

Records of the ECDIS Stakeholders Forum held in Rostock,  
6 - 7 September 2005 in conjunction with 17th CHRIS meeting

(Annex J of the Minutes of 17th CHRIS MEETING)

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*As a follow-on from the two-yearly event "Industry Days" that in previous years took place at the International Hydrographic Bureau in Monaco, the event this year was renamed "ECDIS Stakeholders Forum" and took place in Rostock, Germany, with support provided by the Rostock office of the German Hydrographic Service (BSH). The meeting took place in conjunction with the annual meeting of the IHO Committee on Hydrographic Requirements for Information Systems (CHRIS) with representatives from 24 IHO Member States. As such it provided an excellent opportunity to discuss some important issues between the International Hydrographic Organization (IHO) and those involved in ECDIS manufacturing, data distribution, data validation and data production software developers, and representatives of other organizations representing the interests of the ECDIS user.*

**Introduction.**

The meeting was chaired by Captain Robert Ward (RAN), Chairman of CHRIS, who welcomed the 74 participants, i.e. 32 from "Industry" and 42 from IHO, and gave a brief introduction on the organisation and status of the IHO and the work of the now 76 Member States being undertaken by the different committees and work groups. Particular attention was drawn to the possibility for accredited "Non Governmental International Organisations" (NGIO's), that were able to make a substantial contribution to the work of the IHO, to be granted "Observer Status". This was agreed at the 3rd Extraordinary Conference of the IHO in April 2005.

However, the Chairman emphasized the need for expertise from industry to support the IHO working groups and that the present procedure of inviting experts from outside would be continued.

The agenda of the meeting showed two major items for which the input, co-operation and support of the stakeholders were essential to reach a successful solution. The first issue being the proposal for a new edition of IHO Special Publication 57 (IHO S-57) which is the Transfer Standard for Digital Hydrographic Data and the second issue being the implementation of new editions of the IHO ECDIS Standard S-52, Appendix 2, Colour and Symbol Specifications and its Annex A, the IHO Presentation Library for ECDIS, both released in March 2004.

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**S-52 ECDIS Symbology: Where to Next?**

Mathias Jonas (BSH), Chairman of the IHO Colours & Symbols Maintenance Working Group, presented a status report and discussed future challenges for the Presentation Library. The colours and symbol specifications have been replaced by a new edition 4.2 and the presentation library by a new edition 3.3. The latter marks a considerable change in format, as it is now also available as a printable document. This unique hard copy of the library has about 600 pages, i.e. one symbol description per page. So we can now see how an ECDIS should look.

The present Presentation Library has over the years reached a consolidated and accepted status. It provides a good foundation for the visualisation of ENC's. A number of smaller problems of the preceding editions have been solved.

ECDIS systems to be type approved for the first time after 1st January 2005 must conform to Edition 3.3 of the Presentation Library from 1st July 2005. ECDIS systems already type approved as of 1st January 2005 should update to edition 3.3 at the earliest opportunity, but not later than 1st January 2006.

Ships already fitted with ECDIS should upgrade at the earliest opportunity.

The issues presently on the table are:

- gaining the technical expertise to move Colours and Symbols forward.
- do we continue to move forward slow, moderate, or great?
- the significant shortcomings on what is done now (e.g. the display of Particularly Sensitive Sea Area's (PSSA), Port Security Limits etc.).

#### **The Stakeholders.....**

An interesting discussion followed this presentation. It was mentioned that the original intent of type approval was that if the symbols look enough like the printed version, then this was acceptable. The IHO Colours and Symbols should be a minimum specification, not the only or best way. Freezing a standardised solution has disadvantages: it restricts the fast introduction of new advanced hardware and monitor technology. It will also restrict the competition between ECDIS manufacturers to the lay-out. On the other hand, identical look and feel of chart display of different makes has definite advantages for safety of navigation. It eases ECDIS development and operation, it allows certification, it facilitates standardisation of education and it avoids ambiguity. For safety of navigation there is a steady need to standardise chart information similar to the paper chart. It is not possible for the IHO to release control of the electronic chart display in full as it is not likely that IMO would accept a diversity of chart displays.

For a complete refit of the Presentation Library, IHO could hire a consultant who would travel around all of the OEMs that are interested in contributing. Meanwhile the Presentation Library will be maintained on a low level with minor corrections and amendments to be discussed by correspondence. And a Moratorium until S-57 edition 4 is ready to go.

Again the question arose about how and when to upgrade the existing ECDIS systems for the latest introduced new editions. And do we need renewal of existing type approval and who is going to pay for it. Who is responsible? It was mentioned that manufacturers cannot be held responsible for the life of the equipment. Ships change owners, managers, and personnel. Making manufacturers responsible for periodic upgrades is not practical. It is the ship owner under the ISM code that is ultimately responsible. Perhaps the IMO would need to be kept informed by the IHO as to what upgrades are needed. One manufacturer commented that since ECDIS was not a mandatory piece of equipment, mandatory upgrades were not feasible. It was advised by one of the attendees that probably the users of ECDIS, type approved before 1 January 2005, could be informed about the necessary upgrade by Notices to Mariner.

#### **Wrapping up the S-57 update issue.....**

The Chairman put to the attendees the question whether it was acceptable to live with an ECDIS screen full of asterisks and question marks until the introduction of Edition 4<sup>1</sup> probably between 2010 and 2012. All agreed that this was not acceptable and a minor interim solution was needed. The audience in general agreed that an interim solution in the form of S57 e3.1.1 was necessary. This could be introduced in 2007 / 2008. Introducing e3.1.1 would make it possible to show, for instance, Particularly Sensitive Sea Areas and Archipelagic Sea Lanes as required by the IMO. For ECDIS systems only a minor software update would be required to display e3.1.1. features. In ECDIS which has not been updated, the new feature will show as a question mark. In this case further information could be obtained using the "Information" attribute and the "Pick Report" functionality.

Many Stakeholders expressed their concern about the implication in the market of the announcement of S-57 edition 4, particularly as many people consider the S-57 standard to be the same as the ENC Product Specification. It was therefore proposed by TSMAD to change the name to S-100. This is also to emphasise that it is a complete new transfer format with a much wider application, a flexible structure and taking advantage of new technologies. S-100 would probably be available in 2007, but it was stressed that ENC's created with this Transfer Standard would probably not become available until 2012.

#### **Open ECDIS Forum**

The Chairman put forward the question whether this web site, presently sponsored and upgraded by the IHO, can also be used for any other purpose. In a short discussion it became clear that the site should continue to exist in its present form and that the planned renovation is underway.

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<sup>1</sup> of the ENC Product Specification, i.e. S-101.

**Closing remarks.**

The Chairman mentioned that the next CHRIS meeting will take place in September next year in Sydney, Australia and that calling for another Stakeholders meeting in conjunction with this meeting might not be so practical. The majority of the Stakeholders expressed the wish that the next meeting be in conjunction with a meeting of the WEND Committee. This would enable them to voice their concerns about the quality and quantity of ENC and other pressing issues from the user perspective like licensing and pricing, distribution, a proper loading strategy and discuss possible ways to improve the present situation.

The Chairman concluded that he considered the meeting extremely useful. He expressed his thanks in particular for the input from the non-IHO representatives and confirmed that, although no decisions from the outcome of the meeting were yet taken, all that had been said would be taken into consideration. Finally he mentioned that the next TSMAD meeting would be in November, and that it would be very useful to have some input from non-IHO representatives as TSMAD is desperately short of expertise in certain areas.

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