

Baltic Sea Hydrographic Commission (BSHC)
21th Conference – Klaipeda, Lithuania
27-29 September 2016

Report of the IHO Secretariat

Status of Approval of Amendments to the IHO Convention

1. All IHO Member States in the BSHC have approved the Protocol of Amendments to the Convention on the IHO. The Government of Monaco has informed the Directing Committee that it was formally notified of the approval of the 48th Member State on 8 August 2016. In accordance with the terms of the Protocol, this means that the Amended Convention on the IHO and its supporting Basic Documents will enter into force three months later, this being on 8 November 2016.

Status of Membership of the IHO

2. The IHO membership stands at 85. Bulgaria, Haiti, Mauritania and Sierra Leone have also been approved to become Members of the IHO, but have not yet deposited their instruments of accession with the Government of Monaco.

3. The Government of Monaco has notified IHO Member States of the application by four coastal States to join the IHO: Malta, Vanuatu, the Solomon Islands and the Republic of the Congo. The IHO Member States' representatives are asked to expedite the approval process wherever possible by 8 November 2016. In the Revised Convention structure, for States wishing to join the IHO that are already Member States of the United Nations there will be no requirement to seek the approval of existing Member States of the IHO. In this respect, Governments of States that have previously applied to join the IHO but have not yet received the approval of the required two-third majority of existing Member States are invited to consider depositing their letter of accession with the Depositary at their earliest convenience. Their accession will take effect on 8 November 2016 or on the date on which the letter of accession is received by the Depositary, if this is later than 8 November 2016.

Regional Applications for Membership of the IHO

4. Lithuania that is the Associate member of the BSHC and also not already Member State of the IHO is encouraged to become member. The Directing Committee, in cooperation with the Department of External Relations of the Government of Monaco, stands ready to assist, through diplomatic or other channels, for membership of the IHO of Lithuania.

Suspended Member States

5. Serbia, Congo and the Dominican Republic remain suspended. IHO Secretariat is working with these states to expedite their return to full membership as soon as possible, as is the case for a number of other Member States who have fallen behind on payments of their annual subscription.

IHO GIS and Databases

6. Work has continued on the development of the IHO GIS which is composed of two main parts: a country information database and a regional information database.
7. The country information database has been progressively upgraded to include additional administrative information and facilitate the maintenance of the Yearbook (IHO Publication P-5) and related lists posted on the IHO website. Countries in the BSHC Region are invited to review their entry in the Yearbook on an annual basis and provide the IHO Secretariat with the appropriate updates or report no change.
8. An Esri-based GIS solution is being implemented to develop further the regional information database. This will enable access to various layers of information through the IHO website and through cloud-based on-line GIS options. The IHO ENC Catalogue and the IHO GIS for Antarctica have been transferred to this new environment.
9. **C-55 Database.** Work has continued on developing a GIS database application to support C-55 - *Status of Hydrographic Surveying and Charting Worldwide* and the work of the IHO. In response to the request to complement C-55 composite data (percentage of areas adequately surveyed / requiring re-survey / not surveyed) with CATZOC information (see IHO CL 52/2015), CATZOC data was provided by PRIMAR - on behalf of IC-ENC, PRIMAR and Canada, Singapore, Sweden and Thailand. Useful options for visualizing the data in the IHO Secretariat C-55 GIS are being investigated. Countries in the BSHC Region are invited to review their entry on an annual basis and to provide the IHO Secretariat with the appropriate updates or to report no change.
10. **INToGIS - INT Chart Management and Catalogue.** Following the development of the regional database for Antarctica, the IHO Secretariat, with support provided by the Republic of Korea, initiated an "INToGIS" project in order to move S-11 part B into an interactive GIS/S-100 compliant environment. The objective of the project is to provide the Regional International Charting Coordination WGs with relevant on-line updated information and the necessary tools to review and maintain INT chart schemes and monitor the implementation of the INT chart schemes. Extending the capability to include ENC scheming and coverage is also envisaged. As announced in IHO CL 89/2015, the new INT Chart Web Catalogue and the associated INT Chart on-line Web Manager services were made available in January 2016 through the IHO website at: www.iho.int > Standards & Publications > S-11 > Part B (<http://chart.iho.int:8080/>).
11. The following BSHC countries have not yet requested an ID and password for the maintenance of the S-11 database: Denmark and Russian Federation. Those countries are invited to do so as indicated in IHO CL 89/2015, as the IHO Secretariat discontinued the maintenance of the pdf version of the S-11 Part B -*Catalogue of INT Charts* on 1 April 2016.
12. Feedback and lessons learned from the initial use of the INToGIS services and from the implementation of the experimental procedure for the review and monitoring of INT charts decided at IRCC-7 (IHO CL 64/2015 refers) were addressed during the workshop for Regional INT Chart / ENC Coordinators that was held at the IHO Secretariat on 25 April 2016, just before the second meeting of the Nautical Cartography Working Group. The INT Chart / ENC Coordinators of 14 out of 15 charting regions were present or represented. Mr. Jarmo Makinen (Finland), as INT chart coordinator for Region E, attended the workshop and provided assessment for Charting Region E. A comprehensive demonstration of the INToGIS web-

based INT chart scheme management tool was provided. The workshop confirmed the need to maintain the INT chart concept for the foreseeable future, at least for small scale charts.

INT Chart and ENC Production Coordination - Region E

13. Finland, as INT chart coordinator for Region E, has continued to provide regular updates to web-based version of S-11 Region E. Member States are encouraged to continue to provide updates to S-11, through Finland as coordinator for INT Region E. The point of contact is: Mr. Jarmo Makinen.

14. The status of the INT chart scheme for region E is contained in Edition 3.0.2 of S-11 Part B which was published in June 2016. There are 292 charts in the scheme, of which 282 have been published (96, 24 %).

15. The Region E Coordinator also participated in the 6th meeting (March 2016) of the WENDWG. The WENDWG invited:

- The Regional Hydrographic Commissions to define and adopt ENC Schemes (as it is done for INT Charts Schemes) and to provide basic metadata to the IHO Secretariat, and
- The IHO Secretariat to consider including a layer of "Approved" ENC Schemes in the IHO ENC Catalogue or as an extension of the INT Web Chart Catalogue.

16. Links have been provided to Member States' on-line chart catalogues from the IHO ENC coverage catalogue (www.iho.int > ENC&ECDIS > ENC Availability > on-line catalogue).

Capacity Building Programme

17. The level of activity of the IHO Capacity Building (CB) Programme continued to increase. Expenditure in the IHO 2015 CB Work Programme (930 907 Euros) was 118% larger than the budget for the previous year. In 2015, the IHO CB programme also reached a new level of achievement with the highest rate of completion of planned CB activities (93%) compared to the last decade. Two BSHC member states have benefited from the IHO CB Work Programme in 2015 and 2016.

18. One student from Estonia attended the IHO–Nippon Foundation CHART (Cartography, Hydrography and Related Training) Project Category B training in Marine Cartography and Data Assessment held at the UK Hydrographic Office (UKHO) in 2015. One student from Latvia has also currently participated in the same CAT-B Course scheduled from 5 September to 16 December 2016.

Report on the Overall Status of the IHO Work Programme

19. As a result of discussion at EIHC-5 concerning the assessment of the IHO Work Programme, Conference Decision No. 3 reinforced the reporting requirements by introducing a six-monthly reporting regime for all IHO bodies. The outcome of the first four bi-annual assessments was submitted to Member States through IHO CL 17/2015, 66/2015, 14/2016 and 48/2016. According to last outcome (CL 48/2016refers), only four out of 15 Regional Hydrographic Commissions (RHCs) submitted a status report (MACHC, MBSHC, NSHC, and SAIHC).

Crowd Sourced Bathymetry Programme

20. In accordance with Decision 8 of the EIHC-5, the IRCC has established the Crowd-Sourced Bathymetry Working Group (CSBWG) to provide guidelines on the collection and use of crowd-sourced bathymetry. Member States are invited to nominate representatives to participate in the CSBWG (see IHO CL 42/2015). The CSBWG has continued preparing a Guidance document on Crowd-Sourced Bathymetry.

21. The web-based interface portal to the IHO Data Centre for Digital Bathymetry, hosted by the USA in Boulder, Colorado, as part of its commitment to the system of World Data Centres, is being upgraded to be compatible with the crowd-sourced bathymetry concept. This will enable an IHO-led CSB infrastructure to be established and promoted in the IMO and across the wider maritime community.

Preparation of the next IHO Assembly

22. The first IHO Assembly is scheduled to take place from 24 to 28 April 2017. As indicated in IHO CCL 1 dated 21 April 2016, the on-line registration for the Assembly has been started via the IHO website from 1 September 2016. Because of IT security issues, the initial version of the tool will be self-contained, with no connection to the IHO Country Information System (CIS). The initial registration of the identity of applicants will be validated by the IHO Secretariat. After this initial approval, legitimate applicants will be able to register for further IHO meetings without having to re-enter their details. A beta-version, developed with the support of the KHOA through the Project Officer seconded by the Republic of Korea, is being tested at present. It is expected that the tool will be used in full scale testing as part of registering participants for HSSC8.

23. In accordance with the General Regulations of the IHO that will enter into force on 8 November 2016, the first Assembly will have to approve the list of the members of the IHO Council. The selection process for the establishment of the Council has already been initiated by the Secretary-General designated (CL 46/2016 refers). Therefore it is expected that all RHCs will have agreed before that date on the process by which they will assign Members to occupy the seat(s) in the Council allocated to them, and possibly instruct the relevant occupant(s).

24. The agenda of the Assembly will include a review of the IHO Strategic Plan and consideration of the IHO Work Programme for the next 3-year. In accordance with IHO Resolution 12/2002 as amended the relevant documents will be prepared by the IHO Secretariat in consultation with the HSSC, the IRCC and the Member States.

IHO Outreach

World Hydrography Day

25. The theme for 2016 is "**Hydrography – the key to well-managed seas and waterways**" which was announced by CL 81/2015. This theme enables all stakeholders involved in hydrography to highlight the significance and importance of their particular activities which could include, but is not limited to, the support of safety of navigation, protection of the marine environment, coastal zone management, marine spatial data infrastructures, defence, resource exploration, and all other components of the blue economy. Reports on events hosted in connection with WHD 2015 are available at:

www.iho.int > Home > About IHO > World Hydrography Day > WHD 2016 Celebrations around the world

26. A theme for the WHD 2017 was also proposed by the Directing Committee in the CL 40/2016. The Directing Committee has invited Member States to consider the proposed theme for WHD 2017 “**Mapping our seas and oceans - more important than ever**” - and to provide their comments to the IHO Secretariat by 01 November 2016. In addition to raising awareness of the wide potential uses of hydrographic data in general, this theme may be used in particular to raise awareness of the current lack of comprehensive data to underpin many maps and charts of the seas and oceans. It may help promote and encourage innovative supplementary data gathering and data maximizing initiatives already under investigation in the IHO, including crowd-sourced bathymetry (volunteered geographic data) and satellite-derived bathymetry. This, in turn, will help to promote the increasing role of those involved in hydrography in maritime spatial data infrastructures and the benefits of making hydrographic data accessible to the widest possible audience for uses that go well beyond the safety of navigation.

International Hydrographic Review

27. The International Hydrographic Review (IHR) provides an opportunity for Regional Hydrographic Commissions and Member States to publicize technical and other achievements in the region. An editorial board comprising a representative from each region has been established. The representative for the BSHC is Dr. Mathias Jones (Germany). Papers for consideration for publication in the IHR should be forwarded directly to the editor (ihreview@iho.int, copy to ian.halls1@defence.au.gov).

28. The IHO Secretariat has been working with the University of New Brunswick (UNB), Canada, in a project to develop a digital repository of the complete library of the IHR. As a result, the first phase of the project now provides access to volumes from 1963 to 2015. They can be found at: <https://journals.lib.unb.ca/index.php/ihr>.

Action Requested of BSHC Member States

1. Note this report
2. Provide continuous updates to S-11 Part B, through Finland as coordinator for INT Region E
3. Review entries in IHO Publications C-55 and P-5 (Year Book) at least annually.
4. Provide continuous updates to S-11 Part B for INT Region H through the INT oGIS tool and implement the procedure depicted in IHO CL 64/2015 for the review and monitoring of INT charts
5. Report to the IHO Secretariat on the status and description of the ENC schemes in the Region
6. Consider appropriate arrangements to prepare the IHO Assembly to be held in April 2017
7. Consider submitting papers for publication in the IH Review.
8. Take any other actions as considered appropriate.