



ISO Metadata Implementation Model Workflow Components

1. Establish a strong geospatial metadata foundation
 - 1.1. Inventory and assess your existing metadata resources
 - Metadata Holdings

Review your current metadata holdings and determine which records are

 - viable data management resources
 - in need of improvement
 - outdated or deficient and should be deleted
 - Staff

Identify key staff that

 - create data
 - create metadata
 - manage metadata and/or
 - serve as a metadata expert
 - work in XML, UML and/or basic programming
 - have the administrative role and technical and communication skills to champion the process
 - Policy

Identify internal and external policies that

 - require the creation of geospatial metadata resources
 - promote the creation of geospatial metadata resources
 - Tools

Identify existing metadata creation, validation, management and/or publication tools and determine:

 - significance of the tool to the data development process, i.e. is it fundamental or expendable
 - ability of the tool to support ISO metadata standards
 - Community and Communications

Identify organizations and activities with which you participate that sustain a metadata dialog and provide you insights, e.g. internal, regional, thematic, national and international work groups.
 - Training

Identify organizational geospatial metadata training:

 - needs
 - capabilities
 - opportunities (internal, external, online, etc.)
 - Infrastructure

Outline your current metadata infrastructure including

 - metadata creators/reviewers
 - data management (storage, review, update) system
 - metadata repository/clearinghouse
 - Standards

Determine the geospatial and non-geospatial metadata standards in use within your organization

 - identify the staff and metadata holdings associated with each standard
 - identify the value and/or shortcomings of that standard to support the task
 - 1.2. Address gaps and shortcomings in your metadata resources

2. Develop an ISO metadata implementation strategy

2.1. Establish an implementation team

Based on your staff inventory, identify key members to plan and support implementation.

- Include members that represent:
 - technical and management staff
 - varied operations/disciplines/data development stages
 - your metadata champion
- Assign specific roles for:
 - planning
 - implementation

2.2. Select applicable ISO metadata standards

Based on your inventory of metadata holdings and standards in use, select an optimum set of ISO metadata standards to support your agency

- Purchase the standards
- Locate relevant support documents (guidance, handouts, cheat sheets)

2.3. Select an ISO metadata editor

2.4. Build an organizational template

- Incorporate all affiliate standards and components into single record
- Include custom domains, fixed content and value restrictions

2.5. Build a metadata component library

- Document key contacts, sources, methodologies, sensors, projects, etc.
- Establish or select a registry location to store components

2.6. Determine how UUIDs will be assigned

- Identify optional approaches
- Explore and evaluate options

2.7. Establish and document a metadata transform approach and determine

- Which metadata will be transformed to ISO
 - all existing metadata
 - strategic (framework, widely distributed, etc.) metadata
 - none
- If transforms will be made via
 - metadata editor
 - XSLT
 - publication to CKAN or other ISO-enabled catalog
- Identify and document necessary post-transform edits

2.8. Establish an organizational ISO metadata policy

Based upon internal and externally-related policies, determine:

- Directive (required) or guidance (recommended)?
- Agency/units to which it will apply
- Requirements to utilize implementation features established above (standards, templates, components, transform process, etc.)
- Staged timeline for implementation
 - apply to new metadata
 - transform existing metadata

2.9. Establish or enlist ISO training and outreach capabilities

- Explore existing online training and materials
- Develop or procure custom training

3. Initiate implementation
 - 3.1. Educate staff on the ISO implementation approach and policies via
 - Staff meeting
 - Webinar
 - Guidance document
 - 3.2. Train metadata creators
 - 3.3. Pilot implementation with single or select units/members
 - Document issues
 - Address issues and revise relevant implementation features
 - 3.4. Revise and reissue implementation guidance
 - 3.5. Create and publish ISO metadata
 - 3.6. Actively participate in ISO metadata aware community or work group