1. Introduction

This MSN has been issued to clarify the carriage requirements and seafarers’ training requirements for Electronic Chart Display and Information Systems on Isle of Man registered ships.

2. Nautical Charts and Publications

SOLAS Chapter V regulation 19.2.1.4 requires that all ships, irrespective of size shall have nautical charts and nautical publications to plan and display the ship’s route for the intended voyage and to plot and monitor positions throughout the voyage.

The Regulation further states that an electronic chart display and information system is also accepted as meeting the chart carriage requirements of 19.2.1.4.

Regulation 19.2.1.5 states that if the requirements of 19.2.1.4 are met wholly or partially (i.e. with an ECDIS or electronic publication or both) then there must be some form of back up arrangement in place to cover failure of the electronic systems.

In order for a vessel to meet the requirements of SOLAS Chapter V 19.2.1.4 and 19.2.1.5 the vessel may use the following:

- 1 x paper chart folio;
• 1 x ECDIS unit and 1 x paper chart folio; or
• 2 x ECDIS units which must both work independently. The second ECDIS unit must be connected to an independent power supply and a separate GPS position input.

3. ECDIS Carriage Requirement

SOLAS Chapter V Regulation 19.2.10 makes the carriage of ECDIS mandatory, on a ‘roll out basis’, the schedule for which is included in the Appendix to this MSN.

Once the date has passed for the mandatory carriage of ECDIS for a relevant vessel type, each vessel of that type must be fitted with an approved ECDIS system.

All ECDIS units (hardware) must meet the following performance standards -

a. if installed on or after 1 January 1996 but before 1 January 2009 - must conform to performance standards not inferior to those specified in the Annex to Resolution A.817(19), as amended by resolutions MSC.64(67) and MSC.86(70); or

b. if installed on or after 1 January 2009 - must conform to performance standards not inferior to those specified in the Annex to Resolution MSC.232(82).

In either case there should be a document on board the vessel stating the approval which shall be available for third party inspection.

Once fitted, ECDIS must be listed under the details of Navigational Systems and Equipment on either -

a. the Record of Equipment for the Cargo Ship Safety Equipment Certificate (Form E); or

b. the Record of Equipment for the Passenger Ship Safety Certificate (Form P).

After the mandatory implementation of ECDIS, in order for a vessel to meet the requirements of SOLAS Chapter V 19.2.1.4 and 19.2.1.5, the vessel may use the following:

• 1 x paper chart folio;
• 1 x ECDIS unit and 1 x paper chart folio; or
• 2 x ECDIS units which must both work independently. The second ECDIS unit must be connected to an independent power supply and a separate GPS position input.

In areas for which Electronic Navigational Charts (ENCs) are not available, Raster Navigational Charts (RNCs) should be provided. RNCs must be backed up with a reduced paper chart folio sufficient for safe navigation.

In areas where neither ENCs nor RNCs are available, a full folio of paper charts must be carried for that area.

Adequate provisions should be made to ensure that all paper charts and electronic charts are the latest version and kept up to date.
4. **ECDIS Training Requirements**

The STCW Manila Amendments require that all officers in charge of a navigational watch complete ECDIS training as stated in STCW Table A-II/1 on or after 01/01/2017. However, in many cases the ECDIS carriage requirement will have been met prior to this date resulting in an inconsistency between the carriage requirement and the STCW seafarers’ training requirements.

In order to provide clarity on this issue the Isle of Man has the following requirements prior to 01/01/2017 –

- If ECDIS is fitted and *is being used*, all officers in charge of a navigational watch must have completed the training stated in a. and b. below.
- If ECDIS is fitted and *is not being used*, it is highly recommended that all officers in charge of a navigational watch have completed the training stated in a. and b. below. However, it should be noted that some port authorities require all ECDIS operators to be trained regardless of whether the ECDIS unit is being used or not.

  a. **Generic ECDIS training**

      The generic ECDIS training is the minimum standard required by STCW Table A-II/1. The IMO has approved the standardised model course for the general operation and use of ECDIS (known as the IMO model course 1.27); this course fulfils the generic ECDIS training requirement.

  b. **ECDIS familiarisation training**

      There is also a requirement for officers in charge of a navigational watch to receive familiarisation training for the specific type of ECDIS unit installed on the vessel (i.e. same make and model).

      STCW.7/Circ.18 requires the familiarisation training to be carried out in accordance with section 6.3 and 6.5 of the ISM Code. It is the responsibility of the ISM Company (Document of Compliance holder), to ensure this training is completed, and also to state how the training is delivered in the vessel’s Safety Management System.

      It should be noted that during flag and port State inspections the inspector may require the vessel’s deck officers to confirm they are able to:

      1. produce evidence they have completed the generic ECDIS training and the ECDIS familiarisation training;
      2. undertake basic tasks expected during watchkeeping (e.g. select charts, change scale, explain the meaning of symbols displayed, call up and be able to insert or amend a waypoint in a voyage plan); and
      3. demonstrate how to install official ENC updates.

Isle of Man Ship Registry
April 2015

*Please note - The Isle of Man Ship Registry cannot give Legal Advice. Where this document provides guidance on the law it should not be regarded as definitive. The way the law applies to any particular case can vary according to circumstances - for example, from vessel to vessel. You should consider seeking independent legal advice if you are unsure of your own legal position.*
APPENDIX

The table below is as stated in SOLAS Chapter V Regulation 19.2.10 - Carriage Requirements for Shipborne Navigational Systems and Equipment as amended by Resolution MSC.282(86).

All ships engaged on international voyages shall be fitted with ECDIS as stated below:

<table>
<thead>
<tr>
<th>Ship type</th>
<th>Size</th>
<th>New ships</th>
<th>Existing ships</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Passenger ships</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>≥500gt</td>
<td></td>
<td>Constructed on or after 1 July 2012</td>
<td>Constructed before 1 July 2012: not later than the first survey* on or after 1 July 2014</td>
</tr>
<tr>
<td>Tankers</td>
<td>≥3000gt</td>
<td>Constructed on or after 1 July 2012</td>
<td>Constructed before 1 July 2012: not later than the first survey* on or after 1 July 2015</td>
</tr>
<tr>
<td>Cargo ships, other than tankers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>≥3000gt</td>
<td>&lt; 10 000gt</td>
<td>Constructed on or after 1 July 2014</td>
<td>N/A</td>
</tr>
<tr>
<td>≥10 000gt</td>
<td>&lt; 20 000gt</td>
<td>Constructed on or after 1 July 2013</td>
<td>Constructed before 1 July 2013: not later than the first survey* on or after 01 July 2018</td>
</tr>
<tr>
<td>≥20 000gt</td>
<td>&lt; 50 000gt</td>
<td>Constructed on or after 1 July 2013</td>
<td>Constructed before 1 July 2013: not later than the first survey* on or after 01 July 2017</td>
</tr>
<tr>
<td>≥50 000gt</td>
<td></td>
<td>Constructed on or after 1 July 2013</td>
<td>Constructed before 1 July 2013, not later than the first survey* on or after 1 July 2016</td>
</tr>
</tbody>
</table>

*Refer to MSC.1/Circ.1290 on the Unified interpretation of the term "first survey" referred to in SOLAS regulations.

**International Code of Safety for High-Speed Craft**

Vessels compliant with the High-Speed Craft Code are required to have ECDIS fitted.