# TRANSFER STANDARD MAINTENANCE AND APPLICATIONS DEVELOPMENT WORKING GROUP (TSMAD)

#### Terms of Reference

- Ref: 1) 1<sup>st</sup> HSSC Meeting (Singapore, October 2009)
  - 2) 3<sup>rd</sup> HSSC Meeting (Monaco, November 2011)
  - 3) 5<sup>th</sup> HSSC Meeting (Shanghai, China, November 2013)

## 1. Objective

- a) To maintain, develop and extend:
  - (i) the S-57 IHO transfer standard for digital hydrographic data;
  - (ii) the S-100 IHO Geospatial Standard for Hydrographic Data;
  - (iii) the S-101 IHO ENC Product Specification;
- b) To monitor the development of other related international standards.

## 2. Authority

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

#### 3. Procedures

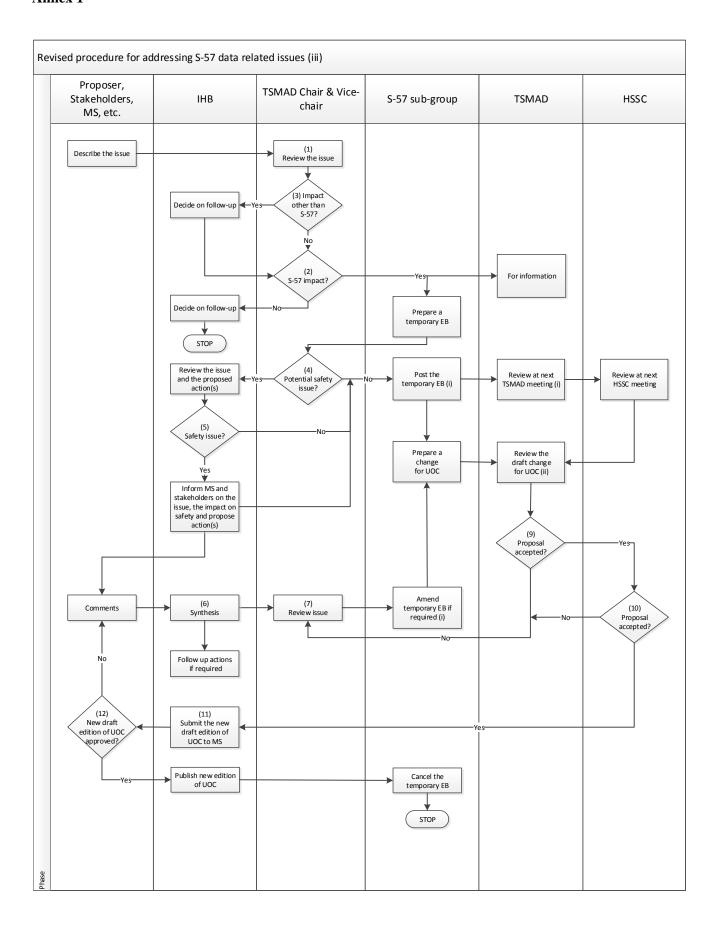
- a) The WG should:
  - (i) maintain the S-57 IHO transfer standard for digital hydrographic data by preparing and promulgating maintenance documents containing clarifications, corrections and extensions when required. In the case of issues reported which may be data related, procedure described in Annex 1 must be adhered to;
  - (ii) maintain the S-100 IHO Geospatial Standard for Hydrographic Data as directed in Part 13 (S-100 Maintenance Procedures);
  - (iii) maintain the S-100 IHO ENC Product Specification;
  - (iv) review relevant international standards and specifications and advise HSSC accordingly;
  - (v) consider new topics as instructed by HSSC and advise HSSC accordingly and/or draft the relevant extension documents;
  - (vi) draft new editions of the IHO transfer standard for digital hydrographic data as instructed by HSSC.
- b) The WG should work by correspondence, group meetings, workshops or symposia. Permanent or temporary sub-working groups may be created by the WG to undertake detailed work on specific topics such as: maintenance of the IHO transfer standard for digital hydrographic data, product specifications, tidal information, survey information, etc. The terms of reference and rules of procedure of the sub-working groups are determined by the WG. The WG should meet at least 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.

- c) The WG should liaise with other HSSC WG's, international organizations and industry to educate and encourage the application of IHO standards to the work of those organizations.
- d) The WG should identify and promote the availability of other navigation-related data in ECDIS and in IHO geospatial standard-compliant format.
- e) 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 NGIO 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-57 are submitted to the TSMAD chair group (chair and vice-chair of TSMAD) for review.
- 2. The TSMAD chair group considers whether the issue impacts S-57.
- 2.a If it considers that the issue does not impact S-57, it reports to the IHB which decides on any follow-up action(s).
- 2.b If it considers that the issue impacts S-57, it informs TSMAD members and tasks the S-57 sub-working group (S-57 SG, created in accordance with article 3b of the terms of reference) with the preparation of a temporary encoding bulletin (EB).
- 3. In parallel the TSMAD chair group considers whether the issue has any other impact, i.e. on other IHO publication or on other stakeholders. The TSMAD chair group reports other impact(s), if any, to the IHB which decides on any follow-up action(s).
- 4. In parallel, the TSMAD 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 EB. See note (i) and item 8.
- 5. The IHB reviews the report from the TSMAD 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 authorizes the posting of the relevant temporary EB. See note (i) and item 6.
- 5.b If the IHB decides that the issue is not safety-related, it informs the TSMAD chair group and authorizes the posting of the relevant temporary EB. 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 TSMAD chair group and takes any follow-up actions which it considers appropriate.
- 7. The TSMAD chair group reviews the issue and invites the S-57 SG to amend the temporary EB if required.
- 8. The S-57 SG prepares/reviews the appropriate draft change for S-57 Appendix B.1, Annex A Use of the Object Catalogue for ENC (UOC) and submits its proposal to TSMAD.
- 9. TSMAD reviews the draft change for UOC as instructed by HSSC. See note (ii).
- 9.a If TSMAD accepts the draft change for UOC, the proposal is submitted to HSSC. See item 10.
- 9.b If TSMAD does not accept the draft change for UOC, the proposal is sent back to the TSMAD chair group. See item 7.
- 10. HSSC reviews the draft change for UOC.
- 10.a If HSSC accepts the draft change for UOC, it invites the IHB to submit the draft to the approval of MS (in accordance with IHO Resolution 2/2007 as amended). See item 11.
- 10.b If HSSC does not accept the draft change for UOC, the proposal is sent back to the TSMAD chair group. See item 7.
- 11. The IHB submit the draft new edition of the UOC to the approval of MS.
- 12. MS reviews the draft new edition of the UOC
- 12.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 EB is cancelled. END.

12.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 EB by circular letter. Active EB are reviewed by TSMAD at its next meeting. TSMAD reports on the situation at the next HSSC meeting.
- (ii) TSMAD may decide to postpone the update of the UOC until a number of EB have been promulgated or until a period of time has elapsed since the previous revision/edition of the UOC.
- (iii) The flow diagram does not reflect the timeline. Potential safety issues are processed as expeditiously as possible.