Metadata Working Group
Update to Coordination Group

Lorna Schmid
FGDC OS
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Introductions
Metadata Working Group Members
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Introduction

The purpose of the Metadata Working Group is to:

- Promote awareness of and best practices for the metadata component of geospatial data
- Facilitate the coordination, development, use, sharing, and dissemination of geospatial metadata
- Supports the implementation of geospatial metadata and other related Federal, National, and International standards established organizations including
  - FGDC
  - Open Geospatial Consortium (OGC)
  - American National Standards Institute (ANSI)
  - International Organization for Standardization (ISO)
Metadata Working Group Members

2017 Metadata Working Group
TOTAL = 190 Participants

- Federal: 54%
- State & Local: 16%
- Academia: 11%
- Industry: 17%
- International: 2%

https://www.fgdc.gov/organization/working-groups-subcommittees/mwg/
NGDA Themes and Datasets

The Metadata Working Group is a cross cutting team:

All NGDA Themes and Datasets are represented
Recent Meetings

The Metadata Working Group meets Quarterly

- September topics included:
  - Status of ISO 191** Suite of Metadata Standards, update from Standards Working Group on proposals and endorsement of ISO standards
  - Best Practices Document Review (companion to NGDA Metadata Guidelines)
  - ISO Metadata Summit – Highlights, Recommendations

- Meeting outcomes include:
  - Increase understanding of status and relationships among ISO metadata standards
  - Meeting summaries and presentations available at:

  http://www.fgdc.gov/participation/working-groups-subcommittees/mwg/
FGDC Endorsement of INCITS/ISO Metadata Standards

- **Steering Committee Endorsement**
  - 19157:2013 Geographic information -- Data quality standard

- **Proposed Endorsement by MWG and SWG:** Preparing for CG
  - 19115-3:2016 Geographic information -- Metadata -- Part 3: XML schema implementation for fundamental concepts
  - 19157-2:2016 Geographic information -- Data quality -- Part 2: XML schema implementation
ISO Metadata Implementation Forum

- **Purpose:** A monthly webinar information series for the presentation and discussion of ISO metadata implementation shared experiences, strategies, topics, and resources

- **Audience:** FGDC Metadata Working Group & NSDI Stakeholders

- **Presenters:** ISO metadata implementers from all community sectors

- **Schedule:** Second Wednesday of the month from 3 – 4:30 ET (alternate with MWG meetings). First meeting on Jan. 11, 2017

- We’re always looking for presenters!
  Please contact: Lorna Schmid (lorna@usgs.gov)

**Presentation Materials & Information**
ISO Forum Topics

ISO Geospatial Metadata Implementation Forum

Community sharing experiences, strategies, and resources

Profiles of ISO
Crosswalking Standards
Transform CSDGM to ISO
ISO for INSPIRE Directive
Why Implement ISO?
Implementation Workflow Model
Common Metadata Repository
Implementation Tools
OpeGeo Metadata
ISO Metadata Editors Registry
Case Studies & Lessons Learned

Census Bureau, USGS
Woolpert, Innovate!
EPA, FGDC, NOAA
Image Matters
North Carolina, New Jersey
GEOCAT, Swedish Geodata
Arizona, California, Idaho
Natural Resources Canada
Minnesota, New Mexico
DOE, NASA, USACE
GeoDiscover Alberta Canada
UNM, Stanford
USGIN
ESRI

FGDC.GOV
FEDERAL GEOGRAPHIC DATA COMMITTEE
ISO Geospatial Metadata Editors Registry

- Share information about ISO creation tools
- Supporting MWG member reviews and feedback on registered tools
- Reaching out to ISO Summit tool developers to add new tools

![Table](http://www.fgdc.gov/metadata/iso-metadata-editor-review-v2)

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http://www.fgdc.gov/metadata/iso-metadata-editor-review-v2
Metadata Guidance & Best Practices

- Worked with Agencies GeoPlatform Team and Data.gov teams to manage documentation

- Updated **NGDA Metadata Guidelines**
  - Documentation best practices for incorporation of web service and data download links

- Updated **Best Practices Companion: Metadata Recommendations Supporting Data Discovery and Use in Data.gov and the Geospatial Platform**
  - Supports the ISO suite of metadata standards
  - Includes guidance & best practices on
    - Metadata Content such as documenting services, collections, and the assignment of unique identifiers and Metadata publishing
ISO Geospatial Metadata Summit

More than 120 attendees ~ 40 government and non-governmental organizations

Focused on:
- Identifying and addressing implementation issues
- Developing implementation plans
- Leveraging the Geospatial Platform to implement the standard and access services
- Engaging participation in ISO metadata policies, tools and outreach
- Sustaining implementation efforts

Sharing Best Practices and Developing Recommendations for Standards Implementation

ISO Summit Report
ISO Metadata Summit Day 1: ISO Tools

<table>
<thead>
<tr>
<th>Tool</th>
<th>Create/Validate</th>
<th>Assess/Enhance</th>
<th>Publish</th>
<th>Features</th>
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</table>
| Geospatial Platform Object Editor            | ✗               | ✗              | ✗       | • Enhanced documentation to link resources and validate  
• Import and export ISO 19139  
• ISO 19115-1/-3 & GeoPlatform profile planned for Aug 2017 |
| Esri Geoportal Server                        | ✗               |                | ✗       | • Web based metadata editor  
• Supports multiple standards                                                                                                          |
| EPA Metadata Editor (EME 5.0)                | ✗               |                | ✗       | • ISO 19115-1/-3 compliant  
• Supports Project Open Data schema                                                                                                       |
| NASA Metadata Management Tool                | ✗               |                | ✗       | • Open source  
• Standards agnostic                                                                                                                    |
| NOAA Metadata Rubric                         |                | ✗              |         | • Online application available to assess metadata completeness  
• Adaptable to other resource types, e.g. services                                                                                      |
| Alaska Consortium ISO Metadata Toolkit       | ✗               |                |         | • Open source metadata editor  
• Transforms mdJSON to CSDGM, ISO 19115-1/-3/-2, 19110, HTML and USGS ScienceBase (sbJSON)                                         |
Enables Data for Applications

- FGDC Geospatial Platform provides shared and trusted geospatial data, services, and applications for the advancement of the NSDI

Census Presentation highlighted processes, challenges, and benefits of 2012 ISO implementation for both geospatial data files and web services
Web Services and Metadata Project

Improving Access to NGDA Data via Web Services & Documentation in Metadata

- Metadata Community Embraces documentation of Web Services

- There are 176 NGDA Datasets
  - In 2016, 41 Datasets reported having a web service and
  - June 2017, this number has increased to 92 NGDA Datasets reporting with 192 web services
Leveraging Mission Efficiencies for Event Driven Collaboration
October 24 & 25th 2017, USGS

Jen Carlino Participated on Panel: Metadata Transitions and Challenges With FGDC, Esri, Image Matters and DoD/DISDI
Next Steps: Moving Towards ISO Metadata & Building Off ISO Summit Recommendations

Policy and Planning
- Develop plan of action for transition to ISO 19115-1/-3
- Streamline reporting requirements (e.g., crosswalks)
- Support FGDC endorsement of ISO standards and profiles

Tools and Applications
- ISO Metadata Editor Registry (e.g., creation, validation)
- Consistency in content (e.g., URI’s, vocabularies)
- Coordinate publishing with Data.gov and GeoPlatform.gov

Education and Outreach
- Enhance best practices for documentation of services, etc.
- Develop online “workbook” with examples
- ISO Forum and other training (e.g., email listserv)
Next Steps

- Update Documentation to incorporate information on new and retired standards, and other relevant updates
- Update Crosswalk towards ISO 19115-1 implementation

- Propose endorsement of ISO geospatial metadata standards through FGDC process including:
  - ISO 19110:2016 Proposal: Geographic information -- Methodology for feature cataloguing (ISO TC 211, 2016)

- Continue coordination with GeoPlatform & Data.gov teams on access and incorporation of Agency Metadata

- Continue work to improve access to Federal Geospatial Data through *bigger, better, more Metadata!*
Next Metadata Working Group Meeting

- Wednesday December 13, 2017 at 3pm ET

- Topics to be discussed:
  - Presentation: Geospatial Intelligence Standards Working Group Update on ISO 19115-1:2014 Implementation
  - Status of proposed FGDC endorsement of 2 standards
  - Metadata Update from Esri
Questions?

Lorna Schmid, FGDC OS

703.648.6834
lorna@usgs.gov