

**Paper for Consideration by SAIHC**  
**IHO Secretariat Report**

<b>Submitted by:</b>	Secretariat of the IHO
<b>Executive Summary:</b>	This paper reports on the activities of the IHO Secretariat that may impact the work of the SAIHC

**Entry into force of the Amendments to the IHO Convention and its supporting Basic Documents**

1. The Amendments to the IHO Convention and its supporting Basic Documents entered into force on 8 November 2016. The most significant changes to the organization of the IHO are:
  - the term International Hydrographic Bureau (IHB) used to describe the headquarters and the secretariat of the IHO is replaced by the term IHO Secretariat;
  - the Directing Committee, comprising a President and two Directors ceases to lead the IHB (Secretariat of the IHO). Instead, the Secretariat of the IHO is now led by a Secretary-General assisted by two subordinate Directors;
  - the term International Hydrographic Conference used to designate the principal organ of the Organization, composed of all Member States, is replaced by the term Assembly. The ordinary sessions of the Assembly will be held every three years instead of every five years for the Conference. The first session of the IHO Assembly (A-1) was held in Monaco from 24 to 28 April 2017, at which time an IHO Council was established. The first meeting of the Council (C-1) will take place in October 2017 and annually thereafter. The second session of the Assembly (A-2) will take place in April 2020;
  - the subsidiary organs, including the Committees, of the IHO will report to the Council that will then refer endorsed proposals for adoption either to the Assembly or to the Member States through correspondence;
  - the planning cycle for the IHO work programme and budget changes from a five-year to a three-year cycle. The next cycle will run from 2018 to 2020.
  - for States wishing to join the IHO that are already Member States of the United Nations there is no requirement to seek the approval of existing Member States of the IHO; and
  - in future, where voting is required, decisions will be taken based on a majority of the Member States that cast a vote, rather than the existing arrangements where a majority of all the Member States entitled to vote is required. A minimum number of at least one-third of all Member States eligible to vote must vote positively for a vote to stand.

**Status of Membership of the IHO**

2. One of the main changes resulting from the entry into force of the revised IHO Convention is that, for States wishing to join the IHO that are already Member States of the United Nations, there is no requirement to seek the approval of existing Member States of the IHO. Malta and Vanuatu became the 86<sup>th</sup> and 87<sup>th</sup> Member States of the IHO during the period since the last meeting of the SAIHC.

3. The following States in the SAIHC region with hydrographic interests are not yet Member States of the IHO:
  - Angola
  - Comores
  - Kenya
  - Madagascar
  - Malawi
  - Namibia
  - Seychelles
  - Tanzania
4. Significantly, all except Tanzania are Member States of the IMO. The IMO Council at its 118th session in July reaffirmed its view that all Member States of the IMO that are not Member States of the IHO should give favourable consideration to joining the IHO. This is particularly relevant and important because hydrography and the provision of nautical charting and maritime safety information services are an integral part of the IMO Member State Audit Scheme (IMSAS). All IMO Member States are audited periodically under the IMSAS. Membership of the IHO provides access to assistance and advice on how to ensure that States satisfy the auditable requirements of the IMO.
5. States that are not yet Member States of the IHO are invited to inform the IHO Secretariat of their intentions to join the IHO and what impediments exist.

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

6. South Africa, chairs the International Charting Committee Working Group (ICCWG) for Region H. The current web-based version of S-11 Part B for Region H is edition 3.0.4 dated June 2017. This new edition reports that 99 INT charts are available to date, out of 125 charts in the scheme. It is expected that a new edition will be released, in liaison with the regional INT Chart Coordinator, after SAIHC-14.
7. No significant ENC overlap issue in region H was reported to the last WENDWG meeting.
8. Suggestions made by the SAIHC representative at the WENDWG-6 (geographic limits of INT Chart Regions) have been included in the IHO ENC Coverage Catalogue or are under development (layer showing ENC that are distributed through the RENCs and those that are not). The SAIHC was represented at the WENDWG-7 meeting by UK.
9. At its 7th meeting (31 January - 2 February 2017), the WENDWG:
  - a. invited Regional Hydrographic Commissions to define and adopt ENC Schemes (as it is done for INT Charts Schemes) and provide basic metadata to the IHO Secretariat, as endorsed by IRCC as action IRCC8/13,
  - b. the IHO Secretariat to consider including a layer of "Approved" ENC Schemes in the IHO ENC Catalogue or as an extension of the INT Web Chart Catalogue,
  - c. drafted a proposed new IHO Resolution on eliminating overlapping ENCs.
10. The proposed new Resolution was endorsed by IRCC-9 and will be submitted for endorsement by the IHO Council at its 1<sup>st</sup> meeting, with a view to seeking subsequent approval by the Member States.
  - The Region H ICCWG is invited to take note of Decision 10 from the 1<sup>st</sup> Session of the IHO Assembly that "urged Member States to ensure consistency between their paper

*and digital charts and publications through the provision of the appropriate updates".* Any observed inconsistencies in the Region H should be reported to the next SAIHC meeting.

### **IHO Capacity Building Programme**

11. The IHO Capacity Building programme is funded from the IHO budget and is supplemented by additional financial support from Member States (currently the Nippon Foundation of Japan, and the Republic of Korea) with in-kind support from Member States and from industry. However, considering the growing demands for IHO Capacity Building activities, more funds and contributions are required. The IHO Secretariat is continuing its campaign to find additional donor States and funding organizations. For this reason, IHO representatives continue to approach potential donor agencies such as the United Nations, IMO, IALA, the European Commission, funding agencies (in particular the World Bank), academia and industry in general.
12. Expenditure in the 2016 CB Work Programme (763,605 Euros) was slightly more than the budget for the previous year. The 2017 CB Work Programme is currently valued at 976 051 Euros. The SAIHC (jointly with the NIOHC) is conducting a MSI Course in Fish Hoek, South Africa, 5-7 September 2017. In 2018, SAIHC will have a Seminar on Raising Awareness of Hydrography, a MBES Processing and Data Basing Training for Mozambique and a Regional MSDI Workshop (the last two pending allocation of resources). It is important that the SAIHC reviews its approved CB bids for 2018 and at the same time identifies and justifies its bids for 2019 so that they can be considered by the CBSC in mid-2018.
13. All SAIHC Members and Observers are encouraged to identify their capacity building requirements to the Regional Capacity Building Coordinator.

### **IHO GIS and Databases**

14. 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.
15. **IHO Year Book.** The country information database has been progressively upgraded to include additional administrative information and to facilitate the maintenance of the IHO Yearbook (IHO Publication P-5) and related lists posted on the IHO website. Countries in the SAIHC Region are invited to check their entry in the Yearbook and to provide the IHO Secretariat with any updates or report no change.
16. An Esri-based GIS solution is being implemented to develop further the regional information database. This enables access to various layers of information through the IHO website and through cloud-based on-line GIS options. The IHO ENC Catalogue and the IHO GIS for Antarctica have already been transferred to this new environment.
17. **C-55.** 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 response to the request to complement C-55 composite data (percentage of areas adequately surveyed / requiring re-survey / not surveyed) with CATZOC information (see IHO CL 52/2015), CATZOC data was provided by PRIMAR - on behalf of IC-ENC, PRIMAR and Canada, Singapore, Sweden and Thailand. Useful options for visualising the data in the IHB C-55 GIS continue to be investigated.
18. All SAIHC region Member States are invited to provide the IHO Secretariat with regular

updates to C-55 on at least an annual basis. The IHO Secretariat would be grateful for delegates to forward up-dated information to the Secretariat at info@iho.int or via mail.

19. **On-line Registration for IHO Meetings.** The Secretariat has introduced an on-line registration system, financed and developed by the Republic of Korea, for IHO meetings. Anyone that has not previously registered for a meeting must firstly register their identity so as to obtain a password. Thereafter, that person can register for any meeting for which they are entitled to attend.

### **Crowd-Sourced Bathymetry**

20. In accordance with Decision 8 of the EIHC-5, IRCC7 established a Crowd-Sourced Bathymetry Working Group (CSBWG) to provide guidelines on the collection and use of crowd-sourced bathymetry. The WG was reconfirmed by IRCC8 in June this year.
21. 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.

### **GEBCO**

22. The GEBCO Ocean mapping programme is dependent on the availability of bathymetric data and undersea feature information. In order to achieve its goals, GEBCO proactively collects, stores and disseminates bathymetric data for the world's oceans.
23. Traditionally GEBCO has focused on areas deeper than 200m, however, it is now actively collecting data in shallow water areas to support activities such as coastal zone management and the mitigation of seaborne disasters such as storm surges and tsunami inundation. IHO Member States are encouraged to contribute bathymetric data in shallower coastal areas to support the production of higher resolution gridded data products.
24. As a result of the *Forum for Future Ocean Mapping* held in Monaco in June 2016, the GEBCO Guiding Committee has established the *Seabed 2030 Project* with aim of achieving full seafloor coverage to 100m grid resolution by 2030. The *Seabed 2030 Project* is focused on discovering what data already exists, how it can be made publically available, where the data gaps are and then encouraging governments, organizations and industry to programme surveys to fill these gaps. *Seabed 2030* will establish regional centres to manage the data, which will be uploaded to the IHO DCDB for later use in the GEBCO Grid and other products.

### **Preparation of the first meeting of the IHO Council**

25. The first session of the IHO Council is scheduled to take place from 24 to 28 October 2017. All documentation to be considered at the meeting is now posted on the IHO website. Members of the SAIHC may wish to inform Members of the Council of their view on any of the agenda items to be discussed. Among the Members of the SAIHC; France, Norway, South Africa and UK occupy seats on the Council.

## IHO Outreach

### World Hydrography Day

26. The theme for World Hydrography Day 2017 is:

*“Mapping our sea, oceans and waterways - more important than ever.”*

27. The Secretariat is taking every opportunity to raise awareness of the value and importance of knowing the depth and nature of the seafloor in all relevant intergovernmental and international forums; including,

- Committee of Experts on Global Geospatial Information Management (UN-GGIM)
- UN 2030 Agenda for sustainable Development -
- UN High Level Conference on to Support Sustainable Development Goal 14
- International Seabed Authority
- Group on Earth Observations (GEO)
- World Ocean Council

28. Taking into account the world’s increasing focus on the United Nations (UN) 2030 Agenda for Sustainable Development, and most recently, the outcomes of the UN Ocean Conference in support of Sustainable Development Goal (SDG) 14 concerning the ocean, and the intention of the Intergovernmental Oceanographic Commission of UNESCO (IOC) to commit to an International Decade of Ocean Science for Sustainable Development, under which the IHO and other intergovernmental organizations such as the World Meteorological Organization will participate, the Secretary-General, in consultation with the IHO Directors, proposes a theme for WHD 2018 which focus on hydrography in relation to the UN 2030 Agenda:

***“Bathymetry – the foundation for sustainable seas, oceans and waterways”***

This proposal will be considered by the Council when it meets in October.

29. The theme, if approved, provides the opportunity to raise awareness that a better understanding of the depth and shape of the seafloor is key to the success of all human activities in, on or under the sea - including safety of navigation, protection of the marine environment, development of the blue economy and the sustainable use and governance of the marine domain. In particular, many of the SDG14 targets may be compromised through insufficient depth data being available.

30. The theme reflects the aims of IHO Resolution 1/2017 - *Improving the Availability of Bathymetric Data Worldwide* that was adopted by the first session of the Assembly of the IHO.

31. The theme may also be used to support the promotion and encouragement of innovative supplementary data gathering and data maximizing initiatives such as crowd-sourced bathymetry (volunteered geographic data) and satellite-derived bathymetry as well as promoting the related activities of the IHO-IOC GEBCO Programme (including the Nippon Foundation - *GEBCO Seabed 2030 Project*) and national hydrographic surveying programmes.

32. The theme will help to promote the role of hydrographic data in national and regional spatial data infrastructures and the benefits of making hydrographic data accessible to the widest possible audience for uses that go well beyond the safety of navigation. It will also acknowledge the increasing interest being shown by the UN-Committee of Experts on Global Geospatial Information Management (UN-GGIM) in marine geospatial data, as shown by its consideration of establishing a dedicated UN-GGIM working group

on marine geospatial information.

#### **Actions requested of SAIHC participants**

- a. **Note** this report
- b. States that are not yet Member States of the IHO are invited to **inform** the IHO Secretariat of their intentions to join the IHO and to indicate what impediments exist.
- c. **Provide** continuous updates to S-11 Part B for INT Region H through the INTtoGIS tool and implement the procedure depicted in IHO CL 64/2015 for the review and monitoring of INT charts and **define** Approved ENC Schemes<sup>1</sup>
- d. All SAIHC Members and Observers to **identify** their capacity building requirements to the Regional Capacity Building Coordinator.
- e. All Countries in the SAIHC Region to **check** their entry in the Yearbook and in C-55 and to **report** any updates or report no change to the IHO Secretariat.
- f. All Members of the SAIHC invited to **inform** Members of the Council of their views on any of the agenda items to be discussed at the meeting
- g. **Take any other actions** as considered appropriate.

---

<sup>1</sup> In accordance with S-11 Part A, Ed. 3.0.0 June 2017