DISPLAY OF ISOLATED DANGERS IN SHALLOW WATERS

1. Summary

Submitted by:	Transas
Executive summary:	Move isolated dangers laying within unsafe water defined by safety contour to Standard display.
Actions To be taken:	IHO DIPWG and TSMAD are requested to discuss the proposal and make amendment/clarification to IHO S-52.
Related documents:	IHO S-52 Annex A of Appendix 2. IHO ECDIS Presentation Library

2. Introduction

IMO MSC Resolution 232 ECDIS Performance Standard defines categories of ECDIS display and general rules for displaying isolated dangers in ECDIS.

Standard Display is the display mode intended to be used as a minimum during route planning and route monitoring. The chart content is listed in appendix 2.

Display Base means the chart content as listed in appendix 2 and which cannot be removed from the display. It is not intended to be sufficient for safe navigation.

According to the IMO MSC 232, appendix 2, obstructions or isolated underwater dangers of depths less than the safety contour which lie within the safe waters defined by the safety contour are to be presented by a specific isolated danger symbol and put in IMO category "DISPLAY BASE". This task is performed by conditional symbology procedure UDWHAZ

In addition, display category for isolated dangers which lie outside the safety contour (unsafe waters) is defined by conditional procedure UDWHAZ of the IHO Presentation Library.

If the mariner selects the option "show isolated dangers in shallow water", according to the procedure, ECDIS should highlight with the isolated danger symbol all rocks, wrecks, obstructions, which lie in 'unsafe' shallow waters between the safety contour and the drying line, putting them in IMO category STANDARD.

3. Proposed change to S-52

Making optional display of isolation dangers in STANDARD display category does not conform to the requirements of IMO ECDIS Performance Standards
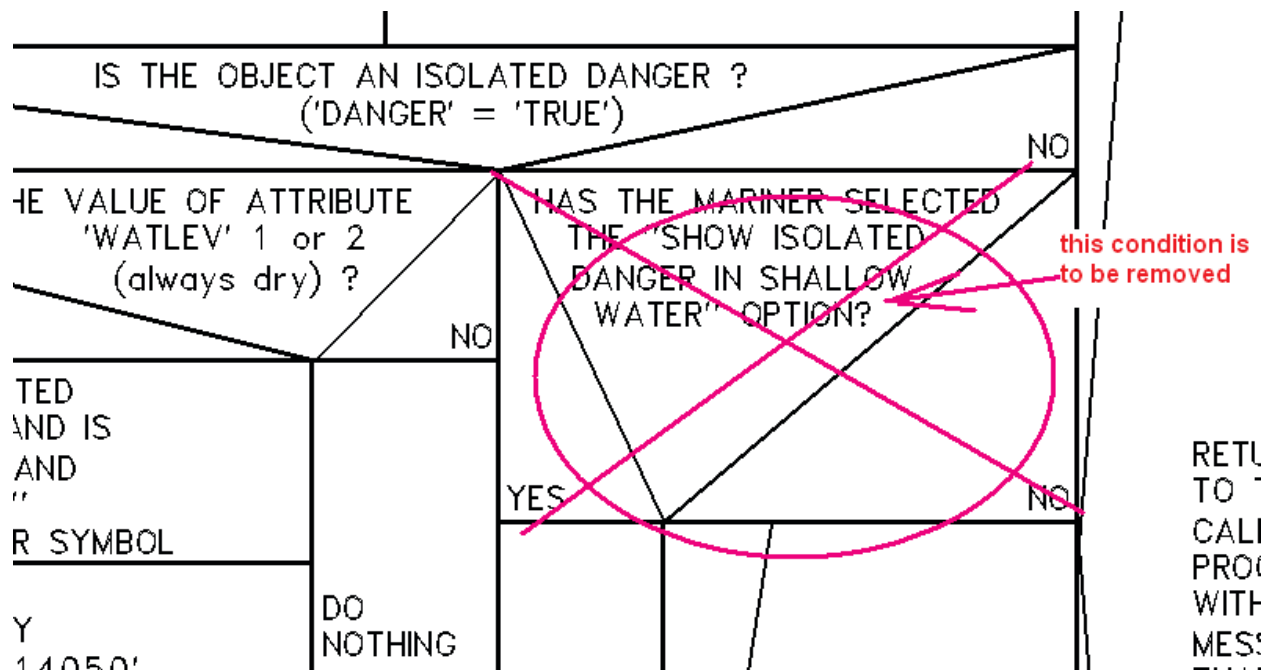
Definition of the Standard display sets that it is should be used as minimum during route planning and route monitoring. IHO Pres Lib procedure UDWHAZ considers the case when mariner is forced to navigate in shallow waters however it also makes display of isolated dangers optional. As result it is possible that the mariner does not see isolated dangers located in shallow waters while he is forced to navigate there. This situation could be considered as potentially dangerous.

IMO ECDISPS requires that ECDIS should present the Standard Display at any time by a single operator action. At the same time IHO Pres Lib procedure UDWHAZ allows content of the STANDARD display to be configurable by the mariner. As result different ECDIS models can interpret Standard display in different ways.

To remove inconsistencies between IMO ECDIS PS and IHO Pres Lib, it is proposed to change conditional procedure UDWHAZ and always show isolated dangers in Standard display mode

The following remark in the procedure UDWHAZ should be changed

In addition, ~~if the mariner selects the option "show isolated dangers in shallow water",~~ this procedure will highlight with the isolated danger symbol all rocks, wrecks, obstructions, which lie in 'unsafe' shallow waters between the safety contour and the drying line, putting them in IMO category STANDARD. This option is provided in case the mariner is forced by circumstances to navigate in waters shallower than the safety contour shown on the display (for example, if the safety contour should default to a value much deeper than that preferred by the mariner).

4. **Affected IHO documents**
   1. IHO S-52 Annex A. Appendix 2. IHO ECDIS Presentation Library