**Nautical CARTOGRAPHY Working Group (NCWG)**

(Formerly the Chart Standardization and Paper Chart Working Group - CSPCWG)

**Terms of Reference and Rules of Procedure**

*Ref: 1) 1st HSSC Meeting (Singapore, October 2009)*

*2) 4th HSSC Meeting (Taunton, United Kingdom, September 2012)*

*3) 6th HSSC Meeting (Viña del Mar, Chile, November 2014) (name change only)*

*4) 7th HSSC Meeting (Busan, Republic of Korea, November 2015)*

*5) 8th HSSC Meeting (Monaco, November 2016) (clarification in section 4.c only)*

*6) 9th HSSC Meeting (Ottawa, Canada, November 2017) (editorial changes, and 4.a) (iii)*

*7) 12th HSSC Meeting (VTC, October 2020) (Objectives amended, and deletion of main tasks in section 4)*

**1. Objectives**

a) To provide expert and authoritative advice and guidance to relevant IHO Member States, IHO bodies and non-IHO entities on the concepts of nautical cartography, including

(i) The definition and the construction of digital chart content for the optimal and efficient production and maintenance of nautical chart products (S-57 ENCs, S-101 ENCs, paper charts meeting IHO standards);

(ii) The development of specifications for symbolization of any data required to be displayed from ENC on ECDIS (S-57 based, S-100 based, dual-fuel) and on paper charts meeting IHO standards;

(iii) The interoperable integration of the nautical chart and other nautical products for e-Navigation in support of the S-100 implementation roadmap. This includes resolving portrayal issues related to the display of a nautical chart within an integrated navigation system.

b) To provide expertise to the International Board on Standards of Competence for Hydrographic Surveyors and Nautical Cartographers (IBSC) on the standards of competence for cartographers when deemed necessary.

c) To monitor the development of other relevant international standards.

d) The primary support compiling the rules to be used by nautical cartographers in their decision-making process for creating chart content is S-4.

**2. Authority**

This WG is a subsidiary of the Hydrographic Services and Standards Committee (HSSC)**.** Its work is subject to HSSC approval.

**3. Composition and Chairmanship**

1. The WG shall comprise representatives of IHO Member States (MS), Expert Contributors (EC), observers from accredited Non-Governmental International Organizations (NGIO), and a representative of the IHO Secretariat. A membership list shall be maintained and posted on the IHO website.
2. The Chair will monitor membership to ensure that each Regional Hydrographic Commission is invited to be represented on the WG.
3. EC membership is open to entities and organizations that can provide a relevant and constructive contribution to the work of the WG.
4. The Chair and Vice-Chair shall each be a representative of a MS. The election of the Chair and Vice-Chair shall be decided at the first meeting after each ordinary session of the Assembly and shall be determined by vote of the MS present and voting.
5. A Secretary should be appointed to ensure the smooth running of WG business; to administer consultation and collation of members’ views; and may act as Editor of the WG’s publications. The position is normally filled by a member of the WG.
6. If the Chair is unable to carry out the duties of the office, the Vice-Chair shall act as the Chair with the same powers and duties. If the position of Chair or Vice-Chair becomes vacant during the period between two ordinary sessions of the Assembly an election should be conducted at the next meeting of the Working Group or by correspondence.
7. ECs shall seek approval of membership from the Chair.
8. EC membership may be withdrawn in the event that a majority of the MS represented in the WG agrees that an EC’s continued participation is irrelevant or unconstructive to the work of the WG.
9. All members shall inform the Chair in advance of their intention to attend meetings of the WG.
10. In the event that a large number of EC members seek to attend a meeting, the Chair may restrict attendance by inviting ECs to act through one or more collective representatives.

**4. Procedures**

1. The WG should work by correspondence, teleconferences, group meetings, workshops or symposia. The WG should meet about once a year. When meetings are scheduled, and in order to allow any WG submissions and reports to be submitted to HSSC on time, WG meetings should not normally occur later than nine weeks before a meeting of the HSSC.
2. Decisions should generally be made by consensus. If votes are required on issues or to endorse proposals presented to the WG, only MS may cast a vote. Votes at meetings shall be on the basis of one vote per MS represented at the meeting. Votes by correspondence shall be on the basis of one vote per responding MS represented in the WG.
3. The date and venue of group meetings shall normally be announced by the Chair at least six months in advance.
4. The draft record of meetings shall be distributed by the Chair (or the secretary) within six weeks of the end of meetings and participants’ comments should be returned within three weeks of the date of dispatch. Final minutes of meetings should be posted on the IHO website within three months after a meeting.
5. Sub-working groups and project teams may be created by the WG or proposed to HSSC to undertake detailed work on specific topics. The terms of reference and rules of procedure of the sub-working groups and project teams are determined or proposed by the WG as appropriate.
6. The WG will maintain close liaison with other HSSC WGs, particularly the ENCWG, NIPWG and S-100WG, and other groups developing and maintaining S-100 based products. The WG should liaise also with other IHO bodies, international organizations and industry, as appropriate and as instructed by HSSC.
7. The WG should prepare annually a report on its activities and a rolling two-year work plan, including expected time frame.