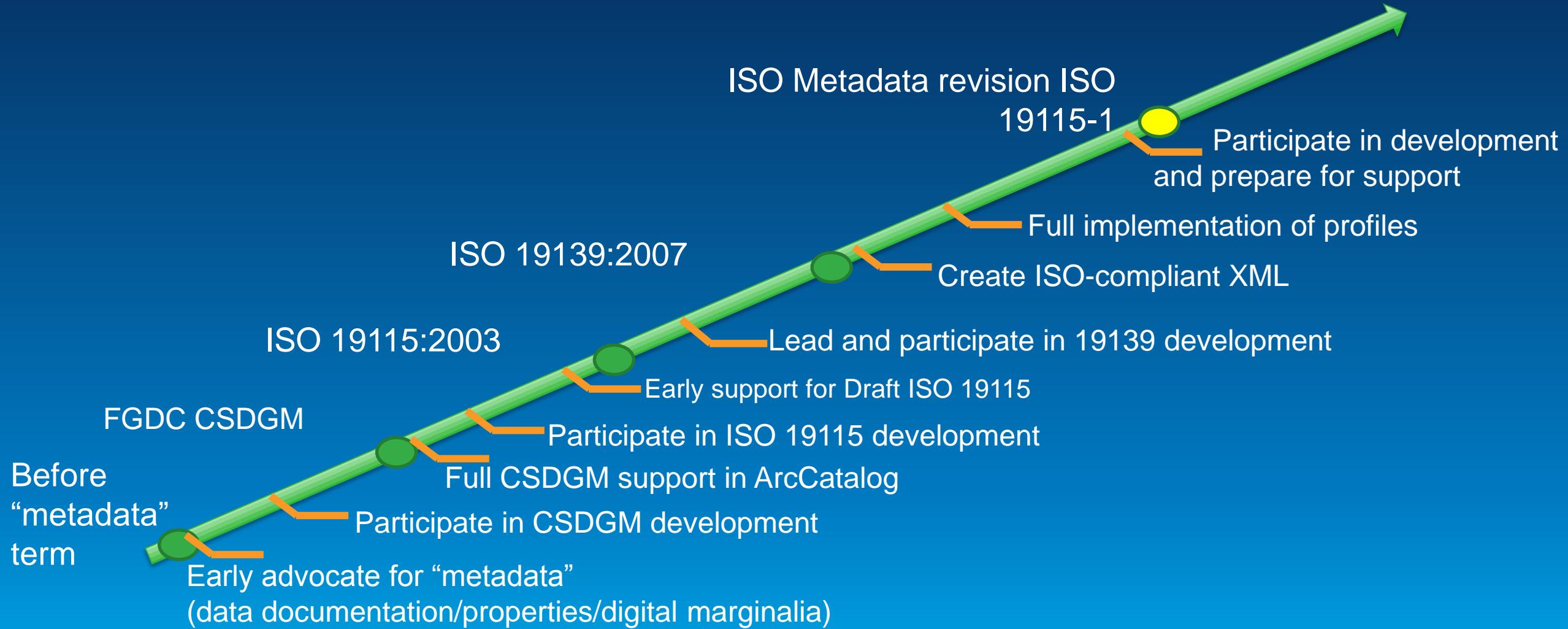




ArcGIS Metadata Editor

Aleta Vienneau

Metadata @ Esri



Different types of metadata standards

- Content standards
 - What to write
 - Optionality

The image shows a screenshot of a web-based metadata form. At the top, there is a red exclamation mark icon followed by the text "purpose is required". Below this, there is a form field with the label "Title" and the value "Different types of vegetation that can be found in the study area".

purpose is required	
Title	Different types of vegetation that can be found in the study area

Different types of metadata standards

- Implementation specifications
 - Format
 - Validity

```
<identificationInfo>
  <MD_DataIdentification>
    <citation>
      <CI_Citation>
        <title>
          <gco:CharacterString>Types of vegetation within the park</gco:CharacterString>
        </title>
```

ArcGIS metadata goals

- Support metadata standards and selected profiles
- Create valid metadata
- Good user experience
- Common experience for all users
- Simplify workflows
- Support the ArcGIS platform

ArcGIS metadata standards support

- *Content Standard for Digital Geospatial Metadata (CSDGM) / mp*
 - Content associated with ISO 19110:2005
- ISO 19115:2003 / ISO 19139:2007
- ISO 19119:2005 / OGC CSW 2008

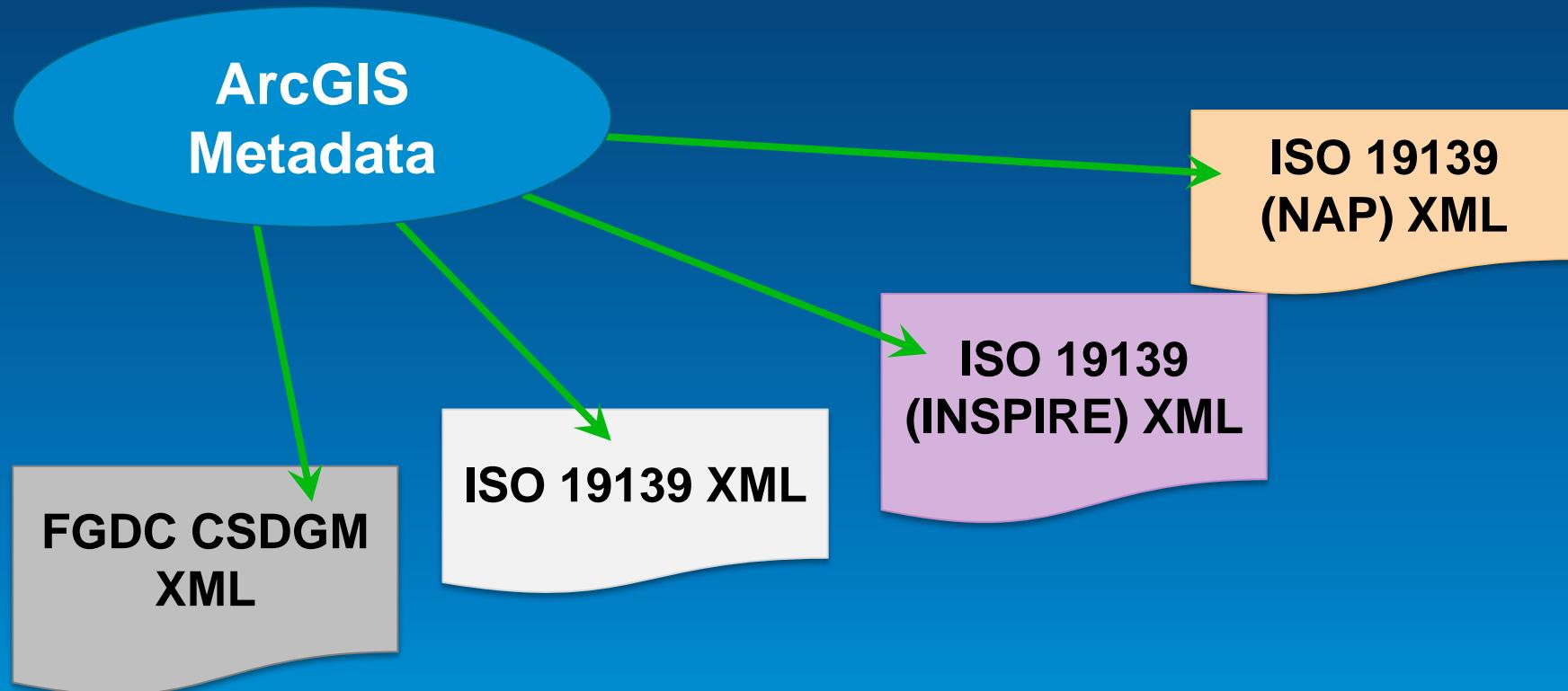
ArcGIS metadata standards support

- **Profiles**
 - North American Profile of ISO 19115:2003 (NAP)
 - INSPIRE Metadata Directive
- Both are based on ISO 19115/19139
- Both reference ISO 19119 content

ArcGIS metadata standards support

- ArcGIS for Desktop metadata content stored in the ArcGIS metadata format
- Includes all concepts for supported standards and profiles

ArcGIS metadata standards support



ArcGIS metadata standards support

- Set the ArcGIS Metadata Style in ArcGIS for Desktop
- Author metadata content
- Export metadata to standard format
- Validate metadata for standard
- Publish to metadata catalog

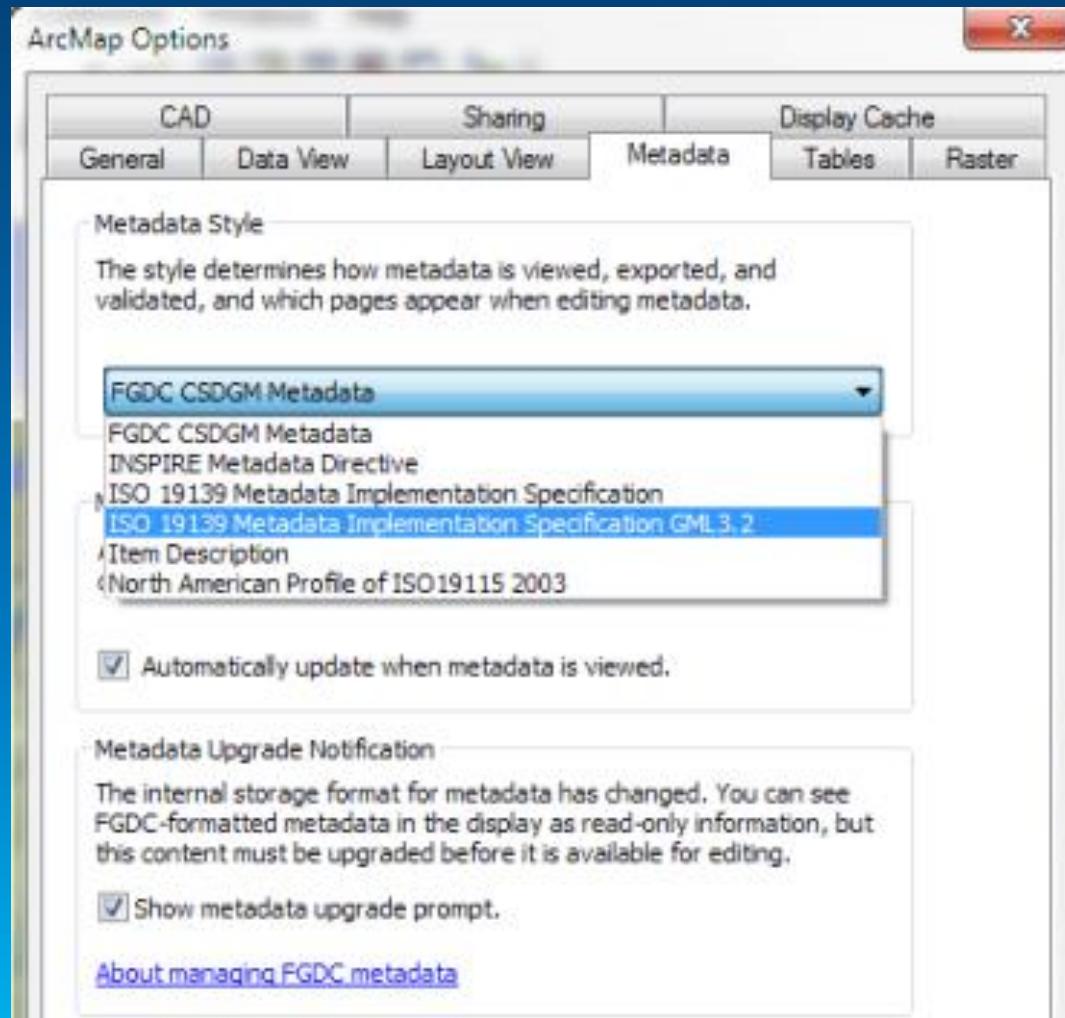
Set the ArcGIS Metadata Style

- **Metadata style**
 - Filters the full set of concepts
 - Associated with metadata standards
 - Set in Options dialog box

Set the ArcGIS Metadata Style

- Default metadata style: Item Description
 - Quickly document items
 - Support discovery when items are published
 - Portion of an item's full metadata
- Full metadata—use another style

Set the ArcGIS Metadata Style



Set the ArcGIS Metadata Style

- **Determines how metadata is**
 - **Displayed**
 - **Edited**
 - **Exported**
 - **Validated**
- **Set once to meet organizational requirements**

Set the ArcGIS Metadata Style

- Adds or removes pages
- Adds or removes elements on a page
- Changes values in some drop-down lists
- Validation rules are appropriate

Author metadata content

- Focus on providing content indicated by the ArcGIS metadata editor
 - Messages based on standard conditions and guidelines
 - Messages change as you type
 - See the metadata's status at a glance

Author metadata content

The screenshot shows a software application window for managing metadata. The left sidebar has a tree structure with the following items:

- Overview
 - Item Description
 - Topics & Keywords
 - Citation
 - Citation Contacts
 - Contacts Manager
 - Locales
- Metadata
 - Details
 - Contacts
 - Maintenance
 - Constraints
- Resource
 - Details
 - Extents
 - Points of Contact

The "Metadata" section is currently selected and highlighted in light blue. The main content area displays a form titled "Resource Citation Contacts". It contains the following fields:

- Contact:
 - Name: [Redacted]
 - Organization: [Redacted]
 - Position: [Redacted]
 - Role: Empty
- Contact Information:
 - Email: [Redacted]
- Online Resource:
 - Linkage: [Redacted]

A message at the bottom of the form states: "The name of an organization associated with the resource. The name of an individual, organization, or position must be provided. Data type: CharacterString. From: ISO 19115-2003."

Two orange arrows are overlaid on the image: one pointing to the "Metadata" section in the sidebar, and another pointing to the "Contact" section in the main content area.

Export content to a standard format

- **Export metadata content to standard format XML file**
 - Export button in Description tab
 - Export Metadata gp tool
- **Converts ArcGIS metadata to standard XML format**
- **Result stored in a stand-alone XML file**

Validate content with a standard schema

- **Validate exported file using XML schema**
 - Validate button in Description tab
 - Validate Metadata gp tool
- **Validate file using Microsoft .NET Framework XML capabilities**
 - Provides warning and error messages

FGDC CSDGM Metadata Style

- **Validate button:** validates using online FGDC XML DTD
- **Validate with mp**
 - Export to CSDGM XML file
 - Run USGS MP Metadata Translator tool with Conversion Type = None
 - Warning and error messages produced by mp

ISO 19139 Metadata Style

- **Validate button:** validates using online ISO XML Schemas
 - One style supports GML 3.2.0 namespace
 - ISO 19139 Metadata Implementation Specification
 - One style supports GML 3.2.1 namespace
 - ISO 19139 Metadata Implementation Specification GML3.2

North American Profile (NAP) Style

- Additional codelist values and mandatory elements
 - Supports tighter transition from CSDGM
- NAP-specific rules available in the editor
- No NAP-specific XML Schemas
- Exported metadata validates with ISO 19139 for data or CSW for services

INSPIRE Metadata Directive Style

- Supports creating ISO metadata that conforms to the INSPIRE Metadata Directive
- Limited codelist values in the editor as appropriate
- INSPIRE-specific rules available in the editor
- Exported metadata validates with ISO 19139 for data or CSW for services

Publish exported metadata file

- Publish standard-format XML file to a metadata catalog

Other ISO Standards and Profiles

- Use the ArcGIS Metadata Toolkit to customize the ArcGIS metadata editor
 - Download from support.esri.com
 - Create a custom metadata style
 - Documents the ArcGIS metadata format

Other ISO Standards and Profiles

- **Code for all pages in the metadata editor**
 - C# WPF application with XAML forms
 - Modify elements on existing pages
 - Add custom pages
 - Change codelist values
 - Change validation rules
- **Programming guide**
- **Sample project**

ArcGIS metadata standards support

- A flexible system that adapts to changing standards
- Enhances interoperability

What's next for ArcGIS

- Building metadata support into ArcGIS Pro
- Preparing to implement ISO 19115-1
- Improving usability of the ArcGIS metadata editor



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