

Paper for consideration by NIPWG 5

XML Structure of NtM

Submitted by:	NIPWG Chair
Executive Summary:	General view on NtM information provision
Related Documents:	S-4, Section B-600
Related Projects:	

Introduction / Background

The NIPWG is a subsidiary of the Hydrographic Services and Standards Committee (HSSC). The work was subject to HSSC approval.

The primary objectives are to develop and maintain guidance, resolutions and specifications in order to provide shipboard users with the necessary and up-to-date information in a timely manner to allow for the planning of a safe route for the intended voyage and the safeguarding of the ship's navigation throughout the voyage.

Notices to Mariners are needed to update paper copies of nautical products, charts in particular. The provision of Notices to Mariners is according to SOLAS Chapter V where the need of an updating system for nautical products has been implied.

Analysis/Discussion

HOs facing the challenge to provide mechanism which assist the mariners in updating their paper copies of nautical products. SOLAS Chapter V describes that these updates have to be provided periodically. HOs have defined different schedules and procedures to provide the mariners with the necessary updates.

Some Coastal States have different organisations involved in the update, publish and provision procedure. The range goes from one organisation which is responsible for all steps in the updating and supply chain, including publication on its own website, to a split of updating and provision in different agencies/organisations.

The provision of the NtM is also very different. Some HOs provide their NtM electronically whereas other HOs provide their NtM in printed formats and some other HOs provide both versions.

The content of NtM also differs from one organisation to another. Some HOs doesn't provide updates to subsets of their products by NtM. Other HOs provide information that updates are available and that the content of these updates can be obtained electronically or that the updates have been incorporated in their products already.

It is possible that updates apply for more than one product and NtMs can be provided for one product and the other product can be updated automatically. This phenomenon applies for paper chart and electronic chart corrections and bases on differences in the updating system.

The provision of chart updates is what all NtMs have in common. These updates will be made for all charts which are listed in the HOs catalogue. That can comprise charts covering the own coastal waters or charts which have been completely or partly published for foreign waters. The reproduction of chart content for foreign waters bases usually on bilateral agreements. Due to the fact that HOs have to publish charts which cover the waters of their neighbouring countries to some extent, each HO is forced to check neighbouring NtM for charts corrections which might be applicable for their own charts.

It has been considered by some HOs which are heavily engaged in using NtM of foreign waters for updating their own chart portfolio that a common data structure of chart corrections could be simplify the procedure and could limit the time needed for adopting foreign chart corrections to their own NtM.

Having considered the different information provision options and the current IT technologies supporting data exchange, a XML provision of NtM chart correction promises the most value. The XML should be written in a way

that all variations of chart correction provision could be served. Having ensured that NtM chart corrections base on one common XML, the layout can be individually designed by the publishing HO.

Justification and Impacts

Seeking a common approach and structure for all current NtM parts seems inappropriate at this stage. The differences in information provision are too significant. It can also be predicted that nautical products which are being provided nowadays in printed or digital format will go entirely digital in the future. What remains will be a set of charts which will be still available in printed format. Be that for backup or for other reasons.

A harmonised data exchange mechanism such as XML for the provision of NtM paper chart corrections can improve the data exchange between HOs and may reduce significantly the time needed from chart correction receipt to chart correction provision. It can be easily implemented with no significant financial impact, with no significant programming work and with no additional human resources.

This improvement may conduce toward a situation that both paper chart updates and electronic chart may be kept permanently consistent.

Action required of NIPWG5

The NIPWG5 is invited to:

- a. note this paper
- b. discuss if harmonisation work on technical level for data exchange mechanism is deemed necessary and how it could be managed best.