



## ▶ CAUTION ON THE UNAUTHORIZED AND INCORRECT USE OF ECDIS SHIPOWNERS

**Electronic Chart Display and Information Systems (ECDIS) is one of the vital navigation tools that contribute to safe navigation. The use of ECDIS has become increasingly prevalent with mandatory carriage requirements for all ships of certain sizes<sup>1</sup> engaged on international voyages as well as voluntary adoption by many operators where it is not mandatory.**

Navigating with an ECDIS has undeniable safety benefits. However, it can have a negative impact if not used correctly, and this is known to be a causative factor in many navigational incidents, such as collisions and groundings.

ECDIS where fitted to meet the chart carriage requirement as per SOLAS Chapter V, must:

- Be type-approved and meet the IMO performance standards.
- Use up-to-date Electronic Nautical Charts (ENC<sup>2</sup>).
- Be maintained so as to be compatible with the latest applicable International Hydrographic Organization (IHO) standards.
- Have adequate, independent back-up arrangements in place.

At times, the vessels that are not mandatorily required to be fitted with ECDIS carry a chart display system, which may not be type-approved. Such systems are generally termed as ECS (Electronic Charting System). These systems are also capable of displaying a vessel position on a chart and some of these chart systems may also be able to perform many of the functions of an ECDIS. However, it is important to note that there are no agreed standards for ECS or the version of charts they use. Hence, ECS are not recognised as an alternative to paper / electronic charts and should not be used as a means of navigation.

If an ECDIS that is not type-approved, is fitted on board a vessel, it is strongly recommended that equipment be decommissioned to stop unauthorised usage. The prohibited use of these systems must further be emphasised by displaying prominent notices on the equipment indicating that it is not to be used for navigation. Such measures should also be included in the shipboard navigation procedures and watchkeeping officers should get acquainted with these measures as part of familiarization process.

[AMSA's Safety Awareness Bulletin](#) highlights strategies for safe navigation using ECDIS.

Further, ship operators, masters and deck officers on ECDIS-fitted ships are encouraged to use [IMO's Guidance for good practice](#) to improve their understanding and facilitate safe and effective use of ECDIS.

We welcome feedback on this article or any other Loss Prevention guidance. Please feel free to contact the [Loss Prevention team](#) should you have any further questions.

### Footnote:

1. The carriage requirements shall apply to the following ships engaged on international voyages:

(a) Passenger ships of 500 GT and upwards;

(b) Tanker\* of 3,000 GT and upwards; and

(c) Cargo ships constructed on or after 1 July 2013 other than tanker of 3,000 GT and upward, and cargo ships constructed before 1 July 2013 other than tanker of 10,000 GT and upward

\* "Tanker" means a cargo ship constructed or adapted for the carriage in bulk of liquid cargoes of a flammable nature.

2. ENC: Electronic navigational chart (ENC) means the database, standardized as to content, structure and format, issued for use with ECDIS by or on the authority of a government, authorized hydrographic office or other relevant government institution, and conforming to IHO standards. The ENC contains all the nautical chart information necessary for safe navigation.