

# Safety advisory: New Electronic Chart Display and Information System (ECDIS) standards



## More information

The IMO Maritime Safety Committee (MSC) circular MSC.1/Circ.1503 was published 24 July 2015. It was titled *ECDIS – Guidance for Good Practice*, and intended to provide mariners with clear and unambiguous guidance on ECDIS requirements. This circular consolidates the relevant guidance from seven previous IMO ECDIS circulars.

## Contact information

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## Special accommodations

To request ADA accommodation, call Ecology at 360-407-7455, 711 (relay service), or 877-833-6341 (TTY).

## Am I required to have an ECDIS?

The International Maritime Organization (IMO) ECDIS implementation schedule required most vessels operating under Safety of Life at Sea (SOLAS) requirements to have at least one ECDIS installed by the end of August 2017.

## What standards should my ECDIS comply with?

By the end of August 2017, all ECDIS (both new and existing installations) must be upgraded to the latest IMO ECDIS standards, which require:

- International Hydrographic Organization (IHO) Standard S-52 Edition 6, with the latest Presentation Library, Edition 4.0
- The new International Electrotechnical Commission (IEC) standard 61174, Edition 4

Bridge officers should review the new standards, and ensure their ECDIS are compliant with these standards.

## What changes will I see when using my ECDIS with these standards?

The changes made to the IHO and IEC standards addresses feedback from industry and system users. The two most common complaints have been the constant audible alarms and the time needed to find information buried in “pick” reports. The new standards bring more consistency between ECDIS manufacturers, making it possible to:

- Introduce strategies for reducing the frequency of audible alarms.
- Reduce the training needed by mariners to learn different ECDIS manufacturer’s platforms.
- Increase ECDIS connectivity to other navigational equipment, helping to create a fully integrated bridge navigation system.

**The International Hydrographic Organization (IHO) and the International Electrotechnical Commission (IEC) are responsible for developing international standards related to ECDIS.**

For further information regarding ECDIS standards, refer to the document titled *Information on IHO Standards related to ENC and ECDIS*, which can be found

at: [https://www.iho.int/mtg\\_docs/enc/PSC\\_Advice\\_IHO.pdf](https://www.iho.int/mtg_docs/enc/PSC_Advice_IHO.pdf)

Additional information can be found on The International Electrotechnical Commission (IEC) website, [www.iec.ch](http://www.iec.ch)

## Changes in IHO S-52 Ed. 6 and the Presentation Library, Edition 4.0

- A new section, “Detection and Notification of Navigational Hazard,” specifies the priority of alert to be raised by each ENC feature and its associated attributes, reducing the number of audible alerts.
- New section, “Detection of Areas, for which Special Conditions Exist,” has been added to ensure required alerts are handled consistently, and audible alert frequency is reduced.
- For greater ease of use, information such as fairway names and anchorage area names now appear on screen. Landmarks, lights, and buoys are viewable with the “hover-over” function.
- Language in the Presentation Library has been simplified and clarified.
- More standardization within the Electronic Navigational Charts (ENC) symbol catalog makes it easier for mariners to move between different ECDIS manufacturers’ platforms, and requires less ECDIS specific training.
- Simplification of diagrams, terms, and standardization of ENC symbols simplifies connectivity between bridge equipment.
- Elimination of multiple options to perform the same task reduces error.

## Changes made in IEC 61174

- ENC update reports can be run so ENC inventory and corrections can be audited.
- Virus protection – USB sticks will not automatically run when inserted into the ECDIS.
- In a single step, a mariner can go to a default user setting. All ECDIS platforms will display the same information in the default setting mode.
- Alarms for CPA/TCPA<sup>1</sup> for AIS<sup>2</sup> and AIS lost target can be turned off.
- Enhanced options for anchor watch planning and monitoring.
- Based on Bridge Alert Management (BAM) principles, alerts will be categorized as Caution (yellow), Warning (orange), and Alarm (red) with fewer audible alarm triggers.
- Display standardization allows easier connections with navigational equipment such as the Radar, AIS, VDR, BNWAS, and NAVTEX.<sup>3</sup>
- ECDIS must declare the highest level of latitude it can operate. If it can operate higher than 85 degrees latitude, the ECDIS must comply with new IMO polar requirements.

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<sup>1</sup> Closest Point of Approach/Time to Closest Point of Approach

<sup>2</sup> Automatic identification system

<sup>3</sup> Voyage Data Recorder, bridge navigational watch alarm system, and Navigational Telex