

ISO GEOSPATIAL METADATA IMPLEMENTATION FORUM

Welcome

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*Creating
Geospatial
Metadata for
Project Open
Data (POD)*

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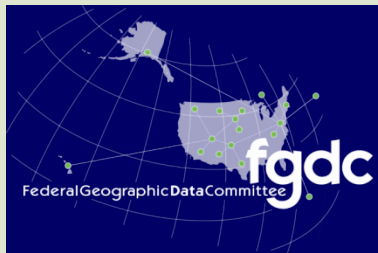
**Wednesday
January 14, 2015**

WELCOME TO THE ISO METADATA IMPLEMENTATION FORUM

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PURPOSE

Offer a webinar information series for the presentation & discussion of ISO geospatial metadata standards implementation efforts through shared experiences, strategies, topics, & resources.



Audience: FGDC Metadata Working Group & other interested participants



Presenters: Community participants willing to share their expertise in common interest areas



Anticipated Outcome: Each session documented & available at the FGDC Metadata website; stimulate ideas and promote use



All Presentations and Materials Available at:

<http://www.fgdc.gov/metadata/events/iso-geospatial-metadata-implementation-forum/>

2015 SCHEDULE

Second Wednesday of the Month - 3:00-4:30 PM ET
60 minute presentation & 30 minute discussion

Date (Wednesdays)	Title
January 14	Creating Geospatial Metadata for Project Open Data (POD)
February 11	ISO 19115-3 Implementation Schema
March 11	Metadata Working Group Meeting
April 8	How does ISO 19115-1 Differ From ISO 19115?
May 13	ISO Metadata Editor Registry
June 10	Metadata Working Group Meeting
July 8	To Be Announced <i>Options:</i>
August 12	To Be Announced <ul style="list-style-type: none">• <i>Moving Your Organization From CSDGM to ISO Metadata</i>
September 9	Metadata Working Group Meeting
October 14	To Be Announced <ul style="list-style-type: none">• <i>ISO Metadata Editor Demonstrations</i>• <i>Capitalizing on ISO Metadata</i>
November 18 <i>(3rd Weds due to Vet Day)</i>	To Be Announced <ul style="list-style-type: none">• <i>Other?</i>
December 9	Metadata Working Group Meeting



**NEXT MONTH:
FEBRUARY 11, 2015**

***ISO 19115-3 Implementation Schema
for ISO 19115-1***

- **Ted Habermann, The HDF Group**

CALL FOR PARTICIPATION

- **ISO Implementation Forum Presenters and Topics of Interest**
Share your expertise or ISO implementation issues
 - **ISO Standards Subject Matter Experts Needed for Revisions to:**
 - **ISO 19115-2 – Geospatial Metadata - Remote Sensing**
 - **ISO 19142 – Geographic Information – Web Feature Service**
 - **ISO 19143 – Geographic Information – Filter Encoding**
- By ***Friday***, January 16, 2015

CONTACT:

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LOGISTICS

- Forum will be recorded
- Presentations, Questions/Answers, and Recordings will be posted at:

<http://www.fgdc.gov/metadata/events/iso-geospatial-metadata-implementation-forum/>

ISO METADATA RELATED STANDARDS

David Danko -
Esri

ISO Metadata related standards

Name of Standard	Description	Status
ISO 19109:2005 Rules for application schema	Defines the a general feature model and rules for creating and documenting application schemas for modeling features and their properties allowing physical applications to understand and share data	Under revision: FDIS 2014-7, IS 2015-01
ISO 19110:2005 + Amendment 1 Methodology for feature cataloguing	Catalogue defining features and properties for a domain of interest and/or a dataset and a schema for encoding in XML	Under revision: IS 2015-01
ISO 19111:2007 Spatial referencing by coordinates	Metadata about/defining a coordinate reference system	International standard
ISO 19111-2:2009 Spatial referencing by coordinates- Extension for parametric value	Metadata about/defining a coordinate reference system using parametric values	International standard
ISO 19112:2003 Spatial referencing by geographic identifiers	Metadata about/defining a reference system which uses spatial unit identifiers other than coordinates i.e. gazetteer, postal codes, etc.	International standard

ISO Metadata related standards

Name of Standard	Description	Status
ISO 19113:2002 Quality principles	Defines the principles, the elements/sub-elements of data quality	Superseded by 19157
ISO 19114:2003 Quality evaluation procedures	Defines procedures for determining data quality	Superseded by 19157
ISO 19115:2003 Geospatial metadata	Defines metadata elements and schema describing geospatial datasets	Superseded by 19115-1
ISO 19115-1:2014 Geospatial metadata fundamentals	Revision of ISO19115 which defines metadata elements and schema describing geospatial resources i.e. datasets and services	International standard
ISO 19115-2:2009 Extensions for imagery and gridded data	Defines additional metadata elements and schema describing imagery and gridded geospatial datasets	International standard
ISO 19115-3: XML schema implementation metadata fundamentals	Provides a schema for implementing ISO 19115-1 in XML	Under development: TS 2015-01

ISO Metadata related standards continued

ISO 19119:2005 Services	Provides a framework and defines the metadata for services enabling users to access and process geographic information across a generic computing interface. The metadata portion of this standard has been moved to ISO19115-1	Partially superseded by 19115-1
ISO 19130:2010 Imagery sensor models for geopositioning	Specifies a sensor model describing the physical and geometrical properties of specific sensors	International standard
ISO 19130-1 Imagery sensor models for geopositioning	Revision of ISO 19130-1	Under revision
ISO 19130-2:2014 Imagery sensor models for geopositioning SAR, InSAR, Lidar and Sonar	Specifies a sensor model describing the physical and geometrical properties for the stated sensors	International standard
ISO 19138:2006 Data quality measures	Defines commonly used measures for reporting data quality for the sub-elements defined in ISO 19113 and a structure so they may be maintained in a register.	Superseded by 19157

ISO Metadata related standards continued

ISO 19139:2007 Metadata XML Schema implementation	Provides encoding rules and a schema for implementing ISO 19115 in XML.	International standard To be partially superseded by ISO 19115-3
ISO 19139-1 Metadata XML Schema implementation	This revision will only include the encoding rules for metadata	Under revision
ISO 19139-2:2012 Metadata - XML schema for imagery and gridded data	Provides a schema for implementing ISO 19115-2 in XML	International standard
ISO 19157:2013 Data Quality	Defines the principles and components for describing, evaluating, and the measures used for reporting data quality. Revising and replacing ISO 19113, 19114, 19138.	International standard
ISO 19157-2 Data Quality XML Schema implementation	Provides a schema for implementing ISO 19157 in XML	Under development: TS 2016-05
ISO 15836:2009 The Dublin Core metadata element set	Cross domain resource descriptions – not limited to specific resources	International standard



Schedule: standards under development

- ISO 19110 Methodology for feature cataloguing
 - IS 2015-01
- ISO 19115 -2 Metadata – Imagery extension Revision (Starting soon)
Call for participants
 - WD ?
- ISO 19115-3 XML schema implementation of metadata fundamentals
 - TS 2015-01?
- ISO 19130-1 Imagery sensor models for geopositioning - Part 1:
(Revision of ISO/TS 19130:2010)
 - CD 2015-06
 - DIS 2016-06
 - TS 2017-06
- ISO 19139-1 Metadata encoding (just methods)
 - CD 2015-06
 - DIS 2016-06
 - TS 2017-06
- ISO 19157-2 Data Quality XML schema
 - TS 2015-11
- ISO 19165 Preservation of digital data and metadata (New)
 - CD 2015-11
 - DIS 2016-11
 - IS 2017-11

PROJECT OPEN DATA (POD) OVERVIEW

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INTRODUCTION

- **Federal agencies are developing geospatial metadata using endorsed standards in accord with NSDI policy and directives**
- **Project Open Data (POD) requires the creation of metadata specific to POD public access objectives**
- **Agencies are faced with meeting metadata requirements for both the NSDI and POD directives**
- **Today's purpose is to:**
 - **provide insight to the POD initiative, requirements, and schedule**
 - **explore agency implementation examples and issues faced**
 - **discuss efforts to create a standardized crosswalk for agency use**

POD FAQ

What?

White House initiative to help agencies implement the Open Data Policy.
requires agencies to collect or create information in a way that supports downstream information processing and dissemination activities. This includes using machine-readable and open formats, data standards, and common core and extensible metadata for all new information creation and collection efforts.

More information: <https://project-open-data.cio.gov/>

OMB M13-13:

<http://www.whitehouse.gov/sites/default/files/omb/memoranda/2013/m-13-13.pdf>

Who?

Federal Departments and Agencies that are accountable to the Federal Office of Management and Budget (OMB)

POD FAQ

How?

Agencies are directed to:

- create an ‘enterprise data inventory’ for all (geo and non-geo) data, e.g.
 - CKAN installation
 - ESRI GeoPortal installation
 - other/custom installation
- develop a Public Data Listing and post at [www.\[agency\].gov/data.json](http://www.[agency].gov/data.json)
- make the PDL available for harvest by Data.gov

POD FAQ

When?

Initial requirements: November 30, 2013

- Create and maintain an Enterprise Data Inventory (Inventory) of POD v1.0 metadata
- Create and maintain a Public Data Listing
- Create a process to engage with customers to help facilitate and prioritize data release
- Document if data cannot be released
- Clarify roles and responsibilities for promoting efficient and effective data release

Source: *POD Implementation Guide* @

<https://project-open-data.cio.gov/implementation-guide/>

POD FAQ

When?

New requirements: February 2015

Project Open Data



Project Open Data Metadata Schema v1.1

New Schema

This version of the schema replaces [Project Open Data Metadata Schema v1.0](#). Federal CFO-Act agencies are expected to complete the transition to the v1.1 schema by

February 1st, 2015.

POD FAQ

Are CSDGM/ISO metadata records ‘POD Compliant’?

Not as written. There are content and format difference.

What are the format differences?

POD metadata is written to the JavaScript Object Notation (JSON) - a text-based open format used by servers and web applications as an alternative to XML

POD FAQ

What are the content differences?

Much of the content overlaps but elements names and domains often differ, e.g.

POD New Elements (required/required if applicable)

- Agency Bureau Code
- Program Bureau Code

POD Similar Element – Different Domain

- Temporal
 - no ‘present/now’ end date option
- Distribution Media Type
 - IANA specified domain does not include geospatial media types

POD FAQ

How do we address format differences?

- Create standalone POD/JSON record
- Incorporate conversion from XML to JSON in data.gov publication process/application

How do we address content differences?

- POD/ISO/CSDGM Crosswalk in final stages
- Agency data.gov publishing methods vary so crosswalk will enable agencies to build custom solutions based on standardized crosswalk

POD FAQ

How do we address format differences?

- Create standalone POD/JSON record
- Incorporate conversion from ISO/CSDGM/XML to POD/JSON in data.gov publication process/application

How do we address content differences?

- POD/ISO/CSDGM Crosswalk in final stages
- Agency data.gov publishing methods vary so crosswalk will enable agencies to build custom solutions based on standardized crosswalk
 - CKAN installations
 - ESRI Portal installations
 - Other/custom installations

PROJECT OPEN DATA (POD) PUBLISHING TO DATA.GOV -

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PROJECT OPEN DATA (POD) GEO METADATA CROSSWALK

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PROJECT OPEN DATA (POD) CROSSWALK IMPLEMENTATION

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PROJECT OPEN DATA (POD) DISCUSSION

DISCUSSION QUESTIONS

- How is your agency addressing POD metadata publication?
- What issues are/will be of concern to your agencies?
- What insights/observations have helped your agency address POD requirements?

MORE INFORMATION AND INPUT

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