Paper for Consideration by S-100TSM

Metadata Register Concept

Submitted by:	Republic of Korea (KHOA)
Executive Summary:	This paper reports on the results of update on S-100 GI Registry
Related Documents:	S-100, S-99
Related Projects:	IHO S-100/S-101 Test Bed Project

Introduction / Background

This paper is a report of metadata register development plan for the new 3rd S-100 GI Registry following the last S-100WG3 and TSM5.

Analysis

Metadata Concept for S-100/10X

As the 3rd S-100 GI Registry development has progressed in earnest, there has been a need for a new metadata register to manage features and information of several S-10X hydrographic product metadata. According to the 3rd S-100 GI Registry, the KHOA research team has been developed metadata register to upload and manage that necessary information.

The S-100 standard provides metadata of specification for describing, validating and exchanging metadata about geographic datasets commonly produced by hydrographic organizations. Its purpose is the creation of metadata records that provide information about the identification, spatial and temporal extent, quality, application schema, spatial reference system, and distribution of digital geographic data. It is applicable to the cataloguing of datasets, clearinghouse activities, and the full description of geographic and non-geographic resources

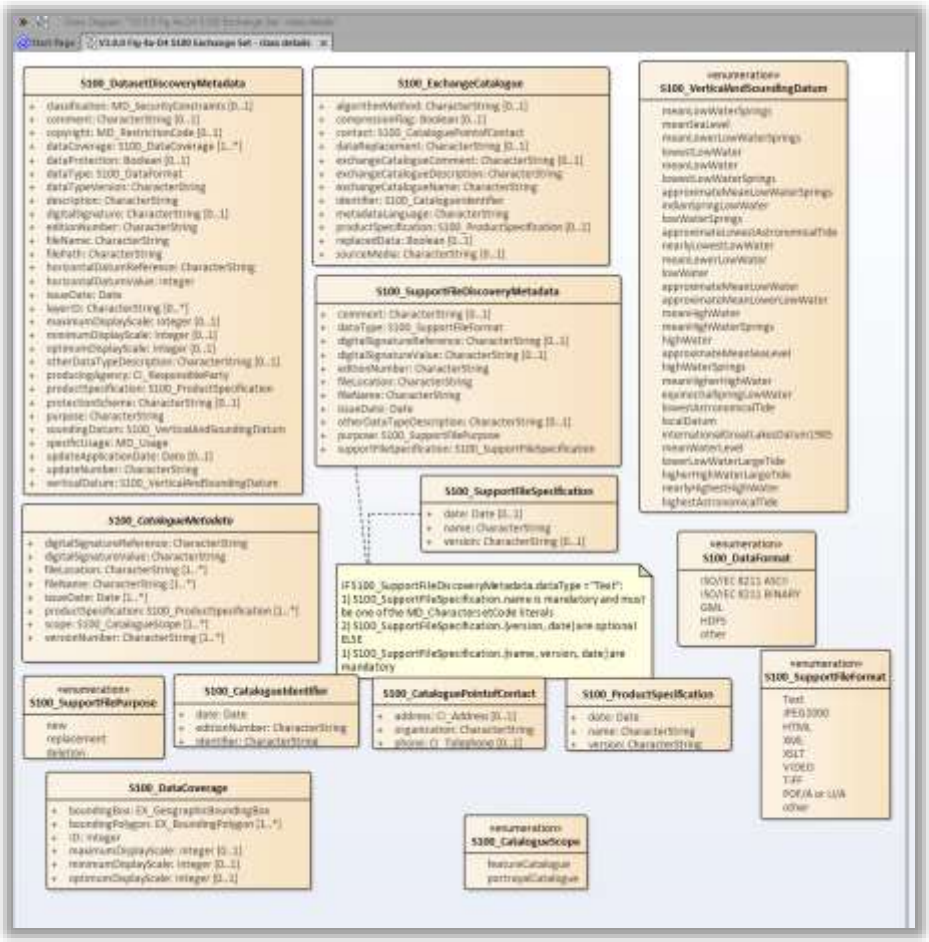

Figure 1. S-100 Metadata Exchange Set

Design Model of Metadata Register for S-100 GI Registry

Metadata was defined as 4 types analysis of metadata UML and structure. It can be presented as below;

- Meta Class
- Meta Element
- Meta Codelist
- Meta Enumeration

For using metadata, users should connect to concept register of S-100 GI Registry to register their metadata feature information as concept. By Following the approval process of registry, concept of metadata feature will be registered to concept register. In this step, user can load the concept and transfer it as meta feature in metadata register. During metadata approval process, user should select the metadata type. When the metadata has been registered to registry, it can be presented in GI REGISTERS page.

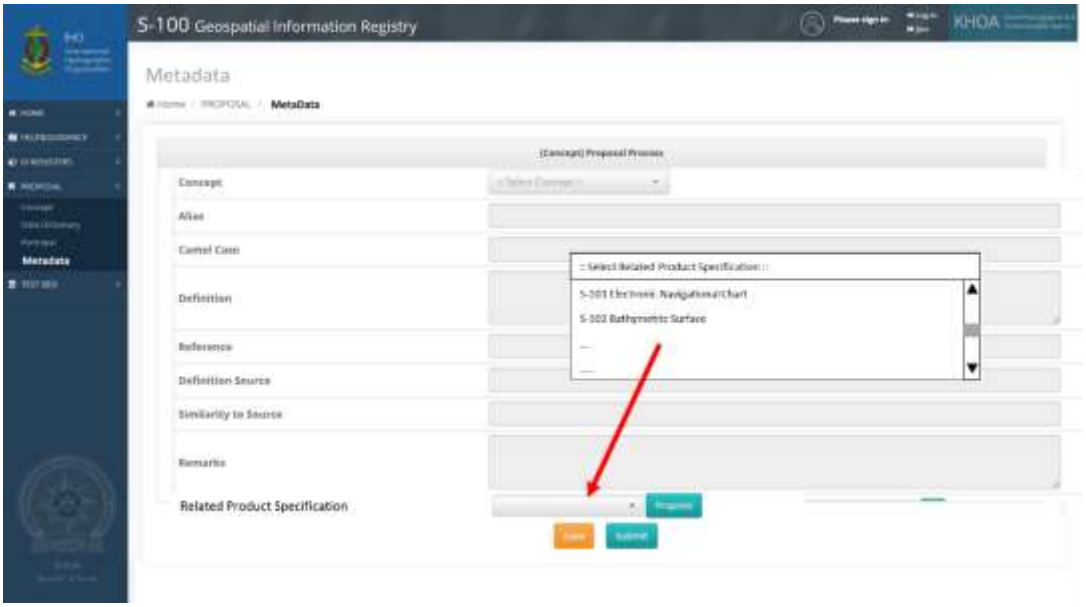

Figure 2. Draft Design of Metadata Register

As metadata is unique meta information for each product specification and standard, proposer in metadata register is defined as maritime stakeholders like S-10X PS developer and register manager.

Discussion/Conclusions

The concept of metadata is a new item in IHO S-100.10X filed, a bit of discussion matters has been occurred.

1) Metadata feature should be registered as concept to use metadata register.(Various of metadata features use same feature, name, definition which is already registered in concept register)
2) Metadata feature has been categorized as 4 types; Meta Class, Meta Element, Meta Codelist, Meta Enumeration.
3) As metadata structure(binding information) is managed by PS schema, only concept and feature will be managed in metadata register.
4) Coverage of metadata register management; Data type(integer/BLOB/string), multiplicity.

Action Required of S-100TSM

The S-100TSM6 is invited to:

a. Note the progress reported in this paper
b. Need to discussion subject in this paper