

**IHO Colours & Symbols Maintenance Working Group (C&SMWG)  
16th Meeting, IHB, Monaco, 29-31 May 2006**

*Taken from FINAL MINUTES of the 17<sup>th</sup> CHRIS MEETING,  
Rostock, Germany, 5-9 September 2005*

**5.2 Colour and Symbol Maintenance (C&SMWG)**

*Docs: CHRIS17-5.2A                      Report of C&SMWG (M. Jonas, Germany, Chair)*

C&SMWG Chair (JONAS) provided a summary of C&SMWG activities since CHRIS16. He reminded that e4.2 of the C&S Specifications (S-52 App.2) and e3.3 of the Presentation Library (PL – Annex A to S-52 App.2) were released in March 2004. Also, a revised IHO Test Data Set (TDS) was published as S-64 in December 2004. To date, approximately 40 copies of the new PL on CD-ROM had been purchased from the IHB, which seems a realistic number of companies / institutions who are commercially active in the ECDIS field. Accordingly, ECDIS manufacturers and other affected bodies have been informed by the IHB about the revised time frame for introduction of PL e3.3, as follows:

- ECDIS systems to be type-approved for the first time after 1st January 2005 must conform to Edition 3.3 of the PL from 1st July 2005.
- ECDIS systems already type-approved as of 1st January 2005 should upgrade to Edition 3.3 of the PL at the earliest opportunity, but not later than 1st January 2006.
- ECDIS systems that are already in use onboard ships should be upgraded to Edition 3.3 of the PL at the earliest opportunity.

C&SMWG Chair (JONAS) explained that PL e3.3 included approximately 25 deferred amendments, which many manufacturers had already dealt with, a reduction from 5 to 3 colour tables, new colour calibration tests for flat panels, and a new method for detection and depiction of the 'safety contour' which makes encoding of linear depth areas redundant. Regarding the latter issue, C&SMWG suggested that HOs no longer needed to provide the laborious encoding of linear depth areas from 1 January 2007 and that all new and existing ECDIS be upgraded accordingly by that date. After discussion it was agreed that, as this is not a safety critical issue, it would be re-considered at CHRIS18. Also, that there was no requirement to notify mariners at sea of the changes from PL e3.2 to PL e3.3. However, it will be necessary to do so when changes are made to accommodate S-57 e3.1.1. C&SMWG was tasked with developing symbols for the objects which will be added to the IHO Object Catalogue when upgrading from e3.1 to e3.1.1. It was decided to include these add-ons in the PL e3.3 and to postpone its implementation by one year, i.e. until the new objects and related symbols are available towards the end of 2006.

C&SMWG Chair (JONAS) reported that C&SMWG also suggested that a consultant be engaged, paid from the PL Fund, to identify which parts of the PL e3.3 would potentially be affected by a reorganisation according to ISO 19117 "Portrayal" and to give advice on the usefulness of transition of exiting PL to this standard. UK (GREENSLADE) felt that this would apply generally to S100, i.e. all aspects of the IHO Standard, including portrayal, will be considered when aligning with the ISO 19000 series. C&SMWG Chair (JONAS) concurred and believed that the money would better be spent to adapt the PL to S-100 rather than to ISO 19117 "Portrayal". There was general support that S-100 going ISO 19117 - compliant was a better path than looking to convert the PL to ISO 19117. A consultant will therefore not be engaged to assess the impact of moving S-52 / PL under an ISO structure. It may however be required later.

The Chair remarked that there is not a comprehensive mariners guide for ECDIS symbology and wondered if such an undertaking would be worthwhile? It would provide a paper chart – ECDIS symbology comparison and would be different from what has been published as Chart 1 in the PL e3.3. It could be similar, in concept, to what is contained in the Inland ENC Encoding Guide. UK (GREENSLADE) mentioned that there exists an "INT 1 to S57/52 for ENCs" document on the IHO website (Annex D to S57 Appendix B1), which provides a reference for interpreting the many symbols and abbreviations found on International charts into ENC objects and attributes. However, it is more intended for encoders than for users. In addition, although there is provision in this document

for reference to S-52 / PL symbols, this part has not (yet) been populated. C&SMWG Chair (JONAS) noted that interrogation of symbols on ECDIS equipment is already possible and felt that the combination of INT 1, Chart 1 and the description of ECDIS symbols (PL Addendum) is sufficient. Regarding the Addendum, he suggested it be made available free of charge on the IHO website, which was accepted. He added that production of a mariners guide for ECDIS symbology would be a large undertaking for someone to do. USA (BROWN) agreed and believed that a database-encoding guide developed in association with S-100 may be a better long-term solution. The meeting agreed to not add this as a new C&SMWG work item.

C&SMWG Chair (JONAS) mentioned that S-52 currently gives only generic guidance on how a pick report should be presented on ECDIS. A number of C&SMWG contributors, particularly from type-approval bodies and customers claimed this as too weak and asked for more harmonisation of pick report presentation. It was agreed that this issue would be addressed by SNPWG.

There followed a discussion on the future on the PL. C&SMWG Chair (JONAS) presented three possible options:

- Option 1: IHO release control of the electronic chart display in full.
- Option 2: PL re-design and consolidation, through consultancy.
- Option 3: Low level maintenance of PL e3.3.

The Meeting agreed that Option 3 would apply for the time being, i.e. maintenance will be limited to minor corrections to / adaptation of the ECDIS symbology. Low-level maintenance of the S-52 / PL will include developing appropriate symbols and colours to comply with S57 e3.1.1, e.g. ASLs and PSSAs. It was acknowledged that this option accepts that the construction of the PL is no longer a modern computer chart presentation in a technical sense and will get more and more outdated over the next years.

UK (GREENSLADE) indicated that he was currently preparing a registry for S-57 / S-100 objects which will be the centralised host of all old and future objects and attributes. He suggested to enhance this registry by incorporation of an extra registry for the display / symbolization of any object. This was supported, as well as that C&SMWG will monitor the move towards symbolization Registry System

Dr. JONAS expressed his desire to eventually step down from C&SMWG Chair. He further suggested that this position could be taken over by someone from industry that is more knowledgeable about this technical field.

#### Outcome

- Report of C&SMWG endorsed.
- C&SMWG to reconsider the "linear depth areas" issue at its next meeting and C&SMWG Chair to prepare a paper on the matter, including proposed action, for submission to CHRIS18. **(Action)**
- C&SMWG to draft symbolisation for S-57 e 3.1.1 added objects. **(Action)**
- No support to convert the PL e3.3 to ISO 19117 "Portrayal"; the effort will focus on future adaptation of the PL to S-100.
- No support for the development of a mariners guide for ECDIS symbology.
- Format for presentation of pick reports on ECDIS to be addressed by SNPWG. **(Action)**
- IHB to make the description of ECDIS symbols (PL Addendum) available free of charge on the IHO website. **(Action)**
- C&SMWG to continue low-level maintenance of PL e3.3, including the necessary support for S-57 e3.1.1. **(Action)**
- C&SMWG to assess and monitor the move towards Symbolization Registry System. **(Action)**