

**EASTERN ATLANTIC HYDROGRAPHIC COMMISSION (EAtHC)
9th Conference, Dakar, Senegal, 6-8 December 2006**

IHB REPORT TO THE 9th EAtHC CONFERENCE

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It is a great honour for me to represent the International Hydrographic Bureau at this 9th EAtHC Conference.

Introduction.

The IHB follows very closely the development of the diverse activities undertaken by the Regional Hydrographic Commissions (RHC), as they constitute the key players in achieving IHO's mission. RHC's are fundamental in the hydrographic international arena and their active participation on IHO's business contribute to improve the provision of hydro-cartographic products of benefit to safe to navigation and protection of marine environment.

Many participants in the EAtHC are still non IHO Members States, but are Maritime States. This condition is a blessing and should be used to improve the socio-economic developing conditions in the region. IHO exists to coordinate and help establishing the minimal national infrastructure required to develop hydrography. Hydrographic surveys and nautical charting are critical to the economics as well as to the development of other productive activities of direct impact to the economy of maritime countries. Resources allocated to hydro-cartographic activities should not be considered as expenditures, but as investment, and timely provision of such a reliable and updated nautical chart is the key for allowing economic activities to take place.

This Report covers the main IHO activities and events of relevance to this RHC since the last Conference in 2004. The content of the report has been organized following the 5 IHO Work Programs in which our activities are grouped.

Main Activities and Events.

Program 1

Cooperation between States Member and with International Organizations

The IHO membership has grown from 73 MS in 2004 to 76 MS in 2006, with 6 more States that just need to deposit the instrument of accession as they have gotten the two third majority of support to become an IHO member (from the EAtHC: Mauritania) and 2 countries in the process of becoming new members: Cameroon and Sierra Leone.

In general, RHCs have been very active in the past years. Some of the RHCs have changed their Statutes to update and modernize the content and also to consider establishing a more frequent calendar of meetings. Considering the important subjects that should be discussed and the role RHCs are expected to play in the functioning of the Organization, several have established that meetings should be held each year. Regional Hydrographic Commissions are open to the participation of Non IHO Members, as associate members, and can take advantage of the Commissions' activities.

Through the RHC and through the IHB, the IHO has been quite open and proactive in providing advice and guidance to countries not members of the Organization but willing to build or improve their hydrographic capabilities. There has been no distinction when offering and granting such support. The IHO has decided to intensify its efforts to build capacity for developing countries, in particular for the least developed countries and small island developing States, as well as coastal African States, to improve hydrographic services and the production of nautical charts, including the mobilization of resources and building of capacity, as requested by different United Nations general Assembly resolutions.

The IHO has been represented in UNICPOLOS and at the **United Nations** Assembly where it has an observer status. In both tribunes, matters related to the ocean and the law of the sea have been treated and the results of the deliberations have been reflected in different Resolution.

In 2004 and through Resolution 59/24, the General Assembly, recognized that hydrographic surveys and nautical charting are critical to the safety of navigation and life at sea, environmental protection, including vulnerable marine ecosystems and the economics of the global shipping industry, and recognizing in this regard that the move towards electronic charting not only provides significantly increased benefits for safe navigation and management of ship movement, but also provides data and information that can be used for sustainable fisheries activities and other sectoral uses of the marine environment, the delimitation of maritime boundaries and environmental protection.

Moreover, the Resolution invites the International Hydrographic Organization and the International Maritime Organization to continue their coordinated efforts, to jointly adopt measures with a view to encouraging greater international cooperation and coordination for the transition to electronic nautical charts and to increase the coverage of hydrographic information on a global basis, especially in the areas of international navigation and ports and where there are vulnerable or protected marine areas;

Recently, the 2005 UN General Assembly adopted Resolution 60/30, through which insisted in the importance of Capacity Building by encouraging intensified efforts to build capacity for developing countries, in particular for the least developed countries and small islands developing States, as well as coastal African States, to improve hydrographic services and the production of nautical charts, including electronic charts, as well as the mobilization of resources and building capacity with the support from international financial institutions and the donor community.

In this opportunity the General Assembly also welcomed 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 areas of international navigation, ports and where are vulnerable or protected marine areas.

As it should be understood, we have in these UN resolutions powerful tools to help raising priority to hydro-cartographic activities. On one side Governments cannot ignore the importance UN assigns to hydrography in the development of projects of socio-economic impact and on the other hand, funding agencies could begin to consider carefully and with priority the hydrographic projects submitted for their consideration, given the multiplying impact they have.

The conditions are given to benefit from these resolutions. The opportunity exists, but coordination and hard work are needed. The IHO and its bodies are ready but nothing will happen if nations observe a passive attitude.

The relationship with IMO over the past year has been very active and productive. The IHB has been present at all sessions of the Assembly, Maritime Safety Committee (MSC), the Safety of Navigation sub-Committee (NAV) and the sub-Committee on Radio Communications and Search & Rescue (COMSAR).

SOLAS issue, especially new Regulation 9 of chapter V, which refers to Hydrographic Services, has motivated an active and fruitful relationship between IHO and IMO to the effects of promoting joint initiatives that tend to facilitate the fulfilment of this Regulation by Contracting Governments. It is considered of value that at a national level, maritime and hydrographic authorities seek to work together this challenging matter.

The offer of hydrographic services stopped from being a voluntary activity, to constitute an obligation for the Governments Part of SOLAS. It is for that reason that the IMO has considered and endorsed IHO recommendations.

Mandatory carriage requirement for ECDIS is on a path to reality with High Speed Craft being required to use ECDIS from 2008. The requirement for other sensitive cargo/passenger ships to use ECDIS is under study. Administrative changes and some substantive changes to the ECDIS Performance Standard have been worked through a Correspondence Group of NAV with close IHO/IHB support.

The IHO has been asked by NAV to develop an online catalogue of ENC's, RNC's where ENC's are unavailable, and paper charts required as back up by national maritime authorities. Development efforts are underway at the IHB. COMSAR has convened a correspondence group to investigate extending WNWNS into the Arctic.

The IHO has a joint program with IOC known as GEBCO and another ocean mapping body constituted by the regional bathymetric projects known as IBC projects, mainly forming part of IOC structure.

The IHB has been working jointly with the IOC Secretariat in order to find the necessary mechanisms to liase these efforts and to optimise the ocean mapping global

program. At the present time a proposal for a new organizational structure for the Ocean Mapping is with IHO and IOC MS for their consideration.

Another important field in which we are working very close is in a project know as “Building Coastal Resilience to Ocean-based Extreme Events through Improved Coastal Mapping Capacity in the Indian Ocean” (COAST-MAP-IO), where IHB is providing expert advise in hydrography and guidance for capacity building.

As we know, several of our Member States were affected by the 26 December 2004 earthquake and resulting tsunami. The IHO convened a special meeting of interested and affected Member States at the conclusion of the 3rd EIHC (April 2005) to understand better how the IHO should respond and what procedures should be put in place to effectively respond to future similar disasters. CL 89/2005 provided the outcome of this meeting and subsequent discussions via correspondence. Member States and Chairmen of Regional Hydrographic Commissions were committed to assess, collate and report information of importance to the IHB so that pertinent international organizations or other Member States may take appropriate actions.

The IHB has had very good relation with the **Port Management Association of West and Central Africa (PMAWCA)**. In February 2005, in Cameroon, the IHB briefed PMAWCA Executive Council on the efforts IHO was making in the region to improve hydrographic capabilities. PMAWCA participated actively in the seminar organized especially for the EAthC by the IHO CBC in Trieste, Italy, October 2005. Later the IHB, on behalf of the IHO signed an MOU with the PMAWCA, setting the objectives of this reciprocal relationship.

Also the IHB, on behalf of the IHO has kept a very good relationship with FIG authorities and mainly with the Chairman of Commission 4 “Hydrography”.

The main achievements during this period have been:

- a) The signing of the Memorandum of Understanding, Athens, Greece, May 2004.
- b) The contribution of FIG to Seminars organized by IHOCBC (2005 & 2006).
- c) The participation of IHO in several Working Weeks and Conferences organized by FIG (2004, 2005 and 2006), including participation on Working Group 4.2 on “Vertical reference Surface for Hydrography”.
- d) The jointly work with ICA in the IAB, with annual meetings.
- e) Production and distribution by FIG of a CD containing conference proceedings, papers and reports published by Commission 4.

The MOU signed has contributed to provide a platform for improving these good relations between FIG and IHO, facilitating the participation on different events organized by both organizations. FIG, and especially Commission 4, constitutes a good partner in all CB initiatives as well as in some technical aspects where dialogue and experience could be shared.

Program 2 Capacity Building

The IHO Capacity Building Committee was created in 2003 and the progress made since then includes among others, the following achievements:

- Updating of Publication M-2 “Maritime National Policies and the Hydrographic Services” (2004).
- Agreed on an IHO definition for “Capacity Building”.
- Develop of an IHO Capacity Building Strategy.
- Establishment of a Management Plan integrating all requirements, projects and initiatives organized by the RHCs.
- Approval of the IHO CB Work Program (2005, 2006 and 2007)
- Establishment of the IHO Capacity Building Fund (2005).

The IHO effort in CB has been concentrated in the following activities:

a) Technical Visits:

Technical Visits have been paid to the following 52 countries: Anguilla(*), Antigua and Barbuda, Bahamas, Barbados, Benin, Belize, British Virgin Islands(*), Brunei Darussalam, Cameroon, Cap Verde, Cayman Is (*), DR of Congo, Dominica, Dominican Republic, El Salvador, Estonia, Gabon, Gambia, Ghana, Grenada, Guatemala, Guinea, Guinea Bissau, Guinea Equatorial, Honduras, Jamaica, Kenya, Latvia, Lithuania, Madagascar, Malawi, Mauritania, Mauritius, Montserrat(*), Panama, Namibia, Nicaragua, Nigeria, R of Congo, St Lucia, St Kitts & Nevis, St. Vincent & Grenadines, Senegal, Seychelles, Sierra Leone, Tanzania, Thailand, Togo, Trinidad & Tobago, Turks & Caicos(*), Uganda and Vietnam.

Note: (*) Corresponds to British Overseas Territories.

b) Technical Workshops:

The first Technical Workshop, on MSI and GMDSS, was organized following the analysis of the reports of the technical visits made to countries in the East Atlantic Hydrographic Commission (EAtHC). This was held in conjunction with the 2004 EAtHC Conference, in Brest, France.

Thereafter, in conjunction with the CBC meetings, Technical Workshops on the establishment of the first phase of hydrographic capacity were organized to address representatives of the countries of the South West Pacific Hydrographic Commission (SWPHC 2004), of the Meso American and Caribbean Hydrographic Commission (MACHC 2005), and of the Southern Africa and Islands Hydrographic Commission (SAIHC 2006).

c) Technical Seminars:

A Seminar was organized and held in 2005, at the IMA, in Trieste, Italy, for the countries of the EAtHC, with the objective of raising awareness at governmental level of the importance of hydrography to safety of navigation and national economic development, and to explore initiatives of common regional interest.

A similar Seminar was offered in Acapulco, Mexico during October 2006.

d) Support to attend/organize Courses:

Courses have been mainly based on the IMA capabilities. Unfortunately due to a reorganization process in the IMA, only a couple of courses have been delivered since the establishment of the CBC, but the situation should change very soon.

Other courses, partially funded by the CB Fund, have been multi-beam courses benefiting 10 students, one from each country: Chile, China, Ecuador, Malaysia, Oman, Pakistan, Philippines, Rep. of Korea, Thailand and Uruguay.

An experimental Practical Basis Hydrographic Course was given in late August 2006 in Nicaragua, for countries in the region. The Course received a partial support from the CB Fund, as well as the Seminar on Electronic Chart for countries in the SEPHC region that took place in late August 2006.

Other capacity building projects with which the IHO is associated include the Marine Electronic Highway of the Malacca and Singapore Straits, the Western Indian Ocean Marine Highway Development and Safety of Navigation on Lake Victoria. Both of the Marine Highway projects have received approval from the participants and the World Bank has approved the funding. The Lake Victoria Project continues very slow progress as the East African Community wrestles with governance issues. The project has acquired a vessel suitable for survey and sufficient fund to begin some project work.

As mentioned earlier the intention to optimize the ocean mapping programme is a fact. In this line, and thanks to a special contribution of the Nippon Foundation, since 2004, 12 students have been trained in bathymetry and related disciplines at the University of New Hampshire. The 2006/2007 course has just started with 6 student.

Finally it has to be thanked, the financial support received directly from several Member States to contribute to execute the IHO CB Work Program.

Program 3

Support of Techniques and Standards

The CHRIS and its Working Groups continues to maintain existing standards while advancing its work on the next generation of standards. CHRIS is very sensitive to the concerns of HOs, ECDIS OEMs, IMO and the mariner in formulating a way ahead for the new standards. To that end, a two-phased approach was adopted at CHRIS 17 in 2005. S-57 edition 3.1.1 would be a limited change primarily focused on new features that IMO mandates be displayed on charts such as PSSAs and ASLs. In the longer term, beyond 2012, a new standard S-100 would be issued that encompasses the changes previously termed S-57 edition 4. The revised ENC Product Specification, when developed and approved by M/S, would issued as S-101 and other product specifications of relevance to hydrographic information would for the S-10X series of standards.

CHRIS met 25-29 Sept 2006 in Cairns, Australia, and adopted several actions. I would like to highlight a couple of them:

- a) WEND to identify which are the key shipping routes for ENC coverage.
- b) IHB to provide information as needed to those MS governments who may be unaware of the importance/urgency of completing ENC production/coverage.

WEND continues to encourage the production of ENC's that provide adequate coverage for international shipping, are consistent in content display with adjoining ENC's and are available worldwide through user-friendly distribution mechanisms. The status on all fronts continues to improve; although, many M/S still lack the capacity to produce and maintain ENC's.

The focus of WEND has undergone a fundamental shift. For the last ten years WEND has concentrated on developing high-level principles regarding the construction of ENC. In the last two years WEND has taken a broader perspective of what is necessary to make ECDIS work. This perspective adopted by the WEND Task Group has resulted in an emphasis on:

- Achieving global coverage of ENC
- Prioritising ENC development with respect to shipping routes and ports
- Improving consistency amongst ENC of neighbouring hydrographic offices
- Providing user-friendly, integrated, service-oriented distribution of ENC.

Of particular note are the changes that strongly encourage Member States to complete appropriate ENC in support of IMO carriage requirements either through in-house capabilities or with outside assistance.

Particularly the last WEND meeting agreed among others, on the following actions:

- a) Determine where gaps in ENC coverage exist for all navigational purposes
- b) IHB to draft a letter to relevant RHCs (those regions with insufficient ENC coverage) regarding the importance of achieving ENC coverage. Specifically to develop an ENC production plan to achieve adequate coverage of priority routes.
- c) IHB to draft a CL containing clarifications on ENC distribution, government responsibility, availability, and use of the term "ENC".

Spatial Data Infrastructure: For the last several years, the IHO has acknowledged that it, as an organization, and more importantly, its M/S, individually, have a significant role to play in the development of the spatial data infrastructure (SDI). The IHB has responded by registering with INSPIRE as an interested party and applying to GEO as a contributing organization. It is hoped that the IHB and thereby the IHO can remain abreast of SDI developments and provide expert advice and influence on the development of the marine portion of a global SDI.

The IHB announced the edition of the **Manual on Hydrography**. This publication has been posted in the IHO website and can be down loaded free of charge. The Manual has been translated into Spanish and studies are being held to see if also can be translated into French. The IHO is willing to make this publication available as wide as possible.

A very important initiative has also taken place in the last years. I refer to the new edition of the **Worldwide Status of Hydrographic Surveying and Nautical Charting, IHB Pub. S-55** that has been prepared digitally in the form of tables. This data base covers the waters of 90% of the coastal states of the world, and constitutes a clear picture of the worldwide coverage of surveys and nautical charts and of the extent of effective organisations for the timely promulgation of navigational safety information.

Comparing the data in the first and second editions with the third edition, it is clear that significant progress has been made in some areas of great importance to international shipping and to the protection of coastal environments. However, in

significant areas of the Caribbean Sea, the coastal waters of Africa, the Indian Ocean and adjacent seas, and the Western Pacific Ocean and adjacent seas, there has been little change, and it is here that capacity building efforts must be concentrated.

The purpose of IHO Special Publication No. 55 (S-55) is to provide base data for governments and supporting international organisations as they consider the best means by which to implement responsibilities set out in Chapter V, Regulation 9, of the Safety of Life at Sea (SOLAS) Convention. It also informs IHO input to the United Nations' Global Maritime Assessment.

The FIG/IHO/ICA International Advisory Board has worked hard in keeping the Standards for Hydrographic Surveyors and the standards for nautical Cartographers, Publications M-5 and M-8, respectively, dully updated. The Board registers 42 recognized courses in hydrography given in 13 different languages and 3 in nautical cartography, in English. The IHB is working with the Regional Maritime Academy in Accra, Ghana, to explore the possibility to add some subjects to the BSc Maritime Studies (Nautical Science) Programme, aiming a Cat B recognition on Hydrography.

Program 4

Public Relations and Information Management

The IHB has allocated human resources and considerable time to improve the structure and content of the **IHO Web Site**, and by all means tries to maintain it as updated as possible, task impossible to fulfil unless contributions are received at the IHB by all relevant parties. The IHB considers that the Web site is an excellent communication tool and its use is becoming more and more popular.

We have also taken note on the efficient and effective improvement made in the access to Circular Letters and most of the IHO Publications, as well as the access to the work and progress made by different working groups of the Organization. The IHB encourages the widest possible use of this powerful tool.

The format of the **IHO Annual Report** obeys to the Work Program corresponding to the year is being reported. Its printed version has a limited distribution in order not to incur in excessive expenses, but such publication is available to anybody, free of charge at the IHO web site.

The establishment and recognition of the existence of the **World Hydrography Day** constitutes an excellent achievement that has been celebrated just once (2006), but offers a yearly potentiality not only to the IHO, but to all the international hydrographic community, to flag the vital contribution hydrography has made in the past, makes nowadays and is called to continue making in the future, in support of sustainable development.

The IHB has proposed IHO MS the theme "Electronic Navigational Charts (ENCs); an essential element of Safety at Sea and Efficient Maritime Operations.» for 2007 celebration.

Program 5

General Development of the Organization

The IHB is transitioning to the practice of closely linking the Budget to the Work Program. This action is partly responsible for the efficient execution of the last years budget, allowing the IHB Directing Committee to propose IHO MS no increase in the annual contributions and the allocation of surplus resources in support of CB activities. In formulating the 2008-2012 work program, the IHB has requested Regional Hydrographic Commissions and all subsidiary bodies, a clear indication of their work program and expected funding requirements from IHO budget.

The IHO decided to carryout a detailed study for the improvement of the IHO structure. This study was trusted to the SPWG. The culmination of three years' effort by the SPWG was the approval of the protocol of the amendments to the Convention of the IHO at the 3rd EIHC in 2005. The Protocol was conveyed to M/S governments for ratification (or nationally appropriate procedure). To date, ten M/S have ratified the protocol.

Meantime the SPWG has been progressing in the development of an implementation plan to be ready when ever the approval is reached. The Chairmen of CHRIS and CBC have been tasked to conduct an analysis pertaining to the two Committees that would constitute the subsidiary bodies of the IHO.

One of the key issues is the establishment of the IHO Council, a new body within IHO that will be formed by (2/3) selected by RHCs and (1/3) of MSs having the greatest "interest" in hydrographic matters. Both, the procedure for the selection of RHCs representatives and definition of the term 'Hydrographic Interests' remain in progress.

As you might be aware, the XVII IHC will take place in Monaco, 07 - 11 May, 2007. The preparation process is well advance and a special section has been organized at the IHO web site, in order to have a direct access to all the documentation and information the IHB is issuing. MSs, Non MSs and Observers of the EAtHC have already been invited to attend the event.

The main proposals submitted to IHO MSs refer to the implementation plan developed by the SPWG, aiming to prepare the IHO for the moment in which the amendments to the Convention will enter in force.

Final Words.

The IHB looks with great optimism the future, and at the same time recognizes that there are several technical and administrative issues that require a permanent follow-up. Probably the involvement of all maritime nations in the hydrographic business, as stipulated in SOLAS V, constitutes one of those mayor issues. In this line the recognition of the importance of hydrography and the proper assignation of priority at national governmental level is vital.

I would like to finalize my presentation with a laud thought. So far we have done an excellent job in defining an INT Chart scheme and probably national schemes have also been carefully established.

Excellent technology and opportunities to improve capacity are available, but sometime there is no echo, no reply to IHO offer of support.

Sincerely, I think we should be considering with greater priority initiatives to raise hydrographic awareness and to cooperate collectively to “fill” the gaps with new hydrographic surveys. New and modern data is needed.

I take this opportunity to invite all Members of the EatHC to generate the proper environment at national and regional that could facilitate the progress in that direction.

If we really would like to increase safe to navigation in the world and offer opportunities to developing countries, we need a team work spirit, patience and persistence.

Well, I think I have finalized this very brief and partial count of what has been done since the last EAtHC Conference in 2004.

Thank you.

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