Title: Provide Vertical CRS vice Vertical Datum in Dataset Discovery Metadata

S-100 Maintenance - Change Proposal Form

Organisation	NIWC	**Date**	2/5/2021
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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 draft	4a	Appendix 4a-D	Modify *S100_DatasetDiscoveryMetadata* to provide a vertical and sounding CRS vice providing a vertical and sounding datum.

Change Proposal

S100_DatasetDiscoveryMetadata

Role Name	Name	Description	Mult	Type	Remarks
Attribute	vertical~~Datum~~CRS	Vertical ~~Datum~~CRS of the entire dataset	0..1	S100_VerticalAndSounding~~Datum~~CRS	
Attribute	sounding~~Datum~~CRS	Sounding ~~Datum~~CRS of the entire dataset	0..1	S100_VerticalAndSounding~~Datum~~CRS	

S100_VerticalAndSoundingCRS

Role Name	Name	Description	Mult	Type	Remarks
Class	S100_VerticalAndSoundingCRS	Defines a vertical CRS	-	-	-
Attribute	datum	A vertical datum	1	S100_VerticalAndSoundingDatum	
Attribute	axis	The axis of the coordinate system	1	CS_CoordinateSystemAxis	rangeMeaning must be "exact" if present. axisDirection must be either "up" or "down"

Change Proposal Justification

A vertical datum only indicates the reference plane (surface of zero elevation) for measuring height or depth. The unit of measure and orientation (up or down) should also be provided to support machine-readability and autonomous navigation.

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.