

## Paper for Consideration by S-100WG3

## Harmonization issues on S-10X SVG symbols

<b>Submitted by:</b>	KHOA / IEHG
<b>Executive Summary:</b>	This paper reports on issues of SVG symbols and S-100 Portrayal register.
<b>Related Documents:</b>	S-100, S-101, S-401
<b>Related Projects:</b>	IHO S-100/S-101 Test Bed Project

**Introduction / Background**

The Inland ENC Harmonization Group (IEHG) has been developing S-401 Inland ENC which is based on S-100. As part of the work, the IEHG is producing the S-401 SVG symbols and KHOA is cooperating on solving relevant issues through its running of test bed.

Producing the S-401 SVG symbols involves producing S-101 SVG symbols and additional symbols required for inland fairways in SVG format. This document discusses the draft SVG symbols produced by the IEHG and main issues related to S-101 SVG and S-100 Portrayal Registry.

**Analysis/Discussion****S-401 SVG symbols**

While the IEHG were producing the S-401 SVG symbols and registering them to inland ENC portrayal domain of S-100 Registry, they were faced with an issue which the color and shape of symbols were portrayed differently.

Current S-100 Portrayal Registry applies style sheet (CSS) used in S-101 in order to offer a preview of SVG symbols and their images. While registering S-401 symbols, the IEHG identified an issue which initially proposed color and shape of symbols were differently portrayed on S-100 Portrayal Registry and requested the test bed team (KHOA) to investigate possible solutions.

**Investigation on the S-401 symbols**

Upon the request of the IEHG, KHOA analyzed the S-401 SVG symbols and discovered the following issues:

- 1) CSS used in S-401 and S-101

The format is the same but the color name is different.

```
.sAZUBL{stroke:#00A9FF}
.fAZUBL{fill:#00A9FF}
.sBLACK{stroke:#000000}
.fBLACK{fill:#000000}
```

```
.layout { display: none} /* used to control visibility of symbolBox, svgBox, pivotPoint (none or inline) */
.symbolBox { stroke: black; stroke-width:0.04; } /* show the cover of the symbol graphics */
.svgBox { stroke:blue; stroke-width:0.04; } /* show the entire SVG cover */
.pivotPoint { stroke:red; stroke-width:0.64; } /* show the pivot/anchor point, 0,0 */
.sl { stroke-linecap:round;stroke-linejoin:round} /* default line style elements */
.f0{fill:none}
.sAZUBL{stroke:#00A9FF}
.fAZUBL{fill:#00A9FF}
.sBLACK{stroke:#000000}
.fBLACK{fill:#000000}
```

**S-401 CSS**

```

.layout {display:none} /* used to control visibility of symbolBox, svgBox, pivotPoint (none or inline) */
.symbolBox {stroke:black;stroke-width:0.32;} /* show the cover of the symbol graphics */
.svgBox {stroke:blue;stroke-width:0.32;} /* show the entire SVG cover */
.pivotPoint {stroke:red;stroke-width:0.64;} /* show the pivot/anchor point, 0,0 */
.sl {stroke-linecap:round;stroke-linejoin:round} /* default line style elements */
.f0 {fill:none} /* no fill */
.sNODTA {stroke:#93AE8B}
.fNODTA {fill:#93AE8B}
.sCURSR {stroke:#E38039} /* sRGB line colour for colour token CURSR */
.fCURSR {fill:#E38039} /* sRGB fill colour for colour token CURSR */
.sCURBK {stroke:#000000}

```

### S-101 CSS

- 2) Comparing S-401 SVG with S-101 SVG
  - S-401 SVG uses vector information of a different format.
  - S-401 SVG Vector Tag : <g>, <polygon>, <polyline>, <circle>
  - S-101 SVG Vector Tag : <rect>, <path>, <circle>

## Discussion

Having reviewed the two issues above, KHOA proposes the following:

- 1) Color names of CSS files do not match.
  - Option 1: When S-100 based product specifications use the same SVGcss files
  - Option 2: When domains or product specifications use different SVGcss files

Consideration) Maintenance of CSS and interoperability with S-100 Portrayal Registry

- 2) VectorTag does not match within SVG symbols.
  - KHOA produced S-401 symbols and solved the issue by making reference to SVG profile in S-100 3.0.0

## Recommendations

There is a chance the issues discovered while producing S-401 SVG could be repeated when producing S-10X SVG symbols in other domains. Thus KHOA proposes to discuss the following and find solutions to prevent such issues:

To consider proposed Option 1 and 2 or other solutions and effective use and management of CSS by making it interoperable with S-100 Portrayal Registry.

## Conclusions

While the IEHG were producing the S-401 SVG symbols to develop S-401 and registering them to S-100 Portrayal Registry, they were faced with the CSS and SVG issue. KHOA investigated the issue accordingly and proposes to discuss its solution to use and manage CSS by making it interoperable with the Registry.

## Action Required of [S-100WG and S-101PT WG]

The S-100WG are invited to:

- a. **note** this paper
- b. **discuss** the recommendations