

**9<sup>th</sup> CSPCWG MEETING**  
**Seoul, South Korea, 13-16 November 2012**

**Paper for Consideration by CSPCWG**

**Report to CSPCWG9 on DIPWG Activities**

<b>Submitted by:</b>	Australia
<b>Executive Summary:</b>	Report on DIPWG Activities Since CSPCWG8.
<b>Related Documents:</b>	Minutes DIPWG4
<b>Related Projects:</b>	S-4/INT1 development

**Introduction / Background**

1. The IHO Digital Information Portrayal Working Group (DIPWG) is a technical Working Group of the IHO HSSC. Its primary objectives are to maintain IHO technical specifications for colours, symbols and display rules used to show SENC information on ECDIS in a safe and ergonomic manner. This is achieved through the maintenance of the IHO ECDIS Standard S-52 “Specifications for Chart Content and Display Aspects of ECDIS”, including its appendices and annexes.
2. Since CSPCWG8, DIPWG has met once (DIPWG4), in conjunction with TSMAD24, at IHB, Monaco – 07-11 May 2012. Minutes of the meeting may be found on the DIPWG page of the IHO web site. DIPWG work progressed by correspondence include ECDIS paper chart/simplified symbol consolidation; review of S-52 Presentation Library Conditional Symbology Procedures (CSPs) in order to simplify such procedures for S-101 portrayal; and discussion by a core group of DIPWG experts to determine a preferred model for portrayal in S-100.

**Analysis / Discussion**

4. Documents published since CSPCWG8:

None.

5. DIPWG4: The main focus of this meeting was the continued development of a Portrayal Model in S-100; and revision of the S-52 Presentation Library, including ECDIS paper chart/simplified symbol consolidation. The following is a summary of the activities of this meeting, with particular emphasis on activities that may be of relevance to CSPCWG:

- S-100 Portrayal Model: A number of proposals were presented at the meeting showing different models for Portrayal in S-100. The models presented were at varying stages of maturity, and although the discussions at the meeting were animated and sometimes passionate, a clear decision could not be made as to a preferred approach. One thing that was clear was that there was no current “off the shelf” solution that would provide all the necessary portrayal functionality required. It was agreed that a small group of DIPWG subject matter experts, including the authors of the proposals presented at the meeting, be tasked with determining the best model from which to move forward, and present a consolidated approach to the Working Group as soon as possible. In the meantime, work is continuing, mainly by correspondence, in finding machine-readable alternatives for the S-52 Presentation Library CSPs for implementation in S-101 portrayal.
- DIPWG liaison with CSPCWG: Discussions on new/revised paper charts specifications, abbreviations and symbols implemented by CSPCWG in regard to portrayal in ECDIS were as follows:
  - Level of topographic detail in ENCs: This discussion was prompted through a combination of observations from ENC Service Providers (a wide variety in the level of detail being shown between Producing Authorities) and the ongoing CSPCWG review of S-4 – B-300. It was determined that the level of topographic detail required for safe navigation in ECDIS had to take into account potential failure/corruption of the vessel’s GNSS receiver, requiring subsequent navigation by traditional visual methods. The result of these discussions was the addition of guidance in the S-57 UOC via an ENC Encoding

Bulletin that the level of topographic detail to be incorporated in ENC's should be in accordance with the guidance in S-4 – B-300.

- New paper chart symbol for areas of foul ground: No action required. Information provided by the ECDIS Pick Report was considered to be sufficient.
- Revised specification for depths alongside berths: No action required. It was considered that the current encoding guidance (use of attribute DRVAL1 on the BERTHS object to indicate the minimum depth at the berth) is sufficient.
- Revised specification for historic wrecks: No action required.
- Imprecise shoal areas: New guidance has been inserted in the UOC via an ENC Encoding Bulletin for encoding areas where satellite imagery has been used as source.
- New symbols for diving prohibited: No action required. Information provided by the ECDIS Pick Report was considered to be sufficient (value of attribute RESTRN = 11 (diving prohibited)).
- Orange and amber lights: No action required.
- A report was provided by the DIPWG Correspondence Group established to progress the work of developing a single standard symbology set in ECDIS. The work done to date consists of a rationalisation of the “traditional” and “simplified” navigation aid symbols, and the meeting agreed with the recommendation of the Group that colour filled “traditional” symbols be used. Further discussion related to whether colour fill should reflect the actual “real world” colour of the aid, or the intended usage of the aid. The meeting agreed that the preferred option would be for the colour to reflect the intended use of the aid, although it was agreed that further input should be requested from the user community through a survey.
- Paper Chart/ECDIS Chart 1 (P/ECDIS Chart 1): It is expected that the next Edition of US Chart 1, containing ECDIS symbols, will be published towards the end of 2013. UK publication NP5012 – Admiralty Guide to ECDIS Symbols, was published in June 2012. The layout of this document is based on INT1, and the document is intended to supplement UK publication NP5011 (UK version of INT1).
- Cursor enquiries and ECDIS Pick Reports: The meeting agreed that the draft standard to specify the minimum requirement for ECDIS cursor enquiry and Pick Report content presented at DIPWG3 should be included in S-101, and some of the more fundamental aspects also included in S-100. It was reported that one ECDIS manufacturer had implemented some of the recommendations in the draft standard, with positive results.
- New Edition of S-52 Presentation Library: A new Work Item has been added to the DIPWG Work Program to develop a new Edition of the S-52 Presentation Library. It is anticipated that drafting of the New Edition will be completed by the end of 2013 for submission to HSSC in 2014.

Next Meeting: It is intended that the next meeting of DIPWG (DIPWG5) be held in the USA in May/June 2013 in conjunction with TSMAD26.

## **Conclusions**

Continued liaison between CSPCWG and DIPWG is a necessity in order to address emerging navigational requirements in a multi-product environment.

## **Recommendations**

None.

## **Justification and Impacts**

No immediate impacts on CSPCWG projects arise from this report.

## **Action required of CSPCWG**

The CSPCWG is invited to:

- a. endorse this report.
- b. note issues within the report of interest to CSPCWG.