

MINUTES OF THE FOURTH SAIHC MEETING
HELD IN SWAKOPMUND, NAMIBIA, 25-26 SEPTEMBER 2003

THURSDAY 25 SEPTEMBER

OPENING CEREMONY

Mike van der Meer, General Manager of Namport, the organizers of the meeting, welcomed the Honourable Minister of Transport, Dr. Moses Amweelo, Director of IHB, Admiral Barbor, SAIHC chairman, Mr. Gove of Mozambique and the delegates. Mr. van der Meer mentioned that this regional commission was created as a result of the historic Maputo Conference.

Chairman of SAIHC, director of INAHINA, Mr. Albano Gove addressed the meeting, welcoming all and in particular thanking the honourable Minister for finding time to attend the meeting, saying this clearly demonstrates the commitment of the Government of Namibia to the process of improving safety of navigation. Further, the chairman mentioned certain important initiatives regarding the International Hydrographic Organisation presently being implemented, such as the creation of the Strategic Planning Working Group - SPWG and of the IHO Capacity Building Committee.

In his address Admiral Barbor, IHB, mentioned that although there are few full members in this region, there are several associate members - i.e. potential full members. Also, the region contains shining examples of what capacity building projects may achieve. He underlined the fact that the region faces challenges but also opportunities.

The Honourable Minister, Dr. Moses Amweelo, welcomed the delegates and - referring to the local weather - said that especially visitors from countries like UK and Norway should feel at home in such a climate. Mentioning the often neglected subject of hydrography the Minister stated that also Namibia is aware of the problems related to violation of territorial waters, pollution from oil spills and other sources etc. The only way to minimize marine disasters is to provide the mariner with reliable information. Finally, the Minister recommended everyone to see as much of the desert as possible, to have good memories to take home. He then declared the meeting officially opened.

- OFFICIAL PHOTOGRAPH -

THE MEETING

Agenda item 1: DOMESTIC ARRANGEMENT

Domestic arrangements for the two days were discussed.

Agenda item 2: SUPPLEMENTARY ITEMS

France would like to inform the meeting on activities in a neighbouring Regional Commission, and on capacity building.

UK requested a review of the Actions decided upon at the last meeting.

Agenda item 3: CHAIRMAN'S REPORT

The Chairman divided his report in two parts: One on his own activities and one on activities in the region. Much time has been taken up by activities in connection with the IHO Strategic Planning Working Group (SPWG). Furthermore the Chairman has participated in regional events in Malawi, Tanzania and Zambia. He has been elected member of the IHO Capacity Building Committee.

The Chairman then reported on the 16 items on the list of ACTIONS decided upon by the 3d meeting in Maputo in 2001, noting in particular that the only new subscriber to the IHO convention is Mauritius, while there is ongoing activity, with regard to item 5 on the list: *Establish Hydrographic and Aids to Navigation Institutions*, in Angola, Malawi, Seychelles.

Regarding item 14: *Inform IALA on the formation of a Regional Co-operation Group on Aids to Navigation and advice on the contents of National reports regarding AtN* (IHB responsible) Director Barbor reported that there had been discussions with IALA, and that he had thought they would attend. He will keep up the effort. Director Barbor also stated that this region is in focus with regard to Capacity Building projects.

The Chairman concluded by saying that item 16 on the list - a broadening of the objectives in the NORSEA Project Profile - has been carried out and will be presented.

Agenda item 4: NATIONAL REPORTS (All national reports are annexed)

4.1 The national report of Namibia:

General Manager of the Namibian Port Authority commenced his report by pointing out that the Namibian coastline consists of 840 nautical miles of largely featureless sand dunes and sand plains. Dense fog most of the year does not make the task of the navigator any easier. The name *Skeleton Coast* has its reasons. The main traffic on the Namibian seaboard consists of fishing vessels, larger vessels pass far offshore. However, an increase in traffic volumes is expected.

Hydrography and charting of Namibian waters is carried out by South Africa. Namport is in the process of establishing a hydrographic office, but it is not intended to undertake any cartography at this stage.

Aids to navigation are concentrated at the ports only, none exist along the coast. Lighthouses are automated. In spite of modern navigators being less reliant on visual navigational aids, the need for such aids remain as long as vessels are not legally obliged to install GPS etc. Namibia concluded by saying that there is not enough revenue from light dues to cover the cost of AtN and hydrographic services. Mr. van der Meer thanked NORAD for providing crucial instrumentation for data collection.

UK agreed with the conclusion of Namibia, saying that visual aids to navigation remain critical to mariners.

4.2 The national report of Angola

Angola commenced their report by saying that since the third SAIHC meeting in 2001 - which they had been unable to attend - certain actions had been taken, aiming at the establishment of a *Hydrographic and Buoyage Institute of Angola*. Some hydrographic activities have taken place, in connection with a new oil terminal and the laying of a fibre optic cable. All work conducted by private companies, overseen by Angolan authorities. Seven lights and two lighthouses have been re-established and a tender is out for further re-establishments.

Angola intends to re-establish and strengthen co-operation with countries which they have co-operated with over a long time. At present, there is co-operation with Portugal, both in the fields of hydrography, buoyage and dredging, as well as the activities necessary for the establishment of the Angolan Hydrographic and Buoyage Service. Eight technicians are due to be trained in Portugal to A-category hydrographers.

The Chairman emphasized that the war had been the main obstacle to Angola in creating their organisation. Angola had been willing, but - due to the war situation - not able. Now, however, the situation has changed.

Questioned by UK, Angola answered that the Angolan hydrographic institute would report to the National Director of Merchant Marine and Ports and that Notices to Mariners would be issued through Portugal.

4.3 The national report of Malawi

The Hydrographer of Malawi, Mr. Mzunzu, emphasized the fact that the while fisheries and shipping and others are interested in information of certain parts of the lake, the Malawi Hydrographic unit is the only entity that takes an interest in the whole area. As he put it, "The monitoring of the entire Lake Malawi is in our hands".

Recent new charts have been printed in Iceland, future charts will be presented in Malawi. A cartographer has been trained in Iceland, a staff member of the hydrographic section in Trieste. Malawi will avail themselves of opportunities for training whenever they may arise. An interesting piece of information was that the kind of film required for traditional, manual chart production is no longer available. There is now no other option but to go for a modern automated system.

On the equipment side, a small, shallow draught vessel to survey shallow waters is needed. Also, more equipment to be able to continue working when some units break down, and to work simultaneously in different areas. There has been contact with Mozambique regarding joint surveys in part of the lake.

The Chairman congratulated Malawi on their efforts. He informed that Mozambique is building four lighthouses in the Mozambican part of the lake. Mozambique has an agreement with Malawi that Malawi may conduct cabotage in Mozambican waters.

Captain Barritt/IHO mentioned that there is an ongoing debate whether IHO should be involved in the surveying of inland waterways. Adm. Barbor/IHB replied that it would be a major effort to do all inland waterways, but to those who indicated a will to do something, IHB would be prepared to render assistance.

Regarding the Malawian chart portfolio, Gordon Taylor, UK pointed out that the numerous programmed large scale charts would mean a lot of work. Malawi stated that what would be undertaken was nine charts in the 1:100.000 scale.

4.4 The national report of South Africa

The chairman welcomed A. Kampfer, the new Hydrographer of South Africa.

South Africa is co-ordinator for region H, producer nation of 33 regional charts in the INT scheme. They also produce small craft charts including information of special interest to small craft users. Six of these have been produced. All charts have, until recently been based on the Clarke 1880 ellipsoid, while now all new charts and new editions will be referenced to the WGS84 ellipsoid. It will, however, take several years for the entire SA chart portfolio to be converted. To speed up the production of electronic charts, ENCs, the SANHO has outsourced some of the process to C-MAP, a private company.

Some other points highlighted by South Africa:

- The tide gauge network is being updated by installation of new acoustic gauges. The Chart datum has been changed to Lowest Astronomical Tide (LAT) as from 1998.
- The IMO Traffic Separation Scheme has been implemented off the south coast.
- In addition to own NAVWARNINGS, South Africa has issued a number of warnings on behalf of Mozambique and Namibia.
- Areas not surveyed using modern methods - some only surveyed in the early 1900's by leadline - are being resurveyed, but it will take approximately ten years to complete this work.

The Chairman informed that SA have said it is prepared to establish a training facility for the region. SA replied that it is currently running two courses a year for own training, which comprises of a basic survey course for officers and one for survey recorders. Will be able to accommodate students from the region if so required for courses or on the job training. UK congratulated SA on this initiative, saying the concept of local training was a good one, preferable to sending people for training overseas.

4.5 The national report of Kenya

The report of Kenya is concerned with the delimitation of maritime zones, including an EEZ of approximately 143.100 km². It states that from the earliest times until today the coastal zone of Kenya has been - and continues to be - the focal point of development and an important source of economic wealth. Resources mentioned are, amongst others, the various ecosystems, fisheries, oil, gas, coal, iron and manganese nodules. On the negative side, pollution and illegal fisheries constitute serious problems.

The work of establishing an EEZ has been ongoing for more than three decades but the country still lacks a coherent maritime policy. The maritime zones have not yet been delimited. Now, the Government has decided to bring in various experts to look at this issue. However, organisational problems within government make the work very difficult: "We are very disjointed". Ministries do not communicate, there are "turf wars", and papers, information etc. that should have been on one person's desk may remain hidden in another person's drawer.

One important conclusion of the Kenyan report is that declaration and implementation of sovereign zones should be spurred not only by the need to exploit economic rights, but also by the need to manage and protect these resources for future generations. Kenya concludes by recommending regional and international co-operation in the area of marine management.

Regarding the sovereign waters of coastal states, IHB reminded of SOLAS obligation, the importance of hydrography, as well as the possibilities of UNCLOS.

UK informed about the IHO website, saying it is a powerful resource, for members to use. It also contains information on various courses. Also the chairman urged members to use this website.

4.6 The national report of France

France pointed out that the EEZ of the French territories within area H constitute about 2.5 mill. km². The French Navy Hydrographic and Oceanographic Service (SHOM) has the charting responsibility for this area, but has no permanent hydrographic presence here. France also undertakes charting for Madagascar and the Comoros.

Particular concerns mentioned by France included hydrography in waters with presence of coral, navigation in areas of high sedimentation and special considerations with regard not only to the claiming of sea areas, but also to what is in “the ground of the sea”.

On the technical side, France mentioned their new 3300T vessel having carried out several surveys in and around Africa, calling at South Africa, Madagascar, Mayotte and the Seychelles.

There has been bilateral co-operation with Seychelles, Madagascar, Malawi, regarding training and technical assistance. France also reported on a special meeting of the Eastern Atlantic Hydrographic Commission on Technical Co-operation, with the aim of finding ways and means of improving standards of nautical charting and safety of navigation in the region, and stressing the importance of hydrography for the development of a maritime state, and the obligation under SOLAS to provide hydrographic services.

France, responsible for navigational warnings in several areas, recommends states in the region to use the local NAVAREA co-ordinator for the broadcasting of messages via the Safetynet option instead of immediately considering Navtex solutions. Safetynet service is very cheap to implement and this is the solution adopted by France for the different areas of the region where they are responsible for MSI dissemination.

UK noted that an important point had been made with regard to the importance of liaison between states co-operating in a region. UK also congratulated France on their rapid deployment of a new vessel, on their good practices, including the practice of delimiting, on charts, areas swept by side scan sonar.

The Chairman requested the assistance of France in contacting Madagascar. France replied that they have contacts with two organisations, that they are always met with interest but that it is difficult to maintain contact.

4.7 The national report of UK

In a very comprehensive report, UK highlighted a number of relevant items:

- UK has published 20 out of a portfolio of 23 charts in the Area H INT Scheme.
- There is a continuous development of the Admiralty Raster Chart Service, ARCS - being digital versions of Admiralty paper charts. The entire SAIHC region has ARCS coverage. Software and display systems supporting ARCS are available from 35 agents world wide.
- For the production of ENCs, new software, dKart Editor, has been acquired from a Norwegian firm. An Indian company has been contracted to do data capture for ENCs. Quality control of data takes place in UKHO, and ENC production processes are now ISO

- 9001:2000 certified. 375 ENC's have been produced, out of which 284 are commercially available.
- For the production of ENC's the UKHO offers services and assistance to other national HO's, covering the entire production line, from training of personnel to production, quality assurance, updating and distribution.
 - UK has discontinued its ENC-arrangements with PRIMAR-Stavanger, in favour of a new approach, setting up a second RENC, known as IC-ENC and operated on behalf of eight nations, including the UK. IC-ENC has three resellers, the UKHO and two private companies.
 - Since January 2000, the UKHO has provided a free online service for digital Notices to Mariners. NtMs can be accessed directly via www.nmwebsearch.com.
 - Also tidal prediction programs and a list of lights and fog signals, covering UK and Northern France, are available in digital form.
 - UK offers training in an increasing range of maritime subjects, including modular and distance training designed specifically for students from overseas HO's. The aim is to provide a sound basis for hydrographic data processing and assessment, chart compilation/cartography and digital production.
 - Bursaries covering the cost of tuition are available, as well as - in certain circumstances - the cost of travel, food and accommodation.
 - The RN (Royal Navy) HM school offers both FIG/IHO Category B and A courses, open also to overseas personnel, military and civilian. Training in Hydrography, Cartography and Data Management for overseas personnel can be customised to meet the needs both of developed and developing HO's.

4.8 The national report of Mozambique

Mozambique is in the process of amending its Statutes, which will - if amendments are approved - give the institute more autonomy regarding certain economic dispositions.

Mozambique pointed to their problem of having inherited two different chart portfolios consisting of 52 charts edited by the Russian Federation and 37 charts by Portugal. This total of 89 charts has now been replaced by a new series of 37 charts, 17 national charts and 20 charts of the Area H INT scheme. UK will, as part of a co-operative agreement including Portugal, produce 16 of the INT charts. Two charts in the national series have been produced, one in UK, and one in Mozambique with the assistance of CARIS. As part of the joint IOC-IHO project of bathymetric charts for the Western Indian Ocean, INAHINA has undertaken to produce 3 of 21 charts.

To be able to fulfil such obligations, as well as its cartographic responsibilities as an IHO member, INAHINA recognizes the need to improve its cartographic capabilities, which will involve training of personnel, acquisition of hard- and software and certain organizational matters.

Training is an ongoing activity, with personnel being educated both overseas and locally. Hydrographers have trained/are training in Portugal (IHO/FIG Cat. A) and Mozambique, and cartographers have trained in Portugal and at the IMA, Trieste.

National Navigational Warnings and Notices to Mariners are being broadcast via the SA Hydrographic Office.

Hydrographic surveys have been carried out in several ports, including Maputo and Beira. A new survey project in co-operation with a private firm will be launched in the near future.

All aids to navigation, 77 buoys and 35 operational lighthouses, are now solar powered - with the result that theft and vandalism of solar panels and batteries has become a major problem.

Mozambique has bilateral agreements with Portugal, UK and Norway, covering the areas of training, exchange of products and data, supply of materials, services and expertise in hydrography and related disciplines.

UK remarked that Mozambique has a complex re-survey problem, and asked how they assured that relevant changes were promulgated to shipping. Mozambique replied that presently new info is given to pilots and promulgated by South Africa. For the future, it is the intention to establish an INAHINA website.

4.9 The national report of Norway

Norway has the charting responsibility for the Bouvet Island. As part of an environmental monitoring program (CEMP) a Norwegian expedition did scientific studies of seals and penguins on the island, in the 2001/2002-season. The Norwegian Hydrographic Service (NHS) has had no activity in the area for the last two years. Businesswise, the sale of Chart 516, Bouvetøya, is not a major success; last years turnover was one chart.

Of other activities connected to the SAIHC region, Norway mentioned a close co-operation with Mozambique, both within the bilateral agreement and with the Chairman of SAIHC. With Namibia, Norway has signed a contract for the establishment of two tidal stations, with NORAD financing.

Primar Stavanger, which is an integrated part of NHS, extends an invitation to HO's worldwide to become members. Presently there are nine. Amongst other services, Primar Stavanger offers online support and services to HO's wishing to generate and operate national ENC services compliant with IHO WEND principles, flexible and configurable online access to VRENC ENC database as well as local online management and control by HO's for all its ENC information available from the VRENC.

Finally, Norway informed about a NHS initiative towards NORAD, with the purpose of establishing a maritime program as part of the Norwegian foreign aid program. Part of the background was strong international demand for Norwegian assistance in areas of traditional Norwegian competence, such as maritime enterprise, development and competence. If accepted by NORAD, a framework agreement will include an annual budget financed by NORAD. On behalf of NORAD, NHS would be the co-ordinating body, and also point of contact for international organisations such as IHO, IMO, IALA and others.

The Chairman commented that NORAD has a long tradition of support to various maritime projects in the SAIHC region.

Agenda item 5: THE IHB REPORT

IHB pointed out three items that had occurred since the last SAIHC meeting, and that could be seen as regional motivating factors.

- SOLAS V which oblige contracting governments to do hydrographic surveys, publish nautical charts, NtMs etc.

- Delimitation of the Continental shelf - the example of a Russian claim in the Antarctic underlines the importance. It is no longer sufficient to establish a baseline and claim from that. A full hydrographic survey is necessary.
- The recent Johannesburg World Summit meeting on Sustainable Development treated issues such as protection and management of coastal areas. HO's should take this as a starting point to make clear to governments that hydrographic capability and data are necessary for the undertaking of such tasks and responsibilities.

Also the UN Convention on the Law of the Sea (UNCLOS) can be referred to in connection with the need for building hydrographic capacities.

IHB requested all member states to pass on information from the region in order to keep the Bureau updated. IHB also referred to the WEND Task Group, formed in Lima in May this year, saying that has focused on the SAIHC region in order to stimulate electronic charting.

Regarding the Strategic Planning Working Group (SPWG) IHB said that the Chairman, as member of the group, would be able to provide information. IHB further said that for the SPWG work to succeed it is not enough for member states to agree with results, they must actively buy into the outcomes and sell them to their governments. Two thirds majority is necessary for changes to be made, and this will not happen without strong support. A major aim of the efforts is to have enhanced speed of governance and increased participation. There is a need for simpler voting procedures and for technical decisions to be taken more quickly. Administrative procedures need to change.

As an example of change, IHB mentioned a proposal for simplified procedure to become an IHO member. Instead of today's cumbersome procedure of gaining acceptance from two thirds of the members, a UN member nation wishing to join IHO would just need to do the necessary diplomatic efforts and would then become a member automatically. The final proposal from SPWG should be distributed one year ahead of the extraordinary IH Conference in 2005.

Referring to a recent well attended meeting of the IHO Capacity Building Committee, and stating that the regional commissions were expected to undertake a large part of this effort, as well as providing information for a program, IHB concluded that these are exciting times to be a member of SAIHC.

The Chairman mentioned the fact that the next ordinary SAIHC meeting was due in September 2005, while the IHO extraordinary conference would take place in April of that year. He asked the members to think about the possibility of an extraordinary SAIHC meeting in 2004, to be able to discuss the SPWG document before the Conference.

Agenda item 6: APPLICATIONS OF ULTRA-HIGH RESOLUTION MULTIBEAM SYSTEMS. A presentation by RESON and CARIS.

Mr. Ephan Potgieter of RESON started his presentation by saying that he would like to show some nice pictures illustrating the use of high resolution multibeam systems that - while not all being for the purpose of chart making - all had to do with hydrography. Examples shown were of hydrographic surveys, diamond mining, military minehunting/-avoidance/-relocation, rescue (location), body searches as well as underwater security with a multibeam echo-sounder used as an underwater "camera".

Regarding “traditional” hydrographic applications, Mr. Potgieter said that RESON has a different approach, as they do not just sell a product, but prefer to co-operate with customers by supplying equipment and a few experts but letting the local staff do the actual work - “while we look over their shoulder”. RESON supplies not only the multibeam equipment but a fully integrated system.

Mr. Maarten Peters of CARIS explained that they took “clean” x-y-z data (for example from a RESON supported survey) and made them into nautical products. He focused on chart compilation, not on all aspects of nautical chart production - which, he claimed, might take days.

There is a proposal to incorporate the use of multibeam data in the S-57 standard, which will mean storing of large amounts of data in an Electronic Chart. Consequently, information on data quality is very important.

Agenda item 6.1: PRESENTATION BY C-MAP

Mr. Derek Law of C-MAP Norway, referring to the co-operation between C-MAP and the South African Hydrographic Office (C-MAP doing vectorisation of navigational charts), pointed out that HO’s *can* establish partnerships with commercial companies. The South African HO found that they were wasting a lot of money to develop in-house systems. Nearly all SA charts are now on the S-57 format.

Several problems exist in the region: There are limitations regarding budgets and personnel. When governments realize they have certain obligations in relation to UNCLOS, that have to be met by 2009, they will request HO’s to do something for which they are not qualified.

The C-MAP production process is ISO-2001 certified. An HO will earn royalty on every chart C-MAP sells, based on HO data. As an example of co-operation, C-MAP informed that they have provided training against future royalties, without upfront payment.

Following the presentations there were several comments/questions. Capt. Barritt (Vice Chairman IHO Capacity Building Committee) underlined the importance of public/private partnership. He requested all three speakers to say more on their co-operation with customers.

Mr. Potgieter/RESON said that they were trying to reverse the process where governments train people, who then leave for private industry. The co-operation with INAHINA is an example where ex-government personnel “return” to do a job for government. Another important aspect of their co-operation is to rent out equipment instead of trying to sell it to institutions who may not be able to maintain it.

Mozambique (the Chairman) stated that there still was a need for own personnel. “We have trained people in Portugal and Brazil, but where are they now?”

France agreed with the Chairman, saying that an HO needs own competence in order to have a real partnership with a private company.

UK (Capt. Barritt) also agreed that skills are required to do quality control. RESON replied that it is not a question of just contracting out a survey and having the client pay for a finished product, the emphasis is on survey planning done by the local hydrographer and co-operation on the actual survey. UK stated, regarding charting, that ENC’s must be maintained and updated. If they are not, they are unreliable.

CARIS informed that a development they had seen over a decade was being not just a software producer providing initial training along with product delivery, but establishing a much closer long-term relationship with customers. However, many HO's need jobs to be done quickly, but lack resources. CARIS also offers small workshops for new HO's (potential users) to familiarize themselves with products, without obligation to buy. CARIS encourages HO's to come to them and discuss problems.

Kenya asked CARIS what cartographic knowledge is required to start using cartographic software, explaining that their cartographers knew only manual chart production. CARIS answered that they recognize this problem. For a person without any computer skills, extensive training is required. There is a movement towards more user-friendly software requiring less in-depth experience/knowledge, but the answer still is that it takes time and training.

France replied that it takes a long time to train cartographers, but the use of tools can be learned quickly.

RESON asked if co-operation industry/government also had acceptance within the IHO capacity building concept. Capt. Barritt answered that yes, industry can be partners in many projects and play many roles. The IHO standpoint is to welcome industry into the working of organisations. IHO can co-operate with industry on capacity building, and will hopefully be seen as more open to relationship with industry.

The chairman concluded this discussion by saying that the SAIHC region welcomes partnership with the industry. "We are not afraid of them. We still have a job to do."

As there was some time left, the Chairman proposed to do agenda item 9: Status of the INT chart scheme, before closing.

Agenda item 9: STATUS OF THE INT CHART SCHEME IN THE REGION

IHB noted that a decision was needed on how to move ahead for the whole region; some countries are not prepared to produce ENCs. There is much work to be done, and another important issue is priority.

The Chairman asked whether any assistance was available, and IHB answered that they need to see where they can help in the collection of data. "As a region we must develop a way ahead."

UK (Taylor) said that many charts are updated by UK, France, Portugal, but lack of data makes it unrealistic to talk about Electronic Charts. It is important to be aware of the fact that seemingly small jobs in connection with new chart schemes often grow into major tasks. UK noted the need for reorientation of charts from "portrait" to "landscape" due to offshore oil use, especially in the Gulf of Guinea. Mr. Taylor also pointed out that Portugal has the responsibility for a large number of INT charts.

FRIDAY 26. SEPTEMBER

Agenda item 7: REVISION OF S-55. Ref. IHB Circular Letter 23/2003

Captain Barritt reminded members of Circular Letter 23/03 which referred to SOLAS V, Regulation 9 and underlined the importance of the review and reissue of Special Publication S-55, "Status of Hydrographic Surveying and Nautical Charting Worldwide". It is vital that Hydrographers are aware of SOLAS V, in order for them to inform their Ministers of the national obligations of SOLAS signatories.

S-55 provides strategic data for national and international policymakers and resource controllers to enable them to assess which of the insufficiently surveyed and charted areas are the prime candidates for co-operative projects and assistance in capacity building. Analysis of maritime shipping routes and other sea usage must underpin the statement of status for each coastal state. Deficiencies must be pointed out in the three important areas of maritime safety information, surveying and charting. National Hydrographers can use such information - provided in S-55 - to argue for resources.

A questionnaire for the purpose of updating S-55 has been made more user-friendly than before. IHB Circular Letter 41/2003 has been sent to all maritime states in the world, with the 10-12 page (depending on the amount of comments/additional information) questionnaire annexed, plus examples of completed questionnaires from two fictitious maritime nations. The document will be re-issued, by IMO, to all maritime states.

Regarding data collection (for S-55), a direct approach had been made to ask practising mariners to provide information to help with identification of problem areas.

HO's *must* return completed questionnaires. Assistance is available to conduct analysis of national status. RHCs should assist member and non-member states, and also create regional databases. Captain Barritt noted the need for SAIHC to identify priorities with regard to private sector involvement, such as, for instance the NORSEA project. Whether to re-survey or not, and to recommend tracks for shipping would require careful analysis of sea usage. For example, cruise liners were starting to use ports/sea areas where they have not been before.

Captain Barritt also noted that the first edition of S-55 highlighted areas such as inland waterways and lakes in Central Africa and the waters off Cabinda, Zaire (DRC) and the Congo river to Matadi. Do these areas still constitute major deficiencies or should other areas be given priority?

The Chairman emphasized the fact that IHO has put a lot of effort into this important issue. It concerns both members and non-members, all governments will have responsibilities.

South Africa, referring to section 1, Hydrographic surveying, pt. 1.3 in the questionnaire, asked about definitions of the terms "hub ports" and "feeder ports". Captain Barritt clarified that hub ports were the termini of the main **international** routes linking regions, whilst feeder ports were the termini of the **regional** routes from the hub ports. A network of **national** routes would be used to distribute goods to other national ports.

IHB commented that member states could not provide *too much* information, it would all be sorted out.

Namibia asked about the term “adequately surveyed” in the questionnaire. Generally, there are different ideas about the definition, and different ideas in different nations. Each state must analyse its own situation - but publication S-44 gives minimum standards of surveys.

Further on the questionnaire: See section 3: Maritime Safety Information (MSI). All nations *must* complete this.

The chairman reminded everyone that the deadline for completion is January 1, 2004. Member states should not hesitate to ask for assistance.

Namibia asked about offshore activities, such as mining, in relation to S-55. Captain Barritt answered that it is vital that all offshore activities and installations are reported.

IHB posed the question of whether any nation could see any problems in answering the questionnaire truthfully (political concern etc.). SA (Nelson) felt that there were not. Kenya said that the document had not been received (by him), quoting bureaucratic problems as the likely cause.

The Chairman said that part of the problem is the fact that an HO is not always in the Navy or in the Ministry of Transport, it may be in the Ministry of Housing or similar. The SAIHC must provide help with this matter.

Malawi said that although they were not in the Ministry of Transport, they were in direct contact with that Ministry when required. Regarding the questionnaire, they intend to contact others and not do all the work themselves. The Chairman recommended to use bilateral arrangements to facilitate the work of filling in the document. Captain Barritt remarked that he would start within next month to e-mail countries and commissions regarding this matter.

Agenda item 11: CAPACITY BUILDING

Captain Barritt presented an Information Brief on the development of IHO Capacity Building strategy. He suggested that RHCs must be the engines for change. Data must be gathered, analysed and assessed, and action put in hand.

The example of the Baltic Sea HC was quoted. All Baltic states were agreed on the necessity of improving maritime safety. The re-survey of shipping fairways was given top priority, with a data-base underdevelopment on the web-site of the Swedish HO.

Captain Barritt stated that whatever the capability of nations, IHO must not create the impression that a country is not “grown up” until it produces its own ENC’s. He drew attention to a diagram summarising the three phases of development of MSI, hydrographic surveying and nautical charting capability. In this context, RHCs had an important role in the co-ordination of training. He suggested that it might be an idea to run a workshop (e.g. on MSI, or port surveys) in connection with the next meeting, in 2005.

IHB said that what comes first in capacity building is money. Having decided on needs and priorities: seek funding. It is necessary to find out what funding possibilities exist. Referring to the recent Johannesburg Conference on Sustainable Development, he said that many programs with a maritime component still lack a hydrographic component. As an example of a success story he quoted a World Bank funded effort to provide pollution control in the Gulf of Honduras which has realized that hydrography must form part of the project.

Captain Barritt emphasised the value of having the SAIHC Chairman on the Capacity Building Committee, and thanked him for his insights, good advice and hard work. Captain Barritt concluded by saying that the Committee needed input from all members. The Committee is there to help. In the way of input, France asked whether the questionnaire had been produced also in French and Spanish? The IHB undertook to investigate.

Agenda item not numbered: FRANCE; REPORT TO SAIHC (regarding WAAT)

See annexed document: Report of Eastern Atlantic Hydrographic Commission West African Action Team (WAAT) of March 2003, with enclosures.

France reported on considerations of ways of improving the standard of charting and the overall safety of navigation in the region. An action team (WAAT) was established and all Western African littoral states invited to accept a visit from the team. 17 nations responded positively. Nine nations were visited in autumn 2002, a further five in March 2003. In most instances the team was able to meet with people at three different levels: Ministerial, Management and Practical.

Broadly the situation was found to be bad in three countries, very encouraging in four others, and mixed for seven visited countries. Also, there seemed to be a general lack of co-operation between countries, despite the existence of several regional organisations. However, in each country some solution seemed possible, with some projects that may be carried out. Some co-operative ventures between countries seem possible. WAAT has developed a simplified flow diagram illustrating the three stages of the development of hydrographic surveying and nautical charting capabilities: Collection/circulation of nautical information - Creation of surveying capability - Independent production of charts and publications.

The EAthC will follow up this initiative by encouraging the formation of NHC's, investigating possible sources of funding, and assist with plans and proposals for training and MSI dissemination (see France report for the use of SafetyNet service). All coastal states in that region are invited and encouraged to attend the eighth EAthC meeting in September or October 2004.

Agenda item 12: HYDROGRAPHY AND AIDS TO NAVIGATION IN THE SADC REGION - A Project Profile

Mr. Tor Saether presented the revised NORSEA Project Profile, now SAIHC Project Profile. Background for revision has been the Minutes of Third SAIHC Meeting in Maputo in 2001, which stated that the Project Goal of the NORSEA document: "... *to satisfy immediate needs for hydrographic charting in the SADC-region and create a nucleus of expertise and equipment in private and public sector to sustain project results*" was too loose and too short. Two and a half lines should be closer to two and a half pages, setting out clearly what should be achieved.

The SAIHC chairman decided to have this task, as well as a certain updating of the entire document, done under SAIHC direction, but without too much effort put into updating facts, as for instance the Cost Estimate. Such changes should come only after an eventual decision by this meeting to proceed with the project. The updated version remains relatively close to the original, the main departure - apart from the revised point 8 - being a stronger emphasis on Aids

to Navigation, as several of the SAIHC member states have decided / may decide to combine responsibilities of AtN and Hydrography in one organisation.

NORSEA presented “The Hydrographic First Aid Concept” at the second SAIHC meeting in Cape Town in October 1998. The meeting requested NORSEA to develop a draft project proposal, which was adopted, in April 2001, by the SADC Council of Ministers as a regional project, and included in the SADC document: “Background Paper on Transport Investment Opportunities and Project Profiles”, as Project 1.2.3: “SADC Hydrography and Aids to Navigation”.

Main changes to the document consist of replacing “NORSEA” by “SAIHC” all through document, redefining objectives and rewriting pt. 8. A new pt. 8.3: Project Outputs, states clearly what should be achieved during the two phases of the project.

It must be remembered that the original NORSEA Project Profile has been approved by the SADC Council of Ministers as regional project 1.2.3: “SADC Hydrography and Aids to Navigation”, which must be updated before eventual presentation to potential donors.

The presentation ended with an extract of the SAIHC Project Profile, which was included in the documents handed out at the meeting.

Captain Barritt commented that it is a challenge to prioritize and SA asked who should decide priorities. Barritt and IHB agreed that this must be a task for the region. Derek Law reported on the experience of donors being unwilling to speak to SAIHC. He assumed that might change as the project now has been adopted by SADC.

Malawi said that the problem might be that the importance of hydrography (imports, exports through ports etc.) has not been emphasized enough.

The Chairman stated that in spite of the project having been given priority (by SADC) the donors were not interested. Norway commented by explaining that the process of obtaining donor funding starts by a request from a country, via a Ministry, to the Foreign Department of the donor country, but then it often turns out that when the donors come to the annual meeting with the recipient country, prepared to discuss the requested funding for the new project, it is no longer on that country’s priority list. It has disappeared. So the advice is to lobby internally, in your own country, to secure priority and thereby funding.

Agenda item 13: THE MARITIME HIGHWAY PROJECT

On behalf of Neil Guy, who was unable to attend the meeting, Mr. Potgieter of RESON did a brief presentation of this project. The requesting countries are Comoros, Kenya, Madagascar, Mauritius, Mozambique, Seychelles, South Africa and Tanzania. France (La Réunion) is a partner. The full project title is “Western Indian Ocean Marine Electronic Highway and Coastal and Marine Contamination Prevention Project.” The project duration is four years.

The main objectives are:

- To help prevent ship-based environmental contamination (oil spills, illegal discharges) and unsustainable exploitation of marine resources (illegal fishing).
- To strengthen the capacities of countries to respond to an oil spill emergency in the region.

Hydrography and charting are project relevant in the form of charting of sea lanes, mapping of environmentally sensitive areas along coasts and sea lanes, producing ENC's, disseminating navigational information and defining territorial waters (where this has not been done already). Aids to navigation is also relevant.

It is worth noting that the project description does not specifically mention the establishment of any kind of hydrographic/cartographic regional centre or database. Regional collaboration is specified in the context of oil spill contingency planning, and in the development of a regional database and geographic information system on marine and coastal resources.

Mr. Potgieter mentioned, as a comparison, the Benguela Current Large Marine Environmental project, which is now funded by NORAD via GEF, the Global Environment Facility, which is also behind this Marine Highway Project. The first phase has been approved, an area of approximately 2000 x 50 n.m. is to be surveyed.

SA suggested that Neil Guy should be approached to investigate whether the NORSEA (now SAIHC) project could be combined/included in the project under discussion. Mr. Potgieter replied that a team including Neil Guy, funded by the World Bank, will meet with heads of State to promote the project. Captain Barritt asked the Chairman to contact Neil Guy and ask him to try to take along the national Hydrographers on those meetings.

Agenda item 10: ENC TOPICS (including WEND Task Group)

IHB said it was perhaps not the right thing to do to come to a region and speak about ENC's when some countries still struggle with the basics. However, the question of what is the status of ENC availability in the world must be asked.

The WEND (Worldwide Electronic Navigational Chart Database) Task Group was established in Lima in May 2003, with the simple objective: "To make WEND happen". SOLAS V/19-2.4 provides that by accepting an Electronic Chart Display and Information System (ECDIS) as meeting the requirement to carry charts, an opportunity has been created to significantly improve maritime safety. On the other hand, if WEND fails, safety of navigation will be jeopardized. And if IMO allows private companies to produce official products, i.e. ENC data that satisfies the SOLAS requirements, without an official HO approval, HO's may lose control of hydrographic standards and gradually become irrelevant, in the end becoming just data providers.

WEND principles oblige member states to provide for their own waters, ENCs compliant with IHO, IMO standards, to be distributed through a network of RENCs. A major problem is the lack of coverage. Globally, only a few shipping routes/sea areas are covered by ENCs allowing the use of ECDIS. Besides, ENCs vary in quality from country to country, the distribution is fragmented and private industry is frustrated.

IHO maintains that the production of officially approved ENCs is the way forward. Regions should assist IHO by providing information and assist with production.

France pointed out that inconsistency between two different data cells did not have to be actual errors but caused by different understanding/interpretation of S57. France suggested that ENCs should be produced according to the INT chart scheme, which would make the situation clearer for the mariner. As an example France showed the attached scheme which could be considered

for small scale ENC production, and which is in line with the INT scheme in the Mozambique Channel area (limits and producer).

IHB raised the question of who would be able to assist with ENC production, who would like to help? The Chairman asked whether to wait for an IHO initiative, IHB replied that the local HO would have to make decisions. SA agreed with France regarding the use of INT-schemes for ENC production. IHB referred to a Circular letter regarding ENC production, sent to Regional HO's.

Agenda item 8: MARITIME SAFETY INFORMATION (including the dissemination of Safety Critical Information)

UK/Taylor explained that this issue - Maritime Safety Information - is an essential function of chart maintenance and production. HO's should have a proactive approach in order to ensure maritime safety, and to enhance their own reputation and profile in the international community. Such an approach might well increase growth in trade, as shippers would choose a port with an active MSI-system over one where they receive no information regarding maritime safety.

On the other hand, a passive approach to maritime safety increases risk of accidents, will increase the possibility of litigation and may cause loss of revenue as well as the possibility of environmental damage.

He noted that the SAIHC region already has an established system for Navigational Warnings, a well functioning system with SA as NAVAREA co-ordinator. Information is broadcast and/or issued on paper, the latter being a slow and costly method. Serious consideration should be given to promulgation of safety critical information via a dedicated website. South Africa, France, UK have good sites to take as examples. It is a cost effective way to fulfil international obligations.

After this presentation, the Chairman informed that all that was left on the agenda was three small items, which could be finished before or after lunch. France immediately stated that it was necessary to eat something, which decided that issue.

Before going to lunch, Namibia asked whether there was any way of introducing certification for ENC producers. IHO replied that it is more difficult than one should think. However, some measures are possible. In this context IHO is providing additional guidance for the encoding of data, but IHO only supply standards, not certification. An ENC is the officially approved Electronic Chart.

Agenda item 14: MEMBERSHIP

The Chairman informed that Mauritius would become a member in the near future.

UK noted that Article 1A, line 3, in the Statutes needed to be revised from "1.2" to "1.3". Besides, Mozambique is still listed, on the IHO website, as an associate member. Malawi must be included as an associate member.

Agenda item 15: ELECTION OF CHAIRMAN AND VICE-CHAIRMAN.

The Chairman (Mozambique) proposed South Africa as new Chairman. Agreed.
South Africa proposed Mozambique as Vice-chairman. Agreed.

UK commented that it was important for continuity to have Mozambique as vice-chairman.

Agenda item 16: DATE AND VENUE OF NEXT MEETING

France suggested that Mauritius (not present) who would be a full member by the next meeting could be asked to consider the possibility of hosting the next conference.

Norway suggested that it might be possible to discuss this at the proposed extraordinary SAIHC meeting in 2004. IHB supported this strongly. UK/Barritt said that with a lot of ongoing action it would be useful to have an extraordinary meeting to keep up momentum. He then thanked Chairman and colleagues for the meeting and also thanked Namibia for having organised it.

IHB/Barbor said that Namport had been superb as organisers, and the Chairmanship of Mozambique very enlightening. This is a challenging region, there are few resources but one important resource is communication: to stay in touch.

The Chairman ended the meeting by saying that a lot had been achieved during these two days. However, there is a lot more to do; he requested all members to improve communication in order to be able to function as a team. He called on all states to make an effort to become full members and to be active in the SAIHC. The Chairman then thanked Namport and Captain van der Meer for an excellent job.

LIST OF ACTIONS

N°	ACTIONS TO BE TAKEN	RESPONSIBLE
1.	Annual reports on hydrographic activities in the Member States.	Commission Members
2.	Annual report from SAIHC.	Chairman, IHO
3.	Encourage and assist Member States to subscribe to IHO and IALA conventions and work towards establishing Hydrographic and Aids to Nav'n institutions.	Chairman, IHO, IALA
4.	Urge member states to start the delimitation of the Continental shelf process	Chairman, IHB
5.	Distribute IHO resolutions, exchange of relevant hydrographic information, stimulate communication	Chairman
6.	Look for financing for regional projects.	Chairman, IHB
7.	Approach Mauritius regarding fifth ordinary SAIHC meeting in 2005	Chairman, France
8.	Organize extraordinary meeting, if decided	Chairman, IHB
9.	Urge members to contribute towards the strategy paper on Capacity Building	Chairman, IHB
10.	Urge and assist member states in rendering questionnaire for updating of S-55 (ref. Circ.letter 41/2003)	Chairman, IHB
11.	A Working Group - Angola, Mozambique, S. Africa - to look at S55-data supplied by members and propose priorities for project assistance.	Chairman, group members
12.	Co-ordinate requests for training and assist member states in obtaining specialized training	SAIHC IHO
13.	Contact Neil Guy/Marine Electronic Highway project re: - Include national Hydrographers in important meetings - SAIHC proj. (ex. NORSEA) in relation to MEH project	Chairman IHB
14.	Statutes, Article 1A, line 3, to be revised from "1.2" to "1.3"	Chairman, SAIHC
15.	- Urge IALA to participate in next SAIHC meeting. - Update IHO website re. Mozambique (list as full member) and Malawi (associate member).	IHB

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