

Making data policies FAIR

Joy Davidson, DCC

Allyson Lister
FAIRsharing Content &
Community Lead



@digitalcuration
@FAIRsFAIR_EU
@jd162a

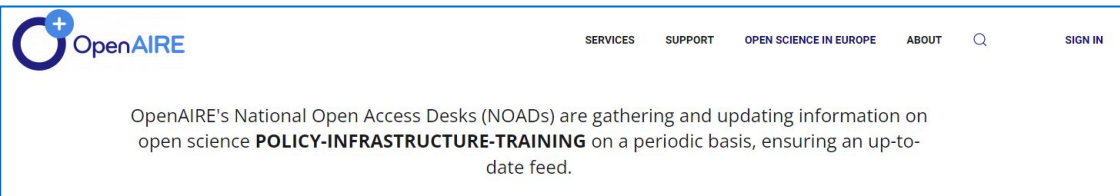


*RDA Europe / EOSC Future Domain
Ambassador for standards, repositories
and policies*



@FAIRsharing_org
@allysonlister
@allysonlister@fediscience.org

Many stakeholders want to monitor the OS policy landscape



<https://www.openaire.eu/os-eu-countries>



<https://www.eosc.eu/monitoring-and-reporting>



<https://eosc-portal.eu/policy/EU-Countries>

Currently, a manual process

- Mainly through surveys at national level
- Time consuming to collect and analyse
- Hard to compare the actual *content* and coverage of the policies across Europe

AA9 Landscape Monitoring

Monitor **standardised** national Open Science and FAIR data strategies, including the description of these policies.



SRIA: https://www.eosc.eu/sites/default/files/EOSC-SRIA-V1.0_15Feb2021.pdf

FAIRsFAIR Policy Resources

FAIR-enabling data policy checklist

helps policy makers review whether their data policies are FAIR-enabling and provides practical recommendations

Policy element	Good practice recommendation	Tick the statement that best reflects your policy
Title of the policy	To support findability, policies should have a title that makes clear whose policy it is and what the policy relates to.	<input type="checkbox"/> The policy has a clear and appropriate title.
		<input type="checkbox"/> The title of the policy would benefit from being made more explicit.
		<input type="checkbox"/> The policy does not have a title.
Year the policy was introduced	To support both human interpretation and machine actionability, the policy should make clear the period of validity, differentiating between the date it was written and the date it was implemented where necessary.	<input type="checkbox"/> The policy clearly states when it came into effect and provides a scheduled review date.
		<input type="checkbox"/> The policy clearly states when it came into effect but does not provide a scheduled review date.
		<input type="checkbox"/> The policy does not make clear when it came into effect or provide a scheduled review date.
Persistent Identifier (PIDs) of the policy document	PIDs should be assigned to clearly versioned policies to ensure that the right version can be found and fed into machine actionable pipelines.	<input type="checkbox"/> The policy has a persistent identifier such as a DOI.
		<input type="checkbox"/> The policy does not have a persistent identifier such as a DOI.
Policy is registered	Policies should be registered with services such as FAIRsharing or similar to improve their findability for various end users.	<input type="checkbox"/> The policy is registered with one or more registry services
		<input type="checkbox"/> The policy is not registered
Availability of the policy	Policies should be openly available and described consistently using a structured data markup schema to support both human and machine	<input type="checkbox"/> The policy is openly available online in a structured format.
		<input type="checkbox"/> The policy is openly available online (e.g., HTML, PDF).
		<input type="checkbox"/>

Structured policy description template

Includes policy checklist elements and enables policy makers create and share structured versions of their data policies

FAIRsFAIR Policy Characterisation Form			
Number	Section	Policy Element	Options
1	Policy Context	Title of policy	Free text
2		Availability of the policy	▼
3		Country/Countries	Free text
4		Year policy was introduced	Free text
5		Status of policy	▼
6		Policy is scheduled for review	▼
7		If scheduled for review, when will this take place?	Free text
8		Persistent Identifier (PID) for policy (i.e., not a question about whether policy requires PIDs but rather is there a PID for the policy document itself)	▼
9		Policy is registered	▼
10		Subject area/discipline covered	▼
11		Sub-discipline if applicable	Free text
12		Type of policy	▼
13		Scope of the policy	▼
14		Definition of data provided	▼
15		Sharing research software	▼
16		Data sharing	▼
17		Alignment with FAIR principles	▼
18		Metadata sharing	▼
19		Exceptions to data sharing are allowed	▼
20		Policy includes expectation on data management planning (DMP) development	▼
21		If a DMP should be developed, please indicate the stage at which it should be produced	▼
22		Is there an expectation that the DMP will be updated and clearly versioned?	▼

Resources are available from <https://fairsfair.eu/policy-recommendations-and-support-programme>

RDA Journal Policy Features



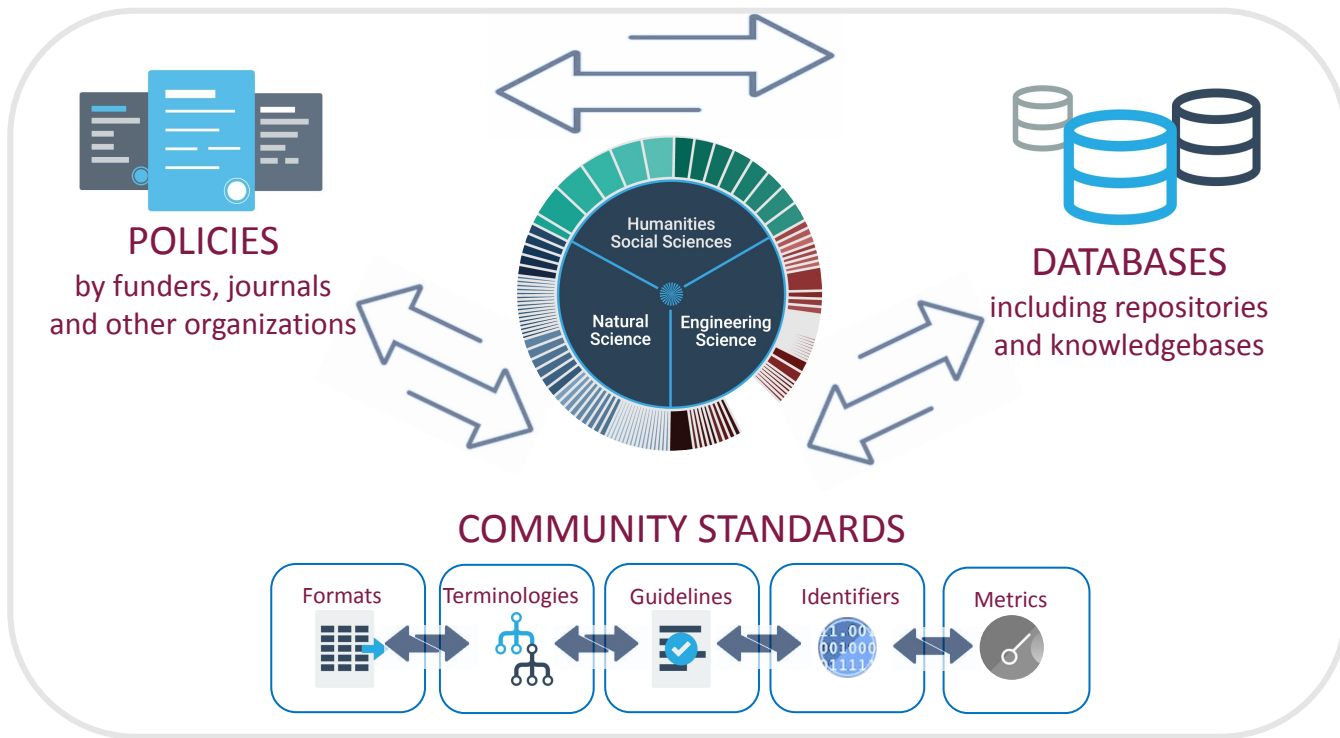
The **RDA Data Policy Standardisation and Implementation Interest Group** has defined and described **14 features** of journal research data policies and arranged these into a set of six standard policy types or tiers.

These can be adopted by journals and publishers to promote data sharing in a way that encourages good practice and is appropriate for their audience's needs.

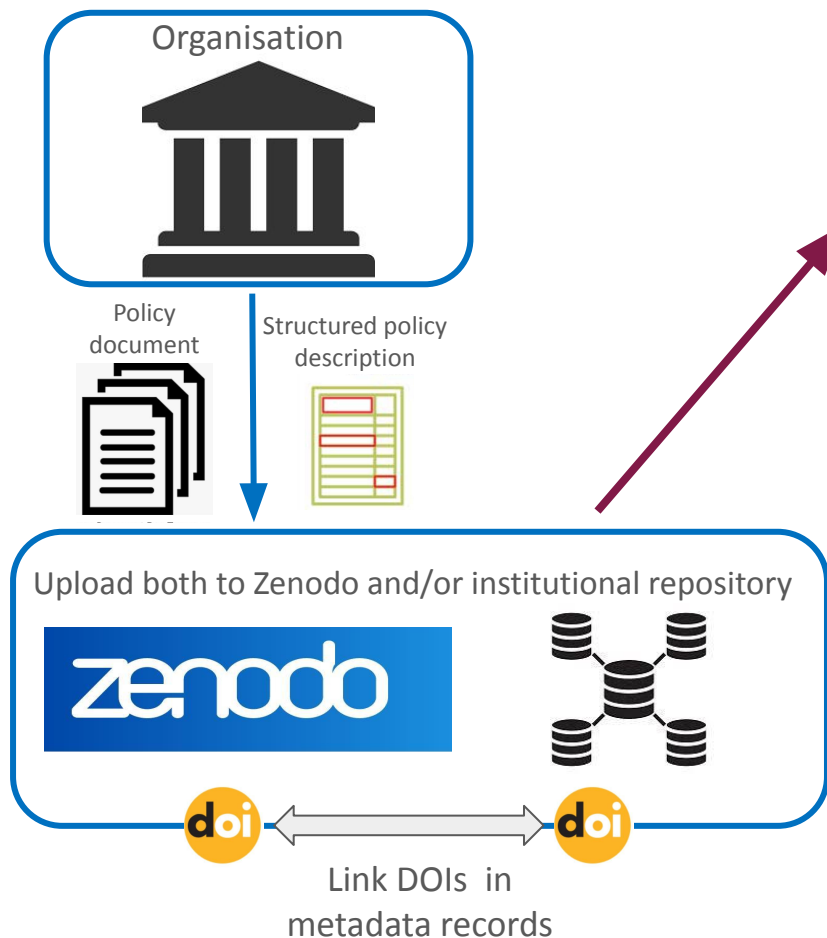
Policy feature definitions.		
Feature	What	Why
Definition of research data	Define which research data the policy applies to, and the types of research data covered by the policy.	This enables the policy to define its scope and, where appropriate, provide general or discipline specific information on research data and file and format types (Hodson & Molloy, 2015). Specifying non-numeric data types (images, video, text etc) helps ensure relevance and applicability across research disciplines.
Definition of exceptions	Define what data do not need to be, or should not be made publicly available, under the policy and the alternative options for describing the availability of these data.	Ensures data policy is applicable to all research publications, but acknowledges legitimate exceptions and makes clear the policy does not create new legal or ethical precedents.
Embargoes	Define if and what embargoes on data release are permitted.	Researchers' reasonable right of first use of data generated during their research is a widely accepted principle of data sharing (Anon, 2016b), but reasonable lengths of embargo may vary by discipline, data type and study.
Supplementary materials	Define the journal/publisher's position on data sharing via supplementary materials, and if and when sharing data as supplementary materials is permitted under the policy.	While many policies preference sharing data in repositories (McCarthy, 2009; Santos, Blake & States, 2005; Evangelou, Trikalinos & Ioannidis, 2005), sharing data as supplementary materials remains very common. Some journals have strong data sharing policies and specify supplementary materials as the mechanism for data sharing. Supplementary materials are often a solution for researchers without discipline specific repositories and the definitions of supplementary material and research data often overlap.
Data repositories	State position on the use of data repositories. Data repositories	Lack of an appropriate repository or lack of awareness of repositories are common

<http://doi.org/10.5334/dsj-2020-005>

FAIRsharing registry



FAIRsharing provides **curated descriptions** and **relationship graphs** of **standards, databases and policies** in **all disciplines**



FAIRsharing.org

standards, databases, policies

Register policy and include DOI to deposited versions and vice versa



- FAIRsharing recently updated their metadata to include most of the fields recommended by FAIRsFAIR so descriptions of content are more comprehensive
- Registering provides an openly available structured description of your data policy that is **machine readable**
- Very useful for monitoring the landscape with minimal effort!

Curating FAIRsharing Policy Metadata

*I found that adding [the new policy] metadata was **extremely helpful** for me to understand concretely what should go in such a Policy, ideally. And found out [a] particular policy is lacking many of these important elements ... Which I can now bring to their attention!*



Gabriel Pelletier, FAIRsharing Community Curator for Neuroscience



GENERAL INFORMATION



Genome Canada Data Release and Resource Sharing Policy

GenomeCanada

 10.25504/FAIRsharing.5h6xzg 



Type	Funder
Registry	Policy
Description	Genome Canada is committed to the principle of rapid data release and sharing of unique resources to the scientific community; Genome Canada-funded projects must therefore share data and resources in a timely fashion with minimal or no restrictions. By providing the scientific community with timely access to the outputs of Genome Canada-funded projects, this data and resource sharing policy is intended to accelerate the translation of research for the benefit of humankind.
Homepage	https://genomecanada.ca/wp-content/uploads/2022/05/gcdatasharingpolicies16-09-23-1.pdf
Year of Creation	2008
Maintainers	This record is in need of a maintainer. If you are affiliated with this project, claim it now!
Countries developing this resource	Canada
Subjects	Life Science Biomedical Science
Domains	DNA Sequence Data Genome Annotation Genome
Taxonomic Range	All
User Defined Tags	None

VIEW RELATION GRAPH

<https://doi.org/10.25504/FAIRsharing.5h6xzg>

Curating FAIRsharing Policy Metadata

*I found that adding [the new policy] metadata was **extremely helpful** for me to understand concretely what should go in such a Policy, ideally. And found out [a] particular policy is lacking many of these important elements ... Which I can now bring to their attention!*

Gabriel Pelletier, FAIRsharing Community Curator for Neuroscience

The screenshot displays the FAIRsharing Policy Metadata form for the "Genome Canada Data Release and Resource Sharing Policy". The form is divided into two main sections: "GENERAL INFORMATION" and "ADDITIONAL INFORMATION".

GENERAL INFORMATION

Field	Value
Type	Funder
Registry	Policy
Description	Genome Canada is providing the science sharing policy is intended to
Homepage	https://genomecanada.ca/data-release-and-resource-sharing-policy/
Year of Creation	2008
Maintainers	This record is in new
Countries developing this resource	Canada
Subjects	Life Science, Biotechnology
Domains	DNA Sequence Data
Taxonomic Range	All
User Defined Tags	None

ADDITIONAL INFORMATION

Field	Value
Compliance	
Monitoring Of Compliance	yes
Sharing Data	
Mandated Data Sharing	required
Exceptions To Data Sharing	yes
DMP Development	
Notes	The policy does not require a complete DMP, but does require a "Data Release and Resource Sharing Plan" as part of the application process.
Timing Of Dmp	pre-award
Mandated DMP Creation	other
Sharing Metadata	
Value	not covered
COS TOP Guidelines	
Comment	NA
Ranking	NA
Licences For Outputs	
Notes	The policy links to suggested Open Source compatible licenses for Research Software/Code, but nothing for Data.
Value	yes
Sharing Research Software	
Value	required



<https://doi.org/10.25504/FAIRsharing.5h6xzg>

Curating FAIRsharing Policy Metadata

*I found that adding [the new policy] metadata was **extremely helpful** for me to understand concretely what should go in such a Policy, ideally. And found out [a] particular policy is lacking many of these important elements ... Which I can now bring to their attention!*


Gabriel Pelletier, FAIRsharing Community Curator for Neuroscience







GENERAL INFORMATION



THE UNIVERSITY
of EDINBURGH

University of Edinburgh Research Data Management Policy (Edinburgh RDM Policy)

10.25504/FAIRsharing.c81b3c



Type

Registry

Description

Homepage

Year of Creation

Maintainers

Countries developing this resource

Subjects

Domains

Taxonomic Range

User Defined Tags

Compliance

Notes

Guidance To Help Enable Compliance

The University is responsible for raising awareness of good practice and PIs' and research students' obligations with respect to research data, and provision of useful platforms, guidance, and services in support of current and future access, during and after completion of research projects, subject to necessary cost recovery from research funders through PIs' grant proposals. The University supports a free-at-point-of-use trustworthy digital repository for University research data which may be used by PIs and research students.

yes

Sharing Data

Notes

Mandated Data Sharing

Exceptions To Data Sharing

The University supports the broad global consensus that publicly funded research data should be made openly available as soon as possible with as few restrictions as necessary. Additionally, many UK and international funders have embraced FAIR principles for data sharing (making data findable, accessible, interoperable, and reusable). FAIR acknowledges legitimate reasons for restricting access to data, such as confidentiality concerns, suggesting the need for information governance processes over usage when necessary. Principal Investigators and research students should consider how they can best make their data FAIR in their Data Management Plans.

suggested

yes

Data Citation

Notes

Value

Research outputs which convey findings from research data should include a citation or data access statement which clearly provides a route for readers to obtain the data.

yes

Data Protection

Notes

Research data management plans must specify how and when research data will be made available as soon as findings are published, under any conditions, whenever data pertaining to individuals is used.

<https://doi.org/10.25504/FAIRsharing.c81b3c>

Benefits of this approach

- Ensures policies align with **FAIR**
- Ensures policymakers are **in control of updates**
- Utilises **freely-available repositories** and **registries**
- Policies and a structured description of their content are available to **multiple stakeholders** for a variety of uses (EOSC Association, OpenAIRE, EOSC Future, etc).

Thank you!

More information at

<https://dcc.ac.uk/blog/fairsharing-and-dcc-collaborate-align-policy-metadata>

<https://blog.fairsharing.org/?p=451>



@digitalcuration
@FAIRsFAIR_EU
@jd162a



*RDA Europe / EOSC Future Domain
Ambassador for standards, repositories
and policies*

FAIRsharing.org
standards, databases, policies

@FAIRsharing_org
@allysonlister
@allysonlister@fediscience.org