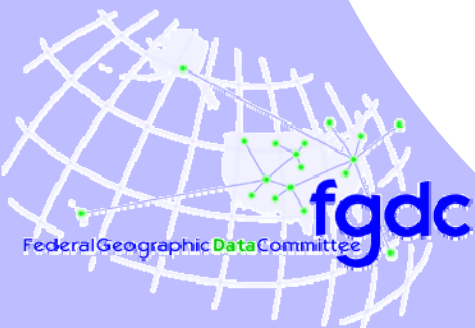


Geospatial Metadata *Coastal Zone Profile Development for Geospatial Metadata*

An overview of efforts to adapt and implement geospatial metadata standards for use by the Coastal Zone geospatial community



vers. 20080331



Why Have a Standard?

Standards help determine:

- ▶ if a set of data is available
- ▶ If a set of data is fit for use
- ▶ how to transfer and access data sets



Why Have a Standard?

A standard helps to create:

- ▶ Common terms
- ▶ Common definitions
- ▶ Common language
- ▶ Common structure

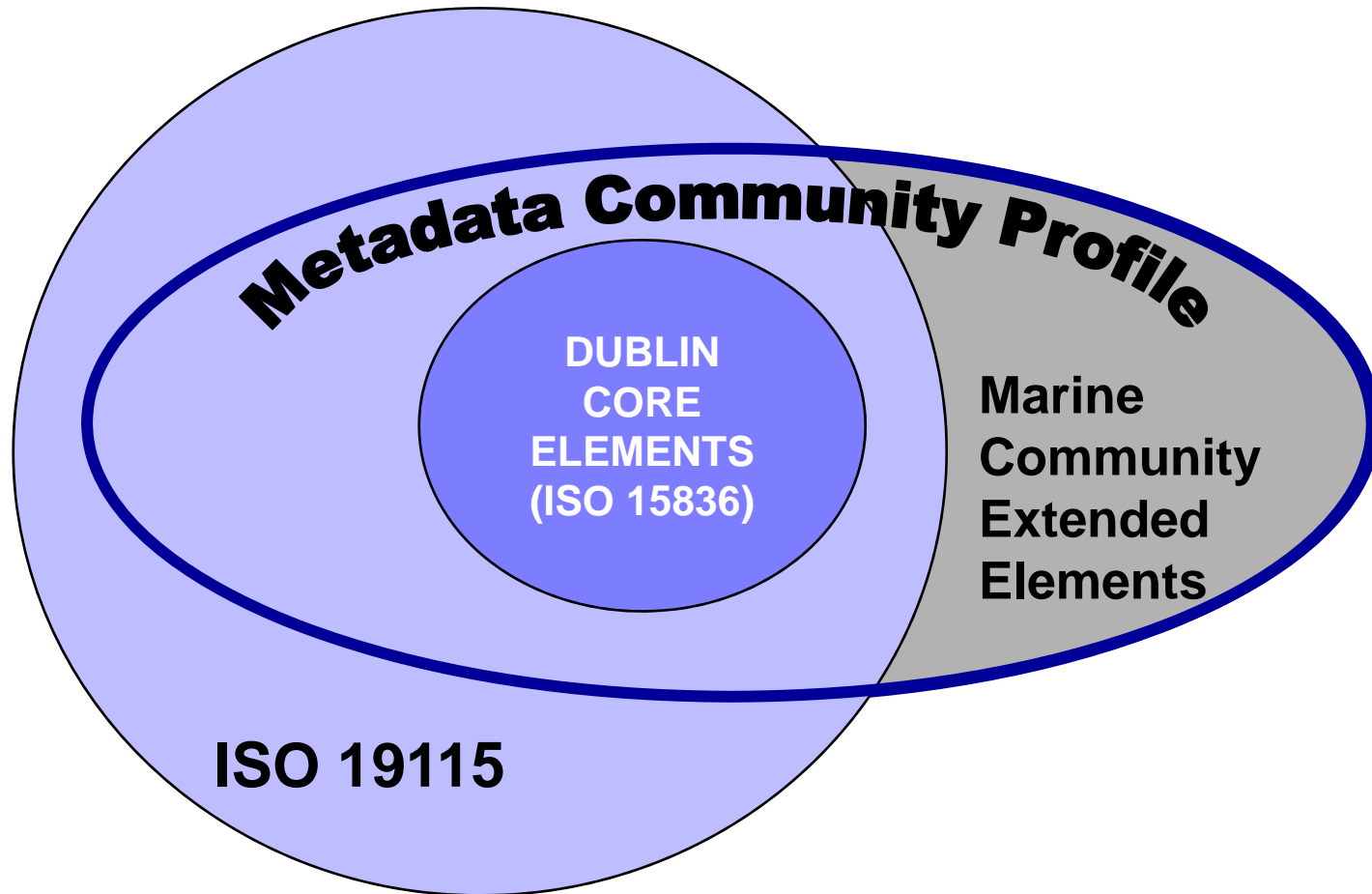


Why Have a Standard?

The key to using a standard is ...
To find fields pertinent to your data,
organization, field of work...
Build a template...
Use the template!



Why Have a Standard?





What is the Dublin Core?

The Dublin Core Metadata Element set:

- ▶ is a simple set of elements for describing digital resources
- ▶ consists of 15 metadata elements, all of which are optional and repeatable
- ▶ facilitates data retrieval in networked environments
 - <http://www.dublincore.org/>



What is the ISO?

The International Organization for Standardization (ISO) is a:

- ▶ network of national standards institutes of 157 countries
 - American National Standards Institute (ANSI) is the US member of ISO
- ▶ non-governmental organization
- ▶ consensus-building body tasked with meeting the standardization requirements of business and society
- ▶ ISO Technical Committee 211
 - Geomatics/Geographic Information



Goal of the ISO

Establish a family of international standards that:

- ▶ support understanding and use of geographic information
- ▶ increase the availability, access, integration and sharing of geographic information
- ▶ enable interoperability of geospatial enabled computer systems
- ▶ ease the establishment of Spatial Data Infrastructures (SDIs) on local, regional and global levels



Why ISO 19115 ?

ISO 19115 Implementation Goals

Establish an international, multilingual framework to:

- ▶ provide appropriate information to **characterize** geographic data properly
- ▶ facilitate the **organization and management** of geographic information
- ▶ enable users to efficiently **apply** geospatial data by knowing the data basic characteristics
- ▶ enable users to **locate, access, evaluate, deliver, and integrate** geographic data



ISO 19115 Geospatial Metadata

Provides a schema for describing:

- ▶ geospatial web services
- ▶ individual dataset descriptions
- ▶ data catalogs
- ▶ clearinghouse activities

Applies to multiple levels of geographic information:

- ▶ datasets
- ▶ dataset series
- ▶ individual data features
- ▶ individual feature properties (attributes)



ISO 19115 Geospatial Metadata

Provides information about the geographic data or service :

- ▶ identification
- ▶ extent
- ▶ quality
- ▶ spatial schema
- ▶ temporal schema
- ▶ spatial reference
- ▶ distribution



ISO 19115 Geospatial Metadata

Defines a core set of metadata required to serve the full range of applications:

- ▶ data discovery
- ▶ fitness for use
- ▶ data access
- ▶ data transfer
- ▶ application of data



ISO 19115 Geospatial Metadata

Establishes:

- ▶ terminology
- ▶ definitions
- ▶ conditionality
 - mandatory
 - conditional
 - optional
- ▶ a method for extending the metadata record to address specialized or custom needs



ISO 19115 Community Profiles

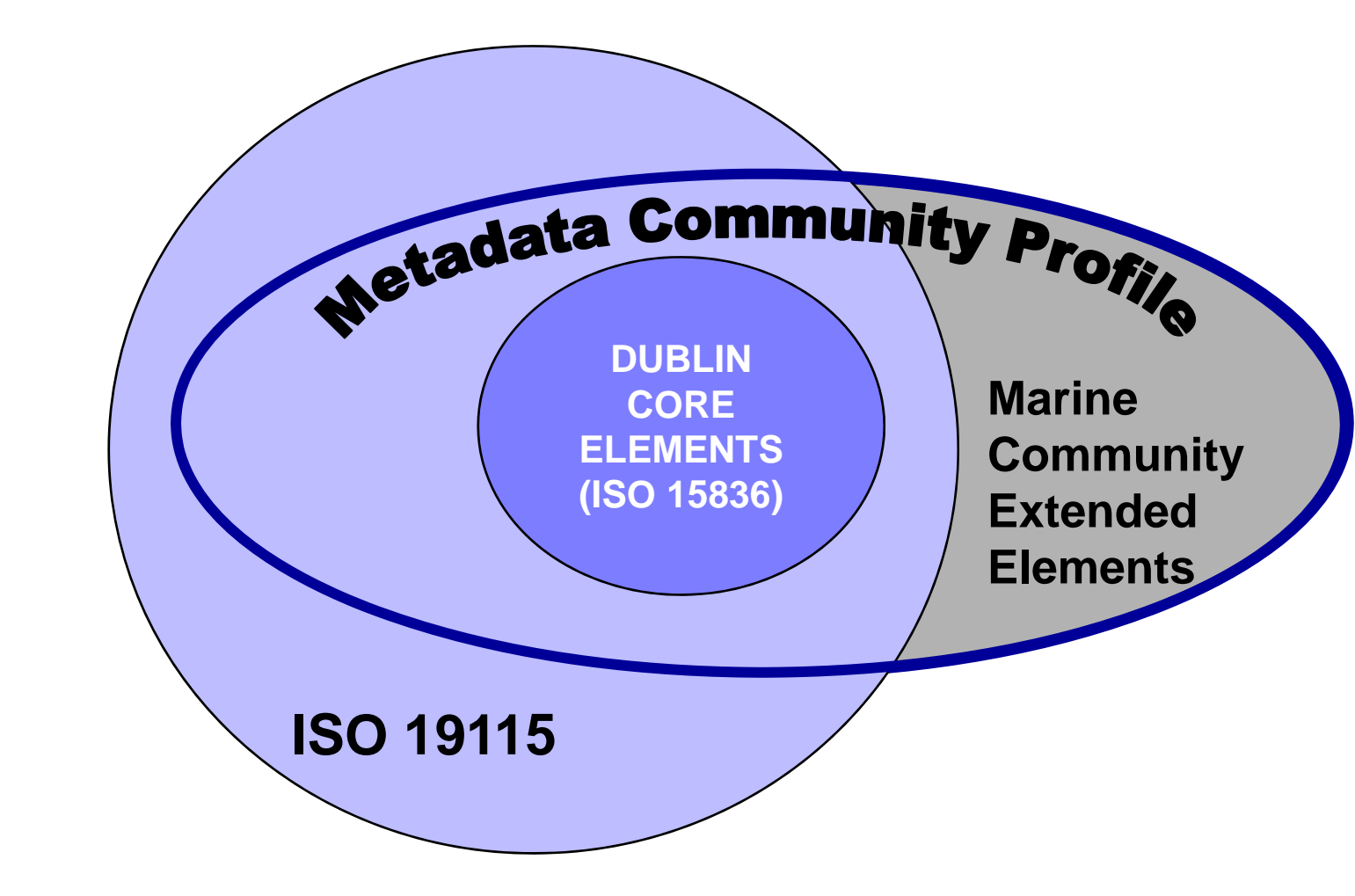
What is an ISO 19115 Profile?

A custom implementation of ISO 19115 that:

- ▶ adopts the ISO 'core' metadata for geographic datasets
- ▶ removes ISO optional components that do not apply to the community
- ▶ increases the obligation of ISO 'optional' elements of strong significance to the community
- ▶ creates new metadata entities, sections or elements to improve characterization of community geospatial data or services
- ▶ adds to or amends the domain of an existing ISO element to include community specific descriptors



ISO 19115 Community Profiles





ISO 19115 Community Profiles

What is a Profile 'Community'?

Any group of individuals or organizations that share a common interest such as:

- ▶ nationality or other administrative unit
- ▶ geography
- ▶ professional disciplinary
- ▶ data theme
- ▶ geospatial application or service



The Marine Community Profile

Developed by the Australian Ocean Data Centre

Objectives of the Marine Community Profile

- ▶ support the documentation and discovery of marine spatial datasets
- ▶ form foundation of a marine data catalog
 - <http://www.aodc.org.au/index.php?id=37>



Coastal and Inland Water Standard

Developed by the National Spatial Data Infrastructure (NSDI)

Objectives of the NSDI Standard

- ▶ develop a nationally focused hydrographic data content standard for spatial data that supports safety of navigation
- ▶ provide a catalog of hydrographic feature terms and definitions pertaining to navigation of coastal and inland waterways
 - <http://www.fgdc.gov/standards>



Geospatial Metadata for the Coastal Zone

- ▶ establish a cooperative effort to create a common geospatial metadata standard that meets the needs of of the Great Lakes Coastal Zone community
- ▶ adopt established standards on which to build
- ▶ is fully compliant with the ISO 19115 Geospatial Metadata Standard
- ▶ follows ISO rules for the development of a community profile