

**Paper for Consideration by
62nd NHC Meeting**

IHO Secretariat Report

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

Entry into force of the Amendments to the IHO Convention

1. The Amendments to the IHO Convention and its supporting Basic Documents entered into force on 8 November 2016. Since last NHC Meeting the following events took place:

- The first session of the IHO Assembly (A-1) was held in Monaco from 24 to 28 April 2017, at which time the IHO Council was established and decisions were agreed. The Assembly elected Dr Mathias Jonas as the Secretary-General and Abri Kampfer and Mustafa Iptes as Directors, who took office on 1 September 2017. The second session of the IHO Assembly (A-2) will happen in April 2020;
- The first meeting of the Council (C-1) took place from 17 to 19 October 2017 and will meet annually thereafter. The subsidiary organs of the IHO reported to the Council that will then referred endorsed proposals for adoption either to the Assembly or to the Member States through correspondence;
- The current planning cycle for the IHO work programme and budget started in 1 January 2018 and will run to 2020.
- Important to note that 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 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, there is no requirement to seek the approval of existing Member States of the IHO. In 2017 **Malta**, **Vanuatu** and **Seychelles** acceded to the IHO Convention and became the 86th, 87th and 88th Member States of the IHO respectively. The following States: Bulgaria, Congo, Haiti, Malta, Mauritania, Sierra Leone and Solomon Islands that have already applied for membership of the IHO, may now submit their instruments of accession to the Convention on the IHO and thereby become members immediately. On 1 January 2018 **Dominican Republic** was reinstated as Member State, suspended since 1983.

INT Chart and ENC Production Coordination - Region D and E

3. Region D and E have matured INT chart schemes compared to some other INT Regions.
4. The status of the INT chart scheme for region D is contained in Edition 3.0.0 of S-11 Part B which was made available in January 2016. The status of the INT chart scheme for region E is contained in Edition 3.0.8 of S-11 Part B which was made available in December 2017.
5. Early January 2018, the IHO Secretariat informed the Chart Coordinators that the project INTtoGIS Phase II was underway, thanks to the outstanding support provided by KHOA (Republic of Korea). For more information, see Doc. [HSSC9-11A-INF1](#). Since the publication of Ed. 3.1.0 of S-11 Part A, INTtoGIS Phase II aims to provide a very useful scheming tool, putting together ENC and INT charts.
6. Adoption of Ed. 3.10.0 of IHO Publication S-11 Part A requires new arrangements for the monitoring

of INT charts (CL 11/2018 refers).

7. The representative of the NHC at the WENDWG (Evert Flier, Norway) participated in the 7th meeting (January 2017) and the 8th meeting (March 2018) of the WENDWG.

8. The elimination of overlapping ENC data that are navigationally significant is one of the main objective of the WEND Principles. A new IHO Resolution addressing this issue was adopted by IHO Member States (See. IHO CL 19/2018 – *Adoption of new IHO resolution on the elimination of overlapping ENC data*). WENDWG considered the outcome of this resolution at its recent 8th meeting from 20 to 22 March 2018 in Buenos Aires, Argentina.

9. At its 13th meeting in Monaco (January 2018), the Data Quality Working Group arranged a workshop where participants shared their best practices on the way CATZOC values are populated for S-57 ENCs by Hydrographic Offices. In order to facilitate the harmonization and prepare the future transition to S-101 ENCs, it is recommended that NHC ENC Producers provide their guidelines to the DQWG.

10. Since all NHC members distribute their ENCs through a RENC they are also encouraged to consider the Proposed Joint RENC policy on the use of ENC CATZOC data by the IHO Secretariat (Joint RENC PRIMAR IC-ENC Letter dated 5 July 2017).

11. Recommendations.

NHC to consider:

- a) Reflect the results of the most recent 8th WENDWG meeting in March
- b) providing CATZOC practices to the DQWG
- c) the policy on the use of CATZOC values by the IHO Secretariat
- d) the maintenance of ENC Schemes when the INTtoGIS Phase II is commissioned

Maritime Safety Information Services

12. **MSI Capability and Supportability.** The IHO Capacity Building strategy lays particular emphasis on the fundamental capability for all coastal States to provide a maritime safety information (MSI) service in support of their international obligations.

13. **Recommendations.** The Chair is requested to encourage all coastal States to:

- a) maintain regular communication with the regional NAVAREA Coordinator(s) and inform of any change of personnel or contact details; and
- b) use and following the guidance provided in S-53 – *Joint IMO/IHO/WMO Manual on Maritime Safety Information*;

Capacity Building Programme

14. The level of activity of the IHO Capacity Building (CB) Programme decreased in 2017. Expenditure in the IHO 2017 CB Work Programme (625 952 Euros) was 18% smaller than the budget for the previous year. Ongoing financial support is provided by the Nippon Foundation of Japan, the Republic of Korea and by a contribution from the IHO budget with in-kind support from Member States and from industry. The Directing Committee is continuing its campaign to find additional donor States and funding organizations. In 2017, 80% of the budgeted work program was executed and paid for.

15. The NHC MS did not benefited from activities under the IHO CB Work Programme (CBWP), instead, Norway engaged directly helping Albania and Mozambique to develop hydrographic capabilities.

16. **Recommendation:** Member States in the NHC are invited to identify opportunities in national or regional funding agencies to incorporate hydrographic development in the broader projects supporting developing countries.

Crowdsourced Bathymetry

17. In accordance with Decision 8 of the EIHC5, IRCC7 established the Crowdsourced Bathymetry Working Group (CSBWG) to provide guidelines on the collection and use of crowdsourced bathymetry. Member States and other interested parties were invited to nominate representatives to participate in the CSBWG (see IHO CL 42/2015). The CSBWG has developed the draft IHO publication B-12 – *IHO Guideline on Crowdsourced Bathymetry*, which has completed extensive stakeholder and IHO member State consultation. Edition 1.0.0 will be presented to IRCC10 for endorsement, prior to submission to IHO Council-2 and IHO member State approval, it is hoped the publication will have a formal publication date of 1 January 2019. Work has commenced on the draft of Edition 2.0.0, taking into account a number of topics, for which additional time and investigation were identified as being required; additionally as a result of Decision C-1/31 to enlarging the scope of the tasking of the CSBWG, the CSBWG drafted revised ToRs for submission to IRCC10.

18. The web-based interface portal to the IHO Data Center 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 crowdsourced 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 GIS and Databases

19. 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.

20. The country information database has been progressively upgraded to include additional administrative information and facilitate the maintenance of the IHO Yearbook (IHO Publication P-5) and related lists posted on the IHO website. Countries in the NHC 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. The status of updates in the IHO Country Information Database concerning the NHC Countries, including those provided for C-55, is as follows:

Country	P-5 – Yearbook Last update received	C-55 Last update received
Denmark	December 2016	May 2017
Finland	August 2015	March 2018
Iceland	May 2017	November 2016
Norway	September 2017	February 2017
Sweden	September 2017	September 2017

21. 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.

22. 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 visualizing the data in the IHO C-55 GIS are being investigated.

23. **Recommendation.** Countries in the NHC Region are invited to review their entry in the IHO Yearbook

and C-55 and to provide the IHO Secretariat with the appropriate updates or to report no change.

Preparation of the next meeting of the IHO Council

24. The main outcomes of the 1st meeting of the IHO Council were reported in [IHO CL 55/2017](#).

25. The second meeting of the IHO Council is scheduled to take place in London, UK, from 9 to 11 October 2018. The preparation of this meeting has started, in liaison with the host country. It can be noted that in accordance with the Rules of Procedures of the Council, the deadline for submission of proposals by IHO Member States is 9 July 2018, while comments on proposals to be included in the Red Book for the Council will be expected by 31 July 2018.

IHO Outreach

World Hydrography Day

26. Taking into account the discussions at the IHO Council meeting held in Monaco in October 2017, the theme of the World Hydrography Day for 2017, as announced by [IHO CL 03/2018](#), is:

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

International Hydrographic Review

27. Twice a year, the IHR provides an opportunity for Member States to publicize technical and other achievements in their region. An editorial board comprising a representative from each region has been established. The representative for the NHC is Lars Hansen (Denmark).

28. Papers for consideration for publication in the IHR should be forwarded directly to the editor (ihreview@iho.int, copy to ian.halls1@defence.gov.au). The deadlines are:

- end of January for the May Edition
- end of July for the November Edition

29. The IHO Secretariat has been working 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 now provides access to volumes from 1963 to 2015. They can be found at: <https://journals.lib.unb.ca/index.php/ihr>.

30. Action Requested of NHC:

- a) **Note** this report
- b) **Consider** the recommendations on Charting as presented in **Paragraph 11**
- c) **Consider** the recommendations on MSI as presented in **Paragraph 13**
- d) **Consider** the recommendation on Capacity Building in **Paragraph 16**
- e) **Review** entries related to IHO C-55 and P-5 (Yearbook) at least annually (**Paragraph 23**)
- f) **Consider** appropriate arrangements to prepare for the 2nd Meeting of the IHO Council (**Paragraph 25**)
- g) **Consider** submitting papers for publication in the International Hydrographic Review (**Paragraph 27**)
- h) **Take any other actions** as considered appropriate