

**20<sup>th</sup> TSMAD and 2<sup>nd</sup> DIPWG COMBINED  
MEETING  
03-07 May 2010, Rostock, Germany**

**Paper for Consideration by TSMAD/DIPWG**

**Report to TSMAD20/DIPWG2 on CSPCWG Activities**

<i>Submitted by:</i>	Australia
<i>Executive Summary:</i>	Report on CSPCWG Activities Since TSMAD19
<i>Related Documents:</i>	IHO S-4
<i>Related Projects:</i>	S-57 Maintenance; S-100; S-101 Development

### **Introduction / Background**

The IHO Chart Standardisation and Paper Chart Working Group (CSPCWG) is a Working Group of the IHO HSSC. Its primary objectives are to:

- Revise, develop and maintain IHO Publication S-4 – Regulations of the IHO for International (INT) Charts and Chart Specifications of the IHO;
- Revise, develop and maintain Part A of IHO Publication S-11 – Guidelines for INT Chart Coordinators;
- Maintain INT1, INT2 and INT3 (with national Hydrographic Offices' assistance);
- Develop new paper chart symbology.

Since TSMAD19, CSPCWG has held its annual meeting at the IHB, Monaco, from 01-03 December 2009 (CSPCWG6). In addition, ongoing review of IHO Publication S-4 has continued through correspondence, and the INT1 Sub-Working Group has continued to address consistency issues between the three official language versions of INT1 by correspondence. The full record of CSPCWG can be found on the CSPCWG page of the IHO web-site.

### **Analysis / Discussion**

The following IHO documents have been published since TSMAD19:

- S-4 – Regulations of the IHO for International Charts and Chart Specifications of the IHO – Edition 3.007; December 2009. Changes from version 3.006 include:
  - Revised ZOC Table at B-297.9 to agree with changes introduced in S-57 Supplement No. 2.;
  - Revised clauses B-480 – B-479 covering Radio Position-Fixing Stations, Marine Services and Signal Stations as reviewed by CSPCWG as part of the on-going revision of S-4.

The publication of Edition 3.007 of S-4 concludes the CSPCWG revision of Section B-400.

- S-11 part A – Guidance for the Preparation and Maintenance of International Chart Schemes – Edition 2.003; March 2010. While this document is only relevant for paper charts only, it is intended that equivalent guidelines will eventually be incorporated for the preparation and maintenance of small and medium scale ENC schemes. Note that Edition 2.003 of S-11 part B was published in September 2009.

CSPCWG6: The following issues that are of interest to TSMAD and DIPWG were discussed at CSPCWG6:

- The issue of communication between the Chair and Secretary of CSPCWG and other relevant IHO Working Groups such as TSMAD and DIPWG was raised. It was agreed that the Chairs of both TSMAD and CSPCWG would be added to the CSPCWG correspondence list where issues related to new or revised symbology for inclusion in S-4/INT1 are raised.

- Foul Area and Foul Ground: A paper outlining the issues that have previously been raised at TSMAD, DIPWG and CSPCWG was tabled (CSPCWG6-08.02A). It was agreed by the meeting that a clear distinction between the terms “foul area” and “foul ground” was required, but it was conceded that the issue was mainly related to confusion by the chart compiler, and no issue had been identified by the chart user. Based on this, CSPCWG proposed the following decisions and actions:
  - Amend the title of B-422 from “Wrecks, Foul Ground, Obstructions” to “Wrecks, Obstructions and Foul Areas”;
  - Amend introduction of B-422.8 from “Foul ground and sites of cleared platforms” to “Foul areas” and re-word the clause accordingly, with cross-reference to B-420.1. The existing B-422.8 is to be moved into B-449 – “Various Maritime Areas and Limits” (the current suggestion is at B-449.7). This will align foul ground with other similar types of areas, such as ice limits, floating barriers, incineration areas, historic wrecks and seaplane operating areas;
  - Although it was agreed that the issue was mainly with the chart compiler and not the user, it was suggested that the INT1 sub-working group consider adding an entry for foul area at K32;
  - A draft amendment to the S-32 definition of “foul ground” to incorporate “not hazardous to surface navigation” be compiled by CSPCWG and proposed to HDWG. NOTE: Since CSPCWG6, this Action has been completed and a revised definition for foul ground will be proposed at HSSC2.

Final agreement on Actions relating to S-4 and INT1 is still being progressed by CSPCWG (refer CSPCWG Letter 07/2010), so at this stage it is considered premature to submit any proposals to TSMAD/DIPWG for possible changes to the Hydro Register and/or ECDIS portrayal. It is anticipated that all Actions will be completed before TSMAD21.

- AIS as Aid to Navigation: These discussions were considered to be especially important, and as such the IHB President and Director (Ward) were present for discussions. Discussions were related to the tabling of papers CSPCWG6-08.3A and 3B, and focussed mainly on Virtual AIS. IHB (Ward) prefaced discussions by stating that IALA would be meeting in January 2010 to discuss the issue of Virtual AIS and its potential as an aid to navigation, and its possible application for the mariner (as distinct from what is technologically possible). It was considered that the IHO should be on the front foot regarding these discussions with proposals developed prior to the meeting as to how such aids to navigation should be symbolised on paper charts. The meeting agreed on the following symbology for Virtual AIS (examples only):



The following Actions were decided on at the meeting:

- New specification to be drafted for the depiction of Virtual AIS Aids to Navigation for S-4 (currently being progressed by CSPCWG Secretary and Vice-Chair);
- IHB to provide CSPCWG with a summary of the outcomes of the IALA meeting in January 2010. NOTE: This has subsequently been provided through CSPCWG Letter 06/2010.

In addition to the discussions on Virtual AIS, it was suggested that the current ENC guidance to not depict AIS information in ENCs (ENC Encoding Bulletin No. 17) may need to be re-considered, particularly in respect to route planning requirements. It is anticipated that this will be raised during discussions related to TSMAD20/DIPWG2 Agenda Item 20.

- Small craft leisure symbols: It was determined that INT1 Section U (Small Craft (Leisure) Facilities) is no longer required in INT1, as chart users now have numerous other sources (e.g. internet) from which to obtain this information. The only symbols

from Section U that will be retained in INT1 are U1.1 (boat harbour, marina); U1.2 (yacht berths without facilities); U2 (visitors berth); U3 (visitors mooring); U4 (yacht club, sailing club); and either of U28/29 (caravan/camping site). Inclusion of a Section U in INT1 will be at national discretion for their national INT1.

- Oscillating sector lights: It was determined that simplified symbology for the representation of a complex light with oscillating sectors would suffice for paper charts. The decision of the meeting was that the directional line only with a legend e.g. “DirWRG” would suffice. Additional information may be provided in publications such as Light Lists, and this may be referenced by a chart note.
- Floating wind turbines: It was reported that such structures are being established in some areas. The meeting determined that a sloping version of INT1 L5.1 and L5.2 (to indicate the floating nature of the structure) were to be adopted as new symbols.
- S-4 Section B-600: This new Section of S-4 is the section covering chart maintenance. The meeting reviewed outstanding issues regarding the draft and agreed on the final draft to be presented to IHO Member States for approval. Due to the work of the IHO EUWG to publish guidelines on the application of ENC Updates of a temporary or preliminary nature, which references B-600 clauses, it was stressed that this new Section needed to be published fairly quickly. It is anticipated that, assuming Member State approval (IHO CL 10/2010), the Section will be published in Edition 3.008 of S-4 toward the middle of 2010.
- Improved data exchange for paper chart production through ENCs: It was reported that a trial was about to commence in the Baltic Sea region to exchange paper chart information between nations using ENC data. One of the expected issues to be addressed would be the lack of cartographic attribution in the ENC data. It was suggested that this could be another reason for re-introducing the cartographic attributes in S-101. It was suggested at the meeting that such transfer of data incorporating cartographic attributes could be done now in S-57, if a data transfer product specification were to be developed (noting that ENC is a specific Product Specification, not a specification for the full exchange of digital data between countries). It was suggested that this be raised with TSMAD – will likely be the subject of a future TSMAD paper.
- INT1 Sub-Working Group: The Sub-Working group has agreed that two indexes should replace the current sections G, O, V, W and X of INT1 (without letters) – these being an Index of Abbreviations (National and International); and a General Index/Translation of Terms. It is anticipated that all outstanding INT1 Sub-Working Group Actions and issues will be resolved during 2010 and preparation of new Editions of the 3 official IHO language versions of INT1 completed for near simultaneous publication early in 2011.

Most of the above issues raised at CSPCWG6 have since been progressed by correspondence, including drafting new/revised clauses for S-4.

As mentioned above, it is anticipated that S-4 Edition 3.008 would be published toward the middle of the year. In addition to the new Section covering Chart maintenance (B-600), it is also anticipated that this Edition will also include:

- New specifications for cable and pipeline tunnel entrances (B-443.8, B-444.5);
- Additional specifications for depiction of bridge supports and bathymetry under bridges (B-381.5, B-381.6);
- Revised specification and new symbol for wave energy devices and wave farms (B-445.12);
- Revised specification and additional symbol for depiction of unsurveyed areas (B-418.1).
- Revised specification for disused platforms (B-445.2) (note that a new symbol L14 will be included in INT1 but this symbol is an adaptation of the production platform symbol L10);
- Revised specification and new symbol for shellfish beds (B-447.4).

The above amendments to S-4 have been presented to IHO member States for approval via IHO CL 14/2010.

Next meeting: The next meeting (CSPCWG6) is to be held in Cape Town, South Africa, from 23-26 November 2010.

## **Recommendations**

1. That TSMAD/DIPWG continue to generally monitor the activities of CSPCWG, particularly the ongoing revision of S-4, with regards to impacts on the IHO Hydrographic Register S-101 and ECDIS display, and liaise with CSPCWG as required.
2. That TSMAD/DIPWG continue to monitor CSPCWG discussions related to foul area and foul ground, for possible changes to the Hydro Register and/or ECDIS portrayal.
3. TSMAD to monitor progress of development of new Editions of INT1 for impact on cross references within the Hydro Register and S-101.

## **Justification and Impacts**

CSPCWG activities impact on the content of the IHO Hydrographic Register; the rules and guidelines for ENCs compiled in both S-57 and S-101; and developments in portrayal of navigation information in ECDIS.

Items of particular note from this report that impact on TSMAD activities include:

- Ongoing activities to resolve confusion over the terms foul area/foul ground.
- Discussion on AIS as Aids to Navigation, particularly in regard to Virtual AIS.

## **Action required of TSMAD/DIPWG**

TSMAD/DIPWG is invited to:

- a. Endorse this report;
- b. Discuss the current guidance on the depiction of AIS information on ENC; possibly in conjunction with TSMAD20/DIPWG2 Agenda Item 20;
- c. Discuss the implications of the removal of INT1 Section U and retention of only a few Section U symbols in other Sections of INT1 in regard to S-101 development.