



IHB File No. S3/8157

CIRCULAR LETTER 89/2010
13 December 2010

WORKSHOP ON ECDIS SOFTWARE ISSUES

Reference: IHB Circular Letter 83/2010 dated 07 December (Outcome of MSC88)

Dear Hydrographer,

1. As reported at the Reference, the Maritime Safety Committee (MSC) of the International Maritime Organization (IMO) discussed a submission from Japan, Norway, the United Kingdom, the International Chamber of Shipping (ICS) and the International Federation of Shipmasters' Associations (IFSMA) on "Operating anomalies identified within ECDIS". The matter was also the subject of a lunchtime presentation made by the United Kingdom.
2. The IHO made a verbal intervention supporting the paper, the text of which is attached at Annex A. In this intervention, the full text of which has been included in the report of the 88th Session of the MSC, the IHO drew attention to the speedy reaction that IHO Member States' Hydrographic Offices had already made in response to the identification of an encoding issue in Electronic Navigational Charts (ENC). The IHO highlighted that while Hydrographic Offices are encoding the new features fairly recently recognised by IMO, such as Archipelagic Sea Lanes and some ECDIS manufacturers have updated the latest editions of their ECDIS software to account for the resulting new versions of the IHO standards, there is no obligation for these changes to be incorporated in ECDIS software and equipment that has already been type approved and fitted in ships. The IHO noted that this also applies to operating shortcomings that may be identified from time to time in ECDIS software. MSC88 was informed that, in the view of the IHO, it is unrealistic to expect that sophisticated software-based equipment, such as ECDIS can be installed in ships and then never be upgraded during its lifetime.
3. As a result of the discussions, MSC88 invited further comment and contributions to be submitted to its next session in May 2011. In view of the current situation and in order to provide useful input to the next session of MSC, the IHO indicated that the IHB will host a workshop in February 2011 where relevant stakeholder organizations will be invited to discuss the matters raised in document MSC88/25/6 in order to develop proposals as to how they may be addressed. The Directing Committee is now arranging this workshop which it plans to hold at the IHB in Monaco **from 0930 to 1700 on Tuesday 15 February 2011 and from 0900 to no later than 1200 on Wednesday 16 February 2011.**
4. Invitations to the workshop will be sent to relevant international organizations, ECDIS equipment manufacturers and technical bodies as well as to those IMO Member States that co-sponsored the submission to MSC88. Any IHO Member State that considers that it can contribute to the debate about ECDIS software shortcomings is welcome to attend this workshop. If you consider that you can provide a practical contribution to the workshop, please confirm attendance by sending the attached registration form (Annex B) to info@ihb.mc by 31 January 2011.

5. The final agenda will be prepared over the coming weeks but an outline of the topics to be considered is attached at Annex C. Please note that this list is in an early draft state and will be refined following discussion with invited attendees. Speakers will also be confirmed for each topic identified. The Directing Committee would welcome any comments that you may have on the matters under consideration and the proposed topics to be discussed.

On behalf of the Directing Committee
Yours sincerely



Robert WARD
Director

Annex A: IHO Intervention at MSC88
Annex B: Workshop Registration Form
Annex C: Proposed topics for the Agenda

Information copy to: NGIOs

Text of IHO intervention at MSC88 on document MSC88/25/6

The IHO thanks the submitters of this document for raising this important matter concerning the safety of navigation – and in particular, the fact that some ECDIS equipment in service at sea may not be performing optimally. The IHO has been concerned for some time that there is no specific obligation placed on ship operators to keep up to date the software that lies behind sophisticated computer-based systems, such as ECDIS. Relevant to this is SN.1/Circ.266 dated 22 October 2007, referring to the “Maintenance of ECDIS software” the revised text of which was approved by this session of the Committee during its discussion on the report of NAV56.

When the IMO recognised Archipelagic Sea Lanes, Particularly Sensitive Sea Areas and the Emergency Wreck Marking Buoy, the IHO quickly introduced new symbology and ENC encoding rules to enable these features to be shown in ECDIS. However, while Hydrographic Offices around the world are now encoding these features in their ENCs, ECDIS equipment whose software has not been updated will not display these features optimally or in some cases at all. This is because there is no obligation placed on ship operators to maintain the software by installing the necessary updated symbols presentation library.

Similarly, now that it has become apparent that some ECDIS manufacturers have omitted to implement the requirement to raise an alarm or indication when a vessel approaches a land area shown on a small scale chart, there appears to be no obligatory mechanism to ensure that any offending ECDIS software is brought up to date through a software upgrade or patch.

The IHO stands ready to do all it can to alleviate any problems with ECDIS as soon as they are discovered, and especially to those related to the production of ENCs by its Member State hydrographic offices. The IHO has shown that whenever there are data encoding issues, it reacts quickly and effectively. Earlier this year it was found that some Hydrographic Offices had misinterpreted the encoding rules for isolated shoals. The IHO immediately alerted its Member States who checked their ENCs and took prompt remedial action.

The IHO is preparing to call a meeting of interested parties in early 2011 to raise awareness of the problems that have been shown to exist in some ECDIS software and their causes and will try and identify some short-term remedies. Expected participants will include representatives from ECDIS manufacturers, type testing authorities, Administrations, the IHO and the IMO. However, this meeting is unlikely to identify a long-term solution.

In the view of the IHO, it is unrealistic to expect that sophisticated software-based equipment, such as ECDIS can be installed in ships and then never be upgraded during its lifetime. The IHO supports this paper and stands ready to contribute to the issues raised.

REGISTRATION FORM FOR ATTENDANCE AT THE
WORKSHOP ON ECDIS SOFTWARE ISSUES
(To be returned to the IHB (info@ihb.mc) by 31 January 2011)

Member State:.....

Name of person attending:.....

Email address for correspondence:

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

.....

PROPOSED TOPICS TO BE INCLUDED IN THE AGENDA:

DAY 1	
0930-1030	1. Introduction / Outline of the issues
1100-1500	2. What measures can be taken in the short term? What are the consequences/impact/implications of such measures?
1530-1700	3. Is there a need for a longer term solution(s)? If so, what is it/are they? What are the consequences/impact/implications of such measures?
DAY 2	
0900-1000	4. Is there other equipment in ships that could be similarly affected by software upgrading issues? Examples?
1030-1200	5. Develop and endorse outline of IHO report to MSC89