

Paper for Consideration by TSMAD28
Progress of S-100 Feature Catalogue Builder

Submitted by:	Republic of Korea (ROK)
Executive Summary:	TSMAD27 decided to include the ROK S-101 test bed program as part of the TSMAD S-101 test plan strategy and ROK is developing the S-100 Feature Catalogue Builder with consultation of TSMAD Chair Group. This paper informs on the progress of S-100 Feature catalogue builder
Related Documents:	IHO S-100, S-101, S-100 Test Plan Strategy
Related Projects:	S-57/S-101 Converter Project, Portrayal Catalogue Builder Project

Introduction / Background

1. ROK presented the result of ROK S-100 research projects at HSSC5 in November 2013 in China and TSMAD27 in December 2013 in Monaco. TSMAD27 decided to include the ROK S-101 test bed program as part of the IHO S-101 test plan strategy. The development of S-100 Feature Catalogue Builder (FCB) has been identified after discussion between ROK, TSMAD Chair Group and IHB during the TSMAD27 meeting.

2. ROK has volunteered to modify the national prototype feature catalogue builder to build the first iteration of the S-101 feature catalogue. This paper informs on the progress of S-100 Feature catalogue builder.

Design of S-100 Feature Catalogue Builder (FCB)

3. ROK developed the prototype S-100 Registry and S-100 Feature catalogue builder to study the S-100 standard technology as Fig. 1 and planed S-10X Use Case research using the registry and builder.

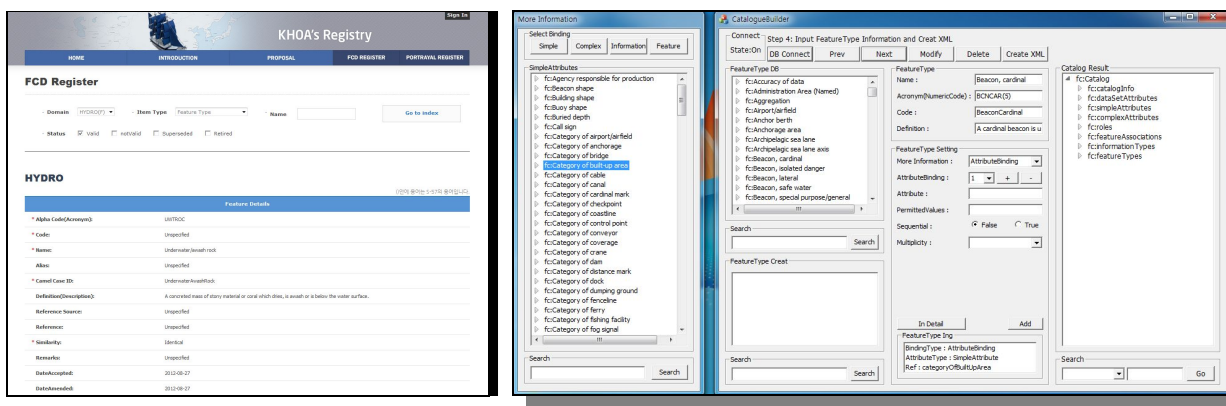


Fig. 1 Prototype Registry and FCB of ROK

4. ROK experienced the process and details for Feature Catalogue Builder development by the national research and decided that dialog typed GUI(Graphic User Interface) may not cover the structural details required by S-101 feature catalogue schema. The conversion of GUI system from dialog to SDI(Single Document Interface) was proposed. Major benefits on the SDI GUI is like below:

- Application of docking function about detailed menu of Feature Catalogue information.
- Easy apply to Feature Catalogue schema modification and user requests without S-100 FCB GUI modification
- Stepwise checking the Feature Catalogue binding results using web browser function.

5. ROK adopted the SDI to take major benefits for the development of S-100 feature catalogue builder, which appears as Fig. 2. This standalone software has 9 part of major functions.

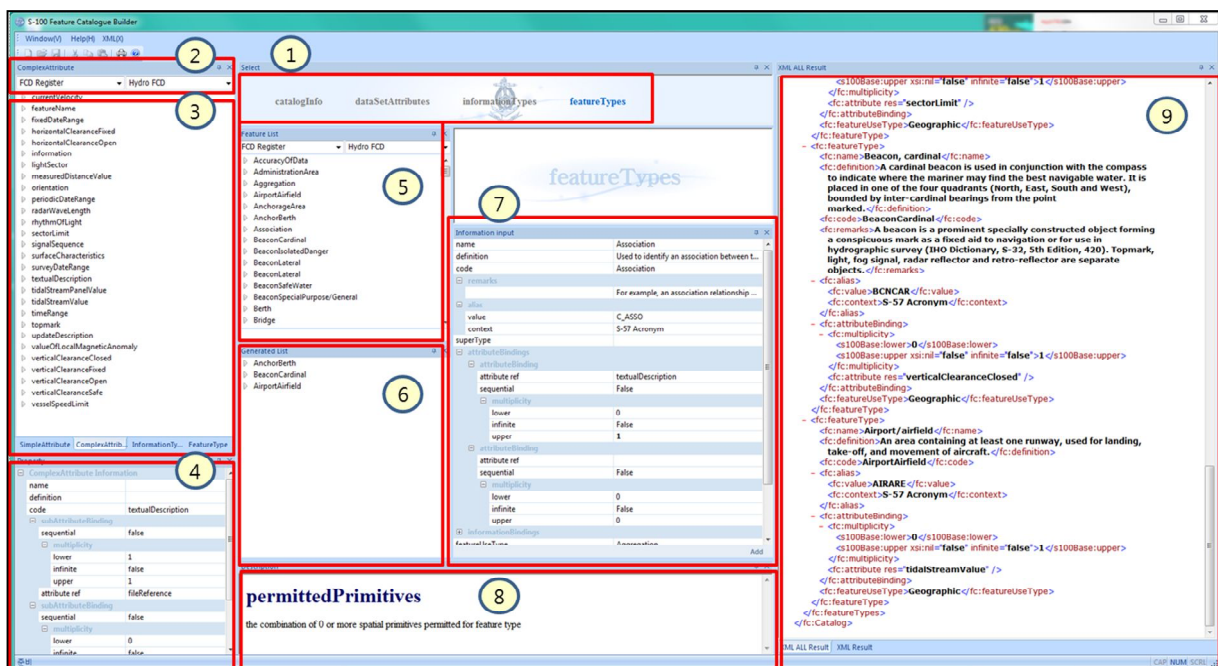


Fig. 2 User interface of S-100 Feature Catalogue Builder

- Part 1: Feature Catalogue consists of 4 steps. (1) catalogInfo → (2) dataSetAttributes → (3) informationTypes → (4) featureTypes
- Part 2: Selection of the Register and Domain from S-100 Registry Database
- Part 3: List of Simple Attribute, Complex Attribute, Information Types and Feature Types could be presented by sorting and filtering the Register and Domain.
- Part 4: Detailed information of Register DB table could be presented by selecting the value in Part 3
- Part 5: The list of the information types and feature types to include in Feature Catalogue.
- Part 6: Presentation the temporal list of binding results on information types and feature types
- Part 7: Presentation the detailed contents of information types and feature types
- Part 8: Explanation for each content of Feature Catalogue.
- Part 9: Output of stepwise results of Feature Catalogue in XML type.

Major schedule of S-100 FCB

6. ROK and TSMAD Chair Group agreed to complete the S-100 FCB function and propose S-101 Feature Catalogue draft until February, 2014. However this project has been delayed due to the adjustment of S-100 FCB development schedule and supplement of S-100 Registry DB Table. There is the new proposed schedule of S-100 FCB tasks:

< Current task results>

- Development of Function for creating the S-101 Feature Catalogue in the S-100 Feature catalogue builder
- Compilation of S-101 Feature Catalogue according to the DCEG (S-101 Feature Catalogue Version 0.8.1)

<April, 2014>

- Send the S-101 Feature Catalogue draft to S-101 Converter Project Team and Portrayal Catalogue Builder Team
- Saving and editing function of S-10X Feature Catalogue results
- Update version of S-101 Feature Catalogue which is reflected the final DCEG
- Adoption of additional requirements for operating the S-100 FCB

<May, 2014>

- Development of the connection technology module between S-100 FCB and IHB S-100 Registry
- Proposal of draft guideline for S-100 FCB user and procedure.

Action Required of TSMAD/DIPWG

The TSMAD/DIPWG is invited to:

- a. note the progress on the S-100 Feature Catalogue Builder
 - b. provide recommendations in order to make a draft guideline for using the S-100 Feature Catalogue Builder and to further development.
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