

Title: Corrections to S-100 Part 8, 10a, 10c and 17**S-100 Maintenance - Change Proposal Form**

Organisation	PRIMAR		Date	29-Nov-2022
Contact	Svein Skjaeveland		Email	svein.skjaeveland@ecc.no

Change Proposal Type (*Select only one option*)

1. Clarification	2. Correction	3. Extension
	X	

Location (*Identify all change proposal locations*)

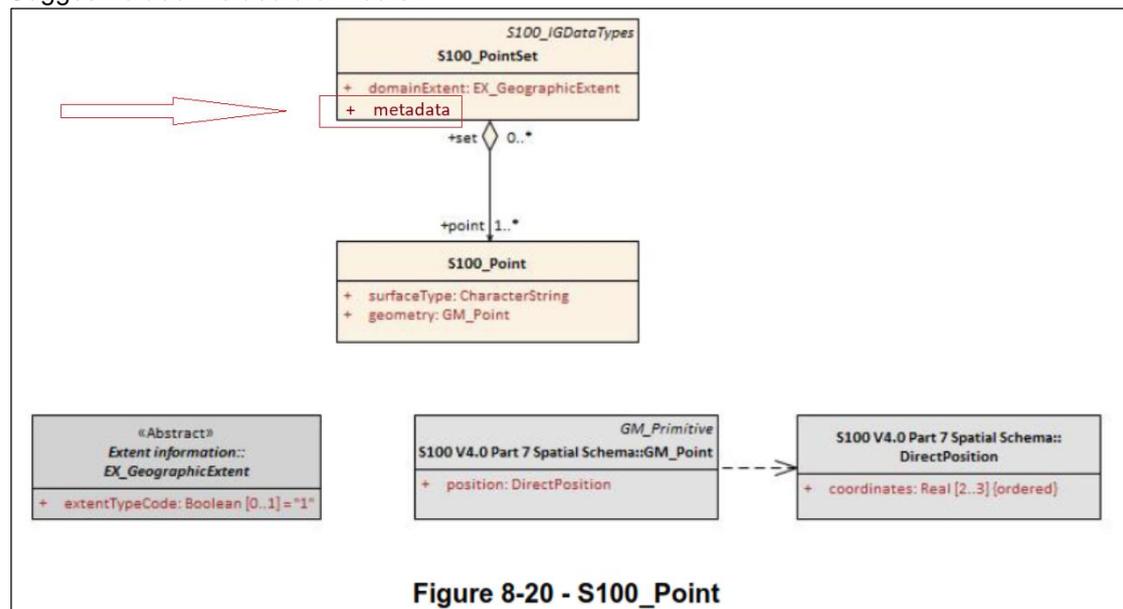
S-100 Version No.	Part No.	Section No.	Proposal Summary
5.0.0	8	8-8.1 Figure 8-20	The attribute "metadata" is missing from the class S100_PointSet in figure 8-20
5.0.0	8	8-15.1	Typo – replace "it" with "in" 3rd last sentence
5.0.0	10a	10a-4.1.2 Figure 10a-3	Change the colour of the line between attribute A6 and A9 to black – as no changes applies to A9.
5.0.0	10a	10a-4.1.2 2 nd table beneath Figure 10a-3	Remarks in row 4 should be changed from "A10-now with ATIX 2" to A10-now with ATIX 3"
5.0.0	10c	10c tables 10c-3 to 10-9 on page 31-44	Incorrect table numbering
5.0.0	10c	10c-5 Figure 10c-1	Change name of figure to "HDF5 models and implementation"
5.0.0	17	17-4.5 S100_EncodingFormat S100_ComplianceCategory S100_ProtectionScheme	Codes are not assigned for Values in Enumeration.
5.0.0	17	17-4.5	The type references to DigitalSignatureReference and DigitalSignatureValue in S100_DatasetDiscoveryMetadata, S100_SupportFileDiscoveryMetadata and

			S100_CatalogueDiscoveryMetadata are incorrectly named.
5.0.0	17	17-4.5 SupportFile DiscoveryMetadata, attribute supportedResource	Conventions for identifiers used to populate the attribute supportedResource is needed.
5.0.0	17	17-4.5 S100_SupportFileFormat value ASCII	The name ASCII for a supportfile described as: "UTF-8 excluding control codes" should be changed to TEXT.

Change Proposal

8-8.1 Figure 8-20: attribute “metadata” is missing from the class S100_PointSet in figure 8-20

The attribute “metadata” – being described in the explanatory text below figure 8-20 is missing. Suggest to add metadata attribute:



Change Proposal Justification

Adjust figure to align with descriptive text.

8-15.1: Typo – replace “it” with “in” 3rd last sentence

There is a typo in the 3rd last sentence – replace “it” with “in”:

8-15.1 Gridded data

This Application Schema defines a quadrilateral grid coverage with associated metadata. The metadata is generically referenced to ISO 19115-1 and 19115-2. A specific choice of metadata has not been made in this Schema. This Schema can serve for both "matrix" and "raster" data [see Appendix 8-D] dependent upon the metadata chosen.

The gridded data consists of a single feature - the "image" or "matrix" together with associated metadata taken from MD_Metadata (or MI_Metadata). The CV_Coverage serves as the spatial attribute of the gridded data set. It defines an area that is "covered" by the coverage function. For the continuous coverage defined in this Application Schema, the coverage function returns a value for every point in the area covered based on an interpolation function. The Grid Value Matrix is a set of values which drives the interpolation function. It is this case the value matrix is a grid traversed by a linear scan (x,y) traversal rule. The spatial referencing is defined by the coordinate reference system. This template Application Schema supports the majority of imagery and gridded data applications.

Change Proposal Justification

Correct typo

10a-4.1.2 Figure 10a-3: Change the colour of the line between attribute A6 and A9 to black

The relation between attribute A6 and A9 is represented by a red line in figure 10a-3 indicating a change. As A9 is not involved in any changes in this update example the line should not be red but black. Propose to change colour of the line from red to black:

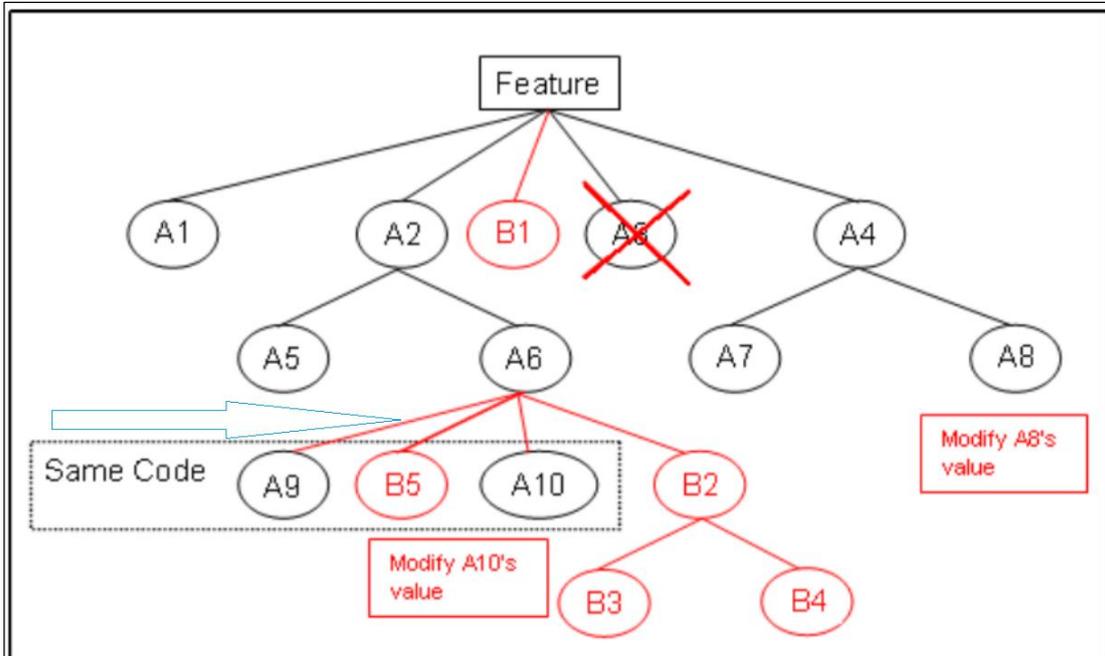


Figure 10a-3

Change Proposal Justification

Change line colour to black to indicate no change to attribute A9

10a-4.1.2 2nd table beneath Figure 10a-3: Remarks in row 4 should be changed from “A10-now with ATIX 2” to A10-now with ATIX 3”

The change indicates that ATIX for A10 must be changed to ATIX 3. Also correct information according to the ATIX column row 4 value in table:

Index	NATC	ATIX	PAIX	ATIN	ATVL	Remark
1	22	1	0	Modify		A2 - complex
2	26	1	1	Modify		A6 - complex
3	29	2	2	Insert	32	B5 - Will increase the ATIX of A10
4	29	3	2	Modify	7	A10 - now with ATIX- 2 3
5	35	1	2	Insert		B2 - complex
6	36	1	5	Insert	22	B3
7	37	1	5	Insert	123	B4
8	32	1	0	Insert	abc	B1
9	23	1	0	Delete		A3
10	24	1	0	Modify		A4 - complex
11	28	1	10	Modify	Germany	A8

Change Proposal Justification

Amend incorrect ATIX number

10c-Table 10c3 to 10c-9 Incorrect table numbering

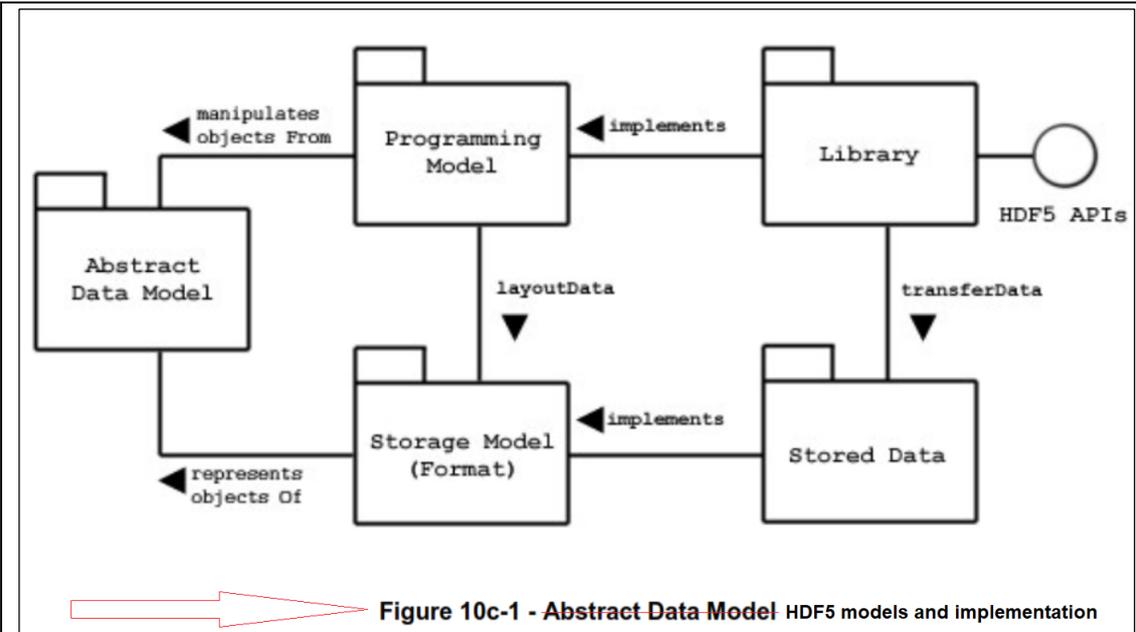
The tables 10c-3 to 10c-9 on the pages 31 - 44 in Part 10c are not numbered correctly according to table numbers on previous pages. Suggest amending table numbers accordingly.

Change Proposal Justification

Amend incorrect table numbers

10c-5 Figure 10c-1: Change name of figure to “HDF5 models and implementation”

Figure is showing the HDF5 models and implementation – rather than the Abstract Data Model, being one of the components. Propose to change figure name to: “HDF5 models and implementation”:



Reference: http://davis.lbl.gov/Manuals/HDF5-1.8.7/UG/03_DataModel.html

Change Proposal Justification

New figure name describes the entire content – and just not one of the components.

17-4.5: Code lists Value missing Code - S100_EncodingFormat - S100_ComplianceCategory - S100_ProtectionScheme

Add codes to the values in Enumeration S100_EncodingFormat:

S100_EncodingFormat

Role Name	Name	Description	Code	Remarks
Enumeration	S100_DataFormat	The encoding format	-	-
Value	ISO/IEC 8211	The ISO 8211 data format as defined in Part 10a	1	-
Value	GML	The GML data format as defined in Part 10b	2	-
Value	HDF5	The HDF5 data format as defined in Part 10c	3	-
Value	undefined	The encoding is defined in the Product Specification	4	Use of Product Specification specific encoding means the data product and Product Specification is not intended for an IHO S-100 compliant system

Add codes to the values in Enumeration S100_ComplianceCategory:

S100_ComplianceCategory

Role Name	Name	Description	Code	Remarks
Enumeration	S100_ComplianceCategory		-	-
Value	category1	IHO S-100 object model compliant	1	
Value	category2	IHO S-100 compliant with non-standard encoding	2	
Value	category3	IHO S-100 compliant with standard encoding	3	
Value	category4	IHO S-100 and IMO harmonized display compliant	4	

Add codes to the values in Enumeration S100_ProtectionScheme

S100_ProtectionScheme				
Role Name	Name	Description	Code	Remarks
Enumeration	S100_ProtectionScheme	Data protection schemes	-	-
Value	S100p15	IHO S-100 Part 15	1	See Part 15

Change Proposal Justification

For encoding of enumeration values Code values should be available.

17-4.5: invalid Type references S100_DigitalSignatureReference and S100_DigitalSignatureValue

Correct the type references to DigitalSignatureReference and DigitalSignatureValue in S100_DatasetDiscoveryMetadata, S100_SupportFileDiscoveryMetadata and S100_CatalogueDiscoveryMetadata.

digitalSignatureReference type shall be S100_SE_DigitalSignatureReference (not S100_DigitalSignatureReference)
 digitalSignatureValue type shall be S100_SE_DigitalSignatureValue (not S100_DigitalSignatureValue)

Attribute	digitalSignatureReference	Specifies the algorithm used to compute digitalSignatureValue	1	S100_SE_DigitalSignatureReference (see Part 15)	
Attribute	digitalSignatureValue	Value derived from the digital signature	1..*	S100_SE_DigitalSignatureValue (see Part 15)	The value resulting from application of digitalSignatureReference Implemented as the digital signature format specified in Part 15

Change Proposal Justification

Type references correction.

17-4.5 SupportFileDiscoveryMetadata, attribute supportedResource

In order to create a link between a supporting resource like ISOMetadata (Dataset metadata in ISO format) and a dataset file, the attribute supportedResource must refer to an identification of the dataset file. This could either be the fileName or the datasetID, as defined by the designated datasetDiscoveryMetadata attributes.

The proposal is to establish a convention for identifiers to be used when encoding the SupportFileDiscoveryMetadata attribute supportedResource. Two solutions are proposed. S-100WG is invited to discuss and decide upon preferred solution.

Option 1:

Use fileName as identifier:

In Description – replace resource with product.

In Type – replace CharacterString with URI.

In Remarks – replace existing text with location of dataset fileName.

Attribute	supportedResource.	Identifier of the resource product supported by this support file	0..*	CharacterString URI	Conventions for identifiers are still to be developed and will be defined later DatasetDiscoveryMetadata attribute fileName
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Option 2:
Use datasetID as identifier:
In Description – replace resource with product
In Type – replace CharacterString with URN
In Remarks – replace existing text with location of datasetID

Attribute	supportedResource.	Identifier of the resource product supported by this support file	0..*	CharacterString URN	Conventions for identifiers are still to be developed and will be defined later DatasetDiscoveryMetadata attribute datasetID.
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Change Proposal Justification

To give a link between a supporting resource like for example ISOMetadata (Dataset metadata in ISO format) and a dataset file (product), the attribute supportedResource must refer to an identification of the dataset file.

17-4.5 SupportFileFormat value ASCII

The proposal is change the name of S100_SupportFileFormat value = 2 (ASCII) to TEXT.

ASCII includes 128 character codes.

UTF-8 is a superset of all characters in widespread use today and also uses the ASCII set for the first 128 characters.

Current name ASCII causes confusion when being described as "UTF-8 excluding control codes" – indicating a wider range of characters available than the 128 ASCII defined characters.

To better align with description of S100_SupportFileFormat value = 2 it is proposed to change name from ASCII to TEXT.

S100_SupportFileFormat

Role Name	Name	Description	Code	Remarks
Enumeration	S100_SupportFileFormat	The format used for the support file	-	-
Value	ASCII-TEXT	UTF-8 text excluding control codes	1	-
Value	JPEG2000	JPEG2000 format	2	ISO 15444
Value	HTML	Hypertext Markup Language	3	
Value	XML	Extensible Markup Language	4	
Value	XSLT	Extensible Stylesheet Language Transformations	5	
Value	VIDEO	Representation of moving images in unspecified format	6	
Value	TIFF	Tagged Image File Format	7	
Value	PDF/AorUA	Portable Document Format	8	ISO 19005, ISO 32000 Product Specification developers should take careful consideration in using PDF as a support file format. It is recommended that PDF never be used in products that will be used on a navigation system as it may impair night vision Must be PDF/A or UA
Value	LUA	Lua programming language	9	

Change Proposal Justification

Current name ASCII causes confusion when being described as "UTF-8 excluding control codes" – indicating a wider range of characters available than the 128 ASCII defined characters. This proposal seeks to clarify and avoid such confusion.

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.