

FAIRsharing.org

WG

i Group details

Status: Completed

Chair (s): Susanna-Assunta Sansone, Rebecca Lawrence, Peter McQuilton, Simon Hodson

Secretariat Liaison: Lynn Yarmey

TAB Liaison: Paul Uhler

Case Statement: [Download](#)

Peter McQuilton

On behalf of the Force11/RDA WG co-chairs

*FAIRsharing Project Coordinator
Oxford e-Research Centre, Dept. Engineering Science,
University of Oxford*



Our mission is to increase:

- guidance to **consumers** of **standards**, **databases**, and **data policies**, to accelerate the discovery, selection and use of these resources; and
- **producer** satisfaction in terms of **resource** visibility, reuse, adoption and citation

Researchers in academia,
industry, government



Developers and curators of
resources

Journal publishers or
organizations with data policy



Research data facilitators,
librarians, trainers

Learned societies, unions and
associations



Funders and data policy
makers



The FAIRsharing Registry and Recommendations

Working Groups outputs:

1. A set of **recommendations**
 - to guide users and producers of standards and databases to select and describe these resources, or to recommend them in data policies
2. A **registry** of curated and interlinked records on
 - *standards* (for identifying, reporting, and citing data and metadata),
 - *databases* (repositories and knowledge-bases) and
 - *data policies* (from journals, publishers, funders, other organizations)

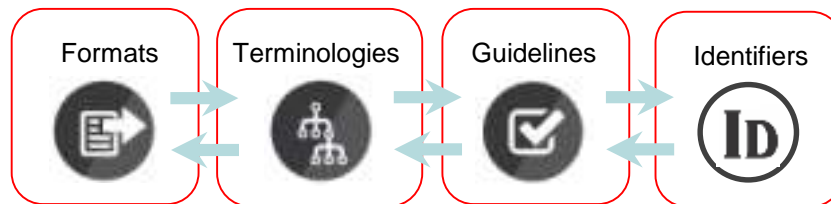
Mapping the landscape



Data policies
by funders, journals and
other organizations



**Databases and
data repositories**



Community standards,
focusing on metadata and identifier schemas



Ready for use, implementation, or recommendation



In development



Status uncertain



Deprecated as subsumed or superseded

All records are manually curated
in-house, verified and claimed by the
community behind each resource

A curated, informative and educational resource on data and metadata *standards*, inter-related to *databases* and data *policies*.

What have we become?

A FAIR-supporting informative and educational resource providing:

- a [registry](#) on data **standards**, **repositories** and **policies**,
- alongside classification, search and visualization [tools](#) and [services](#)



1269 Standards

Terminology Artifact	727
Model/Format	380
Reporting Guideline	154
Identifier Schema	8



1141 Databases

Life Science	838
Biomedical Science	204
General Purpose	27



115 Policies

Funder	23
Journal	80
Society	8

Mapping the landscape



International Virtual Observatory Alliance (IVOA)

The Virtual Observatory (VO) is the vision that astronomical datasets and other resources should work as a seamless whole. Many projects and data centres worldwide are working towards this goal. The International Virtual Observatory Alliance (IVOA) is an organisation that debates and agrees the technical standards that are needed to make the VO possible. It also acts as a focus for VO aspirations, a framework for discussing and sharing VO ideas and technology, and body for promoting and publishing the VO. This collection lists the documents & standards agreed by IVOA.

This record is maintained by: [carviset](#)

Record added: March 15, 2018, 12:56 p.m..

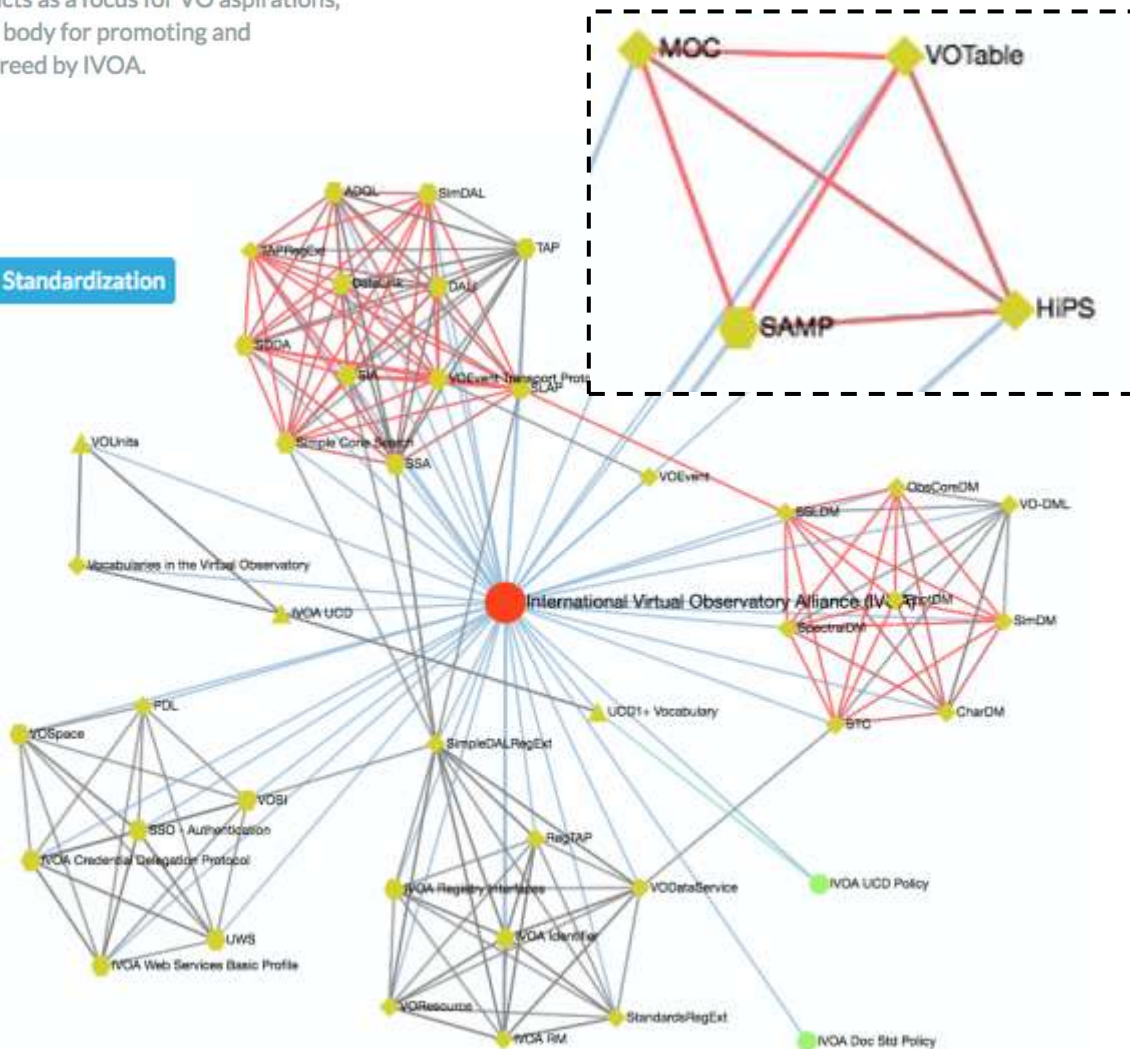
Record updated: Oct. 11. 2018. 9:57 a.m. by [carviset](#).

Scope and data types

-  Astrophysics And Astronomy
-  Data Standards
-  Metadata Standardization



-  DATABASE
-  POLICY
-  COLLECTION
-  TERMINOLOGY ARTIFACT
-  MODEL/FORMAT
-  IDENTIFIER SCHEMA
-  REPORTING GUIDELINE
-  RECOMMENDS
-  COLLECTS
-  RELATED TO



SPRINGER NATURE

SCIENTIFIC DATA

A biologically-centered subset of Scientific Data's recommended repositories and standards across all domains. Scientific Data journal published by Springer Nature.

This record is maintained by: [ScientificData](#)

This recommendation is taken from the following policy:

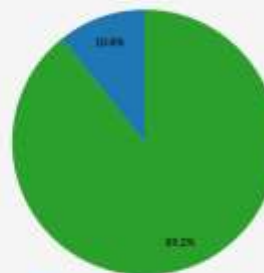
[Scientific Data Data Policy](#).

Record updated: Oct. 11, 2017, 11:51 a.m. by [The FAIRsharing Team](#).

[Homepage](#)

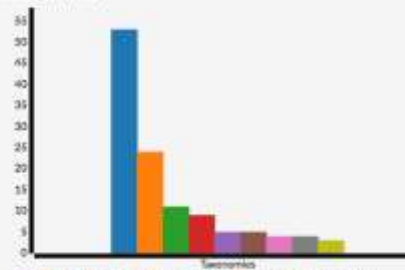
[Reference](#)

General Statistics



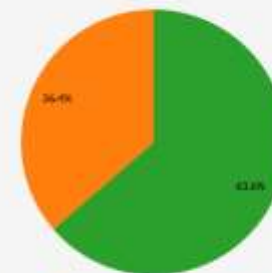
Standards Policies Databases

Taxonomies (top ten)



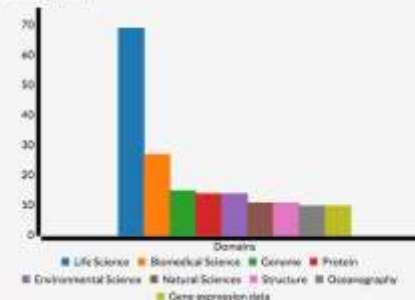
All Homo sapiens Not applicable Mus musculus Bacteria Archaea Drosophila melanogaster Eukaryota Arabidopsis thaliana

Standard Types



Model Format Reporting Guidelines Terminology Artifact Other

Domains (top ten)



Life Science Biomedical Science Genome Protein Environmental Science Natural Sciences Structure Oceanography Gene expression data

View as Table

View as Grid

Sort by

Best Match

Recommended Records

Recommended

Associated Publication?

No Publication

Has Publication

Claimed?

No Maintainer

Has Maintainer

Record Status

Uncertain

Deprecated

In development

Ready

Standard Type

Terminology Artifact

7

Reporting Guideline

4

Registry

Database

93

Showing records 1 - 50 of 102.

1

2

3



Ag Data Commons

DATABASE

Standards

7

Publications

0

In Collections

1

Recommended

1

9 Taxa types, including:

All Animalia Archaea Bacteria

Chromista Fungi Plantae Protozoa

43 Data types, including:

Agricultural Products Agriculture

Agroecology Agroecosystem Agronomy



ADS

Archaeology Data Service
DATABASE

Standards

0

Publications

0

In Collections

0

Recommended

1

No taxa defined.

4 Data types, including:

Classical Archaeology History Humanities

Natural Sciences



ArrayExpress

DATABASE

Standards

7

Publications

2

In Collections

9

Recommended

13

1 Taxa types, including:

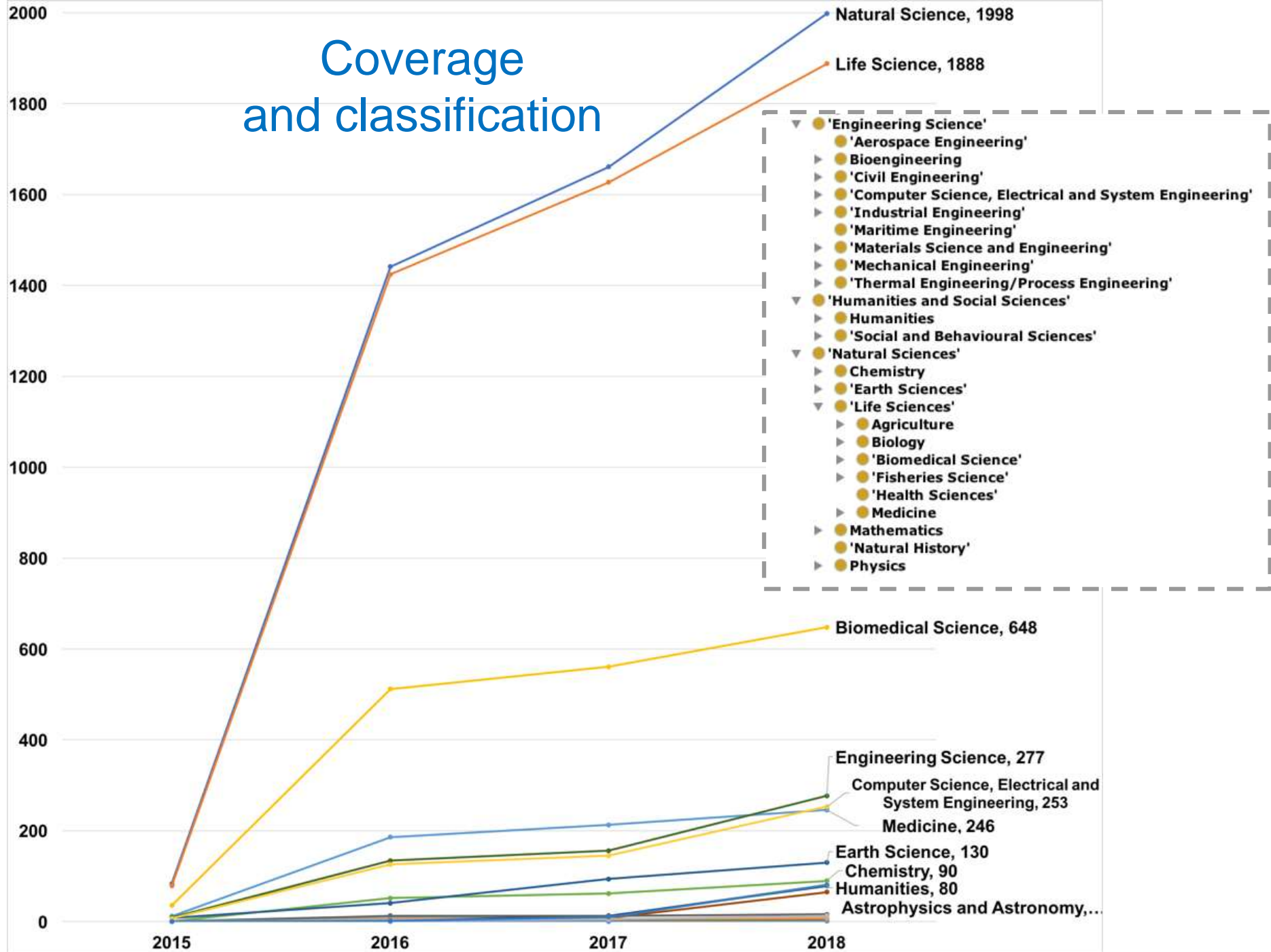
All

9 Data types, including:

DNA Microarray Gene Expression Data

Genotyping Life Science Methylation

Coverage and classification



FAIRsharing enables the FAIR principles

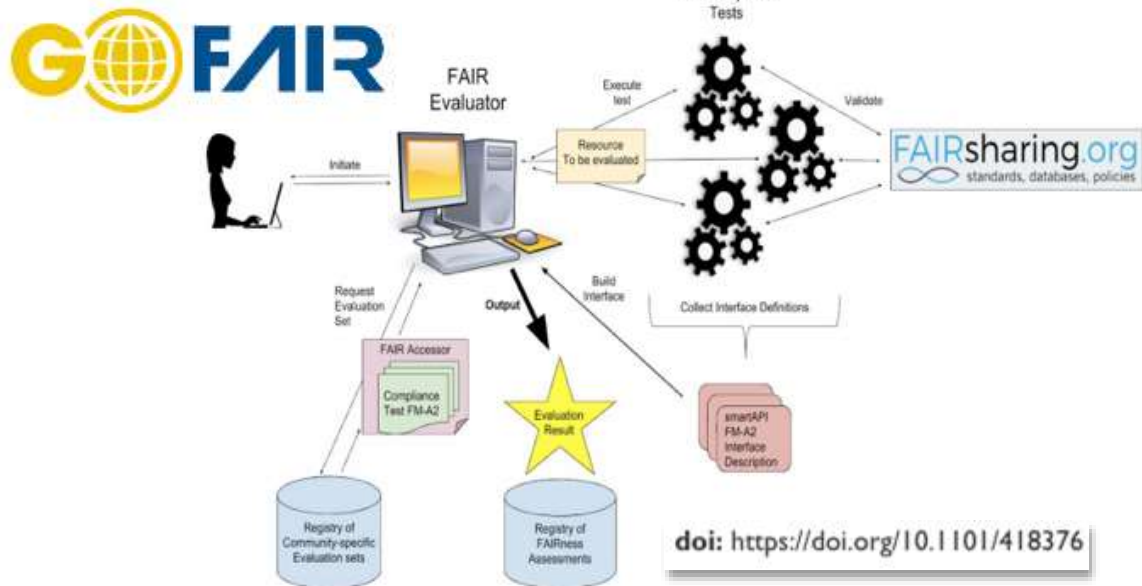
Ensures that **standards, databases, repositories, policies** are:

- **Findable**, e.g., by **providing DOIs** and **marking up records in schema.org**, allowing users to register, claim, maintain, interlink, classify, search and discover them
- **Accessible**, e.g., identifying their level of openness and/or **licence type**
- **Interoperable**, e.g., highlighting **which repositories implement the same standards** to structure and exchange data
- **Reusable**, e.g., knowing the coverage of a standard and its **level of endorsement** by a number of repositories should encourage its use or extension in neighbouring domains, rather than reinvention

FAIRsharing underpins the FAIR metrics

- FAIRsharing works with FAIR assessment tools to serve as:
 - **Registry** to describe digital assets, such as databases/repositories, standards, policies, enhancing their discoverability (schema.org), citability (DOIs)
 - **Look up service** for identifier schemas and standards (phase 1: now)
 - **Validation service** against metadata standards (phase 2: planned)

by FAIRmetrics.org



by NIH Data Commons



FAIRsharing and data management plans and tools

Using the data in FAIRsharing to:

- Inform and drive policy
- Inform data stewardship initiatives
- Create new educational tools



To find out more...

FAIRsharing, a cohesive community approach to the growth in standards, repositories and policies



 Susanna-Assunta Sansone,  Peter McQuilton,  Philippe Rocca-Serra,  Alejandra Gonzalez-Beltran,  Massimiliano Izzo,  Allyson Lister,  Milo Thurston,  Dominique Batista,  Ramon Granell,  Melanie Adekale,  Delphine Dauga,  Emma Ganley,  Simon Hodson,  Rebecca Lawrence,  Varsha Khodiyar,  Jessica Tenenbaum,  J. Myles Axton,  Michael Ball,  Sebastien Besson,  Theodora Bloom,  Vivien Bonazzi,  Rafael Jimenez,  David Carr,  Wei Mun Chan,  Caty Chung,  Geraldine Clement-Stoneham,  Helena Cousin.

Pre-print at: <https://doi.org/10.1101/245183>

Authored by **68 authors**, representing the FAIRsharing community of core adopters, advisory board members, and key collaborator, who are stakeholders from **academia, industry, funding agencies, standards organizations, infrastructure providers** and **scholarly publishers**



FAIRsharing WG:

<https://rd-alliance.org/group/fairsharing-registry-connecting-data-policies-standards-databases.html>

Contact FAIRsharing:



contact@fairsharing.org



[@fairsharing_org](https://twitter.com/fairsharing_org)

