



IHB File No. S1/6000/2017

**ASSEMBLY CIRCULAR LETTER No. 10**  
**02 September 2016**

**1<sup>st</sup> SESSION OF THE IHO ASSEMBLY**

**Monaco, 24-28 April 2017**

**PROPOSALS FOR CONSIDERATION BY THE 1<sup>st</sup> SESSION OF THE IHO ASSEMBLY**

References:

- A. Conference Circular Letter No. 2 dated 22 April 2016 - *Submission of proposals to the Conference / Assembly*
- B. Assembly Circular Letter No. 8 dated 23 August 2016 - *Revision of the timeline for the preparation of the 1<sup>st</sup> Session of the IHO Assembly (A-1)*
- C. Rules of Procedure of the IHO Assembly

Dear Hydrographer,

1. Conference Circular Letter No. 2 (Reference A) invited Member States to submit proposals for consideration by the 1<sup>st</sup> Session of the IHO Assembly (A-1) to be held from 24 to 28 April 2017. As reported in Reference B, the Secretariat of the IHO has received eight proposals from Member States and has also prepared one proposal. These proposals are listed in Annex A.
2. As indicated in Reference B, the Rules of Procedure of the IHO Assembly (Reference C), which will enter into force on 8 November 2016, allow for proposals to be submitted up to four months before the opening of the session of the Assembly, meaning that the closing date for the next Assembly would be 15 December 2016. Rule 9 of Reference C does not contain any specific provision for inviting and circulating comments on proposals submitted to the Secretariat, as has been the case for all previous Conferences. However, the Directing Committee / Secretary General will continue circulating the proposals and request any comments to proposals raised by Member States in order to assist in the considerations and decision making process of the 1<sup>st</sup> Session of the Assembly.
3. Member States are invited to forward any comments on the current proposals provided in Annex A, so that they reach the IHO Secretariat (by e-mail: [cl-lc@iho.int](mailto:cl-lc@iho.int) or by fax: +377 93 10 81 40) **no later than 15 December 2016**.
4. The Directing Committee also invites additional proposals to be submitted, if any, up until 15 December. Any additional proposals received will be circulated as soon as they are received so as to allow for the submission and subsequent circulation of any comments on those proposals from Member States.
5. Although it is not required by the Rules of Procedure of the Assembly, the Directing Committee will circulate a consolidated list of proposals and comments from Member States in the form of a "Red Book" in accordance with the revised timeline (see Reference B).

On behalf of the Directing Committee  
Yours sincerely,

Robert WARD  
President

Annex A: Proposals submitted for consideration by the 1<sup>st</sup> Session of the IHO Assembly.

# PROPOSALS

## PROPOSALS SUBMITTED FOR CONSIDERATION BY THE 1<sup>st</sup> SESSION OF THE IHO ASSEMBLY

### LIST OF PROPOSALS (AS OF 2 SEPTEMBER 2016)

PROPOSAL No.	OBJECT OF THE PROPOSAL	SUBMITTED BY	WORK PROGR.
1	Discuss a way forward for the publication of a 4 <sup>th</sup> Edition of IHO Publication S-23 and include it in the next "3-Year Work Programme"	Democratic People's Republic of Korea	1
2	Development of IHO E-Learning Capacity	France	3
3	Revision of the Resolution on Response to Disasters	Japan	3
4	Rewrite of the IHO Strategic Plan	United Kingdom	1
5	Development of an IHO Satellite-Derived Bathymetry Assessment and Charting Programme for as yet Uncharted or Poorly Charted Areas	Canada, France, United States of America	3
6	Proposed Amendment to the IHO Resolution 2/2007 for Improving the Validation Procedure of Making Changes to Specifications Based on S-100	Republic of Korea	2
7	National Hydrographic Office implications regarding the United Nations Committee of Experts on Global Geospatial Information Management (UN-GGIM) Shared Guiding Principles for Geospatial Information Management	United States of America	3
8	Revise the Standards of Competence for Hydrographic Surveyors	Italy	3
9	Revise IHO Publication M-3 - Repertory of IHO Resolutions	IHO Secretariat	1

**PRO 1 - DISCUSS A WAY FORWARD FOR THE PUBLICATION OF A 4<sup>th</sup> EDITION OF IHO PUBLICATION S-23 AND INCLUDE IT IN THE NEXT "3-YEAR WORK PROGRAMME"**

Submitted by: Democratic People's Republic of Korea

**PROPOSAL:**

**The Assembly is requested to discuss a way forward for the publication of a 4<sup>th</sup> Edition of IHO Publication S-23 and include it in the next "3-Year Work Programme".**

**EXPLANATORY NOTE:**

-We consider that IHO Publication S-23 is a vital and fundamental publication for the activities of not only mariners and cartographers but also non-experts, which provides them with correct knowledge about the names and limits of the oceans and seas.

-As a result of efforts made by IHO Member States over several decades for the publication of 4<sup>th</sup> edition of S-23, IHO gained a wealth of practical experience.

-There were many twists and turns in the process for the publication of 4<sup>th</sup> edition of S-23 but we recognize the value for being of S-23 and its positive role to international community, as the authoritative publication of IHO.

-Considering that the publication of 4<sup>th</sup> edition of S-23 is raised as the task that should not be delayed anymore for IHO,

Reminding the decision of 5<sup>th</sup> EIHC in October 2014 which stated that "The Conference agreed that the matter could be discussed again at the next Ordinary Conference/Assembly in 2017 if a proposal on the matter is made by any Member States",

Democratic People's Republic of Korea proposes to discuss the above mentioned proposal at the 1<sup>st</sup> session of the IHO Assembly.

## **PRO 2 - DEVELOPMENT OF IHO E-LEARNING CAPACITY**

Submitted by: France

Reference: IHO Capacity Building Strategy

### **PROPOSAL:**

**The Assembly is invited to examine and approve the following provisions:**

- a. That the IRCC defines a strategy regarding on-line training,**
- b. That the IRCC pilots the implementation of this strategy in the capacity building programme.**

### **EXPLANATORY NOTE:**

An increasing number of bodies propose on-line training (e-learning) for hydrography (for example: IMarEST and the University of Plymouth, Skilltrade) without any involvement or screening from the IHO. The IHO has not defined any policy in this area although it could provide a very interesting leverage for the capacity building programme. The necessary initial investment to develop a high-quality course could be rather quickly balanced by the savings gained compared to face-to-face training which generates significant traveling costs and time. The relatively moderate cost of an on-line training course would allow an increase in the number of proposed courses, thus responding to the increasing demands of training in certain sectors. Finally, for a modest additional initial investment, on-line training could be delivered in several languages, facilitating the availability of the education to a wider audience, which has to be an important objective of the capacity building programme.

Following the example of the Intergovernmental Oceanographic Commission which launched its portal "Ocean Teacher" the IHO could lead a deliberate action to develop a portal "Hydrography Teacher".

## PRO 3 - REVISION OF THE RESOLUTION ON RESPONSE TO DISASTERS

Submitted by: Japan

Reference: IHO Resolution 1/2005 as amended - *IHO Response to Marine Disasters, and Contribution to Prevention and Alert Systems (former K4.5)*

### PROPOSAL:

**It is proposed that IHO Resolution 1/2005, as amended – “IHO Response to Marine Disasters, and Contribution to Prevention and Alert Systems” be amended as attached.**

### EXPLANATORY NOTE:

1. Japan proposed the amendment of IHO resolution 1/2005 “IHO Responses to Disasters” at the XVIII<sup>th</sup> International Hydrographic Conference held in April 2012 to add key elements to be taken by Member States for the immediate re-establishment of basic maritime transportation routes based on experiences of the Great East Japan Earthquake that occurred in March 2011, and the Conference agreed to amend the Resolution following the proposal.

2. After 2012, Japan continued to conduct re-surveys at each damaged port until September 2015 and plans to revise the nautical charts by the first half of 2017. In this process, Japan revised the chart datum at some affected ports because of the change of the ground level by post-seismic crustal deformation, and developed a rapid method to determine the chart datum utilizing GNSS techniques. Japan also established a system to provide graphical information for Notices to Mariners and Navigational Warnings based on experiences in the huge earthquake. In addition, between 2012 and 2015, Japan hosted the following meetings related to response to disasters.

- a) In August 2012: International Seminar on the Importance of Hydrographic Service against the Natural Disaster
- b) In November 2015: International Workshop on Tsunami Inundation Mapping (P-17 of the IHO Capacity Building Work Programme in 2015)

3. Furthermore, in March 2015, the UN 3<sup>rd</sup> World Conference on Disaster Risk Reduction (WCDRR-3) was held in Sendai, Japan, where the IHO representative delivered a statement, highlighting the important roles of hydrography in disaster risk reduction. The Conference adopted “the Sendai Framework for Disaster Risk Reduction 2015-2030” for disaster risk reduction. In the framework, key activities to be taken by States, regional and international organizations and other relevant stakeholder are described under the following four priority areas:

- a) Understanding disaster risk;
- b) Strengthening disaster risk governance to manage disaster risk;
- c) Investing in disaster risk reduction for resilience;
- d) Enhancing disaster preparedness for effective response, and “Building Back Better” in recovery, rehabilitation and reconstruction.

The framework also invites international organizations to consider and implement the key activities for disaster risk reduction as follows:

Sendai Framework for Disaster Risk Reduction 2015-2030

#### IV. Priorities for action:

*"21. In their approach to disaster risk reduction, States, regional and international organizations and other relevant stakeholders should take into consideration the key activities listed under each of these four priorities and should implement them, as appropriate, taking into consideration respective capacities and capabilities, in line with national laws and regulations. "*

4. Given the circumstances above, Japan proposes that IHO Resolution 1/2005, as amended – "IHO Response to Marine Disasters, and Contribution to Prevention and Alert Systems" be further amended in order to improve the relevant measures for disaster risk reduction.

The main purpose of the proposed amendment is to add descriptions to "1. Introduction" and "2. Procedures and Guidelines" in the Resolution with regard to the following items:

- a) To encourage cooperation in the development and implementation of restoration plans for affected coastal areas and preventive strategies for disaster risk reduction;
- b) To plan and organize capacity building activities to enhance disaster management;
- c) To consider and prepare support plans in advance for countries likely to be affected by future disasters;
- d) To take in to consideration the long term impacts on ground level and depths of post-seismic crustal deformation caused by earthquakes;
- e) To participate in monitoring disaster risk and research and development activities;
- f) To promote the collection, analysis, management and use of relevant data for disaster risk reduction.

IHO RESPONSE TO MARINE DISASTERS, AND CONTRIBUTION TO PREVENTION AND ALERT SYSTEMS	1/2005 as amended	29/2015	K4.5
--	-------------------	---------	------

Note: The proposed amendments are highlighted in red.

## 1 Introduction

The 2004 and 2011 Indian Ocean and Japan tsunami not only severely affected local communities through the widespread loss of life and the extensive destruction of most facilities, but also severely affected safety of navigation through the destruction of port facilities and the creation of new navigational obstacles. A huge number of refugees were created and immediately suffered from shortages of food, water and fuel. In such circumstances support by sea transport was vital and depended on the immediate restoration of appropriate hydrographic and charting services.

Furthermore, various data and information obtained from hydrographic and charting activities are indispensable for the development of restoration plans for damaged coastal areas and for strategies for disaster risk reduction.

In order to reduce disaster risk, Hydrographic Offices should therefore plan to respond immediately after the occurrence of such severe disasters and participate in and cooperate in the development and implementation of the restoration plans for the damaged coastal areas and the strategies for disaster risk reduction within their area of responsibility, which may vary from Member State to Member State.

The International Hydrographic Organization, the Member States, and the Regional Hydrographic Commissions should also cooperate and coordinate their activities in relation to mitigation measures for significant disasters and for the improvement of the capacity of the Member States to cope with disasters, in cooperation with other international organizations as appropriate.

The International Hydrographic Organization, its Member States and the Regional Hydrographic Commissions should ensure that appropriate procedures and guidelines are in place so as to enable an immediate and appropriate response to any future disaster affecting coastal areas of the world.

These procedures should provide guidance to be followed at the national, regional and international levels within the over-arching structure of the IHO.

Such procedures and guidelines should aim to:

- ensure the immediate assessment of damage and its effect on the safety of navigation of national and international shipping,
- immediately inform mariners and other interested parties of relevant damage and any dangers, particularly with respect to navigational hazards,
- re-establish the basic key maritime transportation routes, and
- ensure that charts and other hydrographic information of affected areas are updated as soon as possible.

The procedures and guidelines should also identify the type of actions required and the likely support from Hydrographic Offices needed to recover from the damage as well as preventive measures, such as the improvement of capacity and capability for disaster management, development of disaster risk reduction strategies, and the monitoring and research and development activities for disaster risk reduction.

Appropriate global or regional actions can be co-ordinated through the IHB (“IHB” to be replaced with “IHO Secretariat” when the revised Convention enters into force), in liaison with the relevant Regional Hydrographic Commissions, IHO Member States, other Coastal States and relevant International Organizations, as appropriate to the circumstances, based on the general framework described in section 2 below.

It is also very important for Coastal States to collect relevant coastal and bathymetric data in their areas of responsibility and to make this available to the appropriate organizations to support the establishment and improvement of tsunami early warning systems, protection of coastal areas and relevant simulation studies. In particular, Coastal States should cooperate and support the IOC Tsunami Warning Programme ([www.ioc-tsunami.org](http://www.ioc-tsunami.org)) in setting up sea-level and tide gauges networks, procedures and systems for the exchange and transmission of near real time sea-level data. One to five minute transmission of sea-level data, properly sampled (~1 min rather than 15 min or 1 h) is recommended for specific gauges likely to provide early warnings of tsunamis and storm surges. Any necessary regional cooperation for the collection of data can be coordinated through the Regional Hydrographic Commission with other States in the Region and regional bodies of other International Organizations as appropriate, such as the IOC.

## **2 Procedures and Guidelines**

a) By Coastal States:

All Coastal States should have contingency plans developed in advance in order to be prepared in case a disaster occurs. After the occurrence of a disaster affecting coastal areas under its jurisdiction, each State should promulgate Maritime Safety Information and conduct a preliminary survey to confirm the principal transportation routes, according to the extent of the damage.

In response to the reconstruction of ports, each State should undertake hydrographic surveys so as to keep the charts updated. These actions should be coordinated with neighbouring States, Regional Hydrographic Commissions and others as appropriate.

Member States are requested to consider and prepare support plans in advance that can be implemented in the event of a significant disaster occurring in other countries.

It is important that each Coastal State provides both a senior point of contact and a working point of contact for communication and coordination purposes; this could include the Director of the Hydrographic Service or Maritime Safety Agency or other appropriate persons with the appropriate authority and who are familiar with maritime procedures.

Contingency plans should contain the following key elements:

i) Immediately upon the occurrence of a disaster, including tsunami, promulgate appropriate navigational warnings and necessary information and advice to shipping through existing channels (e.g. NAVTEX, SafetyNET, etc...) using appropriate ways for the public to understand easily, such as graphical information on maps. In addition and following further monitoring and assessment, promulgate updated warnings, information and advice in accordance with the development of the event.

ii) Co-operate with the NAVAREA Co-ordinator and other national co-ordinators so that



warnings, information and advice can be made available to mariners beyond the area of national jurisdiction as soon as is practicable.

iii) Assess the extent of damage to the coastal area particularly to ports, harbours, straits, approaches, and other restricted areas.

iv) Assess, in co-operation with other national agencies, for example, lighthouse and port authorities, the extent of damage to navigational aids.

v) Prioritize actions and allocate resources in order to identify requirements and undertake preliminary re-surveys starting with the most critical areas for navigation, aiming at ensuring the passage of support and supplies through maritime channels and ports, and the marking of new dangers where necessary.

vi) Assess the specific effects on shipping of the existence of obstacles and any changes to the seafloor that can hinder navigation, taking full account of the effects of drifting obstacles which may also hinder preliminary survey results.

vii) Inform the Chair of the Regional Hydrographic Commission and the IHB (“IHB” to be replaced with “IHO Secretariat” when the revised Convention enters into force) of the situation, providing details of the damage, actions taken and indicating what support, if any, is needed. Furthermore, prepare procedures, equipment and materials to support the affected country.

viii) Take the following action to assess and define new hydrographic or cartographic requirements, including:

1. Conducting hydrographic surveys in harbours and approaches as soon as practicable wherever the depth is likely to have changed due to geomorphic change, obstacles, or accumulation of sediment. Surveys should be progressed incrementally in support of progress in reconstruction of port facilities.

2. Checking and confirming relevant benchmarks. Re-defining chart datum, if necessary.

3. Providing nautical information as soon as practicable. Providing chart correction information or new editions of charts incrementally according to priorities and available resources. Indicating newly surveyed areas in chart correction information or on new editions of charts in accordance with the relevant IHO chart specifications in order to highlight areas of more reliable information in areas where significant changes of depth have taken place.

4. In the case of an earthquake, the ground level may continue to change for many years due to post-seismic crustal deformation, which may accumulate and affect charted depths significantly. Therefore the change of water depths should be monitored regularly, even after the revision of the charts, especially when this kind of change is anticipated.

ix) Provide follow-up reports to the Chair of the Regional Hydrographic Commission and the IHB (“IHB” to be replaced with “IHO Secretariat” when the revised Convention enters into force).

In anticipation of potential disasters, Coastal States are encouraged to take the following actions:

- i) To plan and organize capacity building activities to enhance disaster management in cooperation with other Member States and organizations as appropriate,
- ii) To participate in and cooperate with the development and implementation of a disaster risk reduction strategy in each coastal State incorporating the existing and available hydrographic and charting capabilities,
- iii) To participate in monitoring disaster risk, and research and development activities thereby incorporating the skills and knowledge of hydrographic offices, and
- iv) To promote the collection, analysis, management and use of relevant data for disaster risk reduction by using, as applicable, geospatial information technology.

b) By Regional Hydrographic Commissions:

The Chair of the Regional Hydrographic Commission will be responsible for co-ordinating the actions needed within the Region. In order to achieve this, the RHC should develop a 'disaster' action plan, aimed at supporting States in the area to assess the hydrographic damage, provide support and co-ordinate actions and efforts including capacity building, monitoring disaster risks, and research and development to enhance disaster management. These plans will be focused on the following:

- i) Communicating, by the quickest means available, with the focal points of the States in the Region, in order to make an initial evaluation of the extent of the damage.
- ii) Deciding whether a Regional technical task team needs to visit States in the area to support the evaluation of the damage and support needed.
- iii) Deciding, based on the information collected, whether an Extraordinary Meeting of the RHC is needed, in order to discuss in detail the problems, evaluate the damage and respond to requests for support.
- iv) Deciding if the Chair needs to take a co-ordinating role in assessing damage, providing support and broadcasting information to mariners.
- v) Informing the IHB ("IHB" to be replaced with "IHO Secretariat" when the revised Convention enters into force) on the situation, the actions taken and the need, if any, for external support.
- vi) Monitoring the progress of the actions agreed in the area, keeping Member States in the Region and IHB ("IHB" to be replaced with "IHO Secretariat" when the revised Convention enters into force) informed accordingly.
- viii) Including this issue as a permanent Agenda item on RHC meetings in order to monitor the readiness of the Commission to respond to disasters and conducting regular table-top exercises to evaluate the procedures.

c) By the IHB ("IHB" to be replaced with "IHO Secretariat" when the revised Convention enters into force):

The IHB ("IHB" to be replaced with "IHO Secretariat" when the revised Convention enters into force) will co-ordinate the actions required of Member States and Regional Hydrographic Commissions in order to assess damage and will co-operate with other International Organizations as appropriate to co-ordinate any external support required.

The IHB ("IHB" to be replaced with "IHO Secretariat" when the revised Convention enters into force) will coordinate with other International Organizations as appropriate to provide capacity building, monitoring and research and development to enhance disaster management.

The IHB (“IHB” to be replaced with “IHO Secretariat” when the revised Convention enters into force) will undertake the following tasks:

- i) Communicate with the Chairs of the Regional Hydrographic Commissions and, where necessary, directly with Member States in the region(s) affected, in order to collect information relating to the scale of the damage, actions taken, the support needed and the desirability of a regional meeting.
- ii) Participate as appropriate in meetings organized by the RHC or Member States, to determine problems and the actions required to remedy the situation
- iii) Co-operate with other International Organizations, informing them of matters affecting the safety of navigation, the needs of Member States, and actions taken and seeking where appropriate, support from these Organizations for the repair of the damage.
- iv) Invite other International Organizations to participate in Regional Meetings, in order to contribute to the discussions and to the required actions.
- v) Monitor developments and inform Member States on all issues associated with the damage, actions taken and support needed.
- vi) Investigate the willingness of Member States to provide support and co-ordinate the appropriate actions with the affected States in close co-operation with the Chair of the RHC.
- vii) Participate in discussions at RHC meetings to monitor requirements, develop responses to possible disasters and test the procedures and readiness to respond by tabletop exercises.

## **PRO 4 - REWRITE OF THE IHO STRATEGIC PLAN**

Submitted by: United Kingdom

- References:
- A. IHO CL 17/2016 dated 31 March - *Call for Submissions to update the IHO Strategic Plan*
  - B. IHO CL 31/2016 dated 11 July - *Responses to the call for submissions to update the IHO Strategic Plan*

### **PROPOSAL:**

**It is proposed to rewrite the IHO Strategic Plan.**

### **EXPLANATORY NOTE:**

In accordance with Reference A, the UK provided comments on the review of the 2009 IHO Strategic Plan for the Directing Committee to consider. The UK considered that a complete rewrite of the Strategic Plan to reflect the many changes that have taken place over the last 7 years and the coming in to force of the new IHO constitution would be the most appropriate way ahead.

Reference B, noted that five of the six contributions received from Member States could be accommodated through a modest revision of the current edition of the Strategic Plan and/or considered when preparing the draft IHO Work Programme 2018-2020.

Since the implementation of the IHO Strategic Plan in 2009, we know that the hydrographic domain has changed dramatically, particularly with the updated International Convention for the Safety Of Life At Sea (SOLAS) to allow for the carriage of electronic navigational charts. The pivotal role of the IHO in this area over the last seven years or so has been a key tenet to the successful uptake of ECDIS and ENC's. Similarly, the focus on hydrographic Capacity Building has contributed towards the drive for quality hydrographic data, and is, in our view, something which should be continued and invested in further.

In light of the above, the UK considers that a modest revision of the current edition of the Strategic Plan is not sufficient and continues to recommend a full rewrite of the Strategic Plan, to ensure it not only takes in account of the changes which have occurred since it was written, but also reflects and sets new priorities to enable progress against limited resource levels.

The work plan should clearly identify IHO strategic priorities and be flexible to deal with emerging requirements over the duration of the plan. With this in mind, and if a rewrite of the Strategic Plan is endorsed, we would like to offer our support to taking forward this work.

## PRO 5 - DEVELOPMENT OF AN IHO SATELLITE-DERIVED BATHYMETRY ASSESSMENT AND CHARTING PROGRAMME FOR AS YET UNCHARTED OR POORLY CHARTED AREAS

Submitted by: Canada, France, United States of America

- References:
- A. Decision n°17 of the XVIII<sup>th</sup> International Hydrographic Conference: “... to progress whatever actions are required to improve the collection, quality and availability of hydrographic data worldwide, monitor and rectify possible deficiencies and shortcomings...”
  - B. Proposal 6 to the 5<sup>th</sup> Extraordinary International Hydrographic Conference “Development of an IHO satellite-derived bathymetry and charting programme for remote areas”
  - C. GEBCO CookBook  
([http://www.star.nesdis.noaa.gov/sod/lisa/GEBCO\\_Cookbook/documents/CookBook\\_20160727.pdf](http://www.star.nesdis.noaa.gov/sod/lisa/GEBCO_Cookbook/documents/CookBook_20160727.pdf))

### PROPOSAL:

**The Assembly is requested to consider and approve the following:**

**That the Regional Hydrographic Commissions via the IRCC be requested to include as part of their work programmes an assessment of as yet uncharted or poorly charted areas in their respective regions using satellite derived bathymetry and risk assessment methodologies to develop survey priorities for donor funding consideration.**

### EXPLANATORY NOTE:

Satellite-derived bathymetry (SDB) has been an agenda item of several Regional Hydrographic Commissions (RHCs), CBSC and IRCC in recent years. This issue is a standing agenda item for IRCC meetings and for the conferences of several RHCs. This proposal seeks to encourage the RHCs to use SDB to prioritize regional survey requirements (see Reference A) that could then be reported to the WEND WG for tracking and the compilation of a global assessment of gaps. These results could then be considered by the IRCC and IHO in support of funding requests to donor organizations (UN Development Programme for example, with the results made available to the UN-GGIM under open licenses ; also the IHO Capacity Building Programme) to address the identified gaps.

Thanks to new technological developments and available sources of satellite information, SDB offers the possibility to assess in a reasonable time the quality of bathymetry over large areas that are poorly charted or charted a long time ago. Used in conjunction with risk assessment methodologies (identifying where greatest shipping traffic is located within poorly charted areas, for example), SDB 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 of obtaining certified quality data, based on priority requirements and an objective rationale derived from SDB reconnaissance information and a risk assessment.

From 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 for the modernization of nautical charts driven by risk assessment, in a reasonable amount of time and for a foreseeable cost, can be a strong driver for raising funding for regional chart improvement programmes.

At the EIHC-5 in 2014, a proposal on a scoping study on an IHO SDB programme (see Reference B) was discussed. Though the proposal was supported by several Member States, with fruitful comments on technical, practical and legal aspects, the idea of an IHO programme was considered too ambitious a goal at the time, and the Conference agreed not to initiate a coordinated action on satellite-derived bathymetry.

The SDB has been assessed by several hydrographic services and commercial organizations in order to meet their own responsibilities or objectives. However, an assessment of the contribution of this technology to global safety of navigation is yet to be done. This includes those areas not under the direct responsibility of existing IHO Member States, but that may still be important for the risk assessment of navigation of ships under their flag, and could also be of particular interest to future IHO Member States.

**PRO 6- PROPOSED AMENDMENT TO THE IHO RESOLUTION 2/2007 FOR IMPROVING THE VALIDATION PROCEDURE OF MAKING CHANGES TO SPECIFICATIONS BASED ON S-100**

Submitted by: Republic of Korea

- References:
- A. IHO Resolution 2/2007 as amended - *Principles and Procedures for making changes to IHO Technical Standards and Specifications*
  - B. IHO Publication S-100 - *IHO Universal Hydrographic Data Model*

**PROPOSAL:**

**Recognizing the need to improve the test and validation procedure of making changes to specifications based on S-100, it is proposed to add the following to the IHO Resolution 2/2007:**

1. **Establish and run a test bed to test and validate the changes to S-100 based specifications.**
2. **Share the results of running the test bed on the IHO website.**
3. **A body for running the test bed is required to set detailed specifications for the following, which will subsequently need to be approved by the IHO technical committee.**
  - a. **Composition and tasks of the organization for running the test bed**
  - b. **Items and criteria of test phases**
  - c. **Guidelines on inter-operability between specifications**
  - d. **Any other specifications set forth by other technical committees**

**EXPLANATORY NOTE:**

1. The IHO Resolution 2/2007 is a mandatory resolution to refer to when making changes to IHO's specifications and it outlines the principles and procedures for doing so.
2. It also specifies principles and procedures for preventing problems which may occur when making changes to IHO's specifications. To name a few problems, they can be incompatibility between systems, high updating costs, market monopoly, dissatisfied users or increased risks to safety of navigation.
3. Nevertheless, since S-100 based product specifications enable not only traditional single information such as ENCs but also integrated services including tides, bathymetry, and marine meteorology on a single screen, it is anticipated that pre- assessment of impacts from making changes to amendments will be sophisticated. To supplement that, it is required to improve the existing test and validation procedure of making changes to specifications. Therefore it is necessary to add relevant articles to the IHO Resolution 2/2007.
4. Furthermore, it is difficult for Member States to determine the appropriateness of the changes because technical aspects such as data modelling of S-100 based specifications have been reinforced, compared to those from the past.

5. Subsequently, it is required to establish a system which shares the procedure and result of running the test bed on the IHO website so that it will help stakeholders understand changes to specifications.
6. The body which will be tasked to run the test bed is required to obtain prior approval by the IHO on its composition, tasks, roles, etc.



**PRO 7 - NATIONAL HYDROGRAPHIC OFFICE IMPLICATIONS REGARDING THE UNITED NATIONS COMMITTEE OF EXPERTS ON GLOBAL GEOSPATIAL INFORMATION MANAGEMENT (UN-GGIM) SHARED GUIDING PRINCIPLES FOR GEOSPATIAL INFORMATION MANAGEMENT**

Submitted by: United States of America

Supported by: Australia, Brazil, Canada, Denmark, Netherlands, New Zealand, Norway

- References:
- A. UN-GGIM Working Group on Development of a Statement of Shared Principles for the Management of Geospatial Information, adopted Statement  
URL:  
<http://ggim.un.org/docs/meetings/GGIM5/statement%20of%20shared%20guiding%20principles%20flyer.pdf>
  - B. Report presented to the UN-GGIM, Fifth session, New York, 5-7 August 2015. <http://ggim.un.org/docs/meetings/GGIM5/E-C20-2015-10%20Statement%20of%20Shared%20Principles%20Report.pdf>
  - C. [\*A Comparative Study of the Development of Marine Spatial Data Infrastructure \(MSDI\) by IHO Member Nations\*](#), January 2016, presented to the IHO MSDIWG.
  - D. IHO Publication C-17 - *Spatial Data Infrastructures: "The Marine Dimension" - Guidance for Hydrographic Offices*, Ed 2.0, April 2016 (Draft)
  - E. UN-GGIM Committee of Experts:  
<http://ggim.un.org/docs/meetings/GGIM6/GGIM%206th%20Session%20-%20List%20of%20Participants%20as%20circulated.%20rev5.pdf>  
and Regional Entities: <http://ggim.un.org/Regional%20Entities.html>

**PROPOSAL:**

The IHO Assembly is requested to consider the UN-GGIM *"Statement of Shared Guiding Principles for Geospatial Information Management"*, which emphasizes the importance of making all geospatial data available to a broad user community and managing it within a common framework. Hydrographic Offices are key providers of marine geospatial information that is highly valuable to many users beyond the traditional Safety of Navigation customers, yet the marine domain is not fully represented in the UN-GGIM considerations.

To address the issue of geospatial information management, the UN-GGIM conducted a wide ranging consultation and deliberation process with its Member States and geospatial experts that resulted in the creation of a statement of Shared Guiding Principles. IHO Member States are invited to consider how the UN-GGIM principles can be incorporated into national and international frameworks that govern how we operate.

The Assembly is invited to:

1. Note the UN-GGIM document, *The Statement of Shared Guiding Principles for Geospatial Information Management*.
2. Task the IRCC and its subsidiary bodies (RHCs, MSDIWG), in cooperation with the Secretariat of the IHO, to identify and recommend whatever actions may be required to incorporate the Shared Guiding Principles for Geospatial Information Management in their work programs, paying particular emphasis to the following:

- a. **Preamble (e):** *“it is desirable that guiding principles are incorporated in the institutional frameworks that govern geospatial information organizations and understood at all political levels and by all stakeholders in national authorities.”*
  - b. **Innovation (e):** *“Open data: where feasible adopt policies that maximize access to and use of open, free and unrestrictive geospatial information for innovation, efficient and effective decision making and a spatially enabled society.”*
  - c. **Governance (m):** *“International cooperation and harmonization: engage in bilateral and multilateral cooperation in geospatial information management to foster effective and efficient geospatial data management systems in all Member States. Harmonization of national geospatial data and services at regional and global levels is encouraged in order to meet the needs of supranational users.”*
3. **Encourage Member States to incorporate the principles into institutional frameworks that govern the collection, use, and dissemination of hydrographic data, products, and services.**
  4. **Support the continued engagement of the Secretariat of the IHO with the UN-GGIM.**
  5. **Encourage Member State HOs to liaise with their national representatives in UN-GGIM on best practices and to help ensure that ocean and coastal geospatial data is considered as an integral part of national SDI initiatives.**
  6. **Encourage Member States and RHCs to engage with the UN-GGIM and its regional entities to raise awareness of the marine domain, any of its unique needs, and the value of the domain within any geospatial information management effort.**

#### EXPLANATORY NOTE:

National Hydrographic Offices (HOs) have traditionally viewed their role as a provider of nautical charts to support efficient Safety of Navigation (SoN). This role will not change; however, there is a developing recognition that HOs are key providers of marine geospatial information, in all its forms, to a broad user community beyond traditional SoN customers. As national HOs, our collective data, products, and services form the baseline of reliable information that supports the concept of a Marine Spatial Data Infrastructure (MSDI). We are the authoritative, hydrographic, geospatial information managers for our nations, and with proper governance, maximizing access to this information will gain greater support from more users to spatially strengthen the various sectors of our national societies (e.g., commerce, navigation, scientific research, resource management).

UN-GGIM is playing a leading role in setting the agenda for the development of global geospatial information. It provides a forum to liaise and coordinate between UN Member States and international organizations. The mandate of the UN-GGIM is to provide a platform for the development of effective strategies on how to build and strengthen national capacity on geospatial information, as well as disseminating the best practices and experiences of national, regional and international bodies on geospatial information.<sup>1</sup>

The mandate also includes overarching principles inherent in the professional practices of geospatial information management, including recognition of the broad societal need to make data widely accessible. Adherence to the mandate and the principles enhances the public trust in the value of hydrographic data to a variety of applications beyond traditional applications in the

---

<sup>1</sup> Adapted from UN-GGIM information.

global marine transportation system. Operating with common principles and approaches to the management of marine geospatial information will allow national HOs to meet the needs of a broader community of marine data and information users.

To address the issue of geospatial information management, the UN-GGIM conducted a wide ranging consultation and deliberation process with its Member States and geospatial experts that resulted in the creation of a statement of Shared Guiding Principles. This document, *The Statement of Shared Guiding Principles for Geospatial Information Management*, has been adopted by the UN-GGIM for application to all geospatial data, including marine information created and maintained by national HOs.

HOs need to consider how the UN-GGIM principles can be incorporated into our national and international frameworks that govern how we operate.

MSDI is actively being discussed within the IRCC, the MSDIWG, and the Regional Hydrographic Commissions. IHO publication C-17 developed by the MSDIWG is undergoing an update based on the changing roles of HOs as data managers/providers, the current technological environment, and the latest best practices. It provides general guidance to HOs to consider regarding the implementation of MSDI. In 2016, Canada completed *A Comparative study on the development of Marine Spatial Data Infrastructure by IHO Member Nations*. The result was that many nations are making progress, but there is work to be done developing improved governance policies and supporting this effort across the marine community.

These topics are also part of the general discussions at the RHCs. Member States are invited to discuss how they are addressing these concepts within their national programs as some regional efforts are starting to make progress in meeting the needs of the wider community.

There is a clear need to link the marine geospatial management efforts with the land-focused efforts being considered by the UN-GGIM and other geospatial information management governance bodies. As can be seen from the UN-GGIM participant list, there are very few representatives from the global maritime domain.

## PRO 8 - REVISE THE STANDARDS OF COMPETENCE FOR HYDROGRAPHIC SURVEYORS

Submitted by: Italy

### PROPOSAL:

The Assembly is requested to **approve the preparation, under IHO Secretariat responsibility, of a questionnaire with the task of providing suggestions for the IBSC from Hydrographic Offices towards a new amended version of the Standards of Competence, in order to accommodate for the needs and demands of a world where hydrographers are employed in a wider range of activities - boundary delimitation, sea-related business, environment, etc. - and not just as cartographers.**

### EXPLANATORY NOTE:

1. Education is essential in creating and maintaining a modern hydrographic service. Over twenty IHO Member States offer more than thirty technical training programs in hydrography in compliance with IHO guidelines. In cooperation with the Fédération Internationale des Géomètres (FIG), and the International Cartographic Association (ICA), a comprehensive set of Standards of Competence for hydrographic surveyors and nautical cartographers have been drawn up, together with appropriate syllabi for the guidance of universities and teaching establishments. An International Board supervises the application of these standards. Three publications relating to education and training were issued:

- IHO Publication S-5 (S-5B and S-5A-draft): *“Standards of Competence for Hydrographic Surveyors”*;
- IHO Publication S-8: *“Standards of Competence for Nautical Cartographers”*;
- IHO Publication C-47: *“Courses in Hydrography and Nautical Cartography”*.

2. Capacity Building is considered by the IHO as a strategic objective, defined as the process by which the Organization assesses and assists in sustainable development and improvement of Countries, to meet IHO's objects and the Hydrography, Cartography and Maritime Safety obligations and recommendations described in UNCLOS, SOLAS V and other international instruments. Also during the CBSC14 and IRCC8 some delegates from some Regions have put in evidence specific needs about training in their areas.

3. Italy fully supports the indication in CL 14/2013 (*...recognizes the benefit of feedback and contributions from the broad range of stakeholders in order to ensure that any revision of the existing standards take into account the requirements and expectations of the stakeholders...*) but feels that the present Standards of Competence have a rather academic approach particularly in the new category A draft version.

Italy feels that the latest IBSC proposal on training hydrographers skilled enough to work with competence across the full spectrum of their profession is in contrast with a general trend towards highly specialized professionals in given fields. No engineer can deal with IT, building, aerospace, mechanics and logistics at the same time. Likewise no hydrographer can possibly be equally proficient in remote sensing, nautical charting, port management and coastal engineering, data management, offshore geophysical surveying, military and inland waters hydrography.

4. The importance of international organizations in establishing appropriate standards and guidance is universally recognized. For over 90 years the IHO has consistently worked towards achieving maximum standardization in nautical products, services and surveys. IHO publications M and S series are an example.

5. Italy feels that a new approach to training hydrographers is required, offering modular and flexible solutions, also in view of innovative technical solutions such as Crowd Sourced Bathymetry, Remote Sensing etc. The IHO Secretariat should have an essential role in order to transfer the requirements emerging in the hydrographic community to the IBSC.

## **PRO 9 - REVISE IHO PUBLICATION M-3 - REPERTORY OF IHO RESOLUTIONS**

Submitted by: IHO Secretariat (Secretary-General)

Reference: IHO Publication M-3 - *Repertory of IHO Resolutions*, 2<sup>nd</sup> Edition - 2010, Updated to July 2015

### **PROPOSAL:**

**In order to reflect the new structure of the IHO as defined in the amendments to the Convention on the IHO and the other Basic Documents of the IHO that entered in to force on 8 November 2016, the Assembly is requested to agree to:**

- a. the editorial amendments to IHO Publication M-3 - *Repertory of IHO Resolutions*, 2<sup>nd</sup> Edition - 2010, Updated to July 2015, as set out in Annex A to this Proposal, and**
- b. the development of substantive amendments according to the proposals set out in Annex B.**

### **EXPLANATORY NOTE:**

1. IHO Publication M-3 contains the repertory of IHO resolutions. The current edition is the 2<sup>nd</sup> Edition, 2010, updated to July 2015.
2. The implementation of the new structure of the IHO, as defined by the Protocol of amendments to the Convention on the IHO approved by the 3<sup>rd</sup> Extraordinary International Hydrographic Conference in 2005 (EIHC-3) and the other new Basic Documents of the IHO approved by the 17<sup>th</sup> International Hydrographic Conference in 2007 (IHC-17), and that entered in to force on 8 November 2016, has an impact on a number of resolutions that need to be updated accordingly.
3. After a review of Publication M-3, the IHO Secretariat (Secretary-General) proposes a two-level approach.
4. The first level consists of straightforward editorial amendments reflecting the changes in the nomenclature of the Organization (for example the change from Conference to Assembly) and other similar minor, non-substantive adjustments. These proposed amendments are set out in Annex A.
5. The second level addresses several substantive amendments that reflect the requirements of the new organizational framework and other recent developments and that have a significant impact on the content or scope of the relevant resolutions. These substantive amendments are identified in Annex B with proposals for revised texts or for further work as appropriate.

**Proposed Editorial Amendments to IHO Resolutions**

Title	Reference	Last amendment (CL or IHC)	1 <sup>st</sup> Edition Reference
VISITS TO IHB BY HEADS OF HYDROGRAPHIC OFFICES	6/1972 as amended	13/1997	T1.4
<p>Replace "IHB" with "IHO Secretariat".</p> <p>Replace "Conference" with "Assembly."</p>			
LANGUAGES USED IN CORRESPONDENCE WITH THE BUREAU AND AMONG MEMBER STATES	13/1962 as amended	IHC 15	T1.6
<p>Replace "Bureau" with "IHO Secretariat".</p>			
MEMBERSHIP IN IHO AND CO-ORDINATION OF HYDROGRAPHIC SERVICES THROUGHOUT THE WORLD	5/1952 as amended	72/2009	T2.2
<p>Amend the text as follows:</p> <p>The <del>Conference is</del> <u>IHO Member States are</u> aware that certain countries with important hydrographic interests are not yet Members of the IHO. <del>In this connection, the delegates in plenary session expressed the unanimous opinion that</del> <u>The co-operation of these countries would result in a considerable and increasingly effective co-ordination of hydrographic services throughout the world, a co-ordination which would lead to a greater degree of standardization of charts and nautical documents and would considerably improve the theory and practice of the science of hydrography.</u></p> <p>2 Furthermore, it is strongly recommended that the <del>IHB Secretary-General and Directors</del> stimulate in all States without Hydrographic Offices an interest in, and an appreciation of the importance of, setting up such an organization in their country.</p>			
SECONDMENT OF PERSONNEL FROM MEMBER STATES TO THE IHB	3/1987 as amended	54/2008	T4.2
<p>Replace "IHB staff/Staff" with "Secretariat Staff".</p> <p>Replace "International Hydrographic Bureau (IHB)" with "IHO Secretariat".</p> <p>Replace "IHB" with "Secretariat".</p> <p>Replace "Directing Committee" with "Secretary-General".</p> <p>Replace "a Director" with "the Secretary-General or a Director".</p> <p>Replace "IHB Pension and Medical care schemes" with "Pension and Medical care schemes of the IHO".</p> <p>Replace "the President, IHB on behalf of the Directing Committee" with "the Secretary-General".</p>			
PRACTICAL IMPLEMENTATION OF VOTING PROCESSES			T6
<p>Amend the text as follows:</p> <p><del>In considering the Report provided by the IHO Legal Advisory Committee (LAC)<sup>1</sup>,</del> Member States decided that the following meanings should be used to determine the two-thirds</p>			

Title	Reference	Last amendment (CL or IHC)	1 <sup>st</sup> Edition Reference
majority required for the voting procedures under Articles XX and paragraph 3c of Article XXI of the IHO Convention <u>as amended</u> :			
DETERMINING THE MAJORITY REQUIRED TO APPROVE AMENDMENTS TO THE CONVENTION	1/2009		T6.1
<p>Amend the text as follows:</p> <p>In order to determine the majority required to approve the entry into force of an amendment to the Convention in accordance with paragraph 3c of Article XXI of the Convention, the expression “<u>approval by two-thirds of the Contracting Parties after notifications of consent to be bound by two-thirds of the Member States have been received by the Depository</u>” shall be interpreted as meaning two-thirds of the <u>Contracting Parties Member States</u> entitled to vote at the time of the approval by the <u>Conference Assembly</u>.</p>			
DETERMINING THE MAJORITY REQUIRED TO APPROVE ADMISSION TO THE IHO	2/2009		T6.2
Replace “Member Governments” and “Contracting Parties” with “Member States”.			
THE PRINCE ALBERT 1 <sup>ST</sup> MEDAL FOR HYDROGRAPHY	2/2014	EIHC 5	-
<p>Amend paragraph 1 as follows:</p> <p>(...) The Medal <u>is had</u> always <u>been</u> presented by the Prince of Monaco himself during the Opening Ceremony of the ordinary International Hydrographic Conferences. (...)</p> <p>Implement the changes as already indicated in paragraphs 2, 3 and 4.</p>			
LIQUIDITY OF THE IHB	3/1972 as amended	FCL16/2003	R1.1
<p>Amend the title as follows:</p> <p>Liquidity of the <u>IHB IHO Secretariat</u></p> <p>Amend the text as follows:</p> <p>It is resolved that in complying with Article 18 of the Financial Regulations the term “<u>operating cash reserve-emergency reserve fund</u>” shall be understood to include only those amounts of money which are available to the <u>IHB IHO Secretariat</u> for current operating expenses, and shall specifically exclude all money which is part of the <u>Staff Internal Retirement Fund</u> and all money held in special funds against specific future requirements, e.g. for <u>I.H. Conferences Assemblies</u>, re-location of <u>IHB Directors Internationally Recruited Members of Staff</u>, renovation and re-equipment of <u>IHB the Secretariat</u>. The term shall also exclude any cash arising from contributions paid in advance.</p>			
TANGIBLE ASSETS OF THE BUREAU	8/1947 as amended	FCCL1/2003	R1.3
<p>Replace “Bureau” with “IHO Secretariat”.</p> <p>Replace “every five years” with “every three years”.</p>			
INTEREST ON BUREAU FUNDS	8/1926 as amended	IHC 14	R1.4
Amend the title as follows:			



Title	Reference	Last amendment (CL or IHC)	1 <sup>st</sup> Edition Reference
<p>Interest on <del>Bureau</del> <u>IHO</u> Funds.</p> <p>Amend the text as follows:</p> <p>The inactive funds of the <del>IHB</del> <u>IHO</u> should be placed in interest-bearing deposit accounts in reputable banks, convenient for the financial administration of the <del>Bureau</del> <u>IHO Secretariat</u>.</p>			
ROUTINE INCOME OTHER THAN CONTRIBUTIONS	4/1972		R1.7
Replace "Directing Committee" with "Secretary-General".			
EXTERNAL AUDIT - GENERAL PROVISIONS	1/2004		R5.1
<p>Amend the text as follows:</p> <p>The audit shall be conducted yearly in conformity with Generally Accepted Accounting Principles. The Finance Committee, <u>the Council</u> or the <del>Conference Assembly</del> may request the External Auditor to perform certain specific examinations. Nevertheless, the External Auditor shall be completely independent and solely responsible for the conduct of the audit. At the request of <u>the Council</u>, the Finance Committee or the <del>Directing Committee</del> <u>Secretary-General</u>, such auditing may be carried out at any time. The <del>Directing Committee</del> <u>Secretary-General</u> shall provide the External Auditor with the facilities <del>he that they</del> may require in the performance of the audit.</p>			
SHIPS' ROUTEING	1/1980 as amended	29/2009	A1.17
Replace "IHB" with "IHO Secretariat".			
PRINCIPLES AND PROCEDURES FOR MAKING CHANGES TO IHO TECHNICAL STANDARDS AND SPECIFICATIONS	2/2007	69/2014	A1.21
<p>Replace "IHB" with "IHO Secretariat".</p> <p>Replace "Member States" with "Member States through the Council"</p> <p>Amend clause 3.2.8 as follows:</p> <p>3.2.8 After endorsement by the Committee <u>and the Council</u>, the new or changed standard should be submitted to Member States by the <del>IHB</del> <u>IHO Secretariat</u> for approval of the content, and confirmation of the "effective date".</p> <p>and amend the diagram in clause 3.2 and the flow chart in clause 5.3 accordingly.</p> <p>Update the column "relevant maintenance body" in Appendix 1 according to the new structure of HSSC working groups.</p>			
HYDROGRAPHIC OFFICE ARRANGEMENTS FOR THE EXCHANGE AND REPRODUCTION OF NAUTICAL PRODUCTS	7/1919 as amended	8/1995	A3.4
<p>In the note, replace "TR" with "Resolution".</p> <p>In clause 7, replace "International Hydrographic Bureau" with "IHO Secretariat".</p>			
INTERNATIONAL STANDARDIZATION OF GEOGRAPHICAL NAMES	1/1972 as amended	8/1974	A4.2
Replace "IHB" and "Bureau" with "IHO Secretariat".			

Title	Reference	Last amendment (CL or IHC)	1 <sup>st</sup> Edition Reference
NAMING OF UNDERSEA FEATURES	2/1987 as amended	59/1991	A4.3
Replace "IHB" with "IHO Secretariat".			
HISTORICAL ACCOUNTS OF HYDROGRAPHIC OFFICES	30/1919 as amended	59/1991	H1.2
Replace "IHB" and "Bureau" with "IHO Secretariat".			
MARINE SPATIAL DATA INFRASTRUCTURE (MSDI) POLICY	5/2009		K4.7
Replace "Special Publication" with "IHO Publication".			
CENTRALIZATION OF OCEANIC SOUNDINGS	3/1929 as amended	85/2008	A5.3
<p>Replace "IHB" with "IHO Secretariat".</p> <p>In clause 1, replace "GEBCO Guidelines (IHO Publication B-7)" with "GEBCO Cook Book (IHO Publication B-11)."</p>			
EXTENSION OF WORLD NETWORK OF TIDAL OBSERVATIONS	5/1932 as amended	19/2008	A6.4
Replace "IHB" with "IHO Secretariat".			
STUDY OF MEAN SEA LEVEL	6/1932 as amended	20/2012	A6.5
Replace "IHB" with "IHO Secretariat".			
IHO TRANSFER STANDARD FOR DIGITAL HYDROGRAPHIC DATA	1/1987 as amended	35/1996	A3.7
<p>Replace "IHB" with "IHO Secretariat".</p> <p>Replace "a Transfer Standard Maintenance and Application Development (TSMAD) Working Group" with "an ENC Standards Maintenance Working Group (ENCWG)".</p>			
IHO DATA PROTECTION SCHEME S-63	1/2007		A3.12
Replace "the IHB, as the IHO Secretariat" with "the IHO Secretariat".			
THE IMPORTANCE OF RESOLVING ISSUES RELATED TO THE FUNCTIONING OF THE "ECDIS-ENC SYSTEM"	1/2012	IHC 18	-
Replace "Bureau" with "IHO Secretariat".			
REGULATIONS OF THE IHO FOR INTERNATIONAL (INT) CHARTS AND CHART SPECIFICATIONS OF THE IHO	11/2002 as amended	75/2003	B5.6
<p>Amend clause 3 as follows:</p> <p>It is resolved that the <del>IHB</del> IHO Hydrographic Services and Standards Committee (HSSC), through the <del>Chart Standardization and Paper Chart Working Group (CSPCWG)</del> appropriate working group, keep publication S-4 under review in order to advise the IHO on their updating. Member States having proposals to update S-4 should forward them to the <del>CSPCWG</del></p>			

Title	Reference	Last amendment (CL or IHC)	1 <sup>st</sup> Edition Reference
<u>working group</u> through the <del>I.H. Bureau</del> IHO Secretariat.			
FREE DISTRIBUTION AND SALE OF IHO PUBLICATIONS	10/1937 as amended	39/2009	R4.1
<p>Amend clause 1 c) as follows:</p> <p>c) One copy to former <u>Presidents, Secretaries-General and</u> <del>Directors of the IHB</del>, if requested.</p> <p>Replace “IHB” with “IHO Secretariat”.</p> <p>Replace “Directing Committee” with “Secretary-General”.</p>			
TRANSLATION OF IHO PUBLICATIONS	2/2008		R4.2
Replace “IHB” with “IHO Secretariat”.			
DOCUMENTATION	12/1962 as amended	EIHC 5	T1.5
<p>Replace “IHB” and “Bureau” with “IHO Secretariat”.</p> <p>Replace “Category B Staff” with “Locally Recruited Members of Staff”.</p>			
HYDROGRAPHIC DICTIONARY (S-32)	7/1929 as amended	32/2010	K3.3
Replace “IHB” with “IHO Secretariat”.			
STATUS OF HYDROGRAPHIC SURVEYING AND NAUTICAL CHARTING WORLD WIDE	1/2010		A1.22
Replace “IHB” with “IHO Secretariat”.			
REPORTS OF PROCEEDINGS OF I.H. CONFERENCES	9/1929 as amended	72/2009	Q2.4
<p>Amend the title as follows:</p> <p>Report of Proceedings of <del>I.H. Conferences</del> <u>Assembly sessions and Council meetings</u></p> <p>Amend the text as follows:</p> <p>The Proceedings of <del>International Hydrographic Conferences</del> <u>Assembly sessions and Council meetings</u> will be prepared by the <del>IHB</del> <u>IHO Secretariat</u> and shall comprise summary <del>reports</del> <u>records</u> of <del>the different sessions of the Conference</del> <u>all meetings</u>. It will be made available in digital form after the <del>Conference</del> <u>Assembly</u>. The <del>IHB</del> <u>IHO Secretariat</u> will prepare a limited number of printed copies for the <del>IHB</del> <u>IHO Secretariat</u> Library.</p> <p>in accordance with rule 20 of the Rules of Procedure of the Assembly and rule 16 of the Rules of Procedure of the Council.</p>			
INTERNATIONAL HYDROGRAPHIC REVIEW	6/2009 as amended	EIHC 5	Q2.5
<p>In paragraph 1, replace “the International Hydrographic Bureau (IHB)” with “the International Hydrographic Bureau (IHB) (now IHO Secretariat)”.</p> <p>Replace “IHB Directing Committee” with “Secretary-General”.</p> <p>Replace “IHB” with “IHO Secretariat”.</p>			

Title	Reference	Last amendment (CL or IHC)	1 <sup>st</sup> Edition Reference
REPERTORY OF RESOLUTIONS	13/1932 as amended	72/2009	Q3.1
<p>Amend the text as follows:</p> <p>1 All resolutions adopted by <del>I.H. Conference</del> <u>the Assembly</u> or by correspondence shall be compiled in one volume.</p> <p>2 It is resolved that the <del>IHB</del> <u>IHO Secretariat</u> shall keep the Repertory of Resolutions up to date by periodically submitting, through circular letters to Member States, amendments to existing resolutions and new resolutions on any subject, provided that they do not concern matters which would be more appropriately handled by <del>Conferences</del> <u>the Assembly through the Council</u>. These amendments or new resolutions may be proposed either by a Member State or by the <u>Council or by the IHO Secretary-General</u>.</p> <p>3 It is strongly recommended that the IHO Hydrographic Dictionary be used to standardize terminology of the Resolutions.</p>			
GENERAL REGULATIONS OF THE IHO	6/1967 as amended	72/2009	Q3.3
FINANCIAL REGULATIONS OF THE IHO	6/1967 as amended	72/2009	Q3.4
IHO BASIC DOCUMENTS	5/1977 as amended	72/2009	Q3.5
<p>Replace with a single resolution as follows:</p> <p>Basic Documents of the IHO</p> <p>1. Subsequently to the approval of a Protocol of amendments to the Convention on the IHO in 2005, the 17<sup>th</sup> International Hydrographic Conference in 2007 approved the text of a revised set of rules, comprising the General and Financial Regulations and the Rules of Procedure, that contained a number of detailed provisions intended to supplement the provisions of the Convention as amended by the Protocol.</p> <p>2. These rules are kept updated through review and revision by Member States and the IHO Secretariat, through the Council and published as a single document (IHO Publication M-1) containing the Convention, the General and Financial Regulations, the Rules of Procedure and the Host Agreement between the Organization and the Government of the Principality of Monaco.</p>			
IHO RESPONSE TO DISASTERS	1/2005 as amended	29/2015	K4.5
<p>Replace "IHB" with "IHO Secretariat".</p>			
HYDROGRAPHY AND CARTOGRAPHY OF NAVIGABLE INLAND WATERS	4/2009		K4.6
<p>Replace "International Hydrographic Bureau (IHB)" with "IHO Secretariat".</p>			
TECHNICAL ASSISTANCE AND COOPERATION IN THE FIELD OF HYDROGRAPHY	2/1972 as amended	35/1996	K4.1
<p>Replace "Articles II and VIII(e)" with "Article II (c)".</p> <p>Replace "IHB" and "Bureau" with "IHO Secretariat".</p>			

Title	Reference	Last amendment (CL or IHC)	1 <sup>st</sup> Edition Reference
<p>Amend clause 3 as follows:</p> <p>The <del>Directing Committee</del> <u>Secretary-General</u> is invited to report annually to Member States through the Council on measures taken regarding the above-mentioned actions.</p>			
TRAINING AND TECHNICAL ASSISTANCE TO DEVELOPING COUNTRIES	4/1977 as amended	17/2008	K4.3
<p>Replace "IHB" with "IHO Secretariat".</p> <p>Delete ", in accordance with Article VIII of the Convention".</p>			
TECHNICAL ASPECTS OF THE LAW OF THE SEA	2/1992 as amended	28/2008	K4.4
<p>Replace "IHB" with "IHO Secretariat".</p>			
THE CAPACITY BUILDING FUND	5/2004 as amended	17/2008	R6.2
<p>Replace "IHB" with "IHO Secretariat".</p>			
PROCEDURES OF THE CAPACITY BUILDING FUND	7/2004 as amended	17/2005	R6.4
<p>Amend clause 1 as follows:</p> <p>1 IHO Member States, preferably through the RHC <del>Chairmen Chairs</del>, shall report to the <del>CBC Chairman</del> <u>of the Capacity Building Sub Committee (CBSC) at via the IHB IHO Secretariat</u>, no later than April each year, on the main capacity building initiatives needing financial support. The needs shall be clearly identified as well as the regional priority assigned.</p> <p>In clauses 2 to 4:</p> <p>Replace "CBC" with "CBSC".</p> <p>Replace "Conference" with "Assembly".</p> <p>Replace "IHB" with "IHO Secretariat".</p> <p>Replace "Capacity Building Committee" with "Capacity Building Sub-Committee".</p>			

**Proposed Procedures for the Preparation of Substantive Amendments to IHO Resolutions**

<b>Title</b>	<b>Reference</b>	<b>Last amendment (CL or IHC)</b>	<b>1<sup>st</sup> Edition Reference</b>
IHO RELATIONS WITH OTHER ORGANIZATIONS	5/1957 as amended	72/2009	T1.2
<p>Purpose: to reflect the prerogatives of the Council in accordance with Article VI g (ix) of the revised Convention.</p> <p>Procedure: Secretary-General to submit a draft revised resolution to the first meeting of the Council.</p>			
QUESTIONS DEALT WITH BY THE BUREAU BY CORRESPONDENCE	1/1969 as amended	43/1970	T2.1
<p>Purpose: to reflect that the references mentioned in article 1 are no longer valid.</p> <p>Procedure: Secretary-General to submit a proposal (a draft revised resolution or revocation) to the first meeting of the Council.</p>			
PROCEDURE FOR ELECTION OF A DIRECTOR BY CORRESPONDENCE	9/1967 as amended	35/1996	T3.1
<p>Purpose: to reflect the change to Secretary-General and Directors and the terms of Article 25 of the new General Regulations.</p> <p>Procedure: Secretary-General to submit a draft revised resolution to the first meeting of the Council.</p>			
PLANNING CYCLE	12/2002 as amended	EIHC 4	T5.1
<p>Replace with the version approved by Decision 4 of the EIHC-4 (see text in Appendix 1).</p>			
TONNAGE FIGURES	5/1972 as amended	35/1996	R2.1
<p>Purpose: to reflect the new provisions of article 6 of the new Financial Regulations.</p> <p>Procedure: Secretary-General to submit a draft revised resolution to the first meeting of the Council.</p>			
HISTORIC RECORD OF THE VALUE OF A SHARE OF IHO CONTRIBUTIONS	9/1937 as amended	IHC 14	R3.1
<p>Noting that the record of the value of the share is provided in the Finance Report to the Conference / Assembly, it is proposed to revoke this resolution.</p>			
EXTERNAL AUDIT - REPORTS	3/2004		R5.3
<p>Noting that the provisions are superseded by article 19 d of the new Financial Regulations, it is proposed to revoke this resolution.</p>			
GUIDING PRINCIPLES FOR IHO FUNDS	1/2014	33/2014	-
<p>Purpose: to take in to account the role of the Council and to reflect the provisions of the revised IHO Staff Regulations if and when approved.</p> <p>Procedure: Secretary-General to submit a draft revised resolution to the first meeting of the</p>			

Title	Reference	Last amendment (CL or IHC)	1 <sup>st</sup> Edition Reference
Council.			
PREPARATIONS FOR INTERNATIONAL HYDROGRAPHIC CONFERENCES	4/1957 as amended	72/2009	S1.1
<p>Purpose: to reflect the new Rules of Procedure of the Assembly and consider extending the scope of the resolution to include preparations for meetings of the Council.</p> <p>Procedure: Secretary-General to submit a draft revised resolution to the first meeting of the Council.</p>			
CHECKING OF PROPOSALS SUBMITTED BY MEMBER STATES	8/1967 as amended	23/1970	S1.3
<p>Purpose: to consider extending the scope of the resolution to incorporate proposals submitted to the Council.</p> <p>Procedure: Secretary-General to submit a draft revised resolution to the first meeting of the Council.</p>			
ADOPTION OF THE CONCLUDING PROCEDURE	1/1965 as amended	IHC 9	S2.3
<p>Purpose: to consider extending the scope to include the meetings of the Council and the Finance Committee.</p> <p>Procedure: Secretary-General to submit a draft revised resolution to the first meeting of the Council.</p>			
POSSIBILITY OF CONSIDERING A WITHDRAWN PROPOSAL	2/1965 as amended	IHC 9	S2.4
<p>Purpose: to consider extending the scope of the resolution to include the meetings of the Council and Finance Committee.</p> <p>Procedure: Secretary-General to submit a draft revised resolution to the first meeting of the Council.</p>			
REGIONAL SCHEMING OF INT CHARTS	2/1982 as amended	CHRIS 20	B5.4
<p>Noting that the provisions of this resolution are superseded by Part A of IHO Publication S-11 - <i>Guidance for the Preparation and Maintenance of International Chart Schemes and Catalogue of International (INT) Charts</i>, it is proposed to revoke this resolution.</p>			
MONITORING OF INT CHARTS	1/1992		B5.5
<p>This resolution is under review by the Inter-Regional Coordination Committee (IRCC) in accordance with Decision No. 2 of the EIHC-5.</p>			
LIMITS OF OCEANS AND SEAS (S-23)	32/1919 as amended	IHC 11	K3.2
<p>This resolution is in abeyance in accordance with Decision No. 10 of the IHC-17.</p> <p>Any revision would be subject to a decision of the Assembly on related proposal(s) noting Decision No. 5 of the EIHC-5.</p>			
GEOGRAPHICAL SEQUENCE OF STATIONS	8/1932 as amended	IHC 9	E2.2

Title	Reference	Last amendment (CL or IHC)	1 <sup>st</sup> Edition Reference
<p>Purpose: to reflect changes to the names of countries listed in the resolution.</p> <p>Procedure: HSSC to include the revision of the resolution in its Work Plan and report to the Council.</p>			
ESTABLISHMENT OF REGIONAL HYDROGRAPHIC COMMISSIONS (RHC)	2/1997 as amended	69/2010	T1.3
<p>Purpose: to ensure consistency with article 8 of the new General Regulations.</p> <p>Procedure: IRCC to include the revision of the resolution in its Work Plan and report to the Council.</p>			



PLANNING CYCLE	12/2002 as amended	EIHC 4	T5.1
----------------	--------------------	--------	------

The Organization shall prepare two plans to guide its work.

The Strategic Plan shall be for an indefinite period, and shall be reviewed at each ordinary session of the Assembly.

The 3-year Work Programme shall look three years ahead, and shall be reviewed annually.

### **Planning Cycle for the Strategic Plan**

Y-12 (Apr): The Secretary-General invites MS, HSSC and IRCC to submit proposals to update the Strategic Plan.

Y-08 (Aug): The Secretary-General circulates proposals on strategic issues to all MS.

Y-05 (Nov): MS provide comments to the Secretary-General in relation to the proposals.

Y-04 (Dec): The Council reviews the comments and drafts a proposal to confirm, amend or revise the Strategic Plan.

Y (Apr): At the Assembly, the Council proposal is discussed, amended and decided upon in Plenary.

Y+02 (Jun): The Secretary-General circulates the updated Strategic Plan to MS.

### **Notes:**

- 1) Rules of Procedure of the Assembly No. 4 and No. 9 apply.
- 2) "Y" means the year of the ordinary session of the Assembly, and the numbers are months before (-) or after (+).

### **Planning Cycle for the 3-year Work Programme**

The 3-year Work Programme will be reviewed on a yearly basis.

Y (Jan): The corresponding Annual Programme enters in force.

Y+04 (Apr): The Council evaluates the accomplishment of the preceding year's Work Programme, and reports to MS, through the "IHO Annual Report", reviews the Work Programme upcoming years, proposing changes (if needed) to the Programme in force and budgetary adjustments issuing from those changes, within the limits of the approved 3-year Budget.

Y+06 (Jun): MS provide the Secretary General with comments and proposals, if any, for changes to the Programme in force.

Y+08 (Aug): The Secretary General submits to the Council for approval the draft Programme and Budget for the upcoming year.

Y+12 (Dec): The Council approves the draft Programme and Budget and the Secretary General issues CL with the final version of the Programme and Budget.

Y+12 (Jan): The corresponding Annual Programme enters into force, and the Cycle is repeated.

During Assembly years, Article V (e) (v) of the Convention will apply and the Council will submit the new Work Programme and associated 3-year budget for the intersessional period 4 months before the opening of the session. The Work Programme and proposed 3-year Budget will be discussed and approved by the Assembly and will enter into force on 1<sup>st</sup> January of the year following the session. Then the Planning Cycle as described above will apply.

Note: "Y" means years.