Ref. T2-OSS/2.7.1

SN.1/Circ.266/Rev.1
7 December 2010

MAINTENANCE OF ELECTRONIC CHART DISPLAY AND INFORMATION SYSTEM (ECDIS) SOFTWARE

1   The Sub-Committee on Safety of Navigation (NAV), at its fifty-sixth session (26 to 30 July 2010), reviewed the text of SN.1/Circ.266 and agreed that the text of the original circular should be amended as this was an important issue for ensuring the safety of navigation.

2   The Maritime Safety Committee, at its eighty-eighth session (24 November to 3 December 2010), concurred with the Sub-Committee's views, approved the revised Guidance on the maintenance of Electronic Chart Display and Information System (ECDIS) software, as set out in the annex, and encouraged their use by the relevant authorities.

3   Member Governments are invited to bring the attached revised SN circular to the attention of all concerned for information and in particular to ensure that mariners always have the latest safety-related information available to them.

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ANNEX

1   Resolution MSC.282(86), adopted on 5 June 2009, introduced a mandatory carriage requirement for Electronic Chart and Display Systems (ECDIS) to be phased in, according to size and class of ship, between 1 July 2012 and 1 July 2018. ECDIS Performance Standards have been adopted by IMO and in turn refer to the International Hydrographic Organization (IHO) Standards that govern the transfer and presentation of the chart information used in ECDIS.

2   ECDIS in operation comprises hardware, software and data. It is important for the safety of navigation that the application software within the ECDIS works fully in accordance with the Performance Standards and is capable of displaying all the relevant digital information contained within the Electronic Navigational Chart (ENC).

3   ECDIS that is not updated for the latest version of IHO Standards may not meet the chart carriage requirements as set out in SOLAS regulation V/19.2.1.4.

4   For example, in January 2007, Supplement No.1 to the IHO ENC Product Specification[1] was introduced in order to include, within the ENC, the then recently introduced IMO requirements for Particularly Sensitive Sea Areas (PSSA), Archipelagic Sea Lanes (ASL) and to cater for any future Safety of Navigation requirements.

5   Any ECDIS which is not upgraded to be compatible with the latest version of the Product Specification or the S-52 Presentation Library[2] may be unable to correctly display the latest charted features. Additionally, the appropriate alarms and indications may not be activated even though the features have been included in the ENC. Similarly any ECDIS which is not updated to be fully compliant with the latest version of the S-63 Data Protection Standard may fail to decrypt or to properly authenticate some ENCs, leading to failure to load or install.

6   In 2010, the status of IHO standards affecting ECDIS Equipment is:

IHO ECDIS Standards	Current Edition
Electronic Navigational Chart (ENC)	S-57 Edition 3.1
Presentation Library for ECDIS	S-52 PresLib Edition 3.4
ENC Data Protection Scheme	S-63 Edition 1.1
Raster Navigational Chart (RNC) *(Only if ECDIS software supports RCDS mode)*	S-61 Edition 1.0

An up-to-date list of all the relevant IHO standards relating to ECDIS equipment is maintained within the "About ENCs" section of the IHO website (www.iho.int).

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[1]   S-57 Appendix B.1, ENC Product Specification, ed. 3.1.

[2]   S-52 Appendix 2, Annex A, Presentation Library, ed. 3.4.

7   The need for safe navigation requires that manufacturers should provide a mechanism to ensure software maintenance arrangements are adequate. This may be achieved through the provision of software version information using a website. Such information should include the IHO Standards which have been implemented.

8   Administrations should inform shipowners and operators that proper ECDIS software maintenance is an important issue and that adequate measures need to be implemented by masters, shipowners and operators in accordance with the International Safety Management (ISM) Code.

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