19th CHRIS MEETING Rotterdam, Netherlands, 5-9 November 2007

IEC 62376, Electronic Chart Systems Status Report USA (NOAA)

1. Introduction

From the IEC TC80/WG7a Work Item Proposal:

"Electronic chart systems are presently available in a wide variety of models and configurations for ocean, coastal and riverine applications. They are in common use on small recreational craft, fishing vessels, commercial tug and tow vessels, and other workboats and government vessels that are not required to comply with the IMO SOLAS convention.

Currently there are no International Standard for these electronic chart systems, therefore an International Standard is required:

- a) to provide a minimum performance standard for electronic chart systems for small and non-SOLAS convention craft where no other standards apply
- b) to test that the declared performance of electronic chart systems comply with minimum standards which ensure such systems provide a safe aid to navigation and meet the manufacturers own declared objectives."

2. Discussion

The Scope and Contents of the draft IEC Standard 62376, CD V 8.0, "Electronic chart system (ECS) - Operational and performance requirements, methods of testing and required test results," are shown below.

"1. Scope – 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. A Government may choose to accept ECS 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.

Three classes of ECS equipment are defined:

- Class "A" ECS are designed or adapted for use as a primary means of navigation on non-SOLAS vessels where ECDIS is not specified for that purpose. They may also meet the SOLAS requirements for independent back-up arrangements for ECDIS set forth in Appendix 6 to IMO resolution MSC.232(82) or A.817(19), as amended, and further specified in IEC 61174.
- Class "B" ECS are designed or adapted for use as a primary means of navigation on non-SOLAS vessels where ECDIS or Class "A" ECS are not specified for that purpose.
- Class "C" ECS are designed or adapted for use as a navigational aid intended to plot and monitor a vessel's position."

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3. Status

Drafting of the standard has been underway since 2004, with the first draft being completed in August of that year. The Standard is now on version CD v8. Following new organization requirements of IEC standards, the methods of testing and required test results are included with the standard and immediately follow each requirement. Some Methods of Testing need to be completed, and member states need to comment and vote.

In order to complete the Standard, a new IEC Work Item must be established because it was not completed within the time limit set for the original Work Item. That new Work Item has been submitted, but there appears to be some difficulty at IEC with getting it established in spite of sufficient members endorsing the action. Hopefully, that difficulty will be overcome in December. If so, the new Work Item could be adopted in January, a meeting to produce the Comment Draft for Voting could be held in March, with results thereafter.

4. Action Required by CHRIS members

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.