

**11<sup>th</sup> CHRIS MEETING  
IHB, Monaco, 16-18 November 1999**

**REPORT OF THE TRANSFER STANDARD MAINTENANCE AND  
APPLICATIONS DEVELOPMENT WORKING GROUP (TSMAD)  
(Dr. Christopher DRINKWATER)**

1. The TSMAD held its fourth meeting in June 1999 at the Coast Hydrographic Office of Belgium in Oostende.
2. The key item was finalising arrangements for the publication of S57 Edition 3.1. As described in the working group's previous report, Edition 3.1 will be a very limited new edition, the only new information being approximately forty additional attribute values which certain hydrographic offices require for ENC purposes. Instructions on the use of these new attribute values for ENC purposes will be included in the ENC Product Specification and the Use of the Object Catalogue for ENC. Edition 3.1 will be made available in November 1999 for a year's familiarisation period before its adoption in November 2000. Following its adoption, Edition 3.1 will be frozen for at least two years.
3. It should be noted that these new attribute values must be used in conjunction with the attribute value INFORM. This requirement was agreed with the IEC and will enable ECDIS which were type approved using Edition 3.0 data to use Edition 3.1 data.
4. It should also be noted that S57 is maintained by means of a Maintenance Document, a new edition of which is produced following each TSMAD meeting. This document is cumulative, that is the latest edition also includes the contents of the previous editions. Because S57 Edition 3.1 is a minor new edition, the only information which has been transferred to it from the current Maintenance Document are the new attribute values referred to above. "Clarifications" contained in the Maintenance Document remain of relevance to Edition 3.1 but are not included in it. "Clarifications" in the latest edition of the Maintenance Document must therefore be taken into account before making use of Edition 3.1.
5. The Working Group also discussed a number of detailed comments on the contents of Edition 3.0 based on practical experiences when creating, maintaining and using ENC data. This resulted in the subsequent publication of "S57 Maintenance Document No 4" and "Version 1.4 of the Use of the Object Catalogue for ENC."
6. Other topics discussed included:
  - a. Commercial QA software and the IHO Test Data Set. There are several commercial software packages designed to validate the conformance of a dataset to the ENC Product Specification. Concern was expressed at last CHRIS meeting that these were giving different results for the same data set, although it should be stressed

that these differences did not relate to safety of navigation issues. It was noted at the subsequent Updating Workshop held in Mobile, Alabama, in May 1999 that these differences were largely the result of misinterpretations of S57, the ENC Product Specification and actual, as opposed to theoretical, charting practices. It was therefore agreed that a recommended set of IHB tests was required on which the commercial software manufacturers could base their products. Initial proposals were presented to TSMAD based on excellent co-operation between several hydrographic offices, PRIMAR and the commercial companies. This work was reviewed and a methodology and timetable agreed for the work to be completed as a formal TSMAD activity. The intention is for the list of tests to be formally agreed at the next TSMAD meeting in April 2000. It was also confirmed that there are a very small number of minor errors in the Test Data Set and the TSMAD chairman is in discussions with the IHB on how best to correct these.

- b. Colours and Symbols Maintenance Working Group. In recognition of the fact that closer liaison is required between TSMAD and CSMWG, a CSMWG representative attended the meeting. This proved to be extremely useful, particularly when the potential impact of S57 Edition 3.1 on S52 Appendix 2 was discussed. Following the meeting it was agreed that Edition 3.1 did not require a new edition of S52 Appendix 2's Presentation Library.
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