

WHAT'S NEW WITH ISO METADATA?

Day One
*ISO Geospatial
Metadata
Standards
Overview*

Tuesday
April 16, 2013
12:00-4:00 PM

WHAT'S NEW/DIFFERENT?

More **Standardized Content**

New **Content**

Expanded **Values**

New **Structure – UML and XML**

Modular **Suite of Standards**

STANDARDIZED CONTENT

- Fewer Mandatory Elements
 - Enforces core, standardized content across resource types
- More Optional Elements
 - Provides more flexibility in applying the standard

Mandatory for Datasets

- Title
- Date
- Geographic Location
- Language
- Topic Category
- Abstract
- Metadata Contact
- Metadata Date

STANDARDIZED CONTENT

Topic Categories

- 19 high-level subject headings
- Select all that apply
- Facilitates search and discovery
- Used by many geospatial resource catalogs
- Incorporate into CSDGM Theme Keywords to facilitate conversion
- For guidance see 'Preparing for International Metadata'
<http://www.fgdc.gov/metadata/documents>

<<Enumeration>>
MD_TopicCategoryCode

+ farming
+ biota
+ boundaries
+ climatologyMeteorologyAtmosphere
+ economy
+ elevation
+ environment
+ geoscientificInformation
+ health
+ imageryBaseMapsEarthCover
+ intelligenceMilitary
+ inlandWaters
+ location
+ oceans
+ planningCadastre
+ society
+ structure
+ transportation
+ utilitiesCommunication

STANDARDIZED CONTENT

- Code Lists
 - Fixed Domains
 - Extendable

C.15 MD_KeywordTypeCode - methods used to group similar keywords

Name	Domain code	Definition
discipline	001	keyword identifies a branch of instruction or specialized learning
place	002	keyword identifies a location
stratum	003	keyword identifies the layer(s) of any deposited substance
temporal	004	keyword identifies a time period related to the dataset
theme	005	keyword identifies a particular subject or topic

NEW CONTENT

- **International Scope**
 - Data Set Language & Character Set
 - Metadata Language & Character Set
- **Service Metadata**
 - Service Type
 - Access Properties
 - Operated Data Set and Operations
- **Vertical Extent**
 - Minimum Value
 - Maximum Value

NEW CONTENT

- Portrayal Catalog (symbolology)
- Application Schemas
 - Data models
 - Process models
- Online Function Code
 - Download
 - Information
 - Offline Access
 - Order
 - Search

EXPANDED VALUES



Multiple Originators



Role Codes



Multiple Range of Dates



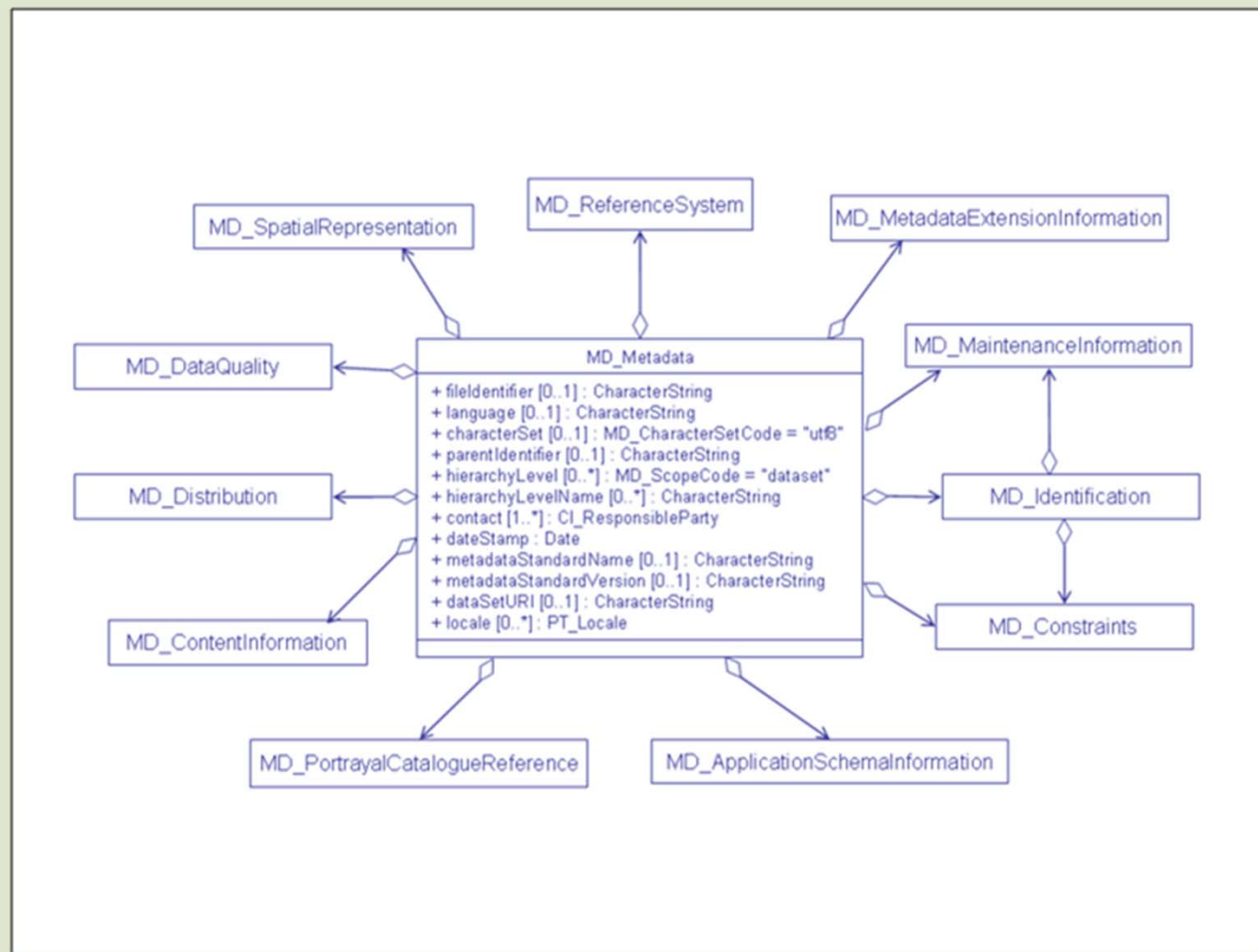
Expanded Data Types



Expanded Use of Citations

NEW STRUCTURE

UML Design



NEW STRUCTURE

Expandable XML

```
1 <gmi:MI_Metadata xmlns:gmi="http://www.isotc211.org/2005/gmi" xmlns:xsi="f
2 <gmd:fileIdentifier>
3   <gco:CharacterString>EX1301</gco:CharacterString>
4 </gmd:fileIdentifier>
5 <gmd:language>
6   <gco:CharacterString>eng; USA</gco:CharacterString>
7 </gmd:language>
8 <gmd:characterSet>
9   <gmd:MD_CharacterSetCode codeList="http://www.isotc211.org/2005/res
10     codeListValue="utf8" codeSpace="004">utf8</gmd:MD_CharacterSetCo
11 </gmd:characterSet>
12 <gmd:hierarchyLevel>
13   <gmd:MD_ScopeCode codeList="http://www.isotc211.org/2005/resources
14     codeListValue="collectionSession" codeSpace="004">collectionSession
15 </gmd:hierarchyLevel>
16 <gmd:hierarchyLevelName>
17   <gco:CharacterString>collection-level metadata</gco:CharacterString>
18 </gmd:hierarchyLevelName>
19 <gmd:contact xlink:title="NOAA/OAR/OER - Ocean Exploration and Researc
20 <gmd:CI_ResponsibleParty uuid="ED9AF398-D6CF-A63A-D75D527D36
21   <gmd:organisationName>
22     <gco:CharacterString>NOAA/OAR/OER - Ocean Exploration and Res
23   </gmd:organisationName>
24   <gmd:contactInfo xlink:type="simple">
25     <gmd:CI_Contact>
26       <gmd:phone xlink:type="simple">
27       <gmd:CI_Telephone>
```

NEW STRUCTURE

Same HTML Presentation

EX1301: Ship Shakedown and Patch Test Exploration, NE Canyons and Seamounts on NOAA Ship Okeanos Explorer between 20130318 and 20130405

[Identification Information](#)

[Content Information](#)

[Distribution Information](#)

[Metadata Maintenance Information](#)

[Acquisition Information](#)

Metadata: uuid: 14d734e0-8fef-11e2-9e96-0800200c9a66

File identifier:

EX1301

Language:

eng: USA

Character set:

Character set code:

utf8

Hierarchy level:

Scope code:

collectionSession

Hierarchy level name:

collection-level metadata

Metadata author: title: NOAA/OAR/OER - Ocean Exploration and Research

Responsible party: uuid: ED9AF398-D6CF-A63A-D75D527D366248F3

Organisation name:

NOAA/OAR/OER - Ocean Exploration and Research

Contact info:

Contact:

Phone:

Telephone:

Voice:

301-734-1014

Facsimile:

301-713-4252

MODULAR SUITE OF STANDARDS

- **ISO/TC 211 – Geographic Information/Geomatics**
Parses metadata into **ISO 191**** series of geo metadata standards that can be:
 - used standalone to document specific data types and components
 - integrated to form a geospatial metadata record
- **Includes:**
 - **Geographic information: Metadata - ISO 19115**
 - **Extension for imagery & gridded data - ISO 19115-2**
 - **Feature Catalog – ISO 19110**
 - **Service Metadata – ISO 19119**
 - **XML schema – ISO 19139**
 - *and more...*

DISCUSSION

Which ISO features provide better support to your geospatial resource documentation?

- **More flexibility via fewer mandatory elements?**
- **Topic Categories to categorize data types?**
- **Service Metadata Elements?**
- **Vertical Extent?**
- **More citations?**
- **Other?**