

# SDSFIE-M

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USACE Metadata Working Group Co-Leads

eHydro Training Session 7

12 April 2016

## Agenda

- What is SDSFIE-M?
- How do I get and use it?
- How is it different than FGDC CSDGM?
- Why, just why?



# METADATA



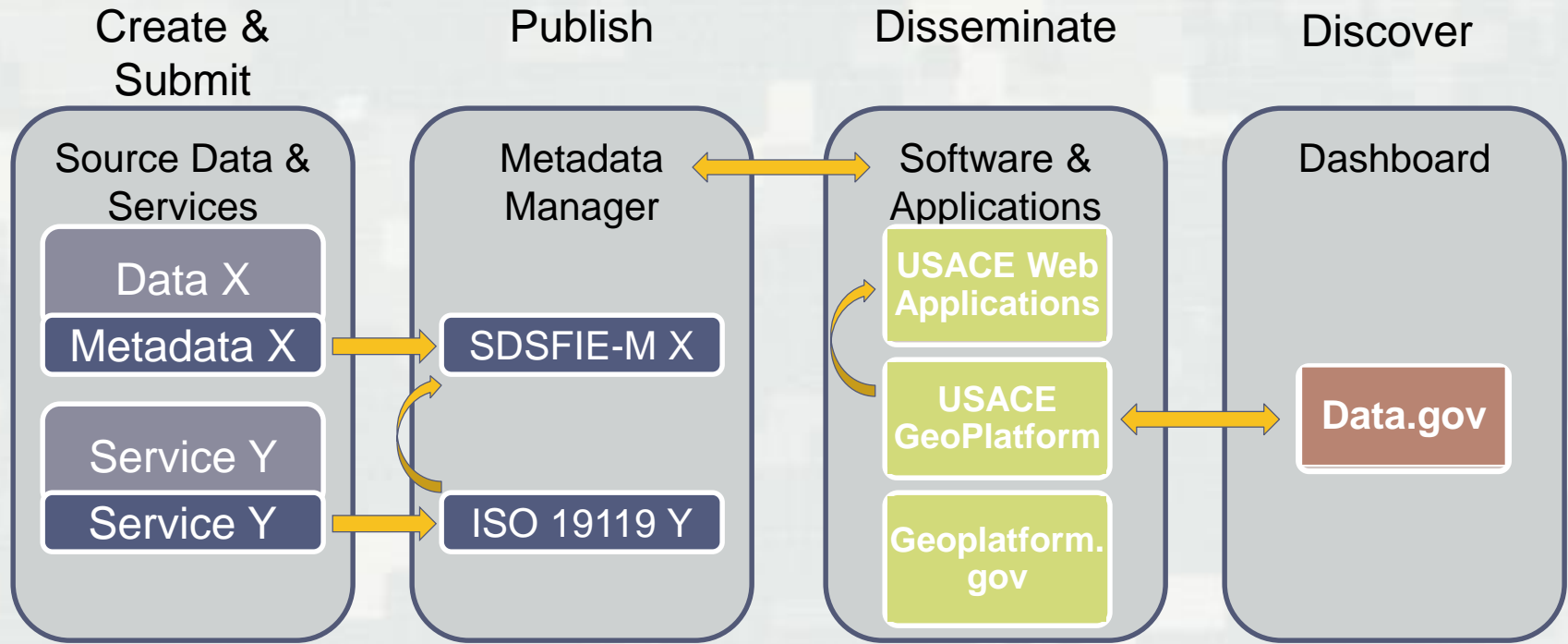
metadata describe information Data

# USACE Metadata Working Group

- Initiated during the 2013 Geospatial CoP meeting
- *Volunteer* effort to develop a new vision for metadata within USACE
  - ▶ Revise Appendix K, “Metadata” of USACE’s *Geospatial Data and Systems Engineer Manual* (EM 1110-1-2909; dated 1 September 2012)
  - ▶ Standardize production, management and dissemination of metadata within USACE
    - Implements SDSFIE-M across the organization
    - Procedures for submitting metadata for publication that include roles for creating and publishing metadata (any USACE personnel) and approval of metadata records for Data.gov harvest (single POC per district, division and lab)
    - Maintains a single metadata catalog that is the sole Data.gov harvest source for USACE metadata
- Participation is *voluntary*, and highly encouraged



# High-Level Metadata Vision



# What is SDSFIE-M?

- SDSFIE-M is a profile of the National System for Geospatial-Intelligence (NSG) Metadata Foundation, or NMF. NMF is, in turn, **a profile of ISO 19115:2003/Cor 1:2006** (Geographic Information – Metadata).
- SDSFIE-M is applicable to (and **will be mandated** for use by) the Installation Geospatial Information and Services (IGI&S) user community, as defined in DoD Instruction (DoDI) 8130.01.
- The structure of SDSFIE-M supports the goals of making IGI&S data discoverable by automated means, understandable to users, and thus more trusted for DoD missions and decision making.
  - ▶ **Optional elements in ISO 19115 become mandatory and are extended**
    - MD\_SecurityConstraints extended for additional security requirements for I&E community (i.e. handling restrictions)
  - ▶ **Includes extended elements necessary to describe SDSFIE data**
    - Sdsfie:FeatureType to distinguish between SDSFIE and non-SDSFIE feature types
    - Sdsfie:Feature to describe SDSFIE feature types



An SDSFIE-M Implementation Plan for USACE will be developed by the USACE Metadata Working Group within 9 months of the IGG mandate.



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# CSDGM

# ISO metadata standards today

(1,7) Identification,  
Metadata  
Reference Info

(2) Data Quality

(5) Entity and  
Attribute

RSE

## Definition/Content Rules

ISO 19115:2003  
Metadata

ISO 19113:2002  
Quality Principals

ISO 19114:2003  
Quality eval procedure

ISO 19110:2005  
Feature Catalogue

ISO 19115-2:2009  
Metadata-Imagery

ISO 19119:2005  
Services

## XML Rules

ISO 19139:2007  
Metadata XML encoding

ISO 19110 Amd 1:2011  
Feature catalogue – encoding  
Annex E

ISO 19139-2:2012  
Metadata Imagery encoding

OGC services



# CSDGM

# ISO metadata standards of the (near) future

## Definition/Content Rules

## XML Rules

(1,7) Identification, Metadata Reference Info

ISO 19115-1:2014  
Metadata fundamentals  
Including Services metadata

ISO 19115-3  
Metadata fundamentals XML encoding 9/15

(2) Data Quality

ISO 19157:2013  
Data Quality

ISO 19157-2  
Data quality XML encoding 5/16

(5) Entity and Attribute

ISO 19115-2  
Extending 19115-1 & 15-2

ISO 19139 Metadata  
XML encoding rules 6/17

RSE

ISO 19115-2:Rev  
Metadata-Imagery  
Started 6/15 – 11/17

ISO 19115-2 Rev  
Metadata Imagery annex

ISO 19110:2015  
Feature catalogue 2/16

ISO 19110:2015  
Feature catalog annex



[ In Work ]

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# What this means to you ...

- Metadata standards will continue to evolve and emerge
  - ▶ Community profiles of ISO (i.e. SDSFIE-M)
  - ▶ Documents, photos, videos, new technologies (i.e. web maps)
  - ▶ Data.gov/Project Open Data (POD) schema and data.json format
- Tools are adaptable to these changes
  - ▶ SDSFIE-M Metadata Style for ArcGIS
  - ▶ Crosswalks from FGDC/CSDGM & ISO to Project Open Data/JSON v1.1 are available; testing validation & harvesting  
<https://project-open-data.cio.gov/v1.1/metadataresources/#crosswalks-for-geospatial-metadata>
  - ▶ ISO Metadata Editor Registry and User Reviews  
<https://www.fgdc.gov/iso-metadata-editors-registry/editors>



# SDSFIE-M Implementation

## SDSFIE-M Metadata Style for ArcGIS

- Go to <https://metadata.ces.mil/dse>
- Search for “SDSFIE-M”
- Select and download “SDSFIE-M Metadata Style for ArcGIS 10.x.x.Zip”\*
- Unzip and install\*\* (.msi installer)
- In ArcCatalog select the SDFSIE-M 1.0.2\*\*\* Metadata Style under the Metadata tab

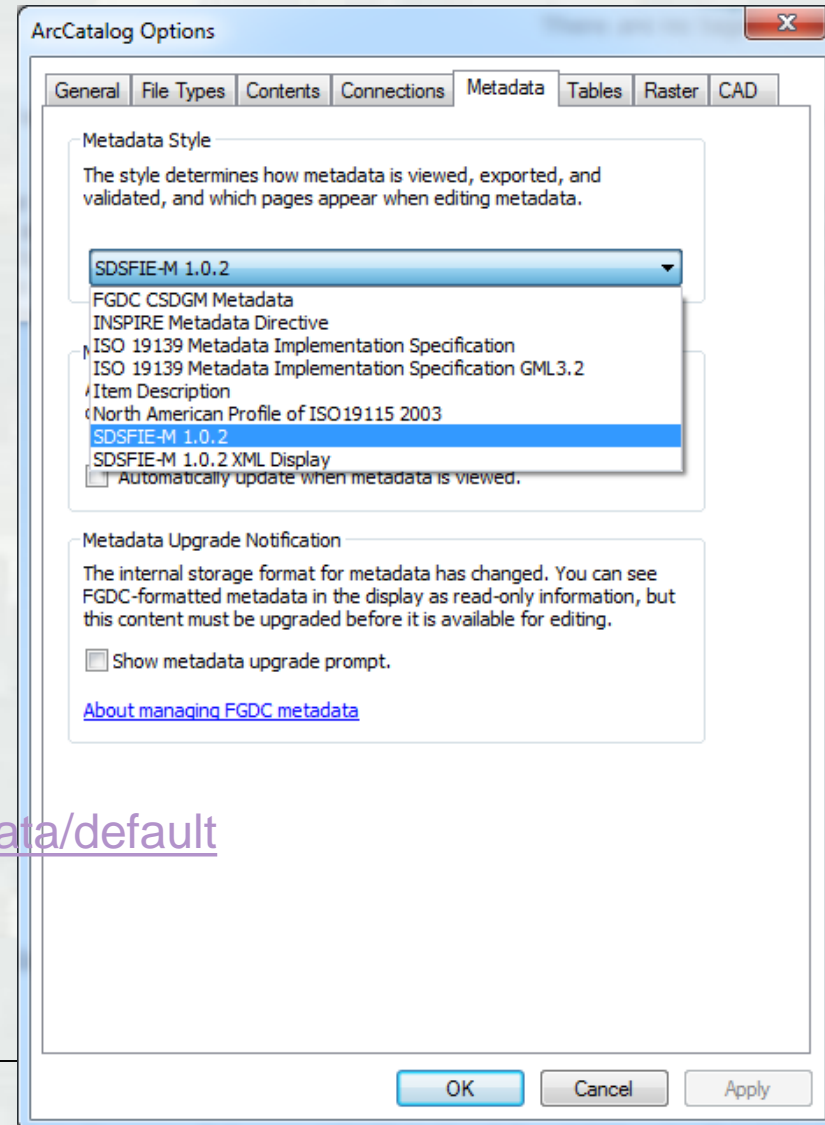
\*Packages also available on Metadata Working Group SharePoint Site

<https://cops.usace.army.mil/sites/GEO/metadata/default>

\*\*Need ACE-IT Approval



\*\*\* under revision, version 1.0.3 soon!





# SDSFIE-M *Example* Workflow

1. Set the SDSFIE-M Metadata Style in ArcCatalog Options
  2. Browse to your SDSFIE feature class in the table of contents
  3. Select the Description tab
  4. Select Edit
  5. Begin editing
    - ▶ Reference the USACE Best Practices Guidance
  6. Save the edits
  7. Run Export Metadata
    - ▶ Source Metadata is your SDSFIE feature class
    - ▶ Translator is the ARCGIStoSDSFIE-M.xml
    - ▶ Output File is an xml file
  8. Validate and upload the output xml file
    - ▶ Using Metadata Manager (possible to just validate, or only validate during upload)
    - ▶ Tell your Metadata Working Group POC the file is uploaded for review and publication (automated ways of doing this)
- Grab the UUID assigned by metadata manager, and use it to populate the sdsMetalD field for those corresponding features in your SDSFIE feature class



# Metadata Working Group on SharePoint

- <https://cops.usace.army.mil/sites/GEO/metadata/default>.

Site Actions ▾ Browse Page Sylvester, Charlene S SAM ▾

**Communities of Practice** Metadata Working Group ▾

Geospatial Related CoPs ▾ Centers of Expertise ▾ Systems & Tools ▾ Agreements, Guidance & Regulations ▾ PDTs ▾ This Site: Metadata Work Search

**Libraries**  
Site Pages  
Shared Documents  
Metadata Documents

**Lists**  
Calendar  
Tasks  
Metadata POCs  
Metadata Questions

**Discussions**  
Team Discussion

Recycle Bin  
All Site Content

## Welcome to the Metadata Working Group

Welcome to the Metadata Working Group! Our goal is to develop best practices, recommend assets. Here you will discover information, resources and discussions as USACE strengthens its metadata posture. Your participation and feedback are critical to this process.

CoP Co-Leaders: Lisa Delmonico and Charlene Sylvester

### Announcements

**New SDSFIE Metadata Links Posted** 10/24/2014 11:38 AM  
by Delmonico, Lisa M AGC

The DISDI Group recently adopted a new metadata standard for use in the I&E community called SDSFIE-M. The standard, like ISO 19115 and the National System for Geospatial-Intelligence (NSG) Metadata Foundation (NMF) from which it is derived, consists...

[Add new announcement](#)

### Site Pages

Type	Name	Modified By	Modified	Created By	Created
	Metadata Resources	Sylvester, Charlene S SAM	8/25/2015 1:28 PM	Sylvester, Charlene S SAM	8/25/2015 7:16 AM

[Add new page](#)

### Content Manager(s)

Blyler, Nancy J HQ02  
Delmonico, Lisa M AGC  
Sylvester, Charlene S SAM

[Add new user](#)

### Links

- Project Open Data - Data.gov Links
- NOAA ISO Training Links

[Add new link](#)

Enterprise Design PDT for Geospatial System  
Metadata Working Group  
Small Unmanned Aerial Systems (SUAS)

https://cops.usace.army.mil/sites/GEO/metadata/SitePages

Accessibility/Section 508 | External Links Disclaimer | Privacy & Security | Support & Services | Content Managers and Leads | SharePoint Skills Center |

# Please participate!

- Check out the SDSFIE-M Metadata Style for ArcGIS and the Metadata Working Group SharePoint Site
- *Volunteer* with and/or engage the Metadata Working Group to help develop your project's metadata
  - ▶ Review of metadata templates for SDSFIE-M compliance and use of metadata best practices
  - ▶ Discuss potential improvements to metadata content (i.e. data processing lineage and QA/QC procedures) and standardization (i.e. keyword lists)
  - ▶ Discuss and develop workflows for implementation of SDSFIE-M
- and remember ...



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# Thanks!

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