

S-100 Maintenance - Change Proposal Form

Organization: Canadian Coast Guard Date Feb 2020
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Change Proposal Type *Select only one option*

1. Clarification

2. Revision

3. New Edition X

Location *Identify all change proposal locations*

S-100 Version No.	Part No.	Section No.	Proposal Summary
4.0.0	4a	5.5	Add new section to describe S-100 compliancy categories
	4a	Appendix 4a-D	Add enumerate attribute S100_compliancyCategory to class S100_ProductSpecification
	4a	Appendix 4a-D	Add table S100_compliancyCategory with literals
	11	Table 11-2	Add attribute S-100 Compliancy Category of type compliancyCategory

Change Proposal

Add section 4a-5.5 S-100 compliancy categories

When implementing S-100 support, different systems may have different requirements to S-100 based products and their adherence to the S-100 framework. ECDIS may require a very high degree of compliance, while a reporting system may require a lower degree of compliance by for example not needing an S-100 based exchange method. To facilitate a means of communicating the intent of a product specification and resulting products an S-100 compliance category can be declared. Four categories are defined.

Category 1 - IHO S-100 object model compliant

Product Specification contains object model which is available as feature catalogue from IHO S-100 GI registry and is compliant with the S-100 spatial model (Parts 7 & 8)

Category 2 - IHO S-100 compliant with non-standard encoding

Product specification adheres to the minimum requirements of S-100 Part 11. The product specification specifies which of the S-100 Part 10 encoding methods is used, or it specifies another encoding including how it maps to the S-100 GFM. Metadata is according to S-100 Part 4, a profile of part 4 or an extension according to Part 4 rules.

Category 3 - IHO S-100 compliant with standard encoding

As Level 2 with the following restrictions;

- The product specification uses only an encoding method defined in S-100 Part 10.

Category 4 - IHO S-100 and IMO harmonized display compliant

As Level 3 with the following restrictions;

- Metadata is according to S-100 Part 4 or a profile of Part 4 metadata;
- The product specification includes portrayal catalogue available from IHO S-100 GI registry;
- The product specification includes defined methods for the S-100 defined cyber security (at a minimum including digital signature and, if applicable, the method of encryption);
- Test material is embedded into the product specification or test material is available in a separate package. The test cases and related material is at a minimum comparable to IHO S-64 for S-52/S-57/S62/S-63);
- Product specification uses a CRS from the EPSG Geodetic Parameter Registry. EPSG CRS's which do not comply with the requirements of Part 6 or the selected encoding method defined in Part 10 should not be used;
- If appropriate, the product specification includes alerts and indications catalogue available from IHO S-100 GI registry;
- If appropriate, the product specification is compliant with the interoperability catalogue available from IHO S-100 GI registry.

Add S100_complianceCategory attribute to the S100_ProductSpecification class.

Add table S100_complianceCategory

Role Name	Name	Description	Code	Remarks
Enumeration	S100_complianceCategory		-	-
Value	Category1	IHO S-100 object model compliant		
Value	Category2	IHO S-100 compliant with non-standard encoding		
Value	Category3	IHO S-100 compliant with standard encoding		
Value	Category4	IHO S-100 and IMO harmonized display compliant		

Change Proposal Justification

Adding compliance categories to S-100 as a means of communicating usage intent of S-100 based product specifications can assist implementers with their development and give indications to how likely a new product specification will function as expected in their systems.

Please send completed forms and supporting documentation to the International Hydrographic Bureau (addt@iho.int).