GUIDANCE FOR GOOD PRACTICE FOR SHIPS USING ELECTRONIC CHART DISPLAY AND INFORMATION SYSTEM (ECDIS) & ELECTRONIC NAUTICAL PUBLICATIONS

ECDIS – Guidance for Good Practice
1. The Maritime Safety Committee (MSC) of the International Maritime Organization (IMO), at its ninety-fifth session approved *The ECDIS – Guidance for Good Practice* – which is annexed to MSC Circular MSC.1/Circ.1503. The ECDIS Guidance for Good Practice draws guidance from previous ECDIS circulars to bring the relevant information into a single document.

2. Ship owners, managers, masters and deck officers of ships fitted with ECDIS are strongly encouraged to use the guidance to improve their understanding and facilitate safe and efficient usage of ECDIS.

ECDIS Training
3. Masters and deck officers on ships installed with ECDIS must have thorough knowledge and ability to use ECDIS for safe and efficient voyage. They should undertake approved *Generic ECDIS Training* meeting the competency requirements prescribed in 2010 Manila amendments to the STCW Convention and STCW Code. In addition, they must undergo *Familiarisation Training* to have operational knowledge of the specific model of ECDIS installed on the ship. Appropriate resources supplied by the ECDIS manufacturer (e.g. courses in ECDIS training centre ashore, e-learning via...
DVD or similar means) may be accepted as part of the ECDIS Familiarisation Training. ‘Trickle down’ training (i.e. one officer informally trains another on board a ship) is not acceptable. If Familiarisation Training is to be conducted on board, such training should be properly structured, provided by a dedicated officer and cover all functionality and effective use of the system. The Familiarisation Training provided to officers must be properly documented in the ship’s safety management system.

4  If the Generic Training is conducted ashore on a particular type and model of ECDIS installed on a ship, such training is acceptable as meeting both the Generic and Familiarisation Training. In such cases, it should be appropriately documented in the ECDIS training certificate.

**Electronic Nautical Publications**

5  MPA accepts the carriage of Electronic Nautical Publications (ENPs) required under SOLAS Regulation V/19.2.1.4 and V/27 in lieu of hardcopy publications. SOLAS regulation V/19.2.1.5 further requires back-up arrangements to be provided if ENPs are carried on ships to comply with the requirements. However, publications for emergency use, such as International Code of Signals and IAMSAR Manual Volume III shall be readily available in the form of hardcopy.

6  When ENPs are used on board, they shall be subjected to the following requirements:

   a. ENPs to be published by a hydrographic organisation which is authorised by the Administration (e.g. United Kingdom Hydrographic Office) or published by an intergovernmental organisation (e.g. IMO, ITU);
   b. ENPs to be kept corrected and up-to-date and means available for making timely corrections;
   c. Appropriate independent backup arrangements;
   d. ENPs from the main and backup unit shall be accessible to the Officer of the Watch (OOW), without limitations, from the bridge; and
   e. Computer shall be dedicated for the provision of ENPs having un-interrupted power from the main and emergency power supplies.

**Port State Control**

7  As ECDIS and ENPs are critical components of navigational safety, port State control officers pay particular attention to the following issues (not exhaustive) related to ECDIS and ENPs when conducting port State inspections:

   • Appropriate certification (e.g. inclusion of ECDIS/ENPs in the record of equipment and certificate) to confirm compliance with IMO’s performance standards.
   • Latest edition and updated folio of electronic charts and ENPs for the intended
voyage.

- Latest and updated edition of ECDIS software and software used in the computer for viewing ENPs.
- Appropriate independent back-up arrangements in accordance with SOLAS requirements.
- Documented procedures for using ECDIS/ENPs and regular checks under the ship’s safety management system.
- Conformance and alignment with inputs from various sensors (e.g. heading, speed, rate of turn, etc.) and presentation of such information on ECDIS display.
- Documentation relating to ship’s officers’ Generic and Familiarisation Training.
- Demonstration of operational competency in using ECDIS and ENPs by ship’s deck officers.

**Obligations of Owners & Managers**

8 Owners and ship managers are reminded of their obligations under Regulation 20 of the Merchant Shipping (Training, Certification and Manning) Regulations and Regulation I/14 of the STCW Convention, as well as sections 6.3 and 6.5 of the International Safety Management (ISM) Code to ensure that seafarers are provided with appropriate familiarisation training for the operation of navigational equipment on board, including ECDIS and use of ENPs. Ship owners and managers are requested to bring this circular to the attention of masters and deck officers of Singapore ships.

9 This circular supersedes Shipping Circulars No. 29 of 2006, Shipping Circulars No. 03 of 2011 and amends paragraphs 6 and 7 of Shipping Circular No. 6 of 2012.

10 Any query relating to this circular should be directed to Capt Khoo Gek Hung (Tel: 6375 1935), Capt Farhad Iftekher (Tel: 6375 6209) or Capt I G Sangameswar (Tel: 6375 6205), or email: coc@mpa.gov.sg

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