

## Paper for Consideration by NIPWG

### [ProdSpec Catalogue of Nautical Products (S-128)]

<b>Submitted by:</b>	Republic of Korea (KHOA)
<b>Executive Summary:</b>	This paper outlines matters to be considered and activities required for developing S-128.
<b>Related Documents:</b>	S-100
<b>Related Projects:</b>	S-11 Part B INTogIS project, e-Navigation MSP

### Introduction / Background

The NIPWG1 discussed a need for an S-100 based product specification on catalogues of nautical products. The NIPWG Chair suggested developing a new product specification at the HSSC7, thus the HSSC assigned a number 'S-128' to this product specification. This paper outlines the progress of discussion on S-128 and matters to be considered and activities required by the NIPWG for developing S-128.

### Analysis/Discussion

#### Progress of discussion on S-128

At the NIPWG1 held in Monaco in mid-2015, the ROK suggested developing an S-100 based product specification on catalogues of nautical products. Having recognised the need to exchange catalogues of nautical products between hydrographic offices as well as to develop a product specification from an e-Navigation perspective, the NIPWG agreed to propose developing a new product specification to the HSSC7.

The NIPWG Chair participated in the HSSC7 held in Busan in November 2015 and proposed developing a new product specification on catalogues of nautical products. Therefore the HSSC assigned a number 'S-128' to this product specification.

#### Matters to be considered when developing S-128

S-128 is a product specification on exchanges of catalogues of nautical products. For its development, it seems necessary to clarify the definition of nautical products mentioned in the title of the specification. Nautical products can be classified into NP1, NP2 and NP3 depending on types of production. If S-128 were to include NP3 only, it could be used only when the development progress of S-XXX and production system for S-100 based products of each hydrographic office were settled.

Nevertheless, there is still a need to exchange catalogues of nautical products including INT charts. Paper-based and S-100 based nautical products will very likely be used concurrently for a while as is the case with S-57 and S-101.

In other words, it seems reasonable to design S-128 into a comprehensive structure which can apply all nautical products regardless of production types, not just limiting to NP3 and using it as a means of exchanging current catalogues of nautical products. It is also necessary to discuss at the NIPWG2 how S-128 can apply future S-10X products when they are developed.

Outlined in Table 1 are potential catalogues of nautical products which can be included in S-128. Developing a comprehensive product specification can be considered, taking into account various nautical products, S-XXX, e-Navigation, etc.

Table 1. Potential catalogues of nautical products

Classification	Products
NP 1	Paper chart, ENC, pilot, list of lights, tide table, current table
NP 2	Digital list of lights, digital radio signals, TotalTide
NP 3	S-101, S-102, S-111, S-112, ... ( <a href="http://www.iho.int/iho_pubs/standard/S-100_Index.htm">http://www.iho.int/iho_pubs/standard/S-100_Index.htm</a> )
e-Navigation	MSP (Maritime Service Portfolio) Services

There are no cases so far where electronic exchanges of catalogues of nautical products have been made, however the INTOGIS project, co-run by the IHB and the ROK, could be used as a reference. Figure 1 shows the database schema of the INTOGIS project for managing INT charts.

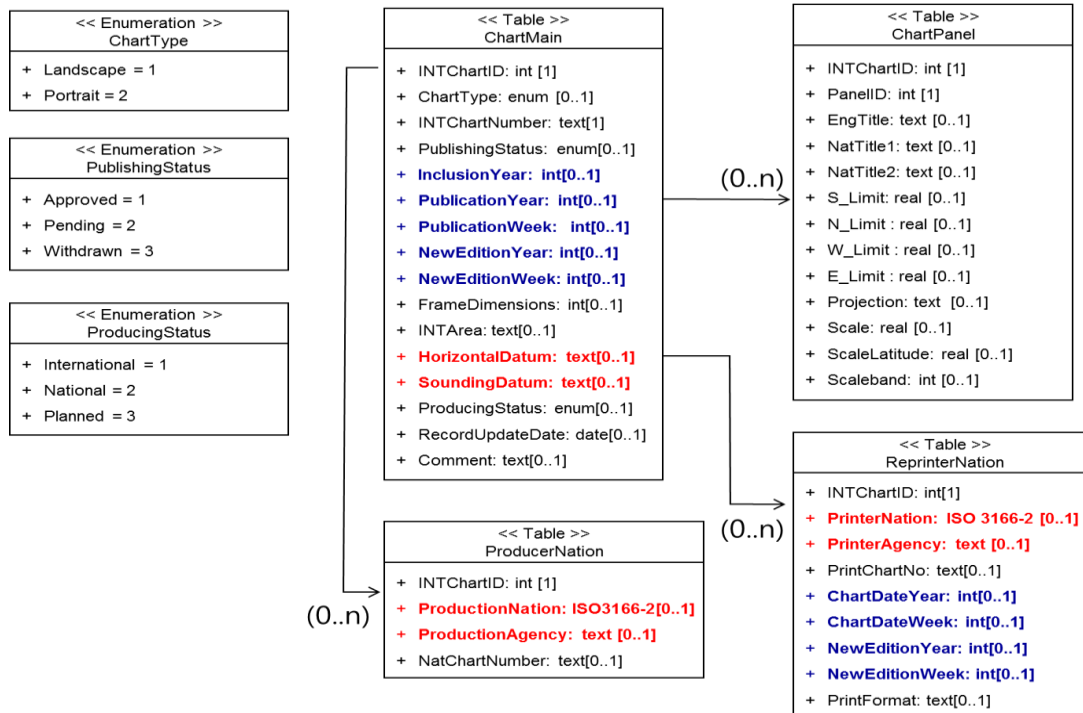


Figure 1. Database schema of INTOGIS project between IHB and KHOA

### Activities required for S-128

S-128 is a product specification aimed at exchanging catalogues of nautical products and it will be simpler and clearer than S-12X developed by the NIPWG. Following activities are expected according to the procedure for developing S-XXX identified through S-100 based specifications.

#### << Analysis of requirements for S-128 and setting the extent >>

- Review nautical products
- Analyse requirements for developing S-128
- Set the extent of S-128

#### << S-128 establishing stage >>

- Create a sample source data (document) including all nautical products
- Establish and review the application schema
- Create a feature catalogue
- Create a portrayal catalogue
- Create a DCEG
- Create a product specification document

#### << S-128 validating stage >>

- Create a test procedure and scenario for validating S-128
- Create test data according to the application schema and the feature catalogue
- Validate S-128 data using S-100 testbed
- Write a brief report on the result of validation and revise S-128 as appropriate

Note: FOR REASONS OF ECONOMY, DELEGATES ARE KINDLY REQUESTED TO BRING THEIR OWN COPIES OF THE DOCUMENTS TO THE MEETING

<< S-128 review and approval stage >>

- NIPWG to review S-128

The ROK has identified various activities required for developing S-128 as above. The ROK is highly interested in developing it and would like to do so in cooperation with NIPWG Member States. The ROK wishes to take actions based on the discussion result from the NIPWG2 and will report the progress to the NIPWG3.

**Action Required of NIPWG**

The NIPWG2 is invited to:

- a. note the progress of discussion on S-128.
- b. provide recommendations on considerations for developing S-128.