



**COMISION REGIONAL HIDROGRAFICA
DEL PACIFICO SUDESTE
SOUTH-EAST PACIFIC REGIONAL HYDROGRAPHIC
COMMISSION**



12^a Reunión - Guayaquil, Ecuador
12th Meeting - Guayaquil, Ecuador
13 - 16 de Julio del 2015
13 - 16 July 2015

IHB Report

Status of Approval of Amendments to the IHO Convention

1. As of 30 June 2015, 42 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 two additional approvals which are pending on notification.
2. The Government of Monaco has not reported receipt of approval of the Protocol of Amendments from the following IHO Member States of the SEPRHC eligible to respond: Colombia and Ecuador.
3. The Directing Committee, in cooperation with the Department of External Relations and Cooperation of the Government of Monaco, stands ready to assist, through diplomatic or other channels, those States' representatives that may be encountering difficulties in progressing the outstanding approvals of the Amendments to the Convention.

Status of IHO Membership

4. 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.
5. Bulgaria, Haiti, Mauritania and Sierra Leone which had received in previous years the required number of votes to be accepted as a Member State of the IHO have not yet deposited their instruments of accession.
6. The Government of Monaco notified the application for IHO Member States of two coastal States: Malta and Vanuatu. Two other applications from Solomon Islands and the Republic of the Congo are pending on notification.
7. The Directing Committee, in cooperation with the Government of Monaco, stands ready to assist, through diplomatic or other channels, Member States' representatives that may be encountering difficulties in progressing the outstanding approvals through their respective governments.

IHO GIS and Databases

8. 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.
9. 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.

10. 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 in this new environment and the transfer of the GIS coverage for Antarctica will follow next.

11. 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. In that perspective, the RENCs are invited to seek the consent of their members to provide CATZOC information to the IHB for inclusion in C-55.

12. 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.

Updates of databases related to the SEPRHC

13. The latest edition of S-11 Part B for Region C2 is Edition 2.0.5 dated December 2013. The IHB is not aware of any new publication or new edition of INT charts having been published since SEPRHC-11. According to records held by the IHB, in total, 7 INT charts have been published to date, out of 44 charts in the scheme (~ 16 %).

14. The status of the data from the SEPRHC region in the C-55 database is as follows:

Area	Last update	Comment
Chile	2004	
Colombia	2009	
Ecuador	2004	
Panama	/	No information on area C2
Peru	2011	

15. The status of the data from the SEPRHC region in the IHO country information database is as follows:

Country	Last update	Comment
Chile	July 2014	
Colombia	May 2015	
Ecuador	May 2015	
Panama	May 2015	Non Member State
Peru	March 2015	

16. Countries in the SEPRHC region are invited to review their entries at least annually and provide the IHB with the appropriate updates or report no change.

5th Extraordinary International Hydrographic Conference (EIHC-5)

17. EIHC-5 took place from 6 to 10 October in Monaco. 65 of the 82 Member States were represented, together with two pending Member States and 21 representatives from non-Member States. All four IHO Member States of the SEPRHC were represented.

18. 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.

19. 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.

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

Report on the Overall Status of the IHO Work Programme

21. As a result of the EIHC-5 discussion 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 for all IHO bodies. The outcome of the first bi-annual assessment was submitted to Member States through IHO CL 17/2015. Only 5 Regional Hydrographic Commissions (EAHC, MACHC, NIOHC, NSHC, and SAIHC) had submitted a status report on time.

Capacity Building Programme

22. The SEPRHC benefited from one activity under the IHO CB Work Programme for 2014: a technical workshop on “Hydro/Cartography River Survey” which was attended by representatives of three commissions: MACHC, SEPRHC and SWaHC. The SEPRHC stands to benefit from one activity of the CB Work Programme for 2015: a workshop on Marine Spatial Data Infrastructures (MSDI), to be organized by the SWaHC with participants from the MACHC and the SEPRHC.

23. One applicant from Peru was selected for the 2014 course of the IHO – Nippon Foundation CHART project and one applicant from Ecuador was selected for the 2015 phase of the marine geospatial information programme sponsored by the Republic of Korea.

24. It is expected that a call for applications will be issued in September 2015 for the 2016-2017 session of the Master of Science Programme in Hydrographic Surveying at the University of Southern Mississippi sponsored by the Republic of Korea. Hydrographic Offices are invited to invest in the preparation of candidates especially with respect to English proficiency.

Crowd Sourced Bathymetry Programme

25. 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).

26. 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

27. 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. 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.

28. 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.

29. 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

30. 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.

31. Logistics information and a form for submitting abstracts for consideration are available on the IHO web site at www.iho.int > External Liaisons > External Stakeholders > Section on IHO Stakeholder Meetings > Next Meeting.

International Hydrographic Review

32. 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. The representative for the SEPRHC is Commander Julio Behr (Peru). 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).

Action Requested of SEPRHC Member States

33. SEPRHC Member States are invited to:

- **Note** this report;
- **Progress** pending ratifications of the Protocol of Amendments to the IHO Convention and report any difficulties being encountered or assistance required;
- **Approve** pending applicants to IHO membership and report any difficulties being encountered or assistance required;
- **Provide** continuous updates to S-11 Part B, through Chile as coordinator for INT Region C2;
- **Review** entries in IHO Publications C-55 and P-5 at least annually;
- **Implement** the bi-annual reporting regime established by EIHC-5;
- **Consider** participating in the CSBWG;
- **Consider** submitting papers for publication in the IH Review;
- **Take any other actions** as considered appropriate.