

Making metadata be FAIR, in particular enhancing the 'R'? – The Approach of the Australian Metadata Working Group

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IN23D-0897

ANZLIC/ICSM Metadata Working Group



Who we are and what we do:

- Australia and New Zealand Federal and Jurisdictional Government Agencies, Research and Academia
 - > 35 Organisations
- Forum for communication and engagement with spatial communities and interest groups
- Supported by the Australian and New Zealand Spatial Information Council (ANZLIC) and the Intergovernmental Committee on Surveying and Mapping (ICSM)
- <https://www.icsm.gov.au/what-we-do/metadata-working-group>

Our targets:

- Support:
 - wider understanding & consistent application of metadata
- Improve:
 - data discoverability by enabling machine-to-machine access & integration across disciplines
- Reduce
 - costs due to the ability to reuse & share developed codes, applications & services
- Reduce
 - business risk and liability through clear identification of legal & security constraints
- Improve:
 - efficiency through client self-service



The Challenges



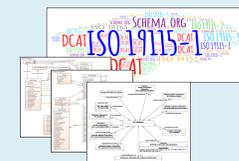
Change in Technology



People's Expectations



Requirements for Data



Complexity in standards



Lack of Skills & Resources



Budget, Time & Rules

Building FAIR Metadata with an emphasis on the 'R'

Reusability of Content

Development of content-rich self-describing metadata to:

- Be interpreted by both humans and machines
- Capture data dictionaries - enable dataset reconstruction
- Record technical details for services - correct usage & code reuse
- Understand resource quality & provenance - ensure its correct usage
- Specify licence & security conditions - understand reuse constraints
- Reuse community vocabularies or publish new for reuse by others
- Record resource formats - support access to resources

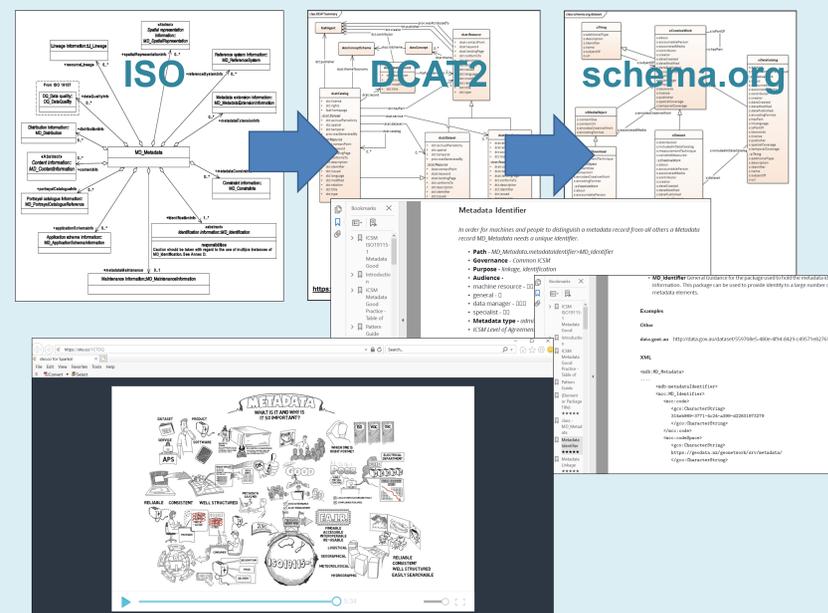
Generalised roadmap

- Tranche 1: Profile the foundation
 - Add of existing profiles
 - Comparison of profiles
 - Proposal: Endorsed
- Tranche 2: Cookbook
 - Support for cookbook
 - Alignment of XML schemas
 - Tools (XML, JSON)
 - Provenance
 - Provenance and examples
 - Software Registry
- Tranche 3: Outreach and management
 - Monitor the ecosystem
 - Coordinate and share
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Table: Comparison of metadata standards

ISO 19115-1	data.gov.au Template	RIF CS	DCAT-2 (draft)
title	title	title	title
description	description	description	description
keywords	keywords	keywords	keywords
spatial coverage	spatial coverage	spatial coverage	spatial coverage
temporal coverage	temporal coverage	temporal coverage	temporal coverage
publisher	publisher	publisher	publisher
identifier	identifier	identifier	identifier
language	language	language	language

Australian Metadata Profile for Spatial Data – High Level Common Elements



Reusability of Metadata Patterns

Adoption of metadata patterns by:

- Development Australian Metadata Profiles for:
 - Data
 - Services
 - Imagery
 - Digital Data Preservation
- Publishing their models and XMLs to ensure
- Developing XML examples
- Building user guides
- Developing cross-works between metadata implementations (ISO, W3C, etc.)
- Creating communication materials

Reusability of tools

Investing into common tools by:

- Investigation and testing metadata tools for
 - Creation
 - Publishing
 - Validation
- Publishing deployment scripts
- Re-use of existing tools
- Sharing tricks and lessons learnt

Metadata Profile Validator

The Metadata Profile Validator allows validation of XML documents against the ISO 19115-1 and ISO 19115-2 XML schemas and the Geoscience Australia Catalogue Profile.

Research Vocabularies Australia

helps you find, access, and reuse vocabularies for research.

Get Involved

- Publish a vocabulary
- Use a vocabulary
- Explore/widely use vocabularies
- Provide feedback

