH WEST ATLANTIC HYDROGRAPHIC COMMISSION (SWAtHC)

Buenos Aires, Argentina, 10–12 April 2007

Chairperson: Vice-Admiral DI VINCENZO (Argentina)

Members: Argentina, Brazil, Uruguay

IHB Representatives: Captain GORZIGLIA, Captain BERMEJO



1. The First Meeting of the South West Atlantic Hydrographic Commission (SWAtHC) was held at the "Servicio de Hidrografía Naval" of Argentina, in Buenos Aires, from 10 to 12 April 2007.

Delegates from Argentina, Brazil and Uruguay attended, as well as observers from Venezuela and the IHB.

Rear Admiral DI VINCENZO, Hydrographer of Argentina and Chairman of the Commission, welcomed the participants and expressed his satisfaction on the creation of this Commission that had taken much time and effort.

Captain GORZIGLIA, IHB Director, made a presentation highlighting the objectives of the IHO Regional Hydrographic Commissions and their role in achieving the Organization's mission and Work Programme.

- 2. The Commission improved the text of the Statutes of the Commission as proposed, discussed and finally agreed by the participants. The Commission Chairman provided a copy of the revised Statutes to the IHB Director who offered the IHB's services to translate the document into English.
- 3. The meeting's main task was the examination and adoption of eleven proposals submitted to the Commission. These proposals and relevant decisions were as follows:

PRO 1: To request the IHO CHRIS the review of the INT charts scheme.

This proposal will be forwarded to MACHC for joint consideration at its next meeting, before sending it to the appropriate CHRIS Working Group.

PRO 2: To investigate the interest in establishing a Hydrographic Commission for navigable rivers in South America.

The interest in creating such a Commission will be investigated by means of a Commission Circular Letter after the XVIIth International Hydrographic Conference.

PRO 3: To request the support of the IHO CBC.

This was done by passing a letter to the CBC Chairman and IHB Director, Captain GORZIGLIA, requesting funding for some participants to attend the Workshop on Fluvial Hydrographic Surveying to be organized by Peru and held in Iquitos in November 2007.

PRO 4: Establishment of a Planning Working Group.

This was approved and a "Working Group of Cartographic Planning" was created, chaired by Brazil.

PRO 5: Representation of the Commission on the future IHO Council.

This topic will be revisited at the next Commission meeting, after the XVIIth I.H. Conference.

PRO 6: Establishment of an INTERNET site for the Commission.

It was agreed to start using the existing IHO web site and page for Hydrographic Commissions before any further action is taken.

PRO 7: Adoption of a logo for SWAtHC.

Brazil submitted a model and the members of the Commission were invited to consider other alternatives, if any.

PRO 8: Modification of Article 6 inc c of the Statute.

This proposed amendment was made to the Statutes.

PRO 9: Submission of a Proposal to the XVIIth I.H. Conference.

In accordance with Article 9 of the IHO General Regulations, this proposal was endorsed and sent to the elected President of the XVIIth I.H. Conference to follow the procedures established.

PRO 10: To request support from the IHO CBC to fund the participation of some students in the Multibeam Workshop to be held in Gulfport (USA) in September 2007.

This proposal was accepted and Brazil was tasked to submit this request at the 5th CBC Meeting in June.

PRO 11: To establish a Working Group to study the feasibility and opportunity of forming a RENC for South America.

The newly formed Cartographic Planning Working Group will study this proposal.

- 4. Captain GORZIGLIA reported on the future opportunities for the region included in the IHO Work Programme 2008-2012, which will be submitted for approval at the XVIIth I.H. Conference, and requested the Commission member countries to propose suitable modifications or amendments. Also Argentina was requested to provide data to update S-55 and information was sought from Uruguay; Both countries agreed to provide information to the IHB as soon as possible.
- 5. It was agreed that the Commission will submit a short report on its activities to the XVIIth I.H. Conference and that the next meeting shall be held in Rio de Janeiro, Brazil during the first half of 2008 (dates were to be decided).





12th MEETING OF THE BALTIC SEA HYDROGRAPHIC COMMISSION

Klaipeda, Lithuania, 12–14 June 2007

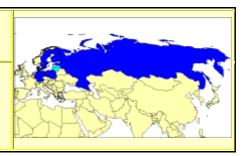
Chairperson: Mr. KRASTINS (Latvia)
Vice-Chairperson: Mr. LIULYS (Lithuania)

Members: Denmark, Estonia, Finland, Germany, Latvia,

Poland, Russian Federation, Sweden. **Associate Members:** Lithuania.

IHB representatives: Vice Admiral MARATOS, Lt. Cdr.

SHIPMAN



The 12th Meeting of the Baltic Sea Hydrographic Commission (BSHC) took place in Klaipeda, Lithuania, between 12 and 14 June 2007, under the Chairmanship of Mr. Janis KRASTINS, the Hydrographer of Latvia. Twenty three delegates participated from the following eight States: Denmark, Estonia, Finland, Germany, Sweden, Latvia, Lithuania and Poland. Vice Admiral MARATOS represented the Bureau and informed the delegates on the progress made in implementing the decisions of the Conference, cooperation with other international organizations and especially IMO, the progress of the work of the Working Group for the improvement of S-44, the celebrations of World Hydrography Day and the status of the approval of the Protocol of Amendments to the IHO Convention as decided at the 3rd Extraordinary I.H. Conference in Monaco in April 2005. The President emphasized the need to accelerate the internal procedures in order for the amendments to be approved as soon as possible.

The delegates discussed various topics: in particular, they considered the need to contact the Chairs of the neighbouring Commissions, the NHC and the NSHC, in order to initiate discussions regarding representation on the future IHO Council from the Region. They also decided to raise with the CPRNW the problem of the time required to promulgate firing exercises via NAVTEX, to seek clarification from the Tidal Committee on the methods and equipment for the distribution of real time sea level data, to amend the Statutes of the Commission so that the Bureau will act as the repository of the Statutes and will collect the signatures/approvals of the Members and Associate Members of the Statutes. There was also discussion on some other topics concerning Capacity Building developments, the need to update S-55, and the progress with the production and harmonization of ENCs. Vice Admiral MARATOS undertook to investigate the status of S-49 and inform the Members of the Commission.

The next meeting of the BSHC will be held in Germany in mid-July 2009.

6th MEETING OF THE SOUTHERN AFRICA AND ISLANDS HYDROGRAPHIC COMMISSION

Mangochi, Malawi, 27–28 August 2007

Chairperson: Mr. BATA (Mozambique)

Vice Chairperson: Captain KAMPFER (South Africa)

Members: France, Norway, Mauritius, Mozambique, Republic of South

Africa, UK.

Associate Members: Angola, Kenya, Madagascar, Malawi, Namibia,

Portugal, Seychelles, Tanzania

IHB Representatives: Rear Admiral BARBOR, Vice Admiral MARATOS

(from 1st September), Mr. PHARAOH



The 6th SAIHC took place at the scenic venue of Club Makokola, Mangochi, located on the shores of Lake Malawi. During his opening address, Malawi Deputy Minister of Land and Natural Resources, the Honourable Rashid GAFFAR, MP, highlighted the relatively high cost of transportation for landlocked countries and noted the importance of hydrography for navigation on inland waters such as Lake Malawi.

The meeting was chaired by Captain KAMPFER (South Africa) who provided a report on the XVIIth International Hydrographic Conference (IHC), and highlighted the importance of the capacity building program for the region. He invited SAIHC members to provide input to the program for their areas of interest.

National reports outlining the status of hydrographic development within the region, were provided by; Angola, France, Kenya, Madagascar, Malawi, Mauritius, Mozambique, Namibia, Norway, Portugal, Seychelles, South Africa, Tanzania and the United Kingdom.

The meeting approved the USA as an observer to the SAIHC. Mozambique was elected as the new Chairman and South Africa as Vice Chairman of SAIHC for the next term.



Participants in the 6th SAIHC Meeting

8th MEETING OF THE SOUTH WEST PACIFIC HYDROGRAPHIC COMMISSION

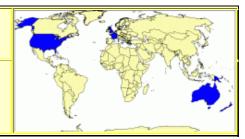
Papeete, Tahiti, 19-20 September 2007

Chairperson: Mr. SPITTAL (New Zealand) Vice-chairperson: Mr. MAHARAJ (Fiji)

Members: Australia, Fiji, France, New Zealand, Papua New

Guinea, Tonga, UK, USA

IHB Representatives: Captain WARD, Mr. PHARAOH



The 8th Meeting of the South West Pacific Hydrographic Commission (SWPHC) was held in Papeete, Tahiti, on 19-20 September 2007. The meeting was attended by Member representatives from Australia, France, New Zealand, Tonga, UK and USA. An observer from Solomon Islands and Captain WARD from IHB also attended the meeting. The Chairman of the SWPHC, Mr. John SPITTAL (New Zealand) presided.

The meeting concentrated on developing better mechanisms to advance capacity building initiatives in the region. The meeting accepted that the SWPHC faces particular difficulties because of the remoteness of the region and the fact that it comprises mostly isolated island States, with very limited hydrographic capabilities.

The Chairman described a successful CBC-sponsored visit undertaken in December 2004 to Western Samoa in conjunction with the 11th Meeting of the Pacific Islands Maritime Association (PacMA) and the 1st Meeting of Ministers for Maritime Transport. PacMA is a well established organization which unites many maritime transport and related interests, and attracts very good governmental support, yet there is currently little or no hydrographic representation. As a result of the obvious benefits of working with the PacMA community, the meeting agreed that the SWPHC will take up the offer of PacMA to join the Association as an observer. At the same time the SWPHC will offer reciprocal status to PacMA.

The meeting developed an implementation strategy to better assist regional States in implementing effective IHO Capacity Building assistance. This will include combined high-level and technical visits planned for 2008 under the IHO Capacity Building program. The aim of these visits to various States in the region will be to seek increased levels of support for hydrography from the higher levels of government and at the same time assess what type of capacity building programs might be most appropriate.

The meeting took actions to agree small scale ENC production boundaries by the end of 2007 in line with the IHO objectives to provide appropriate coverage not later than 2010.

France will assume the Chair of the SWPHC in December 2007. The 9th Meeting of the SWPHC is planned to take place in either late 2008 or early 2009 in conjunction with either a PacMA or a South Pacific Applied Geoscience Commission (SOPAC) meeting.

15th MEETING OF THE MEDITERRANEAN AND BLACK SEAS REGIONAL HYDROGRAPHIC COMMISSION (MBSHC)

Malta, 22-24 October 2007

Chairperson: Captain PEREZ-CARRILLO (Spain)

Members: Algeria, Croatia, Cyprus, Egypt, France, Greece, Italy, Monaco, Morocco, Romania, Russian Federation, Serbia and Montenegro, Slovenia, Spain, Syria, Tunisia, Turkey, Ukraine.

Associate Members: Bulgaria, Georgia, Israel, Malta, Palestinian Authority, UK, USA.

Observers: Albania, Germany, Lebanon, DINMA, IMA, IOC,

IHB Representatives: Vice Admiral MARATOS, Captain

BERMEJO



The 15th MBSHC Meeting was held at the Hotel Phenicia in Malta, hosted by the Hydrographic Offices of Malta and the UK, under the Chairmanship of Spain. Delegates from Algeria, Croatia, Cyprus, France, Greece, Israel, Italy, Malta, Norway, Romania, Russia, Slovenia, Spain, Syria, Tunisia, Turkey, UK, Ukraine, USA, and the IHB attended the meeting.

The following Decisions and Recommendations were adopted:

- 1. Italy to draft the procedure of MBSHC's representatives designation to the Council.
- 2. MS to update Italy (as MBSHC's Rep to ISPWG) on the progress of Convention amendments ratification process.
- 3. MS are kindly requested to comply with M-11 guidance when proposing changes to MEDINTCHART catalogue.
- 4. MS to send current status of surveys to Spain.
- 5. MS HOs to consider liaison with research organisations to complement the status of surveys in MBS.
- 6. MS and AMS to provide MBSHC Chairman and IHB with national reports in standardized format.
- 7. MS and AMS are encouraged to contribute to regional sea level observation projects as part of the MBSHC response to IHO CL 89/2005.
- 8. IT/SI/HR to consider co-operative survey project pending on SI request, and to report to MBSHC's Chairman for submission to IHOCBC.
- 9. Reworded statutes approved, with the inclusion of amended wording of Article 5.a.
- 10. Chair to circulate new version and request IHB to place on IHO website.
- 11. IHB to circulate report of final meeting of EUMEDIS MEDINTCHART project held in Trieste to MBSHC Chair for circulation to the Commission members.
- 12. Following allocation of funding by 5th CBC meeting to support MBSHC activities, Tunisia as the new Chair to send Circular Letter to all MBSHC members requesting whether technical visit is appropriate for their country and to identify others.
- 13. Following allocation of funding by 5th CBC meeting to support MBSHC activities, Tunisia as new Chair to send Circular Letter to all MBSHC members asking whether MBSHC members are able to provide staff to accomplish these visits.
- 14. Following allocation of funding by 5th CBC meeting to support MBSHC activities, Tunisia as new Chair to send Circular Letter to all members seeking volunteers to attend CPRNW MSI Course in 2008 to be held in Cadiz (Malta alternative).
- 15. All Members and Associate Members with requests for CBC funding should forward them through MBSHC Chairman.
- 16. Spain as NAVAREA III Coordinator to send letter to the states bordering the Caspian Sea requesting opinions with respect to the creation of new Sub- Area in that region.
- 17. The Commission approves the resulting document summarizing the outcome of the MEDINTCHART working session held during MBSHC15, as annexed to minutes.
- 18. Member States who consider it appropriate are requested to send ENC soundings data to IBCM-II 0.1' grid.
- 19. Italy will issue CL to MBSHC members to consider the way forward for VRENC.
- 20. Italy, as official MBSHC representative at the Seapower Symposium, will circulate a draft to the Chairman and Member States in advance of meeting and report after these meetings.
- 21. BASWG to continue its work and WG Chair to distribute CL to members of this group and MBSHC Chair the latest status of this group announcing the next meeting to be held in Kiev in 2008.
- 22. 16th MBSHC meeting to take place in Kiev, Ukraine, in September 2009.

Tunisia was elected as the new Chairman of the Commission.

The 16th Meeting will be held in Kiev (Ukraine) in 2009 and the dates will be agreed by correspondence. It was also agreed to schedule a meeting of the Black and Azov Seas Working Group in Kiev in 2008 to examine the new Terms of Reference and objectives of that group.

7th MEETING OF THE IHO HYDROGRAPHIC COMMISSION ON ANTARCTICA (HCA)

Buenos Aires, Argentina, 3-5 October 2007

Chairperson: Captain GORZIGLIA (IHB)

Vice Chairperson: Commodore NAIRN (Australia)

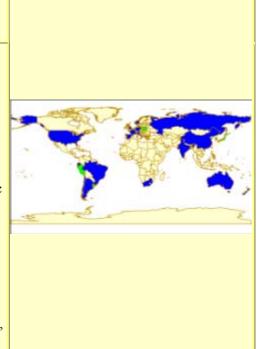
Secretary: Ing. en chef HUET (IHB)

Members: Argentina, Australia, Brazil, Chile, China, Ecuador, France, Germany, Greece, India, Italy, New Zealand, Norway, Russian Federation, South Africa, Spain, United Kingdom, USA.

Pending Confirmation of Membership: Japan, Korea

(Rep. of), Peru, Poland, Ukraine, Uruguay.

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 7th meeting of the Hydrographic Commission on Antarctica (HCA) was hosted by the *Servicio de Hidrografia Naval (SHN)* of Argentina and took place at the *Centro Naval* in Buenos Aires, Argentina, on 3-5 October 2007. Fourteen IHO Member States (Argentina, Australia, Brazil, Chile, Ecuador, France, Germany, Greece, India, Italy, Norway, Peru, UK and USA) were represented, as well as three international organizations (COMNAP, IAATO and SCAR). Capt. Hugo GORZIGLIA, IHB Director, chaired the meeting. Captain Rod NAIRN (Australia) was confirmed as Vice Chairman.

The Commission welcomed the USA as a new HCA member, thus bringing to 18 the current number of HCA members, and was pleased to hear of Peru's intention to soon sign the HCA Statutes. Those IHO Member States who are signatories to the Antarctic Treaty, but not members of HCA, were invited to consider joining the Commission and actively contribute to its work, i.e. Japan, Rep. of Korea, Poland, Ukraine and Uruguay. Noting the continued increase in sea-borne traffic in the region, the Commission considered measures to increase awareness of the importance of providing hydrographic services in Antarctica. In particular, the Commission reviewed the programme of an HCA seminar on Hydrography in Antarctica to be held as part of the 31st Antarctic Treaty Consultative Meeting in Kiev, Ukraine, in June 2008.

The Commission discussed proposed amendments to the HCA Statutes to comply with the new IHO structure. The following two options were considered: 1) HCA Chairperson from a Member State and supported by the IHO Secretariat; and 2) HCA Chairperson from the IHO Secretariat. There was overwhelming support for the second option. The Commission also agreed on a proposed amendment

to Article 8(e) of the revised IHO General Regulations to accommodate the particular case of HCA, i.e. no coastal States exist within the region and while HCA members must be IHO Member States, they must also have acceded to the Antarctic Treaty and are contributing resources and/or data to IHO INT Chart coverage of the region.

A progress report was given on the development of an HCA Geographic Information System, which will eventually provide metadata on INT chart, ENC and RNC coverage, as well as on past and planned hydrographic surveys. A detailed assessment was made of the progress with expanded coverage of INT charts and ENCs. The status of INT charts in progress or not published for the region, as well as that of ENC scheming and production were reviewed. The need for additional volunteer producer nations to accelerate INT chart coverage in the area, in particular for those charts for which no producer nation has been identified, was stressed. Presentation of the national reports also enabled the Commission to review and update its agreed and prioritized survey plan for Antarctica.

The 8th HCA meeting will be hosted by the Brazilian HO in Rio de Janeiro in early October 2008.

2. INTERNATIONAL ORGANIZATIONS

INTERNATIONAL MARITIME ORGANIZATION (IMO)

11th IMO COMSAR SUB-COMMITTEE SESSION

London, UK, 19-23 February 2007

The 11th session of the IMO COMSAR Sub-committee was held at the Royal Horticultural Halls in London from 19-23 February 2007. VAdm. MARATOS (IHB), Lt. Cdr. SHIPMAN (IHB), and the Chairman of CPRNW represented the IHO. The Co-ordinators from NAVAREA I (UK); II (France); III (Spain) and IV and XII (USA) were present as was the National Co-ordinator from Greece.

The Sub-committee reviewed the report of the Correspondence Group (CG) established at COMSAR 10 on extending the WWNWS to Arctic waters. COMSAR approved the establishment of 5 new NAVAREAs to be co-ordinated by Canada, Norway and the Russian Federation and re-established the CG to continue the work and report back to COMSAR 12.

The Sub-committee considered submissions by the IHO and agreed to the issue of two COMSAR Circulars regarding the details of NAVAREA Co-ordinators and the incorrect use of C-Codes in the International SafetyNET service.

On instructions from MSC 82, the Sub-Committee prepared a revised text of Resolution A.888(21) "Criteria for the Provision of Mobile Satellite Communication Systems in the Global Maritime Distress and Safety System (GMDSS)" in view of the decisions taken at MSC 82 and also drafted consequential amendments to SOLAS Chapter IV.

Members of the CG (France, Spain, USA, UK, Inmarsat and IHB) reviewing the WWNWS documentation, set up at CPRNW7 in 2005, met in the week following COMSAR. The meeting completed the revision of IMO Resolutions A.705 (17) as amended (Promulgation of Maritime Safety Information) and A.706 (17) as amended (World-Wide Navigational Warning Service) which will now be considered at CPRNW9 in September 2007 prior to submission to IHO and WMO Member States for agreement and subsequent submission to COMSAR.

57th SESSION OF THE TECHNICAL CO-OPERATION COMMITTEE of IMO (TC 57)

London, UK, 18-21 June 2007

The Technical Co-operation Committee held its fifty-seventh session from 18 to 21 June 2007, under the chairmanship of Mr. Ben OWUSU-MENSAH (Ghana). Captain BERMEJO (IHB) represented the IHO.

In welcoming the delegates, the IMO Secretary-General observed that over the years the Committee had evolved into a proactive body providing an informed oversight of the development and implementation of the Organization's technical co-operation programme.

He also recalled that, since the mid-1990s, IMO had given priority to Africa in the allocation of its technical assistance resources and ensured that the Technical Cooperation Division of IMO spared no effort in seeking ways and means to ensure that the Organization benefited from any potential source which would support the technical assistance programme.

The representative of the IHO provided information on actions taken by the Organization in the field of capacity-building since the Committee's fifty-sixth session in June 2006. He stressed the effort made by members of the UKHO, SHOM and IHB to carry out technical visits to the Baltic countries, to the Caribbean countries, to the countries of the RSAHC, to some African countries and to the countries involved in the joint project IHO-IOC COAST-MAP.

The organization of Technical Workshops and Seminars in the SAIHC region, SEPHC, and MACHC were also highlighted.

Other future events scheduled for the remaining 2007 were also indicated.

The support provided by the IHO Capacity Building Fund to students attending Maritime Safety Information and Multibeam courses was highlighted. Special mention was made of the "Short Course in Hydrography" organized in Managua, Nicaragua, which had fulfilled the objectives intended and could be considered as a "pilot project" for training courses of short duration.

The IHO representative stated that IHO was grateful to IMO for its positive support in the organization of some of the above mentioned events.

The IHO presentation was strongly supported by UK, South Africa and Venezuela and following a proposal from South Africa, new activities involving IHO were included in the IMO Regional ITCP for the Africa and Caribbean regions:

The present Chairman and Vice-Chairman were re-elected for 2008.

53rd SESSION OF THE IMO SUBCOMMITTEE ON SAFETY OF NAVIGATION (NAV)

London, UK, 23-27 July 2007

The 53rd session of the Sub-Committee on Safety of Navigation (NAV) of the IMO was held in London from 23 - 27 July 2007. V Adm. MARATOS (IHB) and Lt. Cdr. SHIPMAN (IHB) represented the IHO. Several representatives from Hydrographic Offices were also present. The Sub-Committee had a very full agenda, of which: Agenda Item 3 - Routeing of Ships, ship reporting and related matters; Agenda Item 5 - Evaluation of ECDIS and ENC Development; Agenda Item 13 - Development of an E-Navigation Strategy; and Agenda Item 14 - Development of carriage requirements for ECDIS; were of most relevance to IHO MS.

The Sub-Committee approved 9 new / revised Traffic Separation Schemes, 13 other routeing measures and 4 new / amended Mandatory Reporting Systems all of which were submitted to the Maritime Safety Committee (MSC) for adoption at its 83rd session in October 2007.

The IHO presented three documents: Maintenance of ECDIS Software; Development of a comprehensive online catalogue of available official charts; and Evaluation of Electronic Navigation Chart (ENC) Availability under Agenda item 5. There was widespread support for the draft SN Circular on the maintenance of ECDIS software prepared by the IHO and an informal drafting group prepared a final text, which will now go to the MSC for approval. The information regarding the details of the IHO online chart catalogue was noted by the Sub-Committee. The Sub-Committee noted the information regarding the Evaluation of Electronic Navigation Chart (ENC) Availability. This matter was also discussed extensively under Agenda Item 14 (Development of carriage requirements for ECDIS). The revised text of SN/Circ.207 – "Differences between RCDS and ECDIS" prepared at NAV 52 was approved for issue now that the ECDIS Performance Standards had been adopted by MSC 82.

A lengthy discussion took place on Agenda Item 14 "Development of carriage requirements for ECDIS" covering ENC availability, classes of ship, tonnages and training issues. The chairman concluded that there was currently no consensus to introduce further mandatory carriage requirements for ECDIS and this matter would be considered further at NAV 54 in 2008. The Sub-Committee also invited MS to submit relevant inputs to NAV 54.

On the "Development of an E-Navigation Strategy" the Sub-Committee considered the report of the Correspondence Group together with some other input papers. The Sub-Committee agreed that enavigation must be user driven and not technology driven. The following definition was adopted:

"E-Navigation is the harmonised collection, integration, exchange, presentation and analysis of maritime information onboard and ashore by electronic means to enhance berth to berth navigation and related services, for safety and security at sea and protection of the marine environment."

The Sub-Committee re-established the CG, to be chaired by the UK, with new ToR.

The refurbishment work on the IMO Headquarters building is due to complete in February 2008 and the 54th session of the Sub-Committee on Safety of Navigation is provisionally scheduled to be held there from 30 June to 4 July 2008.

83rd SESSION OF THE IMO MARITIME SAFETY COMMITTEE (MSC)

Copenhagen, Denmark, 3-12 October 2007

The 83rd session of the IMO Maritime Safety Committee (MSC) was held in Copenhagen, Denmark from 3 – 12 October 2007, hosted by the Danish Government due to the extended refurbishment of the IMO Headquarters Building in London. V Adm. MARATOS (IHB) and Lt. Cdr. SHIPMAN (IHB) represented the IHO.

MSC83 took, amongst others, the following actions:

- Approved the establishment of new NAVAREA in the Arctic;
- Approved COMSAR Circulars on NAVAREA Coordinators and improving the quality of MSI transmitted via the EGC SafetyNET system;
- Approved the revised Assembly Resolution on the Provision of Mobile Satellite Communication Systems in the Global Maritime Distress and Safety System (GMDSS);
- Adopted the new Traffic Separation Schemes (TSS), amendments to existing TSS, new
 mandatory ship reporting systems and amendments to existing mandatory ship reporting
 systems proposed by NAV and decided that these should be implemented at 0000 UTC on
 1 May 2008 or 0000 UTC on 1 July 2008;

- Approved SN Circulars on RCDS/ECDIS and the maintenance of ECDIS software;
- Established a new high-priority work programme item for NAV and COMSAR for the "Development of Procedures for updating shipborne navigation and communication equipment"; and
- Agreed an implementation schedule for Long Range Identification and Tracking.

25th IMO ASSEMBLY

London, UK, 19-30 November 2007

The 25th session of the IMO Assembly was held at the Royal Lancaster Hotel, in London, from 19 – 30 November 2007. VAdm. MARATOS (IHB) and Lt. Cdr. SHIPMAN (IHB) represented the IHO.

Welcoming addresses were made by Admiral MITROPOULOS, IMO Secretary General, Mr. FITZPATRICK, United Kingdom Shipping Minister and His Excellency Zha PEIXIN of China, the outgoing President of the 24th Assembly. His Excellency Mr. MADI of Egypt was elected as President for the 25th Assembly. The Ambassadors of Greece and Chile were elected as Vice Presidents.

The Assembly established two Committees to consider 1) Administrative, Financial Legal and Technical Cooperation Matters and 2) Technical Matters. Matters relating to the Maritime Safety Committee (MSC) were considered by Committee 2 and their decisions were subsequently approved by the Plenary. The reports of the 81st, 82nd and 83rd sessions of the Maritime Safety Committee were accepted. In its consideration of the "Voluntary IMO Member State Audit Scheme" the Assembly welcomed the completion and circulation of an Auditors' Manual. This Manual includes a questionnaire, based on the IHO S-55 questionnaire, prepared by the IHO.

The following IMO Assembly Resolutions, inter alia, were adopted:

A.999(25): "Guidelines on Voyage Planning for Passenger Ships Operating in Remote Areas", to which the IHO contributed during the debate within the Sub-Committee on Safety of Navigation (NAV);

A.1001(25): "Criteria for the Provision of Mobile Satellite Communication Systems in the Global Maritime Distress and Safety System (GMDSS)" (Formerly Resolution A.888(21) and MSC.Circ.1077).

The Assembly endorsed the decision of the IMO Council to confirm Admiral MITROPOULOS as IMO Secretary General for a second 4-year term from 2008 to 2011.

INTERGOVERNMENTAL OCEANOGRAPHIC COMMISSION (IOC)

24th IOC ASSEMBLY

Paris, France, 19–28 June 2007

The Director General of UNESCO addressed the Assembly and stated that, due to the tsunami threat, the IOC had become a new much more responsive IOC. He referred to the climate change, coastal module and the Mean Sea Level monitoring system which is essential for forecasting dangerous events. He also made reference to the future of the IOC, an important matter that would require special consideration and study.

The Agenda of the Meeting covered a wide scope of topics, including statutory reports, policy issues, ocean sciences and ocean services matters, capacity building and regional activities. Particular attention was paid to tsunamis and other marine hazards. On the administrative side, the programme and budget were discussed and approved, and a new Board of Officers was elected. Out of 136 Member States, over 95 were present. The Heads of the following Hydrographic Offices were also

present: Brazil, Canada, Chile, Ecuador, Germany, Turkey and Venezuela. Captain GORZIGLIA represented the IHB.

The IOC is very keen to find a solution to its budgetary and staffing problems. The newly elected Officers have the task of working on a new structure to be proposed to Member States on the occasion of IOC's 50th anniversary. The IHO should be attentive to the IOC developments as some changes, if they occur, might have some impact on IHO activities, such as Ocean Mapping matters, which, despite being classified as vital by the IOC, may not receive sufficient resources to fund the minimum requirements and will have to rely on direct contributions/donations. This may affect the support provided to the GEBCO project.

The IOC decided to continue working on the strategy to handle tsunami threats in the most efficient and effective way. The IHO shall continue to work with IOC, especially in the tsunami affected area, the Indian Ocean, but also in other regions also threatened by this type of natural hazard.

Capacity building matters are given very high priority by both organizations and there is a need to coordinate efforts. The IHB will host a meeting with the IOC CB Officers to assess the work achieved to date and to explore ways to include the efforts in the 2008 programme.

The IOC Assembly made a point of highlighting World Hydrography Day which indicates the excellent level of mutual respect and cooperation between the IOC and IHO. The newly-elected IOC Chair is a former Argentinean Hydrographer; one vice-chair is the current Canadian Hydrographer and the other vice-chair has been deeply involved with Hydrography in Colombia, which should strengthen the excellent relationship between the two Organizations in the next two years.

COAST-MAP-IO PROJECT

IOC-IHO TECHNICAL ASSESSMENT VISIT TO SRI LANKA

19-23 March 2007

A technical assessment visit was made by an IOC-IHO expert team to Sri Lanka from 19 to 23 March 2007, as part of the IOC COAST-MAP-IO Project (Building Coastal Resilience to Ocean-based Extreme Events through Improved Coastal Mapping Capacity in the Indian Ocean). Ing. en chef Huet represented the IHB. 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. The assessment visit was aimed at determining the level of capacity, focal points and national partner agencies, as well as existing data sources for coastal bathymetry and land topography in Sri Lanka. The objectives of the project are:



- To enhance available expertise to locally produce accurate bathymetric and topographic maps on either side [-200 to +50 meters] of the high tideline;
- To provide modelling 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 terrestrial datasets for the development of targeted maps and services, including flooding maps, determination of set back lines, coastal

ecosystem mapping, and zonation for coastal users.

The team was welcomed by the National Aquatic Resources Research & Development Agency (NARA). The team members had the opportunity to meet and hold discussions with those institutions in Sri Lanka likely to be concerned with the Coast-Map-IO project, under the efficient coordination of the National Hydrographic Office (NHO) of NARA. A courtesy visit was also paid to the Secretary, Ministry of Fisheries & Aquatic Resources.

Due to the crucial role of bathymetry in the project, it has been recommended that the NHO, with its competent personnel, its experience of hydrographic surveying and nautical charting, and its modern equipment, particularly that supplied by Germany, should be responsible for the establishment and management of the seamless COAST-MAP-IO bathymetric and topographic database, and that it receives additional training and equipment. The planned UK – Sri Lanka project to survey a large part of Sri Lanka's shallow waters using the Lidar system (i.e. up to approx. 30 metres depth) should result in very useful bathymetric data for COAST-MAP-IO. Same for a hydrographic survey to be undertaken by a French hydrographic vessel in the area of Hambantota on the SE coast, in cooperation with the NHO.

As a result of this visit, the assessment team was able to make a number of recommendations regarding the continuation of the COAST-MAP-IO project.

IOC-IHO ASSESSMENT VISIT TO MOZAMBIQUE

16-20 April 2007

A technical assessment visit was made by an IOC-IHO expert team to Mozambique from 16 to 20 April 2007, as part of the IOC COAST-MAP-IO Project (Building Coastal Resilience to Ocean-based Extreme Events through Improved Coastal Mapping Capacity in the Indian Ocean). Ing. en chef HUET represented the IHB. This project, which is funded by the Italian Government, 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. The aim of the assessment visit was to determine the level of capacity, focal points and national partner agencies, as well as existing data sources for coastal bathymetry and land topography in Mozambique. The objectives of the project are:



Courtesy visit to the Permanent Secretary, Ministry of Transport and Communications

■ To enhance available expertise in order to locally produce accurate bathymetric and topographic maps on either side [-200 to +50 meters] of the high tide-line;

- To provide modelling 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 terrestrial datasets for the development of targeted maps and services, including flooding maps, determination of set back lines, coastal ecosystem mapping, and zonation for coastal users.

The team was welcomed by the Instituto Nacional de Hidrografia e Navegação (INAHINA - National Institute of Hydrography and Navigation) and met and held discussions with institutions in Mozambique likely to be concerned with the Coast-Map-IO Project. A courtesy visit was also paid to the Permanent Secretary, Ministry of Transport and Communications (Photograph).

As a result of its visit, the assessment team has made a number of recommendations regarding the continuation of the COAST-MAP-IO Project, including that INAHINA should be responsible for the establishment and management of the seamless COAST-MAP-IO bathymetric & topographic database, due to the essential role of bathymetry in the project, and that it receives appropriate training and equipment to fulfill this task.

IMPROVING EMERGENCY RESPONSE TO OCEAN-BASED EXTREME EVENTS THROUGH COASTAL MAPPING CAPACITY BUILDING IN THE INDIAN OCEAN (COAST-MAP-IO)

Inaugural Meeting, Bangkok, Thailand, 24-26 October 2007

The inaugural meeting of the COAST-MAP-IO project, organized by IOC with IHB participation and sponsored by the Italian Government, took place on 24-26 October 2007 at the Hydrographic Department of the Royal Thai Navy in Bangkok. The meeting was chaired by Mr. BARBIÈRE (IOC Secretariat, Paris) and attended by representatives of all countries participating in this project, i.e. Bangladesh, Comoros, Kenya, Madagascar, Maldives, Mauritius, Mozambique, Myanmar, Seychelles, Sri Lanka, Tanzania, and Thailand. Representatives of IOC and training institutions (AWI, Germany; National Hydrographic School, India; and NGDC, USA) were also attending. Ing. en chef HUET represented the IHB. COAST-MAP-IO aims at providing participating countries with capacity in coastal bathymetry and development of associated products. Coastal Bathymetry and adjacent land topography [-200 meters to +50 meters] are the critical final links in a successful Warning System allowing computation of the direction and severity of landfall of tsunami but also other hazards (storm surges), and the identification of evacuation routes for coastal populations.

This meeting concluded a series of evaluation missions which had been conducted by an IOC-IHB team in the participating countries of the project. As a result of these missions, a clear institutional focal point has been identified for each country. In building on the assessment missions, the meeting aimed at defining an agreed plan of action which would respond to the expectation of the region. The following was achieved:

- ✓ Development and finalisation of the project work plan,
- ✓ Establishment of the Project Steering Committee,
- ✓ Identification of national coordination mechanisms, and
- ✓ Establishment of procedures, criteria and guidelines for selection of candidates for training in this project.

The project work plan includes several advanced training courses to take place in 2008, in particular on the following topics:

- Bathymetric data acquisition, processing, management and multibeam for shallow water areas
- Bathymetric / topographic data management and map construction (including GIS basic knowledge).

 Development of digital elevation models with an overview on tsunami modelling and inundation.

It was agreed that the Project Steering Committee would be formed of representatives of:

- o the African participating countries (LCdr ROSETTE, Seychelles, was elected),
- o the Asian participating countries (Capt. GANSUNGNOEN, Thailand, was elected),
- o the IOC Secretariat,
- o the IHB, and
- o the Intergovernmental Coordination Group for the Indian Ocean Tsunami Warning System (ICG-IOTWS).

INTERNATIONAL FEDERATION OF SURVEYORS (FIG)

6th FIG REGIONAL CONFERENCE

San José, Costa Rica, 12-15 November 2007

Captain GORZIGLIA, IHB Director, attended the 6th FIG Regional Conference - "Coastal Areas and Land Administration – Building the Capacity" which was held in San José, Costa Rica, from 12 to 15 November 2007.

Approximately 300 delegates from over 30 countries, essentially from Costa Rica and Central America, attended the meeting. The event was organized by FIG, the "Colegio de Ingenieros Topógrafos de Costa Rica" (CIT) and the "Colegio Federado de Ingenieros y de Arquitectos de Costa Rica" (CFIA) and was officially opened by the Costa Rican Minister of Housing and the President of FIG.

The coastal zone is recognized as being constantly under pressure and requires concentrated governmental action to properly manage it. Great investments are being made but regulations are far from being established and/or applied as regards the exploitation of the coast. A capacity building project is urgently required to ensure better management.

FIG decided to prepare a document called "Costa Rica Declaration" to cover the main aspects related to the subject of the Conference, highlighting the social aspects and the so-call pro-poor strategies. A group was established and the text shall be approved at the next Working Week, which will be held in Stockholm, 14-19 June 2008.

Around 100 presentations were made. Some general conclusions were:

- a) Coastal zone demarcation is an issue of great concern;
- b) Cadastral cartography is needed to move ahead any CZM activity;
- c) Capacity building does not only cover education, research and professional practice.
- d) In Costa Rica, the official authority in charge of determining the coast line (as well as producing nautical charts) is the "Instituto Geográfico Nacional" but, unfortunately, cannot provide any solution due to the lack of human, technical and financial resources;
- e) In the region there is no university or programme that includes hydrography or nautical cartography disciplines as defined by IHO.

The Conference included a Workshop on "Economic Benefits of Hydrography", with four presentations: "The economic benefit of hydrography and ocean mapping"; "Marine Geospatial software: Generating economic benefits from hydrographic data and calculation of maritime boundaries"; the "Cost/economic benefits of hydrographic education" and "The value of hydrographic information and its influence in the decision -making process", the last presentation was made by

Capt. GORZIGLIA. The workshop was attended by over 120 people and was considered a great success of the FIG Commission 4 "Hydrography".

During the Conference, the IHB Director held several meetings with Mr. Max LOBO, Director of the "Instituto Geográfico Nacional", the national agency that is, amongst other things, responsible for hydrography and nautical cartography, to discuss matters of common interest.

Mr. LOBO was reminded of the effort the IHO has made to capture the attention of Costa Rica, with regard to hydrography, nautical cartography and marine safety information, without success. He noted a change in his government's attitude and confirmed his country's interest in receiving a high level visit by the IHB and its willingness to become an associate member of the MACHC and to start participating in their meetings and work.

A similar meeting was held with the President and Executive Secretary of the "Colegio de Ingenieros Topógrafos" de Costa Rica (CIT). This is a government recognized body that maintains good relations at the political level with various ministries, at the technical level with the "Instituto Geográfico Nacional" and at the academic level with the main universities. They also expressed a keen interest in learning more about the IHO in order to be able to advise the governmental authorities on Costa Rica.

As usual, the Chairman of FIG Commission 4 "Hydrography" and the IHB Director took advantage of this Conference to meet and discuss matters of common interest. The main issue was the analysis of the workshop held at the Conference. It was confirmed that the subject – economic benefits of hydrography – was of great interest and that more time should be allowed to further develop this topic which is considered of strategic importance. In fact, the FIG Working Week in 2008 in Stockholm might well include this subject as a key note presentation in plenary and a workshop.

ANTARCTIC RELATED ORGANIZATIONS

30th ANTARCTIC TREATY CONSULTATIVE MEETING (ATCM)

New Delhi, India, 30 April - 11 May 2007

The 30th Antarctic Treaty Consultative Meeting (ATCM) was held at the Vigyan Bhavan Complex in New Delhi, India, from 30 April to 11 May 2007. Captain GORZIGLIA, Director of the IHB and Chairman of the Hydrographic Committee on Antarctica (HCA), represented the IHO. The IHO attended in its capability as an Expert Organization.

Dr. RAO, Chairman of the 30th ATCM, welcomed the participants and detailed the main aspects of the meeting and the procedures to be followed. He introduced the Agenda that was approved by the country representatives present. Australia, USA and UK reported on the status of the treaty and related protocols and conventions.

The participants were welcomed by Dr. GOEL, Secretary of the Ministry of Earth Sciences, followed by a brief introduction about the ATCM provided by Mr. HUBER, Executive Secretary of the Antarctic Treaty Secretariat.

Mr. SIBAL, Honourable Minister for Sciences and Technology and Earth Sciences, addressed the delegates and participants. In his Opening Address, he highlighted ATCM's contribution to the worldwide global change concern. He indicated that a balance should be sought between scientific activities and their potential harmful effects on the environment. Furthermore, he stated that today global issues demand the participation of all sectors of society. He expressed concern regarding the increase of tourism and other activities associated with the International Polar Year, as these could generate a strain on the Antarctic environment. Finally he wished everyone a very successful meeting with the identification of clear actions aimed at protecting the marvellous world of Antarctica.

Reports from SCAR, CCMLAR, COMNAP, IHO, IAATO and ASOC were presented at the plenary session. COMNAP's report was very supportive of IHO and the work achieved and in hand by the HCA. The COMNAP Executive Secretary also introduced Information Paper (IP 50) "International Coordination of Hydrography in Antarctica: Significance to Safety of Antarctic Ship Operations", jointly prepared by the HCA and the IHB, making a strong call for increasing hydrographic activity in Antarctica. The paper was to be further discussed during the agenda items concerning Antarctic Operations.

The IHO report was based on Information Paper 23 prepared by the HCA Chairman at the IHB. The main discussions held at the last HCA meeting and the excellent coordination and cooperation with other international organizations were specifically highlighted. Information on the status of INT chart production was provided and strong concern was voiced regarding the low level of hydro-cartographic activity reported by the HCA Members. The report concluded that much higher priority should be given to hydrographic surveys in Antarctica by national programmes. To help raise priority with regard to hydrographic activities, the report offered several presentations that could be delivered at the next ATCM in the form of a seminar. The UK and Norwegian delegations strongly supported the presentation made by the IHB, endorsed the report, requested that a strong message be included in the minutes as regards the need to increase hydro-cartographic activities in Antarctica and, in principle, it was agreed to hold a short seminar at the next ATCM as requested; this event will be coordinated at a later opportunity. SCAR commented on the efforts the IBCSO was making in collecting multibeam data for scientific purposes, but which could also be used to improve nautical charts.

IAATO's report also highlighted the excellent work done by the IHO in conjunction with the HCA.

Taking advantage of this meeting, Captain GORZIGLIA met with the IAATO Executive Secretary, the COMNAP Executive Secretary and SCALOPS Chairman, with whom initiatives of mutual interest were reviewed. It is anticipated that HCA will be represented at the next IAATO meeting in June 2007 and that a seminar will be scheduled for 2010. In 2009 a similar seminar will be organized in conjunction with the COMNAP meeting.

Due to the preparation and holding of the XVIIth International Hydrographic Conference in Monaco, Captain GORZIGLIA was only able to stay at the 30th ATCM for the presentation and immediate discussion.

The next ATCM will be held in Ukraine, 01-13 June 2008.



Captain GORZIGLIA at the venue in New Delhi, India

STANDING COMMITTEE ON ANTARCTIC GEOGRAPHIC INFORMATION (SC-AGI) INTERSESSIONAL MEETING

Buenos Aires, Argentina, 8-10 October 2007

The Standing Committee on Antarctic Geographic Information (SC-AGI) of the Scientific Committee on Antarctic Research (SCAR) held an intersessional meeting in Buenos Aires, Argentina, on 8-10 October 2007, i.e. immediately after the 7th HCA meeting. SC-AGI, at this meeting, reviewed its current projects including the SCAR Composite Gazetteer of Antarctica, the Antarctic Digital Database, the SCAR King George Island GIS Database, SCAR Map Catalogue and SCAR Feature Catalogue (see www.antsdi.scar.org/eggi). The meeting was attended by the SC-AGI Chairman, Dr. BROLSMA (Australia), SCAR representatives from Argentina, Chile, Italy, Rep. of Korea, Poland, UK and USA, plus members of IHB, GEBCO, COMNAP and the Antarctic Treaty Secretariat.

The main point of interest to the IHO was the SCAR Composite Gazetteer of Antarctica, which includes the GEBCO Gazetteer of Undersea Feature Names, as developed and maintained by SCUFN. It was agreed that SC-AGI and SCUFN would cooperate to harmonize both gazetteers and to remove any uncertainties identified by SC-AGI in the GEBCO Gazetteer. Other subjects of HCA / SC-AGI collaboration included the addition of IHO charts in the SCAR Map Catalogue, contribution to a Ross Sea GIS, the collection of tide gauge information, and the IHO-SCAR-IOC International Bathymetric Chart of the Southern Ocean.

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

2nd MEETING OF THE IALA E-NAV COMMITTEE

Southampton, UK, 19-23 March 2007

The 2nd meeting of the IALA E-Nav Committee was held at the offices of the UK's Maritime Coastguard Agency in Southampton from 19 – 23 March 2007; the IHO was represented by Mr. Chris SMITH from the UKHO. Forty six input papers were considered, many of which focused on technical AIS issues. IALA is very keen to forge ahead with E-Nav and is keen to see some tangible results within 2 years and considered that ENC availability was one of 3 obstacles to achieving this. The IMO pointed out that the IMO were the lead for E-Nav and that until IMO NAV reported to the MSC in 2008 on the development of the strategy nothing firm could be decided. Following this meeting IALA intended to prepare an input to NAV 53.

The strategy and operations WG of the IALA E-Nav Committee intended met in Paris from 17-20 July 2007 and the IHO were represented by Ing. en chef LAPORTE from the French Hydrographic Office.

The 3rd meeting of the IALA E-Nav committee was held in Haugesund, Norway from the 17-21 September. The IHO was represented by Mr. Jon-Leon ERVIK of the Norwegian Hydrographic Service who gave a presentation on ENC coverage.

IALA E-NAVIGATION SEMINAR

London, 2-4 July 2007

The International Association of Marine Aids to Navigation and Lighthouse Authorities (IALA) held a 3-day seminar on e-Navigation at the offices of Trinity House in London, from 2 to 4 July 2007. Trinity House is the United Kingdom organization responsible for aids to navigation and deep sea pilotage in UK waters and has been in existence since 1514, when it was given its royal charter by King Henry VIII.

The seminar was well attended by 82 delegates from 23 countries. Presentations were given under the following subject areas: Concept of e-Navigation; User Requirements; Charting and Display Issues; Navigation and Positioning Systems; Communications; Case Studies and Training Issues; and Legal and Human Aspects. Lt. Cdr. SHIPMAN, from the IHB, presented a paper entitled "The IHO and ENCs" during the session on "Charting and Display Issues". During the seminar closure a special presentation on "Electronic Charts of the Future: Challenges and Opportunities" was given by Dr. ALEXANDER, Chairman of the IHO-IEC Harmonizing Group on Marine Information Overlays (HGMIO).

PAN-AMERICAN INSTITUTE OF GEOGRAPHY AND HISTORY (PAIGH)

12th MEETING OF THE HYDROGRAPHIC COMMITTEE OF THE PAN AMERICAN INSTITUTE OF GEOGRAPHY AND HISTORY (PAIGH)

Veracruz, Mexico, 07-09 March 2007

The meeting of the Hydrographic Committee of the Cartographic Commission of the Pan-American Geography and History Institute (PAIGH) was hosted by the Hydrographer of Mexico and held in Veracruz, Mexico on 07-09 March 2007. The objective of the Committee is: "to promote technical cooperation and better understanding in hydrography, nautical cartography and safety of navigation matters between American Hydrographic Services, to facilitate the exchange of information related to hydrographic surveying, research and technical development of the member countries."

Rear Admiral DEL ANGEL RIVAS (Mexico), Director General of Oceanography, Hydrography and Meteorology of the Mexican Navy, opened the meeting welcoming all participants.

The Committee's Chairman, Commander PROAÑO (Ecuador), reported on the activities undertaken in the period 2005-2007 and reviewed the actions previously agreed. He highlighted the preparation of the IHO Manual on Hydrography and the Operation Manual for Multibeam Systems, the workshops on ENCs, IBCs and the meeting of the Editorial Board of IBC, and the workshop under preparation that will deal with fluvial hydrographic surveying. He thanked the IHO and the IOC for the strong support provided for these technical events. At the end of his review, he handed over the Chairmanship to Rear Admiral DEL ANGEL (Mexico), who has assumed this responsibility until the 13th Meeting.

Five countries were present: Chile, Ecuador, Mexico, United States of America and Venezuela. The PAIGH was represented by Mr. BORRERO, Secretary General of the PAIGH and the IHO by Captain GORZIGLIA, IHB Director. Representatives of the UNH and the private sector were also present (HydroService, Jeppesen Marine, Caris and Hypack).

The PAIGH Secretary General delivered a presentation about the PAIGH. He emphasized that the PAIGH will be celebrating 80 years of existence in 2008 and that its organization's structure has been reviewed and improved at the last Council in Chile, 2006. He highlighted that the concept of spatial data infrastructure was considered a high priority issue at the PAIGH, indicating that the marine layer could not be left aside.

Captain GORZIGLIA gave a presentation on "The relationship between the IHO and the PAIGH". The paper provided background information on the areas of competence of both organizations. Special mention was made of the Regional Hydrographic Commissions (RHC); 4 out of 14 RHCs are located within PAIGH's area of influence. The presentation gave a detailed analysis of the objectives of both the PAIGH Hydrographic Committee and the basic, general and conceptual objectives of the RHC. A review of the last 15 years participation in the Committee was also given, followed by a recap of the initiatives jointly undertaken by the IHO and the PAIGH. The paper concluded with a proposal for the Committee's consideration to examine the current situation and the results in order to identify ways of

improving the results of the efforts made by both organizations. The establishment of a work program for the PAIGH Hydrographic Committee was put forward, as well as using the opportunities the PAIGH offers yearly when calling for technical projects that could provide some financial support. The paper was very well received and specific action was later considered and agreed.

The Committee reviewed the last meeting agreements. It was indicated that the IHO Manual on Hydrography is in the final phase of printing and will be made available.

Other presentations made were:

- Development, scope and hydrographic cooperation (by Chile);
- Military use of Electronic Charts (by Ecuador);
- Implementation and construction of a hydrographic data base (HDB) for multiple products;
- Ortho rectification process of satellite images and its use in the cartographic production and Geographic Information in Mexico (by Mexico);
- Re-arrangement of the Naval Oceanographic Program and results within the proposals adopted at the XI Meeting (by USA);
- Electronic Charts and Marine Information Overlays;
- S-100: The new IHO Geo-spatial standard for hydrographic data and River and Inland Waters ENCs (by UNH);
- A presentation on the latest products (by CARIS);
- Notice to Mariners Automatic process and updates of nautical charts (by HYDROSERVICE);
- A presentation on the latest products (by HYPACK);
- Pilot Project to the production of S-57 ENCs in cooperation with the private sector (by JEPPESEN MARINE & Mexico).

The Committee adopted the following Resolutions:

- 1. Creation of a WG to harmonize Marine GIS with Terrestrial GIS. The members of this WG are: Chile, Ecuador, USA and Venezuela, coordinated by Mexico;
- 2. Creation of a WG to prepare and submit a proposal on the activities the Committee would organize to celebrate PAIGH 80th anniversary. This WG is composed of Chile, USA and Venezuela, coordinated by Ecuador;
- 3. To redesign the Committee's web page (Chile);
- 4. Define in conjunction with the PAIGH Authorities the Committee's membership (Mexico):
- 5. Establishment of a WG to prepare the Strategic Program of the Hydrographic Committee. This WG is composed of USA and Venezuela, and coordinated by Mexico. Results to be provided to IHO;
- 6. To coordinate with the IHO the opportunities of capacity building required by Member States of the Hydrographic Committee (Mexico);
- 7. Timely submission of a technical cooperation project requiring financial support from the PAIGH, for the year 2008 (Mexico);
- 8. To hold the 13th Meeting of the Hydrographic Committee of the PAIGH in Venezuela in 2009, date to be confirmed (Venezuela).

The participation of an IHB Director representing the IHO was deeply appreciated. The IHB paper was very well received and generated a brainstorming process that will result in alternatives to improve the effectiveness of the Committee. The IHB will be kept informed of the progress. The 13th Hydrographic Committee Meeting (Venezuela 2009) will be very important as definitions on its future should be discussed, based on the report prepared.

Unfortunately, attendance was rather low. This matter was considered in order to identify ways to remedy this situation, mainly to improve the participation of those countries which are not members of

the IHO, but are active members of the PAIGH. It was agreed that a letter would be sent by the IHB to the Secretary General of the PAIGH.

The Committee recognized the effort the PAIGH is making in Capacity Building matters, despite the financial constraints worldwide.

4th MEETING OF THE IHO-IEC HARMONIZATION GROUP ON MARINE INFORMATION OVERLAYS (HGMIO)

4th Meeting, Durham, New Hampshire, USA, 22-23 May 2007

The 4th meeting of the IHO-IEC Harmonization Group on Marine Information Overlays (HGMIO) took place at the Center for Coastal and Ocean Mapping – Joint Hydrographic Center of the University of New Hampshire, Durham, USA, on 22-23 May 2007. Marine Information Overlays (MIOs) consist of supplementary information to be used with an ECDIS that are not ENCs or specified navigational elements or parameters. HGMIO reports to the IHO/CHRIS committee and the IEC/TC 80 committee and has been tasked to harmonize the activities of IEC and IHO related to MIOs. The meeting was attended by the Chairman of the HGMIO, Dr. ALEXANDER (UNH, USA) and representatives of HOs, institutions and companies from Canada, Norway, Singapore, UK and USA. Ing. en chef HUET represented the IHB.

The meeting agreed that Marine Information Overlays is a more appropriate name than the former Marine Information Objects. The current MIOs addressed by HGMIO were reviewed, i.e. Ice Information, Tides and Water Level, Oceanographic Information, Meteorological Information, Marine Environmental Protection, and Aids to Navigation Status. The need to identify a competent authority for each MIO category was confirmed. This competent authority will take responsibility to develop and maintain S-57 / S-100 based features, as well as the associated symbology, for the relevant MIO, with appropriate support from HGMIO. *Recommended Procedures for Development of MIOs*, as approved by CHRIS, reflect and describe these concepts. For example, WMO/ETSI (Expert Team on Sea Ice) and IALA are the competent authorities for Ice Information and Aids to Navigation Status, respectively. Objects Catalogues for these two MIO categories had been developed and were presented to, and reviewed by the meeting.

The following MIO-related documents were reviewed and agreed by the meeting:

- ✓ Relationship of MIO to Current/Future IHO Standards, e.g. S-57 and S-100.
- ✓ Generic Content Specification for MIOs. It defines the content and provides a description of the schema, accuracy, and data format for MIOs. It conforms as much as practicable to the S-57 ENC Product Specification.

The Chair presented a draft MIO Product Specification for Coral Reefs and Marine Protected Areas in the Florida Keys National Marine Sanctuary, based on draft Object Catalogues for Coral Reefs and Marine Protected Areas, which were reviewed. The need to identify a competent authority for this MIO category was emphasized and it was suggested that the IUCN (World Conservation Union) could be the appropriate body to approach.

The development of an MIO Encoding Guide, similar to what is being used for Inland ENCs, was discussed and supported. It will provide detailed guidance on what is required to produce a specific type of MIO in a consistent and uniform manner.

The meeting agreed that an MIO Register be established as part of the IHO S-100 Registry to host all MIO features, as and when they are developed.

MISCELLANEOUS

INTERNATIONAL RADIO-MARITIME COMMITTEE" (CIRM) MEETING

Lisbon, Portugal, 1-4 April 2007

The "International Radio-Maritime Committee" (CIRM) held its Spring 2007 meeting at the Pestana Palace Hotel, in Lisbon, Portugal, from 1 to 4 April 2007. The IHO was represented by Lt. Cdr. SHIPMAN, who gave a presentation on "The IHO, ENCs and ECDIS".

The meeting which was attended by more than 50 delegates, primarily from the maritime equipment manufacturers but including representatives of RTCM, Inmarsat, the International Maritime Pilots Association (IMPA) and the United Kingdom Hydrographic Office. Sessions devoted to the following subject areas were included:

- International Regulations and Standards: IMO, IEC, ITU, ISO;
- Regional Regulations and Standards: European Maritime Safety Agency (EMSA); European Marine Equipment Council (EMEC); the European Marine Equipment Directive (MED) the way forward and Japanese standards;
- USA and the role of RTCM;
- Navigation equipment: New technology radars and standards;
- ENCs and ECDIS:
- Integrated Navigation Systems and Bridge Systems;
- E-Navigation.

A workshop was held to determine how to have the required IEC Test specifications for the revised IMO ECDIS PS in place in time to meet the entry into force date of 1 January 2009. It was considered that CIRM was in the best position to drive this through and set up a Working Group to prepare a draft Test Spec 61174 Ed3 for consideration by TC80 in May 2007. This was possible due to the extensive work already completed by Kim FISHER, the Secretary of TC80. It was to be hoped that they could achieve a stable test specification by 1 January 2008.

A presentation was given by Mr. PATRAIKO, Director of Projects at the Nautical Institute, on their proposals for an S-Mode (Standard Mode) for bridge equipment. The idea is that all equipment should have an "S-Mode" obtainable by a single button push which, independent of manufacturer, would give a default presentation, standardized but limited functionality and a common interface and require a common training package. A submission would be made to the IMO and they were looking for support and cooperation from all sectors of the maritime community.

THE IOC: GLOBAL SEA LEVEL OBSERVING SYSTEM (GLOSS) GROUP OF EXPERTS 10th MEETING (GE-X)

IOC Headquarters, Paris, France, 5-8 June 2007

The above meeting was held at the IOC headquarters in Paris from 5 – 8 June 2007. The IHB and IHOTC were represented by Lt. Cdr. SHIPMAN. The 5 June was devoted to a workshop on "Real-time Transmission and Processing Techniques; improving the Global Sea Level Observing System's contribution to multi-hazard warning systems" with the main meeting taking place from 6 - 8 June. The meeting was attended by over 50 delegates from some 30 countries. The Hydrographic Offices of Brazil, Canada, Chile, France, the Islamic Republic of Iran, Mozambique, Norway, Portugal, Tunisia and the USA were represented.

The workshop was primarily dedicated to the techniques and processes for delivering and quality assuring tidal data in real-time for use in Tsunami warning systems. The main session was opened by Dr. Bernal, the Executive Secretary of IOC. Sessions were devoted to:

- a. Review of GLOSS Activities and action items from GE IX (February 2005);
- b. Review of the GLOSS Core network status;
- c. Updating the GLOSS Implementation Plan;
- d. GLOSS in the context of a Global Tsunami and other ocean-related hazards early warning system;
- e. Reports from Regional GLOSS programmes;
- f. National reports on Sea Level activities;
- g. Reports on the linkage between GLOSS and other programmes;
- h. Reports from the GLOSS data centres;
- i. Reports from the GLOSS sub-committees;
- j. GLOSS Training Activities; and
- k. Action plan for the intersessional period 2007 2009.

Under item g above the IHO gave a presentation on the principal activities at the 3rd EIHC, the XVIIth IHC and the 6th and 7th meetings of the IHO Tidal Committee.

The GE X expressed its thanks to the IHO for its assistance in trying to arrange for tidal stations to be committed to the GLOSS Core network.

AFRICA MINISTRY OF TRANSPORT MEETING

Abuja, Nigeria, 19-21 February 2007

A meeting of Maritime Experts of Member States of the African Union with the support of some International Organizations, such as IMO and IHO, was held in Nigeria from 19 to 21 February 2007, in preparation for the First African Union Conference of Ministers responsible for Maritime Transport. The general theme of the Conference was: *the Role of Maritime Transport in the Development of Africa*.

RAdm. BARBOR (IHB Director) reported on the status of implementation of commitments made by Coastal States under the terms of Chapter 5 of the SOLAS Convention. He informed on the poor level of adherence to the International Hydrographic Organization and poor participation in the activities of Regional Hydrographic Commissions, highlighting the inadequate level of communication of nautical information and the obsolescence of the existing charts.

The presentation recommended that Coastal States should endeavour to fulfil their obligations within the framework of SOLAS Chapter V and to constitute a National Hydrographic Committee that will address responsibilities and authority. Lastly, the IHO called upon States to participate in the activities of the Regional Hydrographic Commission relating to safety of navigation.

The Experts Meeting contributed to the preparation of the known as "ABUJA Maritime Transport Declaration", signed by African Ministers Responsible for Maritime Transport on the 23 February 2007. Through the declaration, the Ministers decided and agreed to undertake to:

[&]quot;promote and encourage appropriate structures and measures for the improvement of Aids to Navigation, hydrographic survey, nautical cartography and maritime safety information, and for the protection of maritime environment,"

THE INTERNATIONAL HYDROGRAPHIC ORGANIZATION (IHO) RECOGNIZED AS A PARTICIPATING ORGANIZATION IN THE GROUP ON EARTH OBSERVATIONS (GEO)

In the Third Plenary of Group on Earth Observations (GEO) the IHO was officially recognized as a Participating Organization of GEO.

GEO is actively pursuing the development of its work program and the accomplishment of its mission through numerous forums and symposia. The Directing Committee believes several of these events are important opportunities for the IHO to highlight its role in conducting earth observations and providing these data for marine spatial data infrastructure applications. These events also enable the IHO to remain abreast of international efforts in earth observations and spatial data infrastructure development.

Captain KAMPFER, the Hydrographer of South Africa, represented the IHO in the meetings of the GEO Plenary and the Ministerial Summit that took place 28-30 November in Cape Town. A brief statement from the IHO that was presented at the meeting, was included in the Ministerial declaration.

WORK PROGRAMME 2 CAPACITY BUILDING

1. INTERNATIONAL MARITIME ACADEMY (IMA)

Since early 2006 the IHB has been seeking information on the status and future of the International Maritime Academy (IMA) in Trieste, Italy which was, for many years, one of the main and most important academic centres providing hydrographic and cartographic training to many students around the world, including students from IHO Member States and non Member States.

Clarification as regards the IMA situation was finally received from the former President of IMA informing that the legal structure of IMA had been found inadequate to receive and sustain the financial support of the Italian Ministry for Foreign Affairs and carry out training activities, and therefore IMA had to be closed down.

A new legal entity, which has received the formal approval of the Italian Ministry for Foreign Affairs, has been under discussion for several months, but to date it has not yet been officially created. Meanwhile, the mandate of the President of IMA had terminated on 31 October 2006. The Rector of the University of Trieste is now in charge and the decisions concerning the future of IMA are in his hands.

The IHB has contacted the Rector of the University of Trieste offering IHO support in any efforts aimed at accelerating the establishment of the new structure of the former IMA. The IHB will remain in contact with the authorities responsible for the future structure and, at the same time, will actively explore other regional training alternatives which may resolve this situation that has left the international hydrographic community without an excellent partner in the capacity building process.

During the IMO Assembly Meeting, the IMO Secretary General and the representative of Italy announced that IMA will become operational in 2008.

2. CAPACITY BUILDING COMMITTEE

5th MEETING OF THE IHO CAPACITY BUILDING COMMITTEE

Riga, Latvia, 5-7 June 2007

Chairperson: Capt. H. GORZIGLIA (IHB)

Vice-Chairperson: Capt. M. BARRITT (UK) – until June

Mr. J. KRASTINS (Latvia) - since June

Secretary: Capt. F. BERMEJO (IHB)

Members: Australia, Brazil, Chile, France, Germany, India, Japan, Korea, Mexico,

Mozambique, Norway, UK, USA

The 5th meeting of the IHO CBC was held at the Maritime Park Hotel, Riga (Latvia), from 5 to 7 June 2007 under the chairmanship of Captain GORZIGLIA (IHB Director), hosted by the Latvian Maritime Administration.

The Chairman provided a general overview of the activities conducted since the last meeting, stressing the achievement of the CBC Work Programme, the importance recognized by the XVIIth I.H. Conference to Capacity Building subjects and the MOU signed by the Republic of Korea and the IHO on an annual contribution from this country to the Capacity Building Fund.

The most important matters considered by the Committee were as follows:

- Approval of the Minutes of the 4th Meeting.
- Consideration of a report produced by an Australian consultant addressing the subject "Guidelines for submission of projects".
- Reviewing of the CBC Work Programme 2006-2007 and general IHO CB activities. Technical visits paid and Workshops and Seminars organized.
- Progress of S-55.
- Report about the CBC Fund.
- Decisions of the XVIIth I.H. Conference relating CB.
- Courses organized by Institutions, Committees and Commissions and funded by the CBC Fund. Attendance of students to Multi-Beam courses.
- Draft Management Plan
- Establishment of procedures to improve CB assessment, provision and accountability.
- Approval of the CBC WP 2007 and Draft 2008.

Following consideration of the above matters, the CBC approved the following main actions:

- Write to the IHB to request inclusion of CB as a specific topic for Hydrography Day 2008.
- Invite SHOM to inform the EAHC Chairman about the availability of historical data of reefs and islets of the South China Sea.
- Request individual RHCs to seek clarification on their requests and to inform them about the CBC decisions on projects submitted and event in preparation.
- Invite the relevant IHO Committees and WGs to develop presentations for the delivery of short courses/seminars on topics of their responsibility.
- Study the decision of the XVIIth IHC as regard to Proposal 18 and provide CBC Members with an orientation on how the subject could be dealt with.
- Develop a document "procedures for submission of projects to the CBC"

The CBC accepted the invitation of the Hydrographer of Pakistan to hold the 6th meeting in Karachi, Pakistan, along with the 3rd Meeting of the RSAHC and the ENC/ECDIS Technical Workshop for RSAHC. The representative of Korea proposed the alternative of Seoul (Korea) and offered this location for the 7th CBC Meeting (2009), which was accepted by the Committee.

Mr. KRASTINS, Latvian Hydrographer was elected Vice Chairman of the Capacity Building Committee, replacing Captain BARRITT who resigned after the meeting.

CAPACITY BUILDING PROGRAMME

The Capacity Building Committee has established two documents; the CBC Work Programme, which includes all the activities scheduled for the Committee for a determined period, including Seminars, Workshop, Technical visits and any other action directed to development purposes and a Management Plan, that is the compilation of specific proposals and input submitted by the Regional Hydrographic Commissions. The Management Plan and CBC Work Programmes should not consider any individual proposal that is not presented through the corresponding RHC.

At its annual meeting the CBC uses the Management Plan as a reference when preparing the CB Work Programme for the following year. A previous draft for subsequent years can be also be considered for

preliminary approval. The financial implications of projects are considered for funding from the CBC Fund or other sources if any, and also to be inserted in the corresponding IHO Work Programme to be approved by the IHO Member States.

The CBC Work Programme is injected in the IHO Work Programme and that this is one of the reasons why CBC meetings would be held no later than June every year. The approved CBC Programme for 2006 included the following elements:

1) Technical Visits

Technical visits from professional representatives are a tool to use when establishing a Capacity Building programme for a developing country or region. A technical visit should produce a report containing a description of the current situation of the country or region as regards to the Hydrographic Surveying, Nautical Charting and Maritime Safety Information. The visit should also assess the perceived present and future of each country's capacity building requirements to provide the hydrographic products and services identified by SOLAS. This information will subsequently be utilized to draft a Development Project for the region visited. In 2007, visits were paid to the following countries and areas:

- 1. Oman, Iran, Saudi Arabia and Qatar, Yemen and Sudan (IHB, UK, February, March).
- 2. Kenya, Madagascar, Mauritius, Mozambique, Tanzania. (France, India and UK).
- 3. Tonga, Samoa and Tokelau (IHB and New Zealand, June) made by an IOC/IHO Team within the COAST-MAP-IO Project.

2) Technical Workshops

Technical Workshops are events where a particular subject is discussed and the experience gathered by developed countries is shared. For the time being Technical Workshops are oriented to support the establishment of the first phase of hydrographic capability – the ability to gather hydrographic information and to promulgate it in a timely and efficient manner through communication with area co-ordinators of navigational warnings and with charting hydrographic offices

The Technical Workshops held in 2007 were the following:

- 1. Technical Workshop on Phase 1 Capacity held in Jeddah, Saudi Arabia for the benefit of the NIOHC and RSAHC countries.
- 2. Workshop on Fluvial Hydrographic Surveying held in November 2007 hosted by the Servicio de Hidrografia y Navegacion de la Amazonia del Peru, Iquitos, Peru.

The CBC Fund also supported participation in the Workshop on Development of Standard Operational procedures for Multibeam Hydrographic Surveys organized for countries of the MACHC, SEPHC and SWAtHC areas and held in Cartagena, Colombia, in September.

3) CPRNW Courses

Two courses on Maritime Safety Information prepared by the IHO Commission on Promulgation of Radio Navigational Warnings (CPRNW) and supported by the IHO CB Fund were held in Jamaica and Maputo (Mozambique) in June and November respectively, with lecturers kindly provided and funded by the UKHO and NGA (USA) for countries of the MACHC and SAIHC areas.

Another course will be held in March 2008, in Cádiz (Spain) for the MBSHC region.

4) Support of Multi-beam courses

Students from the MBSHC, BSHC, EAHC and NIOHC areas were selected to attend the 44th and 45th Ocean Mapping Group Multibeam Sonar Training Courses, held respectively in Stavanger, Norway in March and in Cairns, Australia in December.

The attendance to these courses was funded by the IHO Capacity Building Fund. The objectives of the courses being to train hydrographers in the use of the multi-beam systems to carry out hydrographic surveys, with special emphasis on the technology and problems associated with surveys in shallow waters.

The IHB is working in the organization of other Multibeam courses in India and Brazil and will inform the IHO Member States in due time.

TECHNICAL CO-OPERATION PROJECTS

ON-GOING PROJECTS

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 provided support, especially through the Meso American and Caribbean Hydrographic Commission, to develop the hydrographic component of the project. After the re-structuring of some items of the project and appointment of a new Project Director, it is hoped that progress of the hydrographic part will be achieved in 2008. The CBC has requested the assessment of the MACHC to decide about continuing the support to the project.

Black and Azov Seas Working Group

Established by the Mediterranean and Black Seas Hydrographic Commission, this Working Group was in charge of developing a project of hydrographic development of the area. In view of the closure of IMA, which was the principal partner in the project, the MBSHC decided at its 15th Meeting in Malta (October 2007) to re-consider a new revised project. A meeting with that purpose will be held in Kiev (Ukraine) in March 2008.

OTHER PROJECTS WITH IHO INVOLVEMENT

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

The 1st Meeting of the Project Steering Committee (PSC) for the MEH Demonstration Project was held in Batam, Indonesia from 29 – 31 May 2007. A meeting of the Technical Committee on Hydrographic Survey and ENC Production was also held. The IHO was represented by Captain WARD, IHB Director elect and Lt. Cdr. SHIPMAN. Delegates from Indonesia, Malaysia and Singapore attended together with representatives from the World Bank, IMO, IHO, ICS and INTERTANKO and observers from the China Maritime Safety Administration, Ministry of Maritime Affairs and Fisheries of the Republic of Korea, the Shipping Policy and Ocean Foundation and the Federation of ASEAN Shipping Associations.

A Memorandum of Agreement was 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 reiterated a pledge made to the

IMO Council to participate in the MEH and to contribute 850,000 US\$ to the MEH, through the IMO, for the procurement of equipment/facilities to enhance MEH-based infrastructure. This offer was welcomed by the littoral States who agreed to reflect the Rep. of Korea's offer of assistance and partnership in the Project Implementation Programme (PIP).

The Technical Committee reviewed the draft Scope of Services for the Hydrographic Survey of the Strait and this was later endorsed by the PSC. Following the meeting 3 companies were preselected to bid for the hydrographic survey, however the process is currently (December 2007) stalled as all 3 bids exceeded the available funding.

Captain WARD made a presentation on Marine Information Overlays (MIOs) (formerly Marine Information Objects) and the Committee then considered a draft Contract Terms of Reference for Consultancy for Environmental and Natural Resource Conservation and Management – MIOs for the MEH. The World Bank (WB) reiterated that this 'environmental element' of the MEH was key to the securing of the WB Global Environment Facility (GEF) funding for the MEH. A revised draft of the ToR were prepared and considered by the PSC. At the request of Malaysia the Littoral States were given a period of three weeks to comment on the revised draft document. Captain WARD pointed out that whilst the IHO was responsible for the presentation/ symbology used for ENCs there was no agency with such responsibility with regard to MIOs. It was agreed that the littoral States would submit any necessary requests to the IMO who would take appropriate action. He would invite IHO CHRIS to consider taking on the role of "repository" for symbols adopted for MIOs.

It was agreed that the 2nd Session of the PSC would be held in Kuala Lumpur, Malaysia in 2008 (dates to be decided). There would however be an intersessional meeting, together with a meeting of the Technical Committee on Shore Base Infrastructure and Facilities during the forthcoming "Straits of Malacca and Singapore: Enhancing Safety, Security and Environmental Protection" which would be held in Singapore from 4-6 September 2007. The IHO was represented at this meeting by Mr. OEI, Chief Hydrographer of the Maritime and Port Authority of Singapore.

WEST INDIAN OCEAN MARINE HIGHWAY DEVELOPMENT AND COASTAL AND MARINE CONTAMINATION PREVENTION PROJECT

The Global Environmental Facility (GEF) Trust Fund of the World Bank (WB) has made available 11 million US Dollars for the West Indian Ocean Marine Highway development and Coastal and Marine Contamination Prevention Projects. The beneficiary countries of this project are Comoros, Kenya, Madagascar, Mauritius, Mozambique, Seychelles, South Africa and Tanzania. South Africa will act as the coordinator of the project. The IHO and other international organizations and agencies like IMO, IALA, ICS, UKHO, SHOM will participate in the Steering Committee that will be established in order to supervise and provide technical assistance and support. The execution of hydrographic surveys, the production of ENCs, the broadcast of MSI and Capacity Building have been identified as major components and tasks of the project and the IHO has a very important role to play.

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.

MISCELLANEOUS

IMO-IOC-IHO MEETING ON CAPACITY BUILDING MATTERS

IHB, Monaco, 15-16 October 2007

Following an initiative from the IHB, the responsible officers for Capacity Building matters in the IMO, IOC and IHO met at the IHB premises in Monaco, 15-16 October 2007. The following were present:

<u>IMO</u> <u>IOC</u> <u>IHO</u>

Mr. Jianxing ZHU Dr. Ehrlich DESA Capt. Hugo GORZIGLIA Capt. Gurpreet SHINGOTA Capt. Dimitri TRAVIN Capt. Federico BERMEJO

The topics considered included among other matters, the Procedures established in each organization to handle CB matters, their Work Programmes and Funding mechanisms, the experiences gained in the provision of CB and the experience with Funding Agencies and Organizations.

The participants also discussed the status of joint co-operation projects and identified areas of common interest. The following conclusions were agreed:

- 1. Capacity Building is an IHO relevant issue and the CBC is developing its work with a systematic approach.
- 2. Awareness and assessment of the reality, through technical visits and the update of the IHO publication S-55 (Status of Hydrographic Surveying and Nautical Charting Worldwide) are unavoidable steps to ensure success.
- 3. Regional problems/shortcomings demand regional coordinated solutions.
- 4. Funding sources request projects and their viability studies.
- 5. An active and persistent regional participation contribute to reach the target.

The participants agreed on the world regions more in need of Capacity Building, namely Africa, Small Islands Developing States (Caribbean, South West Pacific), the Red Sea area and the Persian Gulf.

The following areas of a future co-operation among the three organizations were identified:

- Joint technical visits to raise awareness / assessment / analysis / action
- Coordination in the delivery of courses
- Exchange information on CB/TC programmes and projects in force and future ones
- Participation in the meetings of the three organizations
- Facilitate the establishment of NHC or similar bodies and /or enlarge their scope to cover or be aware of the other two sectors.
- Provide information during technical visits about topics of common interest, such as the establishment of traffic separation schemes.
- Coordinated effort on matters related to tsunamis
- Exchange of information and communication between the IHO Regional HC and the Regional structures of IMO and IOC.

The participants agreed to hold an annual meeting of the representatives from the three organizations, preferably during September. The following main topics will be addressed during such meeting:

- To evaluate Capacity Building and Technical Cooperation delivery during the previous year exchange experiences and procedures
- To exchange information on the respective Capacity Building Programmes.

- To coordinate the delivery of Capacity Building and Technical Cooperation during the following year
- To identify project(s) to jointly address.

The following permanent actions were also agreed:

- To collate the Capacity Building Programmes of the three organizations that will be sent one another in order that common projects may be identified and parallel projects detected and managed.
- To cooperate in joint technical visits, with participation of the regional coordinators and delegates of the organizations.
- To participate (thanks to the mechanisms established by MOU or by invitation) to the relevant meetings of the three organizations.
- To cooperate in the establishment of training courses and programmes.
- To maintain permanent communication between the three contact points of the organizations: Mr. ZHU (IMO), Dr. DESA (IOC) and Capt. GORZIGLIA (IHO).

NIPPON FOUNDATION TRAINING PROGRAMME

The third GEBCO Nippon Foundation Training Program Course leading to the Graduate Certificate in Ocean Bathymetry at the University of New Hampshire, USA, that started in August 2006 finalized in August 2007, followed by the forth course that having started in August 2007 shall finalize in August 2008.

The Nippon Foundation has agreed to fund a fifth course that was announced through CL 116/2007 dated 12 December. This will be the last course of this program and will start in August 2008, for a year period.

Courses are delivered in an intensive 12-month training period comprising lectures, practical laboratory work and waterborne projects, secondments to relevant laboratories and cruises on research or survey ships.

WORK PROGRAMME 3 TECHNIQUES AND STANDARDS SUPPORT

1. CARTOGRAPHY AND HYDROGRAPHIC INFORMATION SERVICES

CHRIS AND ITS SUB-COMMITTEES

19th MEETING OF THE CHRIS AND 3rd ECDIS STAKEHOLDERS' FORUM

Rotterdam, The Netherlands, 5-9 November 2007

The Committee on Hydrographic Requirements for Information Systems (CHRIS) met in Rotterdam from 5 to 9 November 2007 for its 19th Meeting (CHRIS/19). The meeting was held in two parts, with an ECDIS Stakeholders' Forum being held on 7 and 8 November. The CHRIS meeting was preceded by the usual Chair Group coordination meeting comprising the chairs of the various CHRIS subordinate bodies.

The CHRIS meeting, held at the site of the Europort Maritime 2007 exhibition, was chaired by the newly elected Chairman of CHRIS, Captain NAIL (UK), and co-hosted by the Netherlands Hydrographic Office and the UKHO. 21 Member States and five Non Governmental International Organizations were represented. Dr Jonas, currently Chairman of the Colours and Symbols Maintenance Working Group, was elected unopposed as the Vice Chairman of CHRIS.

The Committee reviewed the CHRIS work program and the progress made by its various subordinate working groups. A conceptual model of the hydrographic geospatial information infrastructure (GII) that is now supporting the development, maintenance and extension of IHO digital data standards and specifications was presented. This was accompanied by a demonstration of the data registry application now being used to develop and extend S-57 and S-100 (more details at: www.iho.int-Committees-TSMAD).

Three new Working Groups (WG) were established. The Data Quality Working Group was reestablished to consider, among other things, how ISO Quality standards and specifications should be applied to hydrographic data. A Marine Spatial Data Infrastructures WG will prepare a report identifying the level and nature of the IHO's role in assisting Member States in their support of national spatial data infrastructures. A Hydrography and Cartography in Inland Waters WG will prepare a report on the level and nature of IHO involvement in the hydrography and cartography of inland waters.

The Committee was briefed on various measures now in hand to ensure better consistency in ENCs produced by adjacent States and in particular endorsed the conclusions made by the recent Extraordinary WEND meeting encouraging compliance with the IHO guidelines, especially the use of SCAMIN and the observation that RENCs and RHCs have a vital role in ensuring consistency of ENCs. The Committee endorsed a revised version of "Recommendations for Consistent ENC Encoding" and agreed that it should be included as an Annex to S-65 – ENC Production Guidance. A revised version of S63 – IHO Data Protection Scheme was endorsed and will now be recommended to IHO Member States for formal approval.

Full details of the meeting and outcomes will be included in the minutes of the meeting which will be published no later than early December.

An ECDIS Stakeholders' Forum (ESF) was convened on 7-8 November 2007. The ESF was chaired by Captain Robert WARD, Director IHB and was attended by over 40 representatives from a range of stakeholder groups including equipment manufacturers, data distributors, shipping managers and GIS software developers.

The work being undertaken by the CHRIS WGs, particularly in relation to the current ECDIS specifications S-57 and S-52 and its impact on existing systems was presented. The meeting also considered the future S-100 hydrographic geospatial data standard and the development of the S-101 ENC product specification. Stakeholders were invited to actively participate in the further development of these standards. As a result, it was decided to convene an S-101 User Requirements Workshop in March 2008 at the IHB in Monaco which will be attended by a number of Expert Contributors drawn from the stakeholders attending the ESF.

CHRIS CHAIRMANSHIP

The CHRIS Chairman Captain WARD (Australia) announced his retirement from the RAN in July 2007 and therefore the necessity for him to step down as Chairman. Member States were requested by C.L. to find his replacement and Captain NAIL (UK) was elected.

The CHRIS Vice-Chairman elected by the Committee was Mr. JONAS (BSH, Germany)

Ref: CL 36, 61, 81

ESTABLISHMENT OF WORKING GROUPS ON HYDROGRAPHY AND CARTOGRAPHY OF INLAND WATERS AND ON HYDROGRAPHIC COMMUNITY INPUTS TO NATIONAL SPATIAL DATA INFRASTRUCTURES

Decisions 19 and 22 of the XVIIth International Hydrographic Conference (IHC) requested the Committee on Hydrographic Requirements for Information Systems (CHRIS) to establish working groups on *Hydrography and Cartography of Inland Waters* and on *Hydrographic Community Inputs to National Spatial Data Infrastructures* and to set their Terms of Reference and Rules of Procedure (TOR/ROP).

Member States were requested to provide nominations for both Working Groups and they were formed under the Chairmanship respectively of Capt. CAVALHEIRO (Brazil) and Mr. PEPPER (UKHO)

Ref: CL 62, 112

4th MEETING OF THE CHART STANDARDIZATION AND PAPER CHART WORKING GROUP (CSPCWG)

IHB, Monaco, 13-15 November 2007

Chairperson: Mr. JONES (UK)

Vice-Chairperson:Mr. MAKINEN (Finland)Secretary:Mr. COLEMAN (UK)

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, Ukraine, United Kingdom, USA (NGA & NOS).

The IHO/CHRIS Chart Standardization and Paper Chart Working Group (CSPCWG) held its 4th meeting at the IHB, Monaco, on 13-15 November 2007. The meeting was attended by the Chairman, Mr. JONES (UK), the Secretary, Mr. HEATH-COLEMAN (UK), a representative from the IHB (Ing. en chef HUET) and the HOs of Australia, Canada, Denmark, France, Germany, Indonesia, Italy,

Norway, Spain and USA. The CSPCWG provides a core of expertise on the basic concepts of nautical charting and is tasked to address all paper charting issues.

CHRIS-19 decision that IHO publication S-49 "Recommendations concerning Mariners' Routeing Guides" should be reviewed by CSPCWG was acknowledged and this item was added to the CSPCWG work plan. The meeting undertook a review of various technical charting issues, including the depiction of sea boundaries and offshore renewable energy installations, as well as the development of an IHO paper chart symbol library and a new section B-600 of publication M-4 on the maintenance of paper charts. The meeting reviewed a report of the INT 1 sub-group and discussed issues such as definition for foul grounds, the adoption of Environmentally Sensitive Sea Areas (ESSA) as general heading for environment-related symbols, the transfer from INT 1 to M-4 of the list of international abbreviations, and the inclusion in INT 1 of a combined INT 1 / ENC symbols document.

The meeting took note of the resignation of Mr. MAKKINEN (Finland) as Vice Chair of CSPCWG and elected Mr. ROBERTS (Australia) as new Vice Chair. The following new name for the WG was agreed: Chart Specifications Working Group (CSWG); it will be submitted to the CHRIS committee at its next meeting. The 5th CSPCWG meeting has been planned in Australia on 18-21 November 2008.

14th TSMAD MEETING

Taunton, UK, 4–8 June 2007

AND THE 2nd COMBINED TSMAD/CSMWG MEETING

Stavanger, Norway, 11 June 2007

Chairman:Mr. GREENSLADE (UK)Deputy Chairman:Mr. VACHON (Canada)Secretary:Mr. PHARAOH (IHB)

Members: 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.



The UKHO hosted the 14th TSMAD meeting between the 4th and 8th of June 2007. Rear Admiral MONCRIEFF welcomed members Taunton and noted that there was significant interest in the S-100 standard highlighted the need for data producers to rise to the of challenge providing products and services that satisfy the demands of the maritime community.

The meeting was attended by members from the following IHO Member States: Australia Denmark, Finland, France, Germany, New Zealand, South Africa, Norway, Sweden, USA and the United Kingdom. Members from the following organizations also participated in the meeting; University of New Hampshire, ESRI, IC-ENC, IIC (Canada) CARIS (Canada), C-MAP/Jeppesen, SevenCs, and ECC Norway. The IHB was represented by Mr. PHARAOH.

Some of the important S-100 issues that were discussed during the meeting included the Feature Catalogue, Coordinate Reference Systems and Information Objects. A collateral group was also convened to complete work on S-57 encoding bulletins. Following the Taunton meeting a combined TSMAD/CSMWG meeting was held in Stavanger Norway, to discuss portrayal issues.

TSMAD SUB-WORKING GROUP MEETING ON THE S-100

3rd TSMAD S-100 Focus Group Meeting

Ottawa, Canada, 23-27 April 2007

The IHO CHRIS Transfer Standard Maintenance and Application Development (TSMAD) Working Group held its 3rd Focus Working Group on the development of the S-100 standard, at the Canadian Hydrographic Service (CHS) in Ottawa, Canada. The meeting was attended by domain experts from both hydrographic organizations and industry stakeholders. These included members from the UKHO, US–NOAA, CHS, CARIS, D-Kart, ESRI, IDON, IIC, MITRE, SEVENCS, TENNET and the IHB.

Presentations were provided on the progress of development of several key components of S-100. These included feature catalogues and their relation to application schemas, metadata, spatial schemas, the impact of using different encodings such as GML and ISO 8211 and temporal requirements.

Further information on TSMAD meetings and S-100 development activities is available from the IHO web site.

4th TSMAD S-100 FOCUS GROUP MEETING

SevenCs, in Hamburg, Germany, 17 and 20 September 2007

The CHRIS/ Transfer Standard Maintenance and Application Development Working (TSMAD) Group held its 4th Focus Group meeting on S-100 development at the offices of SevenCs, in Hamburg, Germany between the 17 and 20 September 2007. The meeting comprised a small group of expert contributors from UKHO, SeaZone, SevenCs, US-NOS, Jepperson, CARIS and the IHB (Mr. Tony Pharaoh). A representative from IDON participated via conference link.

The work focused on the following S-100 component documents under development,

- The Feature Data Dictionary (FDD)
- The Feature Catalogue (Working Draft)
- Coordinate Reference System
- Application Schema Template (Working Draft) and the
- The S-100 Framework document

Discussions also included S-101 encoding and the application schema.

17th MEETING OF THE COLOURS AND SYMBOLS MAINTENANCE WORKING GROUP (CSMWG)

Stavanger, Norway, 11-13 June 2007

The IHO/CHRIS Colours and Symbols Working Group (CSMWG) had its 17th meeting in Stavanger, Norway, on 11-13 June 2007, and was hosted by the Norwegian Hydrographic Service. This included a combined TSMAD/CSMWG meeting on 11 June to discuss common issues of both WGs. The CSMWG is tasked to maintain IHO specifications for colours, symbols and display rules used to show SENC information on ECDIS in a safe and ergonomic manner, as contained in S-52 Appendix 2 and its Annex A *IHO Presentation Library for ECDIS* (PresLib). The meeting was attended by the CSMWG Chairman, Dr. Mathias Jonas (BSH, Germany) and representatives of the HOs of Australia, Finland, Norway, UK and USA, plus an IHB member and expert contributors from Jeppesen (Norway), ECC (Norway), HydroService (Norway), SevenCs (Germany), Geomod (France) and Furuno (Finland).

Items discussed at the combined meeting included IALA Wreck Emergency marking Buoys, e-Navigation, coding of linear depth areas and 'unknown' objects, S-57 object classes not symbolised in the current S-52 PresLib, S-101 (new ENC Product Specification), coding of the SCAMIN attribute in ENCs, portrayal issues raised by TSMAD members, ENC cell loading policy, setup of a portrayal register as part of the IHO S-100 registry, and portraval of Marine Information Overlays (MIOs). This combined meeting proved to be very useful and allowed clarifying and/or resolving a number of uncertainties.



17th Meeting IHO Colours and Symbols Maintenance Working Group (CSMWG) Stavanger, 11-13 June 2007

At CSMWG-17, Ms. Julia Powell (USA-NOAA) was elected to the post of Vice-Chairperson. The issues addressed by the WG included:

- ✓ Review of a draft C&S Maintenance Document (No. 5), reflecting the changes in S-57 e3.1.1, in view of its publication on the IHO website in summer 2007.
- ✓ Contribution to a new edition 1.1 of S-64 *IHO Test Data Sets for ECDIS*. Furuno (Finland) kindly offered to produce the associated plots, i.e. screen dumps off an ECDIS for display base, standard display, soundings on and off, etc.
- ✓ Preparation of a new edition 3.4 of the PresLib, taking account of the changes in S-57 e3.1.1 (C&S MD05) as well as those in the revised IMO performance standards for ECDIS (adopted in December 2006), and to be published in early 2008.
- ✓ Cooperation with DGIWG in developing a portrayal register.

7th MEETING OF THE STANDARDISATION OF NAUTICAL PUBLICATIONS WORKING GROUP (SNPWG)

BSH – Rostock, Germany, 12-16 February 2007

Chairman:Mr. GREENSLADE (Germany)Deputy Chairman:Mr. David ACLAND (UK)Secretary:Mr. John NYBERG (USA)

Members: Argentina, Belgium, Estonia, France, Germany, The Netherlands,

Spain, Venezuela, UK

Prof. Dr. EHLERS welcomed the SNPWG members to Rostock and to the BSH. He highlighted the relevance of the work and cited the EU initiative to develop an Integral European Maritime Policy. He also emphasized the need to structure nautical publications information so that it can be used within ECDIS, and wished the meeting every success with its work. The meeting was attended by members from Argentina, Belgium, Estonia, France, Germany, The Netherlands, Spain, Venezuela, UK and USA. Mr. Pharaoh represented the IHB.

Mr. VAN DER HEUL of the Netherlands Hydrographic Service provided a presentation on their new digital pilot (digiPilot) application. This product, which provides nautical publications information in various thematic and geographic layers, will also be exhibited at the XVIIth I.H. Conference chart exhibition. Further information on digiPilot is available from Mr. VAN DER HEUL (d.vd.heul@minderf.nl).

Mr. SALTER, from CherSoft Ltd., provided a presentation on active data and on how this technology has been used in the production of the UKHO's Total Tide product. Further information is available from: www.chersoft.co.uk.

SNPWG members were provided with an excursion to the Rostock-Warnemuende Maritime Simulation Centre, where they received a presentation on the activities of the centre, with particular emphasis on the use of ECDIS. Members were also provided a "hands-on" opportunity to use the simulators.

Significant progress was also made with the review of the data modelling work that had been carried out by the sub-working groups since the last SNPWG meeting. The next meeting was provisionally scheduled to take place at the IHB, Monaco, during the week commencing 10 September 2007.

8th STANDARDISATION OF NAUTICAL PUBLICATIONS WORKING GROUP (SNPWG) MEETING

IHB - Monaco, 3-7 September 2007

The Standardization of Nautical Publications Working Group (SNPWG) held its 8th meeting at the IHB in September 2007. The SNPWG is working on the establishment of a standardized data schema for the capture of nautical publications information in the form of digital data. Representatives from Denmark, Germany, France, Spain, Sweden, UK and USA were present. Mr. MELLES (Germany) presided. Captain WARD, IHB Director, welcomed participants on behalf of the IHO Directing Committee.

The main work of the week was to review the data modelling work carried out by the SNPWG sub-Working Groups since the last SNPWG meeting. There was also a brief discussion on the management of the NPUBS register in the IHO S-100 Registry.

The SNPWG is considering the use of new types of attributes that should be introduced in S-100 (the IHO Geospatial new Data Standard now under development), such as Boolean, and formatted text and is also investigating a number information objects.

Mr. ACLAND (UK) was elected as the new Chairman of the WG in succession to Mr. MELLES who is standing down after 4½ years as the Chairman. Mr NYBORG (USA) will be the Vice-Chair.



The French Hydrographic Office will host the next meeting in Brest, France and this is provisionally scheduled to take place during the week commencing 21 April 2008.

6th MEETING OF THE IHO DATA PROTECTION SCHEME WORKING GROUP (DPSWG)

IHB, Monaco, 28-30 May 2007

Chairman: Mr. SANDVIK, Norway **Vice-Chairman:** Mr. SMITH, United Kingdom

Members: Norway, UK, IC-ENC, Primar Stavanger, SevenCs, SAM Electronics,

IHB.

The 6th Meeting of the IHO Data Protection Scheme Working Group (DPSWG) took place at the IHB, Monaco, on 28-30 May 2007. In the absence of the DPSWG Chairman, Mr. SANDVIK (Norway), who had to cancel his flight at the last moment due to unforeseen circumstances, the meeting was chaired by Mr. PRITCHARD (UK). Seven S-63 experts representing IHO and Industry attended the meeting.

The main purpose of this meeting was to conduct a detailed review of a draft new Edition 1.1 of the IHO Data Protection Scheme S-63, which had been prepared at the UKHO. S-63 is now referred to in the IMO Performance Standards for ECDIS (December 2006) and appropriate tests will therefore have to be included in the new Edition 3 of the IEC Standard 61174 which is currently under preparation. As reported in IHB Circular Letter 36/2007, at its 18th Meeting (Cairns, Australia, September 2006) the CHRIS Committee agreed that the DPSWG proceed with developing e1.1 of S-63 and report at the next CHRIS Meeting (Rotterdam, Netherlands, November 2007). The new edition will be as follows:

- There has been no introduction of new features; changes have been kept to a minimum.
- Published S-63 guidelines have been included into the standard.
- S-63 has been reorganized to group issues specific to IHB as Scheme Administrator, Data Servers, and OEMs.
- There is a more precise description of correct implementation of the IHO standard.



The draft e1.1 of S-63 had been circulated to **DPSWG** members well in advance of the meeting the and feedback received, in particular from Norway (ECC) and Japan (JHOD and JHA), was considered during the review process. As a result of this review, a final draft e1.1 of S-63 will be prepared by UKHO and ECC, for circulation to and approval by DPSWG members before submission to CHRIS.

The meeting also agreed on a schedule to revise the S-63 test data sets and associated guidelines. There will be specific tests for OEMs, for Data Servers and for the Scheme Administrator (IHB). The final draft e1.1 of S-63 will be used to review the test data sets and texts in detail, to produce a final version. It is planned that the 'OEM' part of the S-63 test guidelines will be included in e3 of IEC 61174. Similarly the 'OEM' subset of the S-63 test data will be included in a next edition of Publication S-64 "IHO Test Data Sets for ECDIS", which is referred to in IEC 61174.

WEND

WEND TASK GROUP ON ENC COVERAGE

Paris, France, 30 August 2007

The IHO WEND Task Group (TG) on ENC coverage held a meeting in Paris, hosted by the French Navy Hydrographic and Oceanographic Service (SHOM). The meeting was attended by the Chairman of the TG, Mr. HECHT (Germany), Mr. CARPENTER (UK), Engineer GUILLAM (France) and Captain WARD (IHB Director-elect).

The meeting took note of the directions provided by the WEND Committee at its meeting in September 2006. It also took into consideration the outcomes of the most recent meeting of the IMO Sub-Committee on the Safety of Navigation (NAV53), held in London in July 2007, concerning mandatory carriage requirements for ECDIS. This indicates a requirement for IHO to provide a clear and comprehensive presentation of the status of adequate global ENC coverage to the next meeting of NAV, in June 2008 (NAV54).

The meeting then considered appropriate methods to assess and report on the level of adequate global ENC coverage and developed a work plan to achieve this. A brief progress report will be presented to the WEND at its Extraordinary Meeting in Monaco, in October 2007. A final report will be circulated by the TG in mid February 2008 for consideration by the WEND Committee at its ordinary meeting in Tokyo, Japan, scheduled for April 2008 and also for incorporation, as appropriate, in an IHO submission to NAV54.

EXTRAORDINARY MEETING OF THE COMMITTEE ON WORLDWIDE ENC DISTRIBUTION (WEND)

IHB, Monaco, 30 October 2007

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, Ukraine, United Kingdom, USA

(NGA & NOAA), Venezuela, IHB.

Observers: Primar-Stavanger, IC-ENC, OEF, IOC, CIRM and ICCL.

An Extraordinary Meeting of the Committee on WEND (X-WEND) met at the IHB on 30 October 2007 under the Chairmanship of Captain KAMPFER (South Africa) to examine the status of production of ENCs and the possible problems that are connected with this and to discuss and decide the actions that are required for the IHO to fulfill its commitments to achieve adequate coverage, availability, consistency and quality of ENCs by 2010, in accordance with the relevant Resolutions approved at the XVIIth International Hydrographic Conference. The meeting was attended by representatives from 31 Member States, both RENCs, a number of accredited Non-Governmental International Organizations (NGIOs), and the Directing Committee of the IHB.

Various presentations were made to the X-WEND, including estimates on the current global coverage of ENC and the reported ENC coverage forecasts for 2010. Areas where there is limited or no current ENC production plans were identified. Information related to ENC consistency and ENC pricing was provided.

The Committee was briefed on the discussions at this year's meeting of the IMO Sub-Committee on the Safety of Navigation (NAV) regarding carriage requirements for ECDIS. The WEND Committee was briefed on the arguments raised at that meeting and on the significant importance to the IHO of ensuring that it presents a comprehensive and persuasive report of the status of global ENC coverage and availability at the next meeting of NAV. A decision on mandatory carriage requirements for ECDIS will be made at the next meeting of NAV in July 2008.

The Committee then drew up a list of topics that IHO and its Member State HOs must address to ensure that the IHO can provide an appropriate report to IMO NAV at its next meeting. Principal amongst these topics was a priority to ensure adequate ENC coverage for the world's major trading routes and ports, improving the consistency of ENCs, and acknowledging that the price of ENCs is a factor in the uptake of ECDIS.

The Committee also strongly encouraged HOs to follow the IHO guidelines on consistency of ENC data, especially the use of SCAMIN and noted that RENCs and RHCs have a vital role to play in ensuring consistency of ENCs.

The Committee agreed that ENC producer nations should take account of the comments made during the meeting regarding mariners' feedback on ENC pricing when they next consider their ENC pricing and distribution policies.

The Committee also provided outline guidance to the IHB on how the IHO's position should be presented at the next meeting of NAV.

WEND MEETING OF IHO MEMBER STATES

IHB, Monaco, 31 October 2007

A meeting of IHO Member States was held at the IHB on 31 October 2007 to consider the outcomes of the Extraordinary Meeting of the Committee on WEND (X-WEND) held the previous day. The meeting was chaired by Capt. KAMPFER (South Africa) and was attended by the representatives from 31 Member States who had attended the Extraordinary Meeting of the Committee on WEND and the Directing Committee of the IHB.

The UKHO provided a detailed brief on its proposals to help increase the rate of ENC production and ENC consistency in those areas around the world where the major trading routes will otherwise not be adequately covered by ENCs in the near future. The UKHO has identified that 90% of the world's international shipping trades between 800 ports – of which 107, together with certain areas along the routes between the ports are likely to require some form of production assistance if continuous ENC coverage is to be achieved relatively quickly. The meeting agreed that the UKHO proposal has some merit and should be brought to the attention of all Member States for comments. This will be done by Circular Letter.

The meeting discussed the outcomes of the X-WEND meeting and then added more detail to those outcomes. Specific actions required prior to the next meeting of the IMO Sub-Committee on the Safety of Navigation (IMO NAV) were identified. These included that the IHO report to IMO NAV should include:

- ENC coverage progress and predictions;
- the various IHO and other plans and initiatives that are in hand for ENC coverage;
- illustrations of some example routes that are or will soon be covered by ENC;
- practical examples of the progress and improvements that have lately been made in harmonizing data;
- an explanation of ENC pricing policies including pricing trends and history;
- the increasing take-up rates for ENCs.

The meeting identified some specific actions that Member States could undertake including:

- participation in regional assistance programs;
- ensuring that their national maritime administrations were well informed on ENC and ECDIS.

The meeting agreed that the IHB should arrange an IHO information session/seminar at NAV (supported by UKHO, RENCs and others) prior to discussion in plenary. This should take a similar form to ones delivered to earlier sessions of NAV.

INTERNATIONAL CARTOGRAPHIC ASSOCIATION (ICA)

ICA 23rd INTERNATIONAL CARTOGRAPHIC CONFERENCE, GENERAL ASSEMBLY & EXHIBITION

Moscow, Russia, 4-9 August 2007

The International Cartographic Association (ICA) held its 2007 Conference (ICC'2007) at the Hotel Cosmos in Moscow, Russia, on 4-9 August. About 700 persons attended ICC'2007, many of them being key role players in the cartographic world. The IHB was represented by Ing. en chef HUET. The event included:



Stand of Australia, winner of the Chart Exhibition at ICC'2007

- An ICA General Assembly on 4 and 9 August.
- The Conference itself, where numerous scientific papers on cartography-related matters were presented throughout the week in sessions running in parallel.
- A Map Exhibition, where various maps and other cartographic products from ICA member countries were presented. An IHO Cartographic Exhibition was held as part of the Map Exhibition.
- A Commercial Exhibition.

The Assembly

At the ICA General Assembly, Prof. CARTWRIGHT, Professor at the University of Melbourne, Australia, was elected as new ICA President and Dr. FAIRBAIRN, (U.K.) was elected as new ICA Secretary General, both for a 4-year mandate. Also, Cdr. CARRASCO, (Chile), was elected as new Chairman of the ICA Commission on Marine Cartography.

The Conference

Among the numerous papers presented during the ICA Conference, the followings dealt with subjects of interest to the IHO community:

- ✓ An Initial Model of the Computation Viewpoint for a Spatial Data Infrastructure (A. COOPER, South Africa)
- ✓ SDI Design to Facilitate Spatially Enabled Society (A. RAJABIFARD, Australia)
- ✓ Progress in the Creation of an Operational Global Spatial Data Infrastructure: The Global Map Experience (F. TAYLOR, Canada)
- ✓ Infrastructure for Spatial Information In Europe (INSPIRE): From Cartography to Spatial Objects and Network Services (K. TÓTH and P. SMITS, Italy)
- ✓ ENC Production Process Design for Croatian Part of the Adriatic Sea Area (M. LAPAINE and T. DUPLANČIĆ LEDER, Croatia).

In the frame of a special session of the Conference dedicated to "The Collaboration on Matters of Mutual Interest in the Activities of National Mapping Organisations (NMOs) and the ICA", the IHB representative had the opportunity to give a presentation "Marine Spatial Data Infrastructures: an IHO perspective".

The 24th International Cartographic Conference will be held in Santiago de Chile on 15-21 November 2009 (ICC'2009). Also, the ICA Assembly selected Paris, France, as the venue for the 25th ICC in 2011.

IHO Cartographic Exhibition

The following 20 IHO Member States and the IHB participated in the IHO Cartographic Exhibition: Australia, Bangladesh, Chile, China, Ecuador, Greece, Finland, France, Italy, Japan, Korea (Rep. of), Netherlands, Norway, Pakistan, Portugal, Russia, Slovenia, Slovenia, Turkey and Ukraine. As usual, the IHO "marine" exhibition had a great success with conference delegates. A jury was set up to assess the IHO exhibition, formed of ICA "personalities" and chaired by the IHB representative, Ing. en chef M. HUET. After careful examination of all displays the jury decided, following a series of strict criteria, that the best display was that of the Australian Hydrographic Service. Number 2 was Japan and number 3 was The Netherlands. The prize will be presented to the Australian Hydrographer at a future major IHO event, such as the 4th Extraordinary International Hydrographic Conference (EIHC) in May 2009 in Monaco.

The Joint Board of Geospatial Information Societies (JB-GIS)

During ICC'2007, the JB-GIS held its yearly meeting, chaired by Prof. ENEMARK, FIG President and with participation of ICA, IHO, ISPRS (International Society of Photogrammetry and Remote Sensing), ISCGM (International Steering Committee for Global Map) and IMTA (International Map Trade Association). JB-GIS is a forum where areas of common interest are discussed, and a coordination mechanism for cooperation among member societies. JB-GIS aims at providing an authoritative contact point for all agencies interested in geospatial information. More information at www.fig.net/jbgis/. Main subjects discussed were the development of a Geospatial Information Knowledge Portal (GIKP) for National Mapping Agencies, and how to foster increased cooperation between related working groups / committees within the JB-GIS organisations. For the next two-year period, the Chairman of the Board will be Prof. DOWMAN, ISPRS President. The next meeting of JB-GIS has been planned in conjunction with the next congress of ISPRS in Beijing, China, July 2008.

ICA SPATIAL DATA STANDARDS COMMISSION

Havana, Cuba, 8-9 February 2007



The ICA Commission on Spatial Data Standards held a two-day meeting on 8-9 February 2007 on the continuation work on SDI UML Modelling. This Commission is currently working on defining conceptual models of Spatial Data Infrastructures (SDI) using the Unified Modelling Language (UML). The objective of the meeting was to review, edit and complete a model of the Computational Viewpoint [re: ISO/IEC 10746 standard "Reference Model for Open Distributed Processing (RM-ODP)"], which describes how the different services of an SDI fit together, as contained in a scientific paper to be submitted to the 23rd International Cartographic

Conference (Moscow, Russia, 4-10 August 2007). The meeting was chaired by Prof. MOELLERING (USA) and attended by representatives from Australia, Cuba, Spain and the IHB.

The Chair announced the good news that the IJGIS Journal had accepted a paper previously prepared by the Commission on the Enterprise and Information Viewpoints, which shows and confirms the scientific quality and the importance of the SDI UML modelling topic of the paper.

The meeting agreed that, in addition to standards, the Commission should explore research in the area of spatial semantics (which deal with meaning and knowledge) and anthologies (which address the structure of semantics). This will be reflected in the proposed Terms of Reference of the Commission for the period 2007-2011:

The next Commission meeting will be held in St. Petersburg, Russia, from 28 July-1 August 2007, before the 23rd ICC.

TIDES

8th TIDAL COMMITTEE MEETING (IHOTC)

Halifax, Nova Scotia, Canada – 23-26 October 2007

Chairman: Cdr. PAGE (UK)

Secretary: Lt. Cdr. SHIPMAN (IHB)

Members: Australia, Canada, Chile, China, Denmark, France, New Zealand,

Norway, UK.

Observers CHS, BMT Asia Pacific, IOC/GLOSS, IHB

The 8th meeting of the IHO Tidal Committee (IHOTC) was held in Halifax, Nova Scotia, Canada, from 23 to 26 October 2007. Representatives from Australia, Brazil, Canada, Denmark, France, Norway, Portugal, South Africa, Spain, UK and the USA attended the meeting.

The meeting opened with welcoming addresses by Mr. FORBES, Director of the Atlantic Region of the Canadian Hydrographic Service (CHS), Mr. O'REILLY, Canadian member of the IHOTC and Commander PAGE, RN, Chairman. The Chairman particularly welcomed new representatives from Brazil, France, Norway and Spain who were attending an IHOTC meeting for the first time. The first session of the meeting was devoted to the traditional IHOTC seminar and on this occasion there were presentations on Vertical Datum transformation programmes from the UK and USA.

The following matters were discussed:

- Report of and matters arising from the XVIIth IHC, held in Monaco in May 2007, including the revised committee structure and the development of revised Terms of Reference;
- Update on the list of Tidal Constituents, available from the IHO web site;
- The XML schema for the Exchange of Harmonic Constants which, at the request of the IHOTC, was being developed by a TSMAD WG;
- The development of standards for digital tide tables as authorized by the IHC;
- The presentation of Secondary Port Data in tide tables:
- A naming convention for vertical datums;
- Vertical Reference framework developments;
- Update on the IOC / GLOSS programme;
- Changes in the range of tides as opposed to the generally accepted rise in MSL;
- Capacity Building;
- Review of tidal related IHO Technical Resolutions (M-3) and their agreement with IHO Charting Specifications (M-4);
- Progress on the translation, French to English, of the Manual on Tides written by the former IHOTC member from France, Mr. SIMON.

The Chairman reported that this would be his final meeting as he would be retiring from the UKHO on 1 June 2008. The Committee elected Mr Gill of the USA (NOAA) as its Chairman for the period 2008 - 2012.

It was agreed that, pending formal agreement from Brazil, the 9th meeting should take place at the Brazilian Hydrographic Office in Niteroi, Brazil, in April 2009.

The meeting concluded with a workshop and visit to the Bedford Institute of Oceanography, home of the Atlantic Region of the CHS.

GEBCO PROJECT

24th GEBCO GUIDING COMMITTEE (GGC) MEETING

IOC Offices, Paris, France, 7-8 November 2007

Chairman: Mr. MONAHAN (Canada) (IHO)
Permanent Secretary: Prof. WHITMARSH (UK) (IOC)

Members: 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 24th meeting of the GGC was held at the offices of the Intergovernmental Oceanographic Commission (IOC), in Paris, from 7 to 8 November 2007. All members of the GGC and Mr. WHITMARSH (Permanent Secretary) were present. Also present were the following observers: Mr. ANDERSON, Mr. TANI, Mr. BROWN, Capt. TRAVIN (IOC), Capt. GORZIGLIA and Lt. Cdr. SHIPMAN (IHB).

The GGC considered reports submitted by its two sub-committees, the Sub-Committee on Digital Bathymetry (SCDB) and Sub-Committee on Undersea Feature Names (SCUFN). Dr. FALCONER, Vice Chairman, reported on the status of the Nippon Foundation/GEBCO Training Project and noted that the Nippon Foundation had indicated that they would be considering providing funding for a 5th year of training (IHB CL 116/07 refers). He reported that by late 2008 the project will have trained 24 students from 16 countries.

The GGC considered the request from the IHB for it to review those IHO Technical Resolutions relevant to Ocean Mapping and agreed to provide a revised text by the end of 2007 for the IHB to circulate to Member States for approval.

The GGC reviewed the Terms of Reference and Rules of Procedure for itself and the two sub-committees as requested by the XVIIth IHC. The GGC agreed on most of the amendments needed to ensure the consistency requested by the IHC and informed the IHB and IOC representatives that a final text for circulation to IHO Member States and consideration by the IOC Executive Council would be forwarded to the IHB shortly. The final text has since been circulated to IHO MS with IHB CL 111/07.

Other issues discussed were: Outreach; GEBCO finances and publications and regional mapping projects.

The next meeting of the GGC is planned in May 2008 in Japan and the following in Brest, France in September 2009. The full meeting report will be available on the GEBCO web site www.gebco.net.

20th MEETING OF THE SUB-COMMITTEE ON UNDERSEA FEATURE NAMES (SCUFN)

IHB, Monaco, 9-12 July 2007

Chairperson: Dr. SCHENKE (Germany)

Members: Argentina, India, Japan, Korea (Rep. of), Mexico, Russia, USA.

Secretary: IHB.

The 20th meeting of the GEBCO-SCUFN was held on 9-12 July 2007 at the IHB under the Chairmanship of Dr. SCHENKE, AWI (Alfred Wegener Institute for Polar and Marine Research, Germany). In his opening remarks, Dr. SCHENKE expressed concern about the lack of funds to cover travel and per diem for participation of IOC members in SCUFN meetings. He expected many new proposals during the International Polar Year (IPY). Out of the 12 SCUFN members, 10 were in attendance, from Argentina, India, Korea (Rep. of), Japan, Mexico, Russia and USA; plus the Secretary from IHB. In addition, there were 11 observers / invited guests from Brazil, Japan, Republic of Korea, Russia, and IHB.

The Sub-Committee reviewed the SCUFN Terms of Reference and Rules of Procedures, in light of the comments resulting from the XVIIth IH Conference in May 2007. After lengthy discussion, a final text was agreed for submission to the GEBCO Guiding Committee.

English/Russian and English/Japanese versions of IHO-IOC Publication B-6 *Standardization of Undersea Feature Names* (3rd edition, 2001) were approved by the Sub-Committee. They had been prepared by the Geological Institute of the Russian Academy of Sciences and the Japan Committee of Undersea Feature Names, respectively. A working group was set up to examine the terminology section of B-6, which includes generic terms and definitions, and the current GEBCO policy of only considering geomorphological expression of features in the naming process. It will report to the next meeting.

The essential part of the meeting consisted in reviewing all actions pending from the previous meeting, followed with the examination of 54 new name proposals, mainly originating from Russia, Japan and Republic of Korea. In the end, 35 new names were accepted for inclusion in the GEBCO Gazetteer. Most of these features are located in the North Pacific, North Atlantic and Southern Oceans.

A report was provided on BODC-NGDC collaboration to reformat the GEBCO Gazetteer into a geospatially enabled data base, which will include:

- ✓ Enhanced display and search options in various products, e.g. GDA, GIS systems, Webbased interactive maps, and KML files (Google Earth).
- ✓ Enhanced data base management capability.

The Sub-Committee agreed that this would make the Gazetteer more accessible to the public and give the work of SCUFN valuable international exposure.

The next meeting will be held on the week of 19 May 2008 in Jeju Island, Republic of Korea.

23rd MEETING OF THE GEBCO SUB-COMMITTEE ON DIGITAL BATHYMETRY (SCDB)

New York, USA, 11-13 September 2007

The 23rd GEBCO SCDB meeting took place at the Lamont-Doherty Geological Observatory of Columbia University - Palisades, New York, USA between the 11th and 13th of September 2007. The IHB was represented by Mr. PHARAOH.

During the meeting reports were provided on; new developments to the IHO Data Centre for Digital Bathymetry (Chris FOX), updates to the GEBCO Digital Atlas, the status of shallow water bathymetry collection, other new sources of data, liaisons with IBCs, other regional data centers, and GEBCO's Sub Committee on Under Sea feature Names (SCUFN).



A Bathymetric Science Day was held on Wednesday 12 September during which a number of presentations were provided. These included; "Two Hundred Years of the US Survey of the Coast" (Skip Theberge), "Lamont in the History of Global Ocean Mapping", (John Diebold), "A hovercraft for geophysical investigations in the inaccessible high Arctic" (John K Hall), "An overview on the MGDS, automatic data exchange with NGDC and experiences with web services" (Suzanne Carbotte), "An introduction to the Global Multi-Resolution Topography synthesis - approach and lessons learned" (Bill Ryan), "A sea bottom landslide identified at a foot of a volcano" (Shin Tani) "Indonesian Tsunameter", (Djoko Hartoyo) "The IBCSO data compilation Southern Ocean GIS (SOGIS) (Norbert Ott), "GeoMapApp - a web service enabled tool for visualization and analysis of multi-disciplinary marine geoscience data", (Andrew Goodwille), "Experiences using Google Earth to serve marine geoscience data" (Vicki Ferrin).

Some of the poster presentations included the following titles; "Improving the GEBCO One Minute Grid in shallow water areas" (Pauline WEATHERALL and Tony PHARAOH), "Assembly and editing of global sounding data" (Breanna BINDER), "Identification and editing of incorrect soundings in v9.1 Global, Predicted Depth (Seung-Hee KIM), Global Estimated Depth v9.1-draft (Walter SMITH).

GEBCO NEW TERMS OF REFERENCE AND RULES OF PROCEDURES

In accordance with the decision made at the last International Hydrographic Conference, the IHB requested the GEBCO Guiding Committee Chairman to review the text of the new Terms of Reference and Rules of Procedures for the GEBCO Guiding Committee and its two Sub-Committees; the Sub-Committee on Undersea Features Names (SCUFN) and the Technical Sub-Committee on Ocean Mapping (TSCOM). These were submitted as part of the report of GEBCO to the Conference.

The GEBCO Guiding Committee established a drafting group to review and harmonize, as much as possible, the text based on the comments provided by Member States at the Conference.

The final text was received by the IHB and circulated to Member States for comments with Circular Letter 111 dated 5 December.

Ref: CL 111

COMMISSION OF PROMULGATION OF RADIO NAVIGATIONAL WARNINGS

9th MEETING OF THE IHO COMMISSION ON THE PROMULGATION OF RADIO NAVIGATIONAL WARNINGS (CPRNW)

IHB, Monaco, 11-14 September 2007

Chairman: Mr. DOHERTY (USA)

Members: Argentina, Australia, Brazil, Chile, Croatia, Ecuador, Egypt, France,

Germany, Greece, India, Iran, Italy, Japan, Monaco, New Zealand,

South Africa, Russia, Spain, Sweden, UK.

Ex-Officio members: WMO, IMO, IMSO.

The 9th meeting of the IHO Commission on the Promulgation of Radio Navigational Warnings (CPRNW9) was held at the IHB, Monaco, from 11 – 14 September 2007 and was attended by 17 representatives from 13 Member States, including 9 NAVAREA Co-ordinators, 2 of the 3 new proposed NAVAREAS for the Arctic. Observers from IMO, IMSO and the WMO also attended. The Chairman Mr. DOHERTY from the USA was re-elected as Chairman for the period 2008 – 2012.

The principal topics discussed were: the review of WWNWS documentation; expansion of the WWNWS into the Arctic; reports from the NAVAREA Co-ordinators; alternative means of MSI distribution; MSI Capacity Building training courses; and the reorganisation of the IHO committee structure.

WORKING GROUP ON S-44

3rd MEETING OF THE S-44 WORKING GROUP

Helsinki, Finland, 18-21 September 2007

Chairman: Mr. HOWLETT (UK)
Vice Chairman: Mr. HARE (Canada)
Secretary: Lt. Cdr. SHIPMAN (IHB)

The WG established to prepare a draft 5th Edition of the IHO Standards for Hydrographic Surveys (S-44) held its 3rd meeting in Helsinki from 18 – 21 September 2007 at the invitation of the Finnish Maritime Administration.

The meeting was attended by 14 representatives from 9 Member States and the IHB. The meeting reviewed the full text of the draft 5th Edition and, other than some editorial amendments, achieved its objective of finalizing the draft text of the 5th Edition which will be circulated to IHO Member States for adoption.

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION (ISO)

25th ISO/TECHNICAL COMMITTEE 211 WORKING GROUP AND PLENARY MEETINGS

Xi'an, China, 29 October-2 November 2007

The ISO Technical Committee 211 on Geographic Information/Geomatics held its 25th Plenary and Working Group Meetings in Xian, China, from 29 October to 2 November. Mr. GREENSLADE (UK) and Mr. Pharaoh (IHB) attended relevant working group and plenary meetings. In addition to the IHO, many other international and national standards development organizations participated in these meetings and the TC211 standards and technical specifications are being widely used for the development of geospatial standards.

Some of the resolutions passed during the plenary meeting included:

- The establishment of a new Working Group (10) for Ubiquitous Geographic Information Ubiquitous Public Access.
- The establishment of a control body for the register of geodetic codes and parameters.
- The establishment of new projects for Dynamic Position Identification Schemes; revision of Quality Principles; Location Based Services and the revision of the conceptual schema language.

During a "Standards in Action" workshop, presentations on the following subjects were made:

- Geomatics Standardization in China.
- Geo-spatial Data Sharing and Interoperability Standards and Application in China.
- Metadata Standardization Activities in China.
- Metadata Activities with the Permanent Committee on GIS Infrastructure for Asia and the Pacific.
- The Canadian Geospatial Data Infrastructure/GeoBase Interoperability Project.
- Ucode: An Efficient Tag-based Location Identification System for Ubiquitous Geographic Information.
- Building a Profile of TC211 Standards for the National System for Geospatial-Intelligence.

ADVISORY BOARD ON LAW OF THE SEA

14th ABLOS BUSINESS MEETING

Dubrovnik, Croatia, 30-31 October 2007

The 14th ABLOS Business Meeting was held in Dubrovnik, Croatia on 30-31 October 2007. The IHO members from Croatia, Japan and the UK and the Swedish representative from the International Association of Geodesy (IAG) attended. Apologies were received from the IHO member from Pakistan and the IAG member from Australia. Observers from Brazil, Croatia, Japan and the UK were also present. The IHB was represented by Lt. Cdr. SHIPMAN. Mr. MACNAB, former IOC member from Canada, also attended the meeting, at the invitation of ABLOS, as he had offered to assist in organizing the 5th ABLOS Conference in 2008.

ABLOS expressed concern that IAG had still not informed the Board of the names of the new IAG representatives but expressed its gratitude to the delegate from Sweden for attending, thereby allowing the Board to take its business forward. IAG would be consulted urgently on this matter. At its 13th Business Meeting in 2006, there being no IAG candidate for the position of Vice Chairman, ABLOS had appointed Dr. GRŽETIĆ of Croatia as the acting Vice Chairman. There still being no IAG candidate ABLOS agreed that Dr. GRŽETIĆ should be confirmed as the Vice Chairman. The Board hoped to return to the normal position of having the Chairman and Vice Chairman from different

parent organizations when Dr. GRŽETIĆ took over as Chairman from Mr. Shin TANI, at the conclusion of the 5th ABLOS Conference in 2008.

The principal matter discussed at the meeting was the 5th ABLOS Conference. It was agreed that this should be held at the IHB, in Monaco, on 16 and 17 October 2008 with the 15th Business meeting, also at the IHB, being held on 14 and 15 October. The title of the Conference will be "Difficulties in Implementing the Provisions of UNCLOS". An Organizing Committee was established and a timescale for the activities to bring the Conference to fruition agreed. The details of the Conference will be shortly given a wide distribution.

The meeting also considered: the maintenance of the TALOS Manual, IHO publication S-51; reports from members who had attended conferences of relevance to ABLOS; and received presentations from Brazil, Canada and Japan on new developments relating to the Commission on the Limits of the Continental Shelf (CLCS).

2. TRAINING

FIG/IHO/ICA INTERNATIONAL ADVISORY BOARD ON STANDARDS OF COMPETENCE FOR HYDROGRAPHERS AND NAUTICAL CARTOGRAPHERS

30th MEETING OF THE FIG/IHO/ICA INTERNATIONAL ADVISORY BOARD ON STANDARDS OF COMPETENCE FOR HYDROGRAPHIC SURVEYORS AND NAUTICAL CARTOGRAPHERS

Hamburg, Germany, 25 to 29 June 2007

Chairperson:Capt. ARMSTRONG (USA)Vice-Chairperson:Mr. JOHNSTON (UK)SecretaryCapt. BERMEJO (IHB)

Members: Mr. FURNESS (Australia), Dr. WELLS (Canada), Ms. TUURNALA

(Finland), Prof. Dr. EGGE (Germany), Dr. TSOULOS (Greece), Cdre. BRAHMA (India), Dr. SURACE (Italy), Dr. RAZALI

(Malaysia)

The 30th meeting of the FIG/IHO/ICA Advisory Board was hosted by the Bundesamt für Seeschiffahrt und Hydrographie (BSH) and the HafenCity Universitaet, Hamburg, Germany, from 25 to 29 June 2007.

The IAB considered the following main topics:

- Cancelling the recognition of the courses in Hydrography organized by IMA, due to the closure of this institution.
- New edition of the IHO publication M-6 as a data base.
- Impact of the reduction in years for re-recognition of courses from 10 to 6 years
- Development of the text of the document "Guidelines for submission of courses"
- Study of financial support to the IAB
- Review. The following were awarded recognition:
 - 1. <u>Category B Ocean Sciences curriculum of the Japanese Coast Guard -</u> at Category B with Option 1.

- 2. <u>Course of Hydrography for Naval Petty Officers of the Spanish Hydrographic Institute</u> Awarded re-recognition at Category B with Options 1 and 6.
- 3. <u>Course in Hydrography HYDRO I of the Unversiti Teknologi (Malaysia) at Category B with Options 2 and 7.</u>
- 4. <u>Programme in Hydrography of Maritien Instituut Willem Barentsz, Amsterdam.</u> Recognition of Options 1, 3 and 5.upon reception of further documentation
- Individual recognition.

Mr. Gordon JOHNSTON (FIG) was elected Chairman for the next 3-year period. The Board decided to nominate two Vice-Chairmen representing the two other parent organizations and the elected were Dr. TSOULOS (ICA) and Dr. SURACE (IHO).

Confirmation was given by Mr. FURNESS to the previous schedule for the 2008 meeting in Wollongong (Australia). The dates for the meeting were fixed from 7 to 11 April 2008.

INTERNATIONAL COURSES

10th HYDROGRAPHIC COURSE AT THE NATIONAL HYDROGRAPHIC SCHOOL, GOA, INDIA

The 10th Hydrographic Course for personnel from Indian Ocean Littoral States commenced on 8 October 2007 and the theoretical part (including field practice) will end on 10 May 2008 after a practical training phase onboard an Indian Naval Hydrographic Ship.

Students from developing countries of the Indian Ocean littoral region were considered for financing by the Ministry of External Affairs, Government of India. The support provided by the Government of India covered accommodation, medical expenses, internal travel and a reasonable living allowance to cater for food and small out-of-pocket expenses. Free air travel to and from the respective countries was also be considered in a few cases as per Government of India policy.

The 11th Hydrographic Course will run from 23 June 2008 to 24 January 2009.

3. MISCELLANEOUS

GEOMATICA 2007

Havana, Cuba, 12-17 February 2007

IHO WORKSHOP ON

MARINE / HYDROGRAPHIC SPATIAL DATA INFRASTRUCTURES

12 February 2007

The 5th International Congress GEOMATICA 2007) was held in Havana, Cuba from 12 to 17 February 2007, under the general theme "Geomatics for the development", with the IHO as cosponsoring international organization. In conjunction with GEOMATICA 2007, the IHB also held an IHO Workshop on Marine / Hydrographic Spatial Data Infrastructures (MSDI) on 12 February, jointly with the Cuban National Office of Hydrography and Geodesy, as a follow-up to the IHO Seminar on "The Role of Hydrographic Services with Regard to Geospatial Data and Planning Infrastructure" which was held in Rostock, Germany, on 8-9 November 2005. The Workshop, chaired by Mr. Horst HECHT, BSH, Germany, addressed all marine-related aspects of Spatial Data Infrastructures, with

focus on America's concerns. Approximately 40 persons attended, with Spanish-English interpretation provided. VAdm MARATOS, President of the IHB Directing Committee, and Col. Alun ORTIZ, Hydrographer of Cuba, welcomed attendees and provided opening remarks. The Chair then explained the purpose, aim and expectations of the Workshop.

Open discussions were held during the workshop as well as a 60-minute round-table discussion on 13 February, as part of Geomatica 2007, and the following recommendations were agreed:

- 1. IHB to communicate with IOC to cooperate on the development of the spatial data standard S-100, with a view to facilitate marine/hydrographic data exchange.
- 2. IHB to advertise and promulgate S-100 to the wider spatial data user community, including land mapping organizations.
- 3. The Workshop supported reinforcing the need for IHO to move forward on developing a strategy for designing and implementing Marine SDI, including an assessment of associated benefits to society.
- 4. IHO Regional Hydrographic Commissions to have "Progress on Marine SDI Development and Land-Sea Data Integration" as a standing agenda item of their meetings.
- 5. IHB to establish a special page dedicated to Marine SDI developments, including the outcomes of regional workshops on the matter, on the IHO website.

VAdm. MARATOS, also gave a speech at the opening ceremony of GEOMATICA 2007 on 13 February, followed by a presentation: "The IHO Supporting Maritime Demands". Throughout the congress, presentations were given on geomatics-related subjects at parallel sessions. Of particular note and interest to the IHO community were the following:



- "Worldwide Challenges of Spatial Data Infrastructures", J. RATIA (Finland), President, Global Spatial Data Infrastructure Association GSDI.
- "Spatial Semantic Web", S. LEVACHKINE (Mexico), CIC, National Polytechnic Institute of Mexico.
- "Re-engineering SDI to Support Sustainable Development", A. RAJABIFARD (Australia), Centre for Spatial Data Infrastructures and Land Administration.
- "Spatial Data Infrastructures in Latin America and the Caribbean", T. Delgado FERNÁNDEZ (Cuba) and J. CROMPVOETS (Netherlands).

The next GEOMATICA event will take place from 9 to 13 February 2009, again in Havana.

The IHB is grateful to the Cuban Hydrographic Office and Geocuba for their support in preparing the IHO Marine SDI Workshop, as well as to all those who contributed as speakers to the Workshop.

WORK PROGRAMME 4 INFORMATION MANAGEMENT AND PUBLIC RELATIONS

IHO PUBLICATIONS

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

Member States agreed to discontinue the production of an annual CD-ROM, in view of the full availability of publications for downloading from the Web site. (See CLs 56 & 68/2006).

Non-Member States, organizations, institutions and individuals can acquire IHO publications either by subscribing to the WEB site, or by purchasing directly from the IHB.

Publications produced in 2007

M3 - IHO Resolutions

New Technical Resolutions

A1.21 "Principles and Procedures for Making changes to IHO Technical Standards and Specifications" and

A3.13 "ENC Distribution and Use of the Term ENC" were submitted to Member States and approved. They entered into force in November and December respectively.

Ref: CL 106, 114

At its 8th meeting in Halifax, Canada from 23 – 25 October the IHO Tidal Committee reviewed the following Technical Resolutions (TRs) which relate to Tidal Matters: A2.5, A2.8 and A2.9; A6.1 to A6.9; G1.1 to G3.3; and K1.7. The Tidal Committee also proposed introducing a new TR A2.16 and amending TRs A2.5, A2.9, A6.4 and K1.7.

Ref: CL 98

The Capacity Building Committee (CBC) reviewed the following Technical and Administrative Resolutions (M-3): K4.1 to K4.3; and R6.1 to R6.4. The CBC proposed revised texts for Resolutions K4.2 and K4.3 and a minor amendment to Resolution R6.2.

Ref: CL 100

The Committee on Hydrographic Requirements for Information Systems (CHRIS) started reviewing the following Technical and Administrative Resolutions (M-3):

A1.1 to A1.20;	B1.2; B1.10;	C1.1 to C1.4;	E1.1;	F1.1 to F1.7;	H1.1;
A2.1 to A2.15;	B1.14 to B1.17;	C1.6; C1.8;	E2.1 to E2.4;	F2.1 to F2.6;	H1.2;
A3.1 to A3.11;	B2.18; B2.23;	C1.9;	E3.1; E3.2;	F3.1 to F3.15;	H2.1;
A4.1; A4.2;	B2.27; B2.28;	C2.1 to C2.8;		F4.1 to F4.5;	Н3.1;
A5.4;	B2.32; B2.35;	C3.3 to C3.14;			H4.1
A7.1 to A7.6	B5.4 to B5.6;	C3.16 to C3,21;			

This review is to be completed in 2008 before the 21st CHRIS meeting in November 2008.

Ref: CL 122

M-4 – IHO Chart Specifications

a) The French Hydrographic Office (SHOM) published, on behalf of the IHO, edition N° 4 (2006) of the official French language version of INT 1 "Symbols, Abbreviations and Terms used on Charts". A copy was distributed by the IHB to Member States receiving French Circular Letters. The Spanish Hydrographic Office (IHM) published, on behalf of the IHO, edition N° 4 (2007) of the official Spanish language version of INT 1 "Symbols, Abbreviations and Terms used on Charts". A copy was distributed by the IHB to Member States receiving Spanish Circular Letters. The Netherlands Hydrographic Office (NLHO) published, on behalf of the IHO, edition No. 4 (2007) of INT 2 "Borders, Graduations, Grids and Linear Scales", as a trilingual publication: English, French and Spanish.

C.L. 3, 49, 3 (2008)

b) The Chart Standardization and Paper Chart Working Group (CSPCWG) continued the review of Part B of M-4. After Sections B-100, B-200 and B-400 to B-429, the WG completed Sections B-430 to B-439 as well as other amendments to B-488 and B-481.5. The resulting version 3.004 was posted on the IHO Web site in July. In addition, changes to B-416 "Wrecks in changeable areas", B-241.2(1) "Chart seals on co-produced charts" and B-140 "Colour printing" were proposed and adopted, as well as a new specification B-510.4 "Language on charts".

Work continued on B-440 to B-449 and the remaining sections of B-400 will follow. French and Spanish versions of the revised sections of M-4 are being prepared by SHOM and IHM, respectively.

Ref: CL 8, 51, 58, 82, 107

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. It is posted from time to time on the IHO website. 103 new INT charts were published in 2007, of which 42 in Region 'G'. The status of INT chart series at the end of 2007, as reflected in M-11, was:

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	7	5
C1 (SW Atl. Ocean)	Brazil	SWAtHC	62	18	5
C2 (SE Pac. Ocean)	Chile	SEPHC	44	6	2
D (North Sea)	United Kingdom	NSHC & NHC	206	199	167
E (Baltic Sea)	Denmark	BSICC/BSHC	225	164	54
F (Med. & Black Seas)	France	MEDINCHART/MBSHC	223	157	93
G (East Atl. Ocean)	France	CHATINTCHART/EAtHC	171	137	71
H (SE Atl. & SW Ind. Oceans)	South Africa	SAIHC	107	64	45
I (NW Ind. Ocean)	Iran	RSAHC	108	45	7
J (North Ind. Ocean)	India	NIOHC	138	76	5
K (E. Asia & NW Pac. Ocean)	Japan	EAHC	291	79	17
L (SE Ind. & SW Pac. Oceans)	Australia	SWPHC	62	54	33
M (Southern Ocean)	IHB	НСА	99	60	10
TOTAL		_	1820	1105	550

(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 was prepared by the Tunisian Hydrographic Office (Service Hydrographique et Océanographique – SHO) and posted on the IHO website (IHO Member States only). Based on this draft, an improved version of M-13 in French is being prepared by the Canadian Hydrographic Service (CHS).

M-16 – National Hydrographic Regulations

With a view to preparing a new publication M-16, the IHB requested IHO Member States to provide copies of national regulations that may be used as a reference in establishing a National Hydrographic Office and/or a National Hydrographic Committee or similar body. The compilation of these various administrative regulations has been identified by the CBC as an important source of information to assist those countries which are in the process of developing their own legislation with regard to hydrography, nautical cartography, safety to navigation and other related activities.

The publication was ready in December and posted on the IHO Web site for comment by Member States.

Ref: CL 41, 60

P-5 – IHO Yearbook

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

P-6 – Proceedings of the XVIIth I.H. Conference

The Proceedings in English and French were distributed on CD-ROM to Member States.

P-7 – Annual Report

The IHO Annual Report 2006 was produced by the IHB and distributed in printed format.

S-23 - Limits of Oceans and Seas

The XVIIth International Hydrographic Conference discussed potential ways ahead that could result in the publication of the fourth edition of IHO Special Publication 23, "Limits of Oceans and Seas" in the near term.

The main obstacle to publication centres around the names associated with the sea area between Japan, Republic of Korea and Democratic People's Republic of Korea. This has been reported in the Proceedings of the Conference. The IHB Directing Committee is currently awaiting advice from the States involved.

Ref: CL 86

S-32 Appendix 1 - Glossary of ECDIS Related Terms

This updated text has replaced the former S-52 Appendix 3. English and Spanish texts are available and a French text will be made available in due course.

Ref: CL 65, 87

S-52 Appendix 2 (Annex A) - Presentation Library

A new version of the IHO symbol library (Addendum to the Presentation Library) was published on the IHO Web site in August. Colours and Symbols Maintenance Documents Nos. 5 and 6 were published in July and December to reflect the changes made to the IMO Performance Standards for ECDIS and those associated with the publication of S-57 edition 3.1.1. This will result in a new edition 3.4 of the Presentation Library, to be published in early 2008.

Ref: CL 122

S-52 Appendix 3

Following the joint work of the Committee on Hydrographic Requirements for Information Systems (CHRIS) and the Committee on the Hydrographic Dictionary (CHD), a Glossary of ECDIS Related terms was prepared as Appendix 1 to the IHO S-32 "Hydrographic Dictionary" in replacement of the former Appendix 3 to the IHO publication S-52. The Appendix was made available from the IHO website. French and Spanish Glossaries will be placed on the website once the translation has been completed. The terms will also be included in the online version of S-32 once the French and Spanish definitions are available. S-52 Appendix 3 was removed from the IHO catalogue of publications.

Ref: CL 65, 87

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

The digital database is regularly updated as more information becomes available.

The database now covers 90% of coastal States and other sea areas, and, despite some difficulties with the web-site server which should soon be resolved, the on-line updating process is established.

S-58 - Recommended ENC Validation Checks

Edition 3 of IHO Publication S-58 "Recommended ENC Validation Checks" was completed by the Transfer Standard Maintenance and Application Development (TSMAD) Working Group and made available on the IHO website. This Edition was published in response to the new release of IHO S-57 Supplement No1 (Edition 3.1.1) in order to accommodate the new object classes and attributes contained therein.

Edition 3 also contains a number of editorial changes and additional checks that have been agreed by the TSMAD Working Group. New editions of this publication are only issued as required in order to reflect changes requested by IHO Member States and interested stakeholders.

S-57 Supplement No 1 (Edition 3.1.1) - Enhancements Required to Encode S-57 Edition 3.1.1 ENC Data

In January 2007 the IHB published S-57 Supplement No 1 to make provision for new features such as Archipelagic Sea Lanes and Environmentally Sensitive Sea Areas to be encoded in ENCs. A "generic feature" was also included in the Supplement to cater for anticipated future extensions, however its use is prohibited unless sanctioned by the relevant technical committees of the IHO.

The use of this Supplement is only required if there is a need to produce ENC data containing the new objects.

Ref: CL 121

S-62 - ENC Producer Codes

A new Edition 2.4 of IHO Publication S-62 was published by the IHB in November and posted on the IHO website, to take account of new IHO Member States, i.e. Ireland, Qatar, Romania and Saudi Arabia.

Ref: CL 105

S-63 - IHO Data Protection Scheme

A draft new edition 1.1, prepared by the Data Protection Scheme Working Group (DPSWG), was endorsed by the CHRIS Committee at its 19th meeting in Rotterdam in November, then submitted to Member States for approval.

Ref: CL 113

S-65 - ENC Production Guidance

A revised version of the "*Recommendations for Consistent ENC Encoding*" was endorsed by CHRIS at its 19th Meeting, then submitted to Member States for approval for inclusion as an annex to S-65.

Ref: CL 108

REPOSITORY OF CHARTS AND NAUTICAL DOCUMENTS

During the year, 562 new charts / editions were received (667 in 2006), examined and filed in the Bureau Chartroom. This included 269 INT charts (217 in 2006). 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 delivered to the IHB. A number of ENCs were also received, as well as 147 nautical publications (189 in 2006).

Regarding the IHB paper chart collection, an arrangement has been made with the Bibiothèque Nationale de France so that most of the national charts held at the IHB will be moved in 2008 to their premises in Paris (with the exception of the UKHO worldwide chart series). Only International charts (plus all BA charts) will be kept in the IHB collection.

TRANSLATION SERVICES

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

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

IHO WEB SITE

A new IHO Web site was developed during 2007 with the assistance of an external contractor. The new web site uses a content management system which will improve consistency and will enable the maintenance task to be allocated to individual IHB staff members rather than a Webmaster. The new site also has mirrored French and English pages and will become operational in 2008.

The IHO web site continues to provide 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

IHB LIBRARY

About 530 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 2007. 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 encourage them to continue to do so.

MAINTENANCE OF IHB COMPUTER AND NETWORK SYSTEMS

A backup server was implemented during 2007 in order to cater for an increasing need for data backup requirements. Several computer upgrades were also carried out during this period. These included upgrades to a number of workstations, software upgrades, and upgrades to the backbone network linking the internal servers. Improvements were also made to the IHB internal Intranet services, and the web map server facilities were also upgraded. The IHB continues to support the S-63 security scheme and security server.

DEVELOPMENT AND MAINTENANCE OF IHB GIS DATABASE INFRASTRUCTURE

The IHB continues to develop GIS databases to support internal graphics production requirements, and has expanded some online Web Map Server facilities. It is anticipated that these will continue to be developed during 2008.

PROFESSIONAL ASSISTANT FOR DATA MANAGEMENT AT THE IHB

Following completion of a period of 9 years in the post, and in accordance with the present Staff Regulations, the Directing Committee called for nominations for the post of Professional Assistant for Data Management.

After consideration of the applications received and the positive comments received from Member States with regard to the contribution of the present incumbent, Mr. PHARAOH to the IHO objectives in the technical area, and taking into account the record kept at the IHB of his performance, the Directing Committee decided to renew his contract in accordance with Article V.10.1 (c) of the IHB Staff Regulations, with effect from 01 October 2007.





As a result of the votes received from the IHO Member States the Prince Albert Ist Medal for Hydrography - 2007 was awarded to Vice-Admiral Alexandros MARATOS (IHB) for his article "Shallow Survey - 2005".

The presentation of the Prince Albert Ist Medal for Hydrography - 2007 was made by HSH Prince Albert II at the Opening Ceremony of the XVIIth International Hydrographic Conference (Monaco) on Monday, 7 May 2007.

The IHB will study, as included in the Work Programme 2008-2012 approved by the XVIIth Conference, the establishment of a procedure for awarding the Prince Albert 1st Medal for Hydrography.

WORLD HYDROGRAPHY DAY

On 21st June, the IHO celebrated the second World Hydrography Day (WHD), with the theme "Electronic Navigational Charts (ENCs), an essential element of safety at sea and efficient maritime operations". The following events were organized for the celebration:

- The President gave a short interview to local television on the importance of the WHD;
- Local television broadcast a special programme on Hydrography;
- A reception was given by the Government of Monaco at the Hotel Hermitage. Members of the Monaco Government, local diplomatic authorities, representatives from the maritime industry and others were present. The President opened the reception by welcoming the participants and made a brief speech on the significance of the Day and the importance of ENCs in issues affecting safety at sea, pollution of the environment, security and development;
- The Bureau had prepared a series of posters highlighting the importance of the theme of the celebration.
- The Bureau set up a special page on the IHO web site, where texts and other materials were posted for the benefit of the HOs.
- The Bureau provided support to Member States on various topics as it was requested;
- The IHO webpage on WHD was linked to similar websites that had been established by National HOs:
- Captain Gorziglia who was absent from the Bureau participating in the IOC Assembly in Paris, made a brief statement on the WHD.

The Directing Committee was informed by Member States on the events that took place on a national level to celebrate the WHD. Celebrations of the WHD at the Bureau and by the HOs is an important element to highlight the significance of Hydrography and in this way increase public awareness of its importance.

WORLD HYDROGRAPHY DAY IN NIGERIA

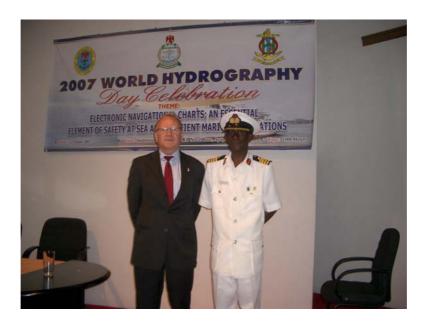
Lagos, Nigeria, 21 June 2007

Celebrations of the 2007 World Hydrography Day by the Nigerian Navy's Hydrographic Department, included a one-day symposium on hydrography. The symposium was organized on the naval base Quorra at the initiative of Capt AM Mahia, Director of the Hydrographic Department. About 150 persons were in attendance, representing various authorities and sectors with interest in hydrography.

Three presentations were given at this occasion, relating to:

- Hydrographic Surveying and Charting: The Need and the Means, by Ing en chef Michel HUET, IHB
- The Role of Hydrography in National Development, by Dr Peter NWILO, Univ. of Lagos
- The Need for a National Hydrographic Committee in Nigeria, by Cdre JO ABULU, former Hydrographer

Considerable improvements are needed regarding hydrographic activities in Nigeria. Budget constraints have not allowed the Nigerian Navy to provide appropriate funding support to the Hydrographic Department. As a result, almost no hydrographic surveying and nautical charting activities are currently carried out by the Hydrographic Department, although there is sufficiently highly qualified personnel (generally trained abroad). Cartographic coverage of the Nigerian waters is provided by the UK Hydrographic Office, based on rather old surveys. Further, the frequent changing of the Hydrographer, roughly every year on average, does not facilitate progressing the development of hydrography in Nigeria.



The IHB representative (M. Huet) with the Hydrographer of the Nigerian Navy (Capt A.M. Maiha)

Each presentation was followed by a round-table discussion. The symposium was concluded by an unanimously supported communiqué recommending *inter alia* the establishment of a National Hydrographic Committee which, in addition to the Nigerian Navy's Hydrographic Department, would involve:

- The Nigerian Ports Authority (NPA)
- The National Inland Waterways Authority (NIWA)
- The Niger-Delta Development Corporation (NDDC)
- The Nigerian Institute of Oceanography & Marine Research (NIOMA)
- The Nigerian National Petroleum Corporation (NNPC)
- The Major Oil Prospecting and Producing Companies such as: Shell, Mobil, Chevron, Total, Agip etc.
- Most State Governments and Universities in the Niger Delta.

It is intended that this Committee would be chaired by a representative of the Ministry of Finance. It will remain for the Hydrographer to find the best way to progress this proposal through the appropriate government channels, with the hope that it can be implemented as soon as possible.

WORK PROGRAMME 5 GENERAL ORGANIZATION DEVELOPMENT

1. IHO RE-STRUCTURING

1.1 - IHO STRATEGIC PLAN WORKING GROUP (ISPWG)

The XVIIth International Hydrographic Conference approved the establishment of a Working Group to propose revision of the IHO Strategic Plan. The proposed revision of the Strategic Plan will be examined at an Extraordinary International Hydrographic Conference that will take place in early June 2009 as decided during the XVIIth IHC.

The Working Group is composed of representatives designated by the Regional Hydrographic Commissions (RHCs) and individual Member States and works mainly by correspondence (electronic).

All the working documents are available to all Member States on the IHO web site. Representatives on the Working Group should have easy access to e-mail and internet facilities.

Ref: CL 52

1.2 - CHAIR, VICE-CHAIR AND MEMBERS OF THE IHO LEGAL ADVISORY COMMITTEE (LAC)

Following the retirement of the LAC Chairperson in July, Member States were requested to nominate a new Chair and Vice-Chair of this Committee and to indicate the participation in the LAC, providing the details of their representatives. The Committee was formed as follows:

Chair: Mr. POGSON (Australia)

Vive-Chairman: Mr. SAHEB-ETTABA (CANADA)

Members: M. SÉGURA (France), Mrs. HERING (Germany), Mr. KASUGA

Japan), Mr. PARDO (Monaco), Ms. MALMLÖF (Sweden), Mr.

HOOTON (UK), Mr. YOUNG (USA)

Ref: CL 68, 89, 102

1.3 - IHO WORKING GROUP TO REVIEW IHB STAFF REGULATIONS (ISRWG)

Following the decision of the XVIIth International Hydrographic Conference (IHC) a Working Group was established to review the IHB Staff Regulations. The Working Group will provide a Report to Member States by Circular Letter in 2009. The Working Group will work mainly by correspondence (electronic) and face-to-face meetings will be decided by the group based on the needs and progress of the work.

The Chair and the Vice-Chair of the WB are respectively Ms. HERING (Germany) and Mr. HOLLIS (UK) and it is open to all IHO Member States.

Ref: CL 103

1.4 - RESTRUCTURING OF IHO COMMITTEES AND OTHER GROUPS

Decision No. 8 of the XVIIth International Hydrographic Conference (IHC) approved the establishment of the IHO "Hydrographic Services and Standards Committee (HSSC)" and the IHO "Inter Regional Coordination Committee (IRCC)", based on the Terms of Reference and the Rules of Procedure contained in Annex I of the "Report of the IHO Strategic Planning Working Group (SPWG) 2005-2006" —"Terms of Reference and Rules of Procedure of HSSC and IRCC". The texts contained in Annex I were intended as the initial ToRs and RoPs for the bodies in the proposed new IHO structure. The XVIIth IHC Decision No. 8 also instructed the Chairs of CHRIS and CBC, in cooperation with the IHB, to further harmonize the texts as much as possible.

The Chairmen of CHRIS and CBC in cooperation with the IHB and the IHO Member States completed the task of further harmonizing the texts which are available on the IHO Web site.

Ref: CL 84, 115

2. XVIIth INTERNATIONAL HYDROGRAPHIC CONFERENCE

Monaco, 7-11 May 2007



XVIIth INTERNATIONAL HYDROGRAPHIC CONFERENCE XVII^e CONFERENCE HYDROGRAPHIQUE INTERNATIONALE

The XVIIth International Hydrographic Conference was held at the Rainier III Auditorium in Monaco from 7 to 11 May 2007. It was attended by 248 delegates from 71 Member States and 36 Observers from non IHO Member States and International Organizations. A meeting of the Finance Committee was held on 5 May. Two Exhibitions, one of IHO Member States charts and a Commercial Exhibition ran from 7 to 10 May.

During the first plenary session on the morning of 7 May, Dr WILLIAMS (UK) and Dr. NARAYANAN the Dominion Hydrographer of Canada, were elected as President and Vice-President respectively of the Conference.

The Conference was opened on Monday 7 May by HSH Prince ALBERT II who also presented the Prince Albert Ist Medal on Hydrography to Vice Admiral MARATOS and the International Cartographic Association Prize was awarded to Australia. The President of the Directing Committee and the President of the Conference delivered Opening Addresses. During the Opening Ceremony the new IHO Member States, Saudi Arabia, Romania and Mauritius, formally presented their flags to the Organization. Admiral ABRAMOV, the Chief of the Naval Staff of the Russian Federation addressed the Conference. After the Opening Ceremony HSH Prince ALBERT II opened the Commercial Exhibition and toured the exhibits.

24 Proposals were presented by the SPWG, Member States and the Bureau and were approved at the Conference. It is worth noting that the Conference approved amendments to the General and Financial Regulations and the Rules of Procedure of the Assembly, Council and Finance Committee that will be implemented when the new structure of the Organization has been approved by Member States, in accordance with Article XXI of the IHO Convention. Also the Conference approved the Work Program and Budget of the Organization for the next 5-year period and considered various reports on the work carried out by the Organization during the past 5 years. The Conference approved two Resolutions with which Member States should comply and the WEND Principles in order for the IHO to achieve adequate coverage, availability, consistency and quality of ENCs by 2010 and to support mandatory carriage requirements of ECDIS by IMO which will further accelerate the production of ENCs.

An important item on the Agenda of the XVIIth I.H. Conference was the election of the new Directing Committee. This took place on Friday 11 May: Vice Admiral Alexandros MARATOS (Greece) was elected President. Captain Hugo GORZIGLIA (Chile) and Captain Robert WARD (Australia) were elected as Directors for the period 2007-2012.

The following Hydrographic vessels visited the port of Monaco during the Conference: HMS ECHO (UK), GALATEA (Italy) and SNELLIUS (Netherlands).

The Conference adopted a Resolution thanking HSH Prince ALBERT II and his Government for the support provided to this important event. Thanks were also extended to all national and international delegates for their contribution to the discussions and the IHB Staff who worked very efficiently for the success of the Conference.

The Conference decided to have an Extraordinary International Hydrographic Conference early June 2009, with the main subject being to examine and approve an amended/improved Strategic Plan.

3. IHO MEMBERSHIP ADMINISTRATION

IHO MEMBERSHIP ADMINISTRATION

The Department for External Affairs in Monaco has always supported the IHB in the most effective manner in administering the IHO membership process: applications from new States are disseminated 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

The Directing Committee was very pleased to welcome four new countries to the Organization in 2007 bringing the total IHO membership to 80 Member States. Those Member States which joined in 2007 are as follows:

Romania

The Government of Romania officially deposited their Instrument of Accession with the Government of the Principality of Monaco on 29 January, thus becoming the 77th IHO Member State. A Romanian delegation was present at the XVIIth International Hydrographic Conference in May and actively participated in the work and voting of the Conference.

Ref: CL 18

Saudi Arabia

The Government of Saudi Arabia officially deposited their Instrument of Accession with the Government of the Principality of Monaco on 27 April, and thus becoming the 78th IHO Member State. A large delegation from Saudi Arabia attended the XVIIth International Hydrographic Conference and was able to actively participate in the Conference proceedings.

Ref: CL 27

Qatar

The Government of Qatar officially deposited their Instrument of Accession with the Government of the Principality of Monaco on 2 May, and thus becoming the 79th IHO Member State. Qatar attended the XVIIth International Hydrographic Conference as Observers.

Ref: CL 44

Ireland

The Government of Ireland officially deposited their Instrument of Accession with the Government of the Principality of Monaco on 4 June, thus becoming the 80th IHO Member State of the IHO on that date. Ireland was represented at the XVIIth International Hydrographic Conference by one Observer.

Ref: CL 53

Pending Member 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. Regretfully this last formality has not yet been completed.

Ref: CLs 1/2008, 52/90, 55/93

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: CLs1/2008, 44/89, 25/90, 55/93

Pending Member States 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 so far received 42 approvals out of a required 47. The Directing Committee hopes that this approval procedure will be completed in the near future

Ref: CL 36/2004, CL 01/2008

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. At the end of 2007 Sierra Leone's application had received 34 approvals out of a required 49. The Directing Committee hopes that this approval procedure will be completed in the near future.

Ref: CL 01/2008, CL17

Republic of Montenegro

Montenegro officially applied for membership of the IHO in August and reported a national tonnage figure of 18,492 tonnes. To date Montenegro's application has received 32 approvals out of a required 49.

Ref: CL 01/2008

Reinstatement of Suriname

The Directing Committee is particularly happy that Suriname, after a long period of suspension (deprived of rights and privileges since 1991) has been able to settle its outstanding contributions and recover full IHO membership as from 26 December. This is a very satisfactory result and the cooperation of The Netherlands has been extremely helpful in resolving this situation.

Ref: CL 13/2008

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.

Amendments to the Convention

As reported in the 2006 Annual Report, the modifications to the Convention 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 2007, the Government of Monaco had reported 18 approvals of the amendments to the IHO Convention by the following Member State Governments: Australia, Cuba, Cyprus, Denmark, Estonia, Finland, France, Germany, Japan, Republic of Korea, Mexico, Morocco, Netherlands, Norway, Pakistan, 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."

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

SECONDMENT OF PERSONNEL TO THE IHB FROM THE REPUBLIC OF KOREA

In accordance with IHO Administrative Resolution T4.2 the National Oceanographic Research Institute (NORI) of the Republic of Korea kindly made available to the IHB one of its experts, Mr. CHOI Shin-Ho, for a period of one year with effect from 1 December 2006, which was gratefully accepted. Mr. CHOI has a GIS / electronic charting background and he worked at the IHB on activities related to cartography and data management.

The Directing Committee would like to thank NORI for the secondment of Mr. CHOI Shin-Ho who made an effective contribution to the work of the Bureau.

In 2007, the IHB invited Member States to consider the secondment of their skilled personnel at the IHB.

Ref: C.L. 2

4. IHO WORK PROGRAMME

The IHB through CL 38/2007 dated 20 April provided Member States with an updated version of the IHO Work Programme for 2007, based on the actual achievement and accomplishment of the preceding year's Work Programme.

Following Article 23 c) of the IHO General Regulations, the Directing Committee through CONFERENCE CIRCULAR LETTER No. 14 dated 31 January 2007, submitted the 2008-2012 IHO Work Programme and the associated Five Year Budget to Member States. These two documents were

considered by the Finance Committee at the meeting held on 5th May 2007 and later by the Conference. Decisions 24 and 32 of the XVIIth International Hydrographic Conference approved the IHO Work Programme 2008-2012 and the IHO Five-Year Budget (2008-2012), respectively.

Finally the IHB issued CL 93/2007 dated 26 October 2007, issuing the IHO Work Programme for 2008, prepared in line with the 2008/2012 Work Programme and the Five Year Budget approved by the XVIIth I.H. Conference, updated accordingly.

5. 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 Convention, as they were approved by the Extraordinary Conference in 2005, informing the Directing Committee on the progress of voting.

At the end of the year, eighteen Governments of the IHO Member States had notified their agreement with the amendments to the Convention approved.

The Directing Committee participated in the formal celebrations of the National Day of Monaco on 19th November. During these celebrations the President was presented "La médaille de Chevalier dans l'Ordre de Saint Charles" by Prince Albert and two members of the Staff "La médaille du travail", Mrs. Caudoux and Mr. Semlali, were awarded by the Prime Minister.

The Directing Committee very much appreciates the support provided by the Government of Monaco, to renovate the Bureau and following an exchange of letters, the decision taken to allow the IHB to continue to use the terrace.

APPENDICES:

- I. NEW HYDROGRAPHERS FROM MEMBER STATES
 - II. VISITS TO THE IHB
 - III. VISITS TO HYDROGRAPHIC OFFICES AND

MEETINGS HELD AT THE IHB

- IV. IHB DIRECTING COMMITTEE AND RESPONSIBILITIES
 - **V. IHB STAFF LIST**
 - VI. IHB TECHNICAL MISSIONS

APPENDIX I - NEW HYDROGRAPHIC AUTHORITIES

NEW HYDROGRAPHER OF ARGENTINA

Rear Admiral Andrés Roque DI VINCENZO joined the Naval Academy on 1st February 1971, graduating as Midshipman on 30th December 1974, following which he obtained a Degree in Hydrography and specialized in Communications. He attended, amongst others, the Command and Staff Course at the Naval War College and the Defence Course at the Royal Defence School in the United Kingdom.

For many years he was Professor and Advisor at the Naval Academy and at the Argentinean Naval Mission for Training in Paraguay, serving in various operational units of the Maritime Fleet and of the Naval Hydrographic Task Force as Commander of the surveying ship ARA "COMODORO RIVADAVIA", the Corvette ARA "DRUMMOND" and the Frigate "LIBERTAD".

Some of the most recent posts held by him are Head of the Naval Communications Service, Commander of Maritime Traffic, Director of the Naval War College, Commander of the Atlantic Naval Area and Head of the Naval Base of Mar del Plata, while in the current year he will serve as Undersecretary of Maritime Interests and Head of the Hydrographic Office.

NEW HYDROGRAPHER OF CHILE

Captain Cristian SORO KORN was born on 8 January 1958 in Santiago, Chile, and, after studying at the German School, the Pre-Military Institute, the Application and Lastarria Secondary Schools in Santiago, he joined the Naval Academy "Arturo Prat" in 1974. He graduated in December 1978 with the rank of Ensign.

He is a Staff Officer specialized in navigation and hydrography. He is a qualified Military Armaments Engineer (Navigation) – and a qualified Hydrographic Engineer. He also successfully completed the High Level Course of Defence at the University of Defence of the Popular Liberation Army of China and a course in High Command at the National Academy of Political and Strategic Studies of Chile.

For more than thirteen years he served on board various vessels such as: the Patrol boat "Lautaro", the Missile launch "Casma", the Destroyer "Portales", the Training Ship "Esmeralda", the Transporter "Aquiles" and the Tanker "Araucano", and was Commander of the Medical Support Launch "Guale", the High Seas Tug "Galvarino" and the Oceanographic Ship "Vidal Gormaz". He has participated in various hydrographic operations?, as well as piloting on board foreign vessels in the austral channels and in the Antarctic territory.

Amongst his postings ashore, in addition to the various courses, we should also mention the following posts: Head of Studies at the Naval School "Arturo Prat", Head of the Center of Tactical Training of the Navy, Head of the Planning Department of the Naval Operations Command, Head of the Command Staff of the 4th Naval Zone and Deputy Manager of the Navy.

On 17 December 2007 he took up the post of Director of the Hydrographic and Oceanographic Office of the Chilean Navy.

NEW HYDROGRAPHER OF COLOMBIA

On August 2nd 2007, Rear Admiral Jairo Javier PEÑA GÓMEZ took up the post of General Maritime Director of Colombia.



RAdm. PEÑA was born in Bucaramanga (Santander - Colombia). He graduated in June 1978 from the Naval Cadet School "Almirante José Prudencio Padilla", as Lieutenant, with specialization in Oceanography, and was promoted to Rear Admiral on June 5 2005

During his professional career, he served in different posts, among them some command posts as: Deputy Commander and Commander of the oceanographic vessel ARC "Malpelo", in 1986 and 1997 respectively; Commander of Midshipmen in the Naval academy "Almirante Padilla", in 1995 and 1996; Deputy Commander and Commander of the ARC "Gloria", in 2000 and 2001; Commander of the Atlantic Naval Force, in 2005 and 2006 and Head of the Personnel and Training Division.

He was also appointed as Director of the Oceanographic and Hydrographic Research Centre in Cartagena, in 1998 and 1999 and General Secretary of the General Maritime Directorate en Bogotá, in 2002.

In addition, he was Naval Attaché of the Colombian Embassy in United Kingdom and Permanent Representative of Colombia before the International Maritime Organization, IMO, in London, in 2003.

NEW HYDROGRAPHER OF J APAN

Since 1st April 2007



Dr. Shigeru KATO was appointed Chief Hydrographer of Japan on 1st April 2007, after serving as Director of Technology Planning and International Affairs Division, Hydrographic and Oceanographic Department, Japan Coast Guard (JHOD).

He was born in 1953. He graduated from the Tokyo Metropolitan University in 1975. After graduating from the University, he entered the Hydrographic Department of Maritime Safety Agency (JHOD, present name) in 1975.

During more than thirty years of service in the Department, he has been engaged mainly in various hydrographic surveys and development of hydrographic technology.

Also, he served in the following posts.

- 1996 1998: Director of Hydrographic Department, 5th Regional Coast Guard Headquarters;
- 1998 1999: Head of International Cooperation Office, Hydrographic Department;
- 1999 2001: Head of Continental Shelf Surveys Office, Hydrographic Department;
- 2001 2003: Director of KOCHI Coast Guard Office, Japan Coast Guard;
- 2003 2004: Director of Marine Pollution Research Laboratory, JHOD;

- 2004 2005: Counselor of Coordination Office for Continental Self Surveys, Cabinet Secretariat, Government of Japan;
- 2005 2007: Director of Technology Planning and International Affairs Division, JHOD.

He made a great contribution to research fields for the mitigation of natural disasters through surveying submarine volcanoes, source areas of tsunami and active faults along the plate boundary area. During the service in the Continental Shelf Surveys Office, he planned and promoted the project of the continental shelf defined by the United Nations Convention on the Law of the Sea.

NEW HYDROGRAPHER OF THE REPUBLIC OF KOREA

From February 2007

Mr. Yeong Jin YEON was appointed General Director of the National Oceanographic Research Institute (NORI) on 20 February 2007.

He was born in October 1958, in Seoul, Republic of Korea. In 1984 he graduated from the Hanyang University. In 1988 he obtained a Master's Degree in Civil Engineering at the Seoul National University. He also obtained a Master's Degree in Economics at the KDI School of Public Policy and Management in Korea in 1998. After that, he was awarded a Doctor's Degree in Civil Engineering at the Sungkyunkwan University in 2001.

His first job was at the Port & Harbors Bureau of the Ministry of Maritime Affairs and Fisheries (MOMAF). Thereafter, he worked in various divisions, such as Expo 2012 Bidding Bureau, Port Development Division, Marine Policy Division and Port Policy Division of MOMAF.

In 2005-2006, he served as Director of the Marine Policy Division. From February 2006 to February 2007, he served as Director of Port Policy Division of the Port & Harbors Bureau of MOMAF.





Rear Admiral Augusto ZEGARRA OVIEDO was born on 27th January 1950 in Lima, Peru. After completing his studies at the Military School "Leoncio Prado", he joined the Naval Academy of Peru in 1967, graduating in 1972. He specialized in Hydrography in 1975.

He also qualified in Intelligence. He attended the Basic Staff Course, the Intelligence Course at the Military School, the Resident Command and Staff Course, as well as the Strategic Intelligence and Security Course.

He served on board B.A.P. "AGUIRRE", B.A.P. "ALMIRANTE GRAU", BIC. "TAREQ-II" and the scientific research ship BIC. "SNP-1". He was Executive Commander of B.A.P. "ETEN" and Commander of the B.A.P. "ZORRITOS".

He has held many posts in the Directorate of Hydrography of the Navy, including the following: Head of Cartography, Head of Operations and Head of Logistics.

During his naval career he was Chief of Staff of the Naval Zone General Command, Captain of the Callao Port and Commander of the El Callao Naval Base, amongst others.

On 1st January 2000, he was promoted to Rear Admiral and took over the post of Director of the Commercial Naval Office; afterwards he served in the Joint Command of the Armed Forces.

HEAD OF THE ROMANIA MARITIME HYDROGRAPHIC DIRECTORATE



D.Sc. Captain Romeo Gh. BOSNEAGU was appointed Director of the Romanian Maritime Hydrographic Directorate on 01.07.2007.

Born in 1955 in Constanza, Captain Bosneagu entered the Naval Academy "Mircea cel Bătrân", Faculty of Navigation, in 1978.

He obtained the following diplomas and accreditations:

- High Military Studies Academy, Navy Specialization, 1988;
- Master in Naval Transport Optimization, 1999;
- Doctor in Geography at University of Bucharest, 2004;
- Candidate for a doctor's degree at Technical University of Cluj-Napoca, 2007;

And in his career held the positions given below:

- 1978-1989, different positions, from navigation officer to warship commander.
- 2005-2006 and 1999, Head of Nautical Sciences' Chair within Naval Academy "Mircea cel Bătrân", Constanța;
- 01.05.2006- Chief of Aids to Navigation Branch within the Maritime Hydrographic Directorate:
- 01.11.2006 Deputy Chief of Maritime Hydrographic Directorate;
- 01.07.2007 Head of the Maritime Hydrographic Directorate;

He has published several articles on nautical subjects as well as university manuals, problems collections published in Naval Academy "Mircea cel Bătrân"; 1 laboratory handbook and 33 dissertation papers.

NEW HYDROGRAPHER OF SERBIA

Ms. Zaneta OSTOJIC-BARJAKTAREVIC was appointed in 2007 Head of the Directorate for Inland Waterways of the Republic of Serbia.

In 1984 she was awarded the diploma of Engineer from the University of Sarajevo, Faculty of Civil Engineering, followed by specialization studies for railway maintenance engineer in Railway Transport Organization, Belgrade, in 1987 and Postgraduate studies at the University of Belgrade, Faculty of Civil Engineering, Department of Road, Railway and Airports Engineering from 1995 to 1999.

Ms. Ostojic-Barjaktarevic has held positions in many governmental institutions and professional organizations, among which the following should be mentioned:



- Managing Director, Agency for Maintenance and Development of Inland Waterways – Plovput, Belgrade;
- Ministerial Counselor, Ministry of Capital Investment, Government of the Republic of Serbia, Belgrade Ministerial counselor for investments, transport infrastructure, concessions and PPP projects;
- Advisor to the Deputy Prime Minister, Government of the Republic of Serbia, Deputy Prime Minister's Office, Belgrade; Advisor to the Deputy Prime Minister in the field of civil engineering, traffic, capital investments;
- **Director of the branch**, "Arrow Insurance" Valjevo, Belgrade branch;
- **Special advisor**, Ministry of Urban Planning and Construction, Government of the Republic of Serbia, Belgrade Special Advisor in the area of European integrations, contacts with unions to prepare construction companies for process of privatization and restructure, preparation of social programs for construction companies, contacts and coordination with other ministries;
- Lead Project Designer, Construction Company "BMR Company";
- Manager of the Project Council, Non-governmental organization G17 PLUS;
- Lead Design Engineer, Independent Project Designer, Project Designer, Traffic Institute CIP, Belgrade Manager of numerous projects and studies in the field of railway engineering;

NEW HYDROGRAPHER OF SPAIN



Captain Francisco PÉREZ-CARRILLO was appointed Director of the Hydrographic Institute of the Spanish Navy in 2007.

Born in 1952, he entered the Naval Academy in 1972, being promoted to Ensign in 1977 and to Captain in 2003.

After serving in the helicopter-carrier "Dedalo" and the minesweeper Ebro, he specialized in Hydrography and served on board the surveying vessel "Malaspina".

He was awarded the Diploma of Hydrographic Engineer and participated in five surveying commissions, acting as Head of three of them on board the Oceanographic Research Ship "Hespérides" and in the DECVOL 99 Survey (Deception Island – Antarctica).

He also served in the following posts ashore:

- Computer Centre of the Hydrographic Institute of the Navy;
- Instructor at the Hydrographic School;
- Instructor at the Naval Military Academy;
- Head of the Hydrographic Department of the Hydrographic Institute of the Navy;
- Head of Research Dept. of the Hydrographic School;

- Deputy Manager of the Hydrographic Institute of the Navy;
- Acting Director of the Hydrographic Institute of the Navy;
- Naval Commander in Huelva;
- Currently, Director Commander of the Hydrographic Institute of the Navy.

He also specialized as System Analyst and graduated in a specialization course on Pedagogic Techniques – Environmental Course for Professors from the University of Alcalá de Henares. And in Advanced Studies (DEA) from the Faculty of Nautical Science of Cadiz.

NEW IHB DIRECTING COMMITTEE

At noon on Friday 31st August, the International Hydrographic Bureau (IHB) held a small, informal cocktail party to say goodbye to Rear Admiral Kenneth BARBOR (USA), who returned to the United States of America, having completed his 5-year term as IHB Director. On the same occasion, a warm welcome was given to Captain Robert WARD (Australia), who became a member of the IHB Directing Committee with effect from 1st September 2007, for the period 2007-2012, alongside Vice Admiral Alexandros MARATOS (Greece) and Captain Hugo GORZIGLIA (Chile).



At this informal gathering the President of the IHB Directing Committee, Vice Admiral MARATOS, referred to the work carried out by the Directing Committee and by the Bureau in general during the five-year period 2002-2007, highlighting the achievements and, in particular, those under Rear Admiral BARBOR'S areas of responsibility.

In recognition of his valuable contribution to the work of the International Hydrographic Organization (IHO), VAdm. MARATOS presented RADM. BARBOR with the IHO crest and Captain GORZIGLIA, IHB Director, gave him, on behalf of the IHB, a nautical gift for his boat.

RAdm. BARBOR thanked everyone for the gifts and for the kind farewell words, and looked back at the team work accomplished during his 5 years in office and wished every success to the new Directing Committee.

APPENDIX II - VISITS TO THE IHB

VISIT TO THE IHB BY THE EXECUTIVE SECRETARY OF COMNAP

1st August 2007

On 1st August Mr. Antoine GUICHARD, Executive Secretary of COMNAP, paid a visit to the IHB and met with Capt. Hugo GORZIGLIA, IHB Director, to discuss various subjects of common interest with regard to Antarctica.

The main subjects discussed were:

- 1. Analysis of the outcomes of the ATCM XXX held in New Delhi, India, in May 2007, with emphasis on those aspects related to hydrography, cartography, safety to navigation and marine operations;
- 2. Decisions made by the two organizations' main bodies: brief discussions were held on the outcomes of the last COMNAP meeting recently held in Australia and the I.H. Conference;
- 3. Progress made since the last HCA meeting held in Punta Arenas, Chile, November 2006 and the progress in the preparation for the next HCA meeting scheduled to take place in Buenos Aires, Argentina, early October 2007;
- 4. The objective of the Seminar on Hydrography to be held as part of the next ATCM in Ukraine in 2009, aimed at raising awareness on the hydrographic contribution to the ATS. Discussion included the possible structure of the seminar and the identification of possible speakers and their field;
- 5. The possibility of holding a similar Seminar at COMNAP 2009 Meeting.

The meeting was very useful and the IHB is most grateful to Mr. GUICHARD for having made time to visit the IHB. These short intensive meetings are a good mechanism to monitor the progress of the activities agreed between both institutions.

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

VISITS TO HYDROGRAPHIC OFFICES 2007

President – Vice Admiral A. MARATOS: Finland, Germany, Greece, Norway, Russia, United

Kingdom.

Director II – Captain H. GORZIGLIA: Argentina, Brazil, Iran, Oman, Qatar, Suriname.

MEETINGS AT THE IHB 2007

JANUARY

8 - 9 SPWG Chair Group Meeting

MARCH

27 - 29 RENC and Catalogue Service meeting 30 Finance Committee Officers' meeting

APRIL

11-12 SPWG Chair Group Meeting

MAY

7 -11 XVIIth IH Conference

28 - 30 DPSWG

JULY

9 - 11 IHO-IOC GEBCO SCUFN

AUGUST

25 - 26 SPWG Chair Group Meeting

SEPTEMBER

3 - 7 CHRIS - SNPWG

11 - 14 CPRNW

OCTOBER

15 - 16 CBC

Finance Committee Officers' Meeting

30 - 31 X-WEND

NOVEMBER

1 Meeting of IHO Member States

1 IC-ENC meeting

13 – 16 CSPCWG

APPENDIX IV - IHB DIRECTING COMMITTEE RESPONSIBILITIES

Following the assumption of duties of the new Directing Committee on 1st September, the respective areas of responsibility were laid down as follows:

President: Vice Admiral Alexandros MARATOS (Greece)

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

Regional Hydrographic Commissions:

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

Director 1: Captain Hugo GORZIGLIA (Chile)

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

Regional Hydrographic Commissions and Committee:

- Eastern Atlantic Hydrographic Commission
- South East Pacific Hydrographic Commission
- ROPME Sea Area Hydrographic Commission
- Meso-American-Caribbean Sea Hydrographic Commission
- Hydrographic Committee on Antarctica

Director 2: Captain Robert Ward (Australia)

- Relations with the International Cartographic Association; International Organization for Standardization and International Electrotechnical Commission.
- Cartographic Information Services, CHRIS, WEND.
- Matters referring to IHB Property and Information Technology.

Regional Hydrographic Commissions:

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

APPENDIX V - IHB STAFF LIST

Professional Assistants

Capt. F. BERMEJO BARÓ, Spain Capacity Building, Training, and Publications Management

Ing. en chef M. HUET, France Cartography

Mr. A. PHARAOH, South Africa Cartography and Data Management

Lt. Cdr. S. SHIPMAN, UK Hydrography

Mr. C. VELARD, France Administration

Translators

Mrs. I. VANKRINKELEN Head Translator/French

Miss M.P. Muro Spanish Translator/Web Editor

Technical, Administrative and Service Staff

Mr. D. MENINI Graphic Arts and Cartographic Assistant

Miss C. MEYNADIER Accounting and Administration Assistant

Miss P. BOUZANQUET French/Cartographic Editor - Librarian

Secretariat

Mrs B. WILLIAMS Head Secretariat

Mrs. C. FONTANILI Secretary of the Directing Committee

Mrs. R. CAUDOUX Document Preparation Assistant (DPA)

Miss M. MOLLET Communications

Office Management

Mr. R. SEMLALI Office Manager

Mr. A. MAACHE General Service Assistant



IHB Staff in 2007

APPENDIX VI - IHB TECHNICAL MISSIONS

FEBRUARY	DATE	NAME	MEETING	DESTINATION	WORK PROGRAMME item
12 15	FEBRUARY				
12 16	07 16	HUET	GEOMATIC 2007	Havana, CUB	O 3.1.2
12 16	12 15	PHARAOH	SNPWG	Rostock, GER	O 3.1.1.
19 23 GORZIGLIA CBC Muscat and Tehran	12 16	MARATOS	GEOMATICA 0007	-	O 3.1.2
19 23	19 02	SHIPMAN	COMSAR & WWNWS	London, UK	O 1.2.1.
19 23				Muscat and	T 2.1.8.
19 23	19 23	GORZIGLIA	CBC		
19 20	19 23	BERMEIO	CBC		
19 23					0121
MARCH				*	
MARCH GORZIGLIA PAIGH Veracruz, MEX Washington, USA O 1.2.1 06 07 BARBOR USCHC Symposium ENC USA T 3.1.2 12 15 BARBOR HUET IOC Tech Cooperation SDI Workshop Sri Lanka O 1.2.1 21 23 PHARAOH SDI Workshop AB Cat B review meeting Rotterdam, NL Riyadh, SA-Doha, QAT St. Petersburg, BOUZANQUET T 2.1.8 26 29 GORZIGLIA Technical visit Doha, QAT St. Petersburg, BOUZANQUET T 4.2.2 26 28 MARATOS BOUZANQUET Maritime Library visit RUS Lyon, FRA T 4.1.3 APRIL CIRM Annual Technical Mtg Lisbon, POR Buenos Aires, ARG Buenos Aires,			_		
O6 12 GORZIGLIA PAIGH Veracruz, MEX Washington, USA O 1.2.1	27 02	WARATOS	None	Daligkok, 111A	0 1.1.1
BARBOR	MARCH				
BARBOR USCHC Symposium ENC Coverage 12 15 BARBOR HUET 10C Tech Cooperation 21 23 PHARAOH SDI Workshop AB Cat B review meeting 26 29 GORZIGLIA Technical visit Doha, QAT St. Petersburg, RUS RUS BOUZANQUET HO visit APRIL CIRM Annual Technical Mtg Lisbon, POR Buenos Aires, ARG Buenos Aires, ARG BARBOR HO Symposium ENC Tokyo, JPN Tokyo, JPN Sri Lanka O 1.2.1 Doha, QAT St. Petersburg, RUS Lyon, FRA O 1.2.1 CIRM Annual Technical ARG Buenos Aires, ARG Buenos Aires, ARG HO SWAtHC ARG BARBOR PACMA HOC Tech Cooperation Maputo, MZB Copenhagen, O 1.1.1	06 12	GORZIGLIA	PAIGH	Veracruz, MEX	O 1.2.1
Decoration Table 1.2.1 Table 2.2.1 Tabl				_	O 1.1.1
12 15	06 07	BARBOR	USCHC		5 2,2,2
12 15					T 3.1.2
HUET	12 15	BARBOR	· ·	Tokyo, JPN	
21 23					O 1.2.1
SHIPMAN AB Cat B review meeting Rotterdam, NL Riyadh, SA- Doha, QAT St. Petersburg, RUS BOUZANQUET CIRM Annual Technical Mtg			•		
26 29 GORZIGLIA Technical visit Doha, QAT St. Petersburg, RUS RUS Lyon, FRA T 4.1.3 APRIL CIRM Annual Technical Mtg Lisbon, POR Buenos Aires, OR SUS BERMEJO SWAtHC ARG Buenos Aires, ARG Buenos AIR Buenos AI			<u> </u>	*	
26 29 GORZIGLIA Technical visit Doha, QAT St. Petersburg, RUS RUS Lyon, FRA T 4.2.2 26 28 BOUZANQUET Maritime Library visit Lyon, FRA T 4.1.3 APRIL CIRM Annual Technical Mtg Lisbon, POR Buenos Aires, ARG Apia, Samoa T 4.2.1 IOC Tech Cooperation Maputo, MZB Copenhagen, O 1.1.1					
26 28 28 30 MARATOS 28 30 BOUZANQUET HO visit APRIL CIRM Annual Technical Mtg CIRM Annual Technical Mtg Lisbon, POR Buenos Aires, ARG Buenos Aires, ARG Buenos Aires, ARG 14 22 BARBOR 15 22 HUET St. Petersburg, RUS Lyon, FRA T 4.2.2 O 1.2.1 ARG Buenos Aires, ARG Buenos Aires, ARG Apia, Samoa T 4.2.1 Copenhagen, O 1.1.1	26 29	GORZIGLIA	Technical visit	-	
26 28 28 30 MARATOS BOUZANQUET HO visit Maritime Library visit RUS Lyon, FRA T 4.1.3 APRIL CIRM Annual Technical Mtg Lisbon, POR Buenos Aires, O 1.2.1 ARG Buenos Aires, ARG Buenos Aires, ARG Buenos Aires, ARG 14 22 BARBOR PACMA Apia, Samoa T 4.2.1 HUET HUET RUS Lyon, FRA T 4.1.3					T 4.2.2
APRIL CIRM Annual Technical O2 04 SHIPMAN Mtg Lisbon, POR Buenos Aires, O 1.2.1 O8 12 GORZIGLIA SWAtHC ARG Buenos Aires, Buenos Aires, ARG Buenos Aires, O 1.1.1 Copenhagen, O 1.1.1	26 28	MARATOS	HO visit		
CIRM Annual Technical O2 04 SHIPMAN Mtg Lisbon, POR Buenos Aires, O 1.2.1 O8 12 GORZIGLIA SWAtHC ARG Buenos Aires, ARG Apia, Samoa T 4.2.1 IOC Tech Cooperation Maputo, MZB Copenhagen, O 1.1.1	28 30	BOUZANQUET	Maritime Library visit	Lyon, FRA	T 4.1.3
02 04SHIPMANMtgLisbon, POR Buenos Aires, ARG Buenos AIRES BARBOR BAR	APRIL				
02 04SHIPMANMtgLisbon, POR Buenos Aires, ARG Buenos AIRES BARBOR BAR					0.1.0.1
Buenos Aires, ARG Buenos Aires	0004	CATADA (A.A.)		r: 1 pop	O 1.2.1
08 12GORZIGLIASWAtHCARG Buenos Aires, ARG08 12BERMEJO 14 22SWAtHC BARBOR HUETARG PACMA 	02 04	SHIPMAN	Mtg	-	
08 12 BERMEJO SWAtHC ARG 14 22 BARBOR PACMA Apia, Samoa T 4.2.1 15 22 HUET IOC Tech Cooperation Maputo, MZB Copenhagen, O 1.1.1					O 1.1.1
08 12BERMEJO 14 22SWAtHC BARBOR HUETARG PACMA IOC Tech CooperationARG Apia, Samoa Maputo, MZB Copenhagen,0 1.1.1	08 12	GORZIGLIA	SWAtHC		
14 22 BARBOR PACMA Apia, Samoa T 4.2.1 IOC Tech Cooperation Maputo, MZB Copenhagen, O 1.1.1					
HUET IOC Tech Cooperation Maputo, MZB O 1.1.1 Copenhagen, O 1.1.1				_	
Copenhagen, O 1.1.1					
	15 22	HUET	IOC Tech Cooperation		
LITTIN IMARATOS 151 NHC meeting DEN 1	1.7.10		51.347 G		O 1.1.1
	17 19	MARATOS	51 NHC meeting	DEN	
23 27 PHARAOH TSMAD Ottawa, CAN O 3.1.1					
23 25 BARBOR DGIWG Cologne, GER O 3.1.1				•	
30 01 GORZIGLIA ATCM New Delhi, IND O 1.2.1	30 01	GORZIGLIA	ATCM	New Delhi, IND	O 1.2.1

DATE	NAME	MEETING	DESTINATION	WORK PROGRAMME item
MAY				
14 17	BARBOR	USCHC	Norfolk, USA	O 1.1.1
21 23	HUET	HGMIO	Durham, USA	O 3.1.2
- 			Oberammergau,	T 4.2.1
23	PHARAOH	NATO Geospatial course	GER	
28 01	PHARAOH	ISO TC211	Rome, ITA	O 3.4.2
28 01	SHIPMAN	MEH Malacca Straits	Indonesia	T 2.1.9
JUNE				
04 08	BERMEJO	CBC Meeting	Riga, LAT	O 2.1.6
04 08	GORZIGLIA	CBC Meeting	Riga, LAT	
04 08	SHIPMAN	IOC Gloss	Paris, FRA	O 1.2.1
04 08	PHARAOH	TSMAD 14	Taunton, UK	O 3.1.1
11	PHARAOH	C&SMWG	Stavanger, NOR	O 3.1.1
11 13	HUET	C&SMWG	Stavanger, NOR	
17 26	GORZIGLIA	IOC Assembly	Paris, FRA	O 1.2.1
18 21	BERMEJO	IMO TC 57	London, UK	O 1.2.1
20 22	HUET	WHD	Lagos, NIG	O 4.2.1
25 29	BERMEJO	IAB	Hamburg, GER	O 3.3.1
29 01	MARATOS	IALA ENAV Seminar	London, UK	O 1.2.1
29 01	SHIPMAN	IALA ENAV Seminar	London, UK	
23 27	MARATOS	NAV 53	London, UK	
23 27	SHIPMAN	NAV 53	London, UK	
JULY				
01 07	HUET	IOC Tech Cooperation	Dar es Salem, TNZ	O 1.2.1
AUGUST				
06 10	HUET	ICC 2007	Moscow, RUS	O 3.4.2
30	WARD	WEND TG	Paris, FRA	O 3.1.1
27 28	PHARAOH	6 SAIHC mtg	Mangochi, MLW	O 1.1.1
SEPTEMBER				
04.05	DILADAOU	NATO C. C. LC	Oberammergau,	T 4.2.1
04 05	PHARAOH	NATO Geospatial Course	GER	0242
11 13	PHARAOH	GEBCO TS/COM	New York, USA	0 3.4.3
17 21	PHARAOH	S-100 Focus Group	Hamburg, GER	0 3.1.1
17 20	MARATOS	S-44 Working Group	Helsinki, FIN	O 3.2.1
17 20	SHIPMAN	S-44 Working Group	Helsinki, FIN	0111
18 20	WARD	SWPHC	Papeete, TAH	O 1.1.1

DATE	NAME	MEETING	DESTINATION	WORK PROGRAMME item
OCTOBER				
01 05	GORZIGLIA	HCA SCAR	Buenos Aires	O 1.2.1
01 05	HUET	HCA SCAR	Buenos Aires	
03 12	SHIPMAN	MSC 83	Copenhagen, DEN	O 1.2.1
08 11	MARATOS	MSC 83	Copenhagen, DEN Rio de Janeiro,	O 1.1.1
08 12	GORZIGLIA	MACHC	BRA Rio de Janeiro,	0 1.1.1
08 12	BERMEJO	MACHC SHOM, Beautemps-	BRA	O 4.2.1
08 08	WARD	Beaupré	Nice	
15 16	WARD	E-Navigation	Oslo, NOR	T 4.2.1
22 24	MARATOS	MBSHC	Vallette, MLT	O 1.1.1
22 24	BERMEJO	MBSHC	Vallette, MLT	
23 26	SHIPMAN	IHO Tidal Committee	Halifax, CAN	O 3.2.3
29 02	PHARAOH	ISO TC211	Xian, CHN	O 3.4.2
30 01	SHIPMAN	ABLOS	Dubrovnic, CRO	O 3.2.5
23 25	HUET	IOC Tech Cooperation	Bangkok, THA	O 1.2.1
NOVEMBER				
05 09	WARD	19th CHRIS Meeting	Rotterdam, NL	O 3.1.1
05 09	HUET	19th CHRIS Meeting	Rotterdam, NL	
06 09	GORZIGLIA	GEBCO GC	Paris, FRA	O 3.4.3
06 09	SHIPMAN	GEBCO GC	Paris, FRA San Jose, Costa	O 1.2.1
12 15	GORZIGLIA	FIG Regional Conf	Rica	0 1.2.1
12 15	SHIPMAN	CBC Workshop	Jeddah, SA	T 2.1.10
13 14	MARATOS	EU Funding	Brussels, BEL	T 2.1.7
13 14	BERMEJO	EU Funding	Brussels, BEL	1 2.1.7
20 30	MARATOS	IMO Assembly	London, GB	O 1.2.1
23 24	MARATOS	Gala farewell Director HO	Stavanger,NO	O 4.2.1
19 30	SHIPMAN	IMO Assembly	London, GB	O 1.2.1
DECEMBER				
0.4.07	CODGICA	m 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Paramaribo,	T 2.2.2
04 07	GORZIGLIA	Technical Visit	SUR	T 2 1 2
10 13	WARD	ENC Launching	Jakarta, IND	T 3.1.2
12 12	MARATOS	SRWG	Hamburg, GER	T 5.1.1
13 14	BERMEJO	IAB Meeting	Brussels, BEL	O 3.3.1