



COMISION HIDROGRAFICA DEL ATLANTICO SUDOCCIDENTAL
SOUTH-WEST ATLANTIC HYDROGRAPHIC COMMISSION

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Paper for consideration by SWAtHC

IHO Secretariat Report

Submitted by:	Secretariat of the IHO
Executive Summary:	This paper reports on the activities of the IHO that may impact the work of the SWAtHC

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) will be held in Monaco from 24 to 28 April 2017, at which time an IHO Council will be established. In order to provide a logical and sequential timetable for decision making, the Secretary-General anticipates that the Council will meet annually in October. The first meeting of the Council (C-1) is scheduled in Monaco from 17 to 19 October 2017. The second session of the Assembly (A-2) should take place in April 2020;
- the subsidiary organs of the IHO, including the Committees, 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;
- the strict eligibility requirements for candidates seeking election as the Secretary-General or a Director are relaxed; and
- in future, where voting by correspondence is required, through the Council, 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 the 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 (UN), there is no requirement to seek the approval of existing Member States of the IHO. Malta was the first State to become a member of the IHO under the new provisions. The other pending applicants (Congo, Solomon Islands, and Vanuatu) were invited to submit their instruments of accession to the Convention on the IHO as soon as possible.

3. In the SWAtHC Paraguay (Associate Member) and Bolivia (Observer) have yet to apply to become members of the IHO. Paraguay was an IHO Member State from 1967 to 1969. Both are Member States of the UN.

IHO GIS and Databases (including C-55)

4. 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.

5. 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. The status of the data from the SWAtHC Member States in the IHO Country Information Database is as follows:

Country	P-5 - Yearbook Last update received	Comment
Argentina	January 2017	
Brazil	October 2016	
Uruguay	January 2016	
Paraguay	March 2014	Associate Member
Bolivia	Last update previous to 2012	Observer

Countries in the SWAtHC Region are invited to review their entry in the Yearbook on an annual basis and provide the IHO Secretariat with the appropriate updates or report no change.

6. 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 cloud-based on-line GIS options. The IHO ENC Catalogue and the IHO GIS for Antarctica have been transferred to this new environment.

7. 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 will provide an initial geo-referenced quality layer (see IHO CL 52/2015). CATZOC data was provided by PRIMAR - on behalf of IC-ENC, PRIMAR and Canada, Singapore, Sweden and Thailand. Portrayal options in the IHO GIS are being investigated..

8. The latest updated information from SWAtHC Member States in C-55 is as follows:

Country	C-55 Last update received	Comment
Argentina	May 2016	
Brazil	March 2016	
Uruguay	May 2016	
Paraguay	/	Inland waters
Bolivia	/	Inland waters

Countries in the SWAtHC Region are invited to review their entry on an annual basis and provide the IHO Secretariat with the appropriate updates or report no change. This can be done as part of the national reports to

the SWAtHC meetings in accordance with the IHO Resolution 2/1997 as amended - *Establishment of Regional Hydrographic Commissions (RHC)*.

9. Following the development of the regional database for Antarctica, the IHO Secretariat, with support provided by the Republic of Korea, initiated an “**INToGIS**” project in order to 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 scheming and coverage is also envisaged. As announced in IHO CL 89/2015, the new INT Chart Web Catalogue and the associated INT Chart on-line Web Manager services were made available in January 2016 through the IHO website at: www.iho.int > Standards & Publications > S-11 > Part B (link). Brazil, both as Chart Coordinator for Region C1 and as INT Chart Producer/Printer Nation, and Argentina have obtained their ID and password for the maintenance of the S-11 database. Uruguay is invited to do so as indicated in IHO CL 89/2015, as the IHO Secretariat discontinued the maintenance of the pdf version of the S-11 Part B - Catalogue of INT Charts from 1 April 2016.

10. Feedback and lessons learned from the initial use of the INToGIS services and from the implementation of the experimental procedure for the review and monitoring of INT charts decided at IRCC-7 (IHO CL 64/2015 refers) were addressed during the workshop for Regional INT Chart / ENC Coordinators that was held at the IHB on 25 April 2016, just before the second meeting of the Nautical Cartography Working Group. The INT Chart / ENC Coordinators of 14 out of 15 charting regions were present or represented. A representative from the INT Chart Coordinator for Region C1 participated in the workshop. A comprehensive demonstration of the INToGIS web-based INT chart scheme management tool was provided. The workshop confirmed the need to maintain the INT chart concept for the foreseeable future, at least for small scale charts. As an IHO CL 64/2015 follow-up, the Chart Coordinator for Region C1 is reminded to provide his feedback to the IHO Secretariat on the “basic quality assurance check-list for reviewing INT charts” by the end of March 2017 (see e-mail from ADCS dated 8 Aug 2016).

INT Chart and ENC Production Coordination - Region C1

11. Brazil (Cdr Paulo Matos) is the designated INT Charts / ENC Coordinator for Region C1 as known by the IHO Secretariat and the relationship between Brazil and the IHO Secretariat is very straightforward and efficient for the monitoring and maintenance of the INT Chart Web Catalogue.

12. As part of the deployment of the INT Web Chart Catalogue, a new edition 3.0.2 of S-11 Part B for Region C1 dated February 2017 was published. This new edition reports that 35 INT charts are available to date, out of 51 charts in the scheme (~ 69 %). INT chart No 2119 was published in 2016 by Brazil.

13. Brazil represented the SWAtHC at the 7th meeting of the WENDWG (31 January - 2 February 2017), where the WENDWG:

- 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,
- Drafted a proposed new IHO Resolution on the way forward to limit important overlapping issues when safety of navigation is at stake; this draft will be submitted to IRCC for endorsement.

It is worth noting that there is no significant ENC overlap issue in this charting region.

14. IHO CL 61/2015 dated 24 August 2015 informed Member States of the promulgation of Circular MSC.1/Circ.1503 of 24 July 2015 on *ECDIS - Guidance for Good Practice* by the Secretariat of the International Maritime Organization (IMO). Noting that the Circular refers to the IHO online ENC Catalogue and that the mention includes a reference to the provision of coastal State information on any requirements for ECDIS backup arrangements using paper charts, the IHO Secretariat reiterated its earlier request (see IHO CL 41/2014) that Member States ensure that the relevant information which has been posted on the IHO website since 2008 (see IHO CL 10/2008) is kept current and to provide the Secretariat with updates as appropriate. Member States were invited to consider the provision of pending updates before the end of 2015 and the provision of subsequent updates, or confirmation of no change, at least once a year. It is located at:

-Home > ENCs & ECDIS > ENC Availability > Backup Paper Charts, and

-Home > ENC's & ECDIS > ENC Availability > Online Chart Catalogues.

Information has been received from Argentina and Brazil but might need to be updated. Uruguay is invited to provide its input as appropriate.

Capacity Building Programme

15. The level of activity of the IHO Capacity Building (CB) Programme in 2016 was nearly the same as in 2015. Expenditure in the IHO 2016 CB Work Programme (763 605 Euros) was 0,3% greater than the budget for the previous year. 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 IHO Secretariat is continuing its campaign to find additional donor States and funding organizations. In 2016, 93% of the budgeted work program was executed and paid for. Three activities were postponed to 2017 at the request of the RHC Chairs.

16. The SWAtHC benefited from two activities under the IHO CB Work Programme since the last meeting: a tide training course, led by Brazil, and a multi-beam training course, led by Argentina. The SWAtHC is responsible for two activities of the CB Work Programme for 2017: a bathymetry training course using RTK technology, a workshop on digital photogrammetry with satellite images and a data management Workshop.

17. A call for applications was issued in CL 51/2016 for the 2017-2018 session of the Master of Science Programme in Hydrographic Surveying at the University of Southern Mississippi (USA) sponsored by the Republic of Korea. Similar call is expected to be issued in October 2017 for the 2018-2019 session. Hydrographic Offices are invited to invest in the preparation of candidates especially with respect to proficiency in English.

18. A call for applications was issued in CL 4/2017 for the 2017 edition of the UKHO Category "B" Cartography programme (IHO - Nippon Foundation CHART Project). Hydrographic Offices are invited to invest in the preparation of candidates especially with respect to proficiency in English.

19. A call for applications for the 14th course of the IHO-IOC-Nippon Foundation GEBCO Training Programme is open until the end of March 2016 (see IHO CL 13/2017).

Crowd Sourced Bathymetry

20. In accordance with Decision 8 of the EHC-5, IRCC7 established the Crowd-Sourced Bathymetry Working Group (CSBWG) to provide guidelines on the collection and use of crowd-sourced bathymetry. Member States and other interested parties were invited to nominate representatives to participate in the CSBWG (see IHO CL 42/2015). Argentina and Brazil are participating in the working group. Following IRCC8, draft CSB guidelines will be circulated to Member States for comments.

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. It is intended to include a comprehensive presentation on the work and aspirations of the CSBWG at Assembly A-1.

Preparation of the 1st Session of the IHO Assembly (A-1)

22. The first session of the IHO Assembly is scheduled to take place from 24 to 28 April 2017. IHO Assembly Circular Letter (ACL) 8 dated 23 August 2016 detailed the impact of the new rules and regulations governing the IHO (see paragraph 1 above) on the preparation of the Session.

23. As indicated in IHO CCL 1 dated 21 April 2016, registration for the Assembly has been available on-line via the IHO website from 1 September 2016. Because of IT security issues, the initial version of the tool is, in the first instance, self-contained, with no connection to the IHO Country Information System (CIS). The initial registration of the identity of applicants will be validated by the IHO Secretariat. After this initial approval, legitimate applicants are able to register for further IHO meetings without having to re-enter their details. The tool was tested as part of registering participants for HSSC8.

24. In accordance with the new General Regulations of the IHO that entered into force on 8 November, the first Assembly will establish an IHO Council. The selection process for the establishment of the Council was initiated by the Secretary-General in October 2016. All RHCs must agree on their process by which they will assign Members

to occupy the seat(s) in the Council allocated to them for the period between the 1st and the 2nd session of the Assembly (2017-2020) - see IHO CL 63/2016, and possibly instruct, the relevant occupant(s). The SWAtHC Chair notified the IHO Secretary-General that Uruguay will occupy the seat allocated to the Commission.

25. The agenda of the Assembly will include a review of the IHO Strategic Plan and consideration of the IHO Work Programme for the next 3-year cycle. In accordance with IHO Resolution 12/2002 as amended the relevant documents have been prepared by the IHO Secretariat in consultation with the HSSC, the IRCC and the Member States (see Assembly CL No. 16).

IHO Outreach

World Hydrography Day

26. The theme for World Hydrography Day 2016 (WHD 2016) was “*Hydrography – the key to well-managed seas and waterways.*” This theme was meant to enable all stakeholders involved in hydrography to highlight the significance and importance of their particular activities which could include, but is not limited to, the support of safety of navigation, protection of the marine environment, coastal zone management, marine spatial data infrastructures, defence, resource exploration, and all other components of the blue economy.

27. Background briefs and reports on events hosted in connection with WHD 2016 are available at www.iho.int > Home > About IHO > World Hydrography Day.

28. Taking into account the discussions at the GEBCO Forum for Future Ocean Floor Mapping held in Monaco in June (see IHO CL 34/2016) and the fact that the depth has not been directly measured in about 50% of the World’s coastal waters and about 90% of the oceans, the theme for 2017 is:

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

29. In support of WHD 2017 the IHO Secretariat will organize a dedicated page on the IHO web site, where papers and other material relevant to the celebration and reflecting the variety of activities supported by hydrography will be posted for Member States and other IHO stakeholders to use as appropriate.

30. Member States are invited to forward to the Secretariat any material that they may create in support of their national WHD-2017 celebrations for posting on the IHO website. This will enable the widest possible dissemination of publicity and support material for the event. The Secretariat also welcomes any comments and suggestions to improve the organization and support of this annual event.

International Hydrographic Review (IHR)

31. Twice a year, the IHR provides an opportunity for Member States to publicise technical and other achievements in their region. An editorial board comprising a representative from each region has been established. The representative for the SWAtHC is Captain Nickolas de Andrade Roscher (Brazil).

32. 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 deadlines are:

- End of January for the May Edition;
- End of July for the November Edition.

33. The Secretariat worked with the University of New Brunswick (UNB), Canada, in a project to develop a digital repository of the complete library of the IHR. As a result, the first phase of the project has provided volumes from 1963 to 2015. They can be found at: <https://journals.lib.unb.ca/index.php/ihr>.

Action Requested of SWAtHC Member States

34. SWAtHC Member States are invited to:

- **Note** this report;
- **Review** entries in IHO C-55 and P-5 (Yearbook) at least annually;
- **Provide** continuous updates to S-11 Part B, through Brazil as coordinator for INT Region C1;

- **Provide**¹ feedback on the “basic quality assurance check-list for reviewing INT charts” (IHO CL 64/2015 and e-mail from ADCS dated 8 Aug 2016 refer)
- **Report** to the IHO Secretariat on the status and description of the ENC schemes in the Region (Action WENDWG7/08 refers);
- **Invest** in the preparation of candidates for the fully-funded Master of Science Programme in Hydrographic Surveying at the University of Southern Mississippi, USA;
- **Consider** appropriate arrangements to prepare the IHO Assembly to be held in April 2017;
- **Consider** submitting material in support of WHD 2017;
- **Consider** submitting papers for publication in the IH Review;
- **Take any other actions** as considered appropriate.

¹ Action on Brazil, as Region C1 Chart Coordinator.