CHRIS18-4.7A

18th CHRIS MEETING
26-29 September 2006, Cairns, Australia

STATUS OF THE STANDARD IEC 62376
"Electronic chart systems (ECS) for small craft and non-SOLAS convention craft – Minimum operational and performance requirements, methods of testing and required test results"
(August 2006)

United States (NOAA)

1. Summary

Executive summary:	The IEC, TC 80, WG 7 is developing an IEC standard for electronic charting systems (ECS). The standard may be used by Administrations to support the carriage of electronic charts where ECDIS is not specified.
Actions to be taken:	Members are invited to comment on the draft standard through their national committee.
Related documents:	None

2. Introduction / Scope

From the draft, IEC 62376 standard, Version 5.1, Issue2:

"This International Standard specifies the minimum operational and performance requirements and methods of testing for ECS. ECS does not meet the chart carriage requirements for SOLAS vessels where ECDIS has been specified for that purpose. It is the responsibility of national Administrations to establish chart data carriage requirements and allowances for vessels under their regulatory authority. An Administration may choose to permit ECS to serve as a primary means of navigation for vessels that are subject to their regulation. When an ECS serves as a primary means of navigation, adequate back-up arrangements may be required to ensure safe navigation in the event of an ECS failure."

3. Analysis/Discussion.

From the draft, IEC 62376 standard, Version 5.1, Issue2:

From Section 1 - Scope

"In order to better reflect the different levels of performance provided by ECS equipment and their different intended applications, three classes are defined.

- Class A includes permanently installed systems designed for use as a primary means of navigation on vessels where ECDIS is not specified for that purpose when using databases permitted for use with ECS by the national Administration. When using ENCs

or RNCs, a Class A may also meet the requirements for an ECDIS backup as specified in IMO resolution A.817(19), as amended, and International Standard IEC 61174.
- Class B includes permanently installed systems, portable systems and systems adapted for use (e.g. radar with chart facilities) as a primary means of navigation on vessels where ECDIS is not specified for that purpose when using databases permitted for use with ECS by the national Administration.
- Class C includes systems intended to use standards-compliant databases derived from up-to-date Nautical Charts and Nautical Publications to plot and monitor a vessel's position as a navigational aid."

From Section 5.1 - Chart data

"(A B C) An ECS only meets the requirements of Class A, B, or C when it is operating with an ECS database for which it has been type-approved. An ECS shall be type-approved for use with one or more of the following database(s):

- ENC and/or Inland ENC, including the SENC Direct Distribution option described by IHO Technical Resolution A3.11;
- selected parts of the ENC and/or Inland ENC, to meet the minimum content for an ECS database specified in Annex A;
- RNC;
- standards compliant databases derived from Nautical Charts and/or Nautical Publications such as databases compliant with ISO 19379. Since ENC, Inland ENC and RNC are the source for ISO 19379 databases, an ECS may meet this requirement using ENC, Inland ENC, and/or RNC.

The association of ECS database to ECS Class A, B, and C in this Standard is limited to the specific purposes of testing and type-approval."

4. Benefits.

   The adoption of this ECS standard has the potential of increasing the demand for, and use of, official ENCs and RNCs.

5. Working Groups.

   None.

6. Other relevant information.

   None.

7. Priority.

   None.

8. Target completion date.

   IEC 62376 is dependent upon IEC 62288 (Presentation of Navigation Related Information) as one of its key general standards. That document includes the requirements for the presentation of charted information and operational information (e.g. reported AIS targets,

etc.). That Standard (IEC 62288) goes to a final drafting group late in August 2006. It will be transmitted to the TC80 Secretariat in London at the end of August 2006 and should go to the IEC Central Office in Geneva no later than 30 September 2006. A committee draft for voting (CDV) should be released by the end of October 2006 at the latest.

IEC 62376 will then go to its final drafting group (using the final draft of IEC 62288) some time in October 2006. It will be transmitted to the Secretariat by the end of October and should go to the Central Office no later than 30 November 2006. A committee draft for voting (CDV) should be released by the end of December 2006 at the latest.

9. Action Required.

CHRIS members are invited to participate by joining the Working Group through nomination by their national committees, and to review the draft Standard. In particular, members should confirm that the capabilities specified for Class A meet the requirements for ECDIS backup. In addition, members should confirm that official RNCs and ENCs provide the data required to meet the functionality specified for Class A and B. Copies of the draft standard are available though members' IEC representative.