Paper for Consideration by NIPWG

Outcome of investigations on the presentation of NtM related information

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Executive Summary:	Results of the review of IHO M-3 and NOAA National Charting Plan
Related Documents:	M-3, S-4, NOAA National Charting Plan
Related Projects:	IALA Marine Resource Name (MRN) Guideline Development
	IALA S-201 PS development
	USA NOAA National Charting Plan (1 Nov 2017)

Introduction / Background

The speed at which Nautical Charts and Publications are updated and released to the public has increased to the point that the traditional maintenance method of producing written Notice to Mariners (NtM) is no longer sufficient. Additionally, the transition from paper chart and publications to digital formats require adoption of machine readable notice to mariner formats. The requirement for a review of IHO documents M-3 and S-4 was identified as an output of NIPWG4 and was conducted in the months following.

Analysis/Discussion

A review of the IHO document M-3 was conducted during the summer of 2017 and a comment matrix was developed. The matrix is offered an attachment to this document. In summary, the M-3 document remains focused on the paper products created by Hydrographic Offices worldwide, but there are instances where the document has been amended to make provisions and acknowledgement of the need to digitize data used to maintain charts and publications. Example: Section 2.4.2 (Updating) "It is recommended that a regular system of updating for digital nautical publications be maintained using an appropriate combination of: Digital Notice To Mariners, Cumulative updating files, & Replacement files." Although not specifically stated and perhaps over stating the obvious, this paragraph implies development of and S-100 Product Specification (PS) for NtMs as well as a PS for the Nautical Publication itself.

Interestingly the latest revision to M-3 included a recommendation which stated that, "since national standardization of geographical names is an essential preliminary to international standardization, Hydrographic Offices encourage and support the establishment of national names authorities, following the principles and procedures recommended by the resolutions on this subject adopted by the United Nations Conferences on Geographical Names." This awareness of the need to harmonize geographical names was recognized by SNPWG and conveyed to IALA. In response, IALA developed a Guideline "Maritime Resource Naming and the development of a Unique Resource Identifiers." It can be concluded that use of IALA's MRN Guideline can assist with the digitization of Nautical Publications and the NtM maintenance of those publications.

Additionally, in the USA, NOAA recently released their National Charting Plan which questions the fundamental design of the chart maintenance schema of Chart Number, Edition, and Edition Date. NOAA proposes that by standardizing chart scale through creation of a single ENC cell from which mariners could either download for use with an electronic charting system or "print on demand" a user defined geographic area, the need to use the existing chart maintenance schema is no longer required by the mariner. Assuming NOAA is the first of many Hydrographic Offices to adopt this product delivery method, there will be a need to reexamine how a NtM is delivered to maintain the user defined paper products.

Conclusions

The adoption of S100 Product Specification for nautical charts and publications underpins and supports the conclusion that the NtM method of maintenance should also be contained in a PS. The question is should the NtM be a single PS or the combination of two or more precisely defined product specifications such as the Aids to Navigation S-201 PS? It is envisioned that a "NtM compiler application" could be created to combine various NtM PS into both human and machine-readable products.

Recommendations

- 1. Amendments to M-3 and S-4 be recommended for maintenance purposes as a bridging strategy until appropriate NtM Product Specifications are developed.
- 2. A NtM Product Specification development strategy be created and executed.

Action Required of NIPWG

The NIPWG is invited to:

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