



IHB File No. S1/6000/X-5

CONFERENCE CIRCULAR LETTER No. 8
21 February 2014

**FIFTH EXTRAORDINARY INTERNATIONAL HYDROGRAPHIC CONFERENCE
Monaco, 6-10 October 2014**

**PROPOSALS FOR CONSIDERATION BY THE FIFTH EXTRAORDINARY
INTERNATIONAL HYDROGRAPHIC CONFERENCE**

References:

- A. Conference Circular Letter No. 3 dated 2 September 2013.
- B. IHO General Regulations, Article 9.
- C. Rules of Procedure for I.H. Conferences, Rules 14 & 15.
- D. IHO Resolution 12/2002 as amended - *Planning Cycle*.

Dear Hydrographer,

1. CCL No. 3 (Reference A) invited Member States to submit proposals for consideration at the 5th Extraordinary International Hydrographic Conference (EIHC-5) to be held from 6 to 10 October 2014 in accordance with References B and C. The International Hydrographic Bureau (IHB) has received seven proposals from Member States. These are shown in Annex A to this letter.

2. Decisions 2, 6 and 11 of the XVIIIth I.H. Conference (IHC-18) required a number of reports and recommendations to be prepared and submitted to EIHC-5 for consideration. These were:

- a. a report and recommendations from the Staff Regulations Working Group (SRWG) regarding its review of the Staff Regulations;
- b. a report and recommendations from the Directing Committee concerning technical capacity within the IHB; and
- c. a report and recommendations from the Capacity Building Sub-Committee (CBSC) regarding the IHO CB Strategy.

3. The Directing Committee has been advised by the Chairs of the SRWG and the CBSC that their reports and recommendations are still under preparation and will be submitted to Member States as soon as they become available. The Directing Committee anticipates that the reports from the SRWG and the CBSC will be distributed no later than the end of May in order to allow enough time for Member States to submit comments and for those comments to be incorporated in the "Red Book" that will be distributed in early August.

4. The report and recommendations of the Directing Committee concerning technical capacity within the IHB is provided in Annex B to this letter.

5. According to IHO Resolution 12/2002 as amended, the draft annual IHO Work Programme and Budget should be submitted to Member States for approval by correspondence in September of the previous year. Noting that the EIHC-5 will take place in October, the Directing Committee proposes to submit the draft 2015 Work Programme and Budget no later than the end of August 2014, for discussion and approval at the Conference.

6. In accordance with Rule 14 of the Rules of Procedure for I.H. Conferences, comments from Member States on proposals must be received at the Bureau at least five months before the Conference so that they may be circulated in the "Red Book" which will be distributed two months before the Conference in accordance with Rule 15 of the Rules of Procedure.

7. Member States are requested to forward any comments on the proposals and the report of the Directing Committee, so that they reach the IHB **no later than 6 May 2014**.

On behalf of the Directing Committee
Yours sincerely,



Robert WARD
President

Annexes:

- A. Proposals submitted for consideration by the EIHC-5.
- B. Report and recommendations of the Directing Committee concerning technical capacity within the IHB.

**PROPOSALS SUBMITTED FOR CONSIDERATION BY THE FIFTH EXTRAORDINARY
INTERNATIONAL HYDROGRAPHIC CONFERENCE**

LIST OF PROPOSALS

| Proposal No | Object of the Proposal | Submitted by |
|--------------------|--|---------------------------------------|
| 1 | Revision of the conditions for the award of the Prince Albert 1 st Medal for Hydrography | Monaco |
| 2 | Seeking a new way forward for the S-23 issue | Democratic People's Republic of Korea |
| 3 | Amendment of the General Regulations of the IHO (not yet in force), Article 16 (b), to clarify the Council selection process | USA |
| 4 | For a trusted crowd-sourcing policy and its cook book | France & USA |
| 5 | Improving the total cost estimate of the IHO tasks for the definition of a prioritized work programme | France |
| 6 | Development of an IHO satellite-derived bathymetry and charting programme for remote areas | France |
| 7 | There is no other alternative but the full implementation of the WEND Principles and its Guidelines | France |

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PRO 1 PROPOSAL TO REVISE THE CONDITIONS FOR THE AWARD OF THE PRINCE ALBERT 1ST MEDAL FOR HYDROGRAPHY

Submitted by: **Monaco**

Reference: IHO Resolution 6/2009 - *International Hydrographic Review: Clause 6 - The Prince Albert 1st Medal for Hydrography*

PROPOSAL

- 1. The Conference is requested to agree to a new Resolution on The Prince Albert 1st Medal for Hydrography, as set out in the Appendix to this Proposal. If agreed the new Resolution will replace clause 6 of IHO Resolution 6/2009 - *International Hydrographic Review: The Prince Albert 1st Medal for Hydrography*. The new Resolution will be placed in Section 1.1 - *IHO Administration in Publication M-3 - Resolutions of the IHO*.**

EXPLANATORY NOTE

1. The Prince Albert 1st Medal for Hydrography was created in 1988 following discussions between the President of the Directing Committee and the Prince of Monaco. The medal was named the Prince Albert 1st Medal for Hydrography, acknowledging that Prince Albert 1st was one of the great navigators and explorers of his time. The medal is awarded to the author of the best article published in the International Hydrographic Review (IHR) and is always presented by The Prince of Monaco during the Opening Ceremony of ordinary International Hydrographic Conferences.

2. The International Hydrographic Review continues to be the principal reference that progressively records the significant developments being made in hydrography. However, the nature and scope of the work of the IHO has changed and is less often reflected in the IHR. Authors of papers published in the IHR now tend to come from academic institutions rather than from the participants that are active in fulfilling the aims of the IHO and its work programme, as was usually the case in the past. In this context, the significance of the award of the Prince Albert 1st Medal for Hydrography has changed also. In the past, the award of the medal could often be seen as a recognition of a significant contribution to hydrography under the auspices of the IHO; this is less clear nowadays.

3. Monaco proposes that in future the award of The Prince Albert 1st Medal for Hydrography be based on significant and long-lasting contributions made by an individual to the work of the IHO and its aims and objectives. The award should recognise those individuals that have by their actions contributed significantly to achieving the aims and objectives of the IHO. In simple terms, the award of The Prince Albert 1st Medal for Hydrography would be a recognition of the IHO's "*heroes of hydrography*".

4. It is proposed that the award should continue to be made on the occasion of the International Hydrographic Conference (to be replaced by Assembly, when the Assembly is established).

5. Current and former members of the IHB ("IHB" to be replaced by "former IHB or of the IHO Secretariat" when the Secretariat is established) would be ineligible for the award.

Proposed Text for an IHO Resolution on The Prince Albert 1st Medal for Hydrography

| Title | Reference | Last amendment (CL or IHC) | 1st Edition Reference |
|---|-----------|-------------------------------|--------------------------|
| The Prince Albert 1 st Medal for Hydrography | xx/2014 | | |

Introduction

1. The Prince Albert 1st Medal for Hydrography was introduced in 1988 following discussions between the President of the Directing Committee and the Prince of Monaco. It was named the “Prince Albert 1st Medal for Hydrography” acknowledging that Prince Albert 1st was one of the great navigators and explorers of his time. The medal was to be awarded to the author of the best article published in the International Hydrographic Review (IHR). The Medal is always presented by the Prince of Monaco himself during the Opening Ceremony of the ordinary International Hydrographic Conferences. In 2014 at the 5th Extraordinary International Hydrographic Conference, Member States agreed to a proposal submitted by Monaco to amend the conditions of the award of the Medal to recognise individuals that have by their actions contributed significantly to achieving the aims and objectives of the IHO. In simple terms, the award of The Prince Albert 1st Medal for Hydrography is a recognition of the IHO’s “*heroes of hydrography*”.

Nominations for the Award

2. At the end of the year preceding an ordinary International Hydrographic Conference (to be replaced by “Assembly”, when the Assembly is established), Member States may submit up to two nominations for the award using the form shown at the Annex to this Resolution. One nomination may be for a citizen of the Member State, another nomination may be for a citizen of another State.

3. Current and former members of the IHB (“IHB” to be replaced by “former IHB or of the IHO Secretariat” when the Secretariat is established) are ineligible for the award.

Selection Process

4. The Directing Committee (“Directing Committee” to be replaced by “Secretary-General and Directors”, when the position of Secretary-General is established) in consultation with representatives of the Government of HSH The Prince of Monaco, will select the recipient of the award, taking into account at least the following:

- a. Specific examples of innovation, original work, exceptional achievement or exceptional devotion in the pursuit of the aims and objectives of the IHO.
- b. How the work or efforts of the nominee have improved global hydrography, hydrographic techniques or hydrographic capacity.

NOMINATION FORM

| Details of Person Being Nominated | |
|-----------------------------------|--|
| Title | |
| Surname | |
| Given Names | |
| Awards or Honorifics | |

Reason and Justification for Nomination

Provide details of how the nominee has made a significant contribution to pursuing the aims and objectives of the IHO, including any positions held or activities undertaken, together with relevant dates of service. Also, please include a statement in your own words about why you think the person should be singled out and recognised by the award of the Prince Albert 1st Medal for Hydrography.

As a guide, you may wish to consider some of the following questions:

- In what role(s) or area(s) has the nominee excelled?
- How has the nominee demonstrated service worthy of recognition?
- How has the nominee's contribution impacted on either a particular field, locality, group, community or humanity at large?
- Over what period of time has the nominee made a major contribution?
- Has the nominee's contribution been recognised elsewhere (for example; in the media, by other awards, professional or interest groups, or through government)?
- What makes this person stand out from others?

| Reason and Justification for Making this Nomination (box will expand as you type) | |
|--|--|
| Endorsement by Nominating Member State | |
| Member State | |
| Signature | |
| I certify that the information provided is, to the best of my knowledge, true. I am prepared to provide additional information and justification for this nomination, if requested. | |
| Title | |
| Surname | |
| Given Names | |
| Position | |

PRO 2 SEEKING A NEW WAY FORWARD FOR THE S-23 ISSUE

Submitted by: Democratic People's Republic of Korea

PROPOSAL

- 2. The 5th EIHC is requested to seek a new way forward to issue the new edition of IHO Special Publication S-23 "Limits of Oceans and Seas".**

EXPLANATORY NOTE

- Considering that Member States of the IHO express their anxiety for not having been issued the S-23 in spite of their effort including two meetings convened by the S-23 Working Group which were organized during the XVIIth I.H. Conference 2007,
- Recalling that Member States had a common understanding for the necessity of issuing a New Edition due to the 3rd Edition of S-23 being too out of date since its issue,
- Expressing our regret at non-progress of the subject, though the problem for S-23 was discussed at the XVIII IHC,
- Recognizing that the issue of S-23 New Edition is posed as an unextendable acute problem by IHO which is an Authorized International Organization,

The Democratic People's Republic of Korea formally suggests that the 5th EIHC would like to review the above proposal.

PRO 3 **AMEND GENERAL REGULATIONS OF THE IHO (NOT YET IN FORCE), ARTICLE 16 (b), TO CLARIFY THE COUNCIL SELECTION PROCESS**

Submitted by: **USA**

References: General Regulations of the International Hydrographic Organization (IHO), not yet in force, IHO Publication M-1.
Draft (25 May 2005) of General Regulations of the International Hydrographic Organization (IHO), Article 14.
Proceedings 3rd EIHC, Appendix I, Report to the 3rd Extraordinary International Hydrographic Conference Monaco, April 2005.

PROPOSAL

3. **It is proposed that a new paragraph be added to the General Regulations of the International Hydrographic Organization (IHO), not yet in force, to clarify the significance of Article 16 (b), iii that all Member States apply to an RHC to indicate their interest in serving on the Council and the implications (drawbacks) of failing to do so. This precludes Member States as noted in Article 16 (c), from attaining Council representation through mere inaction.**

It is proposed that a new paragraph to Article 16 (b) be added as follows:

Article 16 (b), iv:

“If a Member State does not (fails to) apply to an RHC within the time limits set forth in Article 16 (b), it will be assumed that the Member State has no interest in serving on the Council and will therefore not receive consideration under the method described in paragraph (c), below.”

The remaining paragraphs in Article 16 (b) are to be renumbered accordingly. The fully revised Article 16 is provided in the Appendix.

EXPLANATORY NOTE

At present, Article 16 of General Regulations of the IHO (not yet in force), which deals with Council selection, is not clear on the impact on Member States due to simple inaction. Specifically there is no guidance as to what happens if Member States do not respond to Article 16 (b), iii which states “a Member State must apply to the RHC for selection, copying its application to the Secretary-General, at least six months before an ordinary session of the Assembly;”. The United States has been a part of the SPWG proceedings which have led up to the drafting of the General Regulations of the IHO (not yet in force) since its inception. During the SPWG proceedings, it was clear that the primary route for a Member State to gain a Council seat was via the RHCs. This is supported by:

- An early draft (25 May 2005) of the General Regulations, where in Article 14 (b), it states: “**In the first instance, two-thirds of the seats are drawn from the RHCs.**” and
- The Report to the 3rd Extraordinary International Hydrographic Conference, Monaco, April 2005, paragraph 6.2, which states in part “**Two thirds of the Council seats are first selected on the basis of regional representation...**”

However because there were gaps in RHC coverage at that time and several Member States were unable to participate, a second “other” category was introduced for those Member States. As the South West Atlantic RHC was established, eliminating this gap in RHC coverage, the “other” category evolved into “the greatest interest in hydrographic matters” category described in Article 16

(c). (The South West Atlantic RHC was established in 2006 with its first meeting in April 2007, and the Arctic Regional Hydrographic Commission was formed in 2010, with its first meeting in October 2010).

Although not clear, the present Article 16 (b), iii, may be interpreted that “the top ten Member States with the greatest interest in hydrographic matters” could attain Council representation at present through mere inaction. Because “the greatest interest in hydrographic matters” is equivalent to national flag tonnage, the top ten Member States in tonnage will gain Council representation. This proposal seeks to clarify the consequences of non-compliance with Article 16 (b), iii.

However, the United States believes that when the General Regulations were developed, the intent of the SPWG was that all Member States first apply for Council representation via an RHC. Under this scenario, some Member States on the top ten list (those with the highest flag tonnage) will have already attained Council representation under an RHC (as described in Article 16 (b)). Those Member States will be removed from the top ten list (as noted in Article 16 (c)) to allow lower ranking Member States, numbers 11 and above, to move up into the top ten and gain Council representation considerations. This will allow certain Member States to gain representation that may otherwise be unable to do so. The United States believes that this was the intent of the SPWG when the General Regulations were developed.

ARTICLE 16

The Council shall be composed of Member States. Its composition shall be determined in accordance with the following principles.

- (a) No Member State may hold more than one Council seat;
- (b) Two-thirds of Council seats shall be held by Member States selected by the RHCs. Each RHC shall be entitled to select at least one Member State, subject to the following:
 - (i) a Member State may only apply to be selected by a RHC of which it is a full member;
 - (ii) a Member State may only apply to be selected by one RHC;
 - (iii) a Member State must apply to the RHC for selection, copying its application to the Secretary-General, at least six months before an ordinary session of the Assembly;
 - (iv) *“If a Member State does not (fails to) apply to an RHC within the time limits set forth in Article 16 (b), it will be assumed that the Member State has no interest in serving on the Council and will therefore not receive consideration under the method described in paragraph (c), below.”*
 - ~~(iv)~~(v) the number of seats allocated to each RHC shall be calculated by the Secretary-General based on the principle of a proportional representation in order to arrive at the required two-thirds of Council seats provided for in this sub-paragraph (b);
 - ~~(v)~~(vi) for the purpose of deciding how many Council seats are allocated to each RHC the Secretary-General shall ensure that every Member State is counted as a full Member of one, but not more than one, RHC.
 - ~~(vi)~~(vii) three months before the ordinary session of the Assembly, the Secretary-General shall inform all Member States of the number of seats allocated to each RHC and those Member States eligible for selection by each RHC; and
 - ~~(vii)~~(viii) each RHC shall declare to the Secretary-General, before the last day of each ordinary session of the Assembly, the Member States it has selected to take seats on the Council from among those eligible for selection.
- (c) The remaining one-third of Council seats shall be held by Member States that have the greatest interest in hydrographic matters and have not been selected under the procedure described in sub-paragraph (b) above. The definition of what constitutes an interest in hydrographic matters shall be reconsidered at the latest at the second Assembly meeting. Meanwhile, the scale by which an interest in hydrographic matters is measured shall be national flag tonnage. The table of national flag tonnages is derived in accordance with the procedures set forth in Articles 5 and 6 of the Financial Regulations. The Secretary-General shall determine which Member States will hold this one-third of Council seats by identifying them in descending order of their national flag tonnages, referring to the table of current national flag tonnages produced in accordance with Article 6(a) of the Financial Regulations, and by having ascertained the willingness of each of them to hold a seat on the Council.
- (d) Before the end of the ordinary session the Secretary-General shall submit the full list of Council members to the Assembly.
- (e) The Assembly shall review and endorse the selection process to ensure that these principles have been correctly followed.
- (f) In the event that a Member State holding a seat on the Council should be denied voting rights and benefits in accordance with Article XV of the Convention, that Member State shall immediately forfeit its seat and the Secretary-General shall initiate the appropriate procedure to replace it in accordance with this Article 16.

PRO 4 FOR A TRUSTED CROWD-SOURCING POLICY AND ITS COOK-BOOK

Submitted by: France & USA

References: Paper IRCC5-11B - *Crowd source bathymetry, a new source of data?*
Hydro International, October 2013, Volume 7, “*Crowd-sourced bathymetry, from concept to practice*” - 3/12/2013 (by Rear Admiral Gerd Glang).

PROPOSAL

- 4. The Conference is requested to consider and approve the following:**
 - a. That the GEBCO Guiding Committee prepare a draft policy document providing principles and guidelines on the views of the IHO/IOC about crowd-sourcing bathymetry.**
 - b. That the IRCC, followed by the IHO Member States, review this draft and prepare a new IHO publication on “trusted crowd-sourcing policy”.**
 - c. That the SCRUM/TSCOM, following the publication of the principles and guidelines about crowd-sourcing, prepare a “cook-book” for the use of HOs and potential “crowd-sourcers”.**

EXPLANATORY NOTE

New technologies (satellite very accurate positioning, echo-sounders, and data recorders) can now be used by non-dedicated assets at sea (private boats, yachts, cargos, etc.). The increasing availability of vertical off-shore reference frames also makes the measurement of depths possible without being obliged to use accurate tidal measurements in conjunction with surveys. These factors lead to the development of open-sea-map behaviours. One could think that traditional HO responsibilities could be threatened by this important change in our environment. On the contrary, it seems important to support such initiatives, provided that the IHO shares and promotes a coherent policy in this domain.

Another issue is the quality of data collated by crowd-sourcers. Very often, HOs are unable to validate them for integration in their databases.

Rather than passively observing the uncoordinated development of private chart-makers as it was in the XVIIth and the XVIIIth centuries, it seems important for the IHO to show a positive attitude towards such initiatives to make sure that the IHO can monitor them, even drive them to optimize the work of crowd-sourcers. Gathering data collected by mariners has for a long time been a primary source for charting (the French *Dépôt des cartes et plans de la marine* was created for that purpose in 1720). The progress of hydrographic sciences, of instruments and techniques put the official national hydrographers well ahead of “normal” mariners as far as accuracy of soundings and positioning was concerned. Affordability of accurate GPS, MBES, extension of Cat. B and Cat. A training into the private sector is reducing this gap, and official hydrographers have to get back to the consideration of “conventional” mariners’ work.

As the requirement for interoperable DB, products, QC etc. has greatly increased, HOs could not manage flowing input of crowd-source data if they did not respect some minimum standards. For this reason, it is suggested to agree on the principles and guidelines on crowd-sourcing and then to offer the possibility of using a cook-book sharing the best practices all around the world.

Towards a new model for GEBCO in the XXIst century?

**PRO 5 IMPROVING THE TOTAL COST ESTIMATE OF THE IHO TASKS FOR
THE DEFINITION OF A PRIORITIZED WORK PROGRAMME**

Submitted by: **France**

References: IHB Letter No S1/1001/WP dated 23 September 2005 (IHO WP 2008-2012).
IHO CL 74/2013 dated 20 December 2013.

PROPOSAL

- 5. The Conference is requested to consider and approve the following:**
- a. That the Committees, Sub-Committees and WG be directed by the IHB to systematically evaluate the resources needed and available to meet their annual objectives and prioritize these objectives to those available resources;**
 - b. That the Member States participating actively in the IHO Work Programme make an evaluation of their overall in-kind contribution (e.g. human resources devoted to WGs, travel expenses, national funding of actions directly contributing to the WP);**
 - c. That the IHB consolidates and implements the results into a prioritized IHO Work Programme.**

EXPLANATORY NOTE

In IHB Letter No S1/1001/WP dated 23 September 2005, when preparing the 5-year IHO Work Programme for 2008-2012, the IHB requested the Member States to provide an estimate of their direct contribution to the IHO Work Programme as the total budget of the IHO did not reflect the total cost of the IHO activities. At this time, the different groups and Member States were supposed to provide:

- Task identification (just a brief title)
- Short description of the activity (what and for what)
- Brief description of the associated deliverables (products, effects, results, etc.)
- Timing (when, that is to indicate in which year the activity should take place)
- Identification of indicators that could be used to assess effectiveness (parameter(s) that could be used to measure the level of success)
- Estimated resources from the regular IHO budget (this will be mainly determined by IHB based on historical records and input received)
- Estimated global resources from direct Member States' contributions (the total general cost of the activity for MS as a whole).

When approving the 2014 IHO Work Programme and Budget, again, some Member States requested some clarity on the expected contribution of the Member States to the activities of the WG, SC and Committees as reported in IHO CL 74/2013.

As a matter of fact, it seems that there is a general interest for the IHO Member States and the IHB to improve the total cost estimate of the IHO various tasks including the costs of direct contributions from the Member States, industry experts, donor agencies, with the objectives to be in a better position to establish a realistic prioritized Work Programme that the IHO can afford.

**PRO 6 DEVELOPMENT OF AN IHO SATELLITE-DERIVED BATHYMETRY
AND CHARTING PROGRAMME FOR REMOTE AREAS**

Submitted by: France

Reference: IRCC5-11A – *Satellite derived bathymetry.*

PROPOSAL

- 6. The Conference is requested to consider and approve the following:**
- a. That the IRCC be directed to assess and launch an inter-RHC satellite-derived bathymetry and reconnaissance charting operational programme for all relevant areas still uncharted or poorly charted.**

EXPLANATORY NOTE

Satellite-derived bathymetry (SDB) has been on the table of different RHCs, CBSC and IRCC for a couple of years. This issue was also raised by the IHB at IRCC-5 but nothing is done in practice at the IHO level.

Thanks to new technological developments and available sources of satellite information, SDB offers the possibility to assess in a reasonable time the quality of hydrography over large areas, poorly charted or charted a long time ago. Results would be of considerable value in giving Coastal States a clearer view of the status of hydrography in the waters under their responsibility, and for establishing a focused hydrographic programme based on priority requirements and objective rationale extracted from this reconnaissance charting.

In a capacity building perspective, this approach could be very relevant in countries where requirements for land surveying and environment monitoring have led to the development of remote sensing processing capabilities. Indeed, SDB should not be seen as an “all-in-one” solution, impeding the development of classic hydrographic surveying capabilities, even at the limited level required at least for critical areas and / or checking purposes. Nevertheless, the perspective of being able to collect, on a wide scale, a complete set of information usable for establishing a focused strategy of modernization of nautical charts, in a reasonable amount of time and for a foreseeable cost, can be a strong driver for motivating further funding of a regional programme of renovation of charts.

A scoping study could be launched on this basis to assess which areas around the world should be addressed, to define the objectives of a comprehensive reconnaissance SDB mapping programme, to promote the idea in order to raise funding (e.g. UN development funds, with results available to the UN-GGIM under open licenses) for launching an operational programme across the RHCs, sharing the best practices.

**PRO 7 THERE IS NO OTHER ALTERNATIVE BUT THE FULL
IMPLEMENTATION OF THE WEND PRINCIPLES AND ITS
GUIDELINES**

Submitted by: France

PROPOSAL

- 7. The Conference is requested to consider and approve the following:**
- a. in relation to the IHO primary strategic objective which is to provide an ENC worldwide and seamless database, to ask IRCC to assess the concrete consequences of the non-full-implementation of the WEND Principles in the long term;**
 - b. if agreed that the situation is not acceptable, then IRCC to task the WEND-WG and its RENC Harmonization Sub-Group to further develop the additional technical and standardization measures that IHO ENC Producers and RENCs should comply with.**

EXPLANATORY NOTE

Not implementing the WEND Principles, in principle, gives the private sectors the factual responsibility of solving issues not resolved at the HOs' level and stemming from this situation. An analysis of the real extent of this move is necessary for IHO to monitor and better control this imperfect situation.

One could argue that, although the IMO decided that ECDIS carriage was mandatory from 2010 for high speed vessels and from July 2012 for other ship categories, the IHO has up to now failed in providing the so-called ENC worldwide and seamless database. The fact is that it is not possible to designate where this WEND database stands. This fact raises many questions: Where should it be located? In the RENCs? In the VARs? At the IHB? There are many examples showing that it is not possible for a mariner, a ship chandler or end-user service providers to find the most comprehensive and consistent WEND database in every RENC, even if these RENCs are part of the IHO toolbox. Would the IHO consider RENCs as useless in that perspective? In some regions, mariners or service providers have also to make their own choice between two or more ENCs at similar scale. Whereas this situation was quite acceptable in the paper chart world, it is not the foundation on which the ENC concept and the WEND principles were built for supporting electronic navigation. With the development of ENCs (which are INTernational charts by construction), would the IHO accept to get back to the former uncoordinated paper chart system? What would be the consequences for the mariners, then for the HOs?

A lot of questions, that should drive IRCC, WEND and its RHSG to establish mandatory procedures and standards covering all the spectrum of the IHO ENC toolbox, from production to distribution, in order to make our seas much safer and the mariners much more confident in the products they use.

REPORT ON THE TECHNICAL CAPACITY OF THE INTERNATIONAL HYDROGRAPHIC BUREAU

Submitted by: The Directing Committee

Introduction

1. In response to PRO 2 submitted by UK, Decision 6 of the 18th International Hydrographic Conference (IHC-18) requested that the Directing Committee, in consultation with HSSC, “*develop proposals to ensure that there is appropriate technical capacity within the Bureau to support the Organization through a period of significant change resulting from the transition to digital navigation and, where these can be met within the existing budget, encourage them to be acted on, and to report back to the 5th EIHC*”.
2. The Conference suggested “*identifying priorities as well as the technical resources that would be required, including the involvement of other stakeholders, in the management of the S-100 registry and the possibility of certain levels of financial support*”.
3. This report and its recommendations are submitted in response to the request of IHC-18.

Discussion

Workload and Output

4. The scope and intensity of work undertaken by the IHB has progressively increased over time as shown in the various statistics illustrated in Appendix 1. Examples include:
 - an increased number of Member States,
 - more Regional Hydrographic Commissions (RHCs),
 - RHCs now meet more regularly,
 - the IHB now provides the secretary in a significant majority of IHO bodies,
 - a significant increase in the management and implementation of the IHO Capacity Building Programme,
 - the maintenance of the IHO documentation which has become comprehensive,
 - the maintenance of the IHO website which is now very extensive and continues to grow in size,
 - the introduction of programme performance monitoring,
 - the Directing Committee is involved in more outreach activities and representational duties, including the active recruitment of new Member States,
 - implementation issues related to ECDIS,
 - participation in the development of the IMO e-navigation strategy,

- IHO representation in a number of new intergovernmental initiatives, such as the Group on Earth Observations (GEO), United Nations Committee of Experts on Global Geospatial Information Management (UN-GGIM), and European Union (EU) geospatial and maritime programmes.

5. In general, whenever new obligations have been placed on the IHB, there has been no compensating reduction in existing requirements.

Staffing Levels

6. The HB comprises 19 salaried personnel. Eight senior members (three Directors, four Assistant Directors (ADs) and a Manager of Finance and Administration (MFA)). The Directors and Assistant Directors are drawn from around the world on fixed terms of employment. The MFA is recruited locally as are the 11 support and administrative staff that are, in effect, permanent employees. The turnover rate for the locally recruited staff is very low, which means that the ability to introduce significant new skills such as expertise in GIS or other new information and communication technologies among the permanent staff is limited. At the same time, the Directing Committee and the ADs are increasingly involved in more demanding outreach, administrative and secretariat roles.

7. In recent years, the IHB staff has been supplemented by officers seconded from Japan and the Republic of Korea. These officers have been employed almost exclusively on project related activities in support of the IHO technical programme. They have purposely not been employed on core IHB tasks so as not to build a dependency on seconded officers in positions that may not be filled on a continuous basis and who can be withdrawn and not replaced at any time.

Funding Levels

8. While the value of subscriptions to most if not all other intergovernmental organizations has risen steadily, the rate of subscriptions for IHO Member States has not increased since 2005. Fortunately, increases in tonnages in some States and the addition of new Member States joining the Organization over the period has meant that the real value of the IHO income has approximately matched the rate of inflation until now. From 2005 to 2014, the IHO budget in current Euros increased by 16.8% while the salary index for civil servants in Monaco increased by 16.9%. During the same period, the IMO budget in current pounds increased by 41%.

9. The budget for 2013-2017 approved by IHC-18 forecasts a rise in the share value by 1% in 2016 and a further rise of 1% in 2017.

10. The development of the Capacity Building (CB) programme has benefited from significant additional voluntary contributions from Member States, namely Japan, through the Nippon Foundation since 2004, and the Republic of Korea, since 2006. This has resulted in a steady increase in CB activities and a resultant increase in administration (see graph in Appendix 1). To assist in meeting the increase in administration and management, the CB Sub-Committee approved at its 11th meeting (2013) the allocation of up to 13% of the CB Funds (up to a limit of 40,000 Euros) to cover administrative tasks and project management. This provision has enabled the IHB to employ a temporary part-time administrative assistant on a contractual basis to provide assistance with the administration of the CB programme.

11. The work of the FIG-IHO-ICA International Board on Standards of Competence for Hydrographic Surveyors and Nautical Cartographers (IBSC) is supported by a fee levied on course submissions. This was introduced in 2011.

Current Performance

12. Against the background of an increase in the volume and scope of its activity, the IHB has not received any feedback from Member States or from other IHO Stakeholders that indicates any areas of specific concern. It must therefore be concluded that the current service being provided by the IHB is at least satisfactory, albeit with some shortcomings. Nevertheless, the IHB now sometimes finds it difficult to fulfil all of its commitments or meet certain deadlines, such as the timely publication of reports.

13. Two areas of concern where the lack of capacity is impacting on current services are the ability to translate all IHO documents into the official languages of the Organization and the systematic review of all newly printed or adopted international (INT) Charts.

14. Until now, the additional workload to meet new requirements and obligations placed on the IHB through various decisions and through the approval of the IHO Work Programme by Member States has been absorbed through a combination of adjustment to work procedures, the recruitment of replacement staff with relevant skills, through some contracted support when funds are available, and through progressively increased working hours by senior staff. While there is always scope for more efficiencies, there is now little room to make further significant gains with the current structure.

15. It is likely that the implementation of a Council, under the amended terms of the IHO Convention, will, at least initially, create an additional workload both for the IHB and for Member States.

16. The Directing Committee is well aware that Member States are facing similar problems with resources and are facing ever tighter constraints which limit their capacity to participate actively in the IHO Work Programme.

17. Another issue of specific concern is the shortage of candidates willing to hold positions on committees, sub-committees and working groups caused, apparently, by reduced funding from their employers for the associated travel requirements.

Shortfalls in the Technical Programme

18. In accordance with Decision 6 of IHC-18, the Directing Committee sought the input of the HSSC in helping to identify any emerging requirements or existing shortfalls that could exceed the current resources. The Directing Committee submitted to HSSC-4, in September 2012, a paper (HSSC4-04.2A) inviting HSSC to:

- a. initiate a review of critical areas of the technical programme of the IHO where current resources may be inadequate to fulfil the associated tasks, and to
- b. initiate an investigation of alternatives to address shortcomings, if any.

19. HSSC agreed that there is a need for an IHO-wide approach that encompasses both the technical capacity of the IHB and the additional resources required to implement the IHO technical programme and invited WG chairs to provide their initial assessment of the critical areas when presenting their report to the Committee. The following critical elements were identified:

- a. completion of the S-100 portrayal model;
- b. development of various S-100 based product specifications; and
- c. the future composition and chairmanship of working groups, such as the Hydrographic Dictionary Working Group (HDWG).

20. The Directing Committee observes that as a result of the transition from paper to digitally-based hydrographic products and services, Member States increasingly appear to lack the specialist expertise and/or the resources to devote to the development and maintenance of some IHO technical standards. As a result, the IHO, through its WGs and the IHB, is relying increasingly on voluntary industry expertise and increasing levels of contract support.

21. The Directing Committee also observes that the use of S-100 for the next generation of Hydrographic Office (HO) products and services, such as ENC, and the increasing and enthusiastic uptake of the S-100 standard by other organizations, including IMO, as the baseline data transfer standard for e-navigation services has placed a significant responsibility and obligation on the IHO to ensure that S-100 is successfully implemented and managed and is fit for purpose.

22. There is an expectation from users and prospective users that the S-100 standard will be regularly and promptly maintained and extended and that the underpinning S-100 Registry will be managed such that it meets the needs of all its users.

23. To ensure reliability and an appropriate level of support to users, the maintenance and day to day management of the S-100 Registry requires a dedicated registry manager. Since its inception, the S-100 Registry has been managed by the Chair of the Transfer Standard Maintenance and Application Development (TSMAD) WG on a part-time basis, through the generous and continuing support of UK.

24. Failure in performance of the Registry or of the S-100 standard and its dependent and associated standards will now have a serious impact on the reputation of the IHO and its participating Member States. The delays in drafting S-52 edition 6.1.0, its associated components, and edition 2.0 of S-100, reported to HSSC-5 in November 2013, illustrate the fragility of the current situation.

Summary of Limitations

25. The IHB is now experiencing difficulties in fully supporting the current and anticipated requirements of the existing IHO Work Programme and the other obligations that are placed upon it. The present situation has developed progressively and cumulatively and cannot be attributed to a single event or activity. The limiting factors can be summarised as follows:

- The level of activity across all areas of work undertaken by the IHB, with the exception of CB activities (see paragraph 9), has increased progressively without any increase in staff numbers or the provision of additional resources. There is now little or no additional scope available for further efficiency gains within the current arrangements.
- While the activities of the IHB have progressively increased, the real value of the IHO income has remained approximately constant for nearly a decade. Significant improvements in productivity have enabled this to occur.
- A number of IHB activities can no longer be achieved, at least in part. These include: French and Spanish translation, the timely production of records of meetings and other documentation, and the review of INT charts.
- The implementation of the IHO Council is likely to result in at least an initial increase in workload for the IHB and for participating Member States.
- There is a reducing number of Member State representatives willing to hold positions on IHO committees, sub-committees and working groups. This appears to be caused by reductions in the levels of funding and support that is available from their parent organizations for the associated travel requirements.

- The transition from paper to digitally-based hydrographic products and services has placed a greater dependence on specialist contract support providers for expertise in the development and maintenance of IHO standards and guidelines.
- The maintenance and development of the S-100 standard has become a critically important task but it is under-resourced.

Possible Courses of Action

26. In order to ensure that there is an appropriate level of technical and other administrative capacity within the Bureau to support the Organization now and in the future, there are a number of courses of action that can be considered either individually or in combination to mitigate the limitations identified above. These are:

- a. reduce the level or scope of some activities required of the IHB,
- b. recruit IHB staff with different skills upon the redundancy or retirement of existing staff,
- c. increase the capacity of the IHB through additional volunteer support from Member States or through additional contract support or by increasing staff numbers, and
- d. subsidise travel expenses for committee and WG officers from the IHO Budget to assist Member States in making their staff available.

27. A number of these options will require an increase in the IHO income. This could be achieved by any or a combination of:

- a. increasing the annual contribution of Member States,
- b. seeking regular and reliable financial contributions from industry and other organizations,
- c. levying fees and charges for IHO publications, standards and use of the IHO S-100 Registry, and
- d. recruiting new Member States.

Analysis

Increase the IHO Budget

28. Raising the share value above the very moderate increases forecast in the approved 5-year budget are unrealistic in the current economic climate when most if not all Member States are subject to either no growth or a reduction in government spending. In 2014, a 1% increase in the share value would yield an additional 30 k€.

The Directing Committee does not anticipate that Member States will support raising the share value significantly beyond the agreed levels shown in the 5-year budget.

29. Seeking financial contributions or donations from industry to supplement the operating budget would set a precedent for an intergovernmental organization such as the IHO. In any case, the IHO already receives very generous in-kind support from various sectors of industry, particularly in support of the technical programme and the capacity building programme. Seeking monetary donations to supplement the operating budget of the IHO would be problematic and could easily lead

to either a compensating reduction or a withdrawal of the in-kind support already provided by industry participants.

The Directing Committee does not consider that it is appropriate to seek direct financial contributions or donations from industry to supplement the IHO operating budget.

Levying Fees and Charges for IHO Publications and Services

30. Levying fees and charges for IHO publications, standards and use of the IHO S-100 Registry provides a possibility to raise some additional income. A fee to help cover the maintenance of the IHO Presentation Library for ECDIS (which has been maintained under contract) has always been levied. The principal users of the Presentation Library are commercial software and equipment manufacturers. Access to the S-63 Data Protection Scheme could be treated in a similar way since it is relied upon primarily by commercial suppliers of software, equipment and services. Fees could be imposed on access to the S-100 Registry to defray some of the costs of providing the facility.

31. The scope and impact of imposing a charging regime on the use of S-100 or other IHO standards should be considered carefully, in particular during the current first implementation and development phase. Levying charges to access and use IHO standards may be counter-productive and impose barriers to full implementation and widespread use. This is particularly the case for S-100 and the S-100 Registry function, for which there is already significant interest from users outside the IHO community.

32. If user fees were imposed on access to some of the IHO standards, income might typically be about 30k€/year for a fee of 100€/year per commercial participant in the IHO Data Protection Scheme.

If Member States see merit in levying fees and charges for some IHO publications and services, the Directing Committee recommends that an impact study be conducted under the aegis of HSSC, in liaison with IMO, IALA and the relevant professional organizations.

Recruiting New Member States

33. Increasing the income of the IHO through the recruitment of new Member States is an attractive option. In addition to furthering the objectives of the Organization by ensuring that all coastal States belong to the IHO, the addition of a number of the larger Flag States would have a significant beneficial effect on income. At present, the annual contribution for States with a declared tonnage over 29 million is 107k€. Five States in this category are not yet members of the IHO (Bahamas, Liberia, Malta, Marshall Islands, and Panama). An additional annual contribution of 107k€ would fund one additional member of staff at the IHB or enable various activities to be outsourced under contract, such as some translation tasks or support of S-100 activities.

34. The Directing Committee has taken every opportunity to reach out to those States that are not members of the IHO and will continue to do so. Larger Flag States have been a particular priority but in general they lack awareness of hydrographic and charting issues and it is not easy to convince them of the benefits of joining the IHO. Additionally, under the current rules of the IHO Convention, it can take two to three years to obtain the necessary agreement of a majority of the existing Member States. This is a particularly strong reason for adopting the revised Convention.

The Directing Committee considers that the recruitment of new Member States should remain an important priority in the IHO Work Programme.

The Directing Committee encourages those Member States that have not yet indicated their agreement to the revised Convention to do so as soon as possible.

Reducing the Extent and Scope of Some Activities

35. Reducing the extent and scope of certain activities will reduce the workload of the IHB. This in turn will enable other tasks to be completed in a more timely and satisfactory manner. Certain changes could result in the release of manpower and capacity. However, it may not necessarily enable more complex activities to be undertaken without recruiting replacement staff with different skills.

36. There is a significant backlog of IHO publications that are not available in the French language. A table showing the status of translations at the beginning of the year is provided in Appendix 2. A reduction in the number and type of documents that are currently translated into the official languages and Spanish would enable the current backlog to be addressed and may, in the future, reduce the requirement for two French translators - thereby providing the ability to re-recruit replacement personnel for new tasks, such as the S-100 Registry Manager.

37. Changing the translation requirement would require the agreement of Member States through the amendment of IHO Resolution 12/1962 as amended.

38. IHO General Regulation 19 requires Member States to forward their new international (INT) charts, electronic charts, as well as any nautical publications to the IHB. IHO Resolution 1/1992 instructs the IHB to endeavour to examine all newly printed or adopted INT Charts, and to provide the concerned Member States with comments on any points of non-compliance with the Chart Specifications of the IHO for INT Charts. The IHB has only carried out three systematic reviews of new INT charts in the last ten years due to other higher priorities. However, the receipt of INT charts contributes significantly to keeping IHO Publication S-11 Part B - *Catalogue of INT Charts* current.

39. Removing the requirement in IHO Resolution 1/1992 for the IHB to review INT charts would acknowledge the fact that the IHB no longer has the resources to conduct such reviews. It should be noted that the requirements of General Regulation 19 to forward new INT charts to the IHB has not been carried forward to the revised version of the General Regulations that will enter into force with the revised Convention. However, this is still required in order to properly maintain IHO Publication S-11 Part B.

The Directing Committee considers that IHO Resolution 12/1962 should be amended so as to reduce the number and type of documents that are required to be translated into the official languages and Spanish. The text of a proposed amendment is shown in Appendix 3.

The Directing Committee considers that IHO Resolution 1/1992 should be withdrawn so as to remove the requirement for the IHB to review and comment on new INT charts.

The Directing Committee considers that General Regulation 19 obliging Member States to forward new INT Charts to the IHB should be carried forward as a new Resolution, so as to ensure that IHO Publication S-11 Part B can continue to be maintained after the revised General Regulations of the IHO enter into force with the revised Convention. The text of a proposed Resolution is shown in Appendix 3.

40. The scope of other activities in the IHO Work Programme might be reduced if Member States, through the relevant bodies of the Organization, adopted a more critical resource-based programming methodology, as outlined in the IHO Strategic Plan. This would mean placing greater emphasis on matching the likely resources available (both money, and IHB and Member State personnel) before committing to work items and activities. Although the HSSC has had resource assessment criteria in

place for some time, it is only recently that they have begun to be exercised. It is worthy of note that the 5-year Work Programme was adopted by IHC-18 with no debate or discussion by Member States on the resource implications at all.

The Directing Committee recommends the consideration of implementing an improved, resource-based approach to the preparation of the next pluri-annual Work Programme. This would be a further development of performance monitoring, and in accordance with the guidance provided in the IHO Strategic Plan.

However, the Directing Committee considers that a more rigorous process would place an additional workload not only on the IHB but also on those Member States that participate in the HSSC and IRCC. Noting also that much of the execution of the IHO programme relies on the voluntary efforts of Member States and others, a full resource-based approach would be difficult and unrealistic to achieve unless Member States are prepared to commit, in advance, to providing in-kind contributions and support of personnel to the relevant parts of the IHO Work Programme.

Replacement of Existing Staff

41. Until recently, there has been no change in the 11 locally recruited IHB Staff, most having been recruited 15 to 20 or more years ago. However, the IHB is now entering a decade of change. In the last three years, the Directing Committee has taken the opportunity of the retirement of two members of staff to re-allocate some duties and adjust the priority of the different tasks. This enabled the creation of the two new posts of Website and Publications Editor and Information Technology Officer.

42. Five of the existing locally recruited staff will reach retirement age within the next seven years, including one French Translator who will retire next year. Some of these retirements would allow for further internal adjustments and changes in priority to be made that would provide scope to adapt the technical capacity of the IHB, in order to address particularly the S-100 Registry management tasks and the increasing IT and GIS requirements. These changes could possibly be advanced if suitable redundancy or early retirement schemes were implemented.

43. However, any redundancy or early retirement schemes, whether compulsory - through the abolition of an existing post or voluntary - through early retirement, would have significant financial implications for the IHO budget. Redundancies will incur a cost of at least 12 months' salary per individual plus full medical cover for the same period.

44. In addition, unlike all other employees in France and Monaco, any IHB staff member affected by early retirement or redundancy will not qualify for full unemployment or sickness benefits until they reach the national retirement age, which is currently 65 years. Their period of service in the IHB will not count towards their entitlements. For longer serving staff, this will result in only the most basic of social benefits entitlements. In the absence of any suitable compensation arrangements provided by the IHO, this would result in significant social and financial consequences for the individuals concerned. The current inability of redundant or retired staff to claim full State benefits as a result of their previous service at the IHB might also lead to legal challenges against the IHO in the case of compulsory redundancies. At the time of writing this report, the Directing Committee is unaware whether the Staff Regulations Working Group will address the disparity over eligibility for unemployment or other social benefits in France or Monaco for those leaving the IHB before retirement age as part of its review of the existing conditions of service for the IHB Staff.

45. There is no scope to fund redundancies or early retirement schemes from the operating budget. However, subject to the approval of Member States and appropriate amendments to the relevant regulations, redundancy payments could, in the short term, be met from the Retirement Fund (IRF),

however, the resultant deficit in assets against pension liabilities would require repayment over the longer term.

In the circumstances, the Directing Committee considers that compulsory redundancy is not a viable option as a way of introducing new competences. However, if enough funds were made available, voluntary early retirement could be offered to some staff. This could create opportunities for reorganisation sooner than will otherwise be the case. Yet, it appears unlikely that existing staff would take up such an offer unless it accounted for the loss of social benefits and was significantly more than the equivalent of 12 months' salary.

Supplement Staff with Personnel Seconded from Member States

46. The capacity of the IHB may be improved through additional volunteer support from Member States. However, care must be taken to avoid building any dependency on seconded personnel to fulfil core activities.

47. Experience has shown that officers on short-term secondment - two years or less, impose a significant administrative load on the IHB because of the need to assist in domestic arrangements, assimilation in the local community and orientation on arrival.

48. Relying on volunteers rather than a formal staff selection process would introduce a significant risk that officers may not have the relevant skills or background, including language, to carry out core IHB functions.

The Directing Committee considers that core IHB duties should not rely on volunteer officers seconded to the IHB.

Supplement Staff with New Recruits or Contracted Support

49. The capacity of the IHB could be increased through the use of additional contract support or by increasing staff numbers. This would require an increase in the operating budget. By way of example, the average budgetary cost of a staff member, including salary and pension and other social entitlements is 100k€ per year. The typical cost of translating a 100 page publication from English into French is 7k€. As discussed earlier, a real increase in the operating budget is unlikely to occur until such time as there are more IHO Member States or there is a significant increase in the share value.

The Directing Committee notes that increasing staff numbers or contracting out more work would require that the operating budget be increased in real terms.

Subsidise Travel Costs of Office Bearers

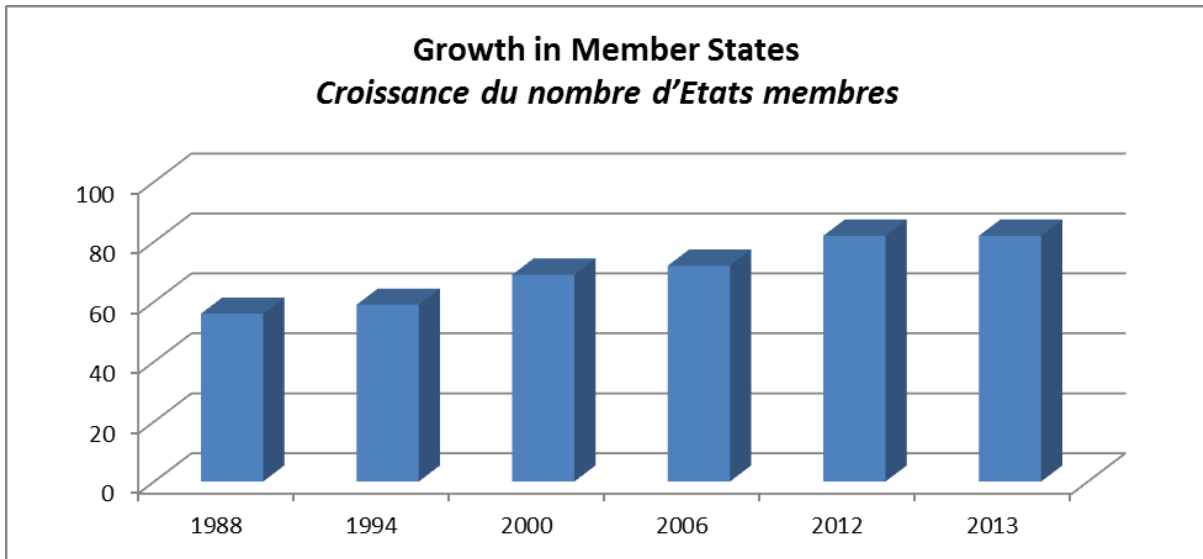
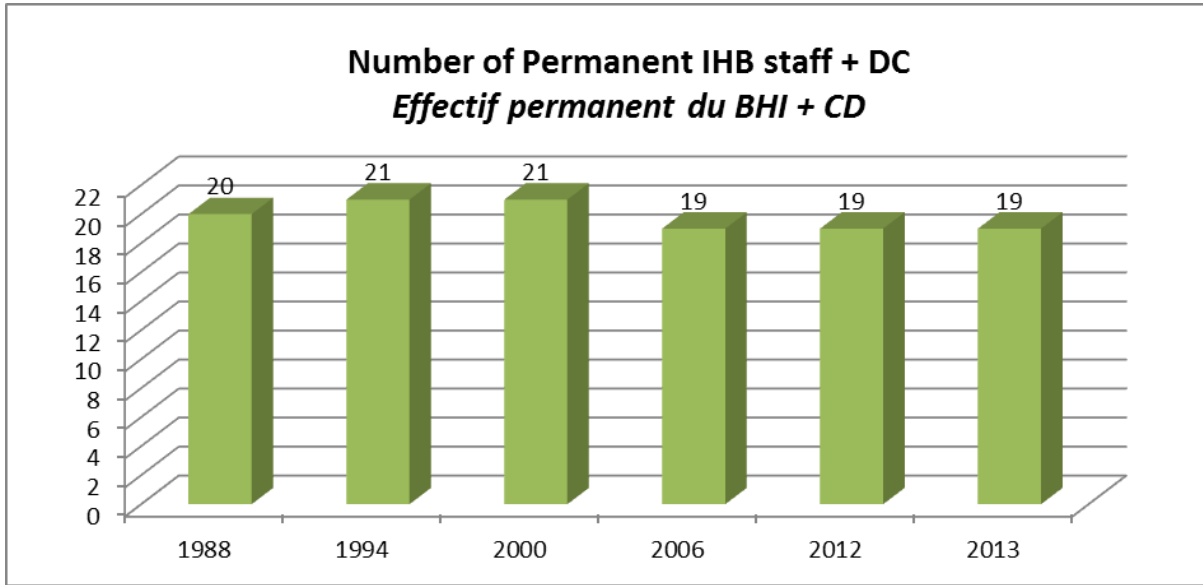
50. Providing a subsidy for the travel expenses of office bearers of IHO organs may assist Member States in making their staff available. This would require an increase in the operating budget. The average cost for inter-continental travel for one delegate to attend a meeting lasting five days would be around 5k€. Member States' representatives currently occupy the Chairs of 19 bodies of the Organization plus the Conference.

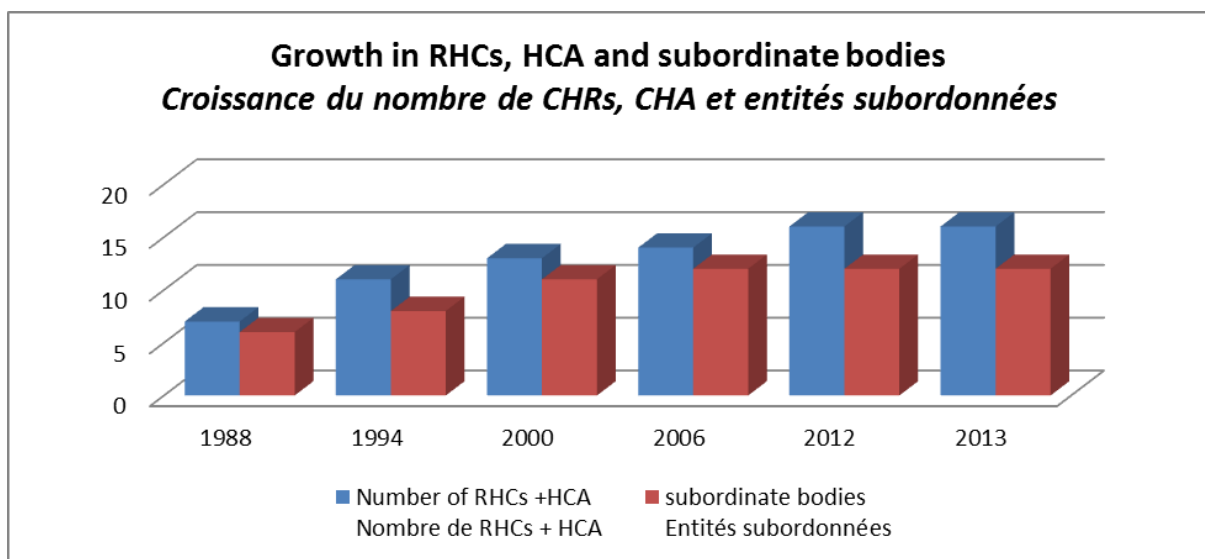
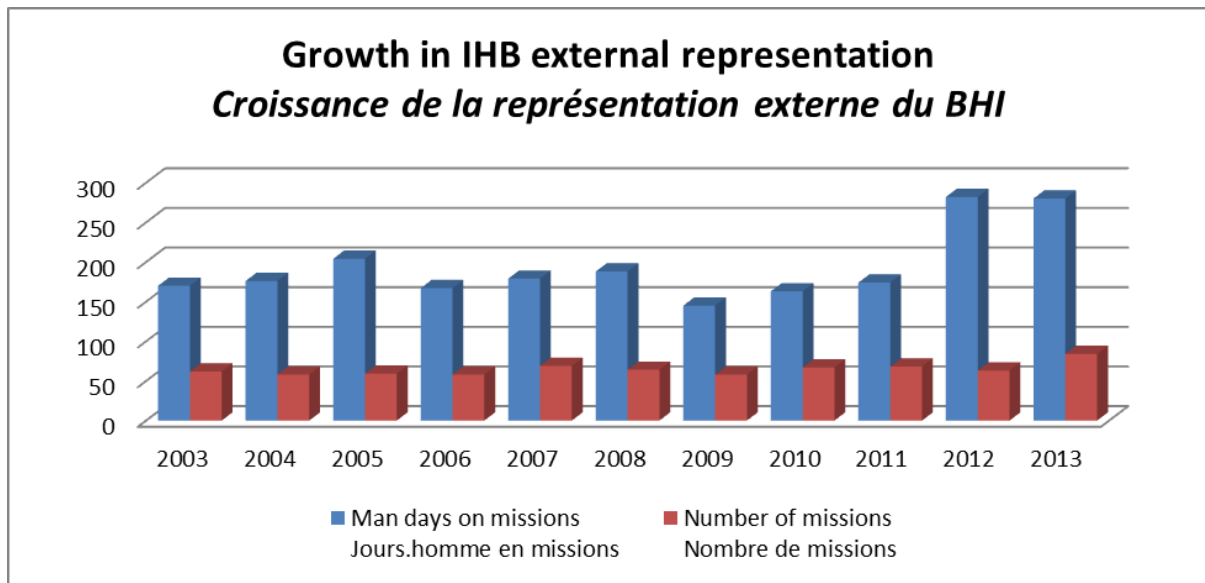
The Directing Committee notes that subsidising the travel expenses of the office bearers of IHO bodies would require that the operating budget be increased in real terms.

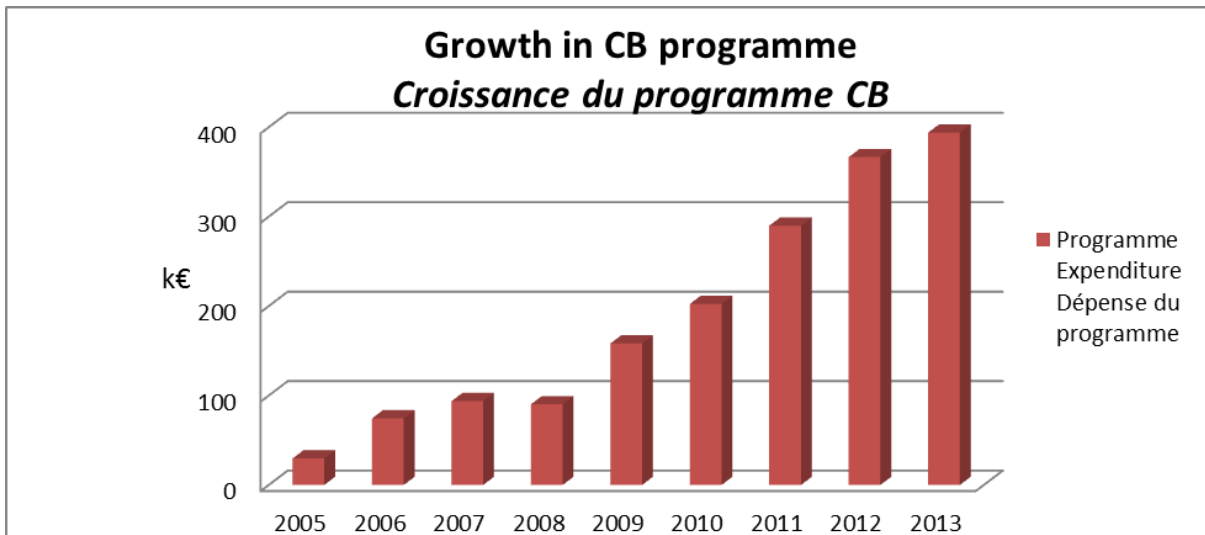
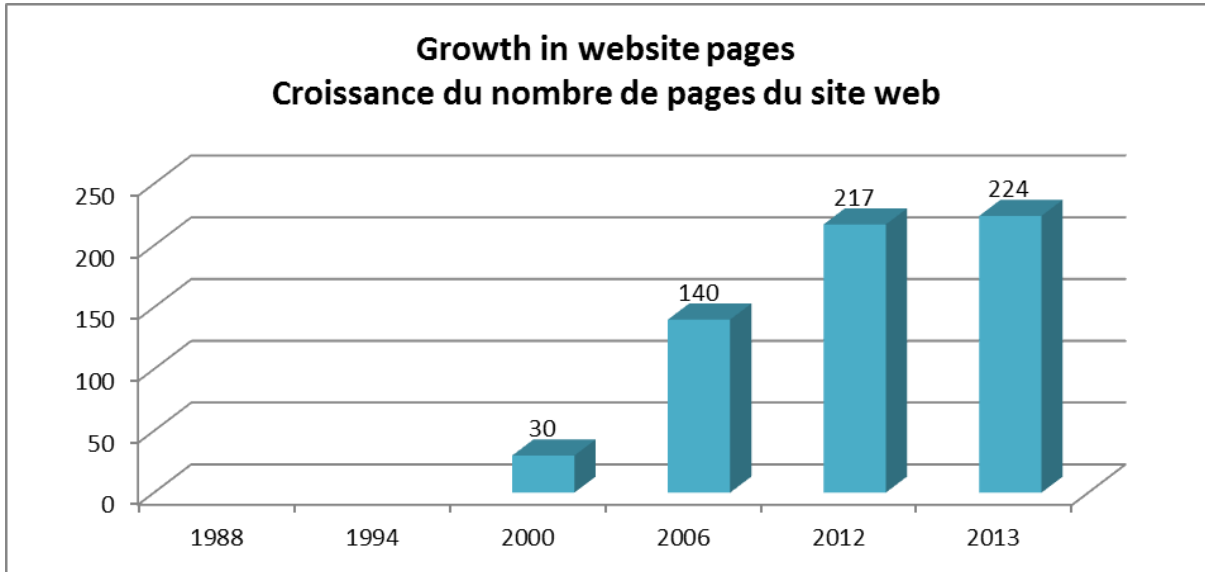
Recommendations

51. Based on the previous analysis, the Directing Committee recommends the following measures:
- a. The recruitment of new Member States should remain an important priority in the IHO Work Programme with a focus on the larger Flag States;
 - b. Those Member States that have not yet ratified the Protocol of Amendments to the IHO Convention should do so as soon as possible, in order to facilitate the recruitment of new Member States;
 - c. An improved, resource-based approach to the development of the Work Programme should be introduced, first in the next work plans of HSSC and IRCC and then in the subsequent edition of the IHO pluri-annual Work Programme, including considering the implementation of the increase in the share value contemplated in the current IHO five-year budget;
 - d. The scope of the translation work required from the IHB should be reduced by limiting the number of publications provided in both official languages or offset by additional assistance from Member States. IHO Resolution 12/1962 should be amended as shown in Appendix 3;
 - e. The requirement for the IHB to examine all newly printed or adopted International (INT) Charts should be discontinued. IHO Resolution 1/1992 should be withdrawn as a consequence;
 - f. The requirement for Member States to forward copies of their new INT charts to the IHB under the terms of Article 19 of IHO General Regulations should be reflected in a new IHO Resolution as shown in Appendix 3;
 - g. The skills of the IHB staff should be adjusted through natural attrition rather than through a redundancy scheme; and
 - h. The recruitment of an IHB staff member to undertake the duties of S-100 Registry Manager should be given priority as soon as an opportunity occurs.

IHB OUTPUT STATISTICS







STATUS OF TRANSLATION OF IHO DOCUMENTS

1. References

IHO Convention

Article XII

The official languages of the Organization shall be English and French.

Rules of Procedure for International Hydrographic Conferences

Rule 38

a) All supporting documents to agenda items of the Conference and its subsidiary bodies and summary records shall be issued in the official languages of the Organization, English and French.

b) All reports, resolutions, recommendations and decisions of the Conference and its subsidiary bodies shall be drawn up in one of the official languages and translated into the other.

IHO Resolutions

Resolution 12/1962 as amended

It is resolved that the IHB shall publish the reports and publications referred to in Articles 32 to 35 of the General Regulations¹ in either bilingual (English/French) or in separate English and French versions. In addition, the Bureau should (without increasing for this reason the present number of Category B Staff) publish at least its Annual Report (Parts 1 and 2) and the periodic I.H. Bulletin in Spanish and should also seek the assistance of Spanish-speaking countries in the preparation and production of other IHO publications in Spanish.

Resolution 13/1962 as amended

1. It is resolved that the Bureau should publish its Circular Letters in English, French and Spanish.

(...)

2. Status as of 31 January 2014

| Category | Sub-category | Number | EN ² | FR ³ | SP ⁴ | Comments |
|-------------------------------------|--------------|---------------------|-----------------|-----------------|-----------------|---|
| Circular Letters (CL, CCL, FCCL) | | 80 to 120 / year | Yes | Yes | Yes | SP versions may be delayed. FCCL are provided in FR and EN only. |

¹ The publications listed in the IHO General Regulations are :

- the annual report (article 32),
- the Yearbook (article 33),
- the International Hydrographic Bulletin (article 34),
- "special publications on technical subjects" (article 35).

² EN: English.

³ FR: French (including bilingual EN/FR or trilingual EN/FR/SP versions).

⁴ SP: Spanish (including bilingual EN/SP or trilingual EN/FR/SP versions).

| Category | Sub-category | Number | EN ² | FR ³ | SP ⁴ | Comments |
|---------------------------|------------------------------|-----------------------|-----------------|-----------------|-----------------|---|
| Yearbook | | Continuous update | Yes | Yes | Yes | Included in Periodic Publications. |
| Annual Report | | 1 / year | Yes | Yes | Yes | Included in Periodic Publications. Only Part 1 is available in SP. Part 2 is bilingual EN/FR. The FR and SP versions of Part 1 may be delayed. |
| IH Bulletin | | Continuous update | Yes | Yes | Yes | The FR and SP versions may be delayed. |
| Conference Proceedings | | 1 or 2 vol. / session | Yes | Yes | No | Included in Periodic Publications. The FR version may be delayed. |
| Publications ⁵ | Bathymetry | 7 | 7 | 2 | 1 | B-1 (GEBCO 5 th Edition) not counted. |
| | Capacity Building | 8 | 8 | 3 | 2 | C-16 (National Hydrographic Regulations) compiles regulations in their original language. |
| | Miscellaneous | 5 | 5 | 5 | 3 | |
| | Periodic | 4 | 4 | 4 | 3 | Only the abstracts of P-1 (IH Review) are provided in FR and SP ⁶ . Only Part 1 of P-7 (Annual Report) is available in SP. |
| | Standards and Specifications | 24 ⁷ | 24 | 9 | 3 | The French version of S-4 (IHO Chart Specifications) is maintained by France. The Spanish version of S-4 is maintained by Spain. |
| | <i>Total</i> | | <i>48</i> | <i>48</i> | <i>23</i> | <i>12</i> |

Note: the IHO website, introduced in 1996, is maintained in the two official languages.

⁵ As listed in the IHO Catalogue of Publications (Home > Standards & Publications > Click here for the IHO Publications Catalogue).

⁶ The discontinuation of the French version of the IH Review was agreed in 2000 by Member States (refer to IHO CL17 and 25/2000).

⁷ Only the main publications are considered: separate annexes and appendices are not included in the count.

PROPOSED AMENDMENTS TO IHO INSTRUMENTS**Existing IHO Resolution 12/1962 as amended**

| Title | Reference | Last amendment (CL or IHC) | 1st Edition Reference |
|----------------------|------------------|-----------------------------------|---|
| Documentation | 12/1962 | 72/2009 | T1.5 |

It is resolved that the IHB shall publish the reports and publications referred to in Articles 32 to 35 of the General Regulations in either bilingual (English/French) or in separate English and French versions. In addition, the Bureau should (without increasing for this reason the present number of Category B Staff) publish at least its Annual Report (Parts 1 and 2) and the periodic I.H. Bulletin in Spanish and should also seek the assistance of Spanish-speaking countries in the preparation and production of other IHO publications in Spanish.

Proposed amendment to IHO Resolution 12/1962 as amended:

| Title | Reference | Last amendment (CL or IHC) | 1st Edition Reference |
|----------------------|------------------|-----------------------------------|---|
| Documentation | 12/1962 | --- | T1.5 |

It is resolved that the IHB shall publish its Annual Report (Parts 1 and 2), the IHO Yearbook and the periodic I.H. Bulletin in either bilingual (English/French) or in separate English and French versions. In addition, the Bureau should (without increasing for this reason the present number of Translator Staff) endeavour to publish at least its Annual Report (Part 1) and the periodic I.H. Bulletin in Spanish. The language(s) of other IHO reference documents, guidelines and standards shall be decided on a case by case basis in the IHO Work Programme, taking into account the intended use of the document, the resources of the Bureau and the assistance offered by Member States.

Existing Article 19 of General Regulations of the IHO(will be withdrawn when the amendments to the Convention on the IHO enter into force)**ARTICLE 19**

To enable the Bureau to achieve its purpose, the Hydrographic Offices of Member Governments shall forward copies of their new international (INT) charts, electronic charts (raster and vector), as well as any nautical publications.

Proposed IHO Resolution**(to be included in section 2.3.3 INT Charts of M-3 Resolutions of the IHO)**

| Title | Reference | Last amendment (CL or IHC) | 1st Edition Reference |
|--|----------------|----------------------------|-----------------------|
| Provision of new INT paper charts, digital charts and publications to the Secretariat of the IHO for reference purposes | xx/2014 | --- | --- |

1. To enable the Secretariat of the IHO to achieve its purpose, the Hydrographic Offices of Member Governments shall forward copies of their new international (INT) charts, electronic charts (raster and vector), as well as any nautical publications.

2. Any paper charts, digital charts or publications provided to the secretariat by the Hydrographic Offices of Member Governments under the terms of this Resolution shall be used for internal reference purposes only. They shall not be duplicated, distributed or provided to any other organization, entity or individual without the express permission of the publishing Hydrographic Office.