

**DIGITAL INFORMATION PORTRAYAL WORKING GROUP (DIPWG)**  
(Formerly, Colours and Symbols Maintenance Working Group)

**Terms of Reference**

- Ref: 1) 1<sup>st</sup> HSSC Meeting (Singapore, October 2009)  
2) 5<sup>th</sup> HSSC Meeting (Shanghai, China, November 2013)

**1. Objective**

To maintain IHO specifications for colours, symbols and display rules used to show SENC information on ECDIS in a safe and ergonomic manner.

**2. Authority**

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

**3. Procedures**

a) The WG should:

(i) Maintain IHO Special Publication S-52, its accompanying Presentation Library and the portrayal related elements of IHO Special Publications S-100 and S-101, as well as the Portrayal Register of the Geospatial Information Infrastructure (GII) by preparing and promulgating maintenance documents when required. In the case of issues which may be related to the portrayal of objects according to S-52, the procedure described in Annex 1 must be adhered to.

(ii) Perform maintenance of S-52 and the GII Portrayal Register by immediate amendments for safety related matters and long-term revisions by deferred amendments. Collaborate with TSMAD in performing maintenance of the portrayal related elements of S-100 and S-101 by immediate amendments for safety related matters and long-term revisions by deferred amendments.

(iii) Draft new editions of S-52 and modifications to the GII Portrayal Register as instructed by HSSC.

(iv) Identify basic scientific fundamentals and provide guidance to ECDIS manufacturers related to colours and symbolization of hydrographic information.

(v) Provide and maintain a framework for display of SENC information that is feasible and practicable within available technology.

(vi) Coordinate technical exchange between DIPWG, type-approval authorities, ECDIS manufacturers and ECDIS user community, including the conduction of comprehensive testing and validation of colours and symbolization by manufacturers, and at-sea trials with mariners.

(vii) Monitor the operational performance and development of IHO specifications, progress in display technology, and human perception analysis.

(viii) Consider new topics and other applications affecting electronic chart display, and/or draft the relevant extension documents.

b) The WG should work by correspondence, group meetings, workshops or symposia. The WG should meet at least once every two years. 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.

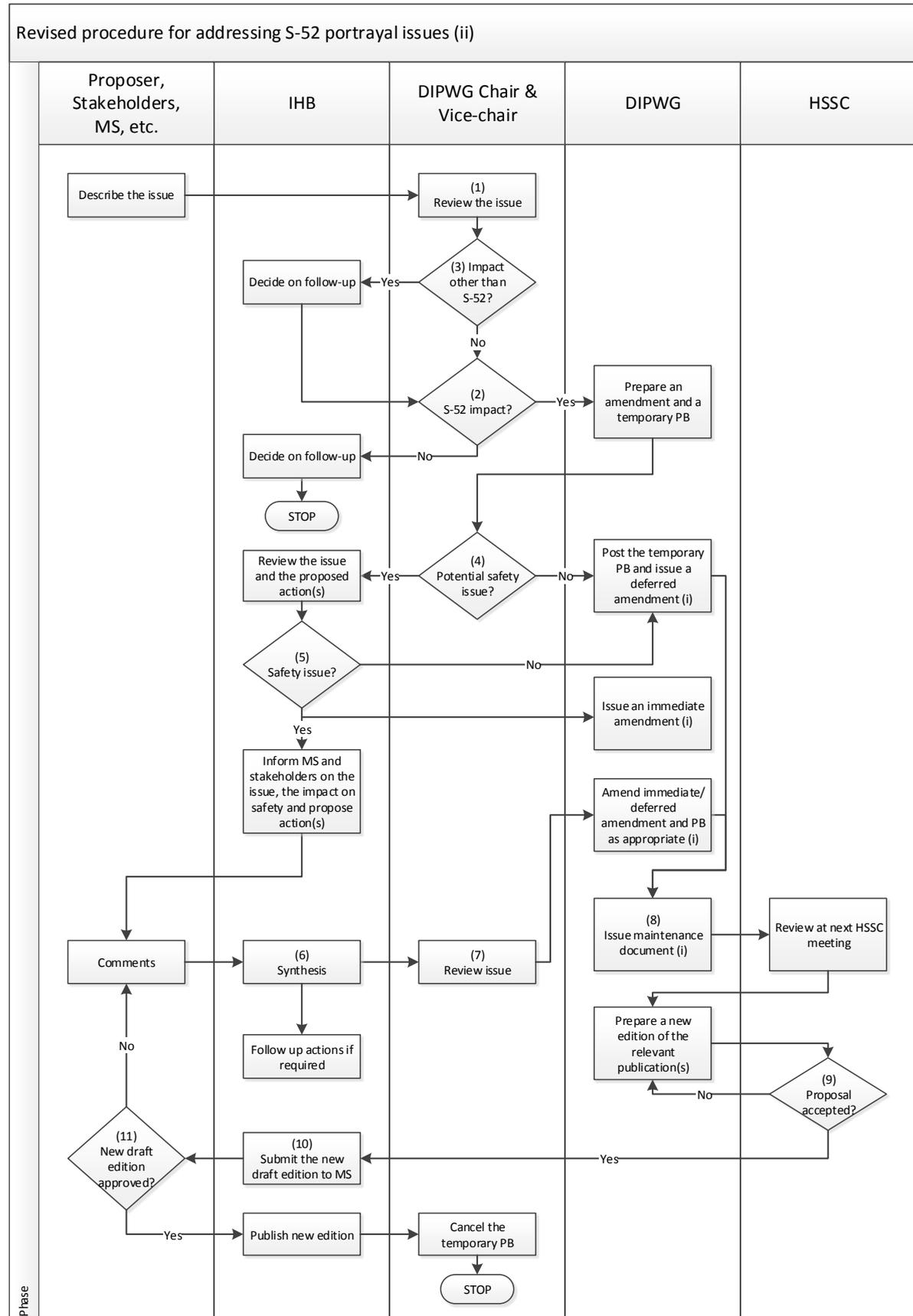
c) The WG should liaise and harmonize with other ECDIS-related bodies as appropriate (e.g., TSMAD, CSPCWG, IEC, IMO/IHO HGE, IALA, WMO, IACS, NATO, etc.).

d) The WG should identify a work programme for each year, including expected time frame.

#### **4. Composition and Chairmanship**

- a) The WG shall comprise representatives of IHO Member States (M/S), Expert Contributors and Accredited NGO Observers.
- b) Decisions should generally be made by consensus. If votes are required on issues or to endorse proposals presented to the WG, only M/S may cast a vote. Votes shall be on the basis of one vote per M/S represented.
- c) Expert Contributor membership is open to entities and organisations that can provide a relevant and constructive contribution to the work of the WG.
- d) The Chair and Vice-Chair shall be a representative of a Member State. The election of the Chair and Vice-Chair shall be decided at the first meeting after each ordinary session of the Conference (Conference to be replaced by Assembly when the revised IHO Convention enters force) and shall be determined by vote of the Member States present and voting.
- e) 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.
- f) Expert Contributors shall seek approval of membership from the Chairman.
- g) Expert Contributor membership may be withdrawn in the event that a majority of the M/S represented in the WG agree that an Expert Contributor's continued participation is irrelevant or unconstructive to the work of the WG.
- h) All members shall inform the Chairman in advance of their intention to attend meetings of the WG.
- i) In the event that a large number of Expert Contributor members seek to attend a meeting, the Chairman may restrict attendance by inviting Expert Contributors to act through one or more collective representatives.

# Annex 1



1. New issues which are potentially related to S-52 are submitted to the DIPWG chair group (chair and vice-chair of DIPWG) for review.
2. The DIPWG chair group considers whether the issue impacts S-52.
  - 2.a If it considers that the issue does not impact S-52, it reports to the IHB which decides on any follow-up action(s).
  - 2.b If it considers that the issue impacts S-52, it invites DIPWG to prepare an amendment to the relevant component(s) of S-52 and a temporary chart presentation bulletin (PB).
3. In parallel the DIPWG chair group considers whether the issue has any other impact, i.e. on other IHO publication or on other stakeholders. The DIPWG chair group reports other impact(s), if any, to the IHB which decides on any follow-up action(s).
4. In parallel, the DIPWG chair group considers whether the issue is related to safety of navigation.
  - 4.a If it considers that the issue is safety-related, it reports to the IHB with proposed actions. See item 5.
  - 4.b If it considers that the issue is not safety-related, it authorizes the posting of the relevant temporary PB and issue a deferred amendment to the relevant publication. See note (i) and item 8.
5. The IHB reviews the report from the DIPWG chair group.
  - 5.a If the IHB agrees that the issue is safety-related, it informs Member States (MS) and stakeholders on the issue and the impact on safety, proposes the appropriate actions and invites comments. It also tasks DIPWG to issue an immediate amendment. See note (i) and item 6.
  - 5.b If the IHB decides that the issue is not safety-related, it informs the DIPWG chair group and authorizes the posting of the relevant temporary PB and the issuance of a deferred amendment. See note (i) and item 8.
6. The IHB analyses the comments from MS and stakeholders. It establishes a synthesis to be considered by the DIPWG chair group and takes any follow-up actions which it considers appropriate.
7. The DIPWG chair group reviews the issue and invites DIPWG to amend the relevant amendment and temporary PB if required.
8. DIPWG prepares/reviews and issues a S-52 maintenance document and reports to HSSC at its next meeting. When appropriate, and as instructed by HSSC, DIPWG prepares a draft new edition of the relevant component of S-52. DIPWG submits its proposal to HSSC.
9. HSSC reviews the draft new edition submitted by DIPWG.
  - 9.a If HSSC accepts the draft new edition, it invites the IHB to submit the draft to the approval of MS (in accordance with IHO Resolution 2/2007 as amended). See item 10.
  - 9.b If HSSC does not accept the draft new edition, the proposal is sent back to DIPWG.
10. The IHB submit the draft new edition to the approval of MS.
11. MS reviews the draft new edition.
  - 11.a If the draft new edition is approved by the simple majority of MS, then the IHB publishes the new edition (taking into account comments if appropriate) and the temporary PB is cancelled. END.
  - 11.b If the draft new edition is not approved by the MS, see item 6.

Notes:

- (i) The IHB informs MS and stakeholders of the posting of every PB and the issuance of every amendment by circular letter.
- (ii) The flow diagram does not reflect the timeline. Potential safety issues are processed as expeditiously as possible.