

Title:

S-100 Maintenance - Change Proposal Form

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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
3.0.0	5	5-A20	Need to align the Feature Catalogue with the rest of S-100 and remove arcByCenterPoint and circleByCenterPoint

Change Proposal

See Paper below

Change Proposal Justification

See Paper Below

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.

Introduction / Background

In S-100 Part 5 - Feature Catalogue the list of geometric primitives that are allowed for a feature type contains two values that are actually specializations of a geometric type.

Line geometry in S-100 is based on the type GM_OrientableCurve. The geometry itself is stored in segments. Each segment carries the appropriate number of coordinates and an interpolation method.

Analyzes

On the feature catalogue level there is a mechanism to define if a feature type is allowed to be instantiated as a point, line, or area object. It should not be restricted to any interpolation methods.

In the current version of S-100 Part 5 there are two values in the list of geometric primitives that are actually not geometric primitives but specializations of a line primitive.

- arcByCenterPoint
- circleByCenterPoint

The inconsistency may come from the GML encoding where circles and arcs are separate encoding items.

Recommendations

To keep the model consistent with other parts of S-100 the following values should be removed from the model of the feature catalogue.

- arcByCenterPoint
- circleByCenterPoint

Note that this requires changes to the UML diagram as well as to the table 5-A-20.

Additionally in the remarks column of the table 5-A-20 the value GM_Curve should be changed to GM_OrientableCurve as this is the base class for linear geometry.

For the same reasons the value GM_Surface should be changed to GM_OrientableSurface.

Action Required of S100WG

The S-100 working group is invited to:

- note the paper
- discuss the recommendations
- take action on each recommendation described herein