Paper for Consideration by S-100TSM

Progress Report on S-101 Feature Catalogue 1.0.0

Submitted by:	Republic of Korea (KHOA)
Executive Summary:	This paper reports on the results of S-101 FC 1.0.0 generation
Related Documents:	S-101, S-100
Related Projects:	IHO S-100/S-101 Test Bed Project

Introduction / Background

This paper is a report of S-101 FC(Feature Catalogue) creation following the S-101 product specification 1.0.0. In this paper, creation result of S-101 FC and issue will be introduced.

Analysis

Overview of S-101 FC Generation

The new S-101 FC 1.0.0 was created to reflect the changed DCEG document according to 4.0 revision of S-100 standard and S-101 product specification 1.0.0 document. The new S-101 FC was created as 2 versions which was based on the S-100 3.0 version and the 4.0 and validated by schema and XML validation tool.
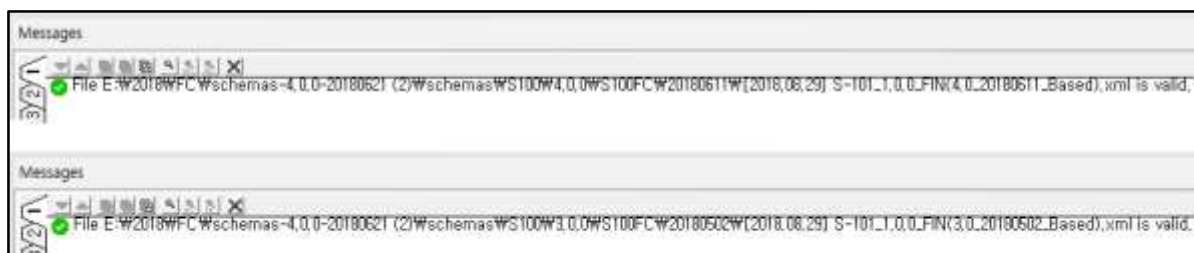

Figure 1. Validation Results by S-100 Schema (3.0, 4.0)

Generation Results of S-101 FC

As the truncated date which is a data type of the simple attribute newly introduced in S-100 4.0 and S-101 PS 1.0.0, the updated data type was also applied to the new S-101 FC. ROK team improved the new S-101 FC errors through continuous cooperation with IHO and S-100/101 stakeholders. Results of S-101 FC creation can be found at attached excel file.

Discussion/Conclusions

The following subjects are requested to discuss for S-101 FC creation:

1) Alias and Alpha code which was used in S-57 ENC are managed separately in the current S-100 GI Registry DB. It should be combined.

2) Information type spatial quality must be bound using Spatial Association. However, the FC model doesn't provide the means for capturing the rule for spatial data quality as stipulated in S-100 3-6.5.3. Therefore, all that can be done at this time is to annotate the FC with the information and include the information type(s) that covers the spatial attributes. S-101 FC has annotation for spatial quality and association.

3) The S-10X DCEG document requires the association type or the association type when making the document. At present, in order to know whether the association is an information association or a feature association, it is necessary to confirm whether the association is a Feature type or an Information type by comparing the objects. If the association type is clearly identified, some improvement of the DCEG document structure is required (or the crane of the snapshot, the supported by matrix is deleted) because the association type is known as a feature association or an information association.

Feature/Information associations							
Type	**Association Name**	**Association Ends**					
		Class	**Role**	**Mult**	**Class**	**Role**	**Mult**
Comp	Structure/Equipment	**Crane**	Supported by	0,1	**Daymark, Fog Signal, Light Air Obstruction, Light All Around, Light Fog Detector, Light Sectored, Physical AIS Aid to Navigation, Radar Transponder Beacon, Retroreflector, Signal Station Traffic, Signal Station Warning**	Supports	1,*

Figure 2. Example of S-101 DCEG

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