

**Title: Add Portrayal CRS for LineSymbol**

**S-100 Maintenance - Change Proposal Form**

<b>Organisation</b>	NIWC	<b>Date</b>	9/27/2022
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**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
5.0	9 9A	9-12.4.1.4 9a-11.2.2.3	Add portrayalCRS to LineSymbol.crsType Add PortrayalCRS to LineSymbol crsType

**Change Proposal**

Add the portrayal CRS to the CRSTypes which are allowed when specifying a LineSymbol.

**Change Proposal Justification**

S-101 desires an S-100 portrayal extension supporting upright placement of contour labels along depth contours.

Currently, symbols placed along curve geometries must be oriented with respect to the tangent of the curve at the symbols pivot point.



**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
- S-100 GitHub Schemas

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

**9-12.4.1.4 LineSymbol**

Role Name	Name	Description		Type
Class	LineSymbol	A symbol placed along a line in a repeating pattern	-	-
Attribute	reference	A reference to an external definition of the symbol graphic. This refers to an identifier of a Catalogue item	1	string
Attribute	rotation	The rotation angle of the symbol. The default value is 0	1	double
Attribute	scaleFactor	The scale factor of the symbol. The default is 1.0	1	double
Attribute	crsType	The type of the CRS where the symbol has to be transformed to. Possible values are localCRS, lineCRS, and portrayalCRS.	1	CRSType
Attribute	position	The position of the symbol measured from the start of the repeating interval, along the x-axis of the line CRS (units in mm)	1	double

**9a-11.2.2.3 Line Style Commands**

[...]

**LineSymbol:reference,position[,rotation[,crsType[,scaleFactor]]]**

Specifies the use of a symbol for a single subsequent *LineStyle* command. Can be repeated to specify that multiple symbols apply to the *LineStyle* command.

- reference* A reference to an external definition of the symbol graphic. This refers to an identifier of a portrayal catalogue item.
- position* The position of the symbol measured from the start of the repeating interval, along the x-axis of the line CRS (units in millimetres).
- rotation* The rotation angle of the symbol.
- crsType* The type of the CRS where the symbol has to be transformed. Possible values are LocalCRS, LineCRS, and PortrayalCRS.
- scaleFactor* The scale factor of the symbol.

**Applicability:** *LineStyle*