**TSM7-5.3b**

**Title: CoverageFill Colour Interpolation**

S-100 Maintenance - Change Proposal Form

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| --- | --- | --- | --- |
| **Organisation** | NIWC | **Date** | 8/16/2019 |
| **Contact** | David Grant | **Email** | David.Grant1@navy.mil |

Change Proposal Type *(Select only one option)*

|  |  |  |
| --- | --- | --- |
| 1.Clarification | 2.Correction | 3.Extension |
|  | X |  |

Location (*Identify all change proposal locations)*

|  |  |  |  |
| --- | --- | --- | --- |
| S-100 Version No. | Part No. | Section No. | Proposal Summary |
| Version 4 | 9  9a | 12.7.4.3  11.2.2.7 | Describe colour interpolation method  Describe colour interpolation method |

Change Proposal

Add the following to the Part 9 description of the *endColor* attribute of CoverageColor:

|  |  |  |
| --- | --- | --- |
| ***Role Name*** | ***Name*** | ***Description*** |
| Class | CoverageColor | A class to fill a Coverage with color |
| Attribute | penWidth | Optional pen width to apply for dot color used for discrete points |
| Role | startColor | The color to assign to the matching range or to use as the start point in a color ramp when ‘endColor’ is defined |
| Role | endColor | The color to use as stop point in a color ramp. The range of values is spread linearly across the range of colors from ‘startColor’ to ‘endColor’ to produce a gradient effect.  The start and end colours shall be converted to the CIE xyL color space and each component (i.e. x, y, L and transparency) shall be interpolated individually before converting back to sRGB for display. |

Add the following to the Part 9a description of the endColor attribute of CoverageColor:  
  
**CoverageColor:*startToken,startTransparency[,endToken,endTransparency][,penWidth]***

…

*endToken,endTransparency*

If given, the colour to use as the stopping point in a color ramp. The range of values is spread linearly across the range of colours from ‘startColor’ to ‘endColor’ to produce a gradient effect.

The start and end colours shall be converted to the CIE xyL color space and each component (i.e. x, y, L and transparency) shall be interpolated individually before converting back to sRGB for display.

…

Change Proposal Justification

As presented in S100WG4-8.2, the color interpolation method should be explicitly defined to prevent inconsistent implementation.

What parts of the S-100 Infrastructure will this proposal affect?

S-100 Feature Concept Dictionary Interface or Database

S-100 Portrayal Register

S-100 Feature Catalogue Builder

S-100 Portrayal Catalogue Builder

S-100 UML Models

**Please send completed forms and supporting documentation to the secretary S-100WG.**