



**Marine Notice 15/2010
Supersedes 10/2005**

Carriage and use of Electronic Chart Display and Information System (ECDIS)

This notice provides guidance to owners and operators of Australian registered ships intending to employ ECDIS to meet the chart carriage requirements of the International Convention for the Safety of Life at Sea (SOLAS) Chapter V (Safety of Navigation), as amended and advises of forthcoming changes.

Attention is drawn to the International Maritime Organization's (IMO) Maritime Safety Committee Resolution MSC.282(86) which will enter into force on 1 July 2011. This resolution will amend SOLAS regulation V/19 to include a new paragraph 2.10 detailing a requirement, commencing on 1 July 2012, for the carriage of ECDIS on certain kinds of ships engaged on international voyages. An amendment to Marine Order Part 21 (Issue 7, Order 6 of 2010) which came into force 1 July 2010 gives effect to the relevant amendments in SOLAS regulation V/19. Marine Order Part 21 is available from AMSA's website at: www.amsa.gov.au. Owners and Operators of Australian ships are encouraged to review these requirements to assess the likely impact on their ships.

For a ship to depend totally on ECDIS for navigation, under SOLAS Chapter V Regulation 18 and 19, the ECDIS installation must conform to the relevant performance standards of the IMO specified in Resolution A.817(19), Performance Standards for ECDIS, as amended by MSC.232(82): 'Adoption of the revised performance standards for ECDIS' and, it must be type-approved conforming to the appropriate testing standard of IEC 61174.

Ships using ECDIS for navigation must carry Electronic Navigational Charts (ENC) (the official vector charts) or, where ENC data has not been published, Raster Navigational Charts (RNCs) may be used. RNCs are essentially scanned and geo-referenced images of official paper charts. While ECDIS using ENCs is approved as an alternative to paper charts, where no ENCs are available RNCs may be used with ECDIS in a mode called Raster Chart Display System (RCDS) mode. When ECDIS is used in RCDS mode (i.e. with RNCs), it is necessary to carry onboard an 'appropriate folio' of up to date official paper charts. All charts must be regularly updated with official updates.

Appendix 6 to IMO Resolution MSC.232(82) specifies the requirement for adequate independent back-up arrangements for ECDIS. The principal requirements are to: enable a timely transfer to the back-up system during critical navigation situations, and allow the vessel to be navigated safely until the termination of the intended voyage.

Before a watchkeeping officer or master intends to use an IMO compliant ECDIS as the primary means of navigation they should, as a minimum, complete generic ECDIS and ECDIS model-specific training. However, in cases where officers or masters have not had any recent experience using ECDIS it is strongly recommended that refresher training be undertaken based on a generic ECDIS Operators Course complying with IMO Model Course 1.27 - The Operational Use of Electronic Chart Display and Information Systems (ECDIS).

AMSA has developed an information sheet that provides detailed guidance on type approval, use of official electronic charts, back-up arrangements, user training requirement and AMSA Requirements for ECDIS Carriage by Australian Registered Ships.

The information sheet can be accessed from AMSA's website: www.amsa.gov.au/Shipping_Safety/Navigation_Safety/ECDIS/ECDIS.asp

There are an increasing number of sources of useful information pertaining to the operational use of ECDIS. Attention is drawn to the following:

- IMO Safety of Navigation Circular SN.1/ Circ.276 on "Transitioning from Paper Chart to Electronic Chart Display and Information Systems (ECDIS) Navigation".
- "Facts about Electronic Charts and Carriage Requirements", IHO Publication S-66 – Edition 1.0.0, January 2010, Published by IHO; http://www.iho-ohi.net/iho_pubs/standard/S-66/S-66_edition_1.0.0.pdf.
- "From Paper Charts to ECDIS – a practical voyage plan", Captain Harry Gale, FNI, 2009.

- Maintenance of Electronic Chart Display and Information System (ECDIS) Software (SN.1/ Circ.266, as revised)

Further enquiries regarding the carriage and use of ECDIS in the light of this Marine Notice should be addressed to:

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