

38th Meeting of the US - Canada Hydrographic Commission (USCHC)

National Harbour, Washington DC, USA

16 March 2015

IHB Report

Status of Approval of Amendments to the IHO Convention

1. Amendments to the Convention on the IHO were approved by the 3rd Extraordinary International Hydrographic Conference in May 2005. By January 2015, 41 of the required 48 approvals to the Protocol of Amendments had been received by the Government of Monaco.

2. The amendments to the Convention will enter force three months after the necessary majority of approvals is received by the Government of Monaco. If the required number of approvals are received in the next two years, then the first Assembly of the IHO will be held in 2017.

Status of Approval of New Member States of the IHO

3. IHO membership stands at 82. Malta, one of the largest Flag States has very recently applied to join the IHO. Vanuatu is expected to apply for membership very soon. Members of the USCHC are requested to expedite the approval of the membership of these States.

4. Brunei Darussalam, Bulgaria Georgia, Haiti, Mauritania, Sierra Leone and Viet Nam have all been approved to become Members of the IHO, but have not yet deposited their instruments of accession with the government of Monaco.

INT Chart and ENC Production Coordination - Region A

5. USA NOAA-NOS is the coordinator for International Charting for Region A. The current edition of S-11 Part B for Region A is Edition 2.0.5 - March 2013. No more recent information has been received by the IHB.

6. According to the chart collection held by the IHB, 8 INT charts appear to have been withdrawn since the last report from the USCHC. All 15 INT charts in the regional INT charting scheme have been published. The Coordinator is requested to confirm that there are no changes to the information currently published in S-11 Part B.

7. The need to improve the current maintenance process for S-11 Part B has been raised in several Regional Hydrographic Commissions. Following the development of the regional database for Antarctica, the IHB, with support provided by the Republic of Korea, is undertaking 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. An experimentation of the "INToGIS" project involving some of the Regional International Charting Coordinators for comment and feedback is likely to start in March and should involve initially the BSHC, the MBSHC, the HCA, and the USCHC. Canada and US have previously indicated a willingness to be involved in the development phase.

8. The information paper presented by US at WENDWG-5 (*USCHC Case Study for Resolving Overlaps*) is now posted on the IHO website as a reference document at:

http://www.iho.int/mtg_docs/com_wg/WEND/WENDWG5/WENDWG5-Docs.htm

5th Extraordinary International Hydrographic Conference (EIHC5)

9. EIHC5 took place from 6 to 10 October in the Auditorium Rainier III in Monaco. 65 of the 82 Member States were represented, together with two pending Member States and 21 representatives from non-Member States.

10. In particular, 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.

11. The Proceedings for the Conference will be published and made available on the IHO website in due course.

IHB GIS and Databases

12. The IHB is migrating from an open-source to an Esri-based GIS solution. This is because the small size of the IHO secretariat meant that reliance on self-taught expertise in customising open-source solutions introduced a very significant single point of failure in the event that staff became unavailable. It is anticipated that the C-55, IHO Year Book and other associated databases, such as the *INToGIS* project will be transferred to an Esri environment by Easter 2015. This will enable access to various layers of information through the IHO website and through various sophisticated cloud-based on-line GIS options.

IHB Technical Standards Support Officer

13. The Directing Committee is confident in identifying options that will enable the recruitment of a Technical Standards Support Officer in 2016 and thereby address the acknowledged shortfall in capacity - especially for the on-going support of IHO standards and those related to S-100 and its Registry. The proposed way forward will be further discussed at HSSC-7 (November 2015), in accordance with the actions agreed at HSSC-6.

Crowd Sourced Bathymetry Programme

14. EIHC5 through Decision 8 directed the IRCC to establish a working group to provide guidelines on the collection and use of crowd-sourced bathymetry. This WG will be established after the IRCC next meets in June in Mexico.

15. 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. The upgrade is expected to begin shortly. This will enable an IHO-led CSB infrastructure to be established and promoted in the IMO and across the wider maritime community.

Post-2015 Agendas

16. The development of the post-2015 sustainable development goals (SDGs) and of the post-2015 framework for disaster risk reduction under the aegis of the United Nations offer an opportunity to highlight the fundamental role of hydrography in underpinning sustainable development and the reduction of marine disaster risks. The Directing Committee is striving to make the best of this opportunity, both directly and through related initiatives and programmes such as the UN initiative on Global Geospatial Information Management (UN-GGIM) and the activities of the Group on Earth Observation (GEO). As the negotiation processes are driven and

controlled by Member States, the efforts of the Directing Committee need to be taken forward at the national and regional levels (IHO CL 53/2014 refers).

International Hydrographic Review

17. The International Hydrographic Review (IHR) provides an opportunity for Member States to publicise technical and other achievements in the region. An editorial board comprising a representative from each region has been established to elicit suitable papers and articles from authors. The nominated representative for the USCHC is Mrs Lucy Hick from NOAA-NOS.

18. Papers for consideration for publication in the IHR should be forwarded directly to the editor (ihreview@iho.int).

IHO Publicity

19. World Hydrography Day. The theme for World hydrography Day 2015 will concentrate on the fact that much of the world's seas, oceans and navigable waters remain unsurveyed. The tag-line for WHD2015 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 and Mars than for many parts of our seas and coastal waters. The theme also 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 EHC5 and data mining - the location of valid bathymetric data from vaults and archives.

20. The theme 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.

Action Requested of USCHC Member States

21. USCHC Member States are invited to:

- a. **Note** this report
- b. **Expedite** the approval of the membership of Malta to the IHO
- c. **Take any other actions** as considered appropriate