



IHB File No. S3/8157

CIRCULAR LETTER 74/2012
24 July 2012

2nd UPDATE REPORT ON IHO ACTION CONCERNING ECDIS SOFTWARE ISSUES

References:

- A. IHB Circular Letter 18/2012 dated 10 February - *Update Report on IHO Action Concerning ECDIS Software Issues*
- B. IHO Publication P-6, pages 152-153 - *Proceedings of XVIIIth International Hydrographic Conference- Verbal report on ECDIS anomalies by IHB*
- C. IHB Circular Letter 57/2012 dated 30 May- *90th Session of the Maritime Safety Committee of the IMO*
- D. IHB Circular Letter 70/2012 dated 12 July- *58th Session of the Sub Committee on Safety of Navigation of the IMO*
- E. IHB Circular Letter 33/2012 dated 14 March- *Safety Notice about the Reliable Operation of ECDIS*

Dear Hydrographer,

1 This letter provides a brief update on IHO actions in relation to resolving various operational implementation issues concerning ECDIS. More detailed reports are at References A and B. This letter also announces a 3rd IHO workshop of invited technical experts to resolve ECDIS operating anomalies. The workshop has similar aims to the second workshop held at the IHB in January and reported at Reference A. In close cooperation with the secretariat of the International Maritime Organization (IMO), the 3rd technical experts workshop will be held at the IMO headquarters in London on 15 and 16 October 2012.

2 The Chair of the Transfer Standards Maintenance and Applications Development Working Group (TSMAD) and the Vice Chair of the Digital Information Portrayal Working Group (DIPWG) will take the opportunity of the presence of industry experts at the IHO workshop to conduct follow-on meetings that will assist with the finalisation of the revision of S-64 - the ECDIS test data set, and the further development of the data portrayal model for S-101 - the next generation ENC. The working meeting concerning S-64 will take place at the IMO on 17 October, followed by a similar meeting concerning data portrayal for S-101 on 18 and 19 October.

Situation Report

3 As already reported at References C and D, the IMO has welcomed the input from the IHO and in particular its observations based on the IHO ECDIS data presentation and performance check and the conclusions that have been reached so far. The IHB has now received reports of checks on nearly 900 ECDIS installations in use at sea.

4 Reports received by the IHB suggest that the majority of ECDIS systems sold before 1 January 2009 require some form of software upgrade in order to comply with the latest version of the relevant technical standards agreed by the IMO. 1 January 2009 is the date on which the current version of the IMO Performance Standard for ECDIS came into effect, incorporating, among other things, the revised IHO Presentation Library edition 3.4. Systems manufactured and approved after 1 January 2009 appear to meet these required standards.

5 In most cases of ECDIS equipment sold before 2009 that require a software upgrade, various operational “work-around” solutions can be implemented by mariners. This will allow them to continue to use their ECDIS for safe navigation until such time as a software upgrade can be applied. However, as reported at Reference E, there is an early model from one specific manufacturer, for which no such work-around solution is possible. For the oldest versions of that manufacturers’ ECDIS equipment (equipment sold about 10 years ago), cross-checking with paper charts is the only option available to ensure that all relevant chart information is available to the mariner. Mariners have been alerted to this situation through a combination of Notices to Mariners and through NAVAREA warnings.

6 The ECDIS manufacturer concerned has taken very active and positive action to remedy the situation and has produced an upgrade patch that mariners can download free-of-charge. Also, the manufacturer has made every effort to contact individually all users of its equipment - although, this is not always possible. Most equipment manufacturers have reported to the IHB that it is often difficult to maintain contact with ships - especially when ships are sold or operated under new managers.

7 A number of the manufacturers of ECDIS have reported to the IHB that they have reinvigorated their software updating regimes and arrangements as well as continuing their active and very constructive participation in the relevant IHO working groups. However, updates are not available for all brands of ECDIS. There are also some ECDIS manufacturers that have ceased trading. While this represents only a very small number of ECDIS in use at sea, there is no software upgrade support for such legacy systems, even though the software requires updating.

8 Progress in resolving the outstanding issues with ECDIS operating anomalies is generally positive. The key stakeholders are now actively involved. However, work remains to be done, particularly to coordinate efforts between the various stakeholder entities to ensure that all ECDIS being used at sea conforms to the latest versions of the relevant underpinning IHO and IMO standards. This is the reason for the next technical workshop and for the on-going deliberations by the IMO Maritime Safety Committee (MSC) and its Sub Committee on Safety of Navigation (NAV).

9 The IHB will continue to monitor the evolution of ECDIS and the associated standards, actively pursuing ways to resolve any future issues whenever they arise, whilst continuing to report progress to Member States, to the IMO MSC and NAV and to the wider maritime community.

3rd IHO Workshop of Technical Experts on Resolving Operating Anomalies in ECDIS

10 A 3rd workshop of technical experts on resolving operating anomalies in ECDIS will be held at the IMO Headquarters in London on 15 and 16 October. As with the previous

workshops, the workshop will be chaired by a member of the Directing Committee. Participants will review progress and the results of the IHO ENC/ECDIS Data Presentation and Performance Check together with input and feedback provided by the most recent meetings of the relevant IMO committees and sub committees. It is intended that the workshop participants will develop practical proposals and identify key points to be forwarded to the relevant IMO, IHO or other relevant organisations for their further consideration. This could include:

- mechanisms and requirements for software in ECDIS equipment to be periodically upgraded to keep it up to date and in accordance with the latest standards adopted by the IMO;
- improving mariner awareness of the need to upgrade and maintain ECDIS software;
- improving the consistency of data encoding in ENCs; and
- the continuing need for a coordinated reporting, assessment and feedback mechanism for ECDIS implementation and related equipment performance issues.

The Directing Committee would welcome any comments or suggestions on the topics to be discussed at the workshop.

11 Invitations to send technical and operational experts have been sent to relevant international organizations, ECDIS equipment manufacturers, technical bodies, other ECDIS stakeholders, and those IMO Member States that have actively participated in the previous workshops. IHO Member States intending to provide technical experts who can actively contribute to resolving the ECDIS operating anomalies at the workshop should confirm attendance by sending the attached registration form (Annex A) to *info@iho.int* **by 14 September 2012**.

12 Joining instructions and details of the workshop programme will be sent to registrants in advance of the meeting.

On behalf of the Directing Committee
Yours sincerely

A handwritten signature in blue ink, appearing to read 'Robert Ward', with a stylized flourish at the end.

Robert WARD
Director

Annex:

- A. Registration Form

REGISTRATION FORM FOR ATTENDANCE AT THE
TECHNICAL WORKSHOP OF EXPERTS
ON RESOLVING ECDIS OPERATING ANOMALIES

IMO, London, UK, 15-16 October 2012

(To be returned to the IHB (info@iho.int) by 14 September 2012)

Member State:.....

Name of person attending:

Email address for correspondence:

Brief description of expertise/experience to be contributed to the workshop:

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