



**IHB File N° S3/8151/HSSC**

**CIRCULAR LETTER 39/2014  
21 May 2014**

**RE-STRUCTURING OF THE WORKING GROUPS OF  
THE HYDROGRAPHIC SERVICES AND STANDARDS COMMITTEE (HSSC)**

**References:**

- A. XVIII<sup>th</sup> IHC Conference Document CONF.18/REP/01 – Proposed IHO Five-Year Work Programme 2013-2017
- B. IHO CL 08/2014 dated 20 January - *Outcome of the fifth meeting of the Hydrographic Services and Standards Committee (HSSC)*

Dear Hydrographer,

1. As reported in Reference B, the Hydrographic Services and Standards Committee (HSSC) approved in principle, at its 5<sup>th</sup> meeting, a new structure composed of working groups and project teams. The rationale and objectives of the restructuring are summarized in Annex A.
2. The Committee decided the establishment of a correspondence group (CG), composed of the Chairs of HSSC, TSMAD, DIPWG, CSPCWG, SNPWG, TWLWG, SCWG and an IHB representative and open to all Member States, to develop draft terms of reference and rules of procedure, and to consider the composition of the new bodies as well as appropriate and timely transition arrangements.
3. Member States were informed that they would be requested at a later stage to identify their contribution, in terms of resources, to the new structure (action HSSC5/10).
4. The current draft version of the terms of reference and rules of procedure considered by the HSSC Correspondence Group on HSSC Working Groups Restructuring (CGHR) are attached at Annex B. Based on this draft version and on the IHO Work Programme (Reference A), the CGHR has developed the draft work plans of the new HSSC bodies for 2015-2016 attached at Annex C. The current work plan 2014-2015 of the HSSC bodies not affected by the re-structuring is provided at Annex D for ease of reference.
5. The proposed assignment of IHO publications under the responsibility of HSSC bodies in the new structure is provided at Annex E.
6. Member States and HSSC Stakeholders are invited to consider the attached documents and to indicate what would be their level of participation in HSSC and its subsidiary organs, subject to the approval of the new structure and of the relevant work plans.

7. Although the documents in Annex B and C are working documents of the CGHR and are not yet agreed for submission to the HSSC, Member States and HSSC Stakeholders are welcome to provide their comments on the current options that may affect their contribution to the activities of the various bodies.

8. Member States and HSSC Stakeholders are kindly invited to respond to the IHB ([info@iho.int](mailto:info@iho.int)) at their earliest convenience and **no later than 1 July 2014**, using the Response Form at Annex F.

On behalf of the Directing Committee

Yours sincerely,



Gilles BESSERO  
Director

Distribution:

- IHO Member States
- HSSC Stakeholders' Contacts

Copy:

- HSSC Contacts representing IHO Member States

*Note: all the documents are provided in the working language of the CGHR only (English).*

- Annex A: Restructuring of the HSSC Working Groups - Rationale and objectives (11 April 2014)  
Annex B: Draft Terms of Reference and Rules of Procedure for the proposed new HSSC bodies (V2.1)  
Annex C: Draft Work Plans of the proposed new HSSC bodies - 2015-2016 (V1)  
Annex D: Consolidated HSSC Work Plan 2014-2015 - Extract (January 2014)  
Annex E: Proposed assignment of IHO publications under the responsibility of HSSC bodies  
Annex F: Response Form

## **Restructuring of the HSSC working groups**

### **Rationale and objectives**

**Mathias Jonas**

**Chair, HSSC**

**Rostock, 11 April 2014**

### **Preface**

The IHO Convention in force designates as the second of the four objectives of the Organization “the greatest possible uniformity in nautical charts and documents“. There is no doubt that this implies technical standardisation of all products which carry nautical information in any form. The scope of this standardisation is largely influenced by the type of media and dissemination technology for these products. However, neither of those two elements is under the full control of the Organization anymore. Colour print, digital cartography and wireless information transfer are examples of developments which have reset the technical basis for the dissemination of nautical information. All of the IHO various standardisation activities are driven by the mainstream of modern geoinformation technology.

Standardisation always considers current possibilities and anticipates future development - and this must also be so for the rather small domain of nautical information. The main relevant consideration here is that the time of printed charts is over. Though the transition from paper to screen will probably continue over another decade, the standardisation of nautical information must focus on digital means. The global focus, as now seen at national, regional and global levels is digital geoinformation - which must, of course, include 21<sup>st</sup> century hydrographic and nautical charting services.

With the global uptake of digital geoinformation even seafarers get their first familiarization with geoinformation systems on consumer devices based on proprietary standards which have a major influence on all domains. The electronic media which carries nautical information nowadays is technically very complex with a steady tendency to increase. Moreover, it can be easily anticipated that nautical information will become fully absorbed by the look and feel of these emerging technologies.

IHO standardisation must inevitably take account of this tendency, though there is some creative leeway in the provision of nautical Information. This range of specific aspects at the changeover from the thematic interpretation of the basic information into a digital distribution format and their customized presentation requires close collaboration between two sorts of specialists: those with hydrographic background and those with IT engineering background. In the settings of HSSC working groups this synergy is formed by governmental employees with hydrographic background and technical experts representing the industry.

Unlike in the past century, the application of hydrographic knowledge is no longer limited to the support of navigation safety. Many Hydrographic Offices (HOs) are transiting into the role of providers of maritime data for applications beyond ship's navigation, i.e. marine spatial planning and sea bound exploration. The required technical infrastructure (MSDI) accelerates the need for integrating hydrographic information into modern IT environments including GIS applications. This development is essential for many HOs – not least to increase national visibility and claim the required resources in a difficult economic environment. In this context it is worth noting that almost all HOs have difficulties justifying the nomination of staff and active participation in the standardisation process in terms of cost for travelling and hosting. The best justification however, lies with a proven request for IHO standards by the industry servicing shipping, offshore activities, environment protection and by academia facilitating development in these fields.

Any contemporary standardisation activity of the IHO must therefore target the following:

- Monitor the mainstream of geoinformation technology.
- Adapt this technology to the hydrographic domain.
- Attract participation of HOs and industry experts likewise through the development of modern concepts to enhance the national recognition of hydrography and enable profitable business cases.

## **Review of the structure of HSSC working groups**

An efficient overarching structure of the various working groups of HSSC is fundamental to meet these targets. A suitable structure should facilitate focusing the limited resources on the projects of the highest relevance in accordance with the above considerations. It should ideally reflect the competences of the attendees nominated by the HOs, the trends of the industry, the time pressure associated with all developments in the digital age and the interaction between different themes and different domains close to hydrography.

The analysis of the current structure and its efficiency in terms of participation, as presented in HSSC5-04.2A, identified three issues of concern:

- The overall limited participation of Member States (MS): the highest participation of MS does not exceed one third of the current IHO membership (29 MS represented in the CSPCWG) and eight MS contribute for more than half of the total IHO membership (98 participants out of 188).
- The absence or quasi absence of industry participation in three WG involved in the development or maintenance of product standards: CSPCWG, TWLWG and SCWG.
- Additionally, the development of S-100 and S-100 based product specifications broadens the range of expertise required and makes it more difficult to ensure the cohesion and the attractiveness of the WG.

This situation illustrates evidently that:

- The IHO devotes the largest portion of its limited resources to a declining product – the paper chart.
- Active participation is not attractive enough for industry and academia.

The revision of the structure should address those two basic deficiencies.

## **Perception of the proposed new structure**

The discussion within the Correspondence Group on HSSC working groups restructuring (CGHR) established by HSSC-5 can be summarised as follows:

There is wide consensus about a structure of working groups which oversees time-limited sub-working groups or project teams for life cycle maintenance of existing standards and standardised products and the development of new standards and standardised products. This is essential to note for the following reasons:

- It reflects current practice of some of the working groups (e.g. the development of the portrayal part of S-101)
- It attracts industry participation for the defined runtime of a project of special interest to them.
- It facilitates justifying the participation of experts from HOs, industry and academia which are not nominal members of the particular working group.

There is wide consensus to establish the following working groups in accordance with the draft TORs being considered by the CGHR:

- S-100 Working Group
- ENC Standards Maintenance Working Group
- Tides, Water Level and Currents Working Group

and to keep

- MSDIWG
- DQWG
- DPSWG
- HDWG

untouched under the existing TOR for the time being.

There are strong reservations against the merger of CSPCWG and SNPWG into NCIWG.

The establishment of NCIWG aims at reconsidering the organization of IHO chart specifications in relation to digital and paper products in the context of the transition from S-57 based ENC to S-100 based ENC and other products. With the generalization of the use of ECDIS, the development of e-navigation, and the generalization of GIS-based chart production systems, the time has come to consider shifting the underlying framework of chart specifications from paper to digital products. It seems appropriate to reconsider also the separation between nautical charts and nautical publications and to promote an integrated approach for the provision of chart and other geo-referenced nautical information, especially in the context of e-navigation implementation.

The reservations can be summarized as follow:

- The topics of CSPCWG and SNPWG are thematically too distant from each other and therefore there is no synergy.
- CSPCWG with its huge participation is safeguarding S-4 - the core standard of IHO. Any rearrangement would jeopardize this most important work.
- It is not clear what kind of projects the NCIWG will oversee and how its activities will be conducted in practice.
- Since the focus of the future NCIWG does not seem clear it would be difficult to justify participation to the decision-makers.

These reservations warrant the following comments:

- The charting scope under NCIWG will not simply be the continuation of CSPCWG major work under a new label. A complete revision cycle of the most essential Part B of S-4 (2005) will be completed in 2014. Even though there might be some smaller adaptations necessary in the years to come – the mission to modernise paper chart standards for their remaining life time is accomplished. It would no longer be worth devoting most of the IHO resources to this task.
- One reason for the numerically high participation at CSPCWG is the fact that the scope of this working group addresses the prevailing expertise of cartographers. But this situation is about to change: over a twenty-year transition almost all HOs have now acquired impressive staff expertise in geomatics and digital cartography. The next wave of retirement will result in a proportional shift from staff who has got traditional expertise in paper-based charting towards staff with digital background. The simple consequence is that individuals with different expertise will represent HOs at NCIWG.

## How it will work

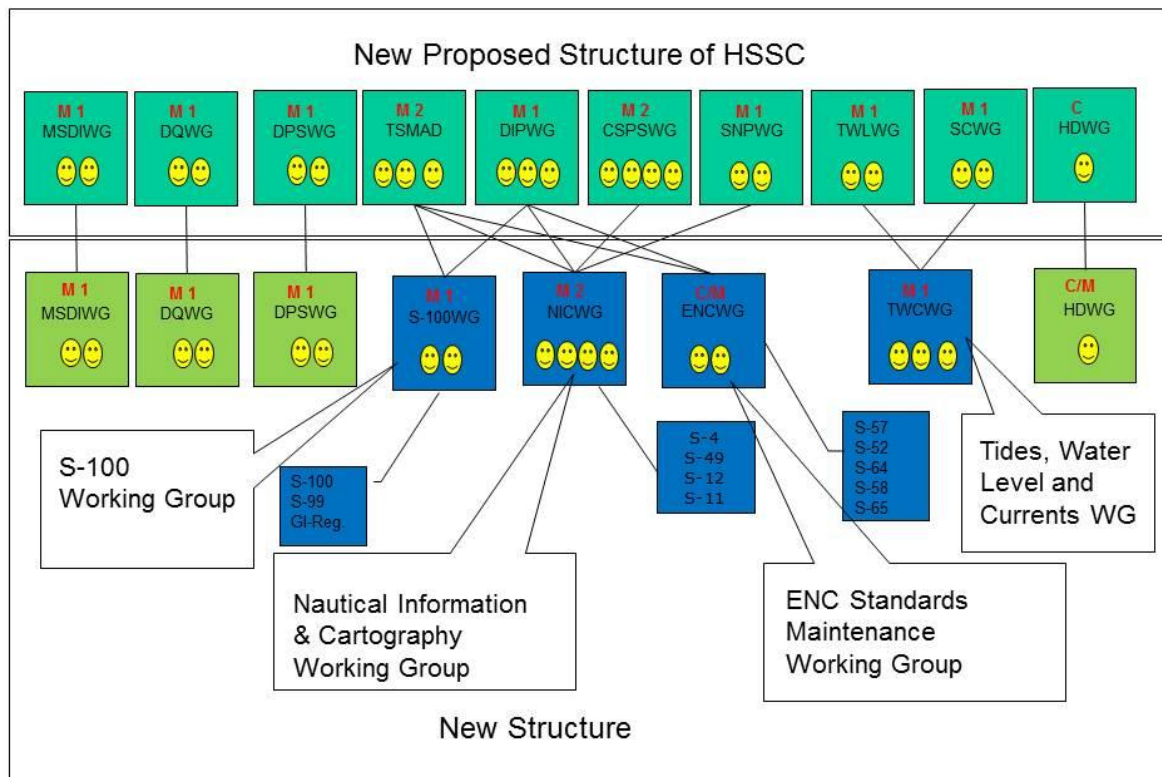
But what will be the scope of NCIWG and how should this group effectively work?

The objectives proposed in the draft TOR of the future NCIWG cover an open range of possible standardisation fields. This is deliberate in order to offer high flexibility for the future challenges of marine geoinformation systems. However, focusing on future development is not exclusive of the maintenance of the current standards. The balance between these two major streams will be managed through the NCIWG work plan which is seen as the main instrument to control the scope and progress of NCIWG activities.

In this arrangement, NCIWG will operate as a steering group, discussing needs for standardisation, initiating projects, establishing and supervising sub-working groups and project teams. The modus operandi for its meetings should be similar to the current working regime of TSMAD: plenary session the first day, followed by a combination of parallel and sequential meetings of NCIWG sub-working groups and/or project teams, and concluded by a final plenary session to review the achieved results and agree on the way forward. The plenary sessions would involve primarily the leaders of the project teams and sub-working groups. The experts could limit their participation to the relevant session of their project team or sub-working group. With attractive projects and focused meetings, it should not be too difficult to convince the Member States and other stakeholders to send the appropriate experts to the relevant sessions, even if that means sending more than one representative to the sequence of meetings.

In summary, the analysis of the available resources, the experience gained with the successful working regime of TSMAD and the expected tasks related to the design of integrated digital products and services advocate for a merger of CSPCWG and SNPWG under TOR which cover a range of standardisation activities congruent with the requirements and expectations of the users. HSSC will keep full surveillance and control by designating projects via the work plan. The new working group will reflect the future of navigation information in an integrated approach and will bring together those who are still used to be separated today. The implementation will require imagination and efforts but there is no better way to respond to the challenge of our generation of hydrographers.

**DRAFT TERMS OF REFERENCE AND RULES OF PROCEDURE  
FOR THE PROPOSED NEW HSSC BODIES  
V2.1**



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## **S-100 Working Group (S-100WG)**

Reference: [x]<sup>th</sup> HSSC Meeting [location, date]

### **1. Objective**

- a) To maintain, develop and extend
  - (i) S-100 - Universal Hydrographic Data Model;
  - (ii) S-99 - Operational Procedures for the Organization and Management of the S-100 Geospatial Information Registry;
- b) To supervise the management and development of the S-100 Geospatial Information Registry;
- c) To advise and support the development and maintenance of S-100-based product specifications in liaison with the relevant IHO bodies and non-IHO entities;
- d) To monitor the development of other relevant international standards.

### **2. Authority**

This WG is a subsidiary of the Hydrographic Services and Standards Committee (HSSC). Its work is subject to HSSC approval.

### **3. Composition and Chairmanship**

- a) The WG shall comprise representatives of IHO Member States (MS), Expert Contributors (EC), observers from accredited NGIO, and a representative of the IHB ("IHB" to be replaced by "IHO Secretariat" when the IHO Secretariat is established). A membership list shall be maintained and posted on the IHO website.
- b) EC membership is open to entities and organizations that can provide a relevant and constructive contribution to the work of the WG.
- c) The Chair and Vice-Chair shall be a representative of a MS. The election of the Chair and Vice-Chair shall be decided at the first meeting after each ordinary session of the Conference (Conference to be replaced by Assembly when the revised IHO Convention enters into force) and shall be determined by vote of the MS present and voting.
- d) If a secretary is required it should normally be drawn from a member of the WG.
- e) If the Chair is unable to carry out the duties of the office, the Vice-Chair shall act as the Chair with the same powers and duties.
- f) ECs shall seek approval of membership from the Chair.
- g) EC membership may be withdrawn in the event that a majority of the MS represented in the WG agrees that an EC's continued participation is irrelevant or unconstructive to the work of the WG.
- h) All members shall inform the Chair in advance of their intention to attend meetings of the WG.
- i) In the event that a large number of EC members seek to attend a meeting, the Chair may restrict attendance by inviting ECs to act through one or more collective representatives.

### **4. Procedures**

- a) The WG should:
  - (i) maintain S-100 as directed in Part 12 (S-100 Maintenance Procedures) and in accordance with IHO Resolution 2/2007 as amended;
  - (ii) maintain S-99 in accordance with IHO Resolution 2/2007 as amended;



- (iii) draft new editions of S-99 and S-100 as instructed by HSSC;
  - (iv) keep under review relevant international standards and specifications and advise HSSC accordingly; and
  - (v) consider new topics as instructed by HSSC and advise HSSC accordingly.
- b) The WG should work by correspondence, teleconferences, group meetings, workshops or symposia. The WG should meet about once a year. When meetings are scheduled, and in order to allow any WG submissions and reports to be submitted to HSSC on time, WG meetings should not normally occur later than nine weeks before a meeting of the HSSC.
  - c) Decisions should generally be made by consensus. If votes are required on issues or to endorse proposals presented to the WG, only MS may cast a vote. Votes at meetings shall be on the basis of one vote per MS represented at the meeting. Votes by correspondence shall be on the basis of one vote per MS represented in the WG.
  - d) The date and venue of group meetings shall normally be announced by the Chair at least six months in advance.
  - e) The draft record of meetings shall be distributed by the Chair (or the secretary) within six weeks of the end of meetings and participants' comments should be returned within three weeks of the date of despatch. Final minutes of meetings should be posted on the IHO website within three months after a meeting.
  - f) Sub-working groups and project teams may be created by the WG or proposed to HSSC to undertake detailed work on specific topics. The terms of reference and rules of procedure of the sub-working groups and project teams are determined or proposed by the WG as appropriate.
  - g) The WG should liaise with other IHO bodies, international organizations and industry to educate on and encourage the application of S-100 to the work of those entities.
  - h) The WG should prepare annually a report on its activities and a rolling two-year work plan, including expected time frame.

## **Nautical Information and Cartography Working Group (NICWG)**

Reference: [x]<sup>th</sup> HSSC Meeting [location, date]

### **1. Objective**

- a) To develop and maintain guidance, resolutions and specifications in order to provide shipboard users the necessary and up-to-date information in a timely manner to allow for the planning of a safe route for the intended voyage and the safeguarding of the ship's navigation throughout the voyage;
- b) To support the development and maintenance of related specifications in liaison with the relevant IHO bodies and non-IHO entities;
- c) To monitor the evolution of the requirements and regulations of marine navigation.
- d) To develop and maintain the relevant IHO publications for which the WG is responsible.

### **2. Authority**

This WG is a subsidiary of the Hydrographic Services and Standards Committee (HSSC). Its work is subject to HSSC approval.

### **3. Composition and Chairmanship**

- a) The WG shall comprise representatives of IHO Member States (MS), Expert Contributors (EC), observers from accredited NGIO, and a representative of the IHB ("IHB" to be replaced by "IHO Secretariat" when the IHO Secretariat is established). A membership list shall be maintained and posted on the IHO website.
- b) EC membership is open to entities and organizations that can provide a relevant and constructive contribution to the work of the WG.
- c) The Chair and Vice-Chair shall be a representative of a MS. The election of the Chair and Vice-Chair shall be decided at the first meeting after each ordinary session of the Conference (Conference to be replaced by Assembly when the revised IHO Convention enters into force) and shall be determined by vote of the MS present and voting.
- d) If a secretary is required it should normally be drawn from a member of the WG.
- e) If the Chair is unable to carry out the duties of the office, the Vice-Chair shall act as the Chair with the same powers and duties.
- f) ECs shall seek approval of membership from the Chair.
- g) EC membership may be withdrawn in the event that a majority of the MS represented in the WG agrees that an EC's continued participation is irrelevant or unconstructive to the work of the WG.
- h) All members shall inform the Chair in advance of their intention to attend meetings of the WG.
- i) In the event that a large number of EC members seek to attend a meeting, the Chair may restrict attendance by inviting ECs to act through one or more collective representatives.

### **4. Procedures**

- a) The WG should:
  - (i) keep under review the relevant IHO publications and resolutions in order to advise HSSC on their updating;
  - (ii) draft or revise guidance documents, resolutions and specifications as appropriate and as instructed by HSSC;

- (iii) advise the IHB (“IHB” to be replaced by “IHO Secretariat” when the IHO Secretariat is established) and the Regional Hydrographic Commissions, as appropriate, on the work of the International Charting Coordination Working Groups (ICCWG) or the Regional Charting Groups (RCG) in order to promote the coordinated production of nautical charts and publications;[ the role of the WG is purely consultative;]
  - (iv) offer advice based on the WG experience on issues relevant to ICCWG/RCG and individual Member States, on chart schemes and on cartographic work, in order to strongly encourage adherence to IHO charting specifications;[ the role of the WG is purely consultative;]
  - (v) keep under review relevant requirements and regulations of marine navigation and advise HSSC accordingly;
  - (vi) monitor the operational performance of IHO specifications, the progress in relevant technologies and navigational equipment , and the feedback from users; and
  - (vii) consider new relevant topics as instructed by HSSC and advise HSSC accordingly.
- b) The WG should work by correspondence, teleconferences, group meetings, workshops or symposia. The WG should meet about once a year. When meetings are scheduled, and in order to allow any WG submissions and reports to be submitted to HSSC on time, WG meetings should not normally occur later than nine weeks before a meeting of the HSSC.
  - c) Decisions should generally be made by consensus. If votes are required on issues or to endorse proposals presented to the WG, only MS may cast a vote. Votes at meetings shall be on the basis of one vote per MS represented at the meeting. Votes by correspondence shall be on the basis of one vote per MS represented in the WG.
  - d) The date and venue of group meetings shall normally be announced by the Chair at least six months in advance.
  - e) The draft record of meetings shall be distributed by the Chair (or the secretary) within six weeks of the end of meetings and participants’ comments should be returned within three weeks of the date of despatch. Final minutes of meetings should be posted on the IHO website within three months after a meeting.
  - f) Sub-working groups and project teams may be created by the WG or proposed to HSSC to undertake detailed work on specific topics. The terms of reference and rules of procedure of the sub-working groups and project teams are determined or proposed by the WG as appropriate.
  - g) The WG should liaise with other IHO bodies, international organizations and industry to ensure the relevance of its work.
  - h) The WG should prepare annually a report on its activities and a rolling two-year work plan, including expected time frame.

## **ENC Standards Maintenance Working Group (ENCWG)**

Reference: [x]<sup>th</sup> HSSC Meeting [location, date]

### **1. Objective**

To maintain IHO standards which apply to ENC production and display:

- (i) S-52 - Specifications for Chart Content and Display Aspects of ECDIS (including its components);
- (ii) S-57 - IHO Transfer Standard for Digital Hydrographic Data (including its components);
- (iii) S-58 - Recommended ENC Validation Checks;
- (iv) S-64 - IHO Test Data Sets for ECDIS.
- (v) S-65 - ENCs: Production, Maintenance and Distribution Guidance

### **2. Authority**

This WG is a subsidiary of the Hydrographic Services and Standards Committee (HSSC). Its work is subject to HSSC approval.

### **3. Composition and Chairmanship**

- a) The WG shall comprise representatives of IHO Member States (MS), Expert Contributors (EC), observers from accredited NGIO, and a representative of the IHB (“IHB” to be replaced by “IHO Secretariat” when the IHO Secretariat is established). A membership list shall be maintained and posted on the IHO website.
- b) EC membership is open to entities and organizations that can provide a relevant and constructive contribution to the work of the WG.
- c) The Chair and Vice-Chair shall be a representative of a MS. The election of the Chair and Vice-Chair shall be decided at the first meeting after each ordinary session of the Conference (Conference to be replaced by Assembly when the revised IHO Convention enters into force) and shall be determined by vote of the MS present and voting.
- d) If a secretary is required it should normally be drawn from a member of the WG.
- e) If the Chair is unable to carry out the duties of the office, the Vice-Chair shall act as the Chair with the same powers and duties.
- f) ECs shall seek approval of membership from the Chair.
- g) EC membership may be withdrawn in the event that a majority of the MS represented in the WG agrees that an EC’s continued participation is irrelevant or unconstructive to the work of the WG.
- h) All members shall inform the Chair in advance of their intention to attend meetings of the WG.
- i) In the event that a large number of EC members seek to attend a meeting, the Chair may restrict attendance by inviting ECs to act through one or more collective representatives.

### **4. Procedures**

- a) The WG should:
  - (i) maintain S-57 by preparing and promulgating maintenance documents containing clarifications, corrections and extensions when required. In the case of issues reported which may be data related, procedure described in Annex 1 must be adhered to;
  - (ii) maintain S-52 and its accompanying Presentation Library by preparing and

promulgating maintenance documents or new editions when required. In the case of issues which may be related to the portrayal of objects according to S-52, the procedure described in Annex 2 must be adhered to;

- (iii) maintain S-58, S-64 and S-65 to ensure consistency with the evolution of S-52 and S-57;
  - (iv) coordinate technical exchange with type-approval authorities, ECDIS manufacturers and ECDIS user community and offer guidance and advice as appropriate; and
  - (v) keep under review the relevant IHO publications and resolutions in order to advise HSSC on their updating.
- b) The WG should work by correspondence, teleconferences, group meetings, workshops or symposia. The WG should meet about once a year. When meetings are scheduled, and in order to allow any WG submissions and reports to be submitted to HSSC on time, WG meetings should not normally occur later than nine weeks before a meeting of the HSSC.
  - c) Decisions should generally be made by consensus. If votes are required on issues or to endorse proposals presented to the WG, only MS may cast a vote. Votes at meetings shall be on the basis of one vote per MS represented at the meeting. Votes by correspondence shall be on the basis of one vote per MS represented in the WG.
  - d) The date and venue of group meetings shall normally be announced by the Chair at least six months in advance.
  - e) The draft record of meetings shall be distributed by the Chair (or the secretary) within six weeks of the end of meetings and participants' comments should be returned within three weeks of the date of despatch. Final minutes of meetings should be posted on the IHO website within three months after a meeting.
  - f) Sub-working groups and project teams may be created by the WG or proposed to HSSC to undertake detailed work on specific topics. The terms of reference and rules of procedure of the sub-working groups and project teams are determined or proposed by the WG as appropriate.
  - g) The WG should liaise with other IHO bodies, international organizations and industry to ensure the relevance of its work and timely notice of changes to the standards.
  - h) The WG should prepare annually a report on its activities and a rolling two-year work plan, including expected time frame.

**Annex 1: Procedure for addressing S-57 data related issues**

(to be derived from Annex 1 to TSMAD TOR)

**Annex 2: Procedure for addressing S-52 portrayal issues**  
(to be derived from Annex 1 to DIPWG TOR)

## **Tides, Water Level and Currents Working Group (TWCWG)**

Reference: [x]<sup>th</sup> HSSC Meeting [location, date]

### **1. Objective**

- a) To provide technical advice and coordination on matters related to tides, water levels, currents and vertical datum, including integrated water level/current data models.
- b) To support the development and maintenance of related specifications in liaison with the relevant IHO bodies and non-IHO entities;
- c) To develop and maintain the IHO publications for which it is responsible.

### **2. Authority**

This WG is a subsidiary of the Hydrographic Services and Standards Committee (HSSC). Its work is subject to HSSC approval.

### **3. Composition and Chairmanship**

- a) The WG shall comprise representatives of IHO Member States (MS), Expert Contributors (EC), observers from accredited NGIO, and a representative of the IHB (“IHB” to be replaced by “IHO Secretariat” when the IHO Secretariat is established). A membership list shall be maintained and posted on the IHO website.
- b) EC membership is open to entities and organizations that can provide a relevant and constructive contribution to the work of the WG.
- c) The Chair and Vice-Chair shall be a representative of a MS. The election of the Chair and Vice-Chair shall be decided at the first meeting after each ordinary session of the Conference (Conference to be replaced by Assembly when the revised IHO Convention enters into force) and shall be determined by vote of the MS present and voting.
- d) If a secretary is required it should normally be drawn from a member of the WG.
- e) If the Chair is unable to carry out the duties of the office, the Vice-Chair shall act as the Chair with the same powers and duties.
- f) ECs shall seek approval of membership from the Chair.
- g) EC membership may be withdrawn in the event that a majority of the MS represented in the WG agrees that an EC’s continued participation is irrelevant or unconstructive to the work of the WG.
- h) All members shall inform the Chair in advance of their intention to attend meetings of the WG.
- i) In the event that a large number of EC members seek to attend a meeting, the Chair may restrict attendance by inviting ECs to act through one or more collective representatives.

### **4. Procedures**

- a) The WG should:
  - (i) monitor and develop the use of tidal, water level and current information including integrated water level/current data models;
  - (ii) advise on the use of vertical datums;
  - (iii) advise on tidal, water level and current observation, analysis and prediction;
  - (iv) advise on matters concerning exchange, distribution and use of tidal, water level and current related data/information;
  - (v) study principles and methods for conveying tidal, water level and current



- information to mariners and other users;
  - (vi) keep under review the relevant IHO publications and resolutions in order to advise HSSC on their updating;
  - (vii) draft or revise guidance document(s), resolutions and specifications as appropriate and as instructed by HSSC; and
  - (viii) consider new related topics as instructed by HSSC and advise HSSC accordingly.
- b) The WG should work by correspondence, teleconferences, group meetings, workshops or symposia. The WG should meet about once a year. When meetings are scheduled, and in order to allow any WG submissions and reports to be submitted to HSSC on time, WG meetings should not normally occur later than nine weeks before a meeting of the HSSC.
  - c) Decisions should generally be made by consensus. If votes are required on issues or to endorse proposals presented to the WG, only MS may cast a vote. Votes at meetings shall be on the basis of one vote per MS represented at the meeting. Votes by correspondence shall be on the basis of one vote per MS represented in the WG.
  - d) The date and venue of group meetings shall normally be announced by the Chair at least six months in advance.
  - e) The draft record of meetings shall be distributed by the Chair (or the secretary) within six weeks of the end of meetings and participants' comments should be returned within three weeks of the date of despatch. Final minutes of meetings should be posted on the IHO website within three months after a meeting.
  - f) Sub-working groups and project teams may be created by the WG or proposed to HSSC to undertake detailed work on specific topics. The terms of reference and rules of procedure of the sub-working groups and project teams are determined or proposed by the WG as appropriate.
  - g) The WG should liaise with other IHO bodies, international organizations and industry to ensure the relevance of its work.
  - h) The WG should prepare annually a report on its activities and a rolling two-year work plan, including expected time frame.

## **Generic terms of reference and rules of procedure for HSSC Project Teams**

Reference: [x]<sup>th</sup> [WG name/HSSC] Meeting [location, date]

### **1. Objective**

To [develop / revise / extend / ...] ... (*name of standards, publication, or product specification*).

### **2. Authority**

This Project Team is a subsidiary of the ... (*name of WG or Committee*). Its work is guided by the work plan established by ... (*acronym of the WG or Committee*) and subject to its approval.

### **3. Composition and Chairmanship**

- a) The Project Team shall comprise representatives of IHO Member States (MS), Expert Contributors (EC) and observers from accredited NGIO. The IHB may be represented ("IHB" to be replaced by "IHO Secretariat" when the IHO Secretariat is established). A membership list shall be maintained and posted on the IHO website.
- b) EC membership is open to entities and organizations that can provide a relevant and constructive contribution to the work of the Project Team.
- c) The Chair is designated by the parent body.
- d) If a secretary is required it should normally be drawn from a member of the Project Team.
- e) ECs shall seek approval of membership from the Chair.
- f) EC membership may be withdrawn in the event that a majority of the members in the Project Team agrees that an EC's continued participation is irrelevant or unconstructive to the work of the Project Team.

### **4. Procedures**

- a) The Project Team should work primarily by correspondence and teleconferences, although face to face meetings at the project start, and at other significant milestones, may be convenient when held in conjunction with another convenient IHO forum.
- b) Decisions should be made by consensus. Dissenting opinions if any should be reflected in the Project Team report.
- c) The Project Team should liaise with other IHO bodies, international organizations and industry to ensure the relevance of its work.
- d) The Project Team should report in accordance with its work plan.

**DRAFT WORK PLANS OF THE PROPOSED NEW HSSC BODIES - 2015-2016**  
**V1 (revised draft for the consultation of Member States)**

*Notes:*

1. *The IHO Task numbers refer to the draft work programme for 2015 circulated to the Chairs and Vice-Chairs of IHO bodies.*
2. *The schedule of meetings beyond 31 December 2014 will be considered under the work item of the CGHR dealing with transition arrangements.*

**S-100WG WORK PLAN 2015-16**

**Objective**

- a) To maintain, develop and extend
  - (i) S-100 - Universal Hydrographic Data Model;
  - (ii) S-99 - Operational Procedures for the Organization and Management of the S-100 Geospatial Information Registry;
- b) To supervise the management and development of the S-100 Geospatial Information Registry;
- c) To advise and support the development and maintenance of S-100-based product specifications in liaison with the relevant IHO bodies and non-IHO entities;
- d) To monitor the development of other related international standards.

**Tasks**

A	Maintain and extend S-100 “IHO Universal Hydrographic Data Model” (IHO Task 2.2.2.2)
B	Maintain and extend S-99 “Operational Procedures for the Organization and Management of the S-100 Geospatial Information Registry” (IHO Task 2.2.2.9)
C	Maintain and extend the S-100 GI Registry (IHO Task 2.2.4)
D	[Supervise/Advise] and support the development and maintenance of S-100-based product specifications
E	Monitor the development of other related international standards
F	Provide outreach and technical assistance regarding the implementation of S-100 (IHO Task 2.2.5)
G	Maintain the S-100 section of the IHO website (IHO Task 2.2.2)
H	Conduct the 2015 and 2016 meetings of the S-100WG and its sub-group(s) and project team(s) (IHO Task 2.2.1)

Work item	Title	Priority H-high M-medium L-low	Next milestone	Start Date	End Date	Status P-planned O-ongoing C-completed S-Superseded	Contact Person(s)	Related Pubs / Standard	Remarks
A.1	Develop S-100 Edition 2.0.0	M		2010	2015	O	Barrie Greenslade (UKHO)		
A.2	Investigate a suitable grid referencing system for S-100	L		2010		P	Tony Pharaoh (IHB)		
D.1	Review the S-100 Master Plan annually	H	HSSC-7 & 8	2013	Permanent	O	Barrie Greenslade (UKHO)	S-100	Include monitoring the need to revise existing S-100-based PS (e.g. S-102) and or to develop new S-100-based PS.
D.2	Review the S-101 Value Added Roadmap annually	H	HSSC-7 & 8	2013	Permanent	O	Julia Powell (NOAA)	S-101	
D.2	Develop a template Product Specification for Marine Information Overlays (MIO)	M	HSSC-7	2010	2015	O	Barrie Greenslade (UKHO)		
D.3	Develop 1 <sup>st</sup> draft of S-101 ENC product specification	H		2006	2015	O	Julia Powell (NOAA)		S-100 WG to consider whether a S-101 Project Team should be established
D.4	Monitor the implementation of the 1 <sup>st</sup> draft of S-101 ENC product specification	H		2015		P			
E.1	Monitor the development of other related international standards	M				P			
F.1	Liaise with IHO subsidiary bodies and subordinate organs, e.g. WWNWS-SC, [NICWG], [ENCWG], etc.								Establish joint project teams as required

Work item	Title	Priority H-high M-medium L-low	Next milestone	Start Date	End Date	Status P-planned O-ongoing C-completed S-Superseded	Contact Person(s)	Related Pubs / Standard	Remarks
F.2	Liaise with non-IHO constituents, e.g. IALA E-nav Committee, IEHC, JCOMM Expert Teams, DGIWG, ISO, marine navigation and GIS industry, etc.	H		2004	Permanent	O	Barrie Greenslade (UKHO)		
G.1	Maintain the S-100 section of the IHO website	H		2003	Permanent	O	Jeff Wooton (AHS)		

#### Meetings (Task H)

Date	Location	Activity
31 Mar-4 Apr 2014	Sydney, Australia	TSMAD-28 / DIPWG 6
2015 (TBD)	TBD	S-100WG-1
2016 (TBD)	TBD	S-100WG-2

Chair: TBD  
Vice Chair: TBD  
Secretary: TBD

Email:  
Email:  
Email:

## **[NICWG] WORK PLAN 2015-16**

### **Objective**

- a) To develop and maintain guidance and specifications for the provision to shipboard users of the necessary and up-to-date information in a timely manner to plan a safe route for the intended voyage and safeguard the ship's navigation throughout the voyage;
- b) To support the development and maintenance of related specifications in liaison with the relevant IHO bodies and non-IHO entities;
- c) To monitor the evolution of the requirements and regulations of marine navigation.
- d) To develop and maintain the IHO publications for which it is responsible.

### **Tasks**

A	Maintain Publication S-4 "Chart Specifications of the IHO & Regulations of the IHO for INT Charts" (IHO Task 2.3.2.1)
B	Maintain S-4 supplementary publications INT 1, 2 & 3 (IHO Tasks 2.3.2.2, 2.3.2.3, 2.3.2.4)
C	Maintain Publication S-11 Part A "Guidance for the Preparation and Maintenance of INT Chart schemes" (IHO Task 2.3.2.5)
D	Maintain Publication S-12 "Standardization of List of Lights and Fog Signals" (IHO Task 2.6.3.2)
E	Maintain Publication S-49 "Recommendations concerning Mariners' Routeing Guides" (IHO Task 2.3.2.7)
F	Establish and monitor, in liaison with the S-100WG, the project teams required to specify and develop nautical information layers for use in ECDIS (IHO Task 2.6.2)
G	Develop high level specifications for a combined Marine Service Portfolio (MSP) covering the provision of hydrographic services to mariners in accordance with the IMO e-navigation strategy implementation plan
H	Develop a test and implementation plan for the development of the MSP "hydrographic services"
I	Maintain IHO Resolutions in M-3 relating to Nautical Charts and Nautical Publications as required (IHO Task 2.6.3.1)
J	Liaise with other HSSC WGs and other IHO and international bodies
K	Conduct the 2015 and 2016 meetings of the [NICWG] and its sub-group(s) and project team(s) (IHO Tasks 2.3.1 and 2.6.1)

Work item	Title	Priority H-high M-medium L-low	Next Milestone	Start Date	End Date	Status P-Planned O-Ongoing C-Completed S-superseded	Contact Person(s)	Related Pubs / Standard	Remarks
A.1	Monitor and assess proposals for amending S-4	H			Permanent	O			
A.2	Investigate enhancing the appearance of traditional chart symbols for use in multi-layered integrated systems	M		2009	-	P	Colby Harmon	S-4 S-52	
B.1	Plan and monitor the next editions of official INT 1s	M		2013	2015?	O	DE: S Spohn FR: S Guillou ES: A Guitart	INT 1	English version 2011 (Ed 7) French version 2012 (Ed 5) Spanish version 2011 (Ed 4) Consider the articulation with a repertory of ENC symbols
B.2	Symbols for vacant entries in INT 1	L		2014		P	Sec NICWG	INT 1, S-4 part B	Consider subsuming into B.3
B.3	Monitor the reorganization of INT 1 to exclude composite symbols	L	Next round of NEs of INT1? Discuss at CSPCWG10 (11.2)	2013	2015?	O	INT1 sub-WG	INT1	CSPCWG9 Action 31
C.1	Monitor and assess proposals for amending S-11	H			Permanent	O			
C.2	Provide advice to ICCWGs, RHCs and Member States as required	H			Permanent	O			
D.1	Monitor and assess proposals for amending S-12	M			Permanent				In close liaison with IALA; see J.4

F.1	Assess the progress and perspectives of developing specifications for NP data layers in ECDIS and propose the way forward for consideration by HSSC	H							To be considered in the context of the IMO e-navigation strategy implementation plan (subject to the outcome of NCSR 1). NICWG to consider establishing one or more project team(s) in liaison with S-100WG as required (see J.2), in particular to continue the development of Product Specifications currently assigned to the SNPWG.
G.1	Monitor the requirements for and provision of nautical chart data and nautical information in e-navigation test-beds	M							
G.2	Initiate consideration of the architecture of the MSP “hydrographic services”	M		2013		P	Chair NICWG		To be considered in the context of the IMO e-navigation strategy implementation plan (subject to the outcome of NCSR 1) .
G.3	Consider the future of paper charts in the perspective of the establishment of MSPs	M		2014					
I.1	Maintain and extend resolutions in M-3 relating to Nautical Charts and Nautical Publications	M		2012	Permanent	O	Chair/Sec NICWG	M-3	
J.1	Liaise with the [ENCWG]	H			Permanent	O	Chair/Sec NICWG		
J.2	Liaise with the S-100WG	H			Permanent	O	Chair/Sec NICWG		Establish joint project teams as required
J.3	Liaise with other HSSC WG	H		2004	Permanent	O	Chair/Sec NICWG		Including DPSWG, DQWG, TWCWG, etc.
J.4	Liaise with IALA e-Nav Committee	H		2013	Permanent	O	Chair/Sec NICWG		As advised by HSSC4 (in liaison with S-100WG).



### Meetings (Task K)

Date	Location	Activity
21-24 Jan 2014	Wellington, New Zealand	CSPCWG 10
7-11 Apr 2014	Rostock, Germany	SNPWG 17
1-4 Dec 2014	Cadiz, Spain	SNPWG 18
2015 (TBD)	TBD	[NICWG]-1
2016 (TBD)	TBD	[NICWG]-2

Chair: TBD  
Vice Chair: TBD  
Secretary: TBD

Email:  
Email:  
Email:

## **[ENCWG] WORK PLAN 2015-16**

### **Objective**

To maintain IHO standards which apply to ENC production and display:

- (i) S-52 - Specifications for Chart Content and Display Aspects of ECDIS (including its components);
- (ii) S-57 - IHO Transfer Standard for Digital Hydrographic Data (including its components);
- (iii) S-58 - Recommended ENC Validation Checks;
- (iv) S-64 - IHO Test Data Sets for ECDIS.
- (v) S-65 - ENCs: Production, Maintenance and Distribution Guidance

### **Tasks**

A	Maintain S-52 “Specifications for Chart Content and Display Aspects of ECDIS” and its associated “Presentation Library” (IHO Task 2.3.2)
B	Maintain S-57 “IHO Transfer Standard for Digital Hydrographic Data” (IHO Task 2.2.2)
C	Maintain S-58 “Recommended ENC validation checks” (IHO Task 2.2.2)
D	Maintain S-61 “Product Specification for Raster Navigational Charts” (IHO Task 2.2.2)
E	Maintain S-64 “IHO Test Data Sets for ECDIS” (IHO Task 2.2.2)
F	Maintain S-65 “ENC Production, Maintenance and Distribution Guidance” (IHO Task 2.2.2)
G	Assess the impact of other IHO standards on S-52 display specifications
H	Liaise with the [NICWG] (IHO Task 2.3.2)
I	Maintain the ENC production and portrayal sections of the IHO website (IHO Task 2.2.2 & 2.3.2)
J	Conduct the 2015 and 2016 meetings of ENCWG] and its sub-group(s) and project team(s) (IHO Task 2.2.1)

Work item	Title	Priority H-high M-medium L-low	Next milestone	Start Date	End Date	Status P-planned O-ongoing C-completed S-Superseded	Contact Person(s)	Related Pubs / Standard	Remarks
A.1	Resolve any problems or errors identified in the current editions of S-52 and its Presentation Library	H		2009	Permanent	O	Colby Harmon Tom Mellor	S-52	
B.1	Resolve any problems or errors identified in the current edition of S-57	H		2011		O			
C.1	Monitor the implementation of the new edition of S-58	H							
C.2	Resolve any problems or errors identified in the current edition of S-58	H		2003	Permanent	O	Richard Fowle (UKHO)		
E.1	Resolve any problems or errors identified in the current edition of S-64	H							
F.1	Monitor and assess proposals for amending S-65	H			Permanent				
H.1	Liaise with the [NICWG]	H							
I.1	Maintain the ENC production and portrayal sections of the IHO website	H		2003	Permanent	O	Jeff Wooton Barrie Greenslade Colby Harmon ADCS		Include posting EBs and PBs

### Meetings (Task J)

Date	Location	Activity
31 Mar-4 Apr 2014	Sydney, Australia	TSMAD-28 & DIPWG-6
2015 (TBD)	TBD	[ENCWG]-1
2016 (TBD)	TBD	[ENCWG]-2

Chair: TBD  
Vice Chair: TBD  
Secretary: TBD

Email:  
Email:  
Email:

DRAFT

## TWCWG WORK PLAN 2015-16

### Objective

- a) To provide technical advice and coordination on matters related to tides, water levels, currents and vertical datum.
- b) To support the development and maintenance of related specifications in liaison with the relevant IHO bodies and non-IHO entities;
- c) To develop and maintain the IHO publications for which it is responsible.

### Tasks

A	Maintain the list of standard tidal constituents (IHO Task 2.7.2.3)
B	Develop and maintain a standard for digital tide tables (IHO Task 2.7.3)
C	Prepare and maintain an inventory of tide gauges used by Member States and publish it on the IHO/TWLWG web site (IHO Task 2.7.2.4)
D	Compare the tidal predictions generated as a result of analysis of a common data set using different analysis software
E	Review feedback of on-line real time water level observation document
F	Develop and maintain a standard for the transmission of real-time tidal data (IHO Task 2.7.4)
G	Develop and maintain a product specification for the transmission of real-time surface current data (S-111 - IHO Task 2.13.3)
H	Develop and maintain a product specification for dynamic application of navigationally significant surface currents in ECDIS (IHO Task 2.13.4)
I	Develop and maintain a product specification for dynamic application of tides in ECDIS (IHO Task 2.7.5)
J	Liaise with industry experts on the development of product specifications for tides and currents (IHO Tasks 2.7.2 and 2.13.2)
K	Liaise with S-100WG on tidal and current matters relevant to ECDIS and GIS applications (IHO Tasks 2.7.4, 2.7.5, 2.13.3 and 2.13.4)
L	Maintain IHO Resolutions in M-3 relating to tides, water levels and currents as required (IHO Tasks 2.7.2.1 and 2.13.2.1)
M	Develop and maintain material for course on tides and tidal streams
N	Conduct the 2015 and 2016 meetings of TWCWG and its sub-group(s) and project team(s) (IHO Tasks 2.7.1 and 2.13.1)

Work item	Title	Priority H-high M-medium L-low	Next milestone	Start Date	End Date	Status P-planned O-ongoing C-completed S-Superseded	Contact Person(s)	Related Pubs / Standard	Remarks
A.1	Maintain the list of standard tidal constituents	M		-	Permanent	O	Chris Jones*		
A.2	Compare the tidal predictions generated as a result of analysis of a common data set using different analysis software.	H				O	Stephen Gill* All		Select Common data set Analyze using different software Predict common set of tides Compare results
C.1	Maintain an inventory of tide gauges used by Member States and publish it on the IHO/TWCWG web site.	H		-	Permanent	O	David Wyatt* All		Initial inventory from TWCWG members available on IHO web site.
F.1	Develop and maintain a standard for the transmission of real-time tidal data	H				O	Chris Jones* All		Liaise with S-100WG (see K.1)
G.1	Develop and maintain a product specification for the transmission of real-time surface current data (S-111)	H							Liaise with S-100WG (see K.1)
H.1	Develop and maintain a product specification for dynamic application of navigational significant surface currents in ECDIS	H							Liaise with S-100WG (see K.1)

Work item	Title	Priority H-high M-medium L-low	Next milestone	Start Date	End Date	Status P-planned O-ongoing C-completed S-Superseded	Contact Person(s)	Related Pubs / Standard	Remarks
I.1	Develop and maintain a product specification for dynamic application of tides in ECDIS	H	Prepare draft Product Specifications (S-1**) for tidal data in S-100.  Prepare draft portrayal model for tidal data in S-100.			O	Zarina Jayaswal* Glen Rowe Bill Mitchell Kwang-nam Han  Stephen Gill* Bill Mitchell Zarina Jayaswal		Liaise with S-100WG (see K.1)
J.1	Liaise with industry experts on the development of product specifications for tides and currents	H				O	All		
K.1	Liaise with S-100WG on tidal and current matters relevant to ECDIS applications	H				O	Gwenaële Jan Kurt Hess		Establish joint project teams as required.
M.1	Develop and maintain material for course on tides and tidal streams	H	Adapt currently available course material to create a course suitable for delivery in support of CBSC requests.	2013	2015	O	Stephen Gill* Bill Mitchell Ruth Farre		

### Meetings (TaskN)

Date	Location	Activity
25-28 Mar 2014	Wollongong, Australia	TWLWG-6
3-5 Jun 2014	Quebec City, Canada	SCWG-2
2015 (TBD)	TBD	TWCWG-1
2016 (TBD)	TBD	TWCWG-2

Chair: TBD  
Vice Chair: TBD  
Secretary: TBD

Email:  
Email:  
Email:



## [Project Team] WORK PLAN 2015-16

### Objective

- a) To ...
- b) To ...

### Tasks

A	
B	
C	
D	

Work item	Title	Priority H-high M-medium L-low	Next milestone	Start Date	End Date	Status P-planned O-ongoing C-completed S-Superseded	Contact Person(s)	Related Pubs / Standard	Remarks

### Meetings (Task ??)

Date	Location	Activity

Chair: TBD  
Vice Chair: TBD  
Secretary: TBD

Email:  
Email:  
Email:

**CONSOLIDATED HSSC WORK PLAN 2014-2015**

January 2014

Note: This consolidated WP has been compiled from the WG reports to HSSC-5, plus the ABLOS report. Decisions from HSSC-5 have been taken into account.

**Objective:**

This work plan aims at ensuring efficient project resource management and alignment, progress monitoring and to provide a communication utility with internal and external parties.

**Rationale:**

The justification for the HSSC Work Plan is in conformance with the IHO Strategic Plan, and mainly related to the following elements of the IHO Work Programme – 2013-2017:

- Element 2.1 Technical Programme Coordination
- Element 2.2 Hydrographic Data Transfer Standards
- Element 2.3 Nautical Cartography
- Element 2.4 Digital Data Protection and Authentication
- Element 2.5 Data Quality
- Element 2.6 Nautical Publications
- Element 2.7 Tides and Datums
- Element 2.8 Digital Data Updating
- Element 2.9 Marine Spatial Data Infrastructures
- Element 2.10 Hydrographic Data Acquisition and Processing
- Element 2.11 Hydrographic Dictionary
- Element 2.12 Hydrographic Aspects of UNCLOS
- Element 2.13 Surface Current

**Revisions:**

Chairs of each working group, along with the HSSC Chair, will meet prior to each HSSC meeting to review progress, and to harmonize the work plan.

**Approval:**

Once revised, the work plan will be approved by the HSSC plenary at each annual meeting. WG Chairs will present an updated WP on the last day of HSSC meetings, incorporating the agreed changes discussed during that meeting. Completed work items should be removed from WPs after they have been reported at a subsequent HSSC meeting. A revised consolidated HSSC Work Plan (WP) incorporating all approved additional WP items will be circulated to participants of the meeting for final comment at the same time as the draft minutes of the meeting. HSSC Chair could seek committee members' interim approval for emerging issues between meetings.

**Communications:**

The HSSC Work Plan will be posted on the IHO website, and a progress summary will be provided at IHO Conferences.

**Project Numbering:**

Each task will be given a sequential number independent of related working group. The related IHO Work Programme Element number and the specific HSSC meeting that approved the inclusion of the task will be identified in the HSSC Work Plan summary. Each WG sub task will be numbered using an alphanumeric sequence, "An, Bn, Cn.."

**Priorities:**

Three Levels of Priorities (H, M, and L) will be assigned by HSSC using the "Guidelines for the Evaluation of Proposed New Work Items for HSSC and its Subordinate Bodies" (see section 1 hereafter).

## 5. DPSWG WORK PLAN 2014-15

- Objectives, Tasks and Work Items are pursued in accordance with IHO Work Programme 2013-2017, Programme 2 (Services and Standards):
- The focus is
  - Support for existing scheme including upgrade to latest version
  - Development of new standard
- As a Plan it will and should evolve; accordingly, contributions from WG members and others are welcomed at any time.

### 5.1 DPSWG Tasks

A	Provide technical and operational support to Data Servers and OEMs developing or operating systems or services compliant with S-63 (IHO Task 2.4.2 refers)
B	Maintain and extend S-63 "IHO Data Protection Scheme" and produce new edition of S-63 to complement S-101 (IHO Task 2.4.2 refers)
C	Maintain and extend data protection and authentication related elements of S-100 "IHO Universal Hydrographic Data Model" (IHO Task 2.4.2 refers)
D	Maintain and extend data protection and authentication related elements of S-101 "ENC Product Specification" (IHO Task 2.4.2 refers)
E	Conduct the 2013 meeting of DPSWG (Task 2.4.1 refers)

Work item	Title	Priority H-high M-medium L-low	Next milestone	Start Date	End Date	Status P-planned O-ongoing C-completed S-superseded	Contact Person(s)	Related Pubs / Standard	Remarks
A.1	Maintain and extend Publication S-63	H		-	Permanent	O	Jonathan Pritchard (UKHO)	S-63, S-64	
B.1	Provide S-63 technical and operational support to Data Servers and OEMs	H		01.08.03	Permanent	O	Jonathan Pritchard (UKHO)		
D.1	Engage stakeholders in drafting of new edition of S-63 to support S-101 development	M		01.09.10	Feb 2014	O	Jonathan Pritchard (UKHO)	DPSWG Work Plan	
C.1	Develop a more detailed work plan for future standards relating to Data Protection and Security of ENC data.	M		01.10.08	Feb 2014	O	Jonathan Pritchard (UKHO)	S-63	
E.1	Support transition to latest edition of S-63 (1.1)	H		01.10.13	1 Jan 2014	O	Jonathan Pritchard (UKHO)	S-63	

## 5.2 DPSWG Meetings (Task E)

Date	Location	Activity
17-18 Feb 2011	IHB Monaco	S-63 Workshop + DPSWG 8
18-20 Feb 2013	IHB Monaco	DPSWG 9
Apr 2014	IHB Monaco	DPSWG 10

Chairman: Jonathan PRITCHARD, UK      Email: [Jonathan.Pritchard@ukho.gov.uk](mailto:Jonathan.Pritchard@ukho.gov.uk)  
Vice Chairman: Robert SANDVIK, Norway      Email: [Robert.Sandvik@ecc.no](mailto:Robert.Sandvik@ecc.no)  
Secretary: Anthony PHARAOH, IHB      Email: [addt@iho.int](mailto:addt@iho.int)

## 8. DQWG WORK PLAN 2014-15

### 8.1 DQWG Tasks

A	Review ISO 19113, Geographic Information-Quality Principles, ISO 19114, Geographic Information-Quality Evaluation Procedures, and ISO 19115, Geographic Information - Metadata and propose relevant enhancements and amendments for incorporation in S-100 "IHO Universal Hydrographic Data Model" (IHO Task 2.5.2)
B	Monitor and further develop quality indicators for hydrographic data (IHO Task 2.5.2)
C	Maintain and extend as needed existing quality indicators in S-57 "IHO Transfer Standard for Digital Hydrographic Data", including the education of both the mariner and the cartographer, and the development of documentation (IHO Task 2.5.2)
D	Maintain and extend as needed the presentation of data quality, as provided in S-52 "Specifications for Chart Content and Display Aspects of ECDIS" and its Presentation Library (IHO Task 2.5.2)
E	Investigate ways of ensuring that ECDIS displays provide a clear warning or indication to the mariner on the quality of the underlying survey data, through appropriate use of the attribute CATZOC and/or improvement of the existing display capabilities (IHO Task 2.5.2)
F	Propose new data quality topics and other applications for consideration by HSSC (IHO Task 2.5.2)
G	Maintain and extend data quality related elements of S-100 "IHO Universal Hydrographic Data Model" (IHO Task 2.5.2)
H	Maintain and extend data quality related elements of S-101 "ENC Product Specification" and other S-100-based Product Specifications (IHO Task 2.5.2)
I	Conduct the annual meetings of DQWG (IHO Task 2.5.1)

Work Item	Title	Priority H-High M-Medium L-Low	Next Milestone	Start Date	End Date	Status P-Planned O-Ongoing C-Completed S-superseded	Contact Person(s)	Related Pubs / Standards	Remarks
A.1	Review ISO 19113, 19114, 19115 and 19157 and make recommendations for inclusion in S-100	M		2010	Permanent	O	DQWG	S-100	Ongoing task to keep S-100 data quality in line with ISO standards.
B.4	Develop the hierarchy approach by formalizing the hierarchy and the algorithm that drive the display	H	TSMAD 27	2013	2014	O	Mike Prince	S-101	To be completed for submission to TSMAD 28.

Work Item	Title	Priority H-High M-Medium L-Low	Next Milestone	Start Date	End Date	Status P-Planned O-Ongoing C-Completed S-superseded	Contact Person(s)	Related Pubs / Standards	Remarks
C.4	Investigate possible methods for how to educate practicing mariners on data quality issues.	H	DQWG8	2010	2015	O	DQWG		Investigate in liaison with training institutions the adequacy of existing HOs' documentation on the quality aspects of the practical use of ENCs. IHO CL 51/2013 issued on this topic. To include the recommendations of HSSC5-INF4, interface with IMO/HTW (Action HSSC5/45 refers).
E.1	Develop logic for indicators in current and proposed approaches.	H	DQWG8	2010	2014	O	Mike Prince	-	To be completed for submission to TSMAD 28.
E.2	Demonstrate methods to mariners.	H	Follows S-100 demonstrator	2012	2014	O	DQWG	S-101	Build possible methods into ENC and ECDIS to demonstrate effectiveness.
E.3	Demonstrate methods to mariners	H	Follows E.1	2014	2015	P	C Howlett		Consider using the Singapore Strait Marine Electronic Highways (MEH) project as a test case (Action HSSC5/47 refers).
F.1	Investigate areas of quality concern (other than survey / bathymetry)	M	DQWG8	2010	Permanent	O	Eivind Mong	-	SNPWG has responded, liaison is ongoing.
H.1	Establish contact with other working groups to investigate scope of data quality items for the S-10x standards (e.g. TSMAD for S-102)	M		-	-	P			To specifically seek contact and collaboration with the TWLWG to include data quality elements into dynamic tide / water levels (Action HSSC5/46 refers).

## 8.2 DQWG Meetings (Task I)

Date	Location	Activity
5 Nov 2010	Rostock, Germany	DQWG 3
14-17 Jun 2011	Helsinki, Finland	DQWG 4
15-18 Nov 2011	IHB, Monaco	DQWG 5
24-26 Jul 2012	Silver Spring, MD, USA	DQWG 6
16-18 Jul 2013	Fredericton, New Brunswick, Canada	DQWG 7
25-27 Mar 2014	Wollongong, Australia	DQWG 8

Chairman: Chris HOWLETT, UK

Email: [Chris.Howlett@ukho.gov.uk](mailto:Chris.Howlett@ukho.gov.uk)

Vice-chairman: Leendert DORST, Netherlands

Email: [LL.Dorst@mindef.nl](mailto:LL.Dorst@mindef.nl)

Secretary: Eivind MONG, Jeppesen

Email: [Eivind.Mong@jeppesen.com](mailto:Eivind.Mong@jeppesen.com)

## 9. MSDIWG WORK PLAN 2014-15

### 9.1. MSDIWG Tasks

A	Identify and promote national and regional best practices: - for land-sea integration - for cross-border integration
B	Review the appropriateness of existing standards for the provision of the maritime components of spatial data infrastructures
C	Develop content for an MSDI training course
D	Maintain MSDI reference documentation on the IHO website
E	Maintain and extend Publication IHO MSDI C-17 (IHO Task 2.9.2 refers)
F	Conduct annual meetings of MSDIWG, arranged back to back with 1-day MSDI Open Forum (IHO Task 2.9.1 refers)
G	Ensure that MSDI is a standing agenda item for RHCs' meetings (IHO Res 2/1997, as amended, refers)

Work Item	Title	Priority H-high M-med L-low	Milestones	Start Date	End Date	Status P-planned O-ongoing C-completed S-superseded	Responsible / contact person(s)	Related Pubs / Standard	Remarks
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Work Item	Title	Priority H-high M-med L-low	Milestones	Start Date	End Date	Status P-planned O-ongoing C-completed S-superseded	Responsible / contact person(s)	Related Pubs / Standard	Remarks
A.1	Set up a survey to establish current position in respect of benefits and challenges faced by MS's role in NSDI and/ or MSDI	H	Review 2008 survey and determine gain from a second survey  Prepare updated questionnaire  Re-issue 2008 questionnaire (if appropriate)  Review status of MS  Gather evidence  Analyse/report results  MS report to each MSDIWG annual meeting listing successes and challenges and ways of overcoming them	Jun 2014	Jun 2015	P	P. Valing (Estonia); J. Pepper (OceanWise - UK); Plus other MS invitees?		
A.2	Monitor and report on national, regional and international MSDI activities and report to enable increased visibility of hydrographic importance	M	Engage with relevant initiatives  Report level of MS involvement  To consider the impact of the UN-GGIM initiative, taking into account the items identified in paragraph 11 of HSSC5-05.7B.	Apr 2014	Mar 2018	O	F. Ros (Spain); C. Texier (France);		Report to HSSC-6.
A.3	Create relevant use cases, from potential users of MSDI	H	Identify and report success stories at sector, national or regional level	Jan 2014	Jun 2015	P	R. Ponce (Esri - USA) ; S. Grammann (BSH – Germany); IHB representative;		

Work Item	Title	Priority H-high M-med L-low	Milestones	Start Date	End Date	Status P-planned O-ongoing C-completed S-superseded	Responsible / contact person(s)	Related Pubs / Standard	Remarks
B.1	Liaise with TSMAD regarding level of S-100 understanding and use in support of SDI activities (e.g. INSPIRE)	M	Determine and log any issues of concern in WG regarding new standards  Obtain feedback from TSMAD on MSDIWG group-established topics  Identify new S-1XX data specifications for datasets use in MSDI	Jan 2013	Jan 2018	O	E. Vos (Netherlands) ; James Rapaport (Caris – Canada) ; C.Textier (France); To be completed	INSPIRE, Draft EC Directive on MSP and ICM	
C.1	Identify the need for education and training among the Member States and report to WG Chair	H	Develop training events as required  Investigate the possibilities to arrange an INSPIRE Workshop with EC-JRC	Jan 2014	Jan 2018	P	Chair & Secretary.		
C.2	Establish a MSDI training syllabus for use across IHO community	H	Senior Managers (i.e. Directors, Hydrographers, HR Managers)  Practitioners (i.e. Hydrographic Surveyors, Cartographers, Oceanographers, IT specialists)	Jan 2014	Jan 2015	P	R. Ponce (Esri - USA); A. Hoggarth (Caris -Canada); John Pepper (OceanWise - UK); Chair. HO members to be confirmed.		

Work Item	Title	Priority H-high M-med L-low	Milestones	Start Date	End Date	Status P-planned O-ongoing C-completed S-superseded	Responsible / contact person(s)	Related Pubs / Standard	Remarks
D.1	Maintain MSDI reference documentation on the IHO website	M	<p>Set up schedule for presentations/papers from MSDIWG members/others to be uploaded to Web site.</p> <p>Identify and make available MS Web sites/papers that address technical issues such as datum, WMS, WFS for charting data.</p> <p>Poll MSDIWG members for input work, with IHB to post on IHO Web site.</p> <p>Poll MS via questionnaire (if reissued).</p>	Oct 2013	2018	Planned through work plan lifecycle	R. Ponce (Esri – USA)  Chair t.b.c.		

Work Item	Title	Priority H-high M-med L-low	Milestones	Start Date	End Date	Status P-planned O-ongoing C-completed S-superseded	Responsible / contact person(s)	Related Pubs / Standard	Remarks
E.1	Conduct a review of MSDI that includes conceptual descriptions of the four sub-areas of MSDI as per: - Technical issues - Governance - Standards and specifications - Content (data)	H	Update information  Provide case studies  Best practice guidelines defined  Fundamentals of MSDI:  <u>Technical issues</u> -Locate standards in place for interoperability -Mechanisms in place for publishing data  <u>Governance</u> Define key challenges in respect of: -Identify organisational attitudes -Define release mechanisms -Understand user needs -Standards and specifications -Content (data) -Change management  <u>Standards and specifications</u> -Status of adopted technical standards -Status of new IHO data specifications  <u>Content (data)</u> -Report in –“Is data fit for purpose for inclusion in SDI”	Jan 2014	Oct 2015	P	Mike Osborne (OceanWise - UK); James Rapaport (Caris -Canada); Rafael Ponce (Esri - USA)	C 17 C-17/CBSC MSDI Syllabus, INSPIRE, OGC, ISO, IHO, RHC reports, MSDIWG MS inputs	

Work Item	Title	Priority H-high M-med L-low	Milestones	Start Date	End Date	Status P-planned O-ongoing C-completed S-superseded	Responsible / contact person(s)	Related Pubs / Standard	Remarks
E.2	Monitor technical developments in relation to MSDI	H	Define the scope of the work related to interoperability  Monitor developments  Provide status report to MSDIWG including recommendations on how to proceed  Standing WG Agenda item	Jun 2014	Jan 2018	P	Ellen Vos (Vice Chair)	TSMAD	
E.3	Determine hydrographic data set(s) that should be included in MSDI	H	Prioritize data layers by usefulness to non- navigational sectors  Identify priority order of importance (High, medium, low)  Establish top 10 list  Identify "core" reference datasets for MSDI  Define publishing mechanism for sharing data	Jan 2013	Jan 2015	O	Core Data Task Group: Chair - Mike Osborne (OceanWise); P. Valing (Estonia); G. Homes (Aus); C. Texier (France); F. Ros (Spain); R.Rios (Argentina); S.Grammann (Germany).		
F.1	Conduct 2014 meeting of MSDIWG, arranged back to back with 1-day MSDI Open Forum	H	3-day workshop to be run Q1 of each year;  2014 NOAA, Washington DC	Sept 2013	Feb 2014	O	MSDIWG Management Group (Chair/Vice Chair, Sec, IHB rep); representative NOAA		

Work Item	Title	Priority H-high M-med L-low	Milestones	Start Date	End Date	Status P-planned O-ongoing C-completed S-superseded	Responsible / contact person(s)	Related Pubs / Standard	Remarks
F.2	Conduct 2015 -18 meetings of MSDIWG, arranged back to back with 1-day MSDI Open Forum	M	Date and venue defined  Logistics in place  Conference programme defined  Develop Workshop programmes	Sep 2013	Jan 2018	P	MSDIWG Management Group (Chair/Vice Chair, Sec, IHB rep)		
G.1	Ensure that MSDI is a standing agenda item for RHCs' meetings (IHO Res 2/1997 as amended)	H	MSDIWG paper to IRCC re-stating importance of RHC's placing MSDI as an agenda item at RHC meetings.  MSDI inputs and actions from RHC's fed back to MSDIWG	July 2013	June 2014	O	MSDIWG Chair/Vice Chair	HSSC, IRCC, CBSC	

## 9.2 MSDIWG Meetings (Task F)

Date	Location	Activity
2-3 Apr 2009	IHB, Monaco	MSDIWG 3
8 & 13 Sep 2011		Conference Calls
30 Jan – 01 Feb 2013	Copenhagen, Denmark	MSDI Open Forum + MSDIWG 4
4-7 Feb 2014	Silver Spring, Ma, USA	MSDI Open Forum + MSDIWG 5

Chair: Jens Peter HARTMANN, Denmark  
Vice-chair: Ellen VOS, Netherlands  
Secretary: John PEPPER, OceanWise

Email: [jepha@kms.dk](mailto:jepha@kms.dk)  
Email: [em.vos@mindef.nl](mailto:em.vos@mindef.nl)  
Email: [john.pepper@oceanwise.eu](mailto:john.pepper@oceanwise.eu)

## 11. HDWG WORK PLAN 2014-15

### 11.1 HDWG Tasks

A	Maintain and extend the definitions in the IHO Dictionary in French, English and Spanish (IHO Task 2.11.1)
B	Liaise with other IHO bodies preparing publications containing glossaries
C	Liaise with other organizations developing dictionaries and/or glossaries
D	Develop the Spanish language Wiki version of S-32 with commercial contract support (IHO Task 2.11.2)

Work item	Title	Priority H-high M-medium L-low	Next milestone	Start Date	End Date	Status P-planned O-ongoing C-completed S-superseded	Contact Person(s) * indicates leader	Related Pubs / Standard	Remarks
A.2	Review all terms currently included in S-32 for their relevance in accordance with the S-32 Business Rules and propose which definitions should be removed from S-32	M	a. Terms a – d b. Terms e – l c. Terms m – r d. Terms s – z	2012 2012 2013 2013	2015 2015 2016 2016	P P P P	All	S-32	
A.3	Review the approved definitions of Altitude, Elevation and Height	H	TSMAD27 CSPCWG10 HSSC6	2012	2014	O		S-32	Alternative definitions to be submitted by HDWG to TSMAD27 (Dec 2013) and CSPCWG10 (Jan 2014) before endorsement
B.6	CSPCWG - Aquaculture	H	MS' approval	2011	2014	O	All	S-32	Proposed definition endorsed by HSSC5

Work item	Title	Priority H-high M-medium L-low	Next milestone	Start Date	End Date	Status P-planned O-ongoing C-completed S-superseded	Contact Person(s) * indicates leader	Related Pubs / Standard	Remarks
B.7	CSPCWG - Phase of a navigational light	H	MS' approval	2011	2014	O	All	S-32	Proposed definition endorsed by HSSC5
B.8	TWLWG - Mean sea level	H	HSSC6	2011	2014	O	All	S-32, IHO Resolution 3/1919	New definition considered too long. See Annex D of HSSC5-05.9A.
B.9	SNPWG - Underkeel clearance/allowance	H	MS' approval	2011	2014	O	All	S-32	Proposed definition endorsed by HSSC5
B.10	IHB - Single Beam Echo Sounder	H	MS' approval	2011	2014	O	All	S-32	Proposed definition endorsed by HSSC5
B.11	UKHO - Seafloor	M	HSSC6	2012	2014	P	All	S-32	
B.12	UKHO - Bathymetry	M	HSSC6	2012	2014	P	All	S-32	

## 11.2 HDWG Meetings

No meetings have taken place. HDWG is invited to consider face-to-face meeting in 2014.

Chair: Jean LAPORTE, France

Vice-Chair: Vacant

Secretary: David WYATT, IHB

Email: [jlaporte@shom.fr](mailto:jlaporte@shom.fr)

Email:

Email: [adso@iho.int](mailto:adso@iho.int)



### 13. ABLOS WORK PLAN 2014-15

#### 13.1 ABLOS Tasks

A	Organise the 8 <sup>th</sup> ABLOS Conference in 2015 (IHO Task 2.12.2)
B	Maintain IHO Publication C-51 "Technical Aspects of the Law of the Sea (TALOS) Manual" (IHO Task 2.12.3)
C	Deliver a standard training program on the hydrographic aspects of maritime delimitation. (IHO Task 3.5.2)
E	Provide advice and guidance on the technical aspect of the Law of the Sea to relevant organizations, bodies and Member States. (IHO Task 2.12.3)
F	Organise and prepare the annual business meetings of ABLOS (IHO Task 2.12.1)

Work item	Title	Priority H-high M-medium L-low	Next milestone	Start Date	End Date	Status P-planned O-ongoing C-completed	Contact Person(s) * indicates leader	Related Pubs / Standard	Remarks
A.1	Organise 8 <sup>th</sup> ABLOS Conference	H	Finalize title by BM 20	2013	2015	O	All members of ABLOS through Niels Andersen*	N/A	
			Organizing committee formed by BM 20	2013		P			
			Dates confirmed by BM 20	2013		P			
			Begin advertising	2013		P			
B.1	Prepare draft Edition 5.0.0 of C-51 (TALOS Manual) for adoption by Member States	H	CL to MS for approval end 2013	2013	2013	O	Chris Carleton*, Sunil Bisnath, John Brown, Shin Tani and I Made Andi Arsana	IHO Publication C-51	CL 69/2013
			Circulate to IAG 1Mar 2014	2013	2014	P			
B.2	Review C-51 Edition 5.0.0 for any necessary updating.	H	Identify areas requiring updating by BM 20	2013	2015	P	Chris Carleton*, Sunil Bisnath, John Brown, David Wyatt	IHO Publication C-51	

Work item	Title	Priority H-high M-medium L-low	Next milestone	Start Date	End Date	Status P-planned O-ongoing C-completed	Contact Person(s) * indicates leader	Related Pubs / Standard	Remarks
B.3	Prepare draft next Edition of C-51 (TALOS Manual) for adoption by Member States	M		2013	2015	P	Chris Carleton*, Sunil Bisnath, John Brown	IHO Publication C-51	
C.1	Deliver standard training programmes for the CBSC	H		2011	Permanent	O	John Brown*		Workshops planned in 2013, 2014, 2016 and 2017 in the CBSC Work Plan.
E.1	Provide advice and guidance on the technical aspect of the Law of the Sea	H		-	Permanent	O	All members of ABLOS through the Chair		

### 13.2 ABLOS Meetings (Tasks A & F)

Date	Location	Activity
25 & 28 Oct 2010	IHB, Monaco	ABLOS 17 and 6 <sup>th</sup> ABLOS Conference
9 - 10 Nov 2011	Valparaiso, Chile	ABLOS 18
1 & 6 Oct 2012	IHB, Monaco	ABLOS 19 and 7 <sup>th</sup> ABLOS Conference
28-29 Oct 2013	Muscat, Oman	ABLOS 20
Oct 2014	TBD	ABLOS 21
2015	IHB, Monaco	ABLOS 22 and 8 <sup>th</sup> ABLOS Conference

Chair: Sunil BISNATH  
Vice-Chair: John BROWN  
Secretary: David WYATT

Email: [sbisnath@yorku.ca](mailto:sbisnath@yorku.ca)  
Email: [john.brown@ukho.gov.uk](mailto:john.brown@ukho.gov.uk)  
Email: [adso@iho.int](mailto:adso@iho.int)

**Proposed assignment of IHO publications under the responsibility of HSSC bodies**

<b>Number</b>	<b>Name</b>	<b>Proposed bodies</b>
<b>S-11 Part A</b>	Guidance for the Preparation and Maintenance of INT Chart schemes	NICWG
<b>S-12</b>	Standardization of List of Lights and Fog Signals	NICWG
<b>S-44</b>	IHO Standards for Hydrographic Surveys	HSSC (Project Team if and when required)
<b>S-49</b>	Standardization of Mariners' Routeing Guides	NICWG
<b>S-52</b>	Specifications for Chart Content and Display Aspects of ECDIS	ENCWG
<b>S-52 Annex A</b>	IHO ECDIS Presentation Library	ENCWG
<b>S-52 Appendix 1</b>	Guidance on Updating the ENC	ENCWG
<b>S-57</b>	IHO Transfer Standard for Digital Hydrographic Data	ENCWG
<b>S-57 Appendix B.1</b>	ENC Product Specification	ENCWG
<b>S-57 Appendix B.1 Annex A</b>	Use of the Object Catalogue for ENC	ENCWG
<b>S-58</b>	Recommended ENC Validation Checks	ENCWG
<b>S-60</b>	Users Handbook on Datum Transformations involving WGS 84	HSSC (Project Team if and when required)
<b>S-61</b>	Product Specifications for Raster Navigational Charts (RNC)	ENCWG
<b>S-63</b>	IHO Data Protection Scheme	DPSWG
<b>S-64</b>	Test Data Sets for ECDIS	ENCWG
<b>S-65</b>	ENC Production Guidance	ENCWG
<b>S-66</b>	Facts about Electronic Charting and Carriage Requirements	HSSC (Project Team being established <sup>1</sup> )
<b>S-99</b>	Operational Procedures for the Organization and Management of the IHO Geospatial Information Registry	S-100WG
<b>S-100</b>	IHO Universal Hydrographic Data Model	S-100WG
<b>S-101</b>	ENC Product Specification	S-100WG NICWG (Project Team if and when required)
<b>S-102</b>	Bathymetric Surface	S-100WG (Project Team if and when required)

<sup>1</sup> Action HSSC5/59 refers.

Number	Name	Proposed bodies
S-103	Sub-surface Navigation	S-100WG NICWG (Project Team if and when required)
S-111	Surface currents	S-100WG TWCWG (Project Team if and when required)
S-121	Maritime limits and boundaries	S-100WG NICWG (Project Team if and when required)
S-122	Marine Protected Areas;	S-100WG NICWG (Project Team if and when required)
S-123	Radio Services	S-100WG NICWG (Project Team if and when required)
S-124	Navigational warnings	S-100WG WWNWS-SC (Project Team if and when required)
S-125	Navigational services	S-100WG NICWG (Project Team if and when required)
S-126	Physical Environment	S-100WG NICWG (Project Team if and when required)
S-127	Traffic Management	S-100WG NICWG (Project Team if and when required)
S-1xx	Marine Services	S-100WG NICWG (Project Team if and when required)
S-1xx	Digital Mariner Routeing Guide	S-100WG NICWG (Project Team if and when required)
S-1xx	Harbour Infrastructure	S-100WG NICWG (Project Team if and when required)
S-1xx	(Social/Political)	S-100WG NICWG (Project Team if and when required)

Number	Name	Proposed bodies
C-17	Spatial Data Infrastructures: “The Marine Dimension” - Guidance For Hydrographic Offices	MSDIWG
C-51	A Manual on Technical Aspects of The United Nations Convention on the Law of The Sea - 1982	ABLOS

**RESTRUCTURING OF THE WORKING GROUPS OF HSSC**

**RESPONSE FORM**

(to be returned to the IHB **no later than 1 July 2014**)

E-mail: info@iho.int - Fax: +377 93 10 81 40)

**Date:**

**Member State:**

**or Stakeholder:**

**Contact:**

**E-mail:**


**Contribution to HSSC activities in the new structure**

HSSC Body	Active Participation*	If Yes		Comment***
HSSC (Committee)	YES - NO	Chair	YES – NO	
		Vice-Chair	YES - NO	
		Ex-officio**	YES - NO	
		Active Member	YES – NO	
		Project Team(s)	YES – NO	
MSDIWG	YES - NO	Chair	YES – NO	
		Vice-Chair	YES - NO	
		Secretary	YES - NO	
		Active Member	YES – NO	
		Project Team(s)	YES - NO	
DQWG	YES - NO	Chair	YES – NO	
		Vice-Chair	YES - NO	
		Secretary	YES - NO	
		Active Member	YES – NO	
		Project Team(s)	YES - NO	
DPSWG	YES - NO	Chair	YES – NO	
		Vice-Chair	YES - NO	
		Secretary	YES - NO	
		Active Member	YES – NO	
		Project Team(s)	YES - NO	
S-100WG	YES - NO	Chair	YES – NO	
		Vice-Chair	YES - NO	
		Secretary	YES - NO	
		Active Member	YES – NO	
		Project Team(s)	YES – NO	
NICWG	YES - NO	Chair	YES – NO	
		Vice-Chair	YES - NO	
		Secretary	YES - NO	
		Active Member	YES – NO	
		Project Team(s)	YES - NO	
ENCWG	YES - NO	Chair	YES – NO	
		Vice-Chair	YES - NO	
		Secretary	YES - NO	
		Active Member	YES – NO	
		Project Team(s)	YES - NO	

HSSC Body	Active Participation*	If Yes	Comment***
TWCWG	YES - NO	Chair YES – NO Vice-Chair YES - NO Secretary YES - NO Active Member YES – NO Project Team(s) YES - NO	
HDWG	YES - NO	Chair YES – NO Vice-Chair YES - NO Secretary YES - NO Active Member YES - NO Project Team(s) YES - NO	
ABLOS	YES – NO	IHO Rep. YES-NO IHO Observer YES - NO	
S-100 GI Registry Management <sup>1</sup>	YES – NO	Registry Manager YES – NO Register Manager YES – NO Domain Control Body Member YES - NO	

\* Active participation implies at least one of the following commitments:

- commitment to nominate a candidate as office bearer (Chair, Vice-Chair, Secretary, IHO Representative, Registry Manager, etc. when applicable),
- commitment to contribute to the work plan as an ordinary active member of the relevant body,
- commitment to participate in the time-limited project team(s) that may be established to address one or more work items of the relevant body.

Note that the commitments are **not** mutually exclusive; in particular the participation of a MS representative as an office bearer is not exclusive of another representative participating also as an “ordinary member”.

\*\* The ex-officio members of HSSC are the Chairs of the subsidiary bodies

\*\*\* If applicable indicate to which specific work items and/or publications you would contribute

#### Additional Comments:

- On the draft work plans: YES – NO If YES, see next page
- Other comments: YES – NO If YES, see next page

<sup>1</sup> Refer to Chapter 3 of IHO Publication S-99 Operational Procedures for the Organization and Management of the S-100 Geospatial Information Registry - Edition 1.1.0 – November 2012

### **Comments on the draft work plans**

### **Any other comments**