

# IHB Report

The following report provides information on certain activities involving the Secretariat of the IHO that may be relevant to the Arctic Regional Hydrographic Commission.

## Status of Approval of Amendments to the Convention on the IHO

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 September 2015, 42 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 (Argentina) which will be announced by the Government of Monaco shortly. ~~Five~~ Four more approvals are therefore required before the amendments can enter into force.

2. The principal effects of the amendments to the IHO Convention are:

- Removal of the requirement for States applying for membership of the IHO to await the approval of two thirds of the existing Member States. This will remove an average wait of two to three years before the required majority is achieved.
- Changing the 5-year programme cycle of the Organisation to three years between Conferences (to be known as Assemblies).
- The establishment of a Council. The Council will meet annually.
- Changing the elected position of President of the Directing Committee to that of Secretary-General with the elected Directors being subordinate to the Secretary-General.

The amendments will result in an organisational structure similar to most other inter-governmental organisations.

## 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, the Democratic Republic of 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-thirds majority is needed.

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
- Vanuatu

IHO Member States' representatives in the ARHC are asked to expedite the approval process wherever possible.

## IHO GIS and Databases

5. 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.

6. 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.

7. An Esri-based GIS solution is being implemented to develop further the regional information database. This

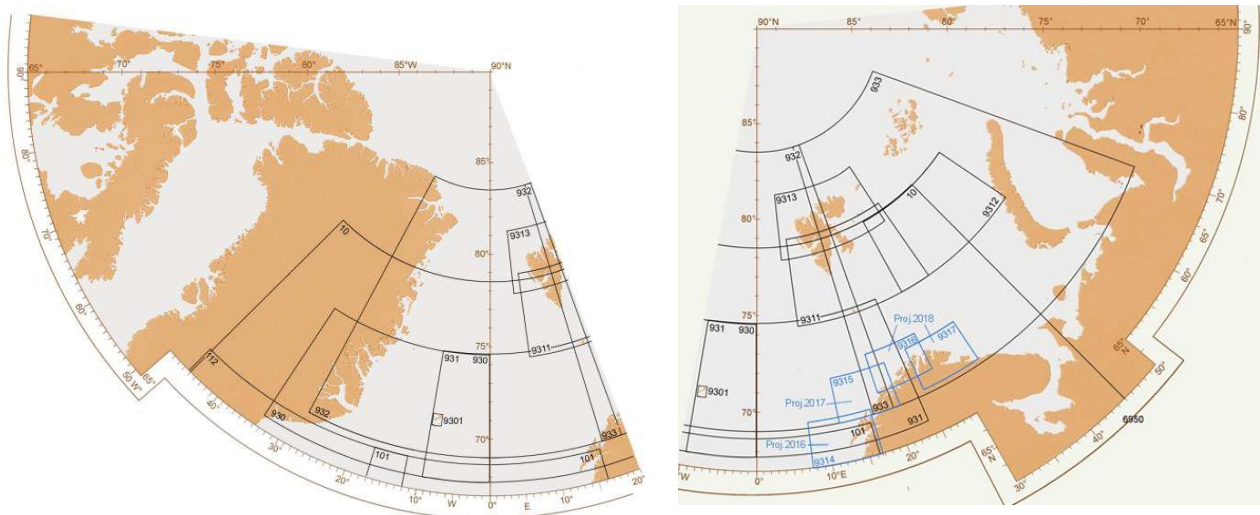
will enable access to various layers of information through the IHO website and through various sophisticated cloud-based on-line GIS options. The IHO ENC Catalogue has been migrated to this new environment and the transfer of the GIS data coverage for Antarctica will follow next.

8. 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 more generally. In addition to the current composite indicators (percentage of areas adequately surveyed / requiring re-survey / not surveyed), the inclusion of CATZOC polygons will 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 (see IHO CL52/2015).

9. 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 the maintenance of the INT chart schema set out in S-11 part B - *Catalogue of INT charts* into an interactive GIS/S-100 compliant environment. The objective of the project is to provide the regional International Charting Coordination WGs (ICCWGs) 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 development phase with several Regional International Charting Coordinators (BSHC, MBSHC, USCHC, and HCA) testing and providing feedback. The target date for transferring to the on-line system is early in 2016, at which time, updates to the INT chart schema will be submitted to the IHB using the INToGIS webservices.

#### INT Chart and ENC Production Coordination - Region N

10. Norway, as INT coordinator for Region N, provides regular updates for the maintenance of INT chart schema promulgated in S-11 Part B - Region N. Member States are encouraged to provide updates to S-11, through Norway as coordinator for INT Region N. The point of contact is: Mr. Kjetil Wirak.

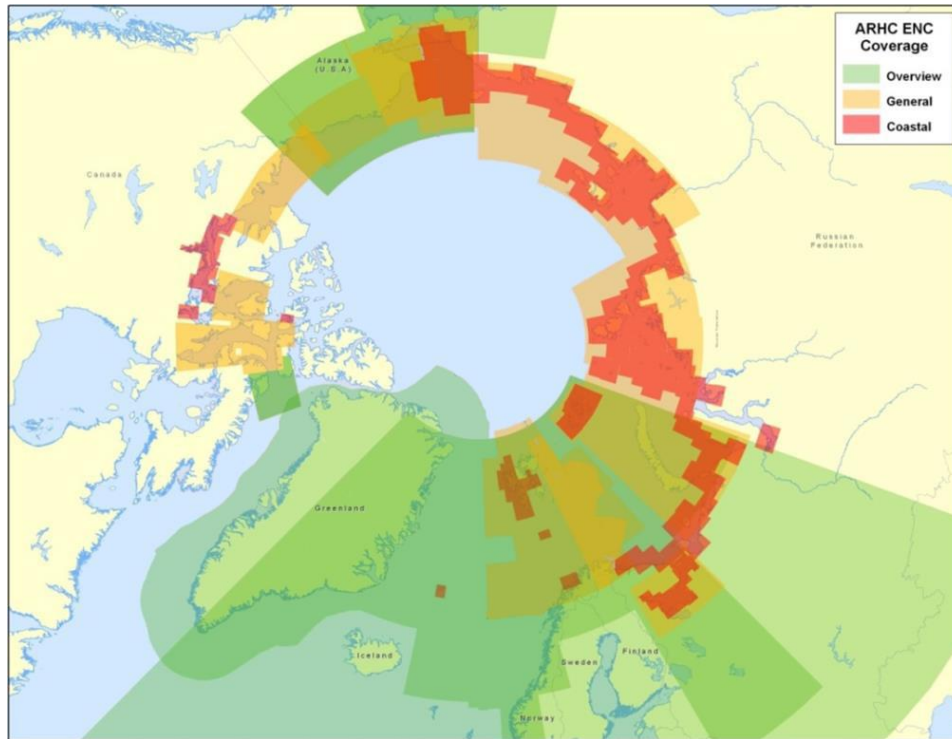


INT Chart Scheme (2015)

11. The status of the INT chart scheme for region N is contained in Edition 2.0.1 of S-11 Part B which was published in September 2015. There appear to be 20 charts in the scheme, of which 8 (40%) have been published.

12. **New INT chart review procedure.** 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, though copies of all new charts and new editions should still be forwarded to the INT Chart Coordinator. The principle purpose of the changes is 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 procedure is provided in CL 64/2015.

13. **INT Chart Coordinators Workshop.** CL 64/2015 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 INTOGIS tools, best practices, and lessons learned.



ENC Coverage (2014)

14. 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).

### 5<sup>th</sup> Extraordinary International Hydrographic Conference (EIHC-5)

15. The 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 IHO Member States of the EAHC were represented.

16. 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.

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

### IHO Crowd Sourced Bathymetry Programme

18. 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 is already working by correspondence. It will hold its first meeting as a side event to meeting of the GEBCO Guiding Committee in Kuala Lumpur during the week 5 to 9 October

19. Separately, the web-based interface portal to the IHO Data Centre for Digital Bathymetry, hosted by the USA in Boulder, Colorado, as part of its support of the system of World Data Centres, is being upgraded to be compatible

with the crowd-sourced bathymetry concept and also to provide a data discovery portal for worldwide bathymetry and to store data as appropriate and agreed with the data owners.

### **UN Post 2015 Development Agenda**

20. The IHB, on behalf of the IHO provides an annual input to the UN Secretary-General's report on the Oceans and Law of the Sea. The IHO submissions have consistently highlighted the lack of hydrographic knowledge and its impact on all human activities in, on or under the sea.

21. The UN General Assembly has most recently adopted its post 2015 Development Agenda. This is underpinned by 17 Strategic Development Goals. SDG 14 is particularly relevant to the IHO Member States.

SDG14 - *Conserve and sustainably use the oceans, seas and marine resources for sustainable development.*

22. Member States are encouraged to link hydrography and the underpinning role of hydrography and bathymetric data in the monitoring and achievement of SDG14.

### **UN Post 2015 Development Agenda**

23. The IHB, on behalf of the IHO, participates as an Observer Organization on the UN Committee of Experts on Global Geospatial Information Management (UN-GGIM). The UN-GGIM is strongly focussed on terrestrial geospatial data and infrastructures, but is now acknowledging the maritime domain in its overall work. The UN-GGIM is dominated by UN Member State representatives with land-based interests.

24. Current intersessional work of the UN-GGIM in which the IHB is contributing, with advice from the IHO Marine Spatial Data Infrastructures Working Group (MSDIWG) includes:

- Activities related to sustainable development and the post-2015 development agenda; notably, providing inputs into the processes to develop the global indicator framework.
- Coordination of United Nations activities related to geospatial information management - especially in relation to improving geospatial information policy, processes and services to support emergency response and disaster risk reduction.
- Determination of global fundamental geospatial data themes in order to be able to measure, monitor and manage sustainable development in a consistent way over time and for evidence-based decision and policy making.

### **IHO Outreach**

#### **World Hydrography Day 2015**

25. 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.

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.

## World Hydrography Day 2016

28. IHO CL71/2015 proposes the WHD theme for 2016: *Hydrography - the key to well-managed seas*. This theme is intended to take advantage of the recently agreed UN Strategic Development Goals - especially SDG 14 - on the use of the ocean and also the continuing UN priority on disaster risk reduction.

## IHO Stakeholder Forum

29. 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.

30. 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

31. 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 nominated representative on the Editorial Board representing the ARHC is Mr. Mike Hecimovich (Canada). 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 dated 23 December refers).

## Status of application for accredited observer status to the Arctic Council

32. In May the IHB was informed of the outcome of the Iqaluit Arctic Council Ministerial Meeting. At that meeting the Ministers deferred any decisions on pending Observer issues with the goal of deciding on them at the next Ministerial meeting in 2017.

The Ministers instructed by Senior Arctic Officials to further guide the Council's engagement with Observers, taking into account contributions to date and opportunities for future collaboration. In this context, the Arctic Council Rules of Procedure (Rule 39) states that the Chair of a Working Group or other subsidiary body of the Arctic Council may, if the Arctic Council or the Arctic States participating in the body in question agree, invite persons or organizations that can contribute expertise and are able to contribute to the work of that body to participate in specific meetings. This is the rule under which the ARHC has been invited to participate in certain activities under the PAME.

## Action Requested

1. **ARHC12** to **note** this report;
2. **IHO Member States** to **expedite** wherever possible, the approval process for the applications of The Republic of the Congo, Malta, The Solomon Islands and Vanuatu to join the IHO.
3. **All States** to **consider** submitting papers for publication in the IH Review.
4. **All States** are **encouraged** to link their activities to the relevant UN Sustainable Development Goals wherever possible.
5. **All States** are **encouraged** to ensure that national representatives to UN-GGIM are appropriately briefed on hydrographic issues.
6. **ARHC Members States** to **take any other actions** as considered appropriate.