12th CHRIS MEETING Valparaiso, Chile, 23-25 October 2000

Report on Activities of the TRANSFER STANDARD MAINTENANCE AND APPLICATIONS DEVELOMENT WORKING GROUP (TSMAD)

- The TSMAD held its fifth meeting at the Australian Hydrographic Service, Wollongong, in April 2000 and its sixth meeting at the IHB, Monaco, in September 2000. The latter meeting was held jointly with the Colours and Symbols Maintenance Working Group (which will submit its own report to CHRIS). This joint meeting also included a two-day workshop which addressed the subject of liaison between the IHO and the outside world concerning the interpretation and future development of ENC and ECDIS standards.
- 2. As well as discussing national proposals for amendments to the Use of the Object Catalogue for ENC and for additional clarifications in the S-57 Maintenance Document, the working group also considered a number of more strategic initiatives as listed below.
- 3. Adoption of S-57 Edition 3.1. Edition 3.1 will be adopted in November 2000, following a year's familiarisation period. However, it was recognised that because of the need to amend their production software, a number of hydrographic offices will continue to produce ENCs conforming to Edition 3.0 for some time. It was agreed that a Circular Letter should be issued to explain this situation. A text was prepared and agreed. The Circular Letter also explains that future editions of the Use of the Object Catalogue for ENC and the S-57 Maintenance Document will be valid for use with both Editions 3.0 and 3.1 of S-57. CIRM had been advised earlier in the year that ECDIS would probably have to read both Edition 3.0 and Edition 3.1 ENCs for some time.
- 4. <u>List of IHO Recommended Tests for ENC Validation.</u> Work continued throughout the year on this document which is intended for use by those producing ENC validation software. Following detailed debate, it was finally decided that the failure of a test would fall into one of two categories:

Errors. These relate to errors in the data which must be corrected before it can be issued as an ENC. Warnings. These relate to "suspicious" data, e.g. a buoy carrying the wrong type of top mark. This is an indication to the data producer that the source data should be checked again to see if the ENC data had been incorrectly captured.

The intention is to publish the list as part of S-57 Edition 3.1.

- 5. <u>Use of the Object Catalogue for ENC.</u> This document is intended to give practical advise to ENC producers. Its contents are not frozen and new editions, containing additional information, are produced as required. However, adherence to certain of the contents is mandatory, as not to do so would conflict with S-57 or with the ENC Product Specification. The text of the document is being revised to indicate clearly which sections are mandatory and which are advisory. The intention is to complete this work within the next six months
- 6. <u>INT1/S-57 Cross-reference Document.</u> The need for such a document, the prime use of which will be to assist those encoding ENCs from paper charts, has been recognised for some time. Work on the document began earlier in the year and it is intend to publish it as part of S-57 Edition 3.1.

- 7. Future extensions to S-57. If S-57 is to satisfy the requirements to transfer all hydrographic data, it will require extending to accommodate such items as a raster data model, a matrix data model, time-varying objects, etc. It has been agreed for some time that such new requirements should be met, to the greatest extent possible, by making use of other existing standards, not by developing new IHO solutions. A report was prepared for CHRIS giving advise and recommendations on how best to achieve the required aims by co-operating with IEC TC211.
- 8. <u>Industry Workshop.</u> ECDIS and ENC related standards are complex and there have been numerous examples of misinterpretation. Part of the problem is that many bodies were involved in producing the standards. These included various IHO committees and working groups, IMO, HGE, IEC, etc. To ensure that such confusion is minimised in the future, a two-day workshop was held with representatives of "industry". These included OEMs, regulatory authorities, ECDIS kernel producers, ENC validation software producers, shipping companies and mariners. The aim was to help identify the best liaison mechanism to ensure that proposed changes to standards are considered by all interested parties prior to a decision being made on their implementation. A report was prepared for CHRIS which describes a recommended liaison mechanism.

Christopher DRINKWATER Chairman TSMAD