



**DEMOCRATIC SOCIALIST REPUBLIC OF SRI LANKA
MERCHANT SHIPPING SECRETARIAT
MINISTRY OF PORTS AND SHIPPING**

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Notice to All Ship-Owners, Operators, Training Institutes, Authorized Manning Agents, Masters of Sri Lankan Flagged Ships, and Recognized Organizations.

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

1. Purpose

1.1 This notice is intended to outline the Sri Lankan requirements for the carriage of ECDIS.

2. General

2.1. The definition of an ECDIS as contained in the Annex to IMO resolution MSC.232(82) is:

Electronic Chart Display and Information System (ECDIS) means a navigational information system which with adequate back-up arrangements can be accepted as complying with the up-to-date chart required by regulations V/19 and V/27 of the 1974 SOLAS Convention, as amended, by displaying selected information from a System Electronic Navigational Chart (SENC) with positional information from navigational sensors to assist the mariner in route planning and route monitoring, and if required display additional navigational-related information.

2.2. SOLAS V/19 requires the carriage of ECDIS, conforming to the performance standards for electronic charts, to be fitted on certain vessels by the dates shown in SOLAS V/19.2.10

3. Requirements of ECDIS usage as Primary Means of Navigation

3.1. SOLAS V/19.2.1.4 requires the carriage of nautical charts. The Merchant Shipping Secretariat (MSS) recognizes that ECDIS conforming to the performance standards for electronic charts satisfies the chart carriage requirements specified in SOLAS V/19.2.1.4, provided that back up arrangements are provided, as required by SOLAS V/19.2.1.5.

3.2. An ECDIS, to comply with the SOLAS carriage requirement, Ch V Regulation 19.2.1.4, is acceptable only if:

- .1 the equipment is type approved as stated in paragraph 3.3;
- .2 it is using official Electronic Navigational Charts (ENC) or, with certain conditions being satisfied as in sub paragraph .7, is using official Raster Navigational Charts (RNC);
- .3 the navigating officers are qualified and competent in its use, MSN 02/2016 provides the details of training requirements;
- .4 the carriage and use of the equipment as primary means of navigation is correctly annotated in the Record of Equipment(Form E) of the Ship Safety Equipment Certificate ;
- .5 the ship's safety management system (SMS) includes relevant requirements and procedures associated with the carriage and operational use of the ECDIS; and
- .6 it is capable of displaying the latest version of the International Hydrographic Organization(IHO) Presentation Library for ECDIS,
- .7 for the purposes of compliance with SOLAS V/19.2.1.4 and 19.2.1.5 the following arrangements are deemed acceptable for Sri Lankan Flagged ships.

Primary System	Secondary requirement
ECDIS operating in electronic navigational chart (ENC) mode or, where ENC Coverage is not available, RCDS Mode	Either: a second independent ECDIS which has a separate power supply and data input, operating in electronic navigational chart (ENC) mode or, where ENC Coverage is not available and RCDS Mode is operating, an appropriate folio of paper nautical charts OR An appropriate folio of paper nautical charts

3.3 Each ECDIS, main unit and back-up if applicable, must be type approved by a Recognized Organization (RO) acting on behalf of the Merchant Shipping Secretariat of Sri Lanka or by the United States Coast Guard (USCG) or Maritime Coast Guard Agency in UK(UKMCA). The Administration will also accept equipment that has been approved under the European Union Marine Equipment Directive (MED) procedures which cover requirements of applicable IMO performance standards,

3.4 It is important that adequate independent back-up arrangements are provided to ensure safe navigation in case of ECDIS failure. Such arrangements include facilities enabling a safe take-over of the ECDIS functions in order to ensure that an ECDIS failure does not result in a hazardous situation. The ship's safety management system (SMS) must recognise and suitably account for this.

3.5 The back-up ECDIS must, therefore, be loaded with relevant official charts and the voyage plan before commencement of the voyage. Similarly, if appropriate folio of paper charts (APC) is being used as the back-up, it must be readily available and the voyage plan must be indicated on the charts. The back-up arrangement must be ready for immediate use, particularly when in confined waters.

3.6 The appropriate folio of paper charts (APC) should contain full coverage of charts of a "general" scale of the planned route or full coverage at "overview" scale where "general" scale coverage does not exist. Full coverage at "coastal" scale should also be carried for sections of the planned route that include waters that are intricate or congested or where navigation is constrained (e.g. areas containing Traffic Separation Schemes). Larger scale charts should be carried where these are deemed by the Master of the vessel to be necessary to ensure safe navigation. The definition of APC is provided in detail within Appendix 7 of Resolution MSC 232(82), the Revised Performance Standards for ECDIS.

4. Maintenance of ECDIS software

4.1 An ECDIS that is not updated to the latest version of IHO standards may not meet the chart carriage requirement as set out in SOLAS Regulation V/19.2.1.4.

4.2 Any ECDIS which is not upgraded to be compatible with the latest version of the IHO ENC Product Specification or the Presentation Library 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 IHO Data Protection

Standard may fail to decrypt or to properly authenticate some ENC's, leading to failure to load or install. An up-to-date list of all the relevant IHO standards relating to ECDIS equipment can be accessed from the IHO website (www.iho.int).

4.3 Proper ECDIS software maintenance is an important issue and that adequate measures need to be implemented by masters, ship owners and operators in accordance with the International Safety Management (ISM) Code.

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