S-100 Maintenance Proposals

Miscellaneous revisions, clarifications and corrections

S100WG4
25 February – 1 March 2019

Raphael Malyankar

Sponsored by NOAA

Overview

- Proposal: Remove ambiguity in exchange catalogue model about the relationship between dataset discovery metadata and support file discovery metadata

- Proposal: Add alpha code to listed values in feature catalogue.

- Other proposals: Various clarifications, corrections, and filled gaps.

1- Exchange catalogue

- The current exchange catalogue model is ambiguous about the location of metadata about support files in the exchange catalogue.

- Is the support file metadata block within the dataset metadata block, or is it referenced by the dataset metadata block?

- The conventional treatment of the association implies "within", but that means support file metadata blocks can exist only inside some dataset metadata block.

  - There may be any number of support files for a dataset.

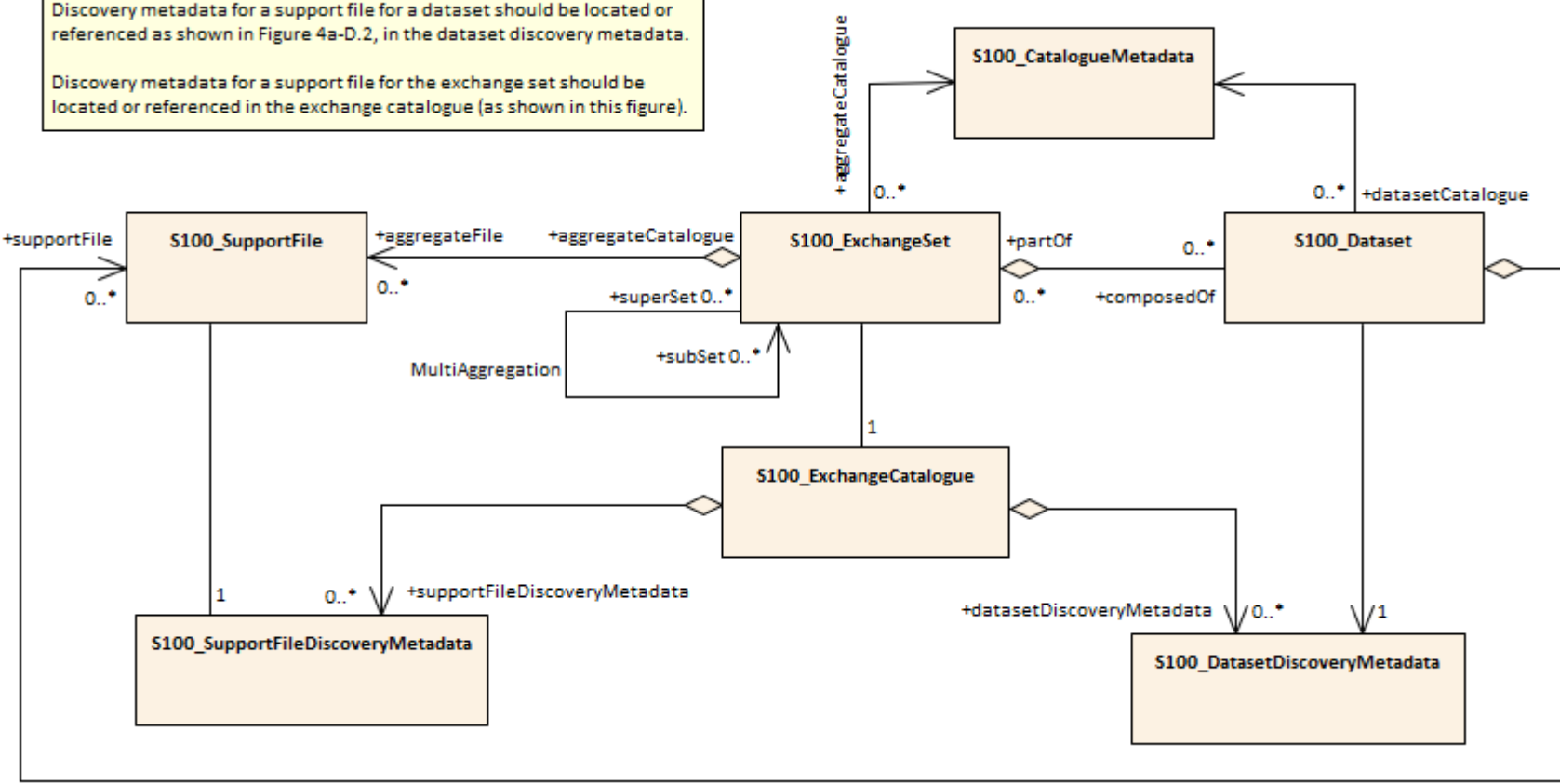 - Support files may be referenced by different datasets
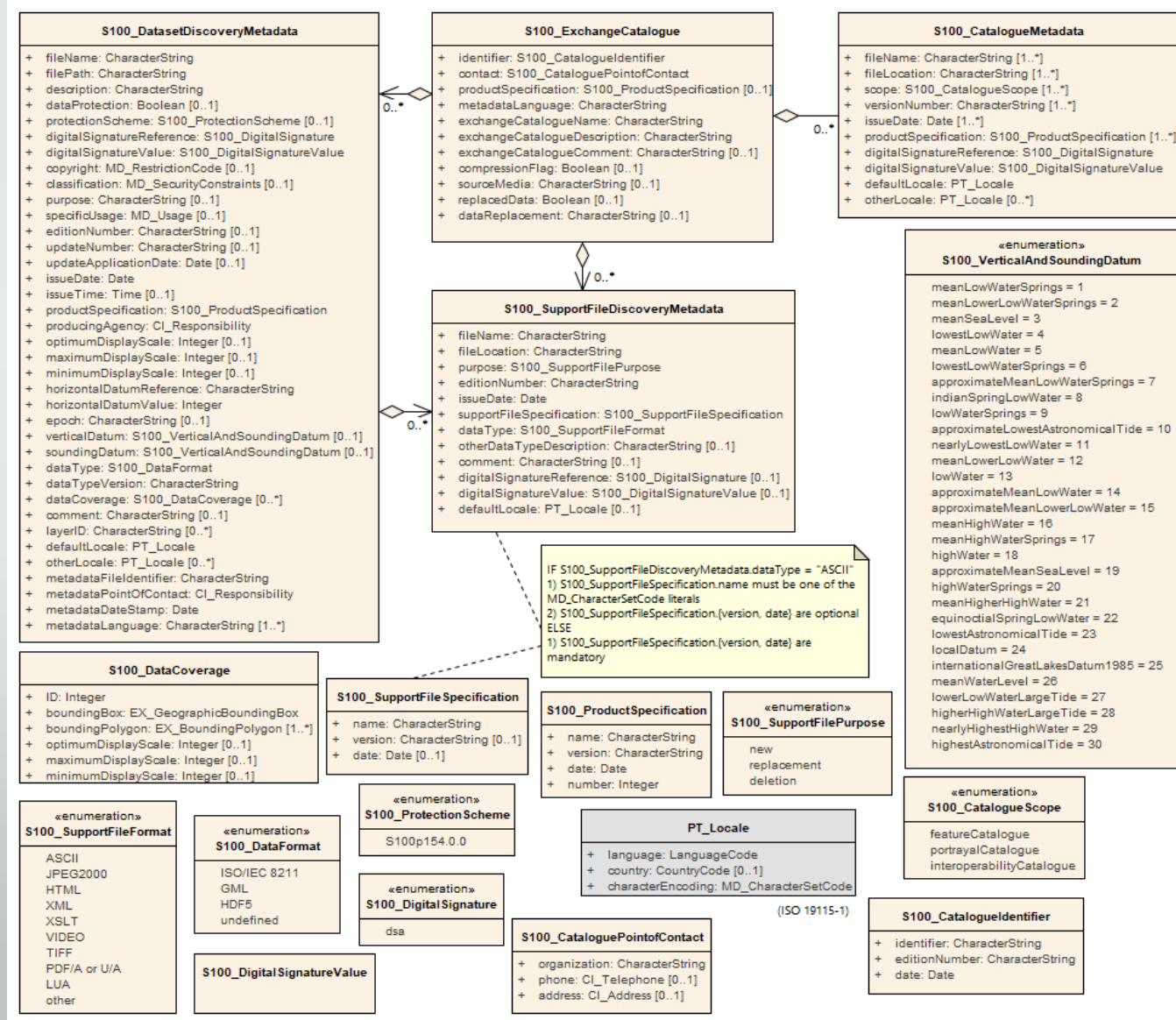
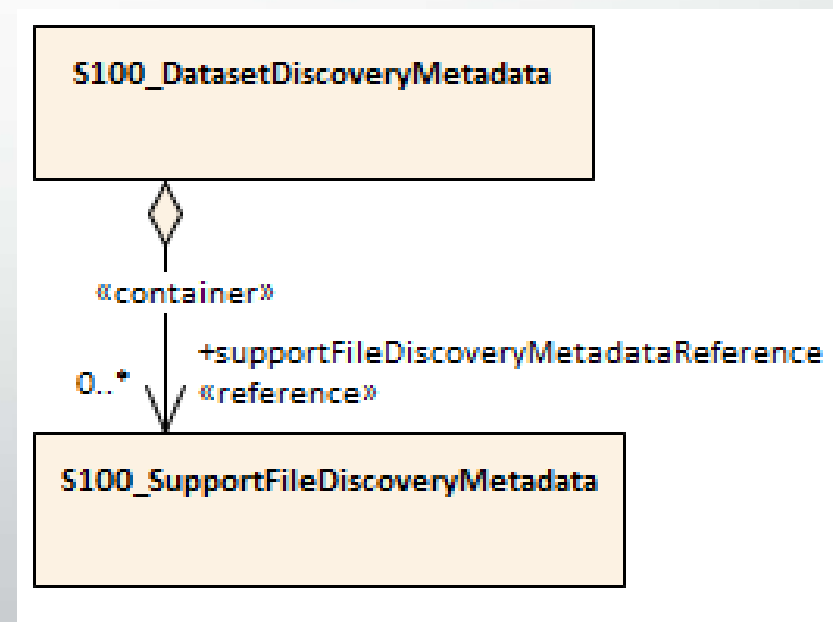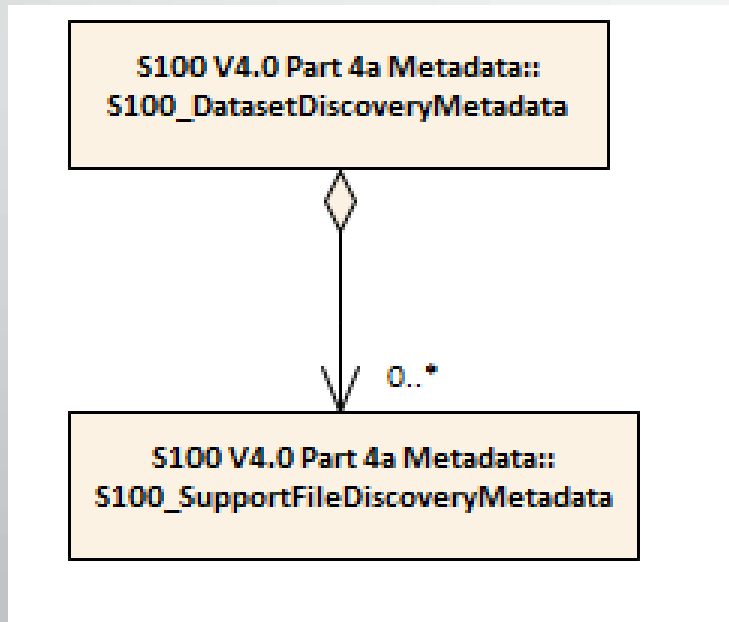# Figure 4a-D-2
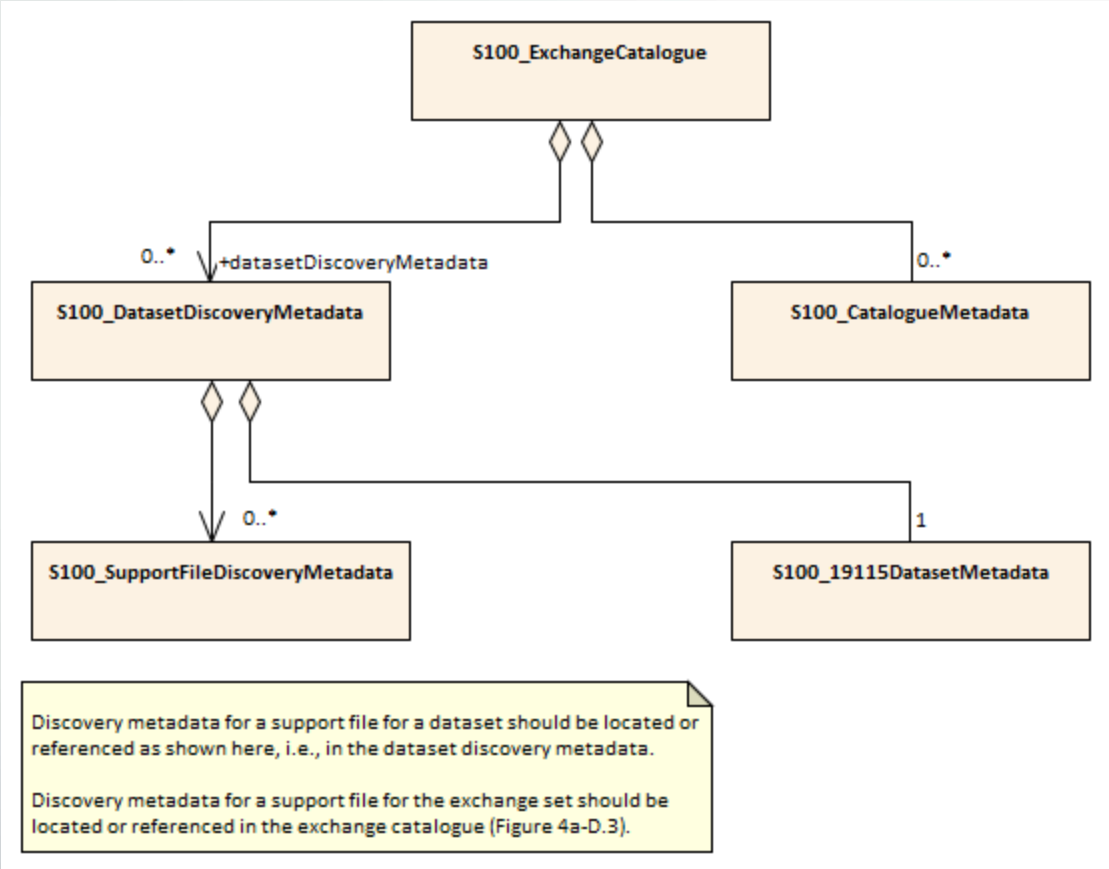
Figure 4a-D-3

Figure 4a-D-4

The proposal

- Add information that indicates that the support file discovery metadata is referenced by dataset discovery metadata.

- Making it a reference is probably simpler for implementations, as well as more flexible.

2 – Camel case code for listed values

- Path to balance:
  - ISO 191xx customary form for enumerations and codelists (which uses alpha codes) and also XML encodings' need for human-friendly encodings on the one hand
  - the ISO 8211 format's use of numeric codes on the other.

- Use of only numeric codes in XML formats would greatly increase the effort needed to create datasets and require custom tools rather than off-the-shelf software.

- Alpha codes can be used as keys in dictionaries almost as conveniently as numeric codes. The standard ISO 19115-3 metadata schemas distributed by ISO already includes a dictionary format in which the codelists in the ISO 19115-x standards are encoded (using the codelists in the ISO UML models).

Proposed changes to feature catalogue and GML encoding

Role name	Name	Description	Mult.	Type	Remarks
Attribute	alphaCode	Alpha (camel case) code of listed value	1	CharacterString	

S100_FC_ListedValue

+ label: CharacterString
+ definition: CharacterString
+ code: PositiveInteger
+ remarks: CharacterString [0..1]
+ alias: CharacterString [0..*]
+ alphaCode: CharacterString

Part 10b
[Add the following row to Table 10b-4 Dataset structure information elements.]

Subfield name	XML Tag	Default value	Mult.	Type	Description
Listed value encoding	LVEncoding	label	1	CharacterString	Type of encoding for listed values in enumerations and codelists. See Table 10b-5 below.

(new) Table 10b-5 Encodings for listed values

Value	Description
label	Listed values are encoded as the labels of the listed values
alpha	Listed values are encoded using the alpha codes of the listed values

CI_DateTypeCode :

Description: identification of when a given event occurred
CodeSpace: http://standards.iso.org/iso/19115/-3/cit/1.0
Number of items: 16

Entry	Definition
creation	date identifies when the resource was brought into existence
publication	date identifies when the resource was issued
revision	date identifies when the resource was examined or re-examined and improved or amended
expiry	date identifies when resource expires
lastUpdate	date identifies when resource was last updated
lastRevision	date identifies when resource was last reviewed
nextUpdate	date identifies when resource will be next updated
unavailable	date identifies when resource became not available or obtainable
inForce	date identifies when resource became in force
adopted	date identifies when resource was adopted
deprecated	date identifies when resource was deprecated
superseded	date identifies when resource was superseded or replaced by another resource
validityBegins	time at which the data are considered to become valid. NOTE: There could be quite a delay between creation and validity begins
validityExpires	time at which the data are no longer considered to be valid
released	the date that the resource shall be released for public access
distribution	date identifies when an instance of the resource was distributed

top

C:\home\raphaelm\Nev   X   +   ∨

file:///C:/home/raphaelm/New%20folder%20(2)/S100WG4/schemas/standards.iso.org/19115/resources/Codelists/cat/codelists.xml

```
- <cat:versionNumber>
    <gco:CharacterString>1.1</gco:CharacterString>
  </cat:versionNumber>
- <cat:versionDate>
    <gco:Date>2017-09-10</gco:Date>
  </cat:versionDate>
- <cat:codelistItem>
  - <cat:CT_Codelist id="CI_DateTypeCode">
    - <cat:identifier>
        <gco:ScopedName codeSpace="http://standards.iso.org/iso/19115/-3/cit/1.0">CI_DateTypeCode</gco:ScopedName>
      </cat:identifier>
    - <cat:name>
        <gco:ScopedName codeSpace="http://standards.iso.org/iso/19115/-3/cit/1.0">CI_DateTypeCode</gco:ScopedName>
      </cat:name>
    - <cat:definition>
        <gco:CharacterString>identification of when a given event occurred</gco:CharacterString>
      </cat:definition>
    - <cat:description>
        <gco:CharacterString>identification of when a given event occurred</gco:CharacterString>
      </cat:description>
    - <cat:codeEntry>
      - <cat:CT_CodelistValue id="CI_DateTypeCode_creation">
        - <cat:identifier>
            <gco:ScopedName codeSpace="http://standards.iso.org/iso/19115/-3/cit/1.0">creation</gco:ScopedName>
          </cat:identifier>
        - <cat:name>
            <gco:ScopedName codeSpace="http://standards.iso.org/iso/19115/-3/cit/1.0">creation</gco:ScopedName>
          </cat:name>
        - <cat:definition>
            <gco:CharacterString>date identifies when the resource was brought into existence</gco:CharacterString>
          </cat:definition>
        - <cat:description>
            <gco:CharacterString>date identifies when the resource was brought into existence</gco:CharacterString>
          </cat:description>
        </cat:CT_CodelistValue>
      </cat:codeEntry>
    - <cat:codeEntry>
      - <cat:CT_CodelistValue id="CI_DateTypeCode_publication">
```

```xml
<S122:TrafficControlService gml:id="USMRNSRV1">
    <featureName>
        <language>eng</language>
        <name>WHALESNORTH</name>
    </featureName>
    <permission xlink:href="#US0001.1.PRMTYP01"
link:role="http://www.iho.int/S-122/gml/1.0/roles/thePermissionType"/>
    <permission xlink:href="#US0001.1.PRMTYP02"
link:role="http://www.iho.int/S-122/gml/1.0/roles/thePermissionType"/>

    <theRxN xlink:href="#USREGLTS12"
link:role="http://www.iho.int/S-122/gml/1.0/roles/theRegulations"/>
    <theRxN xlink:href="#USREGLTS13"
link:role="http://www.iho.int/S-122/gml/1.0/roles/theRegulations"/>
    <theRxN xlink:href="#USREGLTS14"
link:role="http://www.iho.int/S-122/gml/1.0/roles/theRegulations"/>
    <theRxN xlink:href="#USREGLTS15"
link:role="http://www.iho.int/S-122/gml/1.0/roles/theRegulations"/>
    <theRxN xlink:href="#USREGLTS16"
link:role="http://www.iho.int/S-122/gml/1.0/roles/theRegulations"/>
    <theRxN xlink:href="#USREGLTS17"
link:role="http://www.iho.int/S-122/gml/1.0/roles/theRegulations"/>
    <theRxN xlink:href="#USREGLTS18"
link:role="http://www.iho.int/S-122/gml/1.0/roles/theRegulations"/>

    <categoryOfTrafficControlService>Ship Reporting Service</categoryOfTrafficControlService>

    <reptForTrafficServ xlink:href="#USSHPREP2"
link:role="http://www.iho.int/S-122/gml/1.0/roles/reptForTrafficService"/>
```