Paper for Consideration by S100TSM9

ISOMetadataFile clarification

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Executive Summary:	During the implementation and testing phase of S-100 derived Product Specifications, uncertainties related to the intended use of the ISOMetadataFile has been revealed. S-100 should add a short guidance to clarify the intended use.
Related Documents:	S-100 5.0.0 Part 17
Related Projects:	

Introduction / Background

In S-100 Part 17 the ISOMetadataFile is one of the defined Exchange Set components in the figure 17-2:
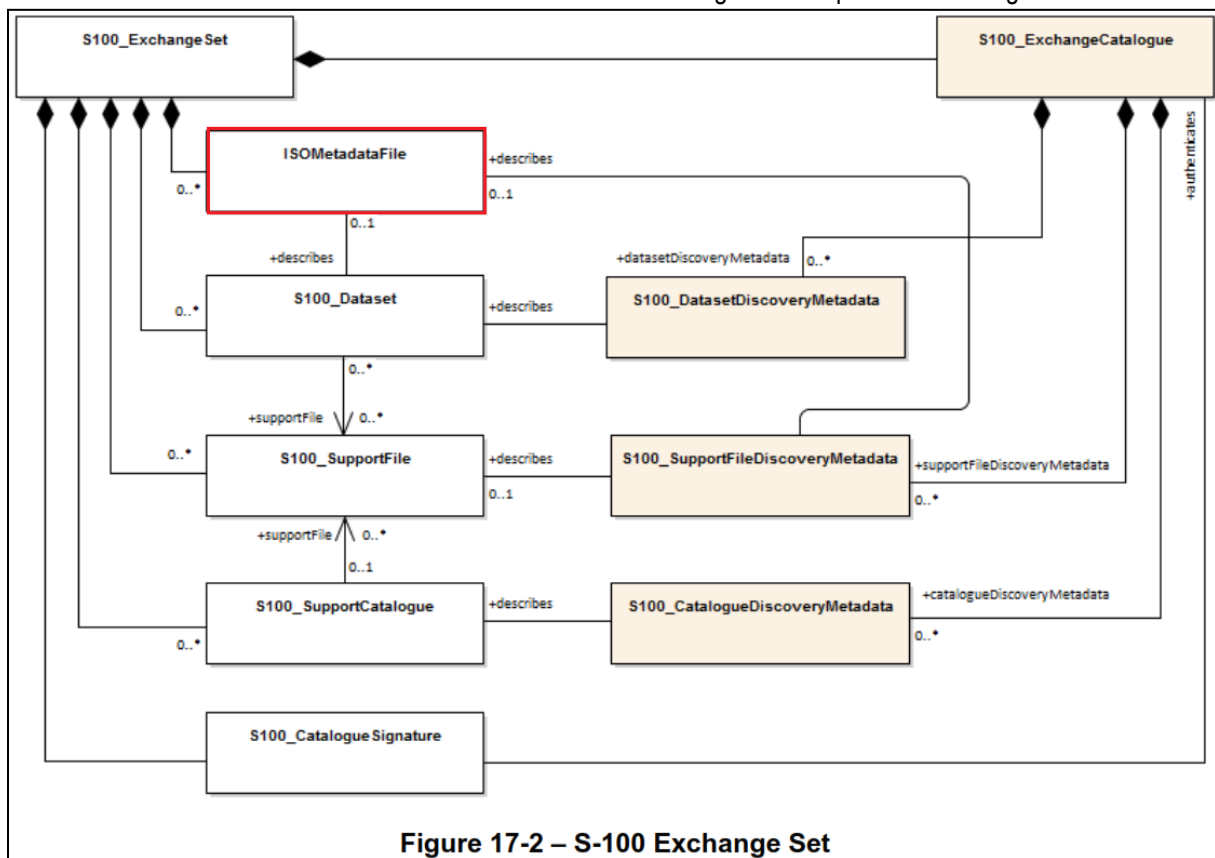

Figure 17-2 – S-100 Exchange Set

Further the ISOMetadataFile is defined in S-100 Part 17 SupportFileDiscoveryMetadata attribute resourcePurpose type S100_ResourcePurpose:

Role Name	Name	Description	Mult	Type	Remarks
Class	S100_SupportFileDiscoveryMetadata	Metadata about the individual support files in the Exchange Catalogue	-	-	-
Attribute	fileName	Name of the support file	1	URI	See Part1, clause 1-4.6
Attribute	revisionStatus	The purpose for which the support file has been issued	1	S100_SupportFileRevisionStatus	For example new, replacement, etc
Attribute	editionNumber	The Edition number of the support file	1	Integer	When a data set is initially created, the Edition number 1 is assigned to it. The Edition number is increased by 1 at each new Edition. Edition number remains the same for a re-issue
Attribute	issueDate	Date on which the data was made available by the Data Producer	0..1	Date	
Attribute	supportFileSpecification	The specification used to create this file	0..1	S100_SupportFileSpecification	
Attribute	dataType	The format of the support file	1	S100_SupportFileFormat	
Attribute	otherDataTypeDescription	Support file format other than those listed	0..1	CharacterString	
Attribute	comment	Optional comment	0..1	CharacterString	
Attribute	compressionFlag	Indicates if the resource is compressed	1	Boolean	*True* indicates a compressed resource *False* indicates an uncompressed resource
Attribute	digitalSignatureReference	Specifies the algorithm used to compute digitalSignatureValue	1	S100_DigitalSignatureReference (see Part 15)	
Attribute	digitalSignatureValue	Value derived from the digital signature	1..*	S100_DigitalSignatureValue (see Part 15)	The value resulting from application of digitalSignatureReference Implemented as the digital signature format specified in Part 15
Attribute	defaultLocale	Default language and character set used in the support file	0..1	PT_Locale	In absence of defaultLocale the language is English in UTF-8 A support file is expected to use only one as locale. Additional support files can be created for other locales
Attribute	supportedResource	Identifier of the resource supported by this support file	0..*	CharacterString	Conventions for identifiers are still to be developed and will be defined later
Attribute	resourcePurpose	The purpose of the supporting resource	0..1	S100_ResourcePurpose	Identifies how the supporting resource is used

S100_ResourcePurpose value 11 = Dataset metadata in ISO format:

S100_ResourcePurpose

Role Name	Name	Description	Code	Remarks
Enumeration	S100_ResourcePurpose	Defines the purpose of the supporting resource	-	-
Value	dataset	A dataset	1	
Value	featureCatalogue	A Feature Catalogue for an S-100 data product	2	
Value	portrayalCatalogue	A Portrayal Catalogue for an S-100 data product	3	
Value	interoperabilityCatalogue	An Interoperability Catalogue	4	
Value	supportFile	A support file	5	
Value	productVersion	All datasets conforming to a specific version of an S-100 Product Specification	6	
Value	productFamily	All datasets conforming to any active version of an S-100 Product Specification	7	
Value	software	Application software	8	
Value	system	Provides support or common information for a variety of applications and products	9	
Value	exchangeCatalogue	An Exchange Catalogue	10	
Value	ISOMetadata	Dataset metadata in ISO format	11	
Value	languagePack	A Language pack	12	
Value	GMLSchema	GML Application Schema	13	
Value	other	A type of resource not otherwise described	100	

Following discussions in S101PT and S102PT there may be a need for clarifying the intended use of ISO Metadata in S-100 products.

Analysis/Discussion

The intended use of the ISOMetadataFile has for some time been a topic of discussion in several Project Teams. The outcome of the discussions has clearly stated that the ISOMetadataFile is intended for carrying information that is not intended to be used by an end user system. The intended use could be for conveying information between different departments within a producing agency (wishing to include relevant information for coworkers) or between producing authorities if they wish to use the Exchange Catalogue structure for sharing of data and information.

As a consequence of the discussions S-101PT landed on the following statements in S-101 1.1.0:

11.2 Exchange Set

S-101 datasets are grouped into Exchange Sets. Each Exchange Set consists of one or more ENC datasets with a single Exchange Catalogue XML file containing metadata. Optionally, an associated XML Metadata file (S100_ResourcePurpose (ISOMetadata) – see S-100 Part 17, clause 17-4.5) may be included (see clause 11.5). It may also include one or more support files. The S-101 Exchange Set structure is the same as that described in S-100 Part 17, clause 17-4.1.

11.5 Associated XML Metadata file

An associated XML Metadata file is expected to carry information specific to producing authorities' internal production procedures, and is not intended for use within the end user systems.

If used, all associated XML Metadata files must have unique names. The name of the associated XML Metadata file should not be used to describe the physical content of the file.

The associated XML Metadata file must be named according to the specification given below:

MD_<data file base name>.XML

As we can see S-101 1.1.0 has landed on allowing the ISOMetadataFile as an optional inclusion in the Exchange Set.

Recently, at its VTC meeting 13th of February 2023 the S102PT decided to remove the option for inclusion of the ISOMetadataFile in the next version of the S-102 product specification.

Due to the above discussions and results in the project teams it is proposed to add the following paragraph to S-100 Part 17:

17-4.3.2   ISOMetadataFile Guidance

The encoding of an ISOMetadataFile as a supported resource is considered to be optional for most S-100 derived product specifications. The content of the file will not be carrying information to be used by the end user systems, but holds additional information that could be useful for other purposes. The intended use could be for conveying information between different departments within a producing agency or between producing authorities if they wish to use the Exchange Catalogue structure for sharing of data and information. Product specification developers should decide if the ISOMetadataFile is to be part of their specification or not.

Conclusions
- Add a new paragraph to S-100 explaining the intended use of the ISOMetdataFile.

Action Required of S100TSM9
The S100TSM is invited to:
Note the paper and discuss proposed changes.