

Federal Geographic Data Committee Metadata Working Group



Quarterly Meeting
December 13, 2017

Agenda

- Presentation: Nathan Babcock, GWG-MFG ISO 19115-2 Implementation for NSG
- Annual Report to Coordination Group Update
- Status of Metadata Standards proposed for FGDC endorsement
 - Request for Review of New Proposal for ISO 19110:2016 Geographic information - Methodology for feature cataloguing
- Metadata Update from Esri. Aleta Vienneau or Satish Sankaran
- News from the Field
- Open Discussion

Presentation: GWG-MFG ISO 19115-2 Implementation for NSG



Nathan Babcock

Chair, GWG Metadata Focus Group, Application Schemas for Feature
Encoding Focus Group
GEOINT Semantic Standards, Profiles, and Metadata Program Lead
Chief Information Officer and IT Services Directorate
National Geospatial-Intelligence Agency

ISO Metadata Standards Update

Julie Maitra, FGDC

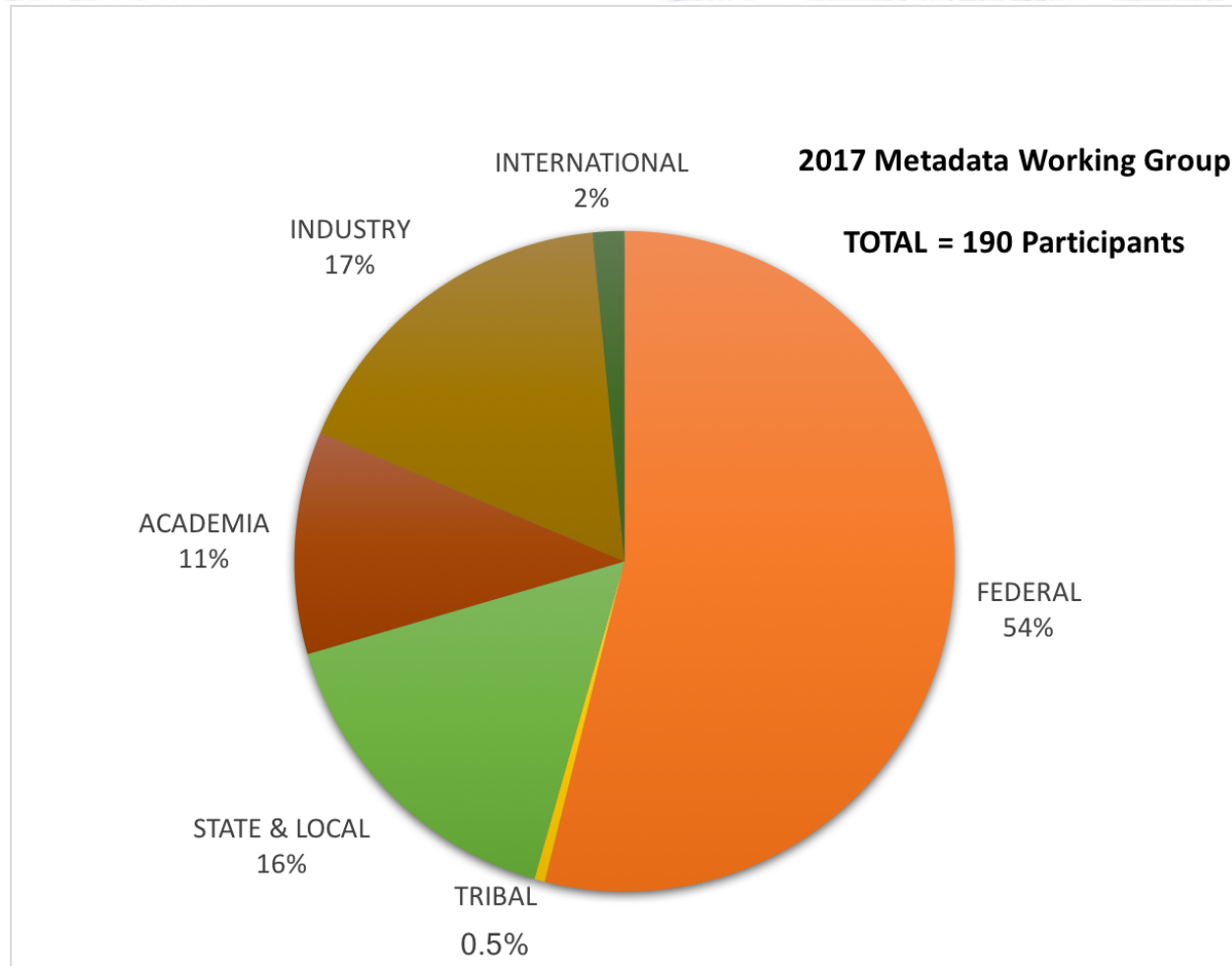


Coordination Group Annual Update on MWG

Lorna Schmid, FGDC



Metadata Working Group Members



<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/>

Recent Developments & Projects

FGDC Endorsement of INCITS/ISO Metadata Standards

❖ **Steering Committee Endorsement**

- ❖ 19115-1:2014 Geographic information -- Metadata -- Part 1: Fundamentals
- ❖ 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](#)

Metadata Working Group



ISO Forum Topics



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

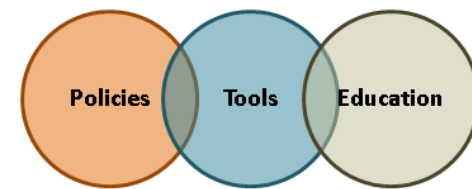
Feature	GeoNetwork Opensource	CatMDEdit V.5.0	Esri Geoportal Server	QSphere
Geospatial Metadata Content Standards Supported				
ISO 19115:2003 - Metadata	full	full	full	partial
ISO 19115-2 - Gridded Imagery Extension	full	none	full	none
ISO 19110 - Feature Catalog	full	full	full	none
ISO 19119 - Services	full	full	full	none
ISO 19115-1 - Metadata Fundamentals	full	none	full	partial
Other Related Metadata Standards	View	View	View	View
User Interface				
GUI	✓	✓	✓	✓
Edit XML Directly	✓		✓	✓
Other / Comments	View	View	View	View
Operating Platform				
Desktop	✓	✓		✓
Distributed/Enterprise	✓		✓	
Online Application	✓		✓	
Other / Comments	View			
Proprietary Nature				
Open Source (publicly available)	✓	✓	✓	✓
Source Code Available (customers only)	✓	✓	✓	✓



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
Metadata Working Group

ISO Metadata Summit Day 1: ISO Tools

Tool	Create/ Validate	Assess / Enhance	Publish	Features
Geospatial Platform Object Editor	x	x	x	<ul style="list-style-type: none"> 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	x		x	<ul style="list-style-type: none"> Web based metadata editor Supports multiple standards
EPA Metadata Editor (EME 5.0)	x		x	<ul style="list-style-type: none"> ISO 19115-1/-3 compliant Supports Project Open Data schema
NASA Metadata Management Tool	x		x	<ul style="list-style-type: none"> Open source Standards agnostic
NOAA Metadata Rubric		x		<ul style="list-style-type: none"> Online application available to assess metadata completeness Adaptable to other resource types, e.g. services
Alaska Consortium ISO Metadata Toolkit	x		x	<ul style="list-style-type: none"> Open source metadata editor Transforms mdJSON to CSDGM, ISO 19115-1/-3/-2, 19110, HTML and USGS ScienceBase (sbJSON)

ISO Summit: Day 2 Understanding Current Implementation Activities & Challenges

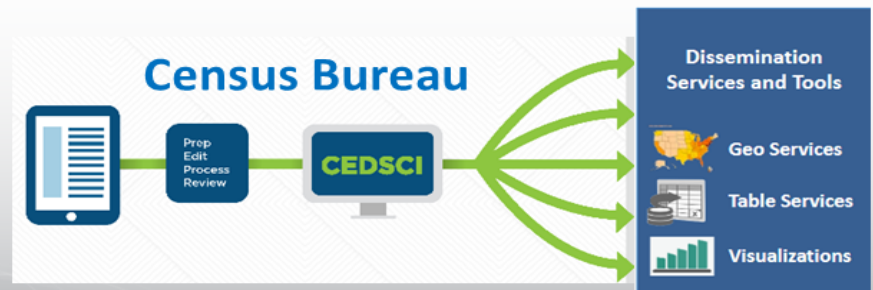
Multiple presenters
&
Breakout Sessions
to
Document Issues and
Suggestions

Enables Data for Applications



FGDC Geospatial Platform

provides shared and trusted geospatial data, services, and applications for the advancement of the NSDI



United States
Census
Bureau

U.S. Department of Commerce
Economics and Statistics Administration
U.S. CENSUS BUREAU
census.gov

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

Metadata Working Group

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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

2017 GeoPlatform Workshop

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!*

News From the Field



Esri Metadata Update

*Aleta Vienneau,
Esri*



Next Meetings

November
ISO Forum

December 13
**Metadata Working
Group**

*Implementing ISO
Annual Report to CG
& Presentations*

January 11, 2018
ISO Forum

To Be Determined