TSMAD 21-4.5.6

Paper for Consideration by TSMAD

S-101 Metadata (Clause 12)

Submitted by:	S-101 Work Item Leader
Executive Summary:	This paper will examine the proposed metadata for S-101
Related Documents:	S-101 Draft Product Specification
Related Projects:	N/a

Introduction / Background

At the previous TSMAD/DIPWG meeting metadata was under discussion. The results were to table the discussion and revisit the items at the S-101 Focus group meeting in August. At this meeting the Focus Group spent time discussion what is needed in the metadata section and how it should be structured.

Analysis/Discussion

The Focus Group proposes the following structure for the S-101 metadata:

- Exchange Set Metadata
- Dataset Metadata
- Support File Metadata
- Exchange Catalogue Metadata

The following sections will enable TSMAD to review the proposed metadata, further refine metadata fields and propose additional metadata. Note that this review will cover metadata that is used for both phase 1 and phase 2 of the S-101 project plan.

1. Exchange Set Metadata

Comment [P1]: To be determined

2. Dataset Metadata

Name	Cardinality	Value	Type	Remarks
DataSetDiscoveryMeta data	-		-	-
metadataFileIdentifier	1		CharacterString	
metadataPointOfContact	1		CI_ResponsibleParty	
metadataDateStamp	1		Date	
metadataLanguage	1	English	CharacterString	All data sets conforming to S-101 PS must use English language
fileName	1		CharacterString	Dataset file name
filePath	1		CharacterString	Full path from the exchange set root directory
description	1		CharacterString	Short description of the area covered by dataset harbour or port name, between two named locations etc.
dataProtection	1	{1} to {2}	CharacterString	1. Encrypted 2. Unprotected
purpose	1	{1} to {4}	CharacterString	1. New Dataset 2. New Edition

Name	Cardinality	Value	Type	Remarks
				3. Update 4.Cancellation
specificUsage	1	{1} to {3}	CharacterString	1.Port Entry 2. Transit 3. Overview
editionNumber	1		CharacterString	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
updateNumber	1		CharacterString	Update number 0 is assigned to a new data set.
issueDate	1		Date	
productSpecification	1	S-101 version 0.0.1	S-100_ ProductSpecification	This must be encoded as S-101
producingAgency	1		CI_ResponsibleParty	
optimumDisplayScale	1	{1} to {13}	double	Display scale must be one of the 13 predefined scales detailed in Table 1.
horizontalDatum	1	WGS84	CharacterString	
verticalDatum	1		CharacterString	
soundingDatum	1		CharacterString	
dataType	1	ISO 8211 BINARY	S-100_DataFormat	
otherDataTypeDescription	0..1		CharacterString	
boundingBox	1		EX_GeographicBoundingBox	
boundingPolygon	1..*		EX_BoundingPolygon	
comment	0..1		CharacterString	
cyclicRedundancyCheck	1		CharacterString NonNegativeInteger	
layerId	1..*	{1} to {3}	integer	Identifies the relationship to other layers that are required to view the complete data set. 1. Scale Independent 2. Scale Dependent 3. Complete

Comment [P2]: Need definitions.

Comment [YUN3]: S-100 needs to be changed

Comment [YUN4]: SI and SD

3. Support File Metadata

Name	Cardinality	Type	Value	Remarks
S-101 SupportFileDiscoveryMetadata	-	-		-
fileName	1	CharacterString		
filePath	1	CharacterString		
Purpose	1	S-100_SupportFilePurpose	1. New 2. Replacement 3. deletion	Signifies a new file Signifies a replacement of a file with the same name Signifies a deletion of a file of that name
editionNumber	1	CharacterString		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.
issueDate	1	Date		
productSpecification	1	S-100_ProductSpecification		
dataType	1	S-100_SupportFileFormat	TXT XML HTM TIFF	Text files Text files Text files Picture files

Comment [T5]: This should be changed to version number.

Comment [T6]: Need to update S-100 to allow for these new file types.

Comment	0..1	CharacterString		
Crc	1	CharacterString		

Comment [JLP7]: Is this correct?

4. Exchange Catalogue File Metadata

The catalogue file is defined in XML schema language and the data set files are encoded as ISO/IEC 8211 data records, fields, and subfields. The Exchange catalogue inherits the dataset discovery metadata and support file discovery metadata.

Name	Cardinality	Value	Type	Remarks
metadataFileIdentifier	1		CharacterString	Should this be changed from a mandatory in S-100 part 3
metadataPointOfContact	1		CI_ResponsibleParty	
metadataDateStamp	1		Date	
metadataLanguage	1	English	CharacterString	All data sets conforming to S-101 PS must use English language
name	1		CharacterString	
path			CharacterString	
abstract	1		CharacterString	E.g. a harbour or port name, between two named locations etc.
productSpecificationEditionNumber	1			
comment	0..1		CharacterString	
compressionFlag	1	{1} to {2}	CharacterString	1. Yes 2. No
algorithmMethod	1		CharacterString	ZIP, RAR, etc.
sourceMedia	1			
replacedData	1			If a data file is cancelled is it replaced by another data file
dataReplacement				Cell name

Comment [YUN8]: Find source – RC and everything below

Comment [YUN9]: Find source of this info – RC?