

Paper for Consideration by HSSC

Proposed name change of IHO S-67

Mariners' Guide to Accuracy of Depth Information in ENC

Submitted by:	Thomas Mellor, ENCWG Chair & Edward Hands DQWG Chair
Executive Summary:	Proposed name change of S-67 Mariners' Guide to Accuracy of Depth Information in Electronic Navigational Charts (ENC)
Related Documents:	Information on ENC Generalization, Over-Scaling and Safety Checking Functions in ECDIS
Related Projects:	HSSC 13/33 (former HSSC12/25) IHO ECDIS Cyber Security Guideline

Introduction / Background

During the course of ENCWG activities it has on occasion been necessary to create stand-alone Mariner information papers with regards to the use of ENC and ECDIS. The information papers don't currently reside in an IHO standard as they don't fit the subject types of the current set of standards. The guidance documents cover, ENC generalisation, type approval of ECDS and the status of IHO standards.

Following the grounding of ABFC Roebuck Bay AHS wanted to publish safety information for Mariners on the compilation process of ENCs. The ENCWG agreed and drafted the following paper 'Information on ENC Generalization, Over-Scaling and Safety Checking Functions in ECDIS'

HSSC Letter 03/2020 informed the ENCWG the IHO cannot maintain stand-alone stacked papers, HSSC chair invited the ENCWG to make proposals to be considered at HSSC-12 on the following:

With the endorsement of S-67 - Mariners' Guide to Accuracy of Depth Information in Electronic Navigational Charts (ENC), is there a need to amend the information paper, so it is synchronized with S-67, before it is made publicly available at least for consistency purposes?

What is the information included in this paper that is missing in existing standards and publications (same for the stand-alone paper on "IHO Advice for PSC Inspectors Concerning IHO Standards")? Could this information be incorporated in any of the already existing standards or publications, e.g. S-66 Facts about Electronic Charts and Carriage Requirements

During HSSC 13 the ENCWG were tasked to consider which IHO standards this Mariner guidance information would best reside. HSSC13/33 (former HSSC12/25). This would assign an IHO WG the task of maintaining the information as a standard WG activity. Additionally, HSSC13 also agreed that no changes are to be made to S-63 for possible cyber security vulnerabilities and instead it was approved the ENCWG develop a new "IHO ECDIS Cyber Security Guideline" document.

Analysis / Discussion

At the last ENCWG 6 meeting delegates unanimously agreed, given all this new information is targeted to the Mariner, it should all be consolidated into a single IHO publication. After careful deliberation of all the possible IHO standards it was agreed, given all this new guidance material is related solely to the use of ENC data in ECDIS, IHO S-67 Mariners' Guide to Accuracy of Depth Information in ENC was strategically the best fit.

S-65 was considered, but it was noted this standard is aimed at the hydrographic offices for the production of ENC data rather than intended for use by mariners. S-66 was also considered and although it was acknowledged it contains some basic information regarding the use of ECDIS the majority of information surrounds the mandate of ECDIS and how this can be used to satisfy carriage requirements.

It was suggested that if the information paper was incorporated into S-66, this may serve to negate the need for a separate S-67 as all this information could also be incorporated within S-66.

The ENCWG have deemed S-67 as the most appropriate document to incorporate all ENC and ECDIS related information directed specifically towards the mariner. It is believed that there is a necessity to amend the name of S-67 to reflect a broader range of ENC and ECDIS topics rather than be focused solely on quality of depth.

The ENCWG proposed to DQWG a name change from IHO S-67 Mariners' Guide to Accuracy of Depth Information in ENC to, "**IHO S-67 Mariners' Guide to use of ENC data in ECDIS**".

In proposing this name change it would allow any future additional guidance related to ENC and ECDIS to be more easily incorporated into a single authoritative IHO source, including future cyber security information.

The ENCWG chair presented the proposal at the last DQWG meeting where it was again discussed extensively by the membership. The DQWG supported the idea of providing a single authoritative text and considered it in the best interest of the mariner. No objections were raised to changing the name of S-67.

It is the considered view of both groups that the requirement for IHO to provide more authoritative Mariner information and guidance will only increase as we move ever closer to the introduction of S-100 ECDIS and this document would be a good interim step.

Considerations

Issues surrounding the ownership and reporting duties related to a shared document were raised. However, it is considered that a suitable mechanism can be put in place if HSSC are minded to approve the proposal. It is proposed maintenance of the new IHO standard would be conducted by the IHO HSSC WG who authored each individual chapter. This standard would be written for the Mariner and focused on ENC and ECDIS. As these products are not subject to constant, rapid change it is not expected that there will be a heavy maintenance burden for any IHO WG.

Recommendations

It is the considered opinion of both the ENCWG and the DQWG that the IHO create a consolidated standard for all Mariner ENC and ECDIS information. To achieve this it is recommended that the name of IHO S-67 be changed from "S-67 Mariners' Guide to Accuracy of Depth Information in Electronic Navigational Charts (ENC)" to "IHO S-67 Mariners' Guide to use of ENC data in ECDIS".

Conclusion

ENCWG and DQWG recommend to HSSC that the name of S-67 is amended "IHO S-67 Mariners' Guide to use of ENC data in ECDIS" and all ENC and ECDIS related Mariner information is consolidated into a single authoritative text.

ENCWG and DQWG will work together to incorporate the standalone Mariner information papers and cyber security information into one consolidated document.

Action Required of DQWG

The HSSC is invited to:

- a. Discuss the details within the paper
- b. Agree to the recommendations above to alter the name of S-67 to reflect a broader range of ENC and ECDIS related information for Mariners.