

Paper for Consideration by S-101PT5**[KHOA S-100 Testbed Report]**

Submitted by:	Republic Of Korea (KHOA)
Executive Summary:	This paper describes update of KHOA S-100 Viewer
Related Documents:	S-100WG4-8.4, TSM7-6.2
Related Projects:	S-100 Test Bed Project

Introduction / Background

KHOA has been developing the S-100 Viewer to support Phase 3 (Simple Viewer) and Phase 6 (Shore based ECDIS) in the IHO S-100 test framework and working with the ECDIS OEM to advance the Shore based ECDIS. The KHOA testbed consists of Viewer, ECDIS and Online Viewer. The major progress of KHOA testbed was reported at each S-100WG, TSM and S-101 PT meeting. This document describes updates of KHOA S-100 Viewer.

Analysis/DiscussionUpdate of Lua Scripting Reference

KHOA applied the latest version of S-101 portrayal catalogue including Lua scripting on the viewer and compared the display results with the S-57 TDS. Several issues were recognized as follows;

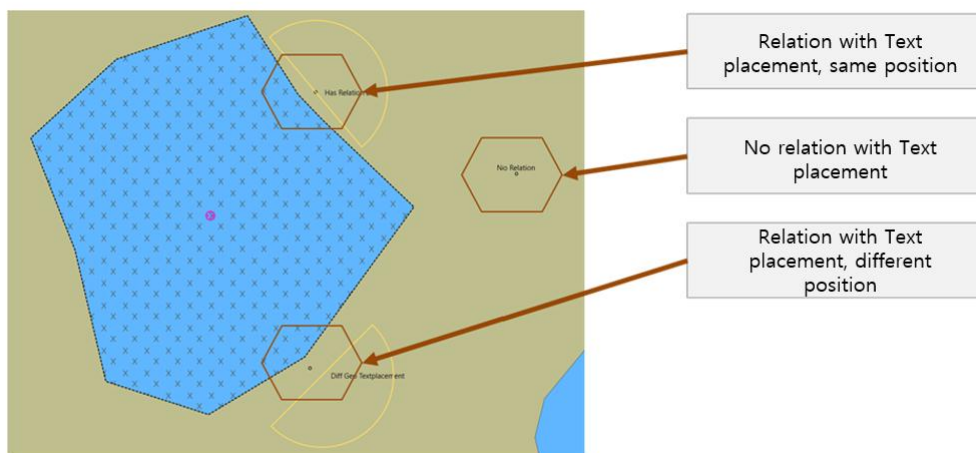
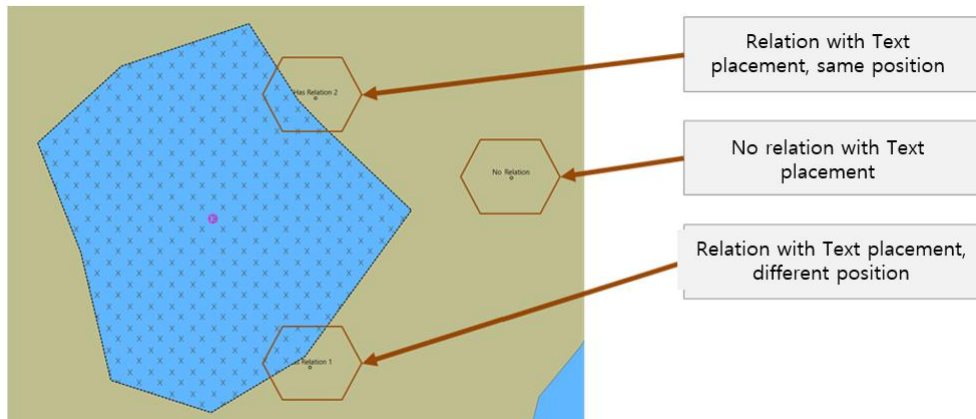
1. Foul Ground feature is displayed as unhappy symbol
2. feature.restriction in the RESTRN01 as CS(Conditional Symbology) displayed same symbol for undefined and unknown
3. There are two symbols in order to display 'Deep Water Route Part' and 'Traffic Separation Scheme Lane Part'. One is displayed with Rotation, the other is without Rotation. However, both are displayed with Rotation in the S-101 portrayal catalogue.

In order to solve the problems, Foul Ground is applied if Category of restricted area is seven. feature.restriction were defined different from symbol for unknown and undefined. For the rotation of two symbols, it was revised to apply Rotation value in the Lua rule.

Application of Text Placement

KHOA tried to implement the Text placement proposed at TSMAD24/DIPWG4 10-10A. Current Lua was revised to display the Text and Flip Bearing

1. Text Placement – Add Lua rule
2. Development of Flip bearing function
3. FC – 'Text Placement' : Relation with all features
4. FC – Add textOffset



Updates of KHOA S-100 Viewer

KHOA S-100 Viewer was developed to enable S-101 portrayal catalogue and testing S-12X dataset. The major improvements are as follows

1. Due to the change of Graphics API, the performance was greatly improved
2. The errors found in the S-100 Viewer executions were fixed. New functions for editing S-101 and S-12X dataset (Vector type – GML)

Release of KHOA S-100 Viewer

KHOA has been improving the S-100 Viewer with testing S-10X TDS and FC/PC. The issues we have faced are fixed and reflected in the S-100 viewer.

KHOA is considering to release the S-100 viewer for interested member states and stakeholders. The KHOA S-100 Viewer is capable of testing and editing S-10x products and we believe it will reduce the implementation barriers by sharing a measure to see and check their own new data set. The viewer currently only supports the vector encoding like ISO/IEC 8211(S-101) and GML(S-12X). The grid encoding will be available in the next release version. Releasing date and location is not yet decided.

Conclusions

KHOA conducted upgrade of S-100 viewer with Lua scripting and implemented text placement. Releasing the S-100 Viewer is under consideration by KHOA for interested member states and stakeholders in the future.

Recommendations

Request review of updated KHOA S-100 Viewer

Action Required of S-101PT

The S-101PT is invited to:

- a. Note this paper
- b. Discuss the updates of KHOA Viewer reported by this paper