

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



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Report of the IHO Secretariat

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

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 former 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 and established the IHO Council. In order to provide a logical and sequential timetable for decision making, 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) is tentatively scheduled from 19 to 25 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 (UN) 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
- when 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 previous arrangements

where a majority of all the Member States entitled to vote was 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. As indicated in the previous paragraph, 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 UN Member States, 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 followed by Vanuatu. IHO membership stands at 87 with three States, the Democratic Republic of the Congo, the Dominican Republic and Serbia remaining suspended.

3. In the SEPRHC region, Panama has yet to apply to become member of the IHO.

IHO GIS and Databases

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. All IHO GIS applications are now accessible through a single interface of the IHO website at www.iho.int > Home > IHO GIS. Table 1 lists the applications that are available.

*Table 1
List of GIS applications accessible through the IHO web site*

Category	Application	Description
Country Information System	IHO Membership	Status of membership of coastal States and landlocked States
	MSDI National Geoportals	Availability of / links to national SDI/MSDI web portals
Regional Information Systems	Antarctic GIS	Status of surveying and charting in Antarctica
Chart Information Systems	INTernational Chart GIS	INT Chart Web Catalogue (S-11 - Part B)
	IHO ENC Catalogue	IHO ENC Coverage Catalogue
	Undersea Feature Name Gazetteer	Web-based Gazetteer of Undersea Feature Names
Capacity Building Information	CHART Project	Geographical distribution of the alumni of the Cartography, Hydrography and Related Training (CHART) Project
World Information	IHO Data Centre for Digital Bathymetry	Access to the IHO Data Centre for Digital Bathymetry to search and download worldwide bathymetric data
	Contribute ENC data to GEBCO	How to contribute shallow water bathymetry to the GEBCO project

6. The country information database has been enhanced with additional information in order to facilitate the work of the Secretariat and the support provided to IHO organs. This additional information includes the date of signature of the SOLAS Convention, when applicable, the existence of a Nominated Hydrographic Authority, the existence of an MSI Capability and the identification of the Primary Charting Authority.

7. The status of the data from the SEPRHC region in the IHO country information database is shown in table 2.

*Table 2
Status of the information from the SEPRHC region in the IHO Yearbook (P-5)
Status as of 1 July 2017*

Country	Last update	Comment
Chile	October 2015	
Colombia	April 2017	
Ecuador	May 2015	
Panama	May 2015	Non Member State
Peru	January 2017	

8. Table 3 provides the status of hydrographic services in the SEPRHC region as recorded in the IHO Country Information Database.

*Table 3
Status of hydrographic services in the SEPRHC Region*

Country	Signatory to SOLAS	Effective MSI Capability	Nominated Hydrographic Authority	Primary Charting Authority
Chile	Yes	Yes	Yes	Own
Colombia	Yes	Yes	Yes	Own
Ecuador	Yes	Yes	Yes	Own
Panama	Yes		Yes	Own for the Canal and USA for the remainder
Peru	Yes	Yes	Yes	Own

9. The data supporting C-55 - *Status of Hydrographic Surveying and Charting Worldwide* was transferred to the Country Information Database in order to facilitate the maintenance of the information. A new on-line pdf version of C-55 is generated automatically from the database (see www.iho.int > Home > Standards & Publications > Download > C-55).

10. The status of the data from the SEPRHC region in the C-55 database is shown in table 4.

*Table 4
Status of the information from the SEPRHC region in IHO Publication C-55
Status as of 1 July 2017*

Area	Last update	Comment
Chile	2004	
Colombia	2015	
Ecuador	2015	
Panama	/	No information on INT Region C2

Area	Last update	Comment
Peru	2015	

11. Countries in the SEPRHC region are invited to review their entries in P-5 and C-55 at least annually and provide the IHO Secretariat with the appropriate updates or report no change. It is worth noting that the Southern part of the EEZ of Panama is within INT Region C2 but this is not reflected in C-55.

12. The INTToGIS application through which S-11 Part B is maintained on-line is used on a daily basis by the INT chart producers and Chart Coordinators since the end of December 2015. Feedback and lessons learned from the initial use of the INTToGIS 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 IHO Secretariat in April 2016, just before the second meeting of the Nautical Cartography Working Group. INT Chart Region C2 was not represented at the workshop. A comprehensive demonstration of the INTToGIS 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. Following the two-year trial of the experimental procedure for the review and monitoring of INT charts and based on the feedback from Regional INT Chart Coordinators, IRCC-9 endorsed the standardization of the procedure through an amendment to IHO Publication S-11 - Part A - *Guidance for the Preparation and Maintenance of International (INT) Chart Schemes*. The proposed revised edition 3.1.0 will be submitted to the IHO Council with a view to seeking subsequent approval by the Member States.

13. The on-line registration service for IHO meetings developed with the support of the Republic of Korea (KHOA) was used successfully for the 8th HSSC meeting and for the 1st session of the IHO Assembly. A set of upgrade requirements based on the lessons learned is being developed for further consideration with KHOA. On-line registration is now the preferred mode of registration for the meetings organized by the Secretariat.

INT Chart and ENC Production Coordination - Region C2

14. Chile (Lt Cdr Felipe Barrios) is the designated INT Charts / ENC Coordinator for Region C2 as known by the IHO Secretariat. As part of the deployment of the INT Web Chart Catalogue, a new edition 3.0.0 of S-11 Part B for Region C2 dated January 2016 was published. This edition reports that 7 INT charts are available to date, out of 44 charts in the scheme (~ 16 %). No INT chart has been published in the region since 1997.

15. The SEPRHC was not represented at the meetings of the WENDWG in 2016 nor in 2017. At its 7th meeting (31 January - 2 February 2017), 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 eliminating overlapping ENCs.

16. The proposed new resolution was endorsed by IRCC-9 for consideration by the IHO Council with a view to seeking subsequent approval by the Member States.

17. It is worth noting that there is no significant ENC overlap in the SEPRHC region and that most ENCs contain assessed CATZOC values.

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

18. The first session of the IHO Assembly (A-1) took place from 24 to 28 April 2017 in Monaco. 77 of the 87 IHO Member States were represented. All four IHO Member States of the SEPRHC were represented.

19. The Assembly approved the composition of the Council for the period 2017-2020 (until the 2nd session of the Assembly). Colombia was selected to occupy the seat allocated to the SEPRHC. No other Member State of the SEPRHC region was selected on the basis of hydrographic interests.

20. The other decisions of the Assembly that may require action from the countries in the SEPRHC region are recalled below with the relevant comments from the Secretariat in *italics*.

- Decision No. 8: The Assembly urged Member States to contribute more actively to the implementation of Programme 2 and to maintain the relevant expertise. *Table 5 shows the current participation from the SEPRHC region in the HSSC and its subordinate organs.*

*Table 5
Participation from the SEPRHC region in the HSSC and its subordinate organs
Status as of 1 July 2017*

HSSC organ	Chile	Colombia	Ecuador	Peru
HSSC	X		X	X
<i>HS PT</i>				X
S-100WG			X	
<i>S-101 PT</i>			X	
<i>S-121 PT</i>				
<i>UKC PT</i>				
ENCWG	X		X	
NCWG				
NIPWG				
DQWG				
HDWG				X*
ABLOS	X**			

* *Via Project Officer seconded to the IHO Secretariat*

** *Via IAG Representative*

- Decision No. 10: The Assembly urged Member States to ensure consistency between their paper and digital charts and publications through the provision of the appropriate updates. *ENC producers in the SEPRHC region are invited to confirm that their updating regime for paper charts and ENCs are aligned, including for Temporary and Preliminary (T&P) Notices to Mariners.*
- Decision No. 11: The Assembly urged Member States to ensure that the information on national arrangements related to the use of ECDIS is kept current. *Table 6 shows the status of the information provided by countries from the SEPRHC region as shown on the IHO web site.*

Table 6
Information from the SEPRHC region on national arrangements related to the use of ECDIS
Status as of 1 July 2017

Country	Back up information	Link to on-line chart catalogue
Chile	/	Yes
Colombia	April 2007	Yes
Ecuador	May 2007	Yes
Panama	/	/
Peru	March 2008	Yes

- Decision No. 21: (...) Member States resolve that, in addition to fulfilling their international obligations to provide hydrographic information in support of safety of navigation, they should also consider implementing mechanisms that encourage the widest possible availability of all hydrographic and particularly bathymetric data, so as to support the sustainable development, management and governance of the marine environment. (...). *Table 7 shows the status of the information available at the Secretariat on SDI National Geoportals in the SEPRHC region and on the contribution of ENC data from the region to the IHO Data Centre for Digital Bathymetry.*

Table 7
Information from the SEPRHC region on SDI National Geoportals and
contribution of ENC data to the IHO DCDB
Status as of 1 July 2017

Country	SDI National Geoportal	Contribution of ENC data to the IHO DCDB
Chile	Yes	Yes
Colombia	Yes	
Ecuador	Yes	Yes
Panama	Yes	
Peru	Yes	Yes

- Decision No. 22: The Assembly (...)
 - encouraged Member States to incorporate the Statement of Shared Guiding Principles for Geospatial Information Management into institutional frameworks and to liaise with their national representatives in the UN Committee of Experts on Global Geospatial Information Management (UN-GGIM) to help ensure that ocean and coastal geospatial data is considered as an integral part of national Spatial Data Infrastructure (SDI) initiatives.
 - (...)
 - encouraged Member States and RHCs to engage with the UN-GGIM and its regional entities to raise awareness of the marine domain, any of its unique needs, and the value of the domain within any geospatial information management effort.

IHO CL 38/2017 dated 8 June informed the IHO Member States on the preparation of the 7th UN-GGIM meeting and encouraged them to ensure that, at a minimum, their national delegation attending UN-GGIM are fully briefed on all relevant hydrographic issues or consequences that may be discussed, and wherever possible, that IHO Member State representatives join national delegations and contribute directly to the work of the UN-GGIM.

The regional UN-GGIM entity relevant to the SEPRHC region is UN-GGIM: Americas in which all countries in the region are represented (see <http://www.un-ggim-americas.org>). Its last meeting took place in Santiago de Chile from 3 to 4 April 2017.

1st Session of the IHO Council (C-1)

21. The first session of the IHO Council (C-1) will be held from 17 to 19 October 2017 in Monaco. The provisional agenda was issued with IHO CCL 03/2017 dated 9 June. The proposals submitted to the Council were circulated for comments with IHO CCL 6 dated 19 July.

Capacity Building Programme

22. The level of activity of the IHO Capacity Building (CB) Programme in 2015 and 2016 were nearly the same and much higher than in previous years. The CB Programme benefits from 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.

23. The SEPRHC benefited from the following activities under the CB Programme in 2015-2016:

- 2015: a workshop on Marine Spatial Data Infrastructures (MSDI) that was organized by the SWAtHC with participants from the MACHC and the SEPRHC;
- 2016: a workshop on technique and methodology of MBES data processing and a workshop on LIDAR technology for shallow waters.

24. The following activities are planned in the CB Programme for 2017-2018:

- 2017: a workshop on Bathymetry Database and a workshop on offshore surveys (geophysical analysis and identification of seamounts);
- 2018: subject to availability of additional funds: a workshop on LIDAR technology and methodology for shallow waters and coastline hydrographic surveys and a workshop on MSDI implementation and development.

25. There are three on-going training programme for which calls for candidates are expected to continue being issued annually:

- the IHO - Nippon Foundation CHART project for nautical cartographers (Category “B”),
- the Master of Science Programme in Hydrographic Surveying at the University of Southern Mississippi, USA sponsored by the Republic of Korea for hydrographic surveyors (Category “A”), and
- the IHO-IOC-Nippon Foundation GEBCO Training Programme in ocean bathymetry (Category “A”) at the University of New Hampshire, USA.

26. Hydrographic Offices are invited to invest well in advance in the preparation of candidates especially with respect to English proficiency.

27. The recent IRCC9 meeting (report in preparation) requested SEPRHC to consider appointing a permanent CB Coordinator and to support their participation at CBSC meetings. The constant rotation of Capacity Building Coordinators in the SEPRHC has proven to generate complications in the process of preparing and submitting projects to the CBSC, reducing the possibilities of obtaining a good review and as a consequence, the resources required for their implementation.

IHO Outreach

World Hydrography Day

28. 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. Background briefs and reports on events hosted in connection with WHD 2016 are available at www.iho.int > Home > About IHO > World Hydrography Day. Two countries in the SEPRHC provided a report: Chile and Colombia.

29. The theme for WHD 2017 was: “*Mapping our sea, oceans and waterways - more important than ever*”. It was intended to raise awareness of the current lack of comprehensive data to underpin many maps and charts of the seas and oceans and. The theme also promotes and encourages innovative supplementary data gathering and data maximizing initiatives already under investigation in the IHO, including crowd-sourced bathymetry (volunteered geographic data) and satellite-derived bathymetry. This, in turn, helps to promote the increasing role of those involved in hydrography in maritime 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. A brief on WHD 2017 was made available on the IHO website and a media release was issued by the Secretariat on 20 June. The IHO Secretariat received a report on the WHD 2017 celebration in Chile. Further reports on celebrating WHD 2017 in the SEPRHC region are welcome at the earliest opportunity.

30. The theme for WHD 2018 will be discussed at the first meeting of the IHO Council.

International Hydrographic Review

31. Twice a year, the International Hydrographic Review (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 SEPRHC is Commander Julio Behr (Peru).

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 SEPRHC Member States

34. SEPRHC Member States are invited to:

- **Note** this report;
- **Review** entries in IHO Publications C-55 and P-5 at least annually;
- **Provide** continuous updates to S-11 Part B, through Chile as coordinator for INT Region C2;
- **Confirm** that their updating regime for paper charts and ENC's are aligned;
- **Report** to the IHO Secretariat on the status and description of the ENC schemes in the Region (Action WENDWG7/08 refers);

- **Consider** the possibility to be represented in the WENDWG;
- **Consider** contributing more actively to the implementation of Programme 2;
- **Consider** appropriate arrangements to prepare the 1st meeting of the IHO Council to be held in October 2017;
- **Invest** well in advance in the preparation of candidates for the fully-funded training programmes listed in paragraph 25;
- **Consider** appointing a permanent CB Coordinator and support their participation at CBSC meetings;
- **Report** to the IHO Secretariat on the celebration of WHD 2017;
- **Consider** submitting papers for publication in the IH Review; and
- **Take any other actions** as considered appropriate.