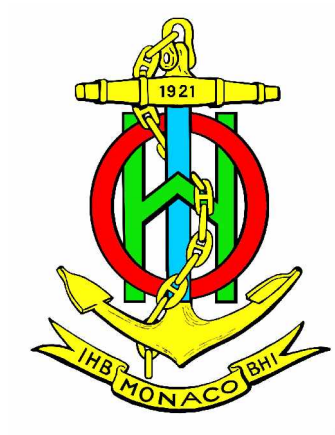


INTERNATIONAL HYDROGRAPHIC ORGANIZATION



ANNUAL REPORT 2005

PART 1 – GENERAL

ANNUAL REPORT
OF THE
**INTERNATIONAL HYDROGRAPHIC
ORGANIZATION**
2005

PART I - GENERAL

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INTERNATIONAL HYDROGRAPHIC ORGANIZATION

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INTRODUCTION

The International Hydrographic Organization is pleased to present the Annual Report for 2005 to IHO Member States and to all those who are interested in monitoring the work and progress made by the IHO on the many subjects of hydrographic, cartographic and navigational importance to safety of navigation, protection of the marine environment, development and security.

The Annual Report consists of two parts:

Part 1 – General. Summarizes the developments of the Organization within the 5 Work Programmes and provides the main activities of the Regional Hydrographic Commissions, Committees, Working Groups and Advisory Boards.

Part 2 – Finance. Presents the financial issues of the Organization for 2005 and will be made available in May, following the closing of the financial period in accordance with Article 12 of the Financial Regulations and the examination of the Auditor's report in accordance with Article 21 of the Financial Regulations.

Whilst all the activities and work carried out during 2005 are very important for the Organization, the Extraordinary Hydrographic Conference in April 2005 must be considered as the major event of the year. The Extraordinary Conference approved the amendments to the Convention proposed by the SPWG, in an effort to make the Organization more efficient, effective and responsive to the demands and requirements of a globalised world as we move into the 21st century. The amendments have been circulated by the Government of Monaco, through diplomatic channels, to Member States for ratification in accordance with Article XXI of the Convention. The SPWG has continued its work examining the necessary amendments to the other Documents of the Organization and developing an implementation plan for the new structure.

Another very important issue for the Organization was the cooperation with IMO, IALA, IOC and WMO, in close contact with the States in Indian Ocean affected by the tsunami disaster that occurred on the 26th of December 2004, to try and identify the problems and to coordinate the support needed. In meetings of the EAHC and NIOHC that were organized early in the year the problems were identified and the way forward decided. At a special session of the Member States on this matter, held following the Extraordinary Conference the needs were presented, the response was reviewed and decided upon and the Bureau developed a Plan for the "IHO RESPONSE TO DISASTERS", which is now TR K 4.5.

Many other issues of importance to Organization were presented and discussed in 2005, aiming at responding to demands for the provision of better hydrographic services. Worth highlighting are the following:

- decisions taken at the 17th meeting of CHRIS and the 9th WEND meeting aimed at determining the future development of the IHO Standard S-57e3.1 and its ENC product specification, proposing numerous changes to the WEND Principles aimed at attaining sufficient ENC coverage and an efficient distribution system;
- Capacity Building issues have been accelerated with the establishment of the Capacity Building Fund and the decision for the RHCs to include support for CB as a standing Agenda item at their meetings. Member States are approving and supporting this very important initiative;
- The IHO Work Programme and Budget for 2006 was approved by Member States and it will be implemented 1st of January 2006;

- In 2005 eleven RHCs met to discuss different regional issues with the purpose of accelerating the production and delivery of ENC's and to better coordinate hydrographic and cartographic activities;
- There was a very close cooperation with IMO, IOC, IALA and FIG. The IHO supports the efforts of IMO on different issues and especially in those concerning the mandatory carriage of ECDIS with official ENC's and the production of a digital world catalogue;
- Cooperation with FIG and ICA continued through the International Advisory Board on Standards of Competence for Hydrographers and Nautical Cartographers. New courses were given international recognition by the Board;
- The Manual on Hydrography, a very important publication, has been concluded and circulated to Member States.

The United Nations General Assembly with its Resolution A/60/30 dated 29 of November 2005, under the Agenda for the Oceans and the Law of the Sea, "Welcomes the adoption by the International Hydrographic Organization of the "World Hydrography Day", to be celebrated annually on 21 June, with the aim of giving suitable publicity to its work at all levels and of increasing the coverage of hydrographic information on a global basis, and urges all States to work with that Organization to promote safe navigation, especially in the areas of International navigation, ports and where there are vulnerable or protected marine areas". This is a very positive development and the Bureau will shortly inform Member States of the actions that need to be approved for the celebrations.

On the 6th of April 2005 Prince Rainier III of Monaco passed away. Prince Rainier, who was always present in the Hydrographic Conferences, was very supportive of the IHO following developments very closely and supporting the needs of the Bureau. Following the period of mourning, the Directing Committee participated in the celebrations for the enthronement of Prince Albert II as the leader of Monaco. Prince Albert, like his father, is very supportive of hydrographic issues.

The Directing Committee invites the readers of this IHO Annual Report Part 1, to visit its web site – www.iho.shom.fr - where they can find more detailed information on the work of the IHO and provide any comments that will result in the improvement of the web and of the information.

WORK PROGRAMME 1

COOPERATION AMONG MEMBER STATES AND WITH INTERNATIONAL ORGANIZATIONS

1. IHO REGIONAL HYDROGRAPHIC COMMISSIONS

49th NORDIC HYDROGRAPHIC COMMISSION MEETING (NHC)
Reykjavik, Iceland, 8-9 February

Chairperson: Mr. H. HAFSTEINSSON (Iceland) up to February
Mr. Fröde KLEPSVIK (Norway)

Vice-Chairperson:

Members: Denmark, Finland, Iceland, Norway, Sweden.

Associated Members:

Observers:

The IHO's second oldest Regional Commission convened its 49th Meeting amidst fresh blowing snow in Reykjavik, Iceland. The Nordic Hydrographic Commission has a long history of strong cooperation and a deep understanding of the obligation they have to the mariner with respect to safety at sea. These themes were evident throughout the Agenda.

The national reports note aggressive efforts in resurveying to modern standards and ENC production despite some evidence of resource reductions. One method of dealing with the reductions is outsourcing appropriate portions of the data collection, processing and chart production tasks. As the members of this Commission retain sufficient expertise for rigorous oversight, their outsourcing experiences have been positive and productive. It was suggested that other Member States may wish to discuss outsourcing strategies with this commission's members. Another means of compensating for resource reductions was offered by Norway, where a gas company is co-financing a harbor survey associated with a gas terminal. Norway has also been successful in motivating research and scientific activities to comply with S-44 standards when collecting bathymetric data. Iceland reported on its efforts to compile a bathymetric database for their waters from various sources including hydrographic survey, scientific research, cable route surveys and fishing trawlers.

The Nordic Hydrographic Commission members actively coordinate survey plans and exchange hydrographic data. Such cooperation is an important enabler in achieving the goals of the HELCOM to have 100% coverage of most shipping lanes with ENC'S based on modern surveys. The NHC is prepared to share their experiences on coordinated requirement setting, planning and execution with other commissions. To this end the NHC will attempt to provide information to others at the North Sea Coordination Meeting and possibly through the Primar-Stravanger Exhibit at the EIHC and following IHC. In other area of coordinated efforts, the NHC agreed to develop a common position on the update of S-44 and with the upcoming EIHC focused on the efforts of the SPWG, all members of the NHC strongly endorsed the proposals of the SPWG and agreed to make their support evident at the EIHC.

In areas of training and technical assistance, the NHC continues a proactive program. "Behind the Nautical Chart" is a downloadable publication from Denmark (<http://www.kms.dk>) that provides the reader with an understanding of surveying and the accuracy and use of the nautical chart. It is available in English and Danish. Finland has developed a series of short training lectures that they are willing to share with others as desired. Norway noted it is working with Croatia to upgrade its

hydrographic capability and continues its long-standing support of Mozambique. Norway will analyze what assistance it may be able to provide to the countries affected by the tsunami. Iceland maintains an assistance project with Malawi.

The update of S-55 was noted and the NHC agreed to maintain the currency of its inputs and attempt to influence others to contribute and maintain their information. The capacity building strategy and work program was also noted. The NHC agreed to keep the IHO Capacity Building Committee informed of the various technical cooperation projects with which they are involved.

Mr. Frode KLEPSVIK from Norway was elected Chairman and in honor of the upcoming 50th anniversary a special meeting in Svalbard is planned in April 2006.

EXTRAORDINARY CONFERENCE OF THE EAST ASIA HYDROGRAPHIC COMMISSION (EAHC)

Seoul, Republic of Korea, 22-24 February

Chairperson: Mr. Sub-In KWAK (Rep. of Korea) up to May
Mr. Chong Rok PARK (Rep. of Korea)

Vice-Chairperson:

Members: China, Indonesia, Japan, Malaysia, Philippines, Rep. of Korea,
Singapore and Thailand

The East Asia Hydrographic Commission (EAHC) met in extraordinary session on 22-24 February 2005, under the Chairmanship of Sub-In KWAK, Director –General of the National Oceanographic Research Institute. This session, called at the conclusion of the last ordinary EAHC Conference in November 2003, was initially envisaged to address the issues associated with the upcoming Extraordinary International Hydrographic Conference; however, in the interim, several other important and emergent issues were added to the agenda.

One emergent and tragic event affecting EAHC members was the Sumatra Earthquake and subsequent Indian Ocean tsunami of 26 December 2004. Thailand, Malaysia and Indonesia provided excellent reports of the effects of this disaster on their countries with a focus on the impact to safety of navigation and on their capacity to address these safety of navigation issues. In the breadth and degree of destruction, Indonesia faces the largest challenges to assessing and addressing safety of navigation in their waters. Significant losses to aids to navigation and substantial changes to the shoreline, seabed and harbour facilities were noted. Both Malaysia and Thailand noted more localized damages that were within their capacity to address. Malaysia reported that their investigations of the Malacca Straits, particularly near the One Fathom Bank, indicated changes to the seabed that did not pose a hazard to navigation. It was opined that these changes were probably sand wave migrations unrelated to the tsunami or earthquake but that a more complete four-nation survey of the Straits was warranted. Thailand has developed a three-year recovery plan to address their resurvey needs. The U.S. Navy and the UKHO reported on their survey efforts in coastal and offshore Indonesia. This agenda item provided extremely important information as the IHO, in concert with IMO and IALA, mapped out a strategy to address safety of navigation issues resulting from this tragedy. Also discussed under this agenda was the Inter-governmental Oceanographic Commission (IOC) initiative to populate a bathymetric database in support of tsunami forecasting and warning.

Another emergent matter was the unprecedented production of four small-scale ENC's of the South China Sea by the EAHC. This innovative solution to accelerating complete ENC coverage of the region was reported on and follow-on efforts that will maintain the momentum were discussed. The four ENC's will be distributed, free of charge, through the Internet or from the participating Member States.

With respect to the proposals submitted by the SPWG to the EIHC, VAdm. MARATOS summarized the proposals and explained the procedures that would be followed during the conference. The EAHC expressed strong support for the SPWG proposals.

Another pending matter before the EAHC is the rewriting of the Statutes. Although much time and effort has been spent on refining the new statutes, the conference decided to postpone the adoption until after the EIHC, should there be decisions at that conference that would affect the statutes of the EAHC.

It was noted that the Democratic People's Republic of Korea has formally requested membership of the EAHC and seven of the eight members have signaled their acceptance of DPRK as a new member.

The USA was informed that they should apply for membership in writing so that their membership could be considered at the necessary level of government of the existing EAHC members.

The next ordinary meeting of the EAHC will be held in September 2006 in the Republic of Korea.

5th MEETING OF THE NORTH INDIAN OCEAN HYDROGRAPHIC COMMISSION (NIOHC)

Jeddah, Saudi Arabia, 28 February-2 March

Chairperson:	Dr. David Wynford WILLIAMS (UK)
Members :	Bangladesh, India, Sri Lanka, Thailand, United Kingdom
Associate Members:	France, Myanmar, Seychelles, USA
Observers:	Malaysia, Oman, Saudi Arabia and Seychelles

The 5th Meeting of the North Indian Ocean Hydrographic Commission (NIOHC) took place in Jeddah, Saudi Arabia, from 28 February to 2nd March, under the Chairmanship of Dr. Wyn WILLIAMS, Chief Executive and UK National Hydrographer. 37 delegates participated from 18 States and four Organizations: Bahrain, Bangladesh, Egypt, France, Germany, India, Kuwait, Oman, Pakistan, Qatar, Saudi Arabia, Sudan, Seychelles, Sri Lanka, Thailand, United Arab Emirates, UK and USA. Also representatives from the International Maritime Organization (IMO), the Intergovernmental Oceanographic Commission (IOC), King Abdulaziz University and PERSGA attended. The IHB was represented by Vadm. A. MARATOS, who briefly presented the activities of the Organization during the past year and especially referred to the co-operation with other International Organizations.

Different issues were discussed of importance to the area. Regarding the ENC's developments the identification of key routes and ports, the schema and timeline for production and the producer Nations were discussed. Also assistance needed for the production of the ENC's and the distribution services available were indicated by the participants. It is anticipated that there will be progress in this issue soon. The implementation of the production of the INT Charts in the area was discussed and some amendments were agreed. The participating States provided through their National Reports their activities during the past year on different hydrographic issues. Captain Mike BARRITT from the UK presented the latest developments with the completion of the Publication S-55 and the decisions that have been taken regarding the Capacity Building Committee.

A special session on the tsunami issues was organized where States suffered by this disaster reported on the damages and the needs for support. The IHB President gave a detailed presentation of the activities of the Bureau and the results of the co-operation with other International Organizations. The requirements for support have been identified and participating States have indicated their willingness to provide support. The final outcome of this issue will be discussed in a special session that will take

place on 16th April, after the Extraordinary Conference. The details of this issue have been notified to Member States with Circular Letter No. 18/2005. A second letter will be issued before the end of March with the Agenda and the final details.

A half a day "Seminar" was organized where Dr Wyn WILLIAMS the Vice Chairman of the SPWG and the President of the IHB, presented the work of the SPWG, the proposals that will be discussed in the Extraordinary Conference and the details of the arrangements for the Conference. Members of the NIOHC in a resolution indicate their support in principle of the proposals put forward to the Extraordinary Conference by the SPWG.

The representatives of the IOC gave a presentation on a programme proposed and funded by this Organization for the collection of data and the establishment of databases for coastal bathymetry in the Indian Ocean in order to support the requirements for the establishment of a tsunami warning system. This is a three years programme with a budget of 850.000 US dollars. A resolution on this issue was approved by the participating States.

It was agreed that the 6th NIOHC Meeting will take place in March 2006 in Colombo, Sri Lanka and will be Chaired by the current Chairman, Dr. Wyn WILLIAMS.

28th MEETING OF THE UNITED STATES - CANADA HYDROGRAPHIC COMMISSION (US-CHC)

San Diego, CA, United States of America, 30 March

Co-Chairpersons: Captain R.L. PARSONS (USA (NOAA)) and
Dr. Savithri NARAYANAN (Canada)

Vice-Chairperson:

Members: USA, Canada.

Associated Members:

Observers:

Next meeting: Halifax, Nova Scotia, 5-8 June 2006

The 28th meeting of the US-Canada Hydrographic Commission was hosted by CAPT Roger PARSONS, NOAA in conjunction with US Hydrographic Conference 2005. This meeting was one of the first opportunities for the Co-chair and newly appointed Acting Dominion Hydrographer, Dr. Savithri NARAYANAN, to discuss IHO issues in an international forum. The meeting covered numerous topics that furthered the cooperation of the two countries through an improved and updated understanding of each country's priorities and pursuits and the opportunity discuss specific matters requiring collaboration or agreement. A 25 February 2005 teleconference of the Chart Advisors Committee had previously dealt with several technical and procedural issues in advance of this meeting.

Specific topics under discussion that require further and continued cooperation between the two countries include ENC production in trans-boundary areas, personnel exchange programs, surveys in support of UNCLOS Article 76 claims, production of GEBCO/IBCNA charts and ENC distribution. ENC distribution presents particularly challenging issues given the CHS exclusive agreement with NDI and the free release with third party certification policy of the OCS.

The IHB presented information on the status of S-55, the IHO Capacity Building Program and initiatives under the purview of WEND. The current status of the SPWG proposals and the upcoming Extraordinary Conference to discuss/approve these proposals was also discussed.

The next meeting of the US-CHC will be in conjunction with the Canadian Hydrographic Conference, 5-8 June 2006 in Halifax, Nova Scotia.

ROPME SEA AREA HYDROGRAPHIC COMMISSION

A coordination meeting was held during the 3rd EIHC Conference. The next meeting has been scheduled in Tehran, Iran, in May 2006.

- Chairperson:** Dr. M. R. GHADERI (Iran) up to October
Mr. S. Ali ESTIRI (Iran)
- Members :** Bahrain, Iran, Oman, Pakistan and United Arab Emirates
- Associate Members:** Kuwait, Qatar, Saudi Arabia and United Kingdom,

11th MEETING OF THE BALTIC SEA HYDROGRAPHIC COMMISSION (BSHC) Jurmala, Latvia, 14-17 June

- Chairperson:** Admiral A.A. KOMARITSYN (Russia) up to June
Mr. Janis KRASTINS (Latvia)
- Members:** Denmark, Estonia, Finland, Germany, Latvia, Poland, Russian Federation, Sweden.
- Associate Members:** Lithuania.
- Observers:**

The 11th Meeting of the Baltic Sea Hydrographic Commission (BSHC) took place between 14 and 17 of June 2005 in the beautiful town of Jurmala, in Latvia. 31 representatives from: Denmark, Estonia, Finland, Germany, Sweden, Latvia, Lithuania, UK, Poland, Russian Federation and from the Inter-governmental Oceanographic Commission (IOC) participated in the meeting, which was chaired by Rear Admiral Boris FRIDMAN from Russian Federation. Vice Admiral MARATOS represented the IHB and presented the activities of the Organization during the intersessional period. He highlighted the actions taken by the IHB following the decisions of the 3rd Extraordinary Conference in April, indicating that all the final documents of the amendments to the Convention have been sent through the Diplomatic Channels to Member States, to the Government of Monaco, and to Member States for approval, according to Article XX of the Convention. He also explained the work of the Chair Group of the SPWG in its two meetings and the subjects to be discussed in the 6th Meeting of the SPWG in Sydney, on 13-15 July. Participants expressed their support for the work of the SPWG. The Commission selected Mr. Juha KORHONEN from Finland to represent the BSHC in the 6th Meeting of the SPWG. Two topics that were presented by Germany and Russian Federation concerning amendments to the Implementation Plan of the new structure proposed by the Chair Group and the General Regulations will be presented in the meeting of Sydney. Vice Admiral MARATOS also explained the co-operation with IMO, IALA, IOC and other Organizations, the developments in Capacity building, and the progress in the follow-up activities on the “tsunami” issue, after the special session held in Monaco on 15 April after the Extraordinary Conference.

During the meeting important technical subjects were discussed and decisions were reached on different issues. Of interest are the subjects of the common sea-level datum in the Baltic Sea, the monitoring of the re-survey in the area and the production of ENCs, the report of the Baltic Sea International Chart Committee (BSICC), the developments on the Draft European Union INSPIRE Directive. Also the promulgation of maritime safety information in the Baltic Sea was discussed. Poland gave a very interesting presentation on the discovery of the “Steuben” wreck.

Mr. Janis KRASTINS from Latvia was elected new Chairman of the BSHC.

7th MEETING OF THE SOUTH EAST PACIFIC HYDROGRAPHIC
COMMISSION (SEPHC)
Guayaquil, Ecuador, 7-8 July

Chairperson:	Rear Admiral Oleg KRILJENKO (Peru) up to July Commander Mario PROAÑO SILVA (Ecuador)
Vice-Chairperson:	
Members:	Chile, Colombia, Ecuador, Peru.
Associated Members:	
Observers:	Panama
Last Meeting:	Lima, Peru, 3-5/11/03

The 7th Meeting of the South East Pacific Hydrographic Commission (SEPHC) took place at the Club Naval, Naval Base, Guayaquil, Ecuador, from 07 to 08 July 2005. At the opening ceremony, after submitting his report, the Chairman, Rear Admiral Oleg KRILJENKO (Peru), handed over the chairmanship to Commander Mario PROAÑO (Ecuador), who hosted and conducted the meeting.

All full Members were present: Chile, Colombia, Ecuador and Peru. The Observer country Panama did not attend.

There were three presentations by the IHB: Captain GORZIGLIA made some general remarks highlighting the success of the meetings just completed as well as the importance IHO gives to RHCs. He also reported on the progress of the actions agreed at the last meeting entrusted to the IHB/IHO and briefed participants on other ongoing IHO activities. Finally, he submitted a report on Capacity Building activities with a detailed explanation on the CB Work Program and CBFUND. To complement this presentation, Captain BARRITT detailed the progress on S-55 and requested that this publication be updated on a permanent basis.

There were only two presentations by delegations: Ecuador referred to the progress achieved as regards the gathering, compilation and classification of single beam and multibeam bathymetric data in their area of responsibility, in particular in the Galapagos, and Colombia made a presentation on the methodology employed to complete the questionnaire of S-55, as regards hydrographic surveys and nautical charting coverage, using GIS as a tool.

Participants agreed on 8 topics, which in brief are :

- a) To thank Colombia for the shared methodology, to evaluate such methodology and to include the issue of the S-55 update as a permanent agenda item;
- b) To hold a Workshop in Peru in November 2007, and to apply to the CBFund to support this initiative.
- c) To organize an ENC Seminar in August 2006, in Chile, and submit this initiative with all the relevant justifications to the CBC requesting partial support to assure attendance of at least one person for each country.
- d) To task Ecuador to prepare a project for this implementation within the next 90 days.
- e) To task the Chairman of the Commission to request IHB to open an open forum on the IHO web site for the exchange of information between technicians in Hydrographic Offices.
- f) Take the appropriate measures to collect initiatives to be provided to the CBC in order to have them included in the 5-Year IHO Capacity Building Work Program.
- g) To continue the exchange of professionals between the HOs and to share the experience gained during different courses or on-the-job training ("stages").
- h) Finally, it was agreed to hold the VIIIth Conference in March or April 2008, in Cartagena de Indias, Colombia, on dates which are to be fixed.

5th MEETING OF THE SOUTHERN AFRICA AND ISLANDS HYDROGRAPHIC
COMMISSION (SAIHC)
Simon's Town, South Africa, 27-28 September

- Chairperson:** Captain A. KAMPFER (South Africa)
- Members :** France, Mozambique, Norway, Rep. of South Africa and UK
- Associate Members:** Angola, Kenya, Madagascar, Mauritius, Namibia, Portugal, Seychelles and Tanzania

Captain Abri KAMPFER, SAN convened the 5th Meeting of the Southern Africa and Islands Hydrographic Commission (SAIHC) in the quaint Navy town of Simon's Town, South Africa. Twenty delegates representing nine countries were present. While the program covered all the normal agenda items of a regional commission meeting, Capacity Building took center stage. Few regional commissions are in greater need of concrete measures for capacity building than the SAIHC. With the IHO Capacity Building work program focusing on this region in 2006, much discussion dealt with ensuring these efforts, which are effectively implemented. A common theme throughout the discussion was the need to develop better communications within the region. Many communiqués go unanswered even with seemingly good information on points of contact. To highlight this problem, several countries, including an IHO Member State, were not present despite the offer of the Norwegian Hydrographic Service to fund the transportation and per diem of any country wishing to attend. The Commission was appreciative of this assistance from Norway but perplexed at the limited take up on this offer.

An aggressive schedule of letter writing and technical assistance visits culminating in a MSI Capacity Building Seminar scheduled for 5-6 June 2006 was discussed and agreed to. The initial letters requesting acceptance of the visit team by the governments of each country were sent shortly after the conclusion of the Commission meeting. Visits to the countries are planned for January and February 2006.

An update on the Marine Highway Development Project – a World Bank/GEF funded project to improve the safety of navigation and protection of the marine environment along the very busy travel shipping lanes of the Madagascar Channel through the hydrographic, cartographic, MSI and pollution control initiatives – was provided by RAdm. Neil GUY. Also, a presentation on the threat of a locally generated Tsunami provided additional impetus for conducting near shore hydrographic and offshore geophysical surveys.

14th MEETING OF THE MEDITERRANEAN AND BLACK SEAS
HYDROGRAPHIC COMMISSION (MBSHC)
IHB, Monaco, 4-5 October

- Chairperson:** IGA Yves DESNOËS (France) up to September
IGA Gilles BESSERO (France)
- Vice-Chairperson:**
- Members:** Algeria, Croatia, Cyprus, Egypt, France, Greece, Italy, Monaco, Morocco, Russian Federation, Serbia & Montenegro, Slovenia, Spain, Syria, Tunisia, Turkey, Ukraine.
- Associate Members:** Bulgaria, Georgia, Israel, Malta, Palestinian Authority, Romania, UK, USA.
- Observers:** Albania, Germany, Lebanon, DINMA, IMA, IOC, PRIMAR.

The 14th Meeting of the MBSHC took place at the IHB, Monaco, from 4 to 5 October 2005, under the Chairmanship of the Director of the French Hydrographic Office (SHOM), Ingénieur Général de l'Armement Gilles BESSERO.

Representatives from twelve members (Croatia, Cyprus, France, Greece, Italy, Monaco, Russia, Slovenia, Spain, Tunisia, Turkey and Ukraine), four associate members (Israel, Malta, Romania and United Kingdom) and four observers (Germany, IOC, IMA and the IHB) attended the meeting.

The IHB hosted the meeting and was represented by VAdm A. MARATOS and Captain F. BERMEJO. Spain was nominated as Vice-Chairman of the Commission.



The President of the IHB Directing Committee presented a report highlighting the most important tasks of the Organization since the last meeting, with specific reference to the work of the SPWG, the revision of the WEND principles, the new Technical Resolution K4.5 concerning IHO response to disasters, Capacity Building matters, including updating of S-55, the work carried out by GEBCO and the establishment of a new working group to deal with the updating of IHO publication S-44 "IHO Standards for Hydrographic Surveys".

SPWG matters

The participants discussed the procedure to designate representatives for the future IHO Council, as requested by the SPWG following approval by the 3rd IEHC of the new structure for the Organization. Italy was tasked with producing a draft document, with the support of the Commission members, by 1st December and seeking comments from members within a period of two months.

Statutes

The Commission took note of the fact that the Statutes will need modification after the ratification of the Convention.

France proposed an amendment to Articles 4 and 6 (c) to allow associate members to host meetings in the future, which was accepted by members. The Chairman will officially communicate the amendments to the Statutes to all members of the Commission.

Reports were presented on the following matters:

MEDINTCHART

- ENC's
- S-55
- NAVAREA and NAVTEX
- IHO Membership
- New techniques and equipment
- Bilateral or multi-lateral arrangements
- Technical Assistance and Cooperation

Turkey, as Chairman of the Working Group, reported that a meeting had been held in Kiev in 2004 but no progress had been communicated about the possible funding of the Project by the European Commission. Capt. BERMEJO (IHB) and Capt. BARRITT asked him about other efforts to seek funding from other sources and reminded him and the rest of the members that the IHO CBC Fund had been established to finance small projects, or the first phase of bigger projects, and that all Regional Hydrographic Commissions are expected to submit projects, through their Chairmen, to be considered for funding.

The next meeting of the WG will be held in St. Petersburg, probably in September 2006.

Other reports and presentations were given by France, Germany, Israel, UK and observers

Following input provided by the participants, a previous list of projects was established.

It was recalled that the MBSHC Chairman should transmit all the requests listed to the CBC, in accordance with the procedures established and communicated to all RHC Chairmen by the CBC Chairman. The timing for this submission is three months before the CBC meetings, the next one being in June 2006.

The participants agreed that the next meeting should be held after the 17th IHO Conference and therefore it was decided to hold it in the second half of October 2007. Tunisia kindly offered to host the meeting and will confirm this by April 2006. Other countries offering to host the meeting were Malta and Croatia.

7th MEETING OF THE SOUTH WEST PACIFIC HYDROGRAPHIC COMMISSION (SWPHC)

Wellington, New Zealand, 7-8 November

Chairperson:

Mr. J. SPITTAL (New Zealand)

Vice-Chairperson:

Members:

Australia, Fiji, France, New Zealand, Papua New Guinea, Tonga, UK, USA.



The South West Pacific Hydrographic Commission (SWPHC), under the Chairmanship of John SPITTAL of New Zealand, convened its seventh meeting in Wellington, New Zealand. Members in attendance included New Zealand, Australia, France, UK, Fiji and Papua New Guinea, with associate members or observers from Samoa, Tokelau and SOPAC. Mr. Warick QUINN, Chief Executive of Land Information New Zealand, welcomed the participants, noting the importance of hydrographic data and the relative sparseness of modern hydrographic data in the SWPHC region. The importance of the data for numerous uses and the cost of collecting data mandate that governments ensure its widest availability and most efficient collection. To this end New Zealand is embarking on a program, OCEANS 2020, that will coordinate across all government activities the collection, use and availability of ocean data.

The national reports indicated, in sum, steady, if not slow, progress in hydrographic data collection and nautical chart production. Several bi-lateral assistance projects were noted and the Royal New Zealand Navy reported on a good will and training cruise that performed hydrographic surveys in several island states. PNG noted that they had formed a National Maritime Safety Administration that would include a survey section. A long-range plan was developed focusing on the rehabilitation of Aids to Navigation in the near term followed by the recompilation of charts. Fiji has formed a maritime coordination committee made up of Members of Parliament that should facilitate access to decision-makers on hydrographic matters.

New Zealand led an informative discussion on metadata stemming from discussions at the 6th SWPHC. Under the auspices of SOPAC, numerous scientific expeditions collect bathymetric data that could potentially contribute to the nautical charting of the region. Assessment and eventual use of these data would be greatly facilitated if a common set of metadata were available for each data set. The conclusion of the discussions was that several international, regional and national activities were involved in setting metadata standards. The IHB and individual Hydrographic Offices, within their resources, should monitor the progress towards metadata standardization.

The Statutes of the Commission were reviewed and several changes approved that increase the flexibility of selecting a chair and the meeting venue. The role of the Commission Chair and the selection process for other representation with respect to the Strategic Planning Working Group, the Capacity Building Committee, and eventually the Council, under the revised Convention, were also discussed.

With the approval of the Capacity Building Program that included technical visits to the numerous countries of the region, attendees discussed the most effective method of conducting these visits in this expansive and communication challenged region. Samoa offered that PACMA, the Secretariat of the Pacific Community's regional maritime committee, offered access to the maritime safety administrations and maritime training institutes of the region. PACMA's next meeting is scheduled for mid 2006 in Apia. SOPAC also offered that the next meeting of the SPC is scheduled for September 2006 in Honiara, Solomon Islands. This would provide access to several ministerial level officials of the region. It was agreed that the visit planning should proceed and that the SPC meetings should also be used to access appropriate officials.

To this end the next meeting of the SWPHC was tentatively set to coincide with the SPC meeting in September 2006 in Honiara, Solomon Islands. The SWPHC Members agreed that New Zealand should retain the Chair.

**EXTRAORDINARY MEETING OF THE MESO-AMERICAN AND
CARIBBEAN SEA HYDROGRAPHIC COMMISSION (MACHC)
AND ELECTRONIC CHART SEMINAR
Veracruz, Mexico, 7-11 November**

Chairperson: Rear Admiral E.A. CELY NUÑEZ (Colombia)
Vice-Chairperson:
Members: Colombia, Cuba, France, Guatemala, Jamaica, Mexico, The Netherlands, Trinidad and Tobago, United Kingdom, United States of America, Venezuela.
Associate Members: Guyana, Haiti, Honduras, Nicaragua and Panama.

An Extraordinary Meeting of the Meso-American and Caribbean Sea Hydrographic Commission (MACHC), along with a Seminar on the Electronic Chart, was held at the Naval Academy of the Mexican Navy, in Veracruz (Mexico) organized by the *Secretaría de Marina* of Mexico. Representatives from Barbados, Belize, Brazil, Colombia, the Dominican Republic, France, Guatemala, Honduras, Jamaica, Mexico, The Netherlands, Suriname, UK, USA and Venezuela attended the meeting, along with representatives from commercial firms who participated in the Seminar, namely CARIS, SevenCs, MPC, MAPTECH and the Universities of New Hampshire and Southern Mississippi. The meeting was chaired by RAdm. Edgar Antonio CELY NUÑEZ (Colombia).

Capt. Hugo GORZIGLIA, IHB Director, and Rear Admiral Carlos ANGULO, Joint Director of the Directorate of Oceanography, Hydrography and Meteorology, gave a general overview of the Seminar. Capt. GORZIGLIA referred to the obligations resulting from the adoption of the revised SOLAS Chapter V and RAdm. ANGULO highlighted the objectives of the Seminar of addressing fundamental topics such as the production, distribution and future use of electronic charts.

EXTRAORDINARY MEETING OF MACHC

Review of the actions carried out since the 6th meeting of the MACHC

The absence of El Salvador was regretted and it was recalled that the Commission Statutes had been changed in 2002 specifically to admit that country into the Commission. In spite of this, El Salvador had not participated in any Commission meeting since that decision.

The representative from the Dominican Republic apologized for the absence of her country in the past and stated that full participation was now envisaged for the future, including the reintegration in the IHO as a full member.

Captain TEJADA (Colombia) recalled that one special day had been devoted to MACHC during the Seminar on Phase 1 organized for the countries of the Commission in Cartagena, in June 2005, along with the Third meeting of the IHO Capacity Building Committee. He emphasized the large participation in that meeting of Caribbean countries and highlighted the following actions related to the region which were agreed for the following months:

- Visit to Caribbean countries by an Action Team ;
- Seminar for Chairmen of National Hydrographic Committees or similar;
- Visit to CARICOM by the MACHC Chairman.
- Approval of funding of a pilot project of a short Hydrographic Course submitted by Nicaragua.



The IHB Director reported on the status of ratifications of the amendments to the Convention approved at the 3rd Extraordinary International Hydrographic Conference. He noted that all Regional Hydrographic Commissions must determine the method to adopt to designate representatives to serve on the future IHO Council. He also informed participants that the next SPWG meeting will be held in Mexico City, from 5 to 7 December 2005.

PROPOSALS SUBMITTED:

- Proposal 1 - Establishment of a regional Capacity Building Committee;
- Proposal 2 - Inclusion of Brazil in the Regional Hydrographic Commission;
- Proposal 3 - Review of the Statutes of the Commission;
- Proposal 4 - To upgrade the Working Group on Electronic Chart to Electronic Chart Committee.

Proposal 2 was unanimously approved and Brazil's representative, VAdm. Paulo Cesar DIAS DE LIMA, was congratulated on the admission of his country.

Following the approval of Proposals 1, 3 and 4, it was noted that there was not an agreed internal structure for the MACHC and its bodies. At the proposal of Colombia, a Drafting Group composed of Colombia, Mexico, UK, USA and Venezuela was formed with the following tasks:

- To present one month before the next MACHC meeting the following documents:
 - draft Terms of Reference for the internal structure, including the reports to be submitted and their periodicity as well as any other item that may improve the functioning of the Commission;
 - draft Terms of Reference for a MACHC Committee on Capacity Building; and a proposal of amendment of the Statutes including amendments suggested by USA and other amendments that may be proposed at the meeting.
- To submit, by February 2006, a draft on the selection procedure of representatives from MACHC for the future IHO Council.

The delegations of the countries attending presented the National Reports of their activities, including the status of hydrographic surveys and actions related to training and capacity building.

The need for training was common to all developing countries of the Commission and representatives from Colombia, Mexico, UK, USA and Venezuela tabled the various opportunities for training in their countries.

Capt. GORZIGLIA and Capt. BERMEJO (IHB) noted that the CBC Fund may contribute to some training needs, either by funding courses such as recently approved for Nicaragua or by sending students to attend specific courses, such as the Multibeam course recently run in Plymouth, where 3 students were financed by the CBC Fund. It was also recalled that any project should be sent to the Commission Chairman who will transmit them to the CB Committee before its next meeting.

The representatives from Honduras requested that another high level visit be made to their country by the IHB, in view of the change of all governmental authorities in January 2006. The Commission approved this request and the visit was tentatively scheduled for March 2006. A similar request was made by the representative from the Dominican Republic.

It was also agreed to include Suriname in the list of countries to be visited by the Caribbean Team.

The representative from Venezuela presented both the MACHC Chairman and the IHB Director with copies of the Spanish version of the “Manual on Hydrography”, translated by the Venezuelan Hydrographic Service. Capt. GORZIGLIA expressed, on behalf of the IHO, his sincere gratitude to the Venezuelan H.O. for this valuable contribution.

COMMITTEE ON ELECTRONIC CHART

The Committee on the Electronic Chart held separate meetings for Task Groups 1 and 2. Task Group 1 discussions focused on the development of the “Gulf of Honduras Project” and Task Group 2 worked on the development of ENC coverage and production in the area. Both Task Groups presented reports that were endorsed by the plenary MACHC.

SEMINAR

The Seminar was divided into the following parts:

- I. Emerging technologies – with presentations from NAVOCEANO, CARIS, UNH and the UKHO;
- II. Training – with a presentation from USM;
- III. Data production for ENCs – with presentations from CARIS and SevenCs; and

IV. Distribution of data – with presentations from MPC (Marine Press of Canada), MAPTECH, IC-ENC, Mexican H.O and the UNH.

Capt. GORZIGLIA (IHB Director) summarized the subjects addressed by the Seminar and then followed a round-table discussion.

5th MEETING OF THE HYDROGRAPHIC COMMITTEE ON ANTARTICA (HCA)

Christchurch, New Zealand, 2-4 November

Chairperson:

Captain H. GORZIGLIA (IHB)

Vice-Chairperson:

Members:

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

Associated members:

Observers:

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

Next Meeting:

Punta Arenas or Valparaiso, Chile, in November 2006.



The 5th Meeting of the Hydrographic Committee on Antarctica (HCA) was held at the International Antarctic Centre, Christchurch, New Zealand, on 2-4 November 2005, and was run with great success by John SPITTALL, New Zealand's Hydrographer, and all the Land Information New Zealand (LINZ) team.

The Chairman, Capt. GORZIGLIA, welcomed the 11 IHO Member States (Australia, Chile, China, France, Germany, Greece, India, New Zealand, Norway, South Africa and United Kingdom) and the 7 international organizations (ATCM, COMNAP, SCALOP, IAATO, GEBCO, IBCSO, and SCAR) who all actively participated in the event.

The Committee reviewed the membership status and, based on the signatures of the statutes received so far, tasked the chairman to contact Brazil, Ecuador, Japan, Rep. of Korea, Peru, Poland, Ukraine, USA and Uruguay, in order to obtain clarification as regards their intentions about participating in HCA activities. Following this formality and in accordance with art. 5.2 of the statutes, the Committee elected Captain Rod NAIRN (Australia) as vice-chairman of the HCA, and thanked Captain Roberto GARNHAM (Chile) for having carried out that function since the previous meeting.

The Committee reviewed the status of the actions agreed at the last meeting and confirmed that almost all the action items had been completed; reports were also submitted by the international observer organizations as well as the IHO Member States. The IHB reported on the latest progress made by the SPWG and on the need to discuss how the HCA would be represented in the future Council. The progress made regarding the INT chart scheme and ENC production, as well as the status of S-55 in Antarctica, were also reported upon, and actions were identified to further progress these three issues.

The Committee noted with satisfaction the importance given to the work of the HCA by the Antarctic Treaty System, through the views expressed by the Executive Secretary of the ATCM. In brief, all the international organizations that participate in HCA activities, officially known as Observers, have been very active and have worked hard and have made an important contribution to the work of the HCA. In fact, the INT Chart scheme is being updated with contributions mainly received from IAATO and COMNAP.

The most important discussion took place following the report of the Chairman of the HCA Hydrographic Survey Work Program Working Group, capably chaired by Mr. Andy WILLETT (UK). As a result of an interesting exchange of views, several actions were identified, all aimed at improving safety of navigation as quickly as possible through the collection of high priority new hydrographic data, required to produce the INT Charts in the Region "M" scheme. These actions included:

- a) To distribute the form for "Collection and Rendering of Hydrographic Data" to ship captains, to help the hydrographic data gathering process;
- b) To prepare an update of the INT Chart Scheme for Region 'M', so as to include the 20 agreed additions as new INT charts / inset plans;
- c) To submit the priority list of areas which urgently need new hydrographic surveys to the IPY Coordinating Committee, IMO, ATCM and COMNAP, seeking their endorsement in view of the importance of this work for the safety of navigation in the region and
- d) To submit the above-mentioned priority list to IHO Member States, seeking an indication of the level of funds that might be allocated to undertake the hydrographic surveys required, especially during the IPY.

In brief, HCA has produced a deliverable that could be used to guide the hydrographic efforts in Antarctica, specifically bearing in mind the contribution the IHO might offer towards the objectives of the International Polar Year (2007-2008). Clearly this event provides an excellent opportunity to concentrate efforts on the improvement of data gathering, compilation and production of nautical charts, for the preservation of the Antarctic.

The Committee also agreed on a number of actions to be carried out during the inter-sessional period and clearly identified the responsibilities and deadlines.

The Committee, accepting the kind invitation from SHOA, decided to hold the 6th HCA meeting in Punta Arenas or Valparaiso, Chile in November 2006.

STANDARDIZED STRUCTURE FOR NATIONAL REPORTS TO RHC

At the 5th meeting of the North Indian Ocean Hydrographic Commission some concern was raised as to the considerable variability in both the content and the structure of national reports. Consequently the IHB was asked to prepare a standardized structure for National Reports to RHC.

A draft text was prepared and circulated to the chairmen of RHC. Following feedback from the RHC an amended text was circulated.

The standardized structure has been used by several RHC and found to be beneficial. It is only intended for use by those RHC that wish to receive National Reports.

It has been proposed that IHO Administrative Resolution T1.3 be amended consequently.

2. IHO MEMBER STATES

AN EXEMPLARY AGREEMENT BETWEEN FRANCE AND MONACO CONCERNING THE NEW SOLAS CONVENTION SHOM, Paris, 19 September



The revised SOLAS Convention, which has been in force since July 2002, stipulates that the signatory States to this Convention are committed to providing official hydrographic services to mariners navigating in the waters under their jurisdiction. These services are specified as: hydrographic surveys, nautical charts and documents, broadcasting of urgent information concerning safety of navigation.

*Mr. Gilles TONELLI, Monegasque Government
Counselor and Vice Admiral Yves DESNOËS,
Director of SHOM sign the agreement concerning
SHOM's responsibility for maintaining the
Monegasque charts*

Certain countries, in spite of being signatories to the Convention, have still not fully developed the required technical capacities and services and so hydrographic services of countries, which have always had strong institutional links with them, continue to maintain the nautical documents for the benefit of international navigation. This role is recognized within the International Hydrographic Organization, but up until now it has been assumed on a permanent basis, tacitly renewed, with no legal obligation.

The services specified by the SOLAS Convention are of an official nature and the signatory States must designate the government authority responsible for providing them. It is now through an arrangement between France and the Principality of Monaco, that Monaco and France have officially made the French Navy's Hydrographic and Oceanographic Service (SHOM) responsible for producing nautical charts covering the Monegasque waters. Very symbolic of the good relations that exist since the Principality of Monaco generously hosts the headquarters of the International Hydrographic Organization.

The signing took place on 19 September 2005. The nautical charts of Monaco are officially published and maintained by the French Hydrographic Service, and from now on the official logos of both SHOM and the Maritime Affairs Directorate of Monaco will appear on the charts.

U.S. HYDRO CONFERENCE 2005
San Diego, California, 29-31 March



Celebrating its twenty-fifth anniversary, The Hydrographic Society of America hosted the U.S. Hydro Conference in San Diego, California. Over 350 delegates and fifty exhibitors were provided a program of cutting edge technology, topics of interest to hydrographers and opportunities to rekindle old friendships or make an important sale. This biennial conference continues to spotlight the innovation emerging from the three North American Universities offering advanced education in

Hydrography. The University of New Hampshire researchers reported on their advances in data management and display, the University of Southern Mississippi addressed research in improving GPS positioning and the University of New Brunswick presented research in establishing a stable vertical reference onboard survey vessels operating in the high Arctic. Numerous presenters from industry, government, academia and the military discussed survey operations in support of nautical charting, coastal zone management, UNCLOS Article 76 claims, military operations and habitat mapping. LIDAR charting figured prominently as a proven and rapidly evolving technology. Two program sessions dealt with ENC and Inland ENC production and their future evolution. An International Partnership session highlighted the GEBCO-NIPPON Foundation training program at the University of New Hampshire, a U.S.-Mexico cooperative survey and charting project and efforts in West Africa to establish a hydrographic society to enhance professional development in that region.

The 2006 Canadian Hydro Conference s scheduled for 6-8 June 2006 in Halifax, Nova Scotia. U.S. Hydro 2007, celebrating the 200th anniversary of the establishment of the U.S. Coast and Geodetic Survey, is scheduled for 15-17 May 2007 in Norfolk, Virginia.

3. INTERNATIONAL ORGANIZATIONS

INTERNATIONAL MARITIME ORGANIZATION (IMO)

24th SESSION OF THE IMO ASSEMBLY

IMO Headquarters, London, 21 November – 2 December

The 24th Assembly of the International Maritime Organization (IMO) was held at IMO headquarters in London from 21 November to 2 December 2005.

The Minister for Transport of the United Kingdom, in his welcoming address, indicated that the UK, together with other co-sponsors, would present a paper to the Maritime Safety Committee (MSC) proposing that “E-Navigation” be put on the work plan for the NAV Sub-Committee. The full text of the address is in Document A 24/INF.9 which can be downloaded from the IHO web site (www.iho.shom.fr) > INT Organizations > IMO

Three Assembly Resolutions related to “Ships’ Routing” concerning the Establishment of an area to be avoided in the Galapagos Archipelago; new and amended traffic separation schemes and associated routing measures in SW Baltic Sea and Amendments to the existing mandatory ship reporting system “In the Great Belt Traffic Area” all of which will come in to force at 0000 UTC on 1 July 2006 were adopted.

The IMO Secretary General, in his report to the Assembly on developments at the International Maritime Academy (IMA) in Italy, thanked the IHO for its continued support for IMA. He stated that IMA, as well as the World Maritime University (WMU) in Sweden and the International Maritime Law Institute (IMLI) in Malta, required regular planned funding in order to operate most efficiently and urged all IMO Member States and associated Organizations to maintain and to consider increasing their support and funding for these important maritime training establishments.

The Assembly approved the phase 1 refurbishment plans for the IMO HQ building. This will take 13 months beginning at the end of July 2006. The IMO Secretariat will relocate to a temporary office building elsewhere in London. Most meetings will continue to be held in the UK albeit at alternative venues, however the 82nd Session of the MSC in Nov / Dec 2006 will be held in Istanbul, Turkey.

It was announced that World Maritime day in 2006 would have the theme “Technical Co-operation: IMO’s response to the 2005 World Summit” and that this would have a special emphasis on addressing the maritime needs of Africa. The main event will take place in London with a parallel event being held in Singapore.

55TH SESSION OF THE TECHNICAL CO-OPERATION COMMITTEE OF IMO (TC 55)

London, UK, 15-17 June

The Technical Co-operation Committee held its fifty-fifth session from 14 to 16 June 2005, under the Chairmanship of Mr. Ben OWUSU-MENSAH (Ghana). Captain Federico BERMEJO represented the IHO.

The IMO Secretary General welcomed all the delegations and acknowledged the role and functions of the Committee that are so distinct vis-à-vis those of other IMO bodies, as it shapes and monitors the development and implementation of the Organization’s technical cooperation policies and programme respectively.

The Secretary also noted that there were three important matters to consider: consideration of the new Integrated Technical Cooperation Programme for 2006-2007, the proposed programme of TC-funded activities within the ITCP and the long-term financing of the ITCP.

The Secretary also referred to the tragic and devastating effects of the January tsunami and recalled that IMO, IHO and IALA had joined forces and were working in partnership to implement an agreed action plan.

Work of other bodies and organizations

After the presentation by Bangladesh of a document containing information on the proposal for the establishment of an International Ship Recycling Fund and the announcement by The Netherlands of its contribution of 25,000 euros towards the Fund, the IHO representative, Capt. BERMEJO, made a presentation on the IHO efforts in Capacity Building.

Capt. BERMEJO explained that the Third Meeting of the IHO Capacity Building Committee (CBC) had just been held in Cartagena (Colombia) and that a new Work Programme and Management Plan had been approved at the meeting that will result in future capacity building tasks to be carried out in 2006 and 2007.

The delegations of Nigeria and South Africa requested the CBC to give particular attention to Africa and the IHO delegate pointed out that Nigeria, as an active IHO Member State, could have an important input in that Committee through the Regional Hydrographic Commission. He also added that the next CBC meeting and a Technical Workshop for Africa will be held in Maputo (Mozambique) in June 2006, which demonstrated the level of interest that IHO is now giving to Capacity Building in Africa.

The delegation from Lebanon emphasized the IHO's role in safety of navigation and declared that without the work of IHO, this matter would have been much less developed. The maritime community should therefore thank IHO for its hard work and interest.

The Committee thanked the IHO for the document submitted and recognized the importance of IHO in the maritime industry and was commended for its work. The Committee also took note of the information provided.

Integrated Technical Co-operation Programme

A comprehensive report on the implementation of ITCP activities over the 2004-2005 biennium was presented and discussed in depth. During the first year of the biennium, US\$14 million were delivered at the regional and global level. Among the activities carried out, special mention should be made of 97 missions undertaken, 115 courses, seminars and workshops held and 4,181 participants were trained worldwide.

The Committee was informed that the Interim Report would be available on the IMO TC website.

Programme for 2006-2007

The proposed programme included 13 programmes (7 regional and 6 global) with funding requirements of US\$15.05 million. It was noted that the proposed ITCP should be viewed as a living programme, to be adjusted as circumstances require.

Long-Term financing for the ITCP by the Member States

The Committee endorsed the following five points presented:

- a. Ensuring that the TC Fund is maintained as a core fund to support the delivery of the primary activities of the biennial ITCP.
- b. Maximizing the cost-effectiveness of the delivery mechanism.
- c. Establishing an equitable financial mechanism to ensure the sustainability of the organization.
- d. Mobilizing external financial support through partnerships with Member States.

IMO International Maritime Academy

The Italian delegation informed the Committee that a total of 60 students from 60 countries had benefited from IMA's didactic activities in 2004 and more would benefit from ongoing training activities in the current year. All these activities were funded mostly by the Government of Italy and the local authorities, with partial funding from the European Union through the MEDA-EUMEDIS projects and IMO. The Committee was informed that the Italian commitment to IMA would continue.

IMO – MSC 80 MEETING IMO Headquarters, London, UK, 11-20 May

The 80th session of the Maritime Safety Committee (MSC) of the IMO was held at the IMO London Headquarters from 11 – 20 May 2005. The MSC agreed to the IHO's request for proposed amendments to the ECDIS Performance Standards to be put on the work programme of the Safety of Navigation Sub-committee (NAV) and on the agenda of the meetings in 2006 / 2007. The MSC also strongly supported IHO's request for an MSC Circular to be issued reporting the deficiencies in survey, charting and promulgation of MSI that have been highlighted in the 3rd Edition of S-55.

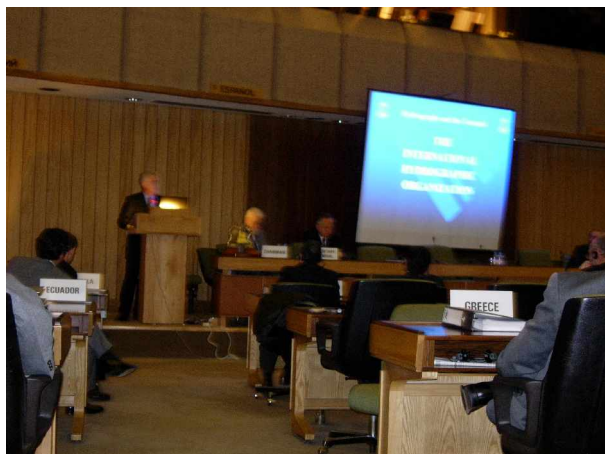
The IMO is considering the introduction of a Voluntary Member State Audit Scheme, intended to assess compliance with IMO Mandatory Instruments. SOLAS '74, as amended, is one such instrument. Regulations V/4 and V/9 require the issuing of navigational warnings and the provision of hydrographic services. The IMO has invited the IHO to consider supplying additional guidance on the process of auditing compliance with these regulations. Further details on this matter can be found in CL 54/2005.

Mr. Tom ALLAN from the United Kingdom announced his intention to stand down as Chairman of the MSC after 6 years. The MSC elected, by acclamation, Mr. Igor PONOMAREV of the Russian Federation as the Chairman of MSC for 2006.

51st SESSION OF THE IMO'S SUB-COMMITTEE ON SAFETY OF NAVIGATION

IMO Headquarters, London, UK, 6-10 June

The 51st Session of the IMO's Sub-Committee on Safety of Navigation (NAV51) was held at IMO's London HQ from the 6-10 June 2005. The IHO submitted 4 papers to NAV51 reporting on: The evaluation and use of ECDIS and ENC development; Action to improve the availability of hydrographic data in remote areas; The production of the South China Sea ENCs and The HELCOM Harmonized Re-Survey Plan for the Baltic Sea.



NAV 51 decided to recommend to the Maritime Safety Committee (MSC) a mandatory carriage requirement for ECDIS in High Speed Craft but not for other ships until such time as a Formal Safety Assessment into the use of ECDIS has been completed and considered by the MSC.

NAV51 also recommended MSC: to amend the footnote to SOLAS regulation V/9 regarding the definition of "Appropriate folio of paper nautical charts" and to invite Member States to consider which paper charts should form this 'appropriate folio' in their Territorial Waters and inform the IHO accordingly.

NAV51 welcomed the IHO offer to develop an on-line catalogue of ENCs, RNCs and paper charts required as back up. A preliminary draft specification for such a catalogue was prepared and passed to the Correspondence Group (CG) on ECDIS and ENC development, which was reconvened, with amended TOR, for further consideration. Mr Eivind S. VÅGSLID of the Norwegian Maritime Directorate will coordinate the CG.

The IHB and the two RENCs, IC-ENC and PRIMAR, gave a well-attended presentation on “Barriers to the adoption of ECDIS: Resolving the Issues”. A lively discussion took place after the presentation and it was decided to hold a seminar on the subject immediately prior to NAV52 in July 2006.

9th MEETING OF THE IMO SUBCOMMITTEE ON COMMUNICATIONS, SEARCH AND RESCUE (COMSAR)

IMO Headquarters, London, UK, 7-11 February

The 9th meeting of the IMO Sub-committee on Communications, Search and Rescue (COMSAR) was held at IMO Headquarters in London, from 7 to 11 February 2005. VAdm. MARATOS and Lt. Cdr. SHIPMAN from IHB and Mr. Peter DOHERTY (Chairman of CPRNW) represented the IHO.

Wednesday 9 February was devoted to presentations and to the submission of documents following the Indian Ocean Tsunami Disaster. VAdm. MARATOS gave a presentation outlining the actions already taken by the IHO and those in progress. Presentations were also made by IMO and IALA. A drafting group was established under the chairmanship of Mr. DOHERTY to review the documents submitted to COMSAR in relation to the WWNWS. The Sub-Committee accepted a COMSAR Circular prepared by the drafting group, which provides an interim mechanism whereby tsunami and other disaster warnings could be passed to the WWNWS for immediate transmission. This mechanism would take immediate effect pending a more detailed review by CPRNW, which is due to meet on 13 – 15 September 2005. The CPRNW position on this issue will be passed to Member States for approval and will then be submitted to COMSAR 10 for incorporation into the WWNWS.

A further submission regarding the promulgation by the WWNWS of changes in security levels in Territorial Seas, in accordance with the ISPS Code (Document COMSAR 9/12/2), was passed to the Maritime Safety Committee (MSC) in accordance with the normal rules for amending these publications. It is expected that MSC will pass the document to CPRNW for review.

UN Secretary General, Kofi ANNAN visited IMO on the final day of the COMSAR meeting.

MEETING ON TSUNAMI IN ASIA

IMO's Headquarters, London, UK, 12 January

At the invitation of the Secretary-General of IMO, the President of the IHB Directing Committee and the Secretary-General of IALA participated in a meeting at IMO's London Headquarters, on 12 January 2005. The needs of the States affected by the tsunami disaster with respect to the safety of navigation were discussed and a joint plan for future actions agreed. The needs as reported to the three Organizations by the official National Agencies in the area were presented and discussed. The IHO emphasized its actions to assess the damage to hydrographic infrastructure and the requirements for surveys in those areas affected by the tsunami, while IALA reported on the damage to navigational aids and IMO reported on the status of various ports. From the discussion it was clear that, at this stage, it was not possible to draw up a concrete set of requirements.

The participants agreed to the IHO proposal for the need for an immediate review of the IMO/IHO documents dealing with the promulgation of navigational warnings through NAVTEX and SafetyNET. Consequently the IMO Subcommittee on Radio communications and Search and Rescue (COMSAR), the 9th session of which is from 7 to 11 February, will accept documents on this matter

until the 28th January. The Bureau is working closely with Mr. DOHERTY, the Chairman of the IHO CPRNW and of the IMO COMSAR working group dealing with MSI, to present on behalf of the IHO a paper proposing amendments and improvements which will result in a better coordination and response to a tsunami threat. The availability of the IMO/IHO NAVAREA Warning system to the IOC tsunami warning structure was briefly discussed and specific actions will be decided during the COMSAR meeting.

Following the meeting in London a Press Release was prepared on behalf of the three Organizations; a paper prepared on the outcome of the meeting that will be presented by the IMO Secretariat to the COMSAR meeting and a further paper that will be presented by the Director of the IMO Maritime Safety Division, on behalf of the three Organizations, at the World Conference on Disaster Reduction in Kobe in Japan. These three documents have been posted on the IHO web site under the title "Tsunami disaster information in SE Asia". The IHO submission to COMSAR relating to MSI is also available on this site.

The IHB continues to communicate with the Hydrographic Offices of the States in the area in order to collect the information needed to support and co-ordinate any necessary actions. The Chairmen of the NIOHC and EAHC, which will meet in February, have included an Agenda item, in order to discuss the needs and determine follow-on actions. The Bureau was pleased to hear that Sri Lanka has accepted support from Germany to help overcome the problems caused by the tsunami. Thailand has informed the Bureau that there are some minor problems with the NAVAIDS and sedimentation in channels in Phuket, Krabi and Phang-gna provinces and that restorative actions are taking place.

IMO CORRESPONDENCE GROUP ON ECDIS

IHB, Monaco, 27-28 January

In 2004 Australia, Norway and France submitted papers to the Maritime Safety Committee (MSC) of the International Maritime Organization (IMO) regarding the use of ECDIS with Raster Navigational Charts and the possible introduction of ECDIS carriage requirements. The MSC tasked the Sub-Committee on Safety of Navigation (NAV) to consider the matter and report back to MSC. NAV 50 formed a Correspondence Group, to be chaired by Norway, to undertake a preliminary discussion on the matter and to report back to NAV 51.

Given the wide diversity of views received by the Correspondence Group, it was decided that it would be necessary to hold a meeting to seek consensus where possible. The IHO hosted this meeting at the IHB on 27 and 28 January. The meeting was successful in achieving consensus on several of the issues being considered and produced a draft report for submission to IMO. The report will now be finalised by Norway prior to being sent to the 51st session of NAV in June 2005.

INFORMAL MEETING ON THE VIABILITY OF AN E-NAVIGATION INITIATIVE

Trinity House, London, UK, 23 June

Twenty-two representatives of Maritime Safety Administrations, IMO, IHO & IALA met in London on 23 June 2005 to discuss the viability of initiating an e-Navigation project. As envisaged by the host, the UK Department of Transportation, e-Navigation would consist of installations ashore and afloat to enhance maritime security, safety of navigation and pollution control and response. IHO CL 29/2005 provided Member States with the initiating correspondence. The Australian Maritime Safety Administration, the U.S. Coast Guard and the UK MCA presented overviews of projects they have employed that may contribute to the concept of e-Navigation. The IMO provided a brief update on the Marine Electronic Highway project in the Malacca and Singapore Straits. After various interventions by the attendees, the host summarized that he heard general agreement for the need to pursue an e-Navigation project. The effort will be advanced through future meetings and correspondence. The host noted that an important stakeholder, the shipping industry, was purposefully omitted. Once this project can be better articulated with respect to financial costs and benefits, the shipping industry will

be brought onboard. It was agreed that the buy-in by shipping was critical but the benefit of e-Navigation must be demonstrable.

INTERGOVERNMENTAL OCEANOGRAPHIC COMMISSION (IOC)

23rd IOC ASSEMBLY Paris, France, 21 – 30 June

I. General Information

The Chairman opened the Assembly of the Intergovernmental Oceanographic Commission and a minute's silence was observed as a mark of respect for the Asian tsunami victims and the distinguished individuals who worked with IOC and who had passed away. The Director General of UNESCO addressed the Assembly highlighting the establishment of the Indian Ocean Tsunami Warning System and the need to attract more funds to give serious consideration to all programs.

II. Agenda and Participants

The Agenda of the Meeting covered a wide scope of subjects, ranging from statutory reports to ocean science and ocean services matters; capacity building and regional activities, and the response to the aftermath of the Tsunami on 26th December 2004 in the Indian Ocean. Out of 132 Member States, over 100 were present. The Chairmen of the National Oceanographic Commissions of these countries mainly headed their Delegations. The Heads of the following Hydrographic Offices were also present: Brazil, Chile, Ecuador, Germany, Russian Federation and Turkey. Captain Gorziglia represented the IHB.

III. Relevant matters to IHO

The following matters were directly related to the IHO objectives:

- a) Establishment of a Global Tsunami Early Warning System. The Assembly formed a sessional working group in which IHO was welcomed to participate as an as observer. The aim of IHO participation in this group was to highlight the importance of bathymetry in such a global system and for the IHO to contribute to the discussions.
- b) Draft Program and Budget. The IOC report for 2006/2007 included several modifications to its initial program as a result of a 20% cut on the budget allocated by UNESCO. In order to balance the situation it was proposed to :
 - a. Reduce by 40% the harmful algae program.
 - b. Reduce by 26% the Global Ocean Observing System (GOOS).
 - c. Reduce by 40% publications.
 - d. Cancel the IOC Ocean Mapping Program; however, it was identified as "fundamental" to IOC.

After several meetings, lobby activities, discussions and submission of relevant information, the Assembly agreed to apply a 20% reduction to all programs. This situation merits IHO's attention, as it will affect GEBCO and IBC projects in the coming years and probably in the future.

- c) IBC Programs. The IBCSEP and IBCSO are two new initiatives which are just starting whose work programs need to be coordinated. Particularly the latter one as it might contribute to the objectives of the International Polar Year.
- d) IOC/ABELOS. This group of experts has been working on the application of parts XIII-Marine Scientific Research and XIV-Development and Transfer of Marine Technology of UNCLOS. This has no relation to the work under the responsibility of ABLOS, and duplication is not the issue until now. Nevertheless, incorporating IOC in ABLOS and the “marine geo-scientific aspects” component seems to be seen as duplication, causing some concern.
- e) Capacity Building. IOC capacity building strategy and work program envisage some joint work with IHO. In fact, the efforts to improve capacity in the Indian Ocean to gather and process coastal bathymetric information, together with the production of tsunami inundation maps are being worked on together by IOC and IHO.

IV. Conclusions and Recommendations

The IOC will be affected by the 20% reduction of its normal UNESCO budget. This situation promises hard times for the ocean mapping program, and ways of solving this situation should be explored. It is recommended that both organizations continue to seek a solution.

Until now ABLOS and ABE-LOS have not been duplicating efforts, and to ensure that this continues to be the case, perhaps IHO should concentrate more on hydro and geodetic technical aspects, whilst leaving IOC to concentrate more on marine sciences. Probably both groups should continue to exist and to coordinate their work as needed. It is felt that, for IOC, participation in both bodies would be rather difficult. Perhaps if ABLOS concentrates on the hydrographic and geodetic technical aspects, then IOC would decide to participate just as an observer. The IHB and IOC Secretariats should consider exploring the best way to work together.

Capacity Building initiatives are progressing and it is recommended to continue working together, especially in the tsunami affected area, the Indian Ocean; but also in other regions also threatened by this type of natural hazard.

PAN AMERICAN INSTITUTE OF GEOGRAPHY AND HISTORY (PAIGH)

11th MEETING OF THE HYDROGRAPHIC COMMITTEE

Guayaquil, Ecuador, 4-6 July

The Pan American Institute of Geography and History was formed on 7 February 1928 with its headquarters in Mexico. In 1949, one year after the signing of the Charter of the Organization of American States (OAS) at the Bogotá Conference, PAIGH signed an agreement with the Council of the OAS and became its first Specialized Organization.

The objectives of the PAIGH are:

- to encourage, coordinate and publicize cartographic, geographic, geophysical and historical studies as well as related sciences of interest to the Americas;
- to promote and carry out studies, projects, and training in these disciplines;
- to promote cooperation among the Institutes of these disciplines in the Americas, as well as with related organizations.

Four Commissions form the Institute: Cartography, History, Geography and Geophysics. The Hydrographic Committee comes under the Cartographic Commission, with the objective: “to promote technical cooperation and better understanding in hydrography, nautical cartography and safety of navigation matters, between South American Hydrographic Services, with the aim of facilitating the exchange of information related to hydrographic surveying, research and technical development of the member countries.”

Seven countries were represented: Chile, Colombia, Ecuador, Mexico, Peru, United States of America and Venezuela. Capt. GORZIGLIA, IHB Director and contact point between PAIGH and IHO represented the IHO.



The Opening Ceremony was chaired by Rear Admiral Eduardo NAVAS NAJERA (Ecuador), General Director of the Merchant and Littoral Navy. Capt. GARNHAM (Chile), Chairman of the Committee, handed over the Chairmanship to Cdr. PROAÑO (Ecuador), who has taken over this responsibility until the next Hydrographic Committee Meeting.

Delegates and the IHO made several presentations:

The Committee adopted the following Resolutions:

1. to prepare a Spanish version of the Manual on Hydrography;
2. to accept Mexico's invitation to host the XII meeting in 2007, before the I.H. Conference;
3. to request IHB to approach Haiti and find out their technical requirements for the development of a hydrographic infrastructure;
4. to make wide use of the web page to exchange experiences and knowledge; and
5. to work on a project to prepare a practical manual of procedures to improve the different steps related to multibeam data gathering, processing and management.

In conclusion, the participation of the IHB representing the IHO was very appreciated, as personal contact provides an invaluable opportunity to strengthen relations between IHO Member States and the IHB. Unfortunately attendance was rather low and this situation was examined to see how attendance could be improved in the future.

The presentation made by the IHB Director as well as his contribution to the discussions that took place after each presentation were strongly endorsed by participants who appreciated the guidance and willingness of the IHO to assist in the development of the hydrographic capabilities of their respective countries.

The agreement to cooperate in the preparation and printing of the Spanish version of the Manual on Hydrography constitutes valuable support of the achievement of IHO mission.

ANTARCTIC RELATED ORGANIZATIONS

ANTARCTIC TREATY CONSULTATIVE PARTIES (ATCP)

Stockholm, Sweden, 6-17 June

The Antarctic Treaty Consultative Meetings are held annually to discuss matters related to the management of the Antarctic Treaty area and to further develop the Antarctic Treaty System. On this occasion, the issue of “Liability Arising from Environmental Emergencies” was specifically considered. The exchange of experiences and activities conducted in the Antarctic, including matters arising from the Protocol on Environmental Protection of the Antarctic, were also given special attention.

Participants allocated time to the discussion of the 72 Working Papers (WP) and 125 Information Papers (IP) submitted by various countries and international organizations related to the Antarctic. Over 250 people from 28 Consultative Parties plus 26 from 9 non Consultative Parties attended the Meeting. Delegations were essentially led by experts from the Ministry of Foreign Affairs in charge of Antarctic matters. 11 Observers from 3 institutions, 11 experts from 5 organizations and one invited country with 4 persons completed the attendance at the meeting. Capt. GORZIGLIA represented the IHO.

The IHO reported that 45 (50%) charts in the INT Charts Scheme have been produced, and that new requirements submitted by IAATO are under consideration. Also it was highlighted that the IHO was willing to contribute with the efforts of the IPY. Countries were invited to assign resources in order to progress the production of nautical charts by carrying out more hydrographic surveys. A Hydrographic Group has been established to provide guidance on priorities associated with chart production. Comments received from the audience concerned the contribution IHO has made to international cooperation and that progress is evident. The IHO was invited to further develop initiatives to foster safety to navigation in the Antarctic. The report was adopted including its recommendations, that in brief are: to acknowledge the progress made in the production of INT charts; to express support for the activities the HCA is conducting with its Hydrographic Survey Programme Working Group and to consider inviting Members States to increase hydrographic survey activity in Antarctica.

During the event a very productive meeting was held with Mrs. Denise LANDAU, Executive Secretary of IAATO; Mr. Antoine GUICHARD, COMNAP Executive Secretary and Manuel CATALAN, Chair of COMNAP Working Group on Ship Operations, to improve coordination and co-operation among the organizations. It was confirmed that both organizations will be present at the next HCA Meeting in Christchurch, New Zealand. Both organizations strongly support the IHO activities and constitute very good allies to foster hydrography and nautical cartography in the Antarctic.

UNITED NATIONS (UN)

**UNITED NATIONS INTERNATIONAL MEETING TO REVIEW THE PROGRAM OF
ACTION FOR THE SUSTAINABLE DEVELOPMENT OF
SMALL ISLAND DEVELOPING STATES**

Port Louis, Mauritius, 10-14 January

Over 2000 delegates from 114 UN Member States and 15 UN specialized agencies, intergovernmental agencies and non-government agencies met in Port Louis, Mauritius, to review the Barbados Plan of Action (BPoA) for the sustainable development of small island developing states (SIDS). The BPoA, developed in 1994, stresses the specific vulnerabilities of SIDS and proposed specific actions to address these vulnerabilities and facilitate the sustainable development of SIDS. These vulnerabilities have been highlighted with the recent events of the Sumatra Earthquake and resulting tsunami, the 2004 tropical cyclones in the Caribbean and Pacific basins, coral bleaching due to increased ocean temperatures, a disproportionate rate of HIV/AIDS in many SIDS, and difficult economic development due to trade issues. Complete discussions of the Mauritius International Meeting and the BPoA can be found at <http://www.un.org/smallislands2005/> and <http://www.iisd.ca/sids/IM/>.



This panel was co-chaired by Mr. Tagaloa SALE TUALA TAGALOA, Samoa's Minister of Natural Resources and Environment, and Mrs. Marian HOBBS, New Zealand's Minister of the Environment. Mr. Klaus TÖPFER, UNEP Executive Director, moderated the session.

While the BPoA is comprehensive, its high-level approach to the issues resulted in no mention of hydrography's importance in the sustainable development of SIDS. The Mauritius International Meeting was viewed as an excellent opportunity to input the role of hydrography in sustainable development and point out the under representation of SIDS in the IHO. During the plenary session of the first day of the meeting, the IHB, on behalf of the IHO, delivered the statement provided below, presented by Rear Admiral K. BARBOR, IHB Director. The statement generated several inquiries regarding membership and participation in the IHO Regional Hydrographic Commissions.

The meeting resulted in a Declaration and a Strategy reaffirming the BPoA. As these documents remain high-level statements, unfortunately, hydrography does not appear explicitly. However, an increased level of awareness has been generated that may manifest as an improved understanding of hydrography's role in sustainable development.

**2nd INTERNATIONAL WORKSHOP ON A REGULAR PROCESS FOR
GLOBAL MARINE ASSESSMENT UNITED NATIONS**

UN, New York, 13-15 June

The UN Division of Oceans and Law of the Sea (DOALOS) convened the Second International Workshop on how to implement a Global Marine Assessment (GMA) called for in the Johannesburg Implementation Plan developed at the World Summit on Sustainable Development. This Workshop continued to address the issues of how an "assessment of assessments" would be managed. The IHO has, in several earlier correspondences with DOALOS, expressed its opinion that S-55 should form one of the fundamental assessments in the GMA. Had the Workshop agenda advanced beyond the discussions of the structural management of the "assessment of assessments" to a discussion of possible assessments, the IHO was prepared to offer the attached statement. Both the IMO & IOC, as UN agencies, will be closely involved in the progress of these managerial decisions in advance of the next meeting on this subject. The IHB will remain engaged with the DOALOS, IMO & IOC in this regard.

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

**3rd MEETING OF IALA WORKING GROUP ON AN AIDS TO NAVIGATION
INFORMATION SERVICE (ANIS) FOR THE 21ST CENTURY**

St Germain-en-Laye, France, 12-13 January

The third meeting of the ANIS Working Group took place at the Headquarters of the International Association of Lighthouse Authorities (IALA), near Paris, with 16 participants, including four IHO representatives from USA-NGA, UKHO and the IHB. The meeting was chaired by Mr. Peter KENT (UK) on the first day and Mr. Torsten KRUSE, IALA Secretary General, on the second day.

The objective of ANIS is to automatically provide real-time information to ships on the status of Aids to Navigation (AtoN) that are critical for the safety of navigation and the protection of the environment. Remote monitoring systems are currently used by many AtoN Authorities to gather information about the performance of their AtoN, for both operational and maintenance purposes. ANIS would select from the monitoring system information relevant to the operational status of all monitored AtoN, compare it with a list of malfunctions/defects appropriate for that particular type of AtoN and, if the changed status was defined as being likely to cause a significant risk to the safety of navigation, automatically initiate an immediate broadcast to local shipping. In addition, if there is a shipping casualty in the local area, or another uncharted hazard was to occur, the AtoN authority concerned would be able to initiate an immediate warning to shipping through ANIS.

It is intended to make use of local communication systems, e.g. Automatic Identification Systems (AIS) in areas where it is in use, to broadcast the relevant ANIS information in an appropriate data format. IALA has recently addressed a submission to IMO (NAV) on the use of AIS Short Safety Related Messages to convey such information. AIS range is reported to be over 30 miles.

When received onboard ships, ANIS information would be displayed preferably on ECDIS or another suitable electronic display, thus indicating if the operational status of an AtoN has changed from the information provided on the chart of the area, or that aids to navigation are being used to mark uncharted wrecks or other new hazards so that mariners have up to date navigational information on the area in which they are navigating. The attention of ships' navigating officers would be drawn to a change of the status of an AtoN by the appropriate chart symbol flashing, or a similar way of drawing attention, and the details of the malfunction would be available on selection.

Two commercial companies, TRANSAS and TIDELANDS, demonstrated the feasibility of the ANIS concept by simulating the malfunction of a lighthouse, information that was transmitted via a Navtex system and shown on top of an ECDIS display. Proprietary encoding, format and symbology were used in this exercise.

The meeting discussed the details of a draft recommendation on ANIS, including:

- The principles and concept of ANIS;
- AtoN operational malfunctions/defects;
- Levels of Impact on Safety of Navigation;
- Information Technology;
- Display of ANIS Information; and
- Identification of Aids to Navigation being monitored.

As a result, a revised draft recommendation was produced. The IHB representative remarked that most of the AtoN which are considered in the ANIS project are already included in the ENC and that ANIS information could possibly form a Marine Information Objects (MIO) layer, for superimposition on the ECDIS/ENC display. He suggested that ANIS-related objects, attributes and values could be developed based on S-57. He also drew attention to an IHO paper "Marine Information Objects (MIO) - Recommended Procedures for Development", which had been communicated to IALA.

The meeting considered favorably the IHB suggestion. It was agreed that the 4th ANIS WG meeting would be held at the IHB, Monaco, on 28-30 June 2005, including a tentative one-day workshop on "ANIS as a MIO".

INTERNATIONAL FEDERATION OF SURVEYORS (FIG)

FIG COMMISSION 4 WORKING GROUP 4.2 "AD HOC" MEETING

London, UK, 4 January

FIG Commission 4 (Hydrography) Working Group 4.2 on "A Vertical Reference Surface for Hydrography" took the opportunity of several members passing through London to hold an ad hoc meeting at the Royal Institution of Chartered Surveyors, on 4th January 2005.

At a WG 4.2 meeting held during the FIG Working Week in Athens in May 2004, it was decided that there should be a short 'high level' document and a much larger 'background paper'. A first draft of the high level document, prepared by Ruth ADAMS of the UKHO, was discussed in London. This paper was developed further and presented at the 2005 FIG Working Week in Cairo in April. A WG meeting was also held in Cairo to discuss both this 'high level' document and a draft of the 'background document', which was prepared by Ms. Ruth ADAMS based on the paper submitted to the Athens Working Week. Discussion on the two documents will continue until early 2006, by which time they will be finalized for submission to the FIG Congress, which will be held in Munich in October 2006. It is also planned to hold an ad hoc WG meeting in conjunction with a workshop on vertical datums to be organised during the Joint Assembly of IAG, IAPSO and IABO "[Dynamic Planet 2005](#)" in Cairns, Australia, in August 2005. Both draft documents will be circulated to members of the IHO Tidal Committee in May 2005 for their comments. Anyone else who would like to provide comments should contact Lt. Cdr. SHIPMAN (IHB).

PORT MANAGEMENT ASSOCIATION OF WEST AND CENTRAL AFRICA

MISSION TO DOUALA, CAMEROON

17/18 February

Capt. GORZIGLIA, IHB Director, went on mission to Douala, Cameroon, from 17th to 18th February 2005, to reinforce the relationship between the Port Management Association of West and Central Africa (PMAWCA) and the IHO, through the following activities:

- a) Meeting with Mrs. Mireille BACKO, Executive Secretary of PMAWCA.
- b) Participation at the Opening Ceremony of the 28th Annual Council of the PMAWCA, occasion in which an IHO Goodwill Message would be delivered.
- c) Participation at the PMAWCA Safety Committee, occasion in which a paper on Cooperation between PMAWCA and IHO would be delivered.

The main objective of this mission was to highlight the status and importance of hydrography in the region, to report on initiatives in force and to share some ideas on how both organizations could cooperate to improve hydro-cartographic products and services aiming safety of life at sea, safe to navigation and protection of the marine environment.

This initiative is considered as a follow-up action after the WAAT mission, as it was identified at the 8th Conference of the EatHC, held in Brest, France in October 2004.

The PMAWCA is a Specialized Agency of the Ministerial Conference of West and Central African States on Maritime Transport (MINCONMAR) that was established in May 1975 in Abidjan. MINCONMAR changed to MOWCA as part of sweeping reforms adopted by the General Assembly of Ministers of Transport in 1999. MOWCA brings together the 25 countries on the West and Central African shipping range (including five landlocked countries) in one of the world's regional sectorial integration schemes. The objective is to serve the regional and international community as a one-stop shop for handling all maritime matters that are regional character.

The MOWCA members countries are (in alphabetical order):

Coastal States: Angola, Benin, Cameroon, Cape Verde, Republic of Congo, Democratic Republic of Congo, Cote d'Ivoire, Gabon, The Gambia, Ghana, Guinea, Guinea-Bissau, Equatorial Guinea, Liberia, Mauritania, Mozambique, Nigeria, Sao Tome and Principe, Senegal, Sierra Leone, Togo.

Landlocked Countries: Burkina Faso, Central African Republic, Chad, Mali, and Niger.

The PMAWCA was established in 1977 with the following objectives, provided in abbreviated form:

- a) To seek the improvement, coordination and standardization of African port operations,
- b) To ensure the coordination and development of the activities of the members.
- c) To establish and maintain relationship with institutions and international organization for the study of matters of interest to the Association.
- d) To provide a form for the members of the association to exchange views on common problems.

The objective of the mission, in terms of taking the advantage of the opportunity to stress the importance of hydrography in the region was achieved. Nevertheless it is necessary to wait for the results of the deliberations of the Council. Further IHB correspondence with PMAWCA is desirable to assure some feed-back. The issues of capacity building (as for example the possibility to help ACCRA

Maritime Institute to establish a hydrographic course and the course for high level people), the highway initiative and the need to make a regional effort to face common regional problems were flagged as the main interested subjects and the reasonableness of the marine highway project initiative deserves much study, as it was felt that there is no clear need for that effort.

ESTABLISHMENT OR ENLARGEMENT OF REGIONAL HYDROGRAPHIC COMMISSIONS

BALTIC SEA

The visit to the Baltic Countries scheduled in 2005 was delayed until 2006. The three countries, Estonia, Latvia and Lithuania have responded affirmatively and the visit will be paid in July 2006.

EAST ASIA

This visit was cancelled due to the lack of response from the two countries involved, Myanmar and Cambodia.

MEMORANDA OF UNDERSTANDING

Memoranda of Understanding were signed in 2005 with the following international organizations:

- International Mobile Satellite Organization (IMSO)
- International Standardization Organization (ISO)
- International Federation of Hydrographic Societies (IFHS)

WORLD HYDROGRAPHY DAY

On 29 November 2005, the General Assembly of the United Nations passed Resolution 60/30 that, *inter alia*:

“Welcomes the adoption by the International Hydrographic Organization of the “World Hydrography Day”, to be celebrated annually on 21 June, with the aim of giving suitable publicity to its work at all levels and of increasing the coverage of hydrographic information on a global basis, and urges all States to work with that organization to promote safe navigation, especially in the areas of international navigation, ports and where there are vulnerable or protected marine areas”

WORK PROGRAMME 2 CAPACITY BUILDING

1. INTERNATIONAL MARITIME ACADEMY (IMA)

TECHNICAL COORDINATION MEETINGS OF IMA (TRIESTE)

On the 7th of March 2005 Capt. GORZIGLIA held a coordination meeting with RAdm. SPANIO (IMA). The main objective for such a meeting was the organization of the 5th Cartographic Course scheduled during 2005, including the selection of candidates. The agenda of this meeting also considered the coordination of the IHO Capacity Building Seminar for the EAHC National Hydrographic Chairmen scheduled for October 2005.

Unfortunately and despite the efforts made, the above-mentioned course was not given due to the financial situation of IMA. On the contrary, the Seminar was executed successfully with the resources allocated by the IHO CB Fund, together with the kind contribution of IHO Member States, other international organizations and IMA cooperation.

The 5th IMA Technical and Scientific Committee Meeting scheduled for 19th April was postponed to the second week of July and finally postponed again without defining a date. The referred meeting did not take place during 2005 and the IHB is concerned about the present and future of IMA, as the lack of IMA Courses in the field of Hydrography and Nautical Cartography affects the overall IHO training associated to capacity building.

2. CAPACITY BUILDING

CAPACITY BUILDING COMMITTEE (IHOCBC)

3rd MEETING OF THE IHO CAPACITY BUILDING COMMITTEE

Cartagena, Colombia, 01-02 June

The 3rd meeting of the IHO CBC was held at the Hotel Almirante Estelar, Cartagena, Colombia, on 1 and 2 June 2005 under the chairmanship of Capt. GORZIGLIA (IHB Director).

Capt. GORZIGLIA opened the meeting and welcomed the participants, in particular the new CBC members from Australia, Germany, Mexico and USA. He also thanked the Colombian Hydrographer, RAdm. CELY, for hosting the meeting. He provided a general report on the activities carried out since the Second CBC meeting, and stressed the fact that capacity building activities within the IHO were becoming more and more important. Capacity building is now a standing agenda item in all meetings of the Regional Hydrographic Commissions and other IHO bodies.

A summary of actions carried out during the inter-sessional period is given below:

- a) Maritime countries were informed about UN Resolution A/RES/58/240 by means of an IMO letter prepared jointly with IHO. All IMO Member States are now aware of the message that the United Nations has provided through that Resolution. IHO representatives also briefed IMO countries about the importance of this Resolution during various meetings of the IMO bodies.
- b) Following a request made by the CBC Chairman, the IHO Regional Hydrographic Commissions now consider capacity building matters during their meetings. Proposals resulting from these discussions will hopefully be submitted to the CBC for consideration in the CB Work Programme on a yearly basis. Some proposals have already been received from NIOHC, EAHC and SAIHC, as well as from some individual countries.
- c) The task assigned to the Chairman “to take action to establish an IHO Capacity Building Fund” was achieved and the Fund is now operational. This represents outstanding progress as it will allow the CBC not only to receive resources, but also to invest those resources in accordance with the needs and priorities considered and agreed at the CBC meetings.
- d) The organization of the 3rd CBC Meeting was greatly facilitated through the strong support received from the “Dirección General Marítima” (DIMAR) and the “Centro de Investigaciones Oceanográficas e Hidrográficas” (CIOH) of Colombia that had also contributed to the holding of a Technical Workshop on Phase 1 of development of hydrographic surveying and nautical charting capability, especially for MACHC and a special MACHC meeting for the Caribbean States, taking advantage of the presence of those Caribbean countries which usually cannot participate in MACHC meetings. The Chairman stressed that the attendance of most of the countries of the Caribbean and Central America had been possible thanks to the financial support from the CBC Fund and from the UKHO.

Establishment of the CBC Fund

The last CBC Meeting tasked the Chairman to “take action to establish an IHO Capacity Building Fund”. The Chairman reported on the actions carried out to establish the above-mentioned Fund as well as its actual status (see next article). The Chairman announced that it was possible to increase the contribution to the CB Fund at the close of the 2004 financial year, which was much appreciated by the Committee. The Norwegian delegate was optimistic about future contributions from his country to the CB Fund but said that this required time due to the existing procedures. The Chairman also reported on the intentions of some countries to make contributions to the CB Fund and that a Memorandum of Understanding between the IHO and one Member State is under consideration. The Chairman stated that the IHB for the time being has the required human resources to run the CB Fund. Finally he said that two requisites were essential in the administration of the CB Fund:

- 1) Never provide 100% support to any initiative. Progress must be achieved with the active contribution and participation of the beneficiary parties, and
- 2) Always respect the rules that have been agreed, with no exceptions.

The careful practice of these principles is a key factor to ensure transparency and confidence in the system.

The CBC approved the updated IHO Capacity Building Management Plan and the 2006 CB Work Programme, as well as a draft Work Programme for 2007.

It was reminded that the CBC Work Programme will be injected into the IHO Work Programme and that this was one of the reasons for holding the CBC meetings no later than June every year.

Technical visits

Technical Visits were paid by IHB to Central American countries. A visit to Baltic countries will be carried out in 2006. The SWPHC Chairman is coordinating the visit with the relevant authorities.

Other items developed were the organization of a Technical Workshop on Phase I for MACHC, especially East Caribbean State Islands, in conjunction with the 3rd CBC Meeting, the support provided to some participants from MACHC, SEPHC and SWAtHC to assist Multibeam Course in the Americas and the organization of a One-week Seminar for Chairmen of National Hydrographic Committees (or equivalent) of EAHC at IMA, Trieste, Italy, second semester.



Participants at the 3rd CBC Meeting and MACHC Technical Workshop

The Vice Chairman, as S-55 project leader, reported on the progress of S-55 data base development and maintenance. The Colombian representative made a presentation about the methodology followed by his country to fulfill the S-55 Questionnaire. The CBC found that the Colombian method was very accurate and complete and that it should be given as an example to other countries. Therefore, Colombia sent an article on this to the International Hydrographic Review for its publication after the meeting.

The CBC members presented reports on Capacity Building efforts undertaken by their countries, in the RHCs environment and by the IHB.

The Chairman emphasized that the future CB activities, specially the content and layout of a complete 5 Year CB Work Program and Budget (2008-2012) should be prepared in advance of the next CBC Meeting for endorsement, to be provided in a timely fashion to the IHB for its inclusion in the General IHO 5 Year Work Program and Budget (2008-2012). A Task Group was formed to prepare a draft document for the next meeting. The Group, constituted by the CBC Chairman and Vice-Chairman plus Australia, India and the Secretary, agreed to work by correspondence.

The CBC members also agreed that the Management Plan and CBC Work Programmes should not develop strategies other than those arising from specific proposals and input from the Regional Hydrographic Commissions and that any individual proposal should be presented through the corresponding RHC for the area. This was again the message from the CBC to the RHCs: an increasing pro-active performance.

The next CBC meeting will be held in Maputo, Mozambique, with the following schedule:

- 5 June - Technical Workshop on Phase 1 for SAIHC countries (activity identified in the CBWP 2006);
- 6 June - Special meeting of the SAIHC (new proposed activity for consideration);
- 7 and 8 - 4th CBC Meeting (activity identified in the CBWP 2006).

ESTABLISHMENT OF THE IHO CAPACITY BUILDING FUND

In Circular Letter 17/2005, the Directing Committee requested Member States to vote and provide comments on the proposed establishment of an IHO Capacity Building Fund. Member States fully agreed with this initiative and the IHO Capacity Building Fund is now open for contributions. It should, however, be noted that resources for capacity building are not necessarily only monetary: places on training courses, both sponsored and non-sponsored, and short and long-term attachments to obtain practical experience in field surveys, or the operation of a chart-producing hydrographic office have long been important tools within the IHO community. The IHOCBC would welcome such offers of training or experience to meet the requirements identified in the Capacity Building Management Plan or to complement the assistance proposed in the 3-Year Work Programme.

In many respects, it will be the human resources aspect, rather than the funding aspect, which will constrain the future capacity building effort of the IHO. The number of people who are actively engaged in the Organization's CB Work Programme as advisers, lecturers or presenters is small. Member States are requested to consider whether they have gifted people who could be seconded for short periods to assist this most vital aspect of the IHO's task.

The Directing Committee would like to express its satisfaction on the approval and the strong support received for this proposal, which will clearly contribute to the fulfillment of the objectives of the Organization.

3. TECHNICAL COOPERATION PROJECTS

CENTRAL AMERICA



IHO Work Programme 2 " Capacity Building" for the period 2003/2007, includes as Tasks 2.1.1 and 2.1.7 "Continuation of the project for the development of the Hydrography, Naval cartography and Safety of Navigation in Central America ", " To carry out technical visits to Central America and Mexico ". In addition, Objective 2,2,1 to this Program considers actions directed to increase of the number of members of the OHI.

During the 6th Meeting of the Hydrographic Commission of Meso-america and the Caribbean, the representatives of Guatemala, Honduras and Nicaragua requested that a visit of high level by representatives of the IHB was carried out to their countries with the purpose of informing to

their authorities on the importance of the Hydrography and the more recent international regulations concerning it.

In accordance with the above mentioned Work Programme and the decision of the MACHC, the IHB prepared a series of technical visits to the related countries, including in addition El Salvador and Panama.

The visits took place from 22 February to 5 March 2005 and the countries visited were Guatemala, Honduras, Nicaragua, El Salvador and Panama. The IHB representatives were Capt. GORZIGLIA, Director responsible for Capacity Building and Capt. BERMEJO, Professional Assistant for Training and Capacity Building.

The objectives of the visits were the following ones:

- To inform to the authorities of the countries visited on the new obligations of the countries signatory of the SOLAS Convention after the entrance into force of the amendments to Chapter V, in special to Rule 9, " Hydrographic Services ".
- To inform on the recent resolutions of the United Nations Assembly about the obligations regarding hydrography and safety of navigation.
- To emphasize the importance of the Hydrography as a contribution to the economic development of maritime countries.
- To stress the advantages to establish a National Hydrographic Committee with responsibilities in the subjects of Hydrography and Safety of Navigation.
- To inform about the funding possibilities of projects directed to the development of the hydrographic capacities of the country (Projects in progress such as the Gulf of Honduras project, projects of possible future development (ex- COCATRAM), training courses (IHB, IMA and others) etc..
- To inform about the benefits of the IHO membership.

In all the visited countries, the representatives of the IHB carried out a presentation on the importance of hydrography.

All authorities visited were well aware of their countries regarding safety of navigation and demonstrated high interest in the work of the IHO. Honduras and Nicaragua informed that they would apply for IHO membership in the near future. Guatemala, the only IHO Member State of the area, informed about the progress of its National Hydrographic Committee.

Among the general recommendations made by the IHB representatives, the following should be highlighted:

- It is recommended to strive to make the relevant authorities aware of the importance of Hydrography and nautical cartography as public services whose absence can cause economic sanctions resulting from the reaction of the insurance companies in the light of the lack of insecurity of the waters in the region.
- It is strongly recommended to establish a National Hydrographic Committee that coordinates the future development of Hydrography and nautical cartography that are essential for the economic development of the countries in the marine sector.

- It is recommended to start action directed to join the IHO as full members to be able to have the international support of its 75 members in the development of the obligations agreed as signatories of the SOLAS Convention and as U.N. members.
- The projects of training of specialists in hydrography and cartography that until now have been supported by the IHO must continue. It is recommended to continue the policy of requests of attendance of students to the courses organized within the framework of the IHO with the IHB support.
- The attendance of representatives from all countries to the meetings of the MACHC is also strongly recommended.

In view of the interest observed in the re-launching of former project COCATRAM/IHO, the Directing Committee of the IHB will study the mechanisms to reinitiate the project with the support of the five Central American countries and with the support of other countries of the area that can provide their cooperation, such as Mexico and Colombia.

HYDROGRAPHY, AIDS TO NAVIGATION AND SAFETY OF NAVIGATION IN WESTERN AND CENTRAL AFRICA

REPORT OF THE MISSION TO SHOM

Paris, France, 15 February

Capt. GORZIGLIA, IHB Director, attended a meeting in Paris, France, on 15th February with the EAthC Working Group set up to analyze the follow-up of the decisions agreed at the last Conference of the Commission, mainly to discuss about the ways to conduct the conclusions. The meeting took place at SHOM Headquarters and was attended by: Ingénieur Général LE GOUIC (Chairman), Cdr. BAGGIO, Capt. BARRITT, Capt. D'AUDIFFRET and Capt. GORZIGLIA.

An analysis of the progress and level of achievement of the decision taken by the 8th EAthC Conference was made, particularly with respect to Conclusion 13. It was reported that:

- 1) The IHB has initiated arrangements to run the seminar during the second half of 2005 at IMA. FIG's potential financial contribution was acknowledged.
- 2) The IHO did not attend the 2004 meeting of the Port Management Association of West and Central Africa (PMAWCA) due to last minute coordination problems, but has been invited to participate in the 28th Council that will take place in Douala, Cameroon.

Considering the opportunity offered, Capt. GORZIGLIA, IHB Director, attended the Council and reported on the contents of the Goodwill Speech and the IHO presentation, respectively, including the proposals to be put forward aiming to improve the relationship between PMAWCA and IHO.

Several aspects were identified as important to be highlighted, starting with the lack of response (communication problem) and interest shown with respect to the activities agreed by the Commission.

- 3) The definition study of a maritime highways' project in West Africa has progressed. SHOM has worked on the project and has prepared a draft document entitled: "West African Marine Highway Project" and prepared a questionnaire to be sent to States in the region. Under this item, the text of the document as well as the contents and

appropriateness of the questionnaire were discussed. Also documentation from IMO referring to the East Africa Project was discussed and further consideration was given to its conceptual content. It was agreed that the project requires a clear identification of the problems, which will be solved with its implementation. It was agreed that it might be a better approach to develop one or two pilot projects that could solve priority problems and, at the same time, motivate the participation of other parties that might not be ready yet to assign priority to the initiative. It was agreed that the document needed to be re-drafted to include the modifications and improvements identified.

PROJECT FOR SAFETY OF NAVIGATION SERVICES ON LAKE VICTORIA

HIGH LEVEL WORKSHOP ON THE IMPLEMENTATION OF A PROJECT ON SAFETY OF NAVIGATION ON LAKE VICTORIA

Arusha, Tanzania, 2-4 October

A workshop to discuss the latest initiatives and map the way ahead for implementing a project for Safety of Navigation on Lake Victoria was hosted by the Secretariat of the East African Community (EAC) in Arusha, Tanzania, on 2-4 October 2005. The high-level delegations were headed by the Minister of State for Transport of Uganda, the Permanent Secretaries of Communication and Transport for Kenya and Tanzania and the Deputy Secretary General (Projects & Programs) of the EAC. Representatives of the IMO, IHO, IALA, Port Management Association of Eastern and Southern Africa, and the Lake Victoria Rescue Institute were amongst the attendees, that also included port authority and maritime safety administration officials from Kenya and Tanzania.

This project, that began after the 1996 sinking of the passenger vessel MV BUKOBA resulting in the loss of 600 passengers, has progressed slowly. The French Ministry of Foreign Affairs and the IMO have funded the development of implementation plans for Hydrographic, Cartographic, Aids to Navigation and Search and Rescue Projects along with the drafting of framework legislation that would enable a sustainable program for Safety of Navigation on Lake Victoria. To date, little progress has been realized on these initiatives; although the framework legislation is believed to be nearing enactment. Individually, Kenya and Tanzania have strengthened their respective maritime safety legislation and infrastructure; while Uganda has embraced the initiatives of the Lake Victoria Rescue Institute to institute rescue services and water safety training. The UK Department for International Development has agreed to the transfer of a fisheries research vessel from Malawi to Lake Victoria and new funds from the French Agency for Development have been approved for the commissioning and outfitting of the boat.

The Minister and the Permanent Secretaries were displeased with the minimal progress and sought concrete measures that would result in substantive progress. The workshop resolved to expedite the remaining steps leading to enactment of the legislative framework and to undertake several initiatives that could be accomplished in advance of this enactment. The resolutions made strong commitments to use the existing maritime safety administrations to provide personnel, planning and budgeting resources to initiate the formation of the Lake Victoria maritime safety units that could promote safety of navigation on Lake Victoria within existing laws and procedures.

MARINE ELECTRONIC HIGHWAY - MARINE HIGHWAY

MH West Indian Ocean

See under IMO NAV 51

TECHNICAL WORKSHOP ON PHASE I FOR MACHC, ESPECIALLY EAST CARIBBEAN STATE ISLANDS, HELD IN CONJUNCTION WITH 3RD CBC MEETING IN COLOMBIA

The Second Meeting of the Capacity Building Committee (November of the 2004), based on the experience of the EAtHC and SWPHC, decided to carry out a third Technical Workshop on Phase ONE, specially for the countries in the Meso-American and Caribbean Sea Hydrographic Commission, in conjunction with the 3rd CBC Meeting. All countries in the region were invited by the Chairman of MACHC.

The Workshop focused on Phase I of Hydrographic Capability Building (Gathering and dissemination of hydrographic and safety of navigation information). Representatives from Barbados, Belize, Colombia, Cuba, Guatemala, Honduras, Jamaica, St. Kitts & Nevis, Sta. Lucia, St. Vincent & Grenadines and USA, some members of the IHO Capacity Building Committee and observers from IOC, ACINPA and the Naval Academy “Almirante Padilla” attended the meeting.

The IHB Director and CBC Chairman, Capt. GORZIGLIA explained then background behind this initiative and reminded participants on the need to coordinate efforts directed to improve the safety of navigation in the region, target that could be reached by the Workshop. He strongly encouraged the participants to take maximum advantage of this opportunity to identify and agree on actions aiming at improving the provision of hydrographic information and products in their countries.

The following five presentations were made during the Workshop:

- “The Importance of Hydrography” (by Capt. GORZIGLIA, IHB)
- “The Three Stages of Development of Hydrographic Capability” (by Ingénieur Général LE GOUIC, SHOM, France)
- Maritime Safety Information (MSI) and Global Maritime Distress and Safety System (GMDSS)’ (by Mr. DOMINIC and Mr. SCHOENE NGA-Navarea)
- Analysis Publication S-55
- The Importance of Accurate Nautical Information

Cuba, France, Guatemala, Jamaica, Mexico, UK and USA, MACHC members presented their reports, as well as Belize, Honduras and Sta Lucia, MACHC associated members. The following observers also made presentations: Barbados, Saint Kitts y Nevis y Saint Vincent y Grenadines.

Discussion

- After the countries’ presentations, an open discussion was allowed by the Chairman and the following points were highlighted:
- SOLAS is a key element for the development of hydrography in all the countries of the region, which must decide the way to fulfill their obligations issuing from the signature of SOLAS.
- Regional cooperation is also an important element. The IHO has implemented this cooperation within the structure of its Regional Hydrographic Commissions and therefore, being an IHO member is rewarding for this cooperation.
- No coordination at international level can be agreed if previously there is no national coordination. All countries should nominate a responsible for hydrographic matters and therefore the establishment of a National Hydrographic Committee is essential.

- Port Authorities, Navies and Cartographic authorities are actors that should play a national role.
- Training is always necessary but its level can be different depending on the country concerned. In some cases, special-tailored courses may be required. Countries should identify their needs and communicating with the IHO CBC for possibilities to have such a training funded.
- Seminars and Workshops, as well as Technical visits to countries are essential to raise the importance of hydrography with national authorities.
- The CBC has scheduled a Seminar for Chairmen of National Hydrographic Committees or similar in the second semester of 2006. These seminars could be a good opportunity to build up development projects to be presented to a major funding Agency.
- Training, infrastructure are very important factors, but to have them, funding is required and should be worked in cooperative form by countries and Regional Hydrographic Committees.

Conclusions of the Workshop

- The Workshop provided an excellent opportunity for representatives from the Meso-American and Caribbean nations, the IHB and observers to gain a greater insight into the MSI issues in the region and also discuss the way ahead for developing hydrographic capability in the region. The participants were appreciative of the very comprehensive presentations, which covered a broad scope ranging from strategic to technical aspects.
- Collective support should and can be given within the region. For this, communication between countries is a factor that must be improved to obtain results. Meetings are also a means to hear the needs and to discuss common efforts and offers of support.
- There are in the MACHC region some countries with a high level of hydrographic development, other countries smaller but with all the necessary capacities as well as others with no hydrographic development at all. These last countries were the most benefited from the Workshop, which helped the awareness to establish, at least, the first Phase of Hydrographic Capacity Building.
- In view of the differences between countries it should be important to establish bi-lateral or multi-lateral agreements to develop the other phases of hydrography, after having drawn the interest of national authorities about such a development, and the wish and need to invest on these phases, in accordance with the particular needs of each country.
- It was also felt that the IHO Capacity Building Committee was a permanent supporting body to raise the matter with the national authorities and to approve projects submitted through the MACHC to develop hydrography in benefit of the safety of navigation.
- One way to stress MACHC efficiency may be the organization of technical visits to the relevant authorities of the countries in the region to raise with them the importance of hydrography but this also requires national effort to prepare the visit and to obtain good results.

SUPPORT ATTENDANCE OF SOME PARTICIPANTS FROM MACHC, SEPHC AND SWATHC TO ASSIST MULTIBEAM COURSE

Three students from Chile, Ecuador and Uruguay were selected to attend the "39th Multibeam Sonar Training Course", given in Plymouth, UK, from 24 to 29 October 2005. The attendance to this course was funded by the IHO Capacity Building Fund. The course was hosted by the UK Royal Navy and organized by "Netsurvey Ltd.". The objectives of the course were 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 programme was very interesting for the students that attended and they reported that the knowledge acquired will contribute to improve the quality control of data gathered and the further data processing as well as the optimisation of human and financial resources associated with hydrographic surveys.

1st IHO SEMINAR FOR THE EAtHC NATIONAL HYDROGRAPHIC COMMITTEE CHAIRMEN Trieste, Italy, 10 - 14 October

General Information

The EAtHC, in view of the excellent work carried out by its West African Action Team (WAAT), endorsed the IHB's initiative to conduct a one-week Seminar for the Chairmen of National Hydrographic Committees (or equivalent) of the countries in the EAtHC region, as a follow-up action. The 8th EAtHC Meeting that took place in Brest, France, 28-29 October 2004, approved this idea and the Capacity Building Committee (CBC) included this activity within the CB Work Programme for 2005 allocating resources to support the attendance of participants.

The objective of the Seminar was to raise awareness at government level of the importance of hydrography to safety of navigation and national economic development, and to explore initiatives of common regional interest. This initiative is in line with the International Hydrographic Organization's efforts to develop and/or improve the existing hydrographic capabilities in the West and Central African Region, following a special request made by several United Nation Assembly resolutions.

This project was jointly developed by the IHB and the Chairman of the Eastern Atlantic Hydrographic Commission (EAtHC), with strong support from some IHO Member States of the Commission and other international organizations. The arrangements were coordinated with the International Maritime Academy (IMA) and it was agreed that the Seminar would be held from 10 to 14 October 2005 at the IMA premises in Trieste, Italy.

Following a coordination meeting to discuss the seminar details, invitations to contribute to the seminar were addressed to Chile, Croatia, France, Portugal, Spain, UK and USA, as well as to the following organizations: IOC, IMO, IALA, PMAWCA, FIG and the WB.

Out of the 7 countries invited to support the Seminar, only one was not able to contribute. The organizations that replied positively and provided speakers were IOC, FIG and the PMAWCA, and although 12 countries responded positively, unfortunately only 6 finally attended. An Organization Team formed by France, UK and the IHB worked out the details of the program.

The IHB used the Capacity Building Fund, allocated by the IHO, to partially support participants from the EAtHC region attending the Seminar. Each country was requested to pay only the return airfare for their representatives; the CB Fund covered the rest. It should be underlined that the IHO Member States, as well as the international organizations, participating in the Seminar kindly funded their representatives.

Representatives from Benin, Ghana, Gambia, Guinea Bissau, Senegal and Togo attended the Seminar. Speakers were from Chile (1), Croatia (2), France (3), Portugal (1), Spain (1), UK (3), IOC (1), FIG (1), PMAWCA (1) and IHB (1).

The Seminar program was spread over 5 days: the first three days focused on 6 general aspects, Units 1 to 6:

- Unit 1: Introduction to the Seminar.
- Unit 2: Generalities associated with Hydrography.
- Unit 3: The Organization of a National Hydrographic Office.
- Unit 4: Application of Hydro-Cartographic Products and Services.
- Unit 5: Economic benefits associated to Hydro-Cartographic Products and Services.
- Unit 6: The National Hydrographic Committee or equivalent.

And the last two days focused on regional aspects, divided into two Units:

- Unit 7: Regional Situation and Opportunities.
- Unit 8: Development of the basis for Regional Project(s).

Conclusions of the Seminar

3 regional sub-projects will run simultaneously:

- Mauritania to Sierra Leone;
- Ghana to Benin;
- Nigeria to Equatorial Guinea;

The FIG Commission 4 meeting in Accra in March 2006 and the 9th EAthC meeting in the autumn of 2006 are the future dates for advancing this project, as well as the next meetings of the Ports Management Association of West and Central Africa (PMAWCA) and the Maritime Organization of West and Central Africa (MOWCA).

In the meantime, it is to be hoped that the specific points of this Project can be examined at National Committee meetings, even if these committees only meet informally for the moment.

Capt. GORZIGLIA essentially highlighted the following points:

- Initially planned for 12 African countries, the number of representatives was too low and the last minute cancellations penalized certain countries which were ready to participate in this training session; the absence of representatives from Mauritania, Sierra Leone, Nigeria, Cameroon and Equatorial Guinea had a very negative impact;
- The fact that certain participants did not have a global national maritime vision hampered the debates, decision-making and the planning of future action;
- A strong national willingness is absolutely essential; the creation of a national committee on maritime safety and/or hydrography, and establishing reliable Internet addresses, were once again considered as high priority; the drafting of Terms of Reference for the national committee may be greatly facilitated by using the IHO publication M-2 "National Maritime Policies and Hydrographic Services" which includes the outline of national plans of action¹;

¹ Available in French, English, Spanish on the IHO Internet site : www.iho.shom.fr

- The development of the CHARMER Project depends on the proper functioning of these national committees as well as the 3 regional sub-projects (Mauritania to Sierra Leone, Ghana to Benin, Nigeria to Equatorial Guinea);
- The development of maritime safety, in particular through a major project, can only succeed if the African countries concerned take over the management of the Project in order to present it to the “financial backers”. The IHO, like the EAtHC, can only act as “facilitators” and can, in no case, collect funds. MOWCA, which covers a large maritime area, could be contacted by PMAWCA on this subject;
- Serious consideration and decisions are required on a national level between the future meeting opportunities (FIG Commission 4, MOWCA, PMAWCA and the 9th EAtHC). The next visit of experts from the UK Hydrographic Office to English-speaking countries will be an excellent opportunity to promote the importance of maritime safety with the government authorities of these countries; preparation of the meetings by the national representatives is thus required.

GULF OF HONDURAS PROJECT SUPPORT TECHNICAL VISITS TO CENTRAL AMERICAN COUNTRIES

Following the decision of the Capacity Building Committee to support the preparation of the “Gulf of Honduras” project, a series of technical visits to the countries participating in the project, namely Belize, Guatemala, Honduras and Nicaragua were scheduled, funded by the Capacity Building Fund. Mr. VILLALOBOS (NOAA) was offered to carry out the visits and he started in November paying visits to Guatemala and Honduras. Unfortunately, the events following the hurricane Katrina, obliged to delay the rest of visits for 2006.

WESTERN INDIAN OCEAN MARINE HIGHWAY DEVELOPMENT PROJECT MEETING

International Maritime Organization, London, 4 May

Representatives from the World Bank, IMO, IHO and IALA met at the IMO Headquarters on 4 May 2005 to discuss the status of the WIOMH Project, the roles each organization can play in the execution of the project and changes to the Project documentation necessary to more fully address the concerns of each partner organization and to enhance viability of the project from the donor’s (GEF) perspective. The highly productive meeting led to a better understanding of the programmatic concerns of the IMO relating to financial management, how this project must relate to existing IMO initiatives and established conventions in the region. Both IHO and IALA representatives expressed a desire to remain closely involved in the planning and execution of the project while urging further study of the best use of resources devoted to the conduct of surveys, maintenance of Aids to Navigation and installation of an Automated Information System. All participants agreed that emphasis must be placed on efforts that would lead to sustainable capacity in the region. The project documentation is due to be submitted for appraisal by the Global Environment Facility in June 2005 with the World Bank review in August 2005. The project would start in January 2006.

WORK PROGRAMME 3

TECHNIQUES AND STANDARDS SUPPORT

1. CARTOGRAPHY AND HYDROGRAPHIC INFORMATION SERVICES

CHRIS AND ITS SUBCOMMITTEES

17th MEETING OF THE IHO COMMITTEE ON HYDROGRAPHIC REQUIREMENTS FOR INFORMATION SYSTEMS (CHRIS)

Rostock, Germany, 4-9 September

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

The 17th Meeting of CHRIS took place in Rostock, Germany, under the Chairmanship of Capt. WARD (Australia) and Vice-chair Mr. OEI (Singapore). The Secretary was Mr. HUET (IHB) and RAdm. BARBOR (Director, IHB) was in attendance. The meeting was hosted by the Bundesamt für Seeschifffahrt und Hydrographie (BSH) and the President of BSH, Prof. Dr. EHLERS, welcomed 44 delegates from 24 Member States.

The principal item on the agenda was to determine the future development of the IHO Transfer Standard for Hydrographic Data (currently S-57e3.1) and its associated ENC Product Specification. There is a need to maintain the IHO data transfer standard as a contemporary standard and also to allow for necessary improvements to ENCs for use in ECDIS. An ECDIS Stakeholders' Forum was convened during the CHRIS meeting specifically to canvass the widest possible opinion and views on the future of S-57 before reaching any conclusions and to ensure that the CHRIS was fully informed of possible impacts as part of its deliberations. The ECDIS Stakeholders' Forum has been reported separately.

The outcome of the CHRIS considerations on S-57 have since been promulgated in IHO Circular Letters 93 and 94/2005.

The CHRIS reviewed its Terms of Reference and those of its subordinate bodies, particularly to recognise Non Governmental International Organizations (NGIOs) as agreed at the 3rd Extraordinary International Hydrographic Conference (EIHC).

As a result of the agreement in principle to proposals before the 3rd EIHC concerning reorganisation of the main bodies of the IHO, CHRIS considered how the Committee might migrate to become the proposed Hydrographic Standards and Specifications Committee. The Chair of CHRIS will submit a report to the IHO Strategic Planning Working Group (SPWG) for consideration in due course.

The work of all the CHRIS Working Groups and sub WGs was reviewed. As a result the CHRIS work Program was amended and endorsed. Concern was expressed over the level of participation in some WG's, in particular the Colours and Symbols Maintenance Working Group and the Standardisation of Nautical Publications Working Group. In both cases, active Member State participation is low and there is a pressing need to attract wider technical participation from so-called "expert contributors" from industry and academia to supply expertise not available from Member States.

As agreed at its 16th meeting, the 18th meeting of CHRIS will take place 25-29 September 2006 in Sydney, Australia.

**15th MEETING OF THE IHO COLOURS AND SYMBOLS MAINTENANCE
WORKING GROUP (C&SMWG)
Rostock, Germany, 2-4 May**

Chairperson:	Dr. M. JONAS (Germany)
Vice-Chairperson:	<i>Vacant</i>
Secretary:	Mr. C. ROBERTS (Australia)
Members:	Australia, Canada, France, Germany, Norway, United Kingdom, USA (NGA), IHB.
Other Participants:	C-Map (Italy), CARIS (Canada), DnV (Norway), Furuno/Navintra (Finland), IEC/TC80, Imtech Marine & Industry (Canada), Kelvin Hughes (UK), Nippon Sogo System (Japan), OSL (Canada), Raytheon Marine (USA), STN Atlas Marine Electronics (Germany), SevenCs (Germany), Transas Group (Russia), UNH (USA), US Coast Guard, Wismar University (Germany), Xenex Innovations (Canada).

Thirteen persons attended the 15th C&SMWG Meeting which was hosted by the German Hydrographic Office (BSH) at its premises in Rostock. Participants included representatives from HOs as well as ECDIS manufacturers and software developers. C&SMWG is under the IHO CHRIS Committee and is responsible for specifying colours and symbols for the display of ENC's on ECDIS, based on S-57. The meeting was chaired by Dr. JONAS, BSH. In his welcoming speech, he noted that the main C&S issue since the previous meeting (Ottawa, Canada, May 03) had been the release in March 2004 of Edition 3.3 of the IHO Presentation Library for ECDIS (PresLib)². He stressed that the paper based description of the ECDIS colours and symbols (Addendum to PresLib e3.3) was a key component of this new edition and provided the official IHO ECDIS symbology. It was suggested to make it available in book form to give it more visibility. Dr. Jonas also reminded the participants that the 16th CHRIS Meeting (Ottawa, May 04) had confirmed the IHO role on ECDIS chart display standardization. The other points discussed are summarized below.

Following the issuance of recommended ENC encoding rules (CL 47/2004), aimed at making ENC's more consistent, the Meeting agreed that there was a need for a common approach by HOs and OEMs to load and display ENC's. Currently, different OEMs have adopted different ENC loading strategies, e.g. by navigational purpose or by scale bands, which should be harmonised. An "ENC loading

² The IHB representative subsequently indicated that, as of April 2005, 23 copies of PresLib Ed. 3.3 had been sold and 13 gratis copies provided to C&SMWG contributors.

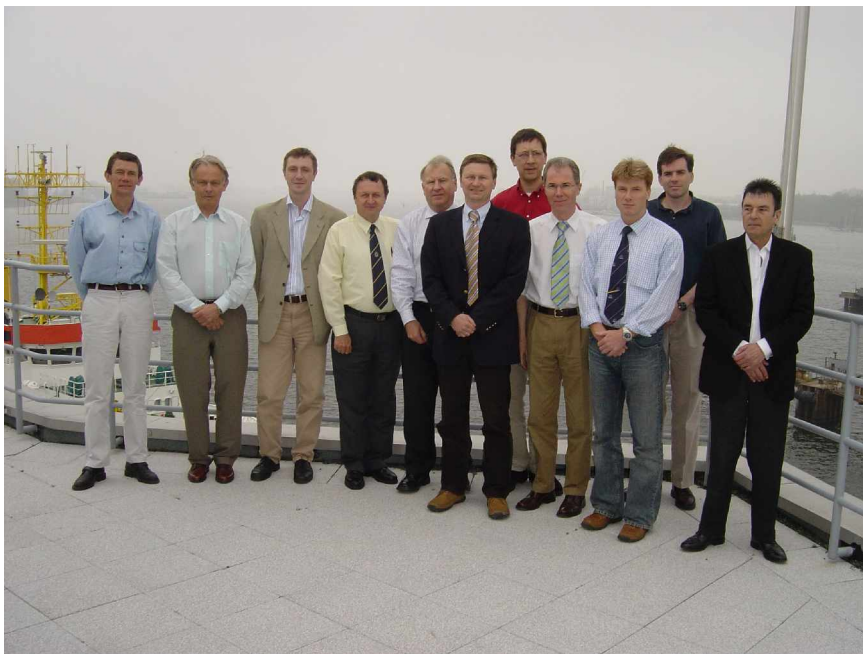
strategy” workshop was suggested at the end of June 2005 to discuss the matter and agree on a common policy.

During the Meeting, presentations were given on the following subjects:

- Edition 4.0 of S-57, by B. Greenslade, UKHO. Noting that this new edition will be aligned with the relevant ISO standards (19000 series), it was suggested that a assessment should be conducted on whether the alignment of the PresLib with ISO Standard 19117 is desirable.
- Geosym: Library of symbols used on Digital Nautical Charts (DNC), by D. Turnbull, USA-NGA. It was mentioned that Geosym is based on the PresLib symbology.
- Recognized Environmental Pictures (REP), by Cdr. FREI, German Navy. This included the concept of Additional Military Layers (AML). It was noted that S-57 was used for any kind of information pertaining to AML.

It was agreed that the C&SMWG would submit a proposal to the 17th CHRIS Meeting (5-9 Sept. 05), that from 1st Jan. 07, the encoding by HOs of “linear depth areas” will no longer be needed. These features were introduced for safety contour generation purposes and PresLib e3.3 provides for their display. However, modern ECDIS software allows for the generation of safety contours directly from polygons delimiting depth areas. It will be proposed that this issue be also discussed at the 2005 ECDIS Stakeholders’ Forum (6-7 Sept. 05).

The adoption of new IHO paper chart symbology for Environmentally Sensitive Sea Areas (ESSA) and Archipelagic Sea lanes (ASL) was noted. However the C&SMWG’s work on ESSA and ASL can start only after TSMAD has developed appropriate objects / attributes for these new chart features, and that they have been included in S-57.



Participants in the 15th C&SMWG Meeting, Rostock, Germany, 2-4 May 2005

Based on the IMO-approved performance standards for the display of navigation-related information (Dec. 04), additional navigational symbols for AIS were proposed, discussed and agreed by the Meeting. They will be promulgated on the IHO website as an amendment to PresLib e3.3. Other topics discussed related to:

- Non-coincidence of chart scale boundaries from cells of same navigational purpose.
- Errors / anomalies in the ENC test data set of S-64 and the associated ECDIS plots.
- Amendments needed in some Conditional Symbology Procedures (CSP) of PresLib e3.3.
- Display of soundings over danger, cursor pick reports and “lost own ship” (how to make the ship’ symbol more prominent at night).

A general discussion on the future activities of C&SMWG concluded the Meeting. Issues raised and proposals made will be reflected in a paper to be submitted to the 17th CHRIS Meeting. The next C&SMWG Meeting will be held at the IHB, Monaco, on 29-31 May 2006. It was agreed to invite ECDIS type-approval agencies to send representatives to that meeting.

8th TSMAD SUB-WORKING GROUP ON S-57 Ed. 4 MEETING

Durham, USA, 25-29 April

Chairperson: Mr. Barry GREENSLADE (UK)
Secretary: Mr. Tony PHARAOH (IHB)

Members: Canada, France, Germany, Norway, UK, USA, IHB

The Transfer Standard Maintenance and Application Development (TSMAD) Sub-Working Group, dealing with the development of the next edition of the S-57 standard, held its 8th meeting in Durham, USA, from 25th to 29th April.

The meeting, which was hosted by the University of New Hampshire’s Center for Coastal & Ocean Mapping – Joint Hydrographic Center (CCOM-JHC), resulted in significant progress being made on several Work Items. A number of interesting presentations were also made during the meeting. These included topics which covered an open navigation surface project, ice objects in ECDIS, and a test bed navigational surface in the St Lawrence River (Canada). Work Item documents and the above-mentioned presentations can be downloaded from the IHO web site at <http://www.iho.shom.fr/> > Committees > TSMAD Sub WG.

12th TSMAD AND 9th S-100 SUB WG MEETINGS

Wollongong, Australia, 7 – 11 November

Chairperson: Mr. Mike BROWN (USA)
Secretary: Mr. Ian HALLS (Australia)

Members: Australia, Belgium, Canada, Denmark, France, Germany, Italy, Korea, New Zealand, Norway, South Africa, Sweden, UK, USA (USCG, NGA)

Other participants: HSA, NZDF, C-Map (Norway), SevenCs (Germany), CARIS, IIC, IHB

The Australian Hydrographic Office hosted the 12th TSMAD and 9th Sub Working Group Meetings during the first week of November 2005. Capt. WARD welcomed TSMAD members and, as Chairman of the CHRIS meeting, outlined some of the CHRIS 17 decisions that needed to be addressed by the TSMAD Working Group. These included the renaming of the proposed S-57 Edition 4 to S-100. All dependent product specifications will be numbered as S-101, S-102 etc. It was also decided that the TSMAD WG should produce an S-57 Edition 3.1.1, which will only contain new features for encoding Archipelagic Sea Lanes (ASL) and Environmentally Sensitive Sea Areas (ESSAs). An additional “generic object” will also be included for possible future requirements. The new edition



3.1.1 will only be used by ENC producers wanting to encode these new feature types, and should not affect normal ENC production. ECDIS systems will display the new features with a “?” symbol until such time that new presentation rules and symbolized features are implemented. It should be stressed however that ENCs containing the new features should not adversely affect existing ECDIS systems. This was demonstrated by the NOAA representative, who provided a test ENC containing the new features. The test ENC data set was loaded in a few different ECDIS systems and will be further tested in additional systems.

**4TH STANDARDIZATION OF NAUTICAL PUBLICATIONS
WORKING GROUP (SNPWG) MEETING
IHB – Monaco, 1-3 March**

Chairperson: Mr. J. MELLES (Germany)
Vice Chairperson: Mr. Tim DOHERTY (USA(NGA))
Secretary:

IHO Members: Argentina, Cuba, Denmark, Estonia, France, Germany, Greece, Italy, India, Italy, Japan, Korea (Rep. of), Russian Federation, Spain, Sweden, Tunisia, UK, USA (NGA & NOS), IHB.

Expert Contributors: Maptech, C-Map, Nippon Sogo Systems.

The 4th SNPWG Meeting was attended by members of the Hydrographic Services of Chile, Denmark, France, Germany, Sweden, USA and UK, and the IHB. National reports outlining nautical publications production and maintenance activities were provided by members present. Although most members reported that their nautical publications were in digital form, their layout and format were still based on their equivalent paper document.

However, this Working Group has been tasked to investigate how digital nautical publications information can be structured so that it can be integrated into ECDIS systems. A significant amount of work was carried out during the meeting to categorize types of nautical publications information. This will be used to model nautical publications information, and will facilitate its integration with ENC, and its use within ECDIS. UKHO presented some preliminary data modelling work that they had carried out. USA presented some example nautical publication information in an XML format.

**5TH STANDARDIZATION OF THE NAUTICAL PUBLICATIONS
WORKING GROUP (SNPWG) MEETING
Copenhagen, Denmark, 25 - 27 October**

The Danish Kort & Matricelstyrelsen Hydrographic Office, hosted the 5th SNPWG Meeting, which took place between the 25th and 27th of October 2005. The meeting was chaired by Mr. MELLES (BSH), and was attended by 17 delegates representing seven member states and one industry member. The IHB was represented by Mr. PHARAOH.

Several national reports outlining production and maintenance methods for nautical publications were presented. These highlighted some advanced data management and processing concepts which, in most instances, were resulting in significant improvements in efficiency. The UKHO presented their UML model for nautical publications and IIC described their prototype product that will enable nautical publications information to be included as an overlay in an ECDIS.

In order to complete the task of mapping nautical publications features to S-100 objects and attributes, the meeting was divided into three work groups, and each assigned sections of the “Scope” document to complete. The next meeting of the SNPWG is scheduled to take place in June 2006 at the IHB in Monaco. Further information and documents concerning the activities of this WG are available from the SNPWG web page. (<http://www.iho.shom.fr> > Committees > SNPWG).

2nd MEETING OF THE CHRIS CHART STANDARDIZATION AND PAPER CHARTS WORKING GROUP (CSPCWG)

IHB, Monaco, 19-21 October

Chairperson: Mr. P. JONES (UK)
Vice-Chairperson: Mr. J. MAKINEN (Finland)
Secretary: Mr. A. COLEMAN (UK)

Members: Australia, Brazil, Canada, Chile, Colombia, Croatia, Cuba, Denmark, Finland, France, Germany, Greece, India, Indonesia, Italy, Japan, Netherlands, New Zealand, Norway, Russian Federation, South Africa, Spain, Ukraine, United Kingdom, USA (NGA & NOAA).

Contacts: IHB, CHRIS Chair, C&SMWG Chair, SNPWG Chair, TSMAD Chair.



The second CSPCWG meeting took place at the IHB from the 19-21 October. Fourteen IHO representatives from Australia, Canada, Denmark, Finland, France, Germany, Italy, Netherlands, Norway, Spain, United Kingdom and the IHB were in attendance. The meeting was chaired by Mr. P. JONES (UK). Attendees were welcomed by VAdm. A. MARATOS, IHO President, who updated the meeting on the current status of plans for future changes to the IHB Committee structure. The main outcomes of the meeting were as follows:

- New principles for portraying maritime limits were developed and hierarchy of international / national territorial limits was agreed.
- Charting of fairways, as well as VTS and reporting areas, was discussed and would be pursued by correspondence.
- Antarctic symbols, as in S-59, were examined and recommendations on the matter to the Hydrographic Committee on Antarctica were agreed.
- It was agreed that synchronized and sequential lights would be charted by using the qualifying term “(sync)”.
- Methods of depiction for oscillating Port Entry Lights (PEL), DGPS stations, Boulders, and dangerous / non-dangerous wrecks, were agreed.
- It was decided that the ISO style for expressing geographical coordinates should be used on charts.
- The meeting expressed its gratefulness to Germany for the publication of a new edition of INT 1, earlier in the year. France and Spain indicated that new editions of INT 1 in French and Spanish were planned for 2006 and 2007, respectively. It was further noted that new editions of INT 2 and INT 3 were being prepared by Netherlands and UKHO, respectively, with the latter about to be published.
- The CSPCWG Work Plan was reviewed by the meeting and updated as appropriate.

ECDIS STAKEHOLDERS’ FORUM

Rostock, Germany, 6-7 September

The ECDIS Stakeholders’ Forum, a gathering of companies and organizations concerned with the development, status and potential changes to the various aspects of ECDIS operations once known as “IHO Industry Days”, convened in Rostock, Germany under the chairmanship of Captain Robert WARD of Australia. The forum was held in conjunction with the 17th meeting of the Committee on Hydrographic Requirements for Information Systems (CHRIS). Joining these two meetings provided an excellent opportunity for IHO Member States to hear and understand the concerns of industry with respect to the current status and proposed direction of IHO ENC policy and the CHRIS membership benefited from the expert technical advice of industry representatives. In attendance were 32 representatives from “industry” and 42 representatives from 22 Member States and the IHB.

The IHO provided the industry representatives with presentations that focused on the current status of S-57 edition 3.1 with the problems encountered by “freezing” this standard since 2001, and the efforts in developing S-57 edition 4 highlighting this edition’s broad applications beyond ENC encoding.

The industry representatives express their concern that stability of ENC specifications and hence ECDIS software is essential to realizing continued growth in ECDIS installations and use. They also noted that increase coverage of ENCs and straightforward availability, pricing and licensing is necessary to increasing ECDIS usage.

Of significant mutual benefit were discussions of what sort of changes to S-57 edition 3.1 could be accommodated without major impact on existing ECDIS installations. These discussions lead to the strategy of developing S-57 edition 3.1.1 as detailed in IHB CL 94/2005. With regard to more sweeping changes to S-57, the strategy outlined in IHB CL 93/2005 received favorable comments.

As many of the concerns expressed by the industry representatives involved the availability, pricing and licensing of ENC's, it was agreed that the next Stakeholders' Forum be associated with the WEND Committee meeting under whose purview these matters reside.

WEND

9th WORLDWIDE ENC DATABASE COMMITTEE (WEND) MEETING IHB, Monaco, 7-8 April

Chairperson: Capt. R.L. PARSONS (USA)
Vice-Chairperson: Capt. Abri KAMPFER (South Africa)
Secretary: Ing. en chef M. 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.



Forty-eight representatives from twenty-five Member States and five observing organizations participated in the 9th WEND Committee Meeting under the Chairmanship of Capt. PARSONS, (USA-NOAA). The meeting took a focused view of the obstacles to ENC and ECDIS use from the mariner's perspective. The concerns specifically addressed were:

- World-wide ENC coverage at appropriate scale;
- Simple and unencumbered distribution system;
- A reasonable licensing and pricing policy.

The perspective of the mariner was offered by Capt. BEGGS, representing the International Council of Cruise Lines, Mr. SANDFORTH, representing the Royal Institute of Navigation (UK) and Capt. HAILWOOD, whose report was contracted for by the UKHO. While each of the presentations had a slightly different point of view, in total the issues of most concern to the mariner were availability, both in coverage and in access, and a sensible pricing and licensing policy.

The WEND Task Group reported on its activities over the year and proposed numerous changes to the WEND Principles that placed greater emphasis on, and suggested more concrete actions toward, attaining sufficient coverage, efficient distribution and common-sense pricing and licensing. The WEND Committee agreed these changes should be submitted to all Member States for their approval. The Committee also approved the continuation of the WEND Task Group under their current Terms of Reference.

Reports from Regional Hydrographic Commissions, RENCs and Member States indicated progress in several areas. Of note is the availability, free of charge, of four small scale ENC's, produced by the East Asia Hydrographic Commission (EAHC), covering the South China Sea. Australia reported on the ease with which they arranged for distribution as a satellite or "icicle" of IC-ENC. Japan (JHA) announced their new pricing policy for ENC's.

The 9th WEND provided an excellent forum for discussion of new concepts. A "pay per use" model of licensing ENC's was introduced and the USA-NOAA policy of distributor certification was explained.

A specific date and venue for the 10th WEND were not set. Pending a Member State's offer to host the next meeting, the IHB will host it in April 2006.

HYDROGRAPHIC INTEROPERABILITY HARMONIZATION WORKING GROUP (HIHWG)

4th MEETING OF THE (HIHWG) Vancouver, Canada, 4th February

Mr. GREENSLADE (UKHO) and Mr. PHARAOH (IHB) attended the Hydrographic Interoperability Harmonization Working Group meeting, which took place in Vancouver (Canada), between the 31st of January and the 4th of February 2005.

The aim of the HIHWG is to examine how interoperability and the harmonization of Electronic Navigation Charts (ENC) and Digital Nautical Charts (DNC) products can be achieved. Three working groups were formed to progress work in the following areas:

Mapping Definitions & Content

This group continued with previous work that focused on mapping the IHO Object, and the DGIWG Feature Attribute Catalogues, as well as harmonizing their definitions.

Although a significant amount of work had previously been undertaken on this task, a change of direction became necessary due to the sensitive nature of some of the more generic attributions. This has resulted in the task being significantly larger than originally estimated.

Metadata

This group was engaged in developing a metadata crosswalk between ENC and DNC, including the current version of the AML ISO 19115 mapping. The aim is to identify the core elements and commonalities between data types. This group will also identify those elements which cannot be

mapped and those elements necessary to pass the current validation processes. The outcome of this activity will be a harmonized metadata profile of ISO 19115, which will be passed to IHO and DGIWG committees for review. The longer term goal is to establish an ISO conformant hydrographic metadata register.

Strategy & Communications

This group was engaged in directing the activities of the technical groups and compiling a communications power-point presentation. The presentation was reviewed by the combined working groups during the daily meeting closure sessions.

CO-ORDINATION AND PUBLICATION OF REGIONAL ENC PRODUCTION AND SERVICES

INTERNATIONAL ELECTRONIC NAVIGATIONAL CHART SEMINAR Seoul, Republic of Korea, 21 February

The National Oceanographic Research Institute and the Korea Oceanographic Research and Development Institute hosted an International ENC Seminar to further stimulate ENC production and distribution in the East Asia region. The Seminar drew upon experts from around the world to discuss topics of hydrographic data management, ENC production, ENC distribution and specific issues related to the region. In attendance were the Hydrographers of the region, representatives of the Regional ENC Coordinating Centers and ENC/ECDIS software manufacturers.



While the presentations and discussions covered a broad range of issues, central to the Seminar was the upcoming release of four small scale ENCs covering the South China Sea. These ENCs were produced by the East Asia Hydrographic Commission and will be distributed, free of charge, by Internet or through the hydrographic offices of the EAHC members. The Commission is to be commended for their innovative approach to accelerating the availability of ENCs in their region. The South China Sea ENCs provide a critical link between the ENCs produced by other EAHC members.

An important issue that received much attention is the formation of a RENC in the EAHC area. The importance of this mechanism for quality control and user-friendly distribution was acknowledged, but the attendees proposed several alternative solutions that must be reconciled.

The frank and open discussions were very beneficial to the eventual attainment of complete and readily available ENC's throughout the region.

INTERNATIONAL CARTOGRAPHIC ASSOCIATION (ICA)

ICA- SPATIAL DATA STANDARDS COMMISSION MEETING

La Coruña, Spain, 4-8 July

The ICA Spatial Data Standards Commission met on 4-8 July 2005 in La Coruña, Spain, under the chairmanship of Prof. Harold Moellering (USA). The meeting objective was mainly to continue work on the Spatial Data Infrastructure (SDI) UML modelling, in the frame of the development by the Commission of a conceptual model of the SDI using the UML modelling language and associated modelling concepts, working in the areas of science, technology and standards, at the Global, Regional and National levels. The Reference Model of the ISO Open Distributed Processing standard (RM-ODP) was used as a basis for the Commission work.



Ten ICA-Commission members from the following 10 countries / organizations were in attendance: Australia, Czech Republic, Cuba, Denmark, France, Poland, Russia, Spain, USA and IHB.

The meeting reviewed and expanded the first two UML viewpoints for SDI, i.e. Enterprise (describes the purpose, scope and policies for an SDI) and Information (describes the semantics of information and information processing into an SDI), and started work on modelling the third viewpoint, i.e. Computation (enables distribution through functional decomposition of the system into objects which interact at interfaces). During the model development process, the roles of the different actors in a SDI are identified in relation to a Use Case elements approach. The meeting also reviewed a paper "UML data modelling for SDI" collectively prepared by the commission for presentation at the International Cartographic Conference on the following week (ICC2005), and modified / expanded this paper to make it suitable for publication in IJGIS (International Journal of GIS).

The next Commission meeting will be held in Vienna, Austria, in July 2006 before the ISPRS Spatial Data Handling (SDH) Conference.

ICC 2005 – 22nd INTERNATIONAL CARTOGRAPHIC CONFERENCE
La Coruña, Spain, 9-16 July

The 22nd International Cartographic Conference (ICC 2005) took place in La Coruña, Spain, from 9 to 16 August 2005. IC Conferences, which are held every two years, are major events of the International Cartographic Association (ICA) (www.icaci.org) and attract many role players in the cartographic world. More than 1600 participants were registered at ICC 2005, from 98 countries. 500 oral presentations were given in 150 technical sessions. An exhibition of IHO Member States' cartographic products was held as part of the Conference. Also, presentations were given by IHO representatives to oral and poster sessions at the Conference. Both IHO chart exhibition and presentations generated much interest amongst the ICA conference delegates.

The IHO cartographic exhibition, as part of the ICC 2005 Map Exhibition, was very successful thanks to the excellent support provided by the local organizers and the Spanish HO. Member States' charts/maps were presented in a special area kindly allocated to the IHO. Cartographic products and/or posters from the following 17 Hydrographic Offices and the IHB were exhibited:

Australia, Chile, China, Croatia, Cuba, Finland, France, Japan, Korea (Rep. of), Mexico, Norway, Slovenia, South Africa, Spain, Turkey, Ukraine and United Kingdom.

A jury was formed to judge the IHO exhibition, chaired by the IHB representative (Michel HUET). The other Jury members were ICA personalities and heads of international organizations attending ICC 2005. After careful consideration of all the displays, the jury decided, in accordance with a series of strict criteria, that the prize for the best exhibition should be given to **Australia**. The winner will receive his prize on the occasion of the 17th International Hydrographic Conference (IHC) in May 2007 in Monaco. The other best displays were those of South Africa and the United Kingdom.

Besides the Map Exhibition area and therefore not taking part in the IHO cartographic exhibition, the Spanish HO had set up a big and splendid display covering many aspects, ancient and modern, of Spanish hydrographic surveying and nautical charting.

In the frame of the ICC 2005 Map Exhibition, delegates were invited to vote on their preferred map/chart, among several categories of cartographic products, including “Nautical Charts and Bathymetric Maps” for which the ICA award went to the Hydrographic and Geodetic Service of **Cuba** for their 1:1 million scale chart *Carta Náutica de Cuba* (2002 Edition).

A number of presentations were given by HOs' Representatives, and the IHB, at the ICC 2005 technical sessions. In particular, chairs and speakers of the three oral sessions covering the topic “Marine Cartography, Navigation and Ocean Mapping” principally came from the IHO. Additional IHO contributions related to the themes “Spatial Data Infrastructures” and “Data Capture and Quality Assessment of Spatial Data”. This significant IHO involvement in the technical sessions, from Croatia, Cuba, France, Portugal, Slovenia, Spain, United Kingdom and IHB, will have undoubtedly raised the importance of Hydrography and emphasized the relevance of the IHO amongst the ICC 2005 delegates. Other HOs represented at ICC 2005 included China, Japan, Rep. of Korea, Turkey and Ukraine.

The next ICA Conference will take place in Moscow, Russia, in August 2007 and will be hosted by the Federal Agency of Geodesy and Cartography of Russia.

INTERNATIONAL ASSOCIATION OF LIGHT AUTHORITIES (IALA)

3rd MEETING OF THE IHO-IEC HARMONIZATION GROUP ON MARINE INFORMATION OBJECTS (HGMIO)

IHB, Monaco, 27 June

Chairperson: Dr. L. ALEXANDER (Univ. of NH, USA)

Secretary: Ing. en chef Michel HUET (IHB)

Members: **IHO:** Canada, Estonia, Italy, Japan, Norway, UK, USA (NGA, NOAA and Navy), IHB.

IEC: Caris (Canada), Navintra/Furuno (Finland), SevenCs (Germany), C-Map (Italy), Chartworx (Netherlands), Transas (Russia), Maptech (USA), USCG.

The 3rd Meeting of HGMIO was held 27 June 2005 at the IHB, Monaco, under the Chairmanship of Dr. Lee Alexander (Univ. of NH, USA). Marine Information Objects (MIO) consist of supplementary information to be used with ECDIS that are not Electronic Navigational Chart (ENC) objects or specified navigational elements or parameters. Eight persons attended representing four member states, and included two IHB Directors. The main topics discussed at this one-day meeting are summarized below.

- Recommended Procedures for MIO Development, which describe the various steps of MIO development, were agreed. This document is available on the IHO website.
- Current status of MIO-related efforts was reviewed, including Ice Coverage, Meteorological information, Tides/Water Levels, Current Flow, Oceanographic information, and Marine Environmental Protection.
- a new MIO-related project on electronic Aids to Navigation Service Information (e-ANSI), launched by the International Association of Marine Aids to Navigation and Lighthouse Authorities (IALA), was discussed. On the following day, an IHO-IALA Workshop on International Standardization of e-ANSI Information on ECDIS was held at IHB (see hereafter).

IHO-IALA WORKSHOP ON INTERNATIONAL STANDARDIZATION OF E-ANSI INFORMATION IN ECDIS

IHB, Monaco, 28 June

The Workshop was held the 28th of June 2005 at the IHB, Monaco, under the Chairmanship of Dr. Lee Alexander, Chairman of HGMIO, with participants from HGMIO and e-ANSI Working Group.

IALA has set up a Working Group on electronic Aids to Navigation Service Information (e-ANSI), which objective is to provide real-time information to ships on the status of Aids to Navigation (AtoN) that are critical for the safety of navigation and the protection of the environment. It is planned that Automatic Identification Systems (AIS) will be used to broadcast the relevant e-ANSI information in an appropriate data format.

The main objective of the Workshop was to define a specific MIO layer for e-ANSI and to determine an action plan for establishing a Register for S-57 e-ANSI objects/attributes and the best approach to display e-ANSI information.



Five main topics were discussed:

1. What is e-ANSI, i.e. why it is important? how it is expected to operate? how it could become a MIO? and role of AIS in data communication?
2. Determination of the data content for e-ANSI.
3. Definition of what S-57 objects and attributes are required.
4. Establishment of an e-ANSI S-57 Object Register.
5. Display of e-ANSI information (present and/or future colours and symbols).

A meeting of the IALA e-ANSI WG was held at the IHB on 29 June 2005, immediately following the Workshop, with IHO participation. It was agreed that IALA e-ANSI WG and HGMIO would work cooperatively on the development of an e-ANSI MIO Product Specification. However, it is IALA that will deal with the implementation of e-ANSI and will address any regulatory requirements (e.g., recommend changes to IMO Performance Standards) related to the mandatory presentation of e-ANSI information.

20th ISO/TC 211 PLENARY MEETING Stockholm, Sweden, 6-10 June

Mr. GRENSLADE (UKHO) and Mr. PHARAOH (IHB) attended the 20th ISO/TC211 Plenary Meeting, and preceding Working Group meetings that took place between the 6th and 10th of June 2005 in Stockholm.

The Working Group meetings that were of particular relevance to IHO standards development activities included 19101-2 Reference model - Part 2 - Imagery, 19115 -2 Metadata - Part 2 - Extensions for Imagery and Gridded Data, and 19139 Metadata - XML Schema Implementation.

An Advisory Group on Outreach Workshop took place during the meetings. The following presentations were provided during the workshop:

- GEOINT Interoperability Demonstration: A Standards Based GEOINT Services Demonstration (Mr. MOELLER, Mr. PEHLE);
- The implementation of ISO 19115 as the metadata standard for Statistics in South Africa (Dr. COOPER);
- Applying a metadata standard for international weather information. (Dr. FOREMAN) and
- ISO GML Demonstration (Mr. LAKE).

Further information on these presentations is available from the ISO/TC211 web site <http://www.isotc211.org/>

A number of resolutions were accepted during the plenary session. These included the approval of a liaison request from the United Nations Economic Commission for Africa (UN ECA). UN ECA will be appointed as a Class A liaison member.

TIDAL COMMITTEE

GLOSS GE9 MEETING IOC, Paris, 24-25 February

The 9th Meeting of the Global Sea Level Observing Systems (GLOSS) Group of Experts (GE9) was held at the Intergovernmental Oceanographic Commission (IOC) in Paris, from 24 – 25 February 2005. The meeting was attended by 40 representatives from 19 countries: Australia, Brazil, Canada, Chile, Denmark, France, Germany, Ireland, Israel, Japan, Kenya, Mexico, Norway, Pakistan, Portugal, Russia, Spain, United Kingdom and United States of America. A further 4 representatives from China, Côte d'Ivoire, India and Indonesia were registered but did not arrive. The IHB and the IHO Tidal Committee were represented by Steve SHIPMAN [PA(H)]. Five of the other attendees came from the HOs of IHO Member States.

Dr. BERNAL, the Executive Secretary of the IOC, opened the meeting. In his welcoming address he outlined the activities of the IOC following the Indian Ocean Tsunami on 26 December 2004. He stressed the importance of sea level measurements for any research/forecasting system for tsunamis. Following this address, Mr MERRYFIELD, Chairman, opened the meeting and held 1 minute's silence in memory of Mr. Christian LE PROVEST. He had been elected as the Chair of the GLOSS GE at the 8th Meeting but died suddenly, a few months afterwards.

Following the adoption of the Agenda the following matters were discussed:

1. GLOSS data services, products and web services;
2. Update on GLOSS links with other programmes. Steve SHIPMAN gave a report on the VIth meeting of the IHO Tidal Committee;
3. Discussion on International Tsunami Warning System in the Pacific (ITSU) – GLOSS coordination;
4. Update on regional programmes: European Sea Level Service (ESEAS), MedGLOSS, South American GLOSS, NOAA activities, Caribbean;
5. National reports on sea level activities;
6. Report on Capacity Building Activities;
 - a. Since the last meeting: Training Courses, Technical visits, Installation / upgrading of gauges, financial support for training, production of GLOSS training CD;
 - b. Planned for 2005 – 2007: Training courses in Indonesia and Tokyo, Gauge installations / upgrades, update of the GLOSS Sea Level manual;
7. Discussion on the activities and TORs for the Technical WG;
8. Discussion on the activities of the Scientific Steering Group;

9. Formulation of a GLOSS statement to be made to the International Tsunami Coordination Meeting to be held at the IOC the following week;
10. Production of list of meeting Action Items.

IHO MANUAL ON HYDROGRAPHY

It is a great pleasure for the IHO to inform that the first edition of the IHO Manual on Hydrography (IHO Pub M-13) has now been completed.

The IHO Manual on Hydrography general objective is to provide knowledge on the concepts involved in hydrography as well as guidance to plan and execute hydrographic surveys. The Manual is considered to be a professional guide for hydrographic surveyors and a tool for teachers and students involved in hydrographic courses or programs.

The content of the Manual is divided into seven chapters:

Chapter 1	Refers to the principles of hydrographic surveying, including its specifications;
Chapter 2	Refers to positioning;
Chapter 3	Refers to depth determination, including both the principles and techniques used;
Chapter 4	Provides information on sea floor classification and object detection;
Chapter 5	Refers in particular to water levels and flow;
Chapter 6	Is devoted to topographic surveying applied to hydrography;
Chapter 7	Provides, in a structured way, complete details on hydrographic practice;

The Manual has an important role to play in Capacity Building and therefore its translation into French and Spanish is under consideration.

The Manual can be downloaded as individual chapters from the IHO web site www.iho.shom.fr > Publications > Catalogue > M-13. Although principally an electronic publication it is intended to print sufficient copies to distribute to each IHO Member State, Cat A / B training school and principal author.

The History

During the development of the IHO Strategic Plan and Work Programme in 1998, consideration was given to the merits of publishing an IHO Manual on Hydrography. Until then, it seems that the IHO has never taken the initiative to develop an IHO Manual on Hydrography. This may be due to the fact that IHO Member States have always published national manuals in the past. Moreover, in an era of declining budgets, it has become very difficult or even impossible for Hydrographic Services to update or rewrite these Manuals.

During the 2nd Extraordinary International Hydrographic Conference, 2000, the IHO adopted a Strategic Plan and Work Programme. The programme included the preparation of an IHO Manual on Hydrography, pulling together the resources previously dedicated to developing national manuals. Recognizing the scope of this task, the Manual on Hydrography Working Group (MoHWG) was established under the chairmanship of Capt. GORZIGLIA from Chile.

The first meeting of the WG was held at the IHB in June 2001, where the content of the Manual proposed by the Chairman was reviewed and agreed. Also, responsibilities were assigned and “team leaders” were appointed to oversee the production of each chapter.

The second and last meeting of the WG took place at the IHB in March 2004. During three days the WG reviewed in depth all six chapters and concluded on minor amendments to be done. Also, the WG

agreed the way forward with regard to Chapter 7, “Hydrographic Practice”, a chapter that, being dependent on the earlier chapters, could not be completed in advance. Whilst it was agreed that the contributions to the Manual were of a very high standard, it was felt that a native English speaker should review the final text before being released. It was considered that if this were not done then the Manual would lose credibility as an authoritative text. The IHO is extremely grateful to the hard work put in by the members of the Working Group and in particular the principal authors who have devoted so much time to writing the Manual. Also the IHO is grateful to The United Kingdom for the loan of Lt. Cdr. WYATT for 1 month to edit the assembled Chapters, that were posted in the IHO web page on May, 2005.

GEBCO PROGRAM

GEBCO MEETING

Aguascalientes, Mexico, 7-12 July

The meeting was hosted by the Instituto Nacional de Estadística, Geografía e Informática (INEGI) and was opened by Dr. CALVILLO VIVES, President of INEGI.

The Sub-committee on Digital Bathymetry (SCDB) met on 7 and 8 July with various WGs holding meetings on 9 and 10 July and the GEBCO Guiding Committee (GGC) meeting on 11 and 12 July.

The meeting was attended by the following IHO representatives of the GGC: Capt. CAILLIAU, Mr. MONAHAN, Mr. LOUGHRIDGE and Cdr. LUSIANI (SCDB only). Lt. Cdr. SHIPMAN and Mr. PHARAOH (PAD) represented the IHB. Mr. FALCONER, Mr. FRÍAS and Mr. SCHENKE of the IOC members were present. Dr. UDINTSEV was unable to attend due to visa problems. Some 19 scientific advisors to GEBCO also attended the meetings.

The SCDB received several presentations on new developments in digital data processing and presentation and considered how these and other data sets might be used to the advantage of GEBCO. Ideas on new / additional grids were discussed and several proposals formulated to present to the GGC Meeting the following week.

The GGC spent much time looking to the future and how GEBCO should evolve in its second hundred years. Amongst the important decisions taken were:

- to release the GEBCO Grid free over the Internet. The GEBCO Digital Atlas containing the GEBCO Grid, Gazetteer of Undersea Feature Names and viewing software will continue to be sold as at present;
- the GEBCO website, which will continue to be hosted by NGDC/NOAA, may now be accessed through the URL www.gebco.net;
- GEBCO will seek to establish regional teams of volunteers to improve / update the GEBCO Grid; these teams will associate closely with the IOC International Bathymetric Charts (IBCs);
- GEBCO will cooperate in the preparation of a new hybrid grid containing data other than pure acoustic bathymetry to replace the Smith-Sandwell Grid, which is widely used in academia;
- GEBCO will seek the availability of shallow water data such as contours and representative soundings in order to improve the GEBCO Grid and make it of more use for requirements such as: tsunami propagation modelling, UNCLOS desktop studies, fish habitat monitoring etc.;

Mr. FALCONER, an IOC representative to the GGC, was elected as Vice Chairman of the GGC.

The meeting was also informed that the first year of the GEBCO-NIPPON Training Scheme was drawing to a successful conclusion and that five students had been selected for the 2nd year. Funding in the 2nd year only allowed 6 students to be trained but unfortunately one selected student had withdrawn at the last moment with insufficient time available to find a suitable replacement. Having completed the course, students would join the GEBCO Community as NIPPON Fund Scholars.

SCUFN

IHO-IOC SUB-COMMITTEE ON UNDERSEA FEATURE NAMES (SCUFN)

Monaco, 3-6 October

Chairperson: Dr. H.W. SCHENKE (Germany)
Secretary: Ing. En chef Michel HUET (IHB)

Members: **IHO** Argentina, India, Japan, Mexico, Russian Federation, USA.
IOC Mexico, Russian Federation, USA.

The XVIIIth meeting of the GEBCO-SCUFN was held on 3-6 October 2005 at the IHB, Monaco, under the Chairmanship of Dr. H.W. SCHENKE, Alfred Wegener Institute (AWI), Germany. Admiral A. MARATOS, IHO President, welcomed the meeting participants and emphasized the importance of SCUFN work, as its recommendations on undersea feature naming issues would, in principle, be accepted by the UN Group of Experts on Geographical Names (UNGEGN). In addition to the Chair, attendees included eight SCUFN members from Russia, USA, Japan, Mexico, India and IHB, and five observers from Russia, USA, Rep. of Korea and IOC Secretariat. Dr. Y. OHARA, Japan Hydrographic and Oceanographic Department (JHOD), Lic. J.L. FRIAS SALAZAR, Instituto Nacional de Estadística Geografía e Informática (INEGI), Mexico, LCdr. Harvinder AVTAR, National Hydrographic Office, India, and Capt. Albert E. THEBERGE, USA (NOAA) participated as new SCUFN members.



About a hundred names were examined during this meeting, half of them being newly submitted. Many of these names had been proposed by Russia (HDNO and the Russian Academy of Sciences).

As a result, SCUFN selected 34 new names for inclusion in the GEBCO Gazetteer. Other topics discussed at the meeting included :

- Web-based Map Interface for the Undersea Feature Names Gazetteer.
- New Version of the IHO-IOC GEBCO Gazetteer Viewing Software.
- Transliteration of Russian Geographical Names.

3rd MEETING OF THE INTERNATIONAL BATHYMETRIC CHART OF THE SOUTH EAST PACIFIC (IBCSEP)

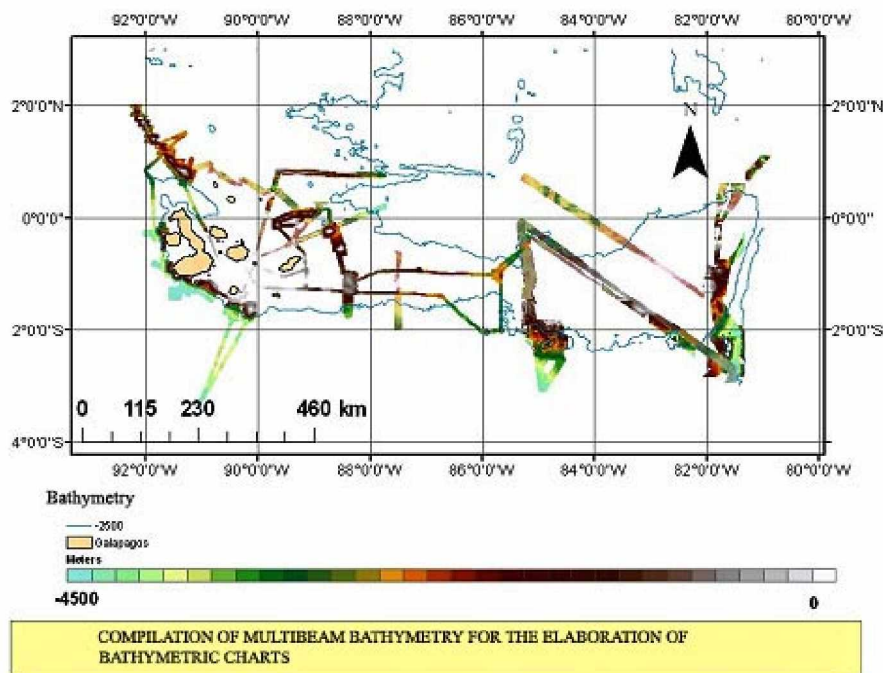
Guayaquil, Ecuador, 07 July

The inaugural session of the IBCSEP took place in Chile in 2001, with the participation of representatives from Chile, Colombia, Ecuador and Peru. Also representatives from the IOC were present as advisors of this new regional project that has held its third meeting now in Ecuador.

The four member countries were present: Chile, Colombia, Ecuador and Peru. Also Mexico, United States and Venezuela were present as observers. Capt. GORZIGLIA, IHB Director, the contact point between IOC and IHO, represented the IHO. Regretfully there was no representative from the IOC.

The Opening Ceremony was chaired by RAdm. KRILJENKO (Peru), Director of the “Dirección de Hidrografía y Navegación” and IBCSEP Editor Committee Chairman, who passed the Chairmanship to Cdr. PROAÑO SILVA (Ecuador), who will assume this responsibility until the next meeting.

Capt. GORZIGLIA reported on the working relationship between IOC and IHO on Ocean Mapping matters and on the outcome of the last IOC Assembly (June 2005) with regard to this program. He also explained the proposal for a new structure of the Ocean Mapping Program, which aimed at a much more efficient system which would improve the effectiveness of the use of the limited resources which are provided by both international organizations to IBC projects.



The four participating countries gave presentations on the progress made to date in the preparation of the charts under their responsibility. The chairman congratulated those making presentations and particularly for the progress achieved by each country. After each presentation, a very interesting

debate and exchange of opinions took place. The outcome of the discussions is reflected in the resolutions adopted, that briefly are as follows:

- a) The holding of a workshop in August 2006 to discuss details prior to the delivery of the charts to the Editorial Committee for approval.
- b) Keep IOC well informed on the progress made in order to facilitate the adoption of a proper decision with regard to allocation of resources. It was made clear that the progress achieved is due to MS's and IOC's contribution.
- c) The Chairman will coordinate with all the Committee Members a virtual forum to define the mid latitude to be applied, as well as the vertical datum and any other technical matter, before 01 November 2005.
- d) Countries that are to produce joint charts will exchange analogical and /or digital data before 01 September 2005.

The participants appreciated the guidance and willingness of the IHO to contribute to the development of this regional project, and also the IHB's useful contribution to the discussions that took place after each presentation. It is recommended to follow up the adopted resolutions, in view of the important contribution this project will make to GEBCO. The decisions adopted reflect a strong spirit of cooperation and cooperation amongst the Members in the region. Finally, the importance of taking advantage of the Multibeam course, that will be attended by two professionals from the region, was stressed and the opportunity the Nippon Foundation is providing through GEBCO to prepare new specialists.

COMMISSION FOR THE PROMULGATION OF RADIO NAVIGATIONAL WARNINGS

AD HOC MEETING OF CPRNW MEMBERS

3rd EIHC, IHB, Monaco, 14 April

Chairman: Mr. P. DOHERTY (USA)
Secretary: Lt Cdr S. SHIPMAN (IHB)

Since several members of CPRNW were attending the 3rd EIHC, the opportunity was taken to hold a short *ad hoc* Meeting on Thursday 14 April in order to prepare some groundwork for the 7th CPRNW Meeting due to be held at the IHB from 13 - 15 September 2005.

Discussion included:

- The preparation of a draft agenda;
- The outcome of COMSAR 9, with particular attention on the transmission of Tsunami Warnings. Initial thoughts were also given to the nature of the ensuing revision of the WNWNS documents to be discussed at CPRNW7 and reported to COMSAR 10.
- Initial discussion on a draft paper reviewing the WNWNS and emerging factors prepared by the Chairman of the Navtex Coordinating Panel.

7th MEETING OF THE COMMISSION FOR THE PROMULGATION OF RADIO NAVIGATIONAL WARNINGS (CPRNW)

IHB, Monaco, 13-15 September

The 7th meeting of the Commission for the Promulgation of Radio Navigational Warnings was held at the IHB from the 13 – 15 September 2005.

The meeting was attended by 21 representatives from Argentina, Australia, France, Greece, Japan, Pakistan, Republic of South Africa, Spain, Sweden, United Kingdom, United States of America and the IHB. Observers from the International Maritime Organization, the International Mobile Satellite Organization, the World Meteorological Organization, INMARSAT and the Federal State Unitary Hydrographic Dept of the Russian Federation.

The principal matters considered by CPRNW 7 were:

GMDSS Master Plan – It is important for the safety of Navigation that MS maintain their entries in the GMDSS Master Plan. The latest version of the Master Plan and amendment forms are now available from the IHO web site.

WWNWS Transmission of additional information – The transmission of World Health Organization (WHO) warnings of interest to the mariner, of ISPS Security Level Warnings and Tsunami warnings in the WWNWS were discussed. These matters all require further work and no final recommendations were reached.

WWNWS Documentation - A Correspondence Group (CG) was established to begin a review of all WWNWS documentation. It is hoped that as many members of the CG will be able to meet in the UK during the week following COMSAR 10 at IMO. Membership of the CG is open to all MS and anyone wishing to join should contact the CPRNW Chairman Mr. Doherty (Peter.M.Doherty@nga.mil).

Business Continuity Plans - All National and NAVAREA Coordinators were urged to consider the preparation of a Business Continuity Plan.

Expansion of the WWNWS to cover Arctic Waters – Further work is required on this matter before the CPRNW is able to make firm recommendations on the extension of the WWNWS to cover all Arctic waters.

Navtex Service Areas - The NAVAREA III coordinator, Spain, introduced a paper concerning the designation of ‘service areas’ in the Mediterranean, following a request from Italy to relocate their existing stations and from Tunisia for the establishment of a new station. CPRNW were not able to discuss this matter fully as not all interested countries were present at the meeting. The NAVAREA III coordinator has arranged a meeting, to be held at the IHB on 18/19 January 2006, to discuss this issue and report back to CPRNW 8.

IMO resolution A.888(21) Criteria for the provision of mobile-satellite communication systems in the GMDSS. – IMSO reported on the progress of the IMO CG preparing a revision of this resolution. NAVAREA coordinators were requested to communicate their baseline requirements to the Chairman of CPRNW as soon as possible.

GMDSS / MSI Briefing – The Chairman introduced a “WWNWS CD “ which he had produced. The idea was to include all information relative to the WWNWS in a single place. The CD would also contain presentations on the WWNWS, which could be used to promote the WWNWS and the provision of MSI. It was intended that the CD would be regularly updated and made freely and widely available. All members of the CPRNW were invited to review the contents and pass comments to the Chairman.

CPRNW Terms of Reference – An amendment has been approved by MS to allow annual, rather than biennial, meetings of CPRNW.

Full details of this meeting are available from the CPRNW section of the IHO web site.

2. TRAINING

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

28th MEETING

Chairperson: Capt. A. ARMSTRONG (USA)
Vice-Chairperson: Mr. G. JOHNSTON (UK)
Secretary: Capt. Federico BERMEJO (IHB)

Members: Mr. R. FURNESS (Australia), Dr. D. WELLS (Canada), Ms. T. TUURNALA (Finland), Prof. Dr. D. EGGE (Germany), Dr. L. TSOULOS (Greece), Cdre. L. BRAHMA (India), Dr. L. SURACE (Italy), Dr. M. RAZALI (Malaysia)



The 28th meeting of the FIG/IHO/ICA Advisory Board was held at, and hosted by, the National Technical University of Athens, from 25 to 29 April.

The Board Members and the Secretary reported on the activities related to training and education carried out between meetings. The following items were concluded:

- a) Recognition of the Course in Hydrography submitted by Bangladesh
- b) Recognition of the Cartographic Course from IMA (Trieste)
- c) Recognition of the UKHO Hydrographic Data Processing and Marine Cartography Programme

Another three topics were discussed regarding recognition of courses: the date of issuance of certificates, the delay agreed for submissions and the recognition of modules forming a course. The Board agreed that the date of issuance had to be the date on which the procedures for recognition were completed. It was also agreed that delay in submissions could be admitted, as this practice had been followed in the

past, provided justification for the delay was given. Finally, on the question of recognition of modules, although this was considered to be an administrative matter for the institutions running courses, the IAB felt that recognition should be given to the total time of all the course modules together.

The Board also confirmed that the logos of the three organizations could be used in the National Certificates issued by institutions running courses recognized by the IAB.

The Board examined a set of amendments proposed by the Board members, which, after endorsement, were incorporated into the Standards.

The following course was awarded recognition:

Course of Hydrography for Naval Officers of the Spanish Hydrographic School
Category A with Options 1 and 6

A Working Group formed by the Chairman, the Vice-Chairman, Dr. WELLS and Capt. BERMEJO (Secretary) was established with the task to provide Draft Guidelines on this topic. The proposal from the Vice-Chairman on Individual Recognition will be a working document to be considered by the Working Group.

It was also decided that a Working Team, formed by the Chairman, Vice-Chairman, Mr. FURNESS and Capt. BERMEJO (Secretary) will study the development of the above items and any others that may be relevant and will produce a draft document. It was also agreed that the Chairman, Vice-Chairman and the Secretary may meet in the inter-sessional period, if necessary, to ensure the correct follow-up of urgent matters.

The next meeting will be held in Goa (India) from 10 to 14 April. The rest of the programme of meetings is as follows:

2007 – Hamburg (Germany) ; 2008 – Sydney (Australia); 2009 – Helsinki (Finland); 2010 – New Orleans (USA)

NEW MEMBER OF THE ADVISORY BOARD

Following retirement of Commodore JAYARAMAN, the Directing Committee appointed Cdre. BRAHMA, Joint Chief Hydrographer of India as the new IHO member of the FIG-IHO-ICA Advisory Board on Standards of Competence for Hydrographic Surveyors and Nautical Cartographers. Cdre. BRAHMA is congratulated for this nomination and thanks the Hydrographic Service of India for making him available for this important task

EIGHTH HYDROGRAPHIC COURSE AT THE NATIONAL HYDROGRAPHIC SCHOOL, GOA, INDIA 27 June 2005 – 28 January 2006

The Eighth Hydrographic Course at the National Hydrographic School, Goa course commenced on Monday 27 June 2004 and the theoretical part (including field practice) ended on 3 December 2005. This phase will be followed by an eight-week practical training phase onboard an Indian Naval Hydrographic Ship. the second phase started on 5 December 2005 and will end on 28 January 2006.

MULTIBEAM COURSE HOSTED BY THE AUSTRALIAN HYDROGRAPHIC SERVICE

The Australian Hydrographic Service co-hosted the 38th Ocean Mapping Group Multibeam Course in Sydney, Australia from 18 – 23 July 2005. The topics covered were :

- Review of underwater acoustics and overview of acoustic seabed mapping systems;
- Multibeam principles and multibeam calibration methods;
- Positioning and motion compensation for multibeam surveys;
- Multibeam survey planning;
- Data structures and multibeam data processing;
- Seabed acoustic backscatter and characterization;
- Visualisation methods and quality control.

NIPPON FOUNDATION - GEBCO TRAINING PROJECT YEAR 2

The establishment of the GEBCO Nippon Foundation Training Program leading to the Graduate Certificate in Ocean Bathymetry at the University of New Hampshire, USA, and the recruitment of the First Class of students have proven to be a very successful initiative. The class that began in August 2004, included members of the HOs of Argentina, Japan, Nigeria and Peru, as well as three students from oceanographic organizations in Fiji, India and Kenya, representing a well balanced contribution to the disciplines pertaining to both the IHO and the IOC.

The second course begun on 29th August 2005 and includes 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. In addition to the institution's teaching staff, other experts are recruited to give specialist lectures. The course content includes acoustics, basin tectonics, bottom composition and acoustic backscatter, data analysis and integration, margin and abyssal sediments, physical oceanography, positioning, satellite altimetry, structure of ocean basins, sonar performance, surface interpolation, survey design, and uncertainty management. Students can also select additional courses from a range of electives.

IHO PRESENTATION TO NATO GEOGRAPHIC OFFICERS COURSE

Oberammergau, Germany, 11 May

For the past three years, the Headquarters of the Allied Command Transformation (formally Supreme Allied Commander Atlantic) has requested the IHB provide a presentation on the IHO to its Geographic Officers Course at the NATO School in Oberammergau, Germany. RAdm BARBOR made this presentation on 11 May 2005 to thirty-five students from NATO and Partnership for Peace countries. The course provides its students with a foundation in policies, concepts, principles, practices and interoperability issues of geographic support in NATO. The students are geographic, oceanographic and hydrographic staff; however, most of the students are not familiar with hydrography. The IHO presentation dealt with the importance of hydrography from the perspective of safety of navigation, protection of the marine environment and sustainable development of the world's economy. The need for hydrographic data collection using current technology and for the distribution and maintenance of modern nautical products is stressed. The nearly complete, high-resolution coverage of the earth's land mass is compared to the largely unsurveyed floor of the ocean while the nuances of hydrographic data exchange and exchange of hydrographic information as reproducible material (REPROMAT) are pointed out. Finally, a comparison is made between NATO and IHO standards with an explanation of the genesis of these differences and the current efforts towards convergence of these standards. The presentation to this class provides beneficial exposure to future leaders and decision makers of the important role IHO plays in standardizing, coordinating and advocating for the collection of hydrographic data and the dissemination of nautical products.

3. MISCELLANEOUS

ABLOS WORKING GROUP

12th ABLOS BUSINESS MEETING AND 4th ABLOS CONFERENCE IHB, Monaco, 9 and 10-12 October

Chairman: Dr. Shin TANI (IHO) (Japan)
Acting Vice-Chairman: Mr. Ron MACNAB (IOC) (Canada)



The 12th ABLOS Business Meeting was held on Sunday 9 October. The minutes of this meeting will be available from the IHO web site. (www.iho.shom.fr> Committees > ABLOS).

The 2005 ABLOS biennial Conference, “Marine Scientific Research and the Law of the Sea: the Balance between Coastal State and International Rights”, was held at the IHB from 10 to 12 October 2005. The Conference was very successful with 79 delegates from 25 countries attending. The delegates included representatives from 20 Hydrographic Offices, 26 other government departments, 5 business groups, 8 academic institutions, 1 IGO and 1 NGO. The Conference opened with a tutorial day, attended by 29 delegates, which was devoted to matters related to UNCLOS Article 76. The seminar on days 2 and 3 included 18 papers on many topics related to the theme of the Conference and stimulated much debate. A CD containing all the papers presented was given to all participants and was mailed to all IHO Member States. Individual presentations can be downloaded from the IHO web site (www.iho.shom.fr > Committees > ABLOS and follow the link to the ABLOS web site at the University of New South Wales). The next ABLOS Conference will be held in late 2007.

JOINT BOARD OF GEOSPATIAL INFORMATION SOCIETIES (JB GIS)
Cairo, Egypt, 17-24 April

The 3rd Meeting of the JB GIS was held in Cairo, Egypt, from 17 to 24 April, in conjunction with the Annual Meeting of Commission 4 – Hydrography - of the “Fédération Internationale des Géomètres” (FIG). VAdm. MARATOS, President of the IHB Directing Committee, attended these meetings and the following is a brief description the week's events:

- a. There was a round table discussion on the status of “surveying engineering” in academic institutions in different parts of the world and especially in Africa. All the participants recognized that the field of “surveying engineering” faces problems of continuation due to lack of interest in this field, as Geomatics gains more interest and covers this field, money is not available and students are oriented towards other more profitable specializations, such as civil engineering. VAdm. MARATOS explained briefly that hydrographers must be considered as part of the field of “surveying engineering” and explained the cooperation between IHO, FIG and ICA in developing and updating the document of “Standards of Competence for Hydrographic Surveying and Nautical Charting”. They were all very interested in this subject, and, in particular, to find ways to introduce hydrographic courses into their curricula and they may seek the assistance of the Bureau. It was decided that FIG will hold a special seminar on this topic in Africa.
- b. The Presidents or General Secretaries of the following Organizations participated in the Meeting of the JB GIS: IHO, FIG, ICA, IAG, GSDI, ISCGM, ISPPRS and IMTA. A strategy green paper had been drafted by the President of ISPPRS for discussion purposes. This paper outlines different options as regards the way that the Board will function. After considerable discussion, it was the general position that the Group would, at this stage, be “a discussion group” with the aim of coordinating meetings and exploring possibilities of joint activities. This role takes a minimum of additional resources and allows officers of the organizations to meet and discuss issues of common interest. The Chairperson will be appointed by the Joint Board and his term will be for two years, with the possibility of an extension for another term. The Board decisions need to be endorsed by all members. Furthermore, it was decided that the Board may set up “ad hoc” committees to respond to particular situations. It was also decided to establish an “ad hoc” Committee on Capacity Building in Africa in order to coordinate capacity building activities in Africa; members of the Joint Board will participate and give advice to the Joint Board on policy issues relating to education in Africa. The IHO will not participate at this stage in this committee, which will concentrate at the moment on training support.
- c. The meeting of the FIG Commission 4 for Hydrography: VAdm. MARATOS gave a presentation on the activities of the IHO, with special emphasis on the developments concerning Capacity Building as approved by Member States.

VAdm. MARATOS took the opportunity to visit the Hydrographic Office of Egypt in Alexandria, and he was briefed by the Director, Cdre. GAMIL RAGAB, and his staff on the activities and work of the Hydrographic Office. Of particular note is the work that has been achieved in ENC production covering part of the Egyptian coast. The Egyptian Hydrographic Office is very well organized and undertakes hydrographic surveys, produces ENCs, paper charts and publications and provides support to the Fleet.

The next Meeting of the Joint Board will take place in Vienna, Austria, from 12 to 14 July in conjunction with the main meeting of ISPPRS.

NATO GEOSPATIAL CONFERENCE

Brussels, Belgium, 28 June

The IHO provided an overview presentation to the NATO Geospatial Conference convened on 27-30 June 2005, at NATO Headquarters in Brussels. During the session, that included the IHO presentation, the conference was open to NATO Members and Partners for Peace (PfP) Nations. The audience of nearly 100 participants represented virtually all of the 26 NATO Members and the 20 PfP Nations. As is frequently the case in such geospatial forums, the topographic and imagery specialists dominate over marine and hydrographic specialists; therefore, it represents an excellent opportunity to educate these decision makers of the unique aspects of hydrography and marine cartography. The presentation covered the objectives of the IHO, the mandates set forth in SOLAS for hydrographic data collection and nautical information dissemination, and the status of hydrography and nautical cartography. There remains several NATO Members and PfP Nations that are coastal states and not Member States of the IHO and the presentation highlighted this while impressing upon all attendees the obligation of a coastal state to provide for the safety of navigation.

4th INTERNATIONAL CONFERENCE ON HIGH RESOLUTION SURVEY IN SHALLOW WATER

Plymouth, UK, 11-15 September

The President of the IHB Directing Committee, VAdm MARATOS delivered the keynote address at the 4th International Conference on High Resolution Survey in shallow water, organized by the UKHO and the UKMSA in Plymouth, on 11-15 of September. More than 250 persons from Hydrographic Offices, Academia, maritime industry and mariners attended the Seminar. Many interesting papers were presented covering a variety of subjects, and in particular topics referring to multibeam systems, side scan sonars and LIDAR.

IHO - SDI SEMINAR

Rostock, Germany, 8-9 November



The IHO and the German Hydrographic Service (BSH) ran a Seminar, the theme of which was “The Role of Hydrographic Services with regard to Geospatial data and planning infrastructure” in Rostock, Germany on 8-9 November. There were 50 participants from 20 Hydrographic Offices, international organizations, interested States and private companies. The seminar was organized in two sessions: on the first day there were some very interesting presentations made by Member States, international

organizations and the IHB. On the second day three groups were established to discuss different topics related to establishing SDI of specific interest to HOs and the IHO.

The term “Spatial Data Infrastructure” encapsulates a framework of policies, institutional arrangements, technologies data and people, which enable the sharing and effective use of geographic information. In deciding to establish SDI, the HOs need to consider the financial, technical and administrative arrangements that they are connected with for the demands and requirements of this HI-TECH infrastructure.

All participants agreed that this first seminar had been successful in allowing an exchange of views on the developments of the SDIs at the national, regional and global level and particularly on the marine and hydrographic components. CHRIS has been identified as the appropriate IHO Committee to consider this issue and advise the Organization.

The IHB wishes to thank the BSH for hosting and organizing this seminar and congratulates them on the excellent arrangements made.

WORK PROGRAMME 4 INFORMATION MANAGEMENT AND PUBLIC RELATIONS

IHO PUBLICATIONS

IHO publications are available on the IHO Web Site (www.iho-ohi.org or www.iho.shom.fr) and can be downloaded by IHO Member States and subscribers to the site. IHO publications are also available on CD-ROM that is distributed annually to Member States and includes all updated publications. The 2005 CD-ROM was distributed in June, with C.L. 60/2005.

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.

Member States responded to C.L. 63/2004 to indicate their preferences in receiving the IHO publications. The Distribution List for Circular Letters and the Annual Report was amended accordingly. The new distribution list was implemented with immediate effect. In the case of those countries who had not responded, Circular Letters are provided by email where an email address exists and by airmail.

Publications produced in 2005

P-5 – IHO Yearbook.

This publication is updated three times per year and offered in the WEB site only.

P-6 – Proceedings of the 3rd Extraordinary I.H. Conference.

The English version was distributed on CD-ROM in September with C.L. 99/2005.

P-7 – Annual Report

The IHO Annual Report 2004 was produced by the IHB and distributed in printed format in March with C.L. 24/2005.

M-3 – IHO Resolutions

A new text of Technical resolution A 2.5 “Datums and benchmarks” was adopted by Circular Letter and inserted in the publication.

By Decision No. 5 of the 3rd Extraordinary International Hydrographic Conference, the document “*Guidelines Of Accreditation Of Non-Governmental International Organizations*” was inserted in the IHO Resolutions as Technical Resolution T 1.2.4. Member States were informed by C.L.53/2005.

Updated English and French texts were produced in November 2005. Spanish text should be available in early 2006

M-4 – Chart Specifications of the IHO

Circular Letter 75/2005 proposed a solution to chart AIS-equipped aids to navigation, which had been developed by the Chart Standardization and Paper Chart Working Group (CSPCWG). This was described in a draft new M-4 Specification B-489 which was attached to the CL. Member States were asked to inform the IHB if they had any objections to the adoption of this proposal. The IHB is pleased to report that Member States raised no objection. The final wording of B-489 has been amended accordingly.

Circular 96/2005 reported on the Member States' approval of the revision of section B-200 of M-4, as completed by the CSPCWG.

As a result version 3.002 of M-4 (English), dated November 2005, incorporating both the new Section B-200 and the new specification B-489, has been prepared and placed on the IHO website (see www.iho.shom.fr > Publications > Download List).

As mentioned in CL 96/2005, CSPCWG is actively engaged in revising and updating the IHO's paper chart specifications. The next step will concern Section B-400; Section B-300 will then follow. The Working Group currently comprises representatives from 25 Member States; its Terms of Reference are posted on the IHO website (see www.iho.shom.fr > Committees > CHRIS/CSPCWG). Membership is open to all Member States and new members are welcome, provided that they can commit effort and contribute at a working level to the Working Group's activities. Further details may be obtained from, and expressions of interest in joining CSPCWG should be conveyed to, the Chairman [Dr. Peter Jones, UKHO, Taunton, Somerset TA1 2DN, UK – Peter.Jones@ukho.gov.uk - Tel: +44 (0)1823 723343 – Fax: +44 (0)1823 284077].

M-5 and M-8 – Standards of Competence for Hydrographic Surveyors and for Nautical Cartographers
During its 28th Meeting, the FIG/IHO/ICA International Advisory Board made some amendments to the Syllabus of M-5 and M-8. Member States were informed about these changes. It is forecasted to produce the 10th edition of M-5 during 2006.

M-11 – Catalogue of INT charts and Guidance for Regional Coordinators of INT chart schemes

Part A of the IHO Publication M-11 “Guidance For The Preparation And Maintenance Of International Chart Schemes” was approved by Member States in April. By Circular Letter, Member States were also requested to update/complete Appendices 1 and 2 of Part A, dealing with “Potential Printer Nations” and “Use of A0 Paper”, respectively. The revised appendices were updated accordingly.

Part A of M-11 is available on the IHO website (www.iho.shom.fr > Committees > CSPCWG > Part A of IHO Publication M-11). It will be incorporated in a new edition of M-11 as soon as possible. The CSPCWG will remain responsible for reviewing and updating Part A of M-11, as and when necessary.

IHO publication M-11 Part B provides details on all INT charts scheduled and/or published. The status of the medium and large scale INT chart series at the end of 2005 was:

Area	Coordinator	Commission/Committee	(1)	(2)	(3)
A (NW Atl. & NE Pac. Oceans)	USA/NOS	US/CHC	NS	4	4
B (Meso-America & Caribb. Sea)	Mexico	MACHC	56	3	0
C1 (SW Atl. Ocean)	Brazil	Reg. Chart. Group	57	12	0
C2 (SE Pac. Ocean)	Chile	SEPHC	42	4	0
D (North Sea)	Netherlands	NSHC & NHC	202	189	153
E (Baltic Sea)	Germany	BSICC/BSHC	225	152	46
F (Med. & Black Seas)	France	MEDINCHART/MBSHC	220	143	87
G (East Atl. Ocean)	France	CHATINTCHART/EAtHC	160	121	62
H (SE Atl. & SW Ind. Oceans)	South Africa	SAIHC	102	57	37
I (NW Ind. Ocean)	Iran	RSAHC	106	27	7
J (North Ind. Ocean)	India	NIOHC	131	65	1
K (E. Asia & NW Pac. Ocean)	Japan	EAHC	283	73	10
L (SE Ind. & SW Pac. Oceans)	Australia	SWPHC	41	35	18
M (Southern Ocean)	IHB	HCA	91	52	9
TOTAL			1706	937	434

(1) Scheduled, NS = Not Stated (2) Published (3) Reprinted by other MS

The total number of medium and large scale INT charts published has increased from 840 in end 2004 to 937 (12 %). Of particular note are the significant progresses observed in Regions G (+50%), I (+35%) and M (+30%).

Additionally, 89 INT charts at small scales (smaller than 1:2 million), out of 98, have so far been published by 17 producer nations.

M-13 – Manual on Hydrography

The first edition of the IHO Manual on Hydrography (IHO Pub M-13) was completed, under the chairmanship of Capt. GORZIGLIA (IHB Director). The IHB is extremely grateful to the hard work put in by the members of the Working Group and in particular the principal authors who have devoted so much time to writing the Manual:

Argentina:	Mr. MAYER and Mr. SALGADO
Australia:	Lt. Cdr. JOHNSON
Italy:	Cdr. LAMBERTI and Lt. DI LIETO
Pakistan:	Capt. ZAFARYAB
Portugal :	Lt. Cdr. FREITAS
UK :	Lt. Cdrs. LAWRENCE, WILSON and WYATT
USA :	Cdr. MILLS and Mr. GILL

The IHB is also grateful to The United Kingdom for the loan of Lt. Cdr. WYATT for 1 month to edit the assembled Chapters.

The Manual can be downloaded as individual chapters from the IHO web site www.iho.shom.fr > Publications > Catalogue > M-13. Although principally an electronic publication it is intended to print sufficient copies to distribute to each Member State, Cat A / B training school and principal author.

S-44 – Standards For Hydrographic Surveys

A Working Group was formed to study the revision of this publication. The new members of the Working Group are now the following:

Australia:	Lt. Cdr. JOHNSON
Canada:	Mr. Hare (Vice-Chairman)
Chile:	Lt. BARRIOS and Ms. ORTIZ
Croatia:	Dr. KASUM, Dr. GRŽETIÆ
Ecuador:	Mr. ROSERO
Finland:	Mr. VARONEN
France:	Ingénieur MICHAUX
Germany:	Mr. VAHRENKAMP
Italy:	Lt. GRASSI
Japan:	Mr. SHIN TANI
Netherlands:	Mr. DORST
Norway:	Mr. OLSEN
Portugal:	Lt. Cdr. FREITAS ARTILHEIRO
Republic of Korea:	Mr. SEONG-KYO KONG
Russian Federation:	Capt. 1 st Rank SMIRNOV
Sweden:	Mr. JAKOBSSON
United Kingdom:	Mr. HOWLETT (Chairman) and Lt. Cdr. DOBSON
USA:	Cdr. MILLS and Mr. CRONIN

The WG is now preparing the 5th Edition of S-44.

S-46 – Correction of echo-sounds

IHO Member States supported the proposal that the IHB should cease to maintain the data formerly included in Publication S-46 and that TR B 1.2 paragraph 6 (referring that publication) should be deleted from Publication M-3.

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

A 4th Edition is nearing completion. The English text should be published in the first half of 2006.

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

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

S-53 – Worldwide Navigational Warnings Service Guidance Document

CPRNW have established a Correspondence Group to review S-53 and S-53 App. 1

S-57 – IHO Transfer Standard for Digital Hydrographic Data

In response to a requirement to accommodate Archipelagic Sea Lanes (ASL) and Environmentally Sensitive Sea Areas (ESSAs) in ENC, the CHRIS 17 tasked the TSMAD WG to produce an enhanced edition of the S-57 Edition 3.1 Standard. A draft S-57 Edition 3.1.1 Addendum document was produced in November and distributed for comment in December. The new edition 3.1.1 will only be used by ENC producers wanting to encode these new feature types, and should not affect normal ENC production or ECDIS operation.

S-62 - ENC Producer Codes

A new [Edition 2.1](#) of this publication was produced by the IHB and is available on the IHO website (www.iho.shom.fr > Publications > Catalogue > S-62). It supersedes Edition 2.0 which was announced in CL 85/2004.

It is planned to publish new editions of S-62 twice a year on average, in order to keep this publication current. Member States are requested to report to the IHB (info@ihb.mc) any changes to S-62 of which they may be aware.

S-65 - ENC Production Guidance

This new publication, based on a document “ENC Production Cookbook”, prepared at the UKHO on behalf of the IHO and in liaison with the IHB, was approved by Member States and was posted on the WEB site. The French and Spanish versions were also made available during the year.

IHO WEB-SITE

The IHO website continues to provide a focal point for the distribution of IHO publications and documents. It also contains important information concerning IHO activities, which include meetings of the various Regional Hydrographic Commission, as well as the numerous committees and working groups. The monthly IHO web bulleting also provides items of interest relating to the current activities and events. The IHB is grateful for the continued web hosting facilities provided by SHOM.

REPOSITORY OF CHARTS AND NAUTICAL DOCUMENTS

During the year, 438 new charts / editions were received (650 in 2004), examined and filed in the Bureau Chartroom. This included 289 INT charts and 149 national charts. Member States are kindly reminded that delivery to the IHB of copies of their national charts is no longer required, in accordance with Article 19 of the IHO General Regulations. A number of ENCs were also received, as well as 160 nautical publications (149 in 2004).

DISTRIBUTION OF IHO PUBLICATIONS ON CD-ROM

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

IHB LIBRARY

About 300 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 2005. 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.

PRODUCTION OF A PUBLICATION COLLATING LEGAL CASES RELATED TO CHARTING AND NAUTICAL ACCIDENTS

Task 4.2.4 of the 2002-2007 Work Program involves the production of a new publication collating legal cases related to charting and nautical accidents. Circular Letter 32/2005 of 24 March 2005 requested Member States forward to the IHB any marine accident investigations or case studies that contain findings that related to the use or adequacy of nautical charts. The IHB received only one substantive response. France provided their publication, SHOM 001FNOA, that describes the inevitable shortcomings of nautical documents with case studies of accidents resulting from these shortcomings. France suggested that this publication could form an integral part of an IHO publication on a worldwide scale and that it would be a valuable resource for Hydrographic Offices. Unfortunately, without further input from Member States there is insufficient material to warrant a publication at this time.

MAINTENANCE OF IHB COMPUTER AND NETWORK SYSTEMS

In order to support an increasing demand for computer and network facilities within the IHB, a new MS Windows 2003 network server was installed during 2005. The new server supplements the existing Unix servers. Five computer workstations and one network printer were replaced during the year. Three Wireless Access Points (WIFI), have been installed which facilitate WIFI access to the Internet from within the conference room. Several enhancements were also made to the IHB Documents Management System. These were carried out by the Chilean hydrographic organization SHOA.

DEVELOPMENT AND MAINTENANCE OF IHB GIS DATABASE INFRA-STRUCTURE

The IHB continues to develop GIS databases to support internal graphics production requirements, and will increasingly work towards the development of online Web Map Server capabilities such as the Global ENC catalogue.

WORK PROGRAMME 5 GENERAL ORGANIZATION DEVELOPMENT

STRATEGIC PLANNING WORKING GROUP

6th MEETING OF THE IHO STRATEGIC PLANNING WORKING GROUP Wollongong, Australia, 13-15 July



The 6th meeting of the SPWG was held at the Australian Hydrographic Office, Wollongong, from 13 to 15 July 2005, under the chairmanship of Mr. KLEPSVIK (Norway). All the IHO Regional Hydrographic Commissions, except SEPHC and RSAHC were represented at the meeting, together with the following individual countries: Brazil, China, Japan, New Zealand, Singapore and UK.

The President of the IHB Directing Committee explained that, on 4 July, the Monegasque Government had sent by diplomatic channels, the Amendments to the IHO Convention to the Governments parties of the Convention. This has been communicated by the IHB through Circular Letter n° 71/2005 dated 8 July 2005. The documents sent by the Monegasque Government were the Resolution, the Protocol of Amendments and the Consolidated Convention.

The delegates informed about the formalities that the ratification procedure needs in their respective countries and also gave an indication of the difficulties that the procedure may find. It was noted that, at least for eleven delegates, the ratification process does not seem to present any major difficulty.

The SPWG Chairman reminded that the following items were the core of the future SPWG work

- Finalize the Basic Documents based on the decisions of the Conference.

- Prepare, in consultation with the IHB Directing Committee, an implementation plan to take forward the decisions, for adoption at the next ordinary IH Conference in 2007, or earlier depending upon the date of ratification.
- Consider the definition of “Hydrographic interests”, and report on the work at the XVIIth IH Conference.

Furthermore, the existing TOR No 1 and 2 concerning the Strategic Plan (SP) and Work Programme (WP) are ongoing tasks which the SPWG must consider before the next ordinary Conference in 2007. A Table summarizing the timing for these actions had been prepared by the Chair Group as indicated below:

Task	6th Meeting	7th Meeting	8th Meeting
Implementation Strategy	X	X	X
Basic Documents	X	X	
ToRs 1 and 2		X	X
Definition of Hydrographic Interest			X

The following remarks were made:

- 1) Three meetings are the maximum forecasted until mid 2006, but should the work have not been finalized by this time, an additional meeting may be organized.
- 2) The study of the definition of “Hydrographic interest” is not to be ended until the future Second Assembly and this is why it has been scheduled only to start at the 8th meeting, but that the sentence “a the latest”, as indicated in Article 16(c) of the General Regulations may mean that the task could be achieved before.
- 3) SPWG work should finish by mid 2006 and a set of agreements should be prepared for information of all IHO Member States by IHB Circular letter, followed by the pertinent proposals to the 17th Conference.
- 4) Initial Meetings of the future IHO Main Committees Chairmen should be organized to start the work of the restructuring of Committees. In principle, the 3rd EIHC has agreed that the CHRIS and CBC Chairmen as the most adequate persons to assume the preliminary functions and this was totally endorsed by the delegates.

The SPWG considered a Table showing all the IHO Committees, Boards and Working It was also decided that the IHB will complete a report about the restructuring of the Legal Advisory Group (LAG) to present to the 7th SPWG meeting.

The lay-out of the SPWG Work Programme was fully approved by the delegates.

The draft Basic Documents were reviewed by the SPWG and several amendments discussed and approved.

It was also reminded that the Conference discussions have agreed to implement as soon as possible those items not requiring ratification from the State Parties.

The SPWG considered a scheme prepared by the Chair Group about the timing for Assembly and Council and the election of Secretary General and Directors. Decisions were taken about various options presented. The representatives will inform the members of their Commissions about the selected option to have their comments before the 7th meeting.

The SPWG also agreed that a different approach should be taken on the salaries of the Secretary-General and Directors, taking into account the new responsibilities as they arise from the new structure. The SPWG also agreed that this issue will not increase the budget and the reconsideration of the salary schemes should take into account the different responsibilities.

7th MEETING OF THE IHO STRATEGIC PLANNING WORKING GROUP

Mexico City, 5-7 December

The 7th meeting of the SPWG was held at the “Secretaria de Marina” Mexico City, from 5 to 7 December 2005, under the chairmanship of Mr. KLEPSVIK (Norway) and hosted by the Hydrographic Office of Mexico. All the IHO Regional Hydrographic Commissions, except SEPHC, NIOHC and RSAHC were represented at the meeting, together with the following individual countries: Brazil, Canada, China, India, Japan, Singapore and UK.



The delegates reported on the status of ratification in their respective countries. It was noted that the ratification process was well on the way in more than 20 countries. Some countries reported that the ratification documents had not yet been received from the Government of Monaco. The President of the IHB D.C. stated that the Government of Monaco, following the Diplomatic procedures sent the documents to the Consuls or Honorary Consuls of the States residing in Monaco.

The SPWG agreed on some further amendments that had been identified for decision during the meeting. The IHB will now produce a final draft of the Basic Documents and will co-ordinate with the Legal Experts to finalize the task.

A summary of the “Implementation strategy” was made, stressing the following facts:

- The 3rd Conference approved in principle the new structure of the Organization with an Assembly, a Council, a Finance Committee, two main Committees and a Secretariat.
- Of the two possible options presented for implementation of the new structure, Option 1 had been preferred by the SPWG (for the text of Option 1, see the Report of the 6th SPWG Meeting).
- Japan submitted an amendment to Option 1, to have the Extraordinary Conferences two years (instead of 3) after the ordinary Conferences so that an extension beyond the five years term of the Directing Committee, is not needed.
- In any case, the new structure should be implemented within three months following the ratification date.

The delegates approved the final option for the timing of Assembly and Council, with an amendment proposed by Japan.

The CBC and CHRIS Chairmen tabled the Reports that the SPWG had requested on the structure of the two Main Committees, the IRCC and the HSCC. The SPWG discussed the content and conclusions presented. It was agreed that the 2007 Conference should take a decision about whether the structure should be implemented before or after the ratification of the Convention and the SPWG decided to recommend to the Conference the implementation of the structure for the two Main Committees independently of the date of ratification of the amendments to the Convention. For this purpose, a clear proposal will be submitted to the next Conference.

It was decided that the CBC and CHRIS Chairmen, with the support of the IHB, will harmonize their reports in the light of the considerations made, and will prepare a proposal to the 17th I.H. Conference.

The President of the IHB Directing Committee reported on the salaries policy in other international organizations and the SPWG agreed that the salaries must be re-examined considering the different responsibilities of the Secretary- General and Directors, under the new structure.

It was agreed that there was a need for the IHO Finance Committee to establish a Working Group to study the salary scheme for the Secretary-General, Directors and Professional Assistants.

The IHB was tasked to communicate with the Finance Committee Officers and the IHO Member States, in order to establish a Working Group, with the aim of presenting a proposal on this issue at the 17th Conference.

The President of the IHB Directing Committee presented a report on this topic and noted that the opinion of the Legal Experts was that the IHO does not need any permanent group to deal with legal matters as, in accordance with the Convention, the Council is able to set up ‘ad hoc’ working groups to resolve any specific legal problem that may arise. The Chairman of the SPWG noted that there is not a need to establish a permanent Group, to consider ad hoc issues. This can be done when the need will come up and with specific, for the case, terms of reference. Therefore, the SPWG agreed with the recommendation of not to establish a special group but to consider the cases when they will come up.

The SPWG members felt that it was necessary to carry out a revision of the Strategic Plan and it was agreed to provide comments for the improvement of the Strategic Plan, by the end of March 2006, taking into consideration the comments provided by the President of the IHB Directing Committee.

They also agreed to provide comments for the Work Program by end March 2006, considering the new structure of the Organization, initiatives that the Organization needs to develop and the Strategic Plan as the main tool on which the Work Program must be based.

The next Meeting of the SPWG will examine the comments and the position of the Chair-Group and will decide on the way forward of these two important issues.

After discussion of the topic “Hydrographic Interest, the SPWG agreed with the conclusions of the report presented by Finland:

1. Tonnage should be used for the definition of Hydrographic interests
2. If Tonnage is not acceptable, then
3. It may be a waste of efforts try to find a multi-parameter solution
4. A new kind of approach should be proposed
5. SPWG to concentrate on other important issues

Therefore, it was agreed that unless any representative is able to present any other proposal to the 8th SPWG meeting, achieving the necessary consensus, then the SPWG will accept to present to the 17th Conference that it is difficult to agree on a multi-option definition for Hydrographic Interest” and that consequently, the parameter of “Tonnage “must be maintained.

Following the kind invitation from the Republic of Korea to host the 8th Meeting, it was agreed to hold it from 2 to 4 May 2006 in Busan (Pusan) (Rep. of Korea)

MEETINGS OF THE SPWG CHAIR GROUP AND LEGAL EXPERTS

The SPWG Chair Group held meetings in London and Monaco to discuss the progress of the work and establish the necessary guidelines. Meetings with the Legal Experts were also held in Hamburg and Monaco.

3rd EXTRAORDINARY INTERNATIONAL HYDROGRAPHIC CONFERENCE
Monaco, 11-14 April



The Third Extraordinary International Hydrographic Conference was held from 11 to 14 April 2005 at the *Auditorium Prince Rainier III*. Some IHO Working Groups and Commissions also held meetings during the conference week.

This Conference was very much overshadowed by the death of HSH PRINCE RAINIER III of Monaco who passed away on 6 April. The Principality of Monaco was in mourning and all festivities and social events were cancelled. The Conference week had to be cut short because of the Sovereign Prince's State Funeral, which was held on Friday 15 April when activities in Monaco came to a complete standstill. The Conference work therefore was completed by Thursday 14 April thanks to the Conference President, who efficiently conducted the proceedings to a successful conclusion, and to the effective participation of all the Conference delegates.

The Conference was held as a result of decision N° 8 of the 16th I.H. Conference, which approved the holding of an Extraordinary Conference in the first quarter of 2005 to consider a Report to be submitted by the IHO Strategic Planning Working Group.

Dr. EHLERS (Germany) was elected President of the Conference, with Capt. WARD (Australia) as Vice-president. A total of 183 delegates and 14 official observers from 69 countries registered at the Conference as well as delegates from the Intergovernmental Oceanographic Commission (IOC), International Association of Institutes of navigation (IAIN), International Cartographic Association (ICA), International Association of Marine Aids to Navigation and Lighthouse Authorities (IALA), International Commission for the Scientific Exploration of the Mediterranean (CIESM), International Council of Cruise Lines (ICCL), International Federation of Surveyors (FIG), International Maritime Organization (IMO), International Mobile Satellite Organization (IMSO), International Radio-Maritime Committee (CIRM) and Regional Organization for the Protection of the Marine Environment (ROPME) were also present.



The Minister of State of Monaco opened the Conference on Monday 11 April. A tribute was paid to the memory of His Serene Highness PRINCE RAINIER of Monaco and a minute's silence was observed. The president of the Directing Committee and the president of the Conference delivered Opening Addresses and expressed their sincere condolences on the passing away of His Serene Highness PRINCE RAINIER. His Excellency Mr. LECLERCQ, Minister of State of Monaco, also delivered an address accepting the condolences and declared the Third Extraordinary International Hydrographic Conference officially open.

The Minister of State presented the International Cartographic Association Prize (ICA) for 2004, which was awarded to Ukraine and South Africa. During the Opening Ceremony, the latest IHO Member States, Slovenia, Kuwait and Latvia, formally presented their flags to the Organization.

Following the Opening Ceremony, the Minister of State inaugurated the Hydrographic Exhibition which delegates and observers were able to visit during the Conference week. The Exhibition, which included hardware and software for hydrographic and oceanographic data collection, data management, GIS, computer-assisted cartography and ENC production, was of a particularly high quality and received many visitors who found the displays extremely interesting.

A total of eight Proposals by the Strategic Planning Working Group were considered and approved by the Conference; this is reflected in the ten Conference Decisions given below.

Hydrographic Industry Exhibition at the 3rd EIHC

The hydrographic industry gave strong support to the 3rd EIHC with 24 companies exhibiting. Their attendance funded a reception on Monday evening and the coffee breaks from Monday to Thursday. Most of the exhibitors have reported being very satisfied with their attendance and the high level of interest shown by the delegates. Many of the exhibitors have stated their intention to exhibit at the XVIIth IHC in May 2007.

The following Hydrographic vessels visited the port of Monaco and were open for visits during their stay in the port : *HMS Enterprise* (UK); *Galatea* (Italy) and *USN Henson* (US).

The Directing Committee wished to thank HSH PRINCE ALBERT II and the Monegasque Government for the support provided to his important event. Thanks are also extended to all the national and international delegates for their contribution to the discussions and to the IHB staff who worked very effectively during the Conference. All these factors greatly contributed to the overall success of the Third Extraordinary Conference.

Following the Conference, a special session on the Tsunami that affected the Indian Ocean on 26 December 2004 was held on Saturday 16 April where many delegates met to discuss the particular situation.

DECISIONS OF THE CONFERENCE RESULTING FROM THE APPROVAL OF PROPOSALS SUBMITTED

DECISION No. 1 - NOTING THE REPORT "A STUDY INTO THE ORGANIZATIONAL STRUCTURE AND PROCEDURES OF THE IHO (PRO 1)

The Conference decided to take note of the Report "A Study into the Organizational Structure and Procedures of the IHO" (CONF.EX3/DOC.1).

DECISION No. 2 - APPROVAL OF THE AMENDMENTS TO THE CONVENTION ON THE INTERNATIONAL HYDROGRAPHIC ORGANIZATION

THE THIRD EXTRAORDINARY INTERNATIONAL HYDROGRAPHIC CONFERENCE,

RECALLING Article XXI of the Convention on the International Hydrographic Organization with annexes, 1970 (the Convention) concerning amendments to the Convention,

HAVING CONSIDERED the report of the SPWG to the 3rd Extraordinary International Hydrographic Conference and the proposal for amendment of the Convention,

DECIDES to approve in accordance with Article XXI of the Convention the amendments to the Convention set forth in the Protocol of Amendments to the IHO Convention including the consolidated version of the Convention as an attachment,

AUTHORISES the President of the Directing Committee of the International Hydrographic Bureau to make such minor grammatical, editorial and spelling corrections, and to make corrections to ensure that the English and French language texts are consistent with each other, as may be necessary,

REQUESTS the Government of His Serene Highness the Prince of Monaco to inform the Member States and the President of the Directing Committee of the date of entry into force of the amendments.

DECISION No. 3 - AGREEMENT WITH THE PRINCIPLES LAID DOWN FOR THE IHO SUBSIDIARY ORGANS STRUCTURE (CONF.EX3/DOC.1)

The Conference agreed with the principles laid down for the IHO subsidiary organs structure, subject to more detailed study for submission to the next Conference.

DECISION No. 4 - AGREEMENT WITH PRINCIPLES LAID DOWN FOR THE PROCEDURES OF SELECTION OF MEMBERS OF THE IHO COUNCIL (PRO 4)

The Conference agreed with the principles laid down for the selection procedures of members of the IHO Council (Para 6.2 of the "SPWG Report" CONF.EX3/DOC.1 and Article 16 of the Draft General Regulations (CONF. EX3/INFODOC.1/Rev.1), subject to the following amendments to Article 16 (c) of the Draft General Regulations.

Revised ARTICLE 16 (c)

- (c) *The remaining one-third of the Council will be drawn from the Member State who have the greatest interest in hydrographic matters and who have not been selected under the procedure described in (b) above. As a starting point, the measure of hydrographic interest is defined by national flag tonnage. The table of national tonnages is derived in accordance with the procedures in Articles 5 and 6 of the Financial Regulations. The Secretary-General will determine the one third of Council membership by identifying Member States in descending order of their tonnage, having confirmed with the Member State their willingness to sit on the Council. The definition of hydrographic interest will be reconsidered at the latest at the second Assembly meeting.*

The deadline of the second Assembly for reconsideration will not preclude conclusion of the issue at an earlier date.

DECISION No. 5 - AGREEMENT WITH THE PRINCIPLES LAID DOWN FOR THE GUIDELINES OF ACCREDITATION OF NGIOS (CONF.EX3/DOC.1 & CONF.EX3/INFODOC.6)

The Conference agreed with the principles laid down for the guidelines of accreditation of NGIOS. The Conference also agreed, following the proposal from Chile, to implement the rules regarding the granting of observer status to NGIOS, with immediate effect.

DECISION No. 6 - AGREEMENT WITH PRINCIPLES LAID DOWN FOR THE ELIGIBILITY CRITERIA AND TERMS OF OFFICE OF THE SECRETARY-GENERAL AND DIRECTORS (PRO 6)

The Conference agreed with the principles laid down for the eligibility criteria and terms of office of the Secretary-General and Directors as described in Articles 19 & 20 of the Draft General Regulations presented to the Conference as information document (CONF. EX3/INFODOC.1/Rev.1).

DECISION No. 7 - AGREEMENT WITH THE STRUCTURE OF THE REVISED IHO BASIC DOCUMENTS (PRO 7)

The Conference agreed in principle with the structure of the revised IHO Basic Documents to be adopted at a future Conference. The Conference also decided that all comments made by the delegates during the consideration of this Proposal should be taken into consideration in the final draft of the documents.

DECISION No. 8 - AMENDMENTS TO THE SPWG TERMS OF REFERENCE

The Conference approved amendments to the present Terms of Reference for the SPWG. The amended Terms of Reference will be as follows:

1. *Give advice, when needed, to the IHB Directing Committee, regarding the content of the Strategic Plan and related Work Programme.*
2. *Oversee and monitor the content of the Strategic Plan and related Work Programme.*
3. *The SPWG will include representatives designated by the IHO Regional Hydrographic Commissions. Individual Member States may be represented if they consider it necessary.*
4. *The SPWG shall request the assistance of legal experts when it is deemed necessary.*
5. *The Chairman of the SPWG will be elected by the Conference. (finalized at the 16th Conference).*
6. *Consider unresolved IHO matters referred by the 16th Conference and provide a report and recommendations by December 2003. (finalized at the 3rd EIHC).*

7. *Carry out a study on the need to revise the IHO Convention, providing the IHB Directing Committee with recommendations on any changes by December 2003. (finalized at the 3rd EIHC).*
8. *Consider the harmonisation of the texts of the IHO Basic Documents and supply recommendations to the IHO Directing Committee by December 2003. (finalized at the 3rd EIHC).*
9. *Present the results of these studies to the IHB Directing Committee who will circulate a report to Member States by December 2003. (finalized at the 3rd EIHC).*
10. *Co-ordinate comments on the interim reports and produce a final version by April 2004 in time to be considered by an Extraordinary Conference. (finalized at the 3rd EIHC).*
11. *Finalize the Basic Documents based on the decisions of the Conference.*
12. *Prepare, in consultation with the IHB Directing Committee, an implementation plan to take forward the decisions for adoption at the next ordinary Conference in 2007, or earlier depending upon the date of ratification.*
13. *Consider the definition of "Hydrographic interests", and report on the work at the 17th IH Conference.*

DECISION No.9 - DATES OF THE 17th INTERNATIONAL HYDROGRAPHIC CONFERENCE - 2007

The Conference confirmed the dates previously decided for the 17th I.H. Conference (2007) from 2 to 13 May 2007. However, noting that the present duration of Conferences, since 2000, is inferior to the preceding ones, the Conference decided that those dates will be refined by the Directing Committee at a later date.

DECISION No. 10 - SEATING ORDER AT THE NEXT CONFERENCE

It was established that the order of seating at the 17th I.H. Conference would commence with the letter "N".



Presentation of the flag by Latvia, new IHO Member



Visit on board the USN Hanson



Members of the IHB D.C. with the Master USN Hanson



The USN Hanson in the Harbour of Monaco



Delegates at the 3rd EIHC



The IHB D.C. receives visitors at the IHO Headquarters



Hydrographic exhibition



The « Port d'Hercules », Monaco, during the Conference



Some IHB staff members

IHO WORK PROGRAM

In accordance with Article 8 of the Financial Regulations, the IHO Finance Committee Members were asked to review and provide comments on the Proposed IHO 2006 Budget.

The proposed IHO 2006 Work Programme and Budget were prepared in line with the 2003-2007 Work Programme and the Five Year Budget approved by the 16th I.H. Conference, adjusted following Member States' approval.

The final versions were approved by the majority of Member States required and following the Planning Cycle approved by the 16th I.H. Conference, entered into force on 1st January 2006.

TRANSLATION SERVICES

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

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

HOST GOVERNMENT AFFAIRS

Relations with the Host Country continued to be very good. The Department of External Relations efficiently monitored the progress made with the request of States to become Members of the Organization, in accordance with the procedures of Article XXI of the Convention. In July, the Department of External Relations circulated to Member States, the amendments to the Convention that were approved by the 3rd Extraordinary Hydrographic Conference in April, monitoring the ratification process.

The President participated in a Committee, established by the Government of Monaco, to organize a Conference and an Exhibition in May 2006 that will commemorate the centenary of the expedition to the Arctic by PRINCE ALBERT 1ST.

The Directing Committee was amongst the mourners at PRINCE RAINIER'S funeral. The Prince passed away on 6th April. Following the three months mourning period, the Directing Committee was invited to participate in the events surrounding the enthronement of Prince Albert II of Monaco in July and November.

IHO MEMBERSHIP ADMINISTRATION

The Government of Monaco continued to effectively support the IHB in encouraging the prompt approval of those States who have applied for IHO Membership, and in following up periodically those pending Member States who have not deposited their Instrument of Accession. The IHB is particularly grateful to Monaco for their assistance in this domain.

Ref: CL6

New Members of the IHO

Republic of Latvia

The Government of Latvia officially deposited their Instrument of Accession with the Government of the Principality of Monaco on 17 March, and thus became the 75th Member State of the IHO on that date. The Directing Committee was delighted to welcome this new Member State and particularly

satisfied that the Latvian representatives were able to participate in the 3rd Extraordinary I.H. Conference in April with full voting rights.

Ref: CL 35

Republic of Mauritius

The Government of Mauritius became a full Member State of the IHO with the deposit of their Instrument of Accession on 4 August. The Directing Committee was extremely pleased to announce Mauritius' membership in Circular Letter 78 and to welcome this country as the 76th IHO Member State.

Ref: CL 78

Pending Member States whose application for admission to the IHO has 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 on 24 April 1992. At that time the Government of Monaco, as the Depositary Government for the Convention, invited the Government of Bulgaria to deposit its Instrument of Accession to complete the IHO membership formalities. Regretfully this last formality has not yet been completed.

Ref: CLs 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 on 14 February 1991, and the Government of Monaco, the Depositary Government for the Convention, informed the Directing Committee accordingly at that time. At the same time, the Mauritanian Government was invited to deposit its Instrument of Accession; unfortunately, to date this last formality has not been completed.

Ref: CLs 44/89, 25/90, 55/93

State of Qatar

The application to join the IHO made by the State of Qatar was approved by the required two-thirds of the Parties to the Convention on 11 November 1993 and the Government of Monaco invited the Government of the State of Qatar to deposit its Instrument of Accession at that time. Regretfully to date this final formality has not been completed. Qatar does participate in the work of the ROPME Sea Area Regional Hydrographic Commission as an Associate Member and the Directing Committee has had contacts with this country on different occasions, and has urged them to proceed with the deposit of their Instrument of Accession.

Ref: CLs 14/90, 55/93

Republic of Romania

The application to join the IHO made by the Government of the Republic of Romania was approved by the required two-thirds of the Parties to the Convention in April and the Government of Monaco immediately invited the Romanian Government to deposit its Instrument of Accession in order to become a full IHO Member State. The Romanian Authorities have not yet completed this final formality. The Directing Committee was nevertheless very pleased to count a delegation from Romania amongst the Observers at the 3rd Extraordinary I.H. Conference, and is confident that this country will rapidly deposit its Instrument of Accession.

Kingdom of Saudi Arabia

The application to join the IHO made by the Government of the Kingdom of Saudi Arabia was approved by the required two-thirds of the Parties to the Convention in April and the Government of Monaco immediately invited the Saudi Arabian Authorities to deposit the Instrument of Accession to complete the membership formalities. Saudi Arabia has not yet completed this final step. The

Directing Committee was very pleased to see Saudi Arabia represented at the 3rd Extraordinary I.H. Conference by 4 Observers. Furthermore, the President and Directors have had several contacts with Saudi Arabia throughout the year and are confident that this country will deposit its Instrument of Accession in the near future.

Pending Member States whose application for admission to the IHO is 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 32 approvals out of a required 47. The Directing Committee hopes that this approval procedure will be completed in the near future.

Ireland

An official application for membership of the IHO was received by the Government of the Principality of Monaco from the Government of Ireland on 22 November 2004, who reported a tonnage figure of 388,275 tonnes. Ireland's application has so far received 38 approvals out of a required 47. The Directing Committee was particularly pleased that two representatives from Ireland were able to participate in the 3rd Extraordinary I.H. Conference as Observers, and hopes that the approval procedure will be completed in the near future.

Member States whose rights and privileges have been suspended or reinstated

Of the 76 Parties to the Convention, three - the Democratic Republic of the Congo, Dominican Republic and Suriname - have all rights and benefits suspended in accordance with Article XV of the Convention and Articles 16 and 17 of the Financial Regulations. A two-thirds majority of Member States entitled to vote, therefore, is currently 49.

Amendments to the Convention

In April the 3rd Extraordinary International Hydrographic Conference considered the modifications to the Convention proposed by the Strategic Planning Working Group and approved the Protocol of Amendments to the Convention on the IHO and the Consolidated Version of the Convention.

The Government of the Principality of Monaco submitted these documents in July to all Contracting Parties for approval. In order for the amended Convention to enter into force, approval by two-thirds of the full membership of the Organization is required.

At the end of the year, one Member State, Denmark, had approved the amendments to the Convention.

With regard to those amendments to the Convention which are pending from the 13th and 15th .H. Conferences, Article 20 of the Protocol states:

“The amendments adopted during the 13th and 15th 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.”

APPENDICES :

- I. NEW HYDROGRAPHERS FROM MEMBER STATES
- II. IHB DIRECTING COMMITTEE AND RESPONSIBILITIES
- III. IHB STAFF LIST
- IV. IHB TECHNICAL MISSIONS
- V. VISITS TO HYDROGRAPHIC OFFICES AND
MEETINGS HELD AT THE IHB

APPENDIX 1 – NEW HYDROGRAPHERS OF MEMBER STATES

NEW HYDROGRAPHER OF KOREA

Mr. In-Sub KWAK was appointed General Director of the National Oceanographic Research Institute on 21 January 2005, in replacement of Mr. Hyung-Nam KIM. He was also appointed new Chairman of the East Asia Hydrographic Commission (EAHC).



He was born in August 1956, in the Province of Gyeongnam, Republic of Korea. In 1983 he graduated from the Busan National University and in 1989 he took a Master's Degree in Economics at the Ohio State University, USA. Following that, he took a further course on Marine Policy at the NOAA (National Oceanic and Atmospheric Administration), USA, from September 1993 to July 1995. Recently, he studied National Security at the National Defense University, Korea, from January to December 2004.

His first job was at the Budget Office, Economic Planning Board (now the Ministry of Planning and Budget). Thereafter, he worked in various public domains such as the Office of the Prime Minister and the Office of the President.

In 1999-2001, he served as Director of the Marine Policy Division, Ministry of Maritime Affairs and Fisheries (MOMAF). From June 2001 to April 2003, he served as Director of the General Services Division, MOMAF. From April 2003 to December 2004, he served as General Inspector in the MOMAF.

NEW HYDROGRAPHER OF AUSTRALIA

Captain Rod NAIRN joined the Royal Australian Navy in 1975 as a junior entry Officer Cadet. After Naval College and initial service in HMA Ships JERVIS BAY, SUPPLY and HOBART he specialized in hydrography and gained a Bachelor of Surveying (Hons) from the University of New South Wales. He served as Officer of the Watch and Assistant Surveyor in HMAS MORESBY, carrying out surveys off Esperance, and the west coast, before being posted to New Zealand in 1983 to



serve in HMNZS MONOWAI. During this overseas stint he participated in the surveys carried out by the ship in Fiji, Tuvalu, Bluff Harbour and Cook Strait in New Zealand. In 1984 he returned to Australia as Quality Control Officer at the Australian Hydrographic Office before returning to sea the following year as Executive Officer of the HMAS FLINDERS. He assumed command of HMAS BETANO in December 1986 and during the following year carried out surveys in the Inner Great Barrier Reef, the Torres Strait and the Papua New Guinea waters. He was promoted to Lieutenant Commander in 1988.

In 1989/90 he served on exchange with the Royal Navy as navigator and operations officer HMS HERALD working primarily in the Norwegian Sea, and later as Executive Officer of the HMS BULLDOG, which conducted surveys in the English Channel and the North Sea. In 1991 he undertook a Staff Course at the Royal Naval Staff College, Greenwich, before returning to Australia to take up his posting as the first Officer-in-Charge of the Laser Airborne Depth Sounder (LADS) Unit. During this posting he carried out surveys of Flinders Passage off Townsville and commenced the LADS Passage survey. He assumed command of HMAS FLINDERS in May 1994 and was promoted to Commander. Work carried out during his command of the ship included surveys in Endeavour

Strait, Great North Eastern Channel (Bligh Entrance) and Simpson Harbour, Rabaul, in Papua New Guinea. He was posted to the Australian Hydrographic Office in October 1995 as Manager Hydrographic Development and later became Head of Operations and Surveying.

In April 1998 Commander NAIRN was appointed Commanding Officer of Hydrographic Ship White Crew standing by the construction of NUSHIP MELVILLE, the second of the Navy's LEEUWIN Class Hydrographic Ships. He commissioned HMAS MELVILLE in June 2000 and, under a rotational crewing regime, alternately commanded HMA Ships MELVILLE and LEEUWIN. Surveys of the South Eastern Approaches to Inner Great Barrier Reef in the vicinity of Lady Elliot and Lady Musgrave Islands were carried during this period.

He was promoted to Captain in July 2001 and returned to the Australian Hydrographic Office in Wollongong, where he took up the position of Director of Hydrographic Operations and Capability and Deputy Hydrographer. In 2004 he undertook the Defence Strategic Studies Course at the Australian Defence College and gained a Master of Arts (Strategic Studies) from Deakin University. In December 2004 Captain NAIRN commenced his current appointment as Hydrographer of Australia and Commander of the Royal Australian Navy's Hydrographic, Meteorological and Oceanographic Force Element Group.

NEW HYDROGRAPHER OF POLAND

Born on October 19, 1951 in Gdansk, Poland, Captain Piotr PERNACZYNSKI attended the Naval Academy where he studied at the Faculty of Navigation and Naval Weapons Systems from 1971 to 1975.



In 1975, having completed his studies and having been promoted to the first officer's rank, Sub Lieutenant, PN, P. PERNACZYNSKI began his initial tour of duty in the *Kashubian* Naval Coast Guard Squadron which, at the time, was an integral part of the Navy. This and his subsequent appointments as Anti-Air/-Surface/-Submarine Warfare Officer aboard one of the squadron's patrol ships enabled him to acquire important sea and tactical training and led him to the positions of Executive Officer (XO) and Commanding Officer (CO).

Between 1980 and 1982, following an extended tour aboard the Coast Guard ships, Captain P. PERNACZYNSKI reported to the Naval Academy of the then Soviet Navy, and took up postgraduate studies in the technologies and use of navigational equipment and systems.

Upon completion of these studies, he returned to the Naval Coast Guard and was designated Fleet Navigator, Naval Coast Guard Brigade. In 1989, Captain P. PERNACZYNSKI took over the position of Fleet Navigator, Polish Navy, within the Sea Training Department, Naval Headquarters (NHQ).

Disintegration of the Warsaw Pact and transition of power in Poland provided Captain P. PERNACZYNSKI with an opportunity to learn in the west; in 1996, Captain P. PERNACZYNSKI graduated from the Naval Command College, Newport, USA.

Returning to Poland in 1997 he assumed the position of the Chief of Fleet Senior Specialists, Sea Training Department, NHQ. His major role in that capacity was to supervise the preparations and training, which naval ships undergo, before overseas deployments or operations during international exercises.

On 15 February 2005, Captain P. PERNACZYNSKI was named Chief of the Hydrographic Office of the Polish Navy.

NEW HYDROGRAPHER OF JAPAN



Mr. Masashi SUE was appointed as the Chief Hydrographer of Japan on 1st April 2005 after serving as Deputy Commander of the 10th Regional Coast Guard Headquarters, Japan Coast Guard.

He was born in 1947. He graduated from the Kobe University Graduate School in 1973. After graduating from the University, he entered the Hydrographic Department of Maritime Safety Agency (Hydrographic and Oceanographic Department (JHOD) of Japan Coast Guard, present name) in 1973.

During more than thirty years of service in the Department, he was mainly engaged in marine pollution research and its monitoring.

Also, he had assumed the following important posts.

- 1995 – 1996: Director of Hydrographic Department, 5th Regional Coast Guard Headquarters;
- 1996 – 1999: Head of Marine Pollution Research Laboratory, Hydrographic Department;
- 1999 – 2000: Director of Oceanographic Survey Division, Hydrographic Department;
- 2000 – 2002: Director of Coastal Survey and Cartography Division, Hydrographic Department;
- 2002 – 2004: Director of Shiogama Coast Guard Office, 2nd Regional Coast Guard Headquarters.

Especially, during the service in the Marine Pollution Research Laboratory, he contributed to the increase in efficiency of the marine pollution research by establishing sample extraction method from sea water and bottom sediment on survey vessel and by introducing the pollution analyzing method from sea water and bottom sediment.

Moreover, in 1999 - 2002, he contributed to the development of the airborne laser hydrography and the real-time observation of the Kuroshio Current with installing a long range HF radar system.

NEW HYDROGRAPHER OF BRAZIL



Vice-Admiral Paulo César DIAS DE LIMA was born in Rio de Janeiro, on October 26th 1946. In 1966 he joined the Brazilian Naval Academy on Villegagnon Island, Rio de Janeiro. Upon graduation, in 1969, he was commissioned an Ensign and assigned to the Oceanic Destroyer BAEPENDI. He specialized in Hydrography at the Directorate of Hydrography and Navigation in 1972. He attended numerous military courses, including the Command and Staff Course at the Brazilian Naval War College and the Politic and Strategic Maritime Course at the French “Collège Interarmée de Défense”.

He served on the survey ships ALMIRANTE SALDANHA and ALMIRANTE CÂMARA, as Division Head, on Antarctic Supply Ship BARÃO DE TEFFE, as Executive Officer, and on Buoytender FAROLEIRO AREAS and survey ship ALMIRANTE CAMARA, as Commanding Officer. His shore billets include a tour of duty as Instructor of the Brazilian Hydrography Course and the Brazilian Naval War College, Vice-Director of the Directorate of Hydrography and Navigation, Director of the Brazilian Hydrographic Center, Director of the Brazilian Lighthouse Authority, Secretary for the Interministerial Commission for Sea Resources, and Director of the Brazilian Institute for Sea Studies ALMIRANTE PAULO MOREIRA.

Among the numerous decorations he received are the following medals: Naval Order of Merit, Military Order of Merit, Gold Military Service, Armed Order Merit, Gold Military Service, Armed Forces Merit, and Defence Merit Order.

NEW HYDROGRAPHER OF KOREA

Mr. Chong Rok PARK was appointed General Director of the National Oceanographic Research Institute, Ministry of Maritime Affairs and Fisheries, Republic of Korea, on 27 June 2005, succeeding Mr. In-Sub KWAK. He will also succeed Mr. In-Sub KWAK as Chairman of the East Asia Hydrographic Commission (EAHC).



He was born on 8 February 1956 and graduated from Sung Kyun Kwan University in 1983. He took a course at Seafarer Education Administration in Japan. In 1994, he took his Master Degree in Economics at the University of Oregon, USA.

He began his career on 1982 and served as Director of General Services Division in Jeju Regional Maritime Affairs and Fisheries Office from 1983. From February 1994 to February 1996, he served as Deputy Director of Planning and Budget Office. He was sent to the Port of Portland and Port of Oakland, USA from 1996 to 1998. From January 2000 to March 2003, he worked as Director of Coastal Shipping Division, Shipping and Logistics Bureau. Since March 2003, he served as General Deputy Director for International Cooperation, Ministry of Maritime Affairs and Fisheries.

NEW HYDROGRAPHER OF EGYPT



Commodore Ehab TALAAT EL-BANNAN has been appointed Director of the Egyptian Hydrographic Department in July 2005, in replacement of the Commodore Gamil Ragab.

Hereunder is a brief detail of the posts he has held:

Career:

- Navigation Officer, Submarine;
- Executive Officer, Submarine;
- Commanding Officer, Submarine;
- Chief of staff, submarine brigade;
- Many posts in operations and training departments.

Qualifications:

- Master Degree , Navy and Military Science;
- Joint Defense College , France ;
- Nasser Higher Academy, High War College.

NEW NAVY INSPECTOR OF THE KINGDOM OF MOROCCO

Rear Admiral Mohamed BERRADA GOUZI has been appointed Royal Moroccan Navy Inspector from August 2005, in replacement of Vice-Admiral Mohamed TRIKI. The IHB Directing Committee congratulates him and looks forward to continued excellent relations with this Hydrographic Office under his leadership.

NEW HYDROGRAPHER OF MOZAMBIQUE

Mr. Select MUNDLOVO, BORN IN 1950, was appointed General Director of the “Instituto Nacional de Hidrografia e Navegação” of the Republic of Mozambique in August 2005, in replacement of Mr. Albano GOVE.

NEW HYDROGRAPHER OF THE ROYAL NETHERLANDS NAVY

Captain Floor P.J. DE HAAN was born in Driebergen (NL) on the 10th March 1959. He joined the Royal Netherlands Naval Academy in 1978. After receiving his commission in 1981, he served for one year on board a Hydrographic Survey Vessel. To complete his studies at the Naval Academy he was sent to the Geodesy Faculty of the Technical University in Delft (NL).



Following graduation from the Naval Academy in 1983, he served on board several frigates (including, as part of an exchange program, on board a Royal Navy frigate) and Hydrographic and Oceanographic Survey Vessels during which he also successfully completed the Basic Hydrographic course at HMS Drake, Plymouth (UK).

In 1988 he specialized as a Navigation and Combat Information Officer and served as such on board several RNLN frigates.

In 1990 he completed the Royal Navy Advanced Hydrographic Course in the United Kingdom, after which he served on the Hydrographic Survey Vessel HNLMS BUYSKES. On completion of this seagoing tour he became Director of Navigation within the Royal Netherlands Navy Directorate of Materiel in The Hague (NL).

From September until November 1992 he attended and successfully completed the Junior Staff Course at the National Defense College, after which he assumed command of HNLMS BUYSKES from January 1995 until September 1996. On completion of his command he was appointed Head of Operations on board HNLMS DE RUYTER until August 1998.

In June 1999 he completed the Senior Staff Course at the National Defense College, and was promoted Commander in his new appointment as the RNLN ‘Recruiter’ in Amsterdam.

In April 2002 Captain DE HAAN became the Foreign Liaison Officer of the Royal Netherlands Navy, followed in September 2003 by ‘acting’ Director of International Plans & Policy within the RNLNaval Staff, The Hague (NL).

In September 2005 he was appointed Hydrographer of RNLN and consequently promoted to Captain.

NEW DIRECTOR OF SHOM (France)

Ingénieur Général de l'Armement (IGA) Gilles BESSERO took up his appointment as Director of the Hydrographic and Oceanographic Service of the Navy (SHOM) on 1st October 2005. He took over from IGA (Vice Admiral) Yves DESNOËS, promoted to the highest level of *Ingénieur general* (Ingénieur general hors classe) and appointed Armaments Inspector for Naval Constructions at the DGA (General Delegation for Armaments).

Born in 1952, Gilles BESSERO is a graduate from the Polytechnic School (Paris) and qualified naval engineer from the National School of Advanced Techniques (Paris). He joined the Hydrographic and Oceanographic Service of the Navy (SHOM) in 1976 as Armaments Engineer.



From 1976 to 1994, he carried out numerous hydrographic and oceanographic surveys in the Atlantic, in the English Channel, in the Mediterranean and overseas (New Caledonia, French Polynesia, West Indies and Guyana), first as naval engineer and then as Director of mission. During this period, he also undertook certain technical functions at the Principal Establishment of SHOM in Brest, in various fields (tides, hydrography, marine geodesy, teaching, management of data bases and finally acquisition of equipment). He was then transferred to the SHOM Directorate in Paris, where he handled the external, national and

international relations of SHOM as well as forecasting activities, from September 1994 to January 1999.

He was appointed to the DGA (General Delegation for Armaments) on 1st February 1999 as Deputy Director at the Directorate of Cooperation and Industrial Affairs (DCI) in charge of industrial affairs of the electronic, mechanic and naval divisions. In particular, he was responsible for the supervision of the defence industry of these sectors and participated in preparing the orientations of the DGA in terms of industrial policy. He represented the State on the Board of Directors of the companies - Giat Industries (July 2000 – April 2001) and Thomson S.A. (September 2000 – May 2001) - and of the Franco-German Institute of Research of Saint-Louis (June 2000 – May 2001).

By order of 25 January 2001, he was appointed Head of the Department of Nuclear Programmes at the Directorate of Weapon Systems of the DGA, tasked with conducting weapon operations and research and development activities related to strategic missiles and defence against nuclear, biological and chemical attacks, as well as the monitoring of the military activities of the Commissariat of Atomic Energy (CAE) and surveillance of the old nuclear test sites. In this capacity, in April 2001, he was appointed the State representative on the Board of Directors of the CAE (job which he held up until July 2004) and of the General Company of Nuclear Materials - COGEMA (up until October 2005). He extended his responsibilities to all tactical missiles and to the systems of drones, and was also appointed Head of the Department of Tactical Missile Programmes of the DGA on 1st May 2002, to prepare the amalgamation of this department with the Department of Nuclear Programmes. He took over as Head of the new Department of Nuclear Programmes and Missiles created by decree dated 26 August 2003.

Gilles BESSERO is married with two children. Ingénieur général de 1^{ère} classe (Vice Admiral) since the 1st November 2002, he is Knight of the Order of Maritime Merit and Knight of the Legion of Honour. Member of the French National Committee of Geodesy and Geophysics since 1981; he was Vice-President of the Geodesy section of this Committee from 1997 to 2003.

NEW HYDROGRAPHER OF NIGERIA



Captain Bosun ODUMOSUN was born on 30 March 1956 in Ijebu-Ode, Nigeria. A graduate of Geology from the University of Ibadan, he had his Basic Hydrographic Course at HMS Drake, Plymouth, UK. He then had Long Specialisation Course in Hydrography at Goa in India. *(as soon as we receive additional information we will include it).*

NEW DIRECTOR OF THE HYDROGRAPHIC AND OCEANOGRAPHIC SERVICE OF THE CHILEAN NAVY (SHOA)



Captain IBARRA was born in Santiago de Chile, on 28th November 1955. After studying in the “Colegio San Pedro Nolasco”, in Santiago, he entered the Naval Academy “Arturo Prat” as a Naval Cadet in February 1972, being commissioned as an Ensign on 1st January 1978.

He specialized in Navigation, Staff Officer, Engineer in Gunnery branch of Navigation and Graduate in Naval and Marine Sciences. He graduated from the Naval War College.

During his naval career, he served more than 14 years on board various war and support ships, including the training ship “Esmeralda”, the patrol boats “Lautaro” and “Odger”, the destroyers “Prat” and “Latorre” and the frigates “Condell” and “Lynch”. In addition, he was in command of the patrol boat “Castor”, the tug “Yelcho”, the oil tanker “Montt”, the frigate “Condell” and the training ship “Esmeralda”. He was operations officer of the Beagle Naval District, of the Operations School of the Navy, of the Staff of the Second Naval Zone, General Secretariat of the Navy and Flag Lieutenant of the Commander in Chief of the Navy. He served as Naval Attaché at the Chilean Embassy in Peru for two years.

Among his awards are the “Condecoración Estrella al Mérito Militar”; “Condecoración Gran Cruz de Servicio a Bordo”; “Medalla Misión Cumplida”; “Medalla Minerva”; Service of the Commander in Chief of the Navy; “Cruz Peruana al Mérito Naval en el grado de Comendador” and “Cruz Naval a los Servicios Distinguidos” as “Cruz Naval” awarded by the Navy of the Argentinean Republic.

On 22nd December 2005 he was appointed Director of the Hydrographic and Oceanographic Office of the Chilean Navy.

Captain IBARRA is married to Mrs. Joyce ORCHARD and has three children.

APPENDIX 2 - IHB DIRECTING COMMITTEE RESPONSIBILITIES

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

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

Regional Hydrographic Commissions:

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

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

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

Regional Hydrographic Commissions:

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

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

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

Regional Hydrographic Commissions and Committee:

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

APPENDIX 3 – IHB STAFF LIST

Professional Assistants

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

Translators

Mrs. I. VANKRINKELLEN	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

APPENDIX 4 - IHB TECHNICAL MISSIONS
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DATE	DESTINATION	MEETING	PERSON
3-4 January	London, UK	FIG Meeting	Lt. Cdr. S. Shipman
8-16 January	Mauritius	UN Sustainable Development for SIDS	Radm. K. Barbor
11-12 January	London, UK	Tsunami Disaster Meeting	Vadm A. Maratos
11-13 January	Paris, France	IALA ANIS Project	Mr. M. Huet
25-27 January	London, UK	DGI Conference	Radm K. Barbor
31-4 February	Vancouver, CAN	HIHG	Mr. A. Pharaoh
2-5 February	St. Petersburg	HDNO	Vadm A. Maratos
5-10 February	London, UK	COMSAR	Vadm A. Maratos
7-10 February	London, UK	COMSAR	Lt. Cdr. S. Shipman
7-10 February	Reykjavik, ICE	NHC	Ram K. Barbor
14-15 February	Paris, FRA	SHOM	Capt. H. Gorziglia
16-18 February	Douala, CAM	PMAWCA	Capt. H. Gorziglia
-24 February	Seoul, KOR	EAHC & ENC	Radm K. Barbor
21-24 February	Seoul, KOR	EAHC	Vadm A. Maratos
23-25 February	Paris, FRA	Gloss Meeting at IOC	Lt. Cdr. S. Shipman
22-5 March	Central America	Capacity Building	Capt. H. Gorziglia
22-5 March	Central America	Capacity Building	Capt. F. Bemejo
27 – 3 March	Jeddah, Saudi Arabia	NIOHC	Vadm. A. Maratos
7 March	Trieste, ITA	IMA	Capt. H. Gorziglia
28 – 1 April	San Diego	US Hydro '05 USCHC	Radm K. Barbor
17 – 24 April	Cairo, EGY	Joint Board Geospatial Society	Vadm A. Maratos
23 – 29 April	Athens, GRE	FIG IHO ICA AB	Capt F. Bermejo
24 – 29 April	New Hampshire, USA	TSMAD	Mr. A. Pharaoh
2-4 May	Rostock	C&SMWG	Mr. M. Huet
4 May	London, UK	IMO	Radm. K. Barbor
10 – 11 May	Oberammergau, GER	NATO School	Radm. K. Barbor
10 – 17 May	London, UK	IMO, MSC	Vadm. A. Maratos
11 – 21 May	London, UK	IMO, MSC	Lt. Cdr. S. Shipman
28 – 04 June	Cartagena, COL	IHOBC & MACHC	Capt. H. Gorziglia

DATE	DESTINATION	MEETING	PERSON
29 – 05 June	Cartagena, COL	IHO/CBC & MACHC	Capt. F. Bermejo
5-10 June	London, UK	IMO NAV 51 & SPWG Chairgroup meeting	Vadm A. Maratos
5-10 June	Stockholm, SWE	ISO TC/211	Mr. A. Pharaoh
5-12 June	Stockholm, SWE	Antarctic Treaty	Capt. H. Gorziglia
6-10 June	London, UK	IMO, NAV 51	Lt. Cdr. S. Shipman
7-9 June	London, UK	SPWG Chair group	Capt. F. Bermejo
9-19 June	New York, USA	UN Open Ended Informal Consultative Process on Oceans and Law of the Sea	Radm. K. Barbor
13-17 June	London, UK	IMO TC55	Capt. F. Bermejo
14 –17 June	Riga, LAT	11 th BSHC	Vadm .A. Maratos
19 – 28 June	Paris, FRA	23 rd IOC Assembly	Capt. H. Gorziglia
26 –29 June	Alghero, Sardinia	INSPIRE	Mr. A. Pharaoh
2-8 July	Guayaquil, ECU	SEPHC	Capt. H. Gorziglia
3-15 July	La Coruna, ESP	ICC	Mr. M. Huet
5-7 July	Kuala Lumpur, MAL	2 nd Int Hydrographic and Oceanographic Industry Exhibition and Conference 2005.	Vadm. A. Maratos
6-13 July	Aguascalientes, MEX	GEBSCO SCDB	Lt. Cdr. S. Shipman
6-13 July	Aguascalientes, MEX	GEBSCO SCDB	Mr. A. Pharaoh
10-15 July	Sydney, AUS	SPWG	Vadm A. Maratos
10 –15 July	Sydney, AUS	SPWG	Capt. F. Bermejo
4-9 Sep	Rostock, GER	17th CHRIS	Radm. K.Barbor
4-9 Sep	Rostock, GER	17th CHRIS	Mr. M. Huet
10-17 Sep	Montreal, Canada	21st ISO /TC211 Meeting	Mr. A. Pharaoh
11-12 Sep	Plymouth, GB	4 th Intl.Conf. on High Resolution Surveys in Shallow Water	Vadm A. Maratos
18-21 Sep	London, GB	IHO Advisory Board Chair Group	Capt. F. Bermejo
25-27 Sep	BSH Hamburg, Germany	SPWG Legal Experts Group Meeting	Capt. F. Bermejo
23-27 Sep	BSH Hamburg, Germany	SPWG Legal Experts Group Meeting	Vadm. A.Maratos

DATE	DESTINATION	MEETING	PERSON
26-29 Sep	Cape Town, SA	SAIHC Meeting	Radm.K. Barbor
2 – 4 Oct	Arusha, TANZANIA	Workshop on Implementation of Lake Victoria Safety in Navigation	Radm. K.Barbor
3 – 6 Oct	Taunton, GB	IC-ENC Meeting/Primar Stavanger TEWG	Mr. A. Pharaoh
8 – 10 Oct	Malmoe, SWEDEN	WMU Graduation	Vadm. A. Maratos
11-14 Oct	London, GB	SPWG Chair Group Meeting	Vadm.A. Maratos
11-14 Oct	London, GB	SPWG Chair Group Meeting	Capt. F. Bermejo
10 – 14 Oct	Trieste,IT	Eathc Seminar at IMA	Capt. H. Gorziglia
24 – 28 Oct	Copenhagen, DK	5th SNPWG Meeting	Mr. A. Pharaoh
30 Oct – 6 Nov	Christchurch, NEW ZEALAND	HCA Meeting	Capt. H. Gorziglia
30 Oct – 6 Nov	Christchurch, NEW ZEALAND	HCA Meeting	Mr. M. Huet
4 – 9 Nov	Wellington, NEW ZEALAND	SWPHC Meeting	Radm. K. Barbor
7 – 9 Nov	Rostock, GERMANY	IHO Seminar – Role of Hydrographic Services with regards to Geospatial Data and Planning Infrastructure	Vadm. A. Maratos
4-12 Nov	Veracruz, MEXICO	MACHC Meeting	Capt. F. Bermejo
3-12 Nov	Sydney, AUS	12th Meeting TSMAD Sub WG, 9th Meeting Wollongong	Mr. A. Pharaoh
7-12 Nov	Veracruz, MEXICO	MACHC Meeting	Capt. H. Gorziglia
19 Nov-3 Dec	London, UK	IMO Assembly, 24 th Session	Lt. Cdr. S. Shipman
21-25 Nov	London, UK	IMO Assembly, 24 th Session	Vadm. A. Maratos
2-10 Dec	Mexico City, MEXICO	7 th SPWG Meeting	Vadm. A. Maratos
3-7 Dec	Mexico City, MEXICO	7 th SPWG Meeting	Capt. H. Gorziglia
3-12 Dec	Mexico City, MEXICO	7 th SPWG Meeting	Capt. F. Bermejo

APPENDIX 5 – VISITS TO HYDROGRAPHIC OFFICES AND MEETINGS HELD AT THE IHB

VISITS TO HYDROGRAPHIC OFFICES 2005

President – Vice Admiral A. MARATOS:	Australia, Egypt, Germany BSH, Greece, Mexico, Russian Federation.
Director I – Rear Admiral K.E. BARBOR:	Germany BSH, Iceland.
Director II – Captain H. GORZIGLIA:	Chile, Ecuador, El Salvador, Guatemala, Honduras, Nicaragua.

MEETINGS AT THE IHB 2005

JANUARY

11-12 SPWG Chair Group Meeting.

MARCH

1-3 Standardization of Nautical Publications Working Group Meeting.
29-30 S-51 Editorial Committee Meeting, TALOS.

APRIL

7- 8 WEND Meeting.
26 Finance Committee Officers' Meeting.

MAY

9-10 SPWG Chair Group Meeting.

JUNE

27 3rd HGMIO Meeting.
28- 29 IHO IALA ANIS Workshop.
30 IALA 4th Meeting.

SEPTEMBER

8-9 SPWG Legal Experts Group Meeting.
13-15 7th CPRNW Meeting.

OCTOBER

3-6 18th SCUFN Meeting.
4-5 14th MBSHC
10- 12 ABLOS
19-21 2nd CSPCWG Meeting.

NOVEMBER

15 Finance Committee Officers' Meeting.
