

Paper for Consideration by HSSC

Future of Nautical Charts

Submitted by:	UK
Executive Summary:	This paper outlines the UK perspective noting the paper submitted by Germany to HSSC15 and MSC 107.
Related Documents:	HSSC15-05.4C IMO MSC 107/15/2 A-3 PRO 2.3
Related Projects:	S-100

Introduction / Background

Following announcements by the USA (NOAA) and the UK (UKHO) papers have been submitted to MSC 107 and to HSSC 15 seeking the continuation of paper chart services to support mariners indefinitely. This paper expands on the UK's position and seeks to outline our vision for a way forward which meets the needs of vessels for which ECDIS is not the appropriate solution.

Analysis/Discussion

The UK is committed to paper charts until suitable and accepted alternatives are in place. However, we believe that the benefits of digital navigation in terms of safety and efficiency are incontrovertible. Currently there is a need for a digital solution that provides an appropriate level of functionality but sits below the requirements for ECDIS. Our position is driven by considerations which include;

a) Maintaining Skills for Paper as a Backup

Although paper charts remain a viable backup option maintaining the skills and experience to effectively use paper charts in this manner is a challenge that was highlighted by the ECDIS Safety Study prepared by the UK and Danish Marine Accident Investigation Branches (Part 6 Para 20).

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1014238/ECDIS_Application_and_Usability.pdf

b) Paper Charts for Compliance

Our user engagement shows that a large number of vessels are using paper to comply with relevant regulations but in practice are using Electronic Chart Systems. We believe that this is a safety issue, and we see incidents where this is clearly evident.

c) Maximizing uptake of S-100

The S-100 series of products will bring a range of benefits and this approach will ensure that all vessels can benefit from these products. We already see portable pilot units for example being early adopters of S-10x products. So, there is good potential for this market to act as a rich source of feedback and innovation.

The UK makes the following observations to specific points made in paper HSSC 15-05.4C

- The IHO commonly agreed NtM XML format suggested by Germany is not currently a published standard and a new IHO work item would be needed to develop such a standard. Although this could be done, given S-100 and other developments this would seem a backwards step. Even if this was in place the coordination and processing of this information to provide a seamless global paper service would

seem onerous and complex. For Hydrographic Offices costly software changes would be needed to support this and these would occur as paper chart use continues to decline.

- The UK does not see the printing of charts on board vessels as a viable option to meet these requirements. It is simply not practical.
- We consider that the primary goal of the INT chart series set out in S-11 has been achieved by ENCs.

At the 3rd IHO Assembly in May 2023 the UK presented PRO 2.3 although Assembly was not able to reach agreement a large number of IHO member states present recognised that with the advent of S-100 now is the time to put in place standards to support appropriate regulation of digital solutions for vessels outside of mandatory carriage of ECDIS.

See further UK paper to HSSC 14 which seeks the establishment of a new Project Team to progress this.

Conclusions

In conclusion, on the basis that extending the benefits of digital navigation to all is the best solution to this challenge. The UK feels the IHO community should focus effort on evolving standards to support vessels that fall outside of current ECDIS mandatory carriage requirements.

Recommendations

This paper makes no specific recommendations it is intended to clarify the UK position noting the paper submitted by Germany.

Justification and Impacts

N/A

Action Required of HSSC

The HSSC is invited to:

- a. note and discuss this paper,