Paper for Consideration by TSM10

Basic Portrayal Catalogue

Submitted by:	Republic of Korea (KHOA/KRISO/Bluemap)
Executive Summary:	In accordance with the S-100WG8 decision, the BPC(Basic Portrayal Catalogue) and test in the S-100 Viewer is described and how to use the BPC is proposed.
Related Documents:	S-100 Ed. 5.2.0, S-97
Related Projects:	KHOA S-100 testbed project

Introduction / Background

Depending on the readiness level of S-97, a portrayal catalogue is optional when developing an S-100-based product specification, and in this regard, a portrayal catalogue has not been developed in most S-100 product specifications. It is difficult to test S-1XX dataset due to the absence of a portrayal catalogue.

To support this, the need of a BPC (Basic Portrayal Catalogue) was discussed at the S-100WG8, and according to the S-100WG8 decision, the results of developing the BPC for the Lua/XSLT and way to utilize the BPC is proposed.

Analysis/Discussion

Structure of BPC(Basic Portrayal Catalogue)

The BPC consists of color, symbols, fonts and rules with portrayal catalogue as shown below, and actually only contains files in Color profiles, Symbols, Fonts, and Rules for BPC. The BPC is divided into XSLT Rules and Lua Rules.

```
Root ---- (contains the Catalogue named "portrayal_catalogue.xml", and optionally an Alert
Catalogue file)
    |
    |-- Pixmaps (contains XML files describing pixmaps)
    |
    |-- ColorProfiles (contains XML files with colour profiles)
    |
    |-- Symbols (contains SVG files with symbols and CSS2 style sheets)
    |
    |-- LineStyles (contains XML files with line styles)
    |
    |-- AreaFills (contains XML files area fills)
    |
    |-- Fonts (contains TrueType font files)
    |
    |-- Rules (contains files with rules which map features to drawing instructions)
```

Fig. 1. Structure of BPC

Testing BPC in S-100 Viewer

A BPC was developed to portray S-1XX dataset for which portrayal catalogue has not been developed, and divided to XSLT types PC and Lua types PC. To verify the BPC in XSLT rules, the following result was confirmed by combining S-122 FC from IHO GI Registry and test data with the BPC.
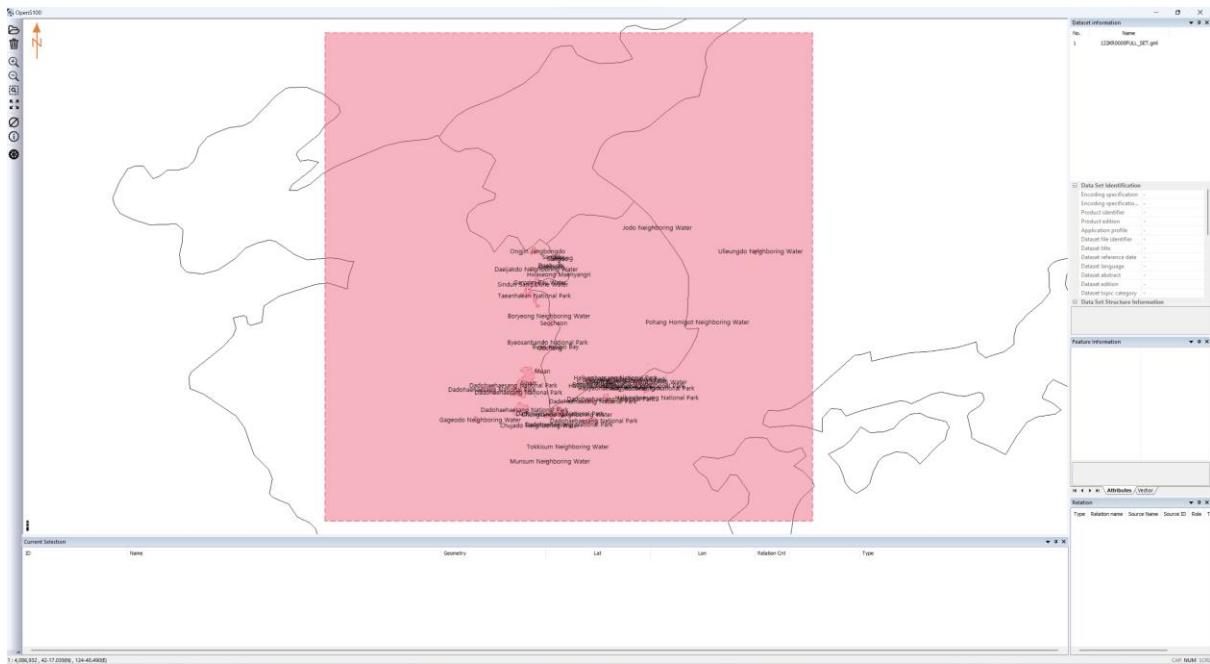
Fig. 2. S-122 MPA dataset with BPC

To verify the BPC in Lua rules, the following result was confirmed by combining S-101 1.1.0 FC and test data with the BPC.
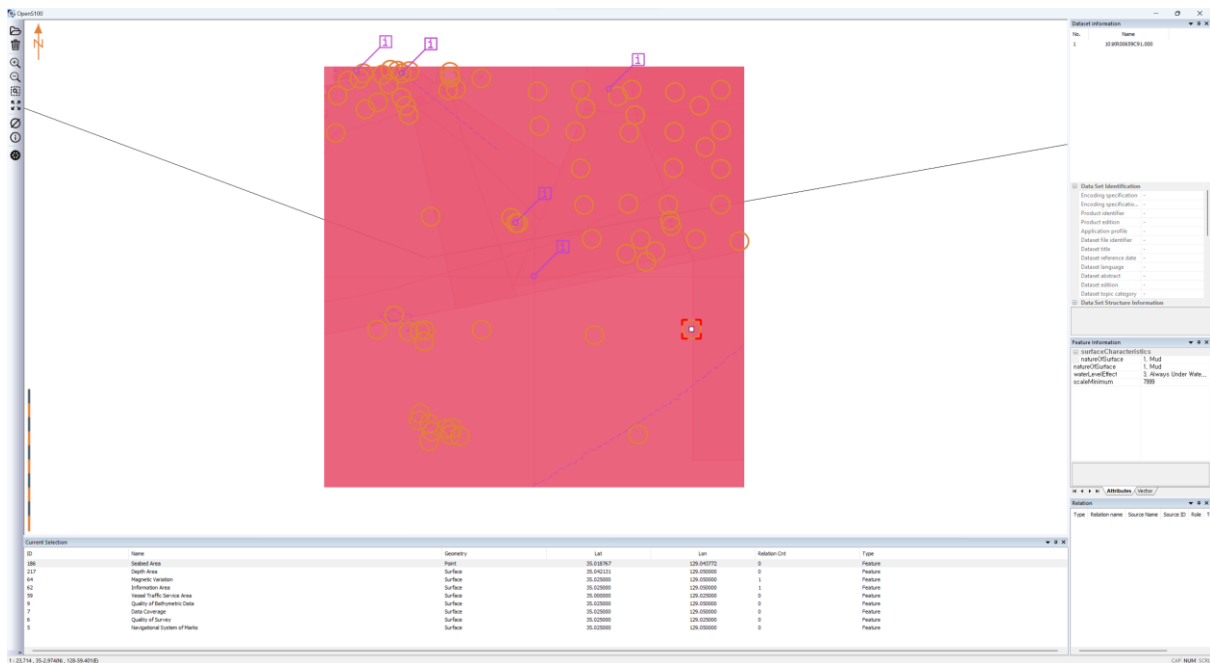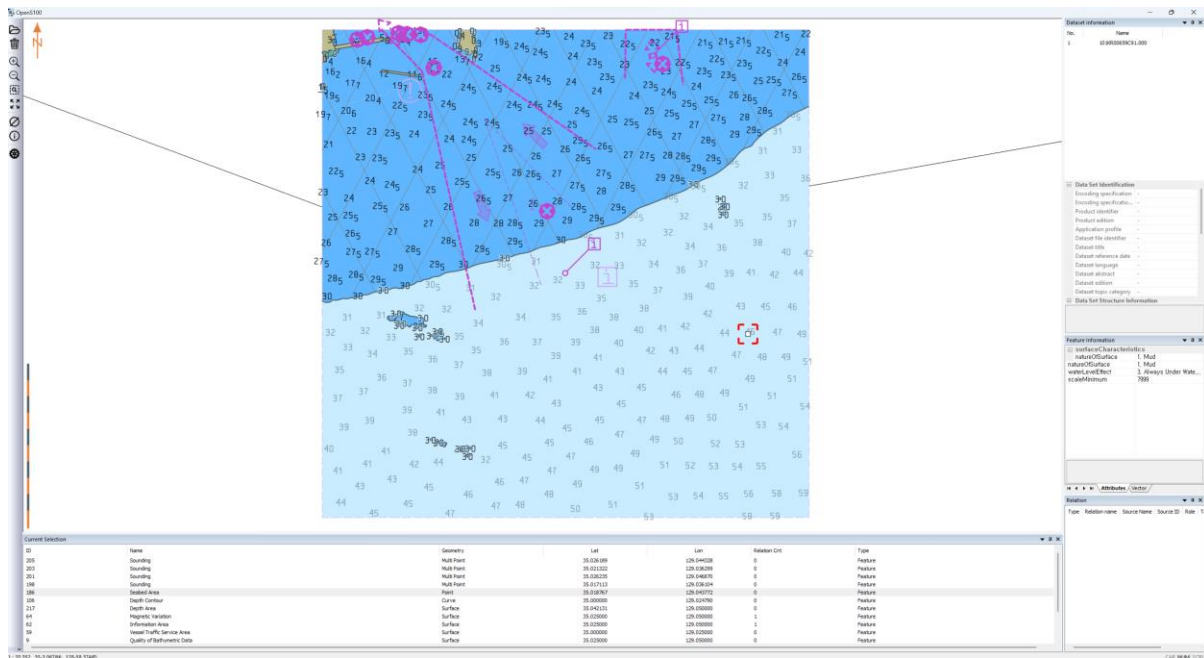

Fig. 3. S-101 ENC with BPC

Fig. 4. S-101 ENC with S-101 PC

How to use BPC

The IHO GI registry includes S-100 Tools and related information used in the development of S-100-based product specifications. The BPC can be registered in the IHO GI Registry for use by PS developer, product producers and users. Meanwhile, in order to support minimum portrayal of test data when developing S-100-based product specifications, text must be added to the relevant sections of the S-97 so that the BPC can be included in the S-100 product specification package.

- (A-6.2.20 Portrayal) In order to check the minimum portrayal in S-100 applications, the BPC provided by IHO can be included in the product specification package or the download location of IHO GI Registry can be indicated.
- (B-16 Portrayal Catalogue) When developing the S-100 product specification, the portrayal catalogue is optional. If necessary, the BPC provided by IHO can be included or the download location of IHO GI Registry can be indicated.

Recommendations

It's recommended to approve the BPC (XSLT, Lua) developed to support the minimum portrayal of the S-100 product specification for which a portrayal catalogue has not been developed, and the IHO Secretariat is invited to post the PBC in the IHO GI Registry.

Action Required of S-100WG
The TSM10 is invited to:

a. approve the basic portrayal catalogue