

4th Meeting of the Nautical Cartography Working Group (NCWG) Scheveningen, The Hague, Netherlands, 6 – 9 November 2018

Contribution to the IHO Work Programme 2018		 Royal Netherlands Navy
Task 2.1.2.4	Organize, prepare and report meetings of NCWG	

Hosted by the Hydrographic Service of the Royal Netherlands Navy, the fourth meeting of the Nautical Cartography Working Group (NCWG) took place in Scheveningen, The Hague, Netherlands, from 6 to 9 November. The meeting was chaired by Mr Mikko Hovi (Finland), supported by Mr James Timmins, Secretary (United Kingdom). Thirty-two delegates from 19 Member States (Brazil, Colombia, Denmark, Estonia, Finland, France, Germany, India, Indonesia, Italy, Japan, Netherlands, Norway, Republic of Korea, Spain, Sweden, Turkey, United Kingdom, USA), two Expert Contributors (Esri, Fugro/ICPC¹), and the IHO Secretariat, represented by Director Abri Kampfer and Assistant Director Yves Guillam, attended the meeting. The Chair of the Data Quality Working Group (Netherlands) was also present during the entire meeting and provided enlightening inputs in relation to doubtful features, accuracy, CATZOC, data quality portrayal, etc.



NCWG-4 participants gather outside the Badhotel meeting room

¹ International Cable Protection Committee

Following a motivating welcome address by Captain (RNLN) Marc van der Donck, Hydrographer of the Royal Netherlands Navy, the Nautical Cartography Working Group (NCWG) considered all the actions from the last meeting and those arising from the 9th and 10th meeting of the Hydrographic Services and Standards Committee (HSSC) that related to charting.

The Chair (US) of the Sub-Working Group on the Future of the Paper Chart provided a progress report on the status of this high priority work item of the NCWG work plan and suggested the draft topics that should be considered for an impact study by various stakeholders through a survey to be conducted in 2019. The various tasks to continue the work were allocated to some NCWG Members and the management plan was approved. A preliminary report is planned to be presented at HSSC-11, in May 2019. Several IHO strategic related issues were discussed, such as the future of the INT chart concept itself.

The representative of the ICPC submitted proposals for amendments to the sections of S-4 - *Regulations for International (INT) Charts and Chart Specifications of the IHO* - dealing with submarine cables, aiming to align with the IHO Resolution 4/1967 as amended and eventually to chart cables in possible deep sea mining areas.

About 15 cartographic issues and proposals were considered by the NCWG, including the possible need to harmonize or standardize the portrayal of satellite derived bathymetry and the associated quality indicators. It is worth noting that since the last NCWG meeting, the submission template used for change proposals on symbology or chart regulations requires a short mandatory analysis of the possible impact of the proposed change on ENC's.

Germany introduced the latest Edition 9 of INT-1 - *Symbols, Abbreviations and Terms used on Charts* – which is now available on the IHO website for download by IHO Member States. An action was initiated to consider future alternative options in the maintenance and production of INT-1. UK introduced the new section V on Data Quality Indicators that is now included in the August 2018 edition of its national publication NP5011 - *Symbols and Abbreviations used on Admiralty Charts*.

The IHO Secretariat provided an update on the developments in progress with regard to the Phase II of the INTtoGIS project, aiming to facilitate the implementation of INT paper chart and ENC schemes in the charting regions, in accordance with guidance given in Publication S-11 Edition 3.1.0, February 2018 - *Guidance for the Preparation and Maintenance of International (INT) Chart and ENC Schemes and Catalogue of International (INT) Charts*. In support of this topic, the meeting welcomed a presentation provided by a representative of Colombia, engaged in a doctoral level study entitled "*Methodological Proposal to Standardize Regional ENC Schemes – Case Study: Caribbean Sea*". This study is planned to be introduced at the 19th meeting of the MACHC and its progress could further be monitored by the WENDWG.

The working group also considered four marine nautical incidents (groundings) by examining the official investigation reports to identify whether lessons learned had to be captured for cartographic improvements. Although it was agreed that these incidents were not due to shortcomings in cartographic concepts, participants acknowledged that these cases were noteworthy to be considered by the NCWG as they help to understand how the nautical publications, charts (ENC's and Paper) and quality indicators are used for setting alarm thresholds, either for route planning or during navigation.

Compared to the previous meetings, this meeting was particularly notable for a major reason: while addressing the cartographic issues, it revealed that a number of Hydrographic Offices are now facing new cartographic challenges resulting from the dual and simultaneous production of ENC's and paper charts from a single chart content database. Therefore, sharing the best practices within the NCWG to avoid inconsistencies in chart production and maintenance is becoming even more important for the future.

At the end of the meeting, the working group welcomed the offer by Sweden to host the 5th meeting of the NCWG in Stockholm in November 2019.