

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. As of August 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 will be announced by the Government of Monaco shortly.
2. Mozambique is the only IHO Member State in the SAIHC that has not indicated its approval of 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: The Republic of the Congo, Malta, The Solomon Islands and Vanuatu. IHO Member States' representatives are asked to expedite the approval process wherever possible.
5. The following States in the SAIHC region have yet to apply to become members of the IHO: Angola, Comoros, Kenya, Madagascar, Malawi, Namibia, Seychelles, Tanzania. All are Member States of the IMO except Tanzania.

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 in 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. 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 H

11. South Africa, as INT coordinator for Region H, has continued to provide regular updates to S-11 Part B - Region H. Member States are encouraged to continue to provide updates to S-11, through South Africa as coordinator for INT Region H. The point of contact is: Alfons Van Craeynest.

12. The status of the INT chart scheme for region H is contained in Edition 2.0.8 of S-11 Part B which was published in August 2015. There are 116 charts in the scheme, of which 87 have been published (75%).

13. In this reporting period there have been two new charts: INT 2513 "*Approaches to Soyo*" produced by GB and INT 7645 "*Porto da Topuito*" co-produced by MZ & PT and five new editions published.

14. Producer responsibility for INT chart 7739, which replaces INT chart 7738 (GB) covering Mauritius has been included in S-11 Part B - Region H.

15. 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. Information on the new experimental process for INT chart review. A CL has been issued announcing the revised procedure.

16. The CL also provides information on a workshop being organised in conjunction with NCWG2. The workshop will provide International Charting Coordinators with the latest information on the practical implementation of the INT chart scheme and will introduce the INTtoGIS tools, best practices, and lessons learned.

17. 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).

5th Extraordinary International Hydrographic Conference (EIHC-5)

18. 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 six IHO Member States of the SAIHC were represented.

19. 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.

20. 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.

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

Capacity Building Programme

22. 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. 11 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.

23. The SAIHC benefited from three activities under the IHO CB Work Programme since the last meeting:

- on-board training for personnel from Comoros and Madagascar aboard the French vessel *Beautemps-Beaupré* undertaken from June to August 2014
- a tides and water levels workshop led by the UKHO in Fish Hoek, South Africa in February 2015.
- an introduction to Hydrographic surveying in coordination with the IMO for Southern Africa in Maputo, Mozambique in September/October 2014

24. A phase 1 (MSI) skills training course is scheduled to take place in Moroni, Comoros and a course on the technical aspects of maritime boundaries and baselines is scheduled to take place in Fish Hoek, South Africa. Both courses will take place in November/December 2015, led by the UKHO.

25. 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. IHO CL 65/2014 provides guidance that will be similar to the call in 2015.

Crowd Sourced Bathymetry Programme

26. 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).

27. 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

28. 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.

29. 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.

30. 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.

31. 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

32. 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.

33. 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

34. International Hydrographic Review (IHR). The 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 SAIHC is Captain Abri Kampfer (South Africa). 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). The mandate of the current editor, Mr Ian Halls (Australia), was renewed until the end of 2016 (CL 84/2014 dated 23 December refers).

African Union Extraordinary Summit on Maritime Security and Safety and Development in Africa

35. In the context of the 2050 Africa's Integrated Maritime (AIM) Strategy developed by the African Union (AU) and following the Summit of Heads of State and Government on Maritime Safety and Security in the Gulf of Guinea (Yaoundé, Cameroon - June 2013) and the Maritime Safety and Security Ministerial Meeting of the African Union and European Union (Mahé, Seychelles - February 2015), the government of Togo will host in Lomé, Togo an AU Extraordinary Summit on Maritime Security and Safety and Development in Africa. Initially scheduled from 2 to 7 November 2015, the Summit is now postponed to 2016.

36. The objective of the Summit is to bring together the Heads of State and Government of the 54 countries of the African Union (listed in Annex A), experts and business leaders in order to put in place an African strategy for the protection of its seas and oceans, to provide peace, security and stability, and to make African maritime space the key driver for sustainable economic development.

37. It is expected that the Summit will consider the sea both as a factor of development and as the scene of illicit or dangerous activities (piracy, illegal fishing, ocean pollution, etc.) with a view to develop an "*African Union Charter for the Protection of the Seas and Oceans*".

38. Participation in the Summit is by invitation only.

39. The Secretariats of the IHO, the IOC and the WMO have been asked to participate in the Summit and in particular to hold a side event on "sciences, applications, safety and building the future".

40. The Directing Committee sees this Summit as a welcome opportunity to raise further awareness of the importance of hydrography in support of the 2050 AIM-Strategy and promote the consideration of the development of hydrographic infrastructures and services in the future AU Charter for the Protection of the Seas and Oceans.

41. In that context, the IHB invites the SAIHC to consider how its AU members can best contribute to the Summit and influence its outcomes, through their national delegations and/or at the regional level.

Action Requested of SAIHC Member States

1. **Note** this report;
2. **Mozambique** to **progress** ratification of the Protocol of Amendments to the IHO Convention and report any difficulties being encountered or assistance required.
3. **Expedite** wherever possible, the approval process for the applications of The Republic of the Congo, Malta, The Solomon Islands and Vanuatu to join IHO.
4. **Provide** continuous updates to S-11 Part B, through South Africa as coordinator for INT Region H.
5. **Review** entries in IHO Publications C-55 and P-5 (Year Book) at least annually.
6. **Consider** submitting papers for publication in the IH Review.
7. **Consider** how SAIHC Members that also belong to the African Union can best contribute to the African Union Extraordinary Summit on Maritime Security and Safety and Development in Africa and influence its outcomes, through their national delegations and/or at the regional level.
8. **Take any other actions** as considered appropriate.

List of the Member States of the African Union

Algeria	Côte d'Ivoire	Libya	Seychelles
Angola	Djibouti	Madagascar	Sierra Leone
Benin	Egypt	Malawi	Somalia
Botswana	Equatorial Guinea	Mali	South Africa
Burkina Faso	Eritrea	Mauritania	South Sudan
Burundi	Ethiopia	Mauritius	Sudan
Cabo Verde	Gabon	Mozambique	Swaziland
Cameroon	Gambia	Namibia	Tanzania
Central African Republic	Ghana	Nigeria	Togo
Chad	Guinea	Nigeria	Tunisia
Comoros	Guinea-Bissau	Rwanda	Uganda
Democratic Republic of the Congo	Kenya	Western Sahara (SADR)	Zambia
Republic of the Congo	Lesotho	Sao Tome and Principe	Zimbabwe
	Liberia	Senegal	