



IHB File N° S1/1001/WP

CIRCULAR LETTER 17/2015
24 February 2015

REPORT ON THE OVERALL STATUS OF THE IHO WORK PROGRAMME
- END OF 2014

Reference: EIHC-5 - Decision No. 3 (*PRO. 5 - Improving the total cost estimate of the IHO tasks for the definition of a prioritized Work Programme*)

Dear Hydrographer,

1. As a result of the discussion at the 5th Extraordinary International Hydrographic Conference (EIHC-5) on Proposal 5 concerning the assessment of the IHO Work Programme, Conference Decision No. 3 reinforced the reporting requirements by introducing a six-monthly reporting regime. Accordingly, on 8 January 2015, the Directing Committee invited the Chairs of Regional Hydrographic Commissions, Committees, Sub-Committees and Working Groups and the Director of the IHO Data Centre for Digital Bathymetry (DCDB) to report by 15 February 2015 on the overall status of their respective work programme. A reporting template was provided to achieve this.

2. By 20 February 2015, 25 of the 42 IHO bodies and inter-organizational bodies involving the IHO had provided a report. As directed by EIHC-5, the Directing Committee is providing a brief summary of the reports received. This is included in Annex A. The reports themselves are reproduced in Annex B (*in English only*). The lessons learned from this first iteration of the additional reporting process are addressed in the following paragraphs.

Non-reporting by some Chairs

3. The proportion of Chairs who did not provide a report is relatively high, at more than 40%. Member States providing Chairs for groups that did not provide a report are invited to identify with the Chairs the reasons for not providing a report and to indicate any significant difficulty encountered in not complying with the decision of the Conference.

Clarification of reporting requirements

4. The scope of the reports from the various Chairs varied, with some reporters including most, if not all, items in their work programmes. The view of the Directing Committee is that each report should identify no more than five top goals and priorities. Some organs may have only one or two top priorities or goals; others may have three or four. The intention is not to seek a report on each item in the work plans. The Directing Committee suggests that each organ ensures that the goals and priorities are explicitly specified when adopting a work plan or approving the work plans of subordinate bodies.

Identification of gaps and needs

5. A study of the responses indicates that the purpose of identifying any “gaps and needs” may not have been appreciated by all reporters. The intention is to identify any areas where specific inputs or resources are not currently available, or at risk of becoming unavailable, thereby compromising the timely achievement of the relevant goal or priority. Additional guidance will be provided in future.

Main areas of concern

6. Based on the reports received, it appears that supporting the continuing development of the S-100 framework is a particular area of concern. The current ECDIS and ENC standards which have just undergone a major revision may also attract additional work as they start to be implemented and need to be supported. In addition, a number of Working Groups have reported that the rate of active participation by Member States in meetings and intersessional work is a concern and is hampering progress.

7. As a result, the Directing Committee considers that the following should be areas of priority for the IHO:

- a. **Supporting ECDIS-related Standards and the S-100 Framework.** Both of these activities are relying on a small group of dedicated experts from a few Member States and from industry. Member States may wish to consider, while preparing their submissions to the next meeting of the Capacity Building Sub-Committee (see IHO CL 16/2015), if any specific capacity building actions, such as training and tutoring, could assist them in developing their own expertise and in so doing, expand the pool of experts available to develop and maintain the relevant IHO standards.
- b. **S-100 Registry Manager and Technical Standards Support Officer.** The establishment of a permanent IHB position of S-100 Registry Manager and Technical Standards Support Officer must be a priority. This should be coupled with enrolling additional expertise and manpower in the relevant Working Groups from Member States and industry. The Directing Committee will develop proposals for inclusion in the 2016 budget, taking into account the recommendations expected from the S-100WG.

8. In accordance with the Conference Decision, the Directing Committee will issue its next request for six-monthly reports in early July 2015. In that perspective the Directing Committee would welcome any feedback from Member States on this letter or the reporting process **not later than 1 May 2015**.

On behalf of the Directing Committee
Yours sincerely,



Robert WARD
President

Annexes:

- A. Compilation of the status reports from IHO bodies and inter-organizational bodies involving the IHO – end of 2014.
- B. Status reports received by 20 February 2015 (*in English only*).

Copy (by e-mail):

- Chairs and Vice-Chairs of IHO bodies
- Chairs and Vice-Chairs of inter-organizational bodies involving the IHO

Compilation of the status reports from IHO bodies and inter-organizational bodies involving the IHO - End of 2014.

Number of responses

1. The Chairs of 25 bodies responded to the IHB request by 20 February 2015. The following 17 bodies did not provide any report:

- subordinate organs of HSSC: TSMAD, SNPWG/NIPWG, TWLWG/TWCWG, HDWG;
- subordinate organ of IRCC: DCDB;
- Regional Hydrographic Commissions: ARHC, BSHC, EAHC, MBSHC, NHC, RSAHC, SEPRHC, SWAtHC, SWPHC, USCHC;
- inter-organizational bodies: ABLOS, IBSC.

2. In addition, a report was provided by the Chair of the new S-100WG. No report was received from the now-disbanded TSMAD, as indicated above, or from the new ENCWG.

Status of the work programme of the HSSC

3. The new or revised editions of IHO ECDIS-related standards required to support the completion and approval of the new edition of IEC standard 61174 – *Electronic Chart Display and Information System (ECDIS) – Operational and performance requirements, methods of testing and required test results* were adopted according to the timeline reported to the International Maritime Organization (IMO) as a result of the combined effort of all parties involved. During the transition phase, the new ENCWG will need to be attentive and, if required, reactive, as the practical implementation of the new versions of these complex standards may reveal errors or ambiguities that will require clarifications or revisions to resolve.

4. The development of S-100 and S-100 based product specifications, as well as the operation of the S-100 Registry, relies on a small number of dedicated experts from the Member States and from the industry. This situation is fragile and could undermine the central role of S-100 in the development of the common maritime data structure in support of e-navigation.

5. The implementation of the re-organized structure of HSSC, reported in IHO CL 11/2015, has confirmed the difficulty to attract volunteers for the positions of office-bearers of the working groups that was reported to EIHC-5.

Status of the work programmes of the Regional Hydrographic Commissions

6. Only 5 RHC provided a report. Two RHCs (MACHC and NIOHC) did not report on gaps or needs.

7. The gaps reported by the NSHC on the status of survey coverage and inconsistent vertical reference frames in the North Sea area could be addressed through the outcome of the European Commission call for tenders on coastal mapping, to which a consortium comprising 12 Hydrographic Offices responded.

8. Both EAtHC and SAIHC report gaps related to the lack of governmental awareness and support and limited technical capacities in their regions. The definition study for a long term Capacity Building (CB) project in the EAtHC region, which is included in the CB Work Programme 2015, should identify ways and means to address this situation. If relevant, the extension of the outcome or of the methodology to African States outside the EAtHC might be considered in due course.

Status of the work programme of the IRCC

9. No gaps were reported at the Committee level.

10. The lack of support from Member States highlighted in the report of the HCA is illustrated by the postponement to 2016 of the meeting originally planned in 2015. Only 11 of the 23 HCA Members had indicated their possible attendance at the 2015 meeting. The HCA might wish to reconsider the sustainability and relevance of an annual work cycle.
11. The Chair of the MSDIWG submitted a partial report indicating only that the MSDIWG moved from the authority of the HSSC to the IRCC on 1 January 2015.
12. The report of the WWNWS-SC does not identify any short term gaps. However, it highlights, in accordance with the report of its correspondence group on S-124 - *Product Specification for Navigational Warnings*, the need to secure long-term commitment of Member States to the development of S-124 and to coordinate with the further development of the Maritime Service Portfolios (MSP) related to the implementation of the e-navigation strategy. The contribution of the IHO to the further development of the MSP will need to be considered and resourced, subject to the guidance expected from the IMO Maritime Safety Committee, and noting the vital need to harmonize its efforts with complementary work by IALA.
13. The CBSC report notes that the IHO CB Fund and other contributions supporting the CB Work Programme only partially cover the needs established in the IHO CB Strategy. Additional resources would be required to support adequate performance monitoring.
14. The reports related to the IHO-IOC GEBCO Project details the status of the current work items but does not identify any specific gap or need that might be hindering progress.

Status reports received by 20 February 2015

Contents:

- HSSC
- DPSWG
- DIPWG
- S-100WG
- CSPCWG/NCWG
- DQWG
- SCWG

- IRCC
- NSHC
- EAHC
- MACHC
- SAIHC
- NIOHC
- HCA
- WVNWS-SC
- S-124CG
- CBSC
- MSDIWG
- WEND-WG
- IENWG
- GEBCO GC
- TSCOM & SCRUM
- SCUFN

- FC
- SRWG

Overall status of the work programme of Hydrographic Standards and Services Committee (HSSC)

Compiled by Dr Mathias Jonas - e-mail address: mathias.jonas@bsh.de

Current goals and priorities	Current or expected gaps and needs	Comments
Maintenance of current ECDIS standards: implementation of the new editions of S-52, S-52 Presentation Library, S-58, S-63 and S-64	Software upgrades (OEM, ENC producers, end-users)	
	Coordination with IEC and IMO	
Development of S-100 and S-100 based product specifications	Lack of expertise/participation in IHO Working Groups from both MS and Industry	Delay in finalizing edition 2 of S-100 and draft edition 1 of S-101 Delay in completion of important elements: feature catalogue builder, portrayal catalogue builder, S-100 data viewer
	Resourcing the function of S-100 Registry Manager	See IHO CL 77/2014 dated 28 November The function of the Registry Manager is now split between in-kind support from three Member States: GB, ROK, USA. The method of coordination between these three parties is yet to be arranged.
Re-structuring of HSSC Working Groups	- ENCWG: the positions of Vice-Chair and Secretary not yet filled. NIPWG: there are two nominations for the position of Chair, but no nomination, so far, for the positions of Vice-Chair and Secretary; TWCWG: one nomination for the position of Chair and two nominations for the position of Vice-Chair functions but no nomination for the position of Secretary.	Actions HSSC6/04 to 11 – IHO CL 76/2014 dated 28 November – IHO CL 11/2015 dated 12 February Additional nominations for the positions of office bearers of the NIPWG and TWCWG are welcome at any time prior to the first meeting of the new Working Groups

Overall status of the work programme of ...DPSWG..... (acronym of the IHO body or inter-organizational body involving the IHO)

Compiled by Jonathan Pritchard (UKHO)..... (name of the compiler of the report) - e-mail address: jonathan.pritchard@ukho.gov.uk

Current goals and priorities	Current or expected gaps and needs	Comments
Production of new version of S-63 to complement development of IHO S-100.	The current aim within the group is to table a draft specification for S-63 2.0 within the structure agreed at the last DPSWG meeting in 2014. This activity is on track but will require input from all meeting participants during 2015. DPSWG does not have a large number of participating member states but has good, considered input from those who do attend. More input from other groups and other Member States willing to share their experiences and author a new distribution mechanism is the main resource gap the group has. Industry participation is also vital. Experience of working within the broader regulatory community and how IHO best contributes to it remains a gap also.	
Input to other groups in respect of development of new version of S-63	Participation in meetings by Member States and input from as broad and diverse a group of participants as possible are the only gaps. The new version of S-63 requires tighter interaction and integration with S-100 activities so a close liaison is essential to minimise duplication and risk between the groups.	
Support to existing members of the data protection scheme in their implementation of IHO S-63 and provision of general information and guidance concerning the scheme.	No current gaps identified in this activity and most queries are answered by either IHB or the chair.	
Assistance to IHB staff as and when required.	No current gaps anticipated. IHB staff require little guidance with the technical and administrative running of the data protection scheme. Chair DPSWG gives occasional support but this area is currently resourced adequately.	
Working group structure.	The group has a Chair and Vice Chair now but lacks a permanent Secretary. The IHB has provided support in this regard but support before, during and after meetings (particularly with actions and minutes) would be much appreciated and currently is a resource gap.	

Overall status of the work programme of DIPWG

Compiled by Colby Harmon - e-mail address colby.harmon@noaa.gov

Current goals and priorities	Current or expected gaps and needs	Comments
<p>Publish new edition of S-52 and its Presentation Library</p>	<p>None</p>	<p>S-52, edition 6.1.0, and its Presentation Library, edition 4.0.0, both dated Oct 2015 have been posted to the IHO website. A small number of required minor changes have been identified and an updated S-52 edition 6.1.1 and Presentation Library edition 4.0.1 are being prepared. It is hoped that an expedited review of these documents by the HSSC and the IHO member states will enable the publication of the documents by September 2015.</p> <p>The ENCWG has taken over this activity from the disbanded DIPWG.</p>
<p>Update the S-100 Portrayal Catalogue Builder to accommodate changes to the S-100 Data Model</p>	<p>Funding for the contract vehicle being used to carry out this work was obtained through sales of the S-52 Presentation Library on CD-ROM by the IHO.</p> <p>Continued funding for maintenance of ENC portrayal during the transition from S-57/S-52 based ENCs to S-101 based ENCs may depend on IHO selling access to the S-101 Portrayal Catalogue after the final operational version of S-101 is approved.</p> <p>The mechanism for this has yet to be established. Also, the language establishing the S-52 Presentation Library fund by the IHO may need to be updated to add references to S-101 portrayal (or S-100 portrayal).</p>	<p>An engineering change proposal has been awarded to accomplish the necessary updates to the Portrayal Catalogue Builder.</p> <p>The S-100WG has taken over this activity from the disbanded DIPWG.</p>

<p>Make changes to the S-100 Hydro Portrayal Register to accommodate changes to the S-100 Data Model and the needs of the S-100 Portrayal Catalogue Builder tool.</p>	<p>Resources from the USA (NOAA), UK (UKHO), and the Republic of Korea (KHOA) have been identified to help maintain and update the S-100 GI Registry and its component registers. It is hoped that a permanent position at the IHB for an S-100 GI Registry Manager may be filled as soon as is practicable to ensure the ongoing stability of the Registry.</p>	<p>The S100WG has taken over this activity from the disbanded DIPWG.</p>
---	--	--

Overall status of the work programme of the **S-100 Working Group** (*acronym of the IHO body or inter-organizational body involving the IHO*)

Compiled by Julia Powell - e-mail address: Julia.Powell@noaa.gov

Current goals and priorities	Current or expected gaps and needs	Comments
Establish the S-100 Test Bed	<p>[GAP and NEED] In order to support the test bed activities the following items will need to be accomplished:</p> <ul style="list-style-type: none"> • Creation of test data to support the entire process • Creation of several simple viewers to examine the expected results 	<p>The test bed is needed to help S-100 based product specifications undergo the test process in order to comply with Resolution 2/2007. The test bed is currently being designed using S-101 as the initial test case as that product specification will need to be tested at various stages in order to function in an S-100 based ECDIS. Other S-100 based product specifications may only need to use a subset of the test bed framework as their intended use may be different.</p>
Prepare a New Edition of S-102	<p>[GAP and NEED] S-102 still needs to establish both a feature and portrayal catalogue for machine readability. It also needs to propose the encoding that will be used for this product to S-100 edition 2.1.0</p>	
Develop an S-100 Interoperability Guidebook	<p>[GAP] Currently, there is not enough information and the test bed is not mature enough to prepare this item of work.</p> <p>In addition, it may be difficult to resource this properly</p>	<p>This item will be tentatively scheduled for 2016</p>
Development of S-101 – ENC Product Specification	<p>[NEED] accompanying test datasets to test the various types of functionality within the product specification?</p> <p>[GAP] S-101 is still missing the Portrayal Catalogue and need to find a resource to create this.</p>	<p>The portrayal catalogue is dependent upon the completion of the Engineering Change Proposal to update the Portrayal Catalogue Builder Functionality to Ed 2.0.0 of S-100</p>

Overall status of the work programme of the **Nautical Cartography Working Group (NCWG – formerly CSPCWG)**

Compiled by **Jeff Wootton**

- e-mail address: jeff.wootton@defence.gov.au

Current goals and priorities	Current or expected gaps and needs	Comments
Provide guidance on charting maximum authorized draught (S-4 – Task A13).	New issues regarding relationship between maximum authorized draught and underlying bathymetry raised by WG Member requiring further discussion.	Paper to be presented at CSPCWG11 (NCWG1). Has possible implications on S-100WG (S-101 Project Team) and ENCWG. Associated Task D34 considered to be in hand.
Initiate consideration of the ‘future of the paper chart’ (Task A16).	Discussion Paper in draft by AU (CSPCWG Chair). Retirement from the WG of other key stakeholders (CA and SE) adds additional workload on Chair.	Paper intended to be completed for CSPCWG11 (NCWG1).
Develop guidelines for preparation & maintenance of small / medium scale ENC schemes (S-11 Part A – Task B3).	Awaiting feedback from NSEHWG.	Longest ongoing CSPCWG (NCWG) Work Item.
Reinstate (simplified) symbol for light vessels (INT1 – Task D32.4).	Resource constraints of Chair.	Comments from IHB regarding history behind the removal of the light vessel symbol from INT1 to be investigated.
Develop new section V for INT1 for ‘data quality’ (INT1 – Task E9).	Preliminary consideration made by Chair, however progress delayed due to resource constraints on Chair.	Progress report to be delivered at CSPCWG11 (NCWG1).

All other Tasks in the Work Plan are in hand (no gaps or additional needs) or Planned.

Overall status of the work programme ofDQWG..... (acronym of the IHO body or inter-organizational body involving the IHO)

Compiled by ...Chris Howlett and Antti Castrén. (name of the compiler of the report) - e-mail address: ... Antti.Castren@fta.fi

Current goals and priorities	Current or expected gaps and needs	Comments
Develop an improved method of visualizing data quality within S-100 ENCs.	The method of combining data quality elements to form a composite indicator has been completed. This task now needs to be taken forward by DCEG(/TSMAD) to determine how the composite indicator can be portrayed.	This part of the DQWG task is nearly complete. However, demonstration to the mariner is still needed but needs to await the portrayal guidance to be complete.
Educate the mariner about data quality and its implications when using navigational products (in all formats).		It is proving difficult to establish robust routes to educate mariners since the numbers of colleges etc is high and widely distributed.
Develop data quality portrayals for other types of data e.g. tidal predictions	Still outstanding. Water level predications are probably the priority for this.	The end game for data quality is to indicate go-no go areas on charts based on vessel parameters and water depth (actual depth including tide). To do this uncertainties of tidal height and other water level changes are imperative. However, because an equal part are vessel parameters it is not considered practical for an IHO WG to develop the complete solution. This should be left to commercial solution providers who can use data provided by the IHO WG.
Investigate areas of quality concern (other than survey / bathymetry)	This aspect remains outstanding although the concept of Non-bathymetric data has been covered in S-101	

Overall status of the work programme of SCWG/PT..... (acronym of the IHO body or inter-organizational body involving the IHO)

Compiled by ...Kurt Hess..... (name of the compiler of the report) - e-mail address: kurt.hess@noaa.gov

Current goals and priorities	Current or expected gaps and needs	Comments
Complete S-111 Product Specification for surface currents	Need to get point feature and gridded coverage feature for surface currents into the Register and the Feature Catalogue	Waiting for the Feature Catalogue Builder and the Register

Overall status of the work programme of IRCC (*acronym of the IHO body or inter-organizational body involving the IHO*)

Compiled by Nigel Sutton (*name of the compiler of the report*) - e-mail address: Nigel.Sutton@ukho.gov.uk

Current goals and priorities	Current or expected gaps and needs	Comments
Organize and prepare annual meeting of IRCC	None	Ongoing Registration and Logistics IRCC CL to be issued shortly
Support the IHB to implement the planning mechanism annually	None	Ongoing IRCC CL 05/2014 refers
Provide the IHB with the IRCC Annual Report for 2014.	None	Ongoing The Annual Report is dependent on input from RHCs and subordinated bodies. Action IRCC6/05
Update and implement the IRCC Work Programme	None	Will be undertaken at IRCC7

Overall status of the work programme of NSHC

Compiled by Leendert Dorst - e-mail address: LL.Dorst@mindef.nl

Current goals and priorities	Current or expected gaps and needs	Comments
shared European contacts and projects	none	in cooperation with other European HOs
shared progress to reach an up to date bathymetric dataset for the North Sea	limited survey capacity	resurvey strategies for dynamic areas and emerging survey methods (LIDAR, SDB, CSB) are taken into account
shared experiences relating to Marine Spatial Data Infrastructures	none	through establishing a BSHC/NSHC MSDI Working Group
shared progress on the establishment of vertical reference frames	lack of an international initiative to establish a consistent set of references for the entire North Sea area	includes national Chart Datums, references suitable for the coastal zone, and Ellipsoidally referenced Surveying

Overall status of the work programme of ...**EAtHC**..... (acronym of the IHO body or inter-organizational body involving the IHO)

Compiled by ...**CV A DIHAJI**..... (name of the compiler of the report) - e-mail address: **affairmar.dhoc@gmail.com**.....

Current goals and priorities	Current or expected gaps and needs	Comments
Encourage the EAtHC Observers to contact their national authorities to encourage the signing of the EAtHC Statutes.	Requirements for navigation from the coastal States for Maritime security	
Continue to engage Member States in the region to encourage the ratification of the Protocol of Amendments to the IHO Convention.	Only 7 (one suspended) out of 24 of the coastal States are IHO members	
Develop the capacity building	Hydrographic data compiled are old and incomplete on the coastal States of EAtHC	
Facilitate global coverage and use of official hydrographic data, products and services	The list of national contacts for Navarea II is still incomplete	
Raise global awareness of the importance of hydrography	Requirement regular monitoring of the location of exploration and exploitation platforms(for example offshore oil & gas operations in the Gulf of Guinea)	
Assist Member States to fulfill their roles	<ul style="list-style-type: none"> - Need to train hydrographer-assistants, to leverage the potential trained at the B and A level; - Interest of having an English speaking training centre and a French speaking one 	
Raise awareness of the importance of geographical data in Africa, and the role of satellite observation in their collection	A partial update of the IHO publication C-55 "status of hydrographic surveying and nautical charting worldwide"	
Continue to engage suspended Member States in the region to encourage their re-insertion in IHO		
Review the procedures for the transmission of survey data, in order to make sure that all relevant national organisations can access the survey data covering their national waters.		

Overall status of the work programme of ...2, and 3.1.5...MACHC/MICC..... (acronym of the IHO body or inter-organizational body involving the IHO)

Compiled by (name of the compiler of the report) - e-mail address:

Current goals and priorities	Current or expected gaps and needs	Comments
Achieve full ENC coverage in MACHC	Gaps are being addressed/no add'l needs required	Of the 799 current and planned ENCs required to meet WEND principles for adequate ENC coverage, 665 are currently published and available (83%)
Update INT Chart Catalog	No additional needs required	

Overall status of the work programme of ...MACHC CB...(acronym of the IHO body or inter-organizational body involving the IHO)

Compiled byJ Bryant.....(name of the compiler of the report) - e-mail address: jeff.bryant@ukho.gov.uk

Current goals and priorities	Current or expected gaps and needs	Comments
The MACHC has a five year plan for its CB activities, the priority to ensure all coastal states reach Phase 1 status. Other activities reinforce Phases 2 and 3.	No gaps	The requirement to deliver capacity building activities in Spanish is being met. E.g. Hydro course in Hydrography delivered in Nicaragua in Sep/Oct 2014 and short courses sent to Mexico for translation

Overall status of the work programme of ...MACHC/MEIP..... (acronym of the IHO body or inter-organizational body involving the IHO)

Compiled by ...Chris Thorne..... (name of the compiler of the report) - e-mail address: Chris.Thorne@UKHO.gov.uk

Current goals and priorities	Current or expected gaps and needs	Comments
The MEIP was given a direction at the 15 th MACHC meeting in December 2014. The aim was to "piggy back" on the NOAA ENC on line viewer.		The MEIP Chair, MEIP vice Chair and NOAA met in January 2015 to discuss population of a base layer within the viewer. We are planning to achieve this by the end of February 2015, at which time we intend to contact all MS to inform them of progress and encourage them to make larger scale data available.

Overall status of the work programme of**SAIHC**.....

Compiled byCaptain Abri Kampfer (*name of the compiler of the report*) - e-mail address: hydrosan@iafrica.com

Current goals and priorities	Current or expected gaps and needs	Comments
Promote technical co-operation in the domain of hydrographic surveying, marine cartography, and nautical information within the Region	Majority of Associate Member States in region have still not achieved Phase 1 hydrographic development.	Shortcomings have been identified during technical visits within the region and are being addressed through the SAIHC Capacity Building Strategy.
Stimulate all countries within the Region to widen hydrographic activity in the area and to encourage them to seek technical advice and assistance from the IHB in establishing and strengthening their hydrographic capabilities in order to promote safe navigation and create an environment within which economic development may take place	Lack of funding and government support. High level interaction required to inform decision makers at the political levels of Government to create awareness and garner support for in-country officials.	Visits by IHB President identified as a SAIHC Capacity Building priority.
Facilitate the exchange of information concerning surveys, research or scientific and technical developments, to aid in the planning and organisation of hydrographic activities	The lack of functioning hydrographic offices and National Hydrographic Committees create some difficulty to obtain information.	SAIHC Conference and SAIHC ICCWG are used to communicate the requirements and obtain information from delegates.
Conduct Capacity Building projects as approved by CBSC	One training event transferred from 2014 to February 2015.	Approval obtained from CBSC secretariat by correspondence. All on track to execute project end of Feb 15.

Overall status of the work programme of..... **NIOHC**..... (*acronym of the IHO body or inter-organizational body involving the IHO*)

Compiled by ...**Kerrie Howard**..... (*name of the compiler of the report*) - e-mail address: ...**kerrie.howard@ukho.gov.uk**

Current goals and priorities	Current or expected gaps and needs	Comments
NICCCWG Production and maintenance of INT chart and ENC schemes for the NIOHC region.	None	Ongoing Will be updated at the next NICCCWG meeting in March 15
NIOHC CB CB plan revised annually at the NIOHC meeting as per MS requirements. CB events planned and undertaken.	None	Ongoing Will be updated at the next NICCCWG meeting in March 15
Other IHO bodies Responding to actions and reports as required by other IHO bodies eg. IRCC, WEND-WG	None	Ongoing Responses as required within timescale

Overall status of the work programme of ...HCA..... (acronym of the IHO body or inter-organizational body involving the IHO)

Compiled by ...Yves GUILLAM, HCA Sec. for President Robert WARD, Chair.... (name of the compiler of the report) - e-mail address: ...adcs@iho.int.

Current goals and priorities	Current or expected gaps and needs	Comments
1.Co-operation with International Organizations and participation in relevant meetings (IHO WP 1.1.1 & 1.1.3)...in order to further the interests of the IHO by enlisting their support and cooperation and to participate in projects of common interest (ATCM, COMNAP, IAATO, SCAR, IMO..)	No support from Member States delegations at ATCM likely due to lack of interaction between HOs and representatives in such meetings. Limited participation from HCA Member States at meetings and no participation registered from Observer Organizations at HCA-14, which led to the postponement of HCA-14 until 2016.	Done by HCA Chair. Polar Code adopted at IMO including hydrographic and charting concerns. IAATO represented at EIHC-5
2. To conduct a risk assessment for the Antarctic region and develop a Work Program to improve Antarctic charting (IHO WP 3.1.16.1)... To facilitate IHO MS coordination, cooperation and collaboration to improve hydrographic services and the provision of hydro-cartographic products.	Slow progress due to lack of resources by HCA Members.	Toolbox in progress with the IHO (Antarctica) GIS development, the provision of survey metadata by some HOs, the charting coverage in progress (ENC and INT charts), the creation of the Hydrographic Priorities WG.
3. To develop co-operation packages using Ships of Opportunity in order to improve survey data in critical shipping areas.	Need for...HCA meetings where all Stakeholders are present and common commitments to develop such operations.	Progress made with the provision of the Ships of Opportunity Guidelines.
4. To monitor ENC and INT paper chart coverage, and quality.	None	Ongoing. UK acts as Region M co-ordinator.

Overall status of the work programme of: WWNWS-SC

Compiled by: Peter Doherty – Chairman WWNWS-SC - e-mail address: peter.m.doherty@nga.mil

Current goals and priorities	Current or expected gaps and needs	Comments
Maritime Safety Information Training Course	Travel expense for 2 Instructors, anticipated via CB funding.	2 courses per year, 2 instructors per course
Maritime Safety Information Document Review Work Group	None expected.	WG supports review and standardization of IMO, WMO, IHO common MSI documents. Chairman supports through IMO NCSR. Conclusion of IHO/WMO MoU expected to increase WMO participation.
S-124 Working Group	None at this time. WG has the right mix of National MSI authorities and Industry Partners.	WG contributes to the modernization of GMDSS via e-navigation. Longer term engagement of MS in S-124 development considered fragile and could retard S delivery. Harmonization with IALA e-navigation initiative considered vital.
Review of the Iridium proposal as a GMDSS Satellite Service Provider	None expected.	Review of Iridium proposal and various documentation via WWNWS-SC meetings and interaction with IMO and WMO forums. Longer term challenges for NAVAREA coordinators' service delivery via two satellite providers to be considered and exposed with IMO.

Overall status of the work program of S-124 CG (subsidiary of the WWNWS-SC)

Compiled by Yves Le Franc - e-mail address: yves.le.franc@shom.fr

Current goals and priorities	Current or expected gaps and needs	Comments
<p>General: develop an S-100 Product Specification (PS) for Navigational Warnings (NWs)</p>	<p>Standardized digital NWs, as other new technical components, will allow new ways of operations. Reciprocally, the design of the S-124 PS depends to a certain extent of the new ways of operations envisaged. So, in parallel with the development of S-124 PS, the reflexion on new ways of operations in a global and structured approach ie the definition of the Maritime Service Portfolios of the e-navigation, should progress to feed the development of the product specification.</p>	
<p>Current tasks:</p> <ul style="list-style-type: none"> - establish the detailed scenarios of the current use of NWs - locate in scenarios the gaps from the user point of view - study solutions that S-124 NWs should allow for addressing the gaps - design the S-124 PS accordingly 	<p>The membership of the CG was extended to include the appropriate skills and knowledge's to include NW coordinators and producers, the industry and the organizations most involved in e-navigation development. However, the work requests detailed analysis and so, a strong investment for members. It is difficult to reach the appropriate level of active involvement. The design of system components (as S-100 PS) requests particular engineering skills and methods that may be far removed from the original skills of members.</p>	

Overall status of the work programme of ...Capacity Building Subcommittee (CBSC)

Compiled by ...Thomas Dehling.....- e-mail address: Thomas.dehling@bsh.de

Current goals and priorities	Current or expected gaps and needs	Comments
<p>The goals and priorities are provided in the respective Capacity Building Work Programme as published on the IHO website.</p>	<p>The Capacity Building effort depends on the active contribution of MS. The CB Fund and other contributions provide resources that cover the needs established in the IHO Strategy only partially. Additional resources are needed. These resources can be personal, technical or financial contributions.</p> <p>Gap: If more financial resources are available there will be an impact in the human resources with regards to the management.</p> <p>Expected Gap: the lack of a dedicated staff at the IHB may impact the ever increasing resources, projects, trainees, instructors and inter-institutional activities. Post-event assessment and performance monitoring are still too incipient and will require additional resources not currently available.</p>	<p>Weakness: CB fund depends on voluntary contribution from a limited number of countries, currently only two. There is no clear indication at this stage what will be the total contribution available in 2015.</p>

Overall status of the work programme of the Marine Spatial Data Infrastructures Working Group (MSDIWG)

Compiled by Jens Peter Hartmann Chair MSDIWG - e-mail address: jepha@GST.dk

Current goals and priorities	Current or expected gaps and needs	Comments
<p>A. Identify and promote national and regional best practices:</p> <ul style="list-style-type: none"> - for land-sea integration - for cross-border integration 		<p>The MSDIWG was moved from HSSC to IRCC 1. January 2015.</p> <p>At the next MSDIWG meeting in Marts 2015, the work programme of the MSDIWG will be adjusted in order to get an approval from IRCC at their meeting in June 2015.</p>
<p>B. Review the appropriateness of existing standards for the provision of the maritime components of spatial data infrastructures</p>		
<p>C. Develop content for an MSDI training course</p>		
<p>D. Maintain MSDI reference documentation on the IHO website</p>		
<p>E. Maintain and extend Publication IHO MSDI C-17 (IHO Task 2.9.2 refers)</p>		
<p>F. Conduct annual meetings of MSDIWG, arranged back to back with 1-day MSDI Open Forum (IHO Task 2.9.1 refers)</p>		
<p>G. Ensure that MSDI is a standing agenda item for RHCs' meetings (IHO Res 2/1997, as amended, refers)</p>		

Overall status of the work programme of ...WEND Working Group (*acronym of the IHO body or inter-organizational body involving the IHO*)

Compiled by ...Mark Halliwell (for Capt Jamie McMichael-Phillips... (*name of the compiler of the report*) - e-mail address: mark.halliwell@ukho.gov.uk

Current goals and priorities	Current or expected gaps and needs	Comments
1 To develop a proposal for a pilot project using OEM software tools to resolve overlapping ENC data issues, for consideration at WENDWG5	None	Ongoing. Singapore leading. Will be discussed at WENDWG5 in March 2015.
2 To finalise paper on Guidelines on Assessing and Eliminating the Risk of Overlapping ENC cells	None	Ongoing. Will be discussed at WENDWG5 in March 2015.
3 To provide a revised RHSG paper on WENC	None	Ongoing. RENC Harmonisation Group leading. Will be discussed at WENDWG5 in March 2015.
4 To continue working to attract ENC producer nations to join the RENCs	None	Ongoing. Will be discussed at WENDWG5 in March 2015.
5 To produce a paper on the benefits for ENC producer nations to join a RENC	None	Ongoing. RENCs leading. Will be discussed at WENDWG5 in March 2015.
6 To monitor ENC coverage and quality and report to IRCC and IHB	None	Ongoing. Will be discussed at WENDWG5 in March 2015.
7 To monitor and report the statistics on those ENCs not distributed via RENCs	None	Ongoing. RENCs leading. Will be discussed at WENDWG5 in March 2015.
8 To provide a scoping paper of the ENC Catalogue and to progress catalogue development	None	Ongoing. IHB leading. Will be discussed at WENDWG5 in March 2015.

9 To develop Capacity Building activities	None	Ongoing. Will be discussed at WENDWG5 in March 2015.
10 To monitor and advise on the impact of differences between paper charts and ENC updates and encourage Producer Nations through IRCC to solve issues that affect end users	None	Ongoing. Will be discussed at WENDWG5 in March 2015.
11 To assess ENC usage indicators and to propose alternatives if appropriate	None	Ongoing. Will be discussed at WENDWG5 in March 2015.

Overall status of the work programme of IHO-EC network WG

Compiled by Michel EVEN - e-mail address: even@shom.fr

Current goals and priorities	Current or expected gaps and needs	Comments
To follow the process and the EC call for tender “Coastal Mapping”	Not for now	
To prepare position of European HOs about the future phase of EMODNet, the long term marine data initiative from the European Commission	Not for now	Will require participation from regional hydrographic commissions concerned
To improve cooperation with the EC, by promoting, amongst its entities and near decision makers, the role of the hydrographic offices in the development of EU maritime policies	Not for now	
To follow European directives, call for tenders, programmes, etc, potentially impacting HOs and to define actions to be conducted in accordance	Not for now	

Remark: as the WG was created after the 6th IRCC meeting, no work programme has yet been validated by IRCC.

Overall status of the work programme of GEBCO Guiding Committee... (*acronym of the IHO body or inter-organizational body involving the IHO*)

Compiled by ...David Clark..... (*name of the compiler of the report*) - e-mail address: ...David.M.Clark@noaa.gov.....

2015 IHO WP #/Current goals and priorities	Current or expected gaps and needs	Comments
A. Organize and conduct GGC XXXII meeting	None	Meeting to be held in Kuala Lumpur, Malaysia, Oct 5, 2015 - Oct 9, 2015
D1. Encourage the contribution of bathymetric data to the IHO DCDB	None	GGC Chair to attend IRCC7 in Mexico, June 1-3, 2015
D3. Promote data contribution through GEBCO participation in RHCs meetings	Implementation of financial activities at IHB needs completion.	Prioritization of RHCs needed
F. Develop the on-line function of B-4	No Progress	Investigate feasibility
G1. Contribute to outreach and education about ocean mapping	Implementation in place, waiting for the date to be finalized so detailed planning and implementation can go forward.	Hold 10 year celebration Nippon Foundation Training Program in Monaco

Overall status of the work programme of SCRUM/TSCOM..... (acronym of the IHO body or inter-organizational body involving the IHO)

Compiled by Martin Jakobsson, Karen Marks. (name of the compiler of the report) - e-mail address: Martin.Jakobsson@geo.su.se, Karen.Marks@noaa.gov

2015 IHO WP #/Current goals and priorities	Current or expected gaps and needs	Comments
B. Joint TSCOM/SCRUM Meeting Dec. 2014	Completed	Held at Mtn. View, CA Dec. 2014
B. Joint TSCOM/SCRUM Meeting Oct. 2015	Organize meeting and preparation	Kuala Lumpur, Malaysia Oct. 2015
C. GEBCO Data Store development	Host and developer NOAA NGDC	Voluntary, Data Store prototype in preparation
G2. Release article for GEBCO_2014	Manuscript in preparation	Plan to submit to AGU Earth and Space Science Journal
G2. GEBCO Science Day/AGU Special Session	Completed	Highly successful Fall 2014 AGU Meeting Special Session held as GEBCO Science Day
G3. GEBCO World Map	Available for download from the GEBCO webpage.	Map with gazetteer features names, no seas, is made available for download from the GEBCO web page. MS are able to download and print. New version of the World Map based on the GEBCO_2014 map will be the next update
D2. IBCAO Printed Map	A map for printing of the Arctic Ocean is currently being prepared within IBCAO	A final PDF based on most recent IBCAO Version 3.0 is planned to be ready during the summer of 2015.
D2. Initiation of regional mapping project: IBCAO-Greenland	There are several marine research expeditions involving bathymetric mapping of Greenland's continental shelf planned for nearest years to come. SCRUM is currently looking into to start a regional project within IBCAO with a specific focus on Greenland: "IBCAO-Greenland"	
D2. Initiation of regional mapping project: IBCAO-Svalbard	SCRUM is currently looking into to start a regional project within IBCAO with a specific focus on the waters around Svalbard: "IBCAO-Svalbard"	

Overall status of the work programme ofGEBCO (web site wok)..... (*acronym of the IHO body or inter-organizational body involving the IHO*)

Compiled by ...Pauline Weatherall..... (*name of the compiler of the report*) - e-mail address:paw@bodc.ac.uk.....

2015 IHO WP #/Current goals and priorities	Current or expected gaps and needs	Comments
H. Ongoing, maintenance and update of GEBCO's web site (www.gebco.net), hosted at the British Oceanographic Data Centre (BODC)	None	GEBCO's web site is updated when required to include news items; meeting information and any ad hoc required additions/changes. Recent news items include: http://www.gebco.net/about_us/news_and_events/

Overall status of the work programme ofGEBCO (Outreach work)..... (acronym of the IHO body or inter-organizational body involving the IHO)

Compiled by ...Pauline Weatherall..... (name of the compiler of the report) - e-mail address: paw@bodc.ac.uk.....

2015 IHO WP #/Current goals and priorities	Current or expected gaps and needs	Comments
<p>G2. Increase membership and involvement in the GEBCO Outreach Working Group</p> <p>G2 Further develop a roadmap and plan for Outreach activities, including effective use of Outreach budget</p> <p>Investigate and develop outreach material and products</p>	None	<p>The membership of the WG has been extended from 4 members to 12 : http://www.gebco.net/about_us/committees_and_groups/</p> <p>A road map was outlined at the GEBCO Guiding Committee meeting in June 2014: http://www.gebco.net/about_us/meetings_and_minutes/documents/ggc_gebco_outreach_roadmap.pdf</p> <p>No update to report at present</p>
G3. Printing of GEBCO World Map in MS		No update to report at present from Outreach WG.
I. Develop short course and course material on compiling digital bathymetric models (DBMs) to be included in GEBCO from a heterogeneous bathymetric source database		No update to report at present

Overall status of the work programme ofGEBCO/SCUFN..... (acronym of the IHO body or inter-organizational body involving the IHO)

Compiled byHans Werner Schenke...(name of the compiler of the report) - e-mail address: hans-werner.schenke@awi.de or hwschenke@t-online.de

2015 IHO WP #/Current goals and priorities	Current or expected gaps and needs	Comments
B. SCUFN-27 Meeting 16-20 June 2014	Summary Report completed (IHO website)	Action Items from SCUF-27 under work by SCUFN-Members
B. SCUFN-28 Meeting 12 – 16 Oct 2015	Organize/prepare the Meeting by DHN, Brazil	12 – 16 Oct 2015 in Rio de Janeiro /Niteroi, Brazil
E. Preview of submitted name proposals by SCUFN-Members during intersessional period	Development and test of websites www.scufnsubmission.org and www.scufnreview.org underway	Under work by SCUFN Members/Dr. Han
J. Final Implementation of the on-line GEBCO Gazetteer www.ngdc.noaa.gov/gazetteer/	Need for improvement and corrections of the online Gazetteer content, s.a. feature geometry, coordinates, and meta data	Under work by IHB and IHO DCDB
E. Completion of the generic term website www.genericterm.org and replenishment of new terms	Improvement of the graphic examples and adding additional generic terms	Contributions and input requested from SCUFN Members and Generic Term Group

Overall status of the work programme of ...Finance Committee..... (*acronym of the IHO body or inter-organizational body involving the IHO*)

Compiled by ...Andrew Millard..... (*name of the compiler of the report*) - e-mail address: andrew.millard@ukho.gov.uk.....

Current goals and priorities	Current or expected gaps and needs	Comments
<p>Maintain oversight of the IHB financial performance against the approved budget:</p> <ul style="list-style-type: none"> • Ensure appropriate effort is made to collect members contributions • Ensure costs of running the IHB are within the limits set by the budget. • Ensure funds are used for the purposes approved by member states • Identify and manage any financial risks that the IHB may be subject to • Ensure processes are adequate to minimize the occurrence of fraud being committed against the IHB, either from external or internal parties. • Ensure any recommendations arising from the auditors are acted upon 	<p>Financial statements and reports to be provided in a timely manner in advance of the 6 monthly meetings</p>	

Overall status of the work programme of ...SRWG..... (*acronym of the IHO body or inter-organizational body involving the IHO*)

Compiled by ...Andrew Millard..... (*name of the compiler of the report*) - e-mail address: andrew.millard@ukho.gov.uk.....

Current goals and priorities	Current or expected gaps and needs	Comments
In accordance with ToR of the SRWG:		
Review proposed revised draft regulation Review implementation plan Review proposed job descriptions for directors under new structure	Require drafts of the regulations, implementation plans and job descriptions no later than June 15.	Following a discussion with the President it is hoped that draft regulations might be at a point that the SRWG can have an initial meeting on 9 th April 15 to agree progress and discuss any issues and sticking points.