

**Baltic Sea Hydrographic Commission (BSHC)**  
**20th Conference – Saint Petersburg, Russian Federation**  
**16-18 September 2015**

**IHB Report**

**Status of Approval of Amendments to the IHO Convention**

1. Amendments to the Convention on the IHO were approved by the 3<sup>rd</sup> Extraordinary International Hydrographic Conference in May 2005. As of August 2015, 43 of the required 48 approvals of the Protocol of Amendments to the IHO Convention had been reported by the Government of Monaco. The IHB has been informed of one additional approval which will be announced by the Government of Monaco shortly.
2. All IHO Member States in the BSHC have approved the Protocol of Amendments to the Convention on the IHO.

**Status of Membership of the IHO**

3. Following the accession of Georgia, Viet Nam and Brunei Darussalam in March 2015, IHO membership stands at 85. With Serbia, Congo and the Dominican Republic remaining suspended, the current thresholds for IHO decisions are 42 when a simple majority is required and 55 when a two-third majority is needed. The Directing Committee reminds Member States that not responding to a Circular Letter which requires a vote is equivalent to voting NO.
4. 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.
5. Only Lithuania in the Baltic region has yet to apply to become members of the IHO. 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.

**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.
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 various sophisticated cloud-based on-line GIS options. The IHO ENC Catalogue has been transferred to this new environment and the transfer of the GIS coverage for Antarctica will follow next.
9. 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 addition to the current

composite indicators (percentage of areas adequately surveyed / requiring re-survey / not surveyed), the inclusion of CATZOC polygons would provide an initial geo-referenced quality layer as discussed at IRCC-4 meeting. In that perspective, the RENCs have been asked to seek the consent of their contributing members to provide CATZOC information to the IHB for inclusion in C-55.

10. The need to improve the current maintenance process for S-11 Part B has been raised on many occasions in several Regional Hydrographic Commissions. Following the development of the regional database for Antarctica, the IHB, with support provided by the Republic of Korea, has initiated an "INToGIS" project that will 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 schemes/coverage/production is also envisaged in due course. The "INToGIS" project is now in the experimentation phase with a few Regional International Charting Coordinators (BSHC, MBSHC, USCHC, and HCA). The target date for transferring to the on-line system is 1st January 2016.

### **INT Chart and ENC Production Coordination - Region E**

11. Finland, as INT chart coordinator for Region E, has continued to provide regular updates to 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.

12. The status of the INT chart scheme for region E is contained in Edition 2.0.7 of S-11 Part B which was published in May 2015. There are 292 charts in the scheme, of which 283 have been published (96,92 %).

13. IRCC7 (Decision IRCC7/3 and Actions IRCC7/27&28) agreed on a revised procedure for the review of new INT charts. In future, only charts from new INT producers will be reviewed. The principle purpose being to ensure that any new Producer Nation is following the relevant IHO standards and guidelines regarding INT charts. A CL (64/2015) has been issued announcing the revised procedure.

14. The CL 64/2015 also provides information on a workshop being organised in conjunction with Second meeting of the Nautical Cartography Working Group (NCWG2) in April 2016. The workshop will provide International Charting Coordinators with the latest information on the practical implementation of the INT chart scheme and will introduce the INToGIS tools, best practices, and lessons learned.

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

### **5th Extraordinary International Hydrographic Conference (EHC-5)**

16. EHC-5 took place from 6 to 10 October 2014 in Monaco. 65 of the 82 Member States were represented, together with two pending Member States and 21 representatives from non-Member States. All IHO Member States of the BSHC were represented.

17. In addition to the Industry Exhibition, an IHO Capacity Building exhibition and poster celebration of ten years of Nippon Foundation IHO-IOC GEBCO scholars was arranged. A number of past scholars and alumni provided poster displays of their work since graduation throughout the period of the Conference.

18. The Conference acknowledged the need to consider novel ways to supplement hydrographic data gathering, especially in remote and unsurveyed areas. Methods include using satellite derived bathymetry and crowd-sourcing techniques. The Conference was told that the development of national and regional spatial data infrastructures is growing and that national hydrographic services should urgently consider the potential impact on their roles and responsibilities as the world moves from a map and chart-based paradigm to one that places the management and provision of national reference geodata services ahead of map and chart production.

19. The Proceedings for the Conference were posted on the IHO website (see IHO CL 27/2015).

### **Capacity Building Programme**

20. The IHO capacity building programme reached a new level of achievement in 2014 with double the funds available for 2014 compared to 2013. This was a result of the ongoing financial support provided by the Nippon Foundation of Japan and the Republic of Korea, supplemented by a contribution from the IHO budget and in-kind support from Member States and from industry. The Directing Committee is continuing its campaign to find additional donor States and funding organizations. Eleven technical visits and 31 different training activities were planned last year with a rate of execution of over 80%. The remainder of the planned activities were unavoidably cancelled or postponed due to difficulties arising in host countries and no suitable alternative arrangements being possible in time.

21. Estonia has already benefited from IHO CB Work Programme. One Estonian student has 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).

### **Crowd Sourced Bathymetry Programme**

22. 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).

23. Meanwhile, 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.

### **IHO Outreach**

#### **World Hydrography Day**

24. The theme for World hydrography Day 2015 concentrates on the fact that much of the world's seas, oceans and navigable waters remain unsurveyed. The tag-line for WHD-2015 is: "*Our seas and waterways - yet to be fully charted and explored*". The theme is intended to raise public awareness that, for example, there are higher resolution maps of the Moon, Mars and Venus than for many parts of our seas and coastal waters. The theme provides the opportunity to promote and encourage innovative supplementary data gathering initiatives to address the current shortfall in useful bathymetric data, including crowd-sourcing and satellite derived bathymetry that were discussed at EIHC-5.

25. The theme also offers the opportunity to highlight both the missed opportunities and the potential risks involved in the continuing development of the blue economy and all other human-related activities

taking place at sea, at a time when mankind still has a relatively limited knowledge of the nature and the shape of much of the seafloor and the hazards that lie upon it.

26. The celebration of WHD-2015 in Monaco on 30 June was honoured by the presence of HSH Prince Albert II of Monaco. It was enhanced both by a visit by the Japan Coast Guard Training Ship "Kojima" facilitated by the Japan Hydrographic Oceanographic Department (JHOD) and by hosting the 1st meeting of the Nautical Information Provision Working Group (NIPWG) at the IHB during the week.

27. The IHB has provided supporting material for WHD-2015 on the IHO website (see IHO CL 28/2015). Member States are invited to forward as soon as possible to the IHB any material created in support of WHD-2015 celebrations for posting on the IHO website. This will enable the widest possible dissemination of publicity and support material.

### **IHO Stakeholder Forum**

28. The draft agenda of HSSC-7 includes a half-day session for Stakeholders' input and discussion on the afternoon of Thursday, 12 November 2015 (see IHO CL 37/2015). The programme of the session will be based on presentations proposed by IHO Stakeholders. IHO Stakeholders attending the Forum will be welcomed to participate as observers throughout the HSSC meeting.

29. Logistics information and a form for submitting abstracts for consideration are available on the IHO web site at [www.iho.int](http://www.iho.int) > External Liaisons > External Stakeholders > Section on IHO Stakeholder Meetings > Next Meeting.

### **International Hydrographic Review**

30. The International Hydrographic Review (IHR) provides an opportunity for Regional Hydrographic Commissions and Member States to publicise 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](mailto:ihreview@iho.int), copy to [ian.halls1@defence.au.gov](mailto:ian.halls1@defence.au.gov)). The mandate of the current editor, Mr Ian Halls (Australia), was renewed until the end of 2016 (CL 84/2014 refers).

### **Action Requested of SAIHC 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. **Consider** submitting papers for publication in the IH Review.
5. **Take any other actions** as considered appropriate.