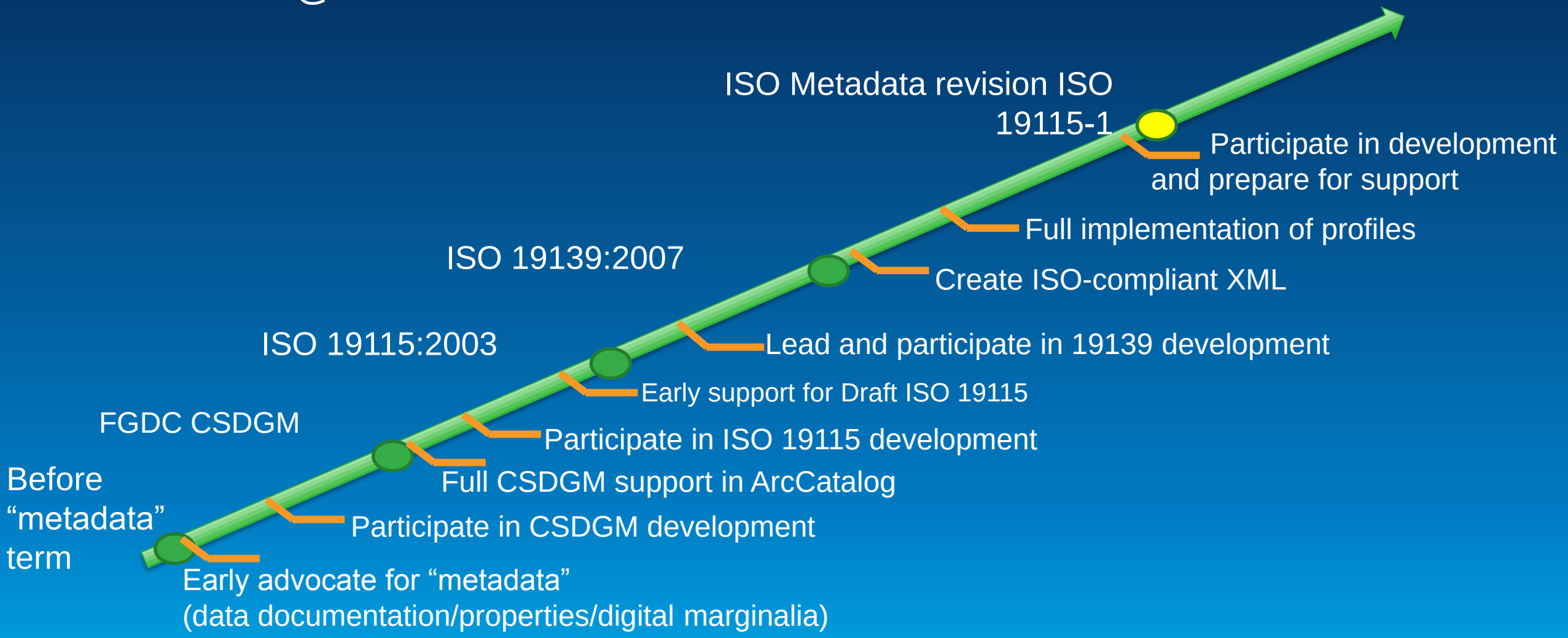
# ArcGIS Metadata Editor

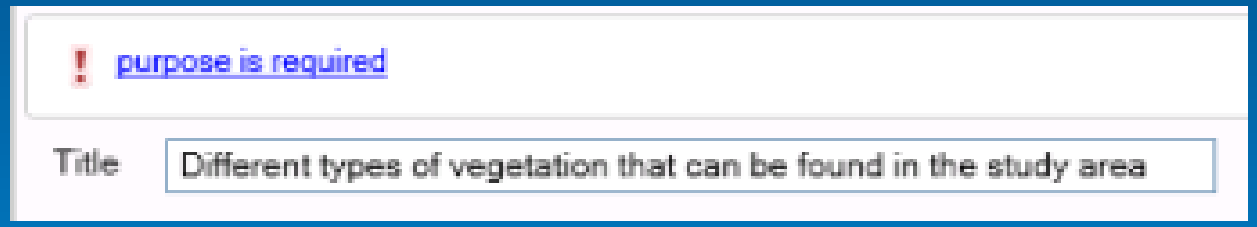
Aleta Vienneau

# Metadata @ Esri



# Different types of metadata standards

- **Content standards**
  - **What to write**
  - **Optionality**



# 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

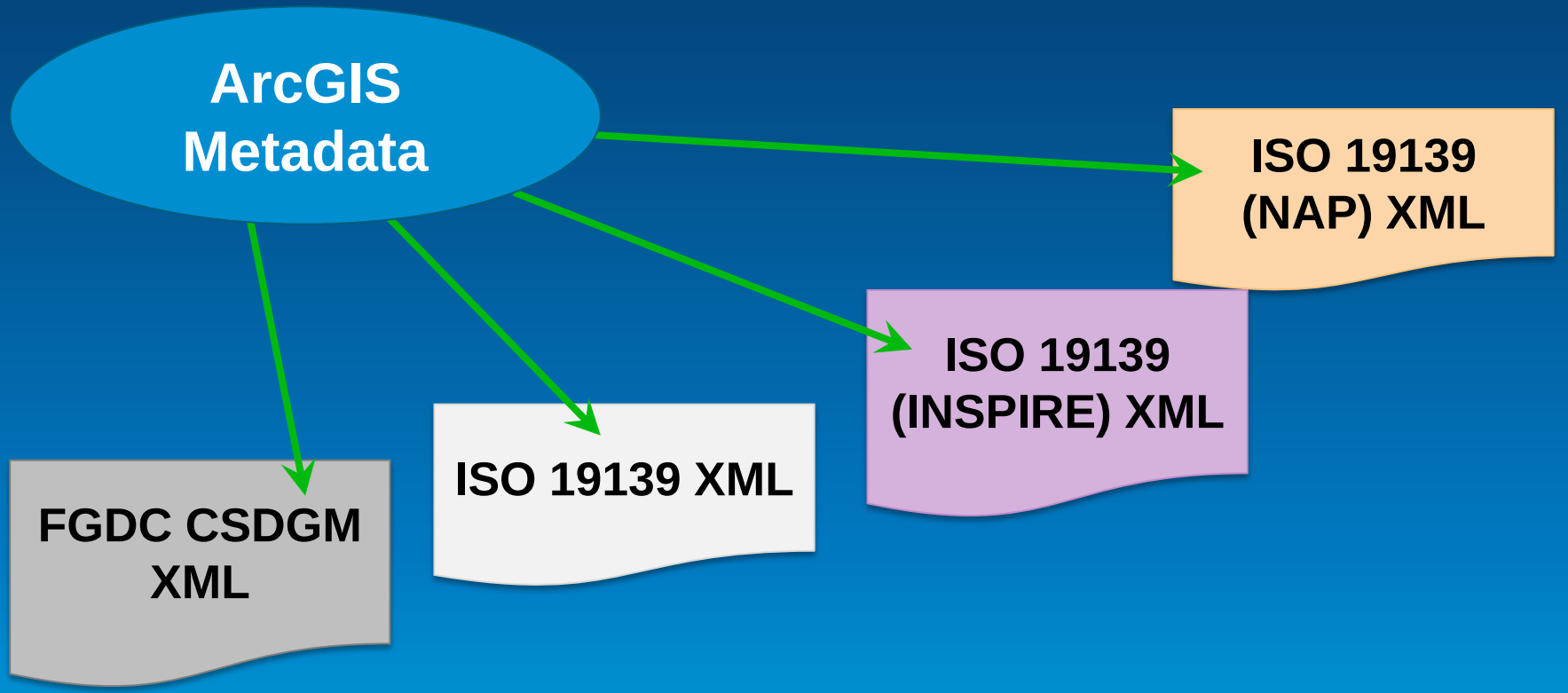
# ArcGIS metadata standards support

- **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

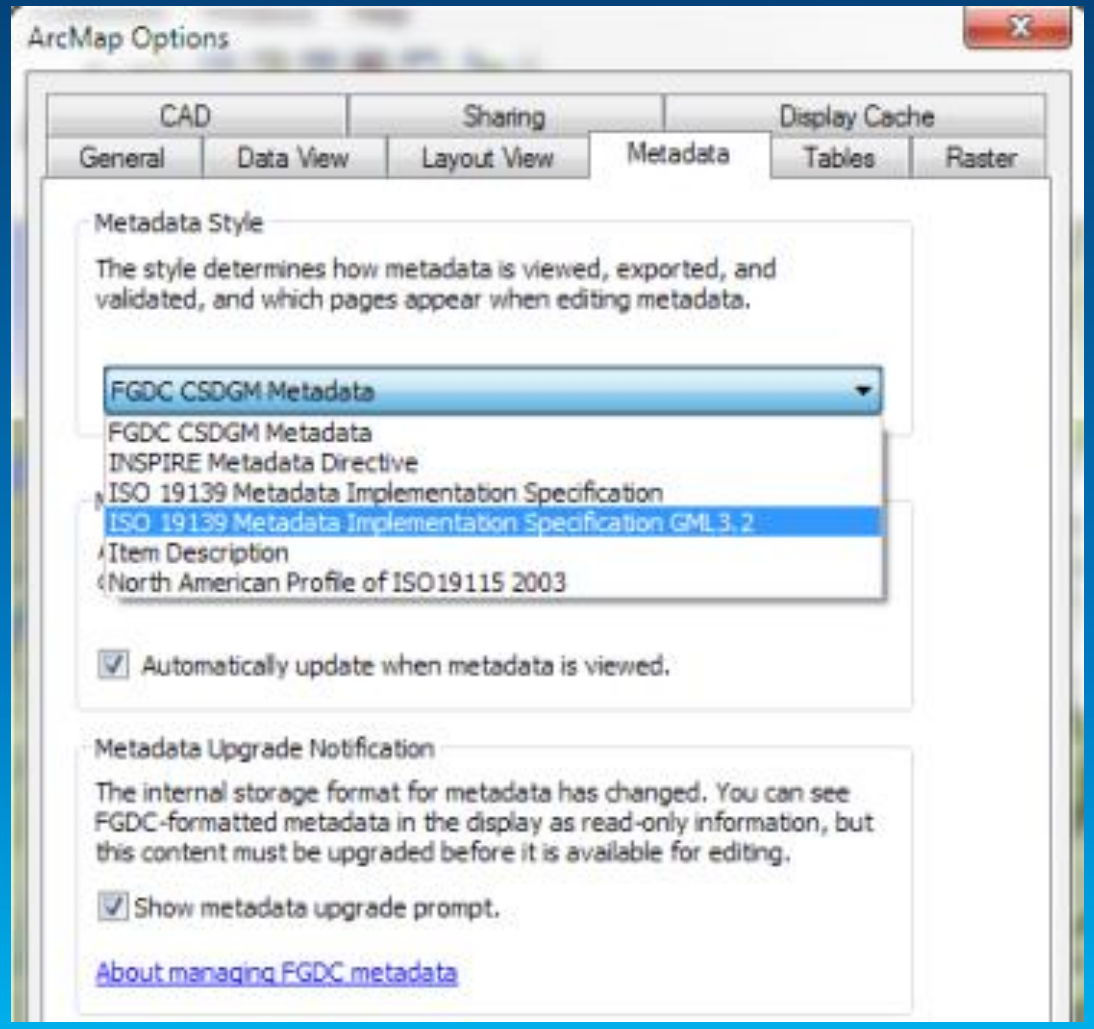
# Set the ArcGIS Metadata Style

- **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

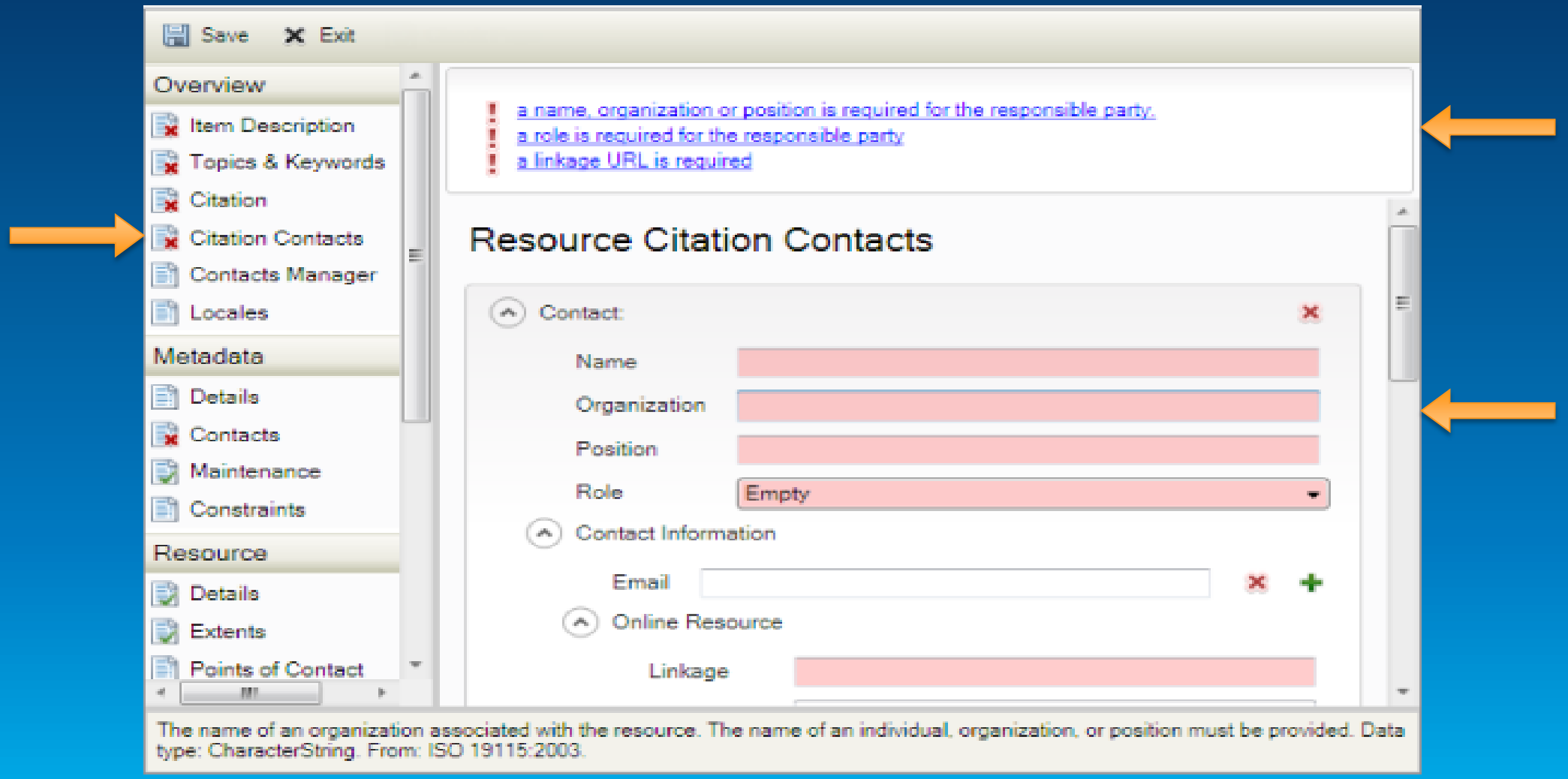
# Set the ArcGIS Metadata Style

- 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



# 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

Understanding our world.