



Citation for published version:

Ball, AJ 2013, 'The DCC Disciplinary Metadata Catalogue', Paper presented at CAMP-4-DATA, 13th International Conference on Dublin Core and Metadata Applications, Lisbon, Portugal, 6/09/13.

Publication date:
2013

Document Version
Early version, also known as pre-print

[Link to publication](#)

Publisher Rights
CC BY

University of Bath

Alternative formats

If you require this document in an alternative format, please contact:
openaccess@bath.ac.uk

General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

Take down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

DCC Disciplinary Metadata

Alex Ball

DCC/UKOLN Informatics, University of Bath

2013-09-06



Except where otherwise stated, this work is licensed under
Creative Commons Attribution 2.5 Scotland: [http://
creativecommons.org/licenses/by/2.5/scotland/](http://creativecommons.org/licenses/by/2.5/scotland/)

Funded by



Motivation

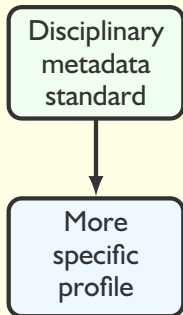
- *... disciplinary metadata standards ... indicate the domain-specific information that will allow data to be **interpreted correctly** by others in the field. Since data curators **cannot become experts** in all of the subjects under research within their institutions, a particular need exists for guidance regarding disciplinary metadata standards.*

— Liz Bedford (emphasis added)

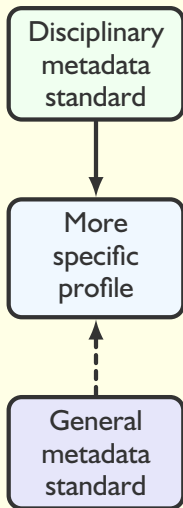
Catalogue elements

Disciplinary
metadata
standard

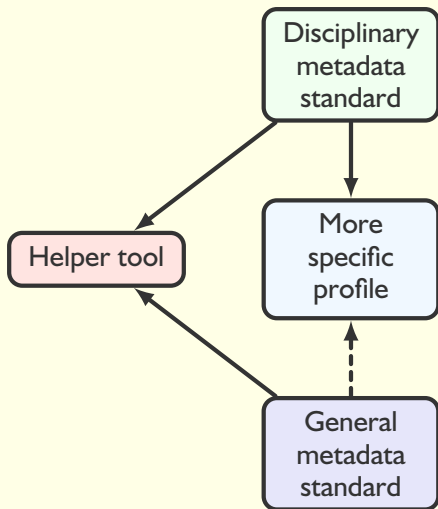
Catalogue elements



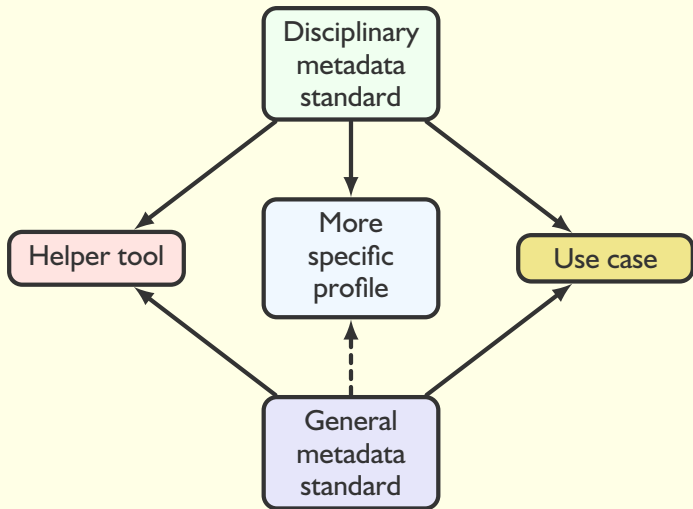
Catalogue elements



Catalogue elements



Catalogue elements



Scope

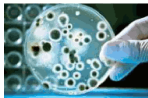
- ▶ Metadata standards, but not
 - ▶ languages/protocols
 - ▶ taxonomies/vocabularies
- ▶ Descriptive metadata, but not
 - ▶ administrative metadata
 - ▶ preservation metadata
 - ▶ structural metadata
- ▶ Active research data, but not
 - ▶ publications
 - ▶ learning objects
- ▶ Tabular data, but not
 - ▶ audio
 - ▶ video
 - ▶ narrative text

Process

1. Literature review
 - ▶ Ball, *Scientific Data Application Profile Scoping Study*
 - ▶ Riley & Becker, *Seeing Standards: A Visualization of the Metadata Universe*
 - ▶ DCC Diffuse
 - ▶ UKOLN Application Profiles Support Project
2. Repository review
 - ▶ Databib
3. Early thoughts about implementation
4. Choose taxonomy of disciplines (HESA JACS 3.0)
5. Assemble information about standards, profiles/extensions, tools and use cases
6. Finalize implementation and enter information on website
7. Testing and release

Disciplinary Metadata catalogue

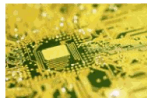
Search by Discipline



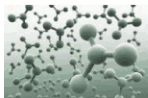
Biology



Earth Science



General Research Data



Physical Science



Social Science & Humanities

Search by Resource Type

Metadata Standards

Specifications for the minimum information that should be collected about research data in order for it to be used.

Profiles and Extensions

Standards that have been adapted for use in particular types of repositories, or for particular types of data.

Use cases

Institutional repositories and data portals using standards to determine which metadata should be collected upon data deposit.

Tools

Software that has been developed to capture or store metadata conforming to a specific standard.

← Subject areas

← Resource types



Browsing by discipline

Physical Science

Nuclear and Particle Physics Chemistry Physics Crystallography
Materials Science Solar physics Space science Astronomy^{Multi-}
disciplinary Biochemistry

Metadata Standards

AVM - Astronomy Visualization Metadata

A standard defining discovery metadata for fully rendered astronomical imagery.

CIF - Crystallographic Information Framework

An extensible standard file format and set of protocols for the exchange of crystallographic and related structured data.

CSMD-CCLRC Core Scientific Metadata Model

A study-data oriented model that captures high-level information about scientific studies and the data that they produce, primarily tailored for the physical sciences.

International Virtual Observatory Alliance Technical Specifications

A set of specifications, including metadata standards, that enable the integration of many astronomical archives into an international virtual observatory.

SPASE Data Model

An information model for describing the elements of the heliophysics data environment.

Extensions

eBank UK Metadata Application Profile

A [Dublin Core](#) Metadata Application Profile created for the eBank UK project, which provides access to the detailed results of scientific experiments in crystallography.

←
Disciplines

←
Relevant
metadata
standards

List of
▶ profiles/
extensions
▶ use cases
▶ tools



Record for metadata standard

SPASE Data Model

An information model for describing the elements of the heliophysics data environment, and a set of resource types which can be used to describe data along with its scientific context, source, provenance, content and location. It is designed to support a federated data system where data reside at different locations and may be separated from the metadata which describes it. The preferred expression form is XML.

Description

The Space Physics Archive Search and Extract (SPASE) effort is implemented by the SPASE Consortium which is composed of scientists from across the international Heliophysics data community. The Current Release of the data model (2.2.2) was updated in October 2012.

Mappings	OAI
Related Vocabularies	SPASE Dictionary
Specification	http://www.spase-group.org/docs/schema/
Standard's website	http://www.spase-group.org/data/

Key links/facts

Extensions

IMPEX Data Model

A simulation extension to the [SPASE](#) data model.

Links to extensions

Tools

SPASE Metadata Editor

A web-based editor for generating [SPASE](#) descriptions.

Links to tools

SPASE Tools

The [SPASE](#) website's list of tools for working with [SPASE](#) metadata and the [SPASE](#) framework.

Use Cases

NSSDC SPASE Registry

The National Space Science Data Center's registry of [SPASE](#)-described space science mission data.

Links to use cases

SPASE Inside

The [SPASE](#) website's list of systems that use [SPASE](#) compliant metadata to enable search services.

Next steps

- ▶ Review periodically for currency
- ▶ Add entries in response to suggestions
- ▶ Work with RDA Metadata Standards Directory Working Group



METADATA STANDARDS DIRECTORY (MASDIR) WORKING GROUP

V0.01	2013/04/29
V0.02	2013/08/01

not conducive to collective maintenance. In the UK, JISC and Digital Curation Centre recently launched the Disciplinary Metadata resource covering a variety of disciplines, and the RDA MSDIG has been evaluating this resource.³ The assessment to-date reveals that this is an important accomplishment to build upon. It is apparent that collaborative metadata registration systems have

Submitted by J. Greenberg, K. Jeffery, and R. Koskela

29 July 2013



because good research needs good data

Thank you for your attention

DCC Website: <http://www.dcc.ac.uk/>
Alex Ball: <http://alexball.me.uk/>

DCC Disciplinary Metadata:
<http://www.dcc.ac.uk/resources/metadata-standards>