**HSSC15-xx.xx**

**Follow up**

## Circular Letter for Consideration by HSSC

## S-100 based nautical publications – considerations for data production and data management

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| ***Submitted by:*** | NIPWG |
| ***Executive Summary:*** | Follow up challenges by creating S-100 based test datasets |
| ***Related Documents:*** | S-100 based product specifications |
| ***Related Projects:*** | Several test datasets by NIPWG members |

## Introduction / Background

During the creation of S-100 based nautical publication test datasets, several NIPWG members faced challenges in the acquisition and management of data maintained by other bodies, e.g. port administrations.

The topic was raised during NIPWG9 in paper 13.4, and it was concluded that a pan IHO guidance may be needed to address the overarching issue and to seek HSSC guidance for the next steps.

## Analysis/Discussion

The content of printed nautical publications remain the primary source for the creation of S-123 (Marine Radio Service), S-127 (Marine Traffic Management) and S-131 (Marine Harbor Infrastructure) test datasets. However, often and due to local variations of nautical publication content, these datasets could not be created to fully utilize the complete structure of the data models.

The S-123, S-127 and S-131 data models offer much more elements and content, which are or might not be provided in the respective nautical publications and therefore the data models might not be complete in terms of the whole intention of S-100 based nautical publication services. Additional information, such as for administrative divisions or detailed port information need to be obtained by external sources.

The S-100 based datasets are compilations of several data sources that utilized to complete the requirements of each standard, e.g. S-123 (Marine Radio Services) or S-131 (Marine Harbour Infrastructure). Creating complete up-to-date datasets to produce a certain S-100 based nautical product requires an interaction between several authorities, which might lead to several challenges, especially in the process to updating information.

Creation and maintenance of complete S-100 based datasets raise questions about responsibility and obligations, such as:

* How to obtain a complete and up-to-date dataset?
* Will all port administrations be obliged to create their own S-100 based data sets? That means, will a HO and a port provide individual S-100 based data sets? How should they be administrated?
* Will the port administration be obliged to forward all “raw” data to the hydrographic offices and send updates too?
* How should the responsibility be divided for S-100 based standards between different authorities?
  + Is there a need to adjust national legislative framework to ensure the compliance of S-100 based nautical publications services that fulfill carriage requirements and safe navigation?

## Conclusions

The experiences so far makes it clear that there is an urgent need for improvement of cross-governmental relationships and cooperation between different authorities in order to meet the IHO roadmap at the national level.

It is clear that the hydrographic offices cannot maintain all relevant data in their databases. Each country should defined which responsibilities each administration has in terms of relevant S-100 based nautical publications data products. NIPWG has been made aware of these challenges and is seeking guidance for how to advice its stakeholders best meet these challenges.

IHO member countries need to identify and define the responsibilities in terms of S-100 based nautical publications. The appointed body, which is responsible for the creation of the S-100 based nautical publication service, may need to be determined by legislation. This includes the interaction of data collection and up-to-date data distribution.

## Recommendations

IHO should identify a general way – a guideline – for the relevant and affected authorities, e.g. hydrographic offices and national agencies, on the creation of datasets, and how to identify the best organization to provide data services to ensure the best possible overall service for the end user.

## Justification and Impacts

All parties in the creation of S-100 services must be made aware that closer cooperation is required. The amount of data exchange will increase. The HOs might be requested to adapt their cooperation agreements with data source providers, such as for example harbours and other national maritime authorities, accordingly. On the other hand these authorities and administrations need to make sure that a continuous flow of complete, correct and up-to-date data are forwarded to the producer / creator of the respective S-100 based nautical publication service in terms of an agreed way of data distribution.

It needs to be highlighted and considered that not only a HO should be made responsible for the complete topic of S-100 based nautical publication services.

## Action Required of HSSC

The HSSC is invited to:

a. note this paper

b address the challenge to IHO member states to encourage them to establish a guideline for the creation of relevant S-100 based nautical publication services

c Recommend to the IHMA that its members be requested to provide their data to the relevant national authority.

d Consider if other relevant international organisations should be contacted.