FAIRsFAIR policy enhancement recommendations and support

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FAIRsFAIR in a nutshell

FAIRsFAIR:

- H2020 funded project

- 22 partners, runs from March 2019-
  Feb 2022

- Emphasis on fostering FAIR data
  culture and uptake of good practices.

- Helping to realise the European
  Open Science Cloud (EOSC) vision.

https://www.fairsfair.eu/

FAIRsFAIR landscape activities 2019-2020

Semantics and Interoperability

Policies and Practices

HEIs and FAIR Data

- **D3.1 FAIR Policy landscape analysis**
  https://zenodo.org/record/3558173

- **D3.3 Policy Enhancement Recommendations**
  https://zenodo.org/record/3686901

- **D7.1 FAIR in European Higher Education**
  https://zenodo.org/record/3629683

FAIRsFAIR recommendations

Collectively agree on a **common set of FAIR policy elements** to describe policies.

FAIRsFAIR Policy Characterisation Data for D3.1
https://zenodo.org/record/3550544

> **AA9 Landscape Monitoring**
> *Monitor **standardised** national Open Science and FAIR data strategies, including the description of these policies.*

SRIA: https://www.eoscsecretariat.eu/sites/default/files/open_consultation_booklet_sria-eosc_20-july-2020.pdf

FAIRsFAIR recommendations

PIDs should be assigned to **clearly versioned policies** made available via registries.

Emphasis on describing elements that may be considered 'rules' to support **machine-actionability.**

Model Policy on Open Access to Publications and Data for Research Performing Organisations (RPOs)

1. Preamble

1. The **[Name of RPO]** commits to the advancement of science and the wide dissemination of knowledge to the benefit of society by adopting practices on open, reproducible and responsible research.

2. The **[Name of the RPO]** recognizes "openness" as one of its guiding principles and commits to promoting it by −among others- encouraging and supporting research processes and tools that encourage collaboration, enabling new working models and new social relationships, stimulating the dissemination of knowledge and the accessibility and re-usability of research outputs, encouraging open access to publications and data and building the necessary infrastructure to support open science.

2. Jurisdiction and Effect of Policy

The Policy applies to all researchers active at **[Name of RPO].** In cases where research is funded by a third party, any agreement with that party concerning access rights, deposit and storage takes precedence over this Policy.

The Policy has been approved by **[dean/ commission/....]** and takes effect from **[dd/mm/yy]**

3. Rights, Responsibilities, and Duties

3.1 The [Name of RPO] is responsible for:

1. Supporting and empowering the transition to Open Access/ Open Science through education, training and awareness-raising actions targeting researchers and other employees, along with the provision of the necessary infrastructure and funding to support this transition. Acquisition of Open Science skills should form an integral part of professional training and career development offered to researchers.

2. Establishing (if one does not yet exist) an **Institutional Open Access Repository [Name of the Repository]** according to international standards, containing digital content and providing advanced tools for search, navigation and Open Access to its content.

https://www.openaire.eu/model-policy-on-open-science-for-research-performing-organisations

FAIRsFAIR recommendation

FAIR can be referred to both explicitly and implicitly.

Really depends on your organisation's aims.

IMPLICIT	EXPLICIT
Implicit refers to something that is implied but not said directly	Explicit refers to something is that stated directly
When someone expresses something implicitly, there is room for confusion	When someone expresses something explicitly, there tends to be no confusion

Image from https://pediaa.com/what-is-the-difference-between-implicit-and-explicit/

FAIRsFAIR recommendation

Provide clarity on the range of outputs that should be considered and what might be considered
"**FAIR enough**"

https://www.go-fair.org/how-to-go-fair/fair-implementation-profile/

Prototype implementation of the FAIR-related features - a demonstration

Enhancing Metadata Exposure in Repositories

Online workshop

9 December 2020
15:00-18:00 CET

https://fairsfair.eu/events/prototype-implementation-fair-related-features-demonstration

FAIRsFAIR recommendation

Standardised **exceptions for not sharing data** should be developed and promoted in guidance

Example data access statements

Openly available data

- All research data supporting this publication are directly available within this publication.
- Additional research data supporting this publication are available as supplementary information accompanying this publication at [insert DOI].
- Additional research data supporting this publication are available from the [insert repository name] repository at [insert DOI].
- Multiple datasets openly available at various data repositories were used to support these research findings. All the data used are referred to in the 'References' section of this publication.

Secondary analysis of existing data

- This study is a re-analysis of existing data that are publicly available from the [insert name of repository] repository at [insert DOI]. Further documentation about data processing is available from the [insert repository name] repository at [insert DOI].
- This study brought together existing research data obtained upon request and subject to licence restrictions from a number of different sources. Full details of how these data were obtained are available in the documentation available at the [insert repository name] repository at [insert DOI].

Ethical constraints

- Due to ethical concerns, supporting data cannot be made openly available. Further information about the data and conditions for access are available from the [insert repository name] repository at [insert DOI].

FAIRSFAIR Rec on DMPs

Require **updating** of DMPs over the research lifecycle leading to **end stage** DMPs.

Emphasis should be on **rewarding** good practice but, where necessary, **penalties** for non-compliance will eventually need to be considered.

HORIZON 2020 ONLINE MANUAL

Research Data Management Plans During The Project Life Cycle

First version

Once a project has had its funding approved and has started, you **must submit a first version of your DMP** (as a deliverable) within the first 6 months of the project. The Commission provides a DMP template in annex, the use of which is recommended but voluntary.

Updates

The DMP needs to be updated over the course of the project whenever significant changes arise, such as (but not limited to):

- new data
- changes in consortium policies (e.g. new innovation potential, decision to file for a patent)
- changes in consortium composition and external factors (e.g. new consortium members joining or old members leaving).

The DMP should be updated as a minimum in time with the periodic evaluation/assessment of the project.

- If there are no other periodic reviews foreseen within the grant agreement, then such an update needs to be made in time for the final review at the latest.
- Furthermore, the consortium can define a timetable for review in the DMP itself.

Periodic reporting

For general information on periodic reporting please check the following sections of the online manual

- how to fill in reporting tables for publications, deliverables and
- process for continuous reporting in the grant management system of the Funding & Tenders Portal.

https://ec.europa.eu/research/participants/docs/h2020-funding-guide/cross-cutting-issues/open-access-data-management/data-management_en.htm

Local support is valued

Support provision is a positive influence

Lots of different ways to provide support!

Which of the following policy factors do you believe would positively or negatively influence researchers to make data FAIR?
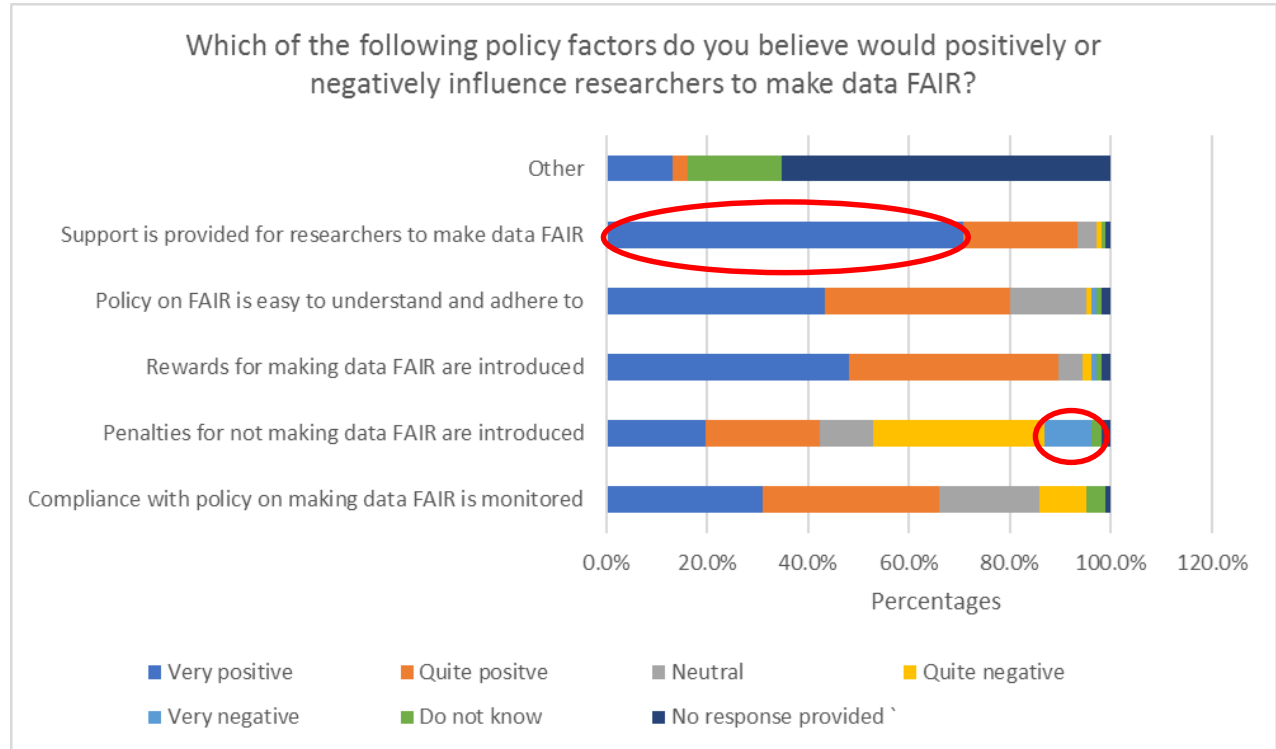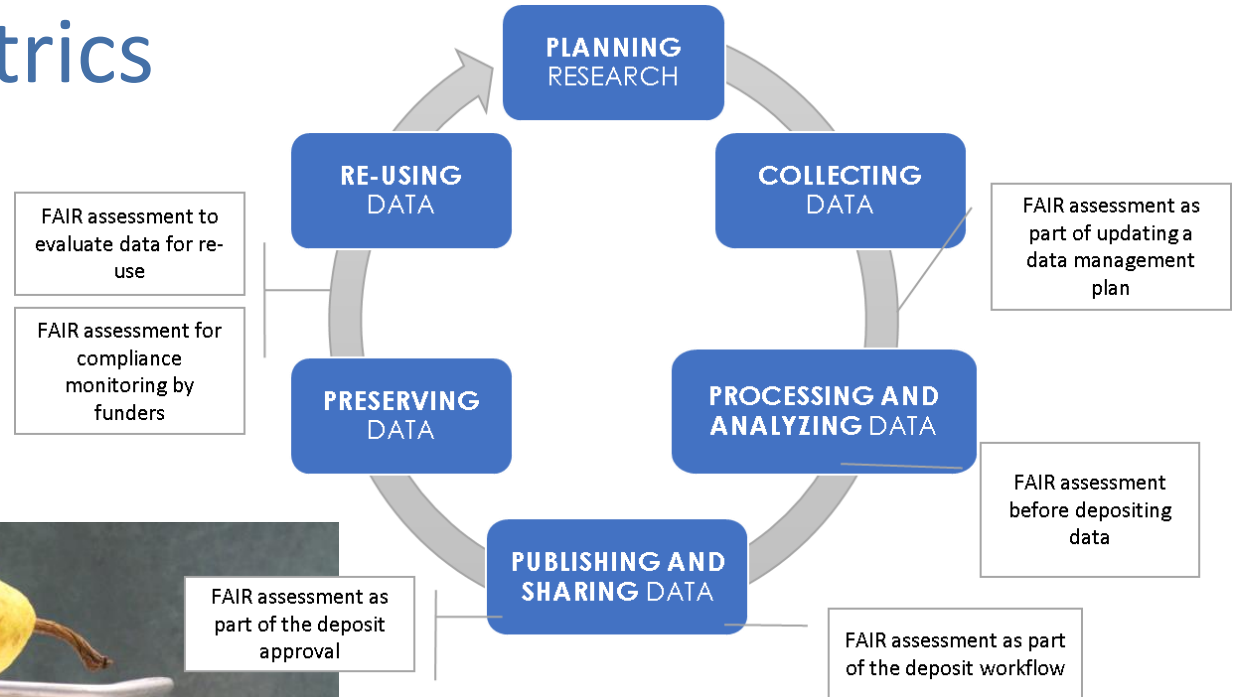
How are we supporting these recommendations?

FAIRsFAIR Policy Support Programme

- Review policies against our recommendations
- Develop a structured version of policies
- Series of three workshops over 2021

OPEN CALL FOR
POLICY ENHANCEMENT SUPPORT

Photo by Nick Karvounis on Unsplash

https://fairsfair.eu/policy-enhancement-recommendations

Assessment metrics

PLANNING RESEARCH

COLLECTING DATA

FAIR assessment as part of updating a data management plan

PROCESSING AND ANALYZING DATA

FAIR assessment before depositing data

PUBLISHING AND SHARING DATA

FAIR assessment as part of the deposit workflow

FAIR assessment as part of the deposit approval

PRESERVING DATA

RE-USING DATA

FAIR assessment to evaluate data for re-use

FAIR assessment for compliance monitoring by funders

FAIRSFAIR
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EXTENDED DEADLINE
31 DECEMBER

Comment on the 17 proposed minimal viable metrics

Data Object Assessment Metrics

https://fairsfair.eu/fairsfair-data-object-assessment-metrics-request-comments

Machine actionable assessment tool

https://github.com/pangaea-data-publisher/fuji

Graphical user interface / www.f-uji.net

https://www.fairsfair.eu/f-uji-automated-fair-data-assessment-tool

CoreTrustSeal Certification Support

Finding FAIR-enabling repositories

- make FAIR-enabling and certified repositories findable
- revised and improved re3data metadata schema
- integration of repository finder into DataCite Commons
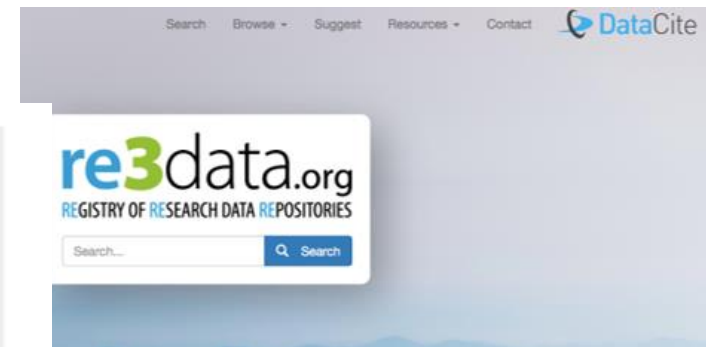
See also: FAIRsFAIR M4.8 Introduce additional components and practices to metadata schema and align them with FAIR data practices, https://doi.org/10.5281/zenodo.4590298

FAIRSFAIR
Fostering Fair Data Practices in Europe

FAIR|Aware

- Online tool to raise awareness and educate on data FAIRness

- For researchers, authors and data stewards

- 10 simple questions with practical tips to improve data FAIRness before data deposit

- Now available for testing. Continuously improved. Open source.
  Final release Autumn 2020.

https://fairaware.dans.knaw.nl/

FAIR skills frameworks

Professional and PhD level

Framework	Main Field	Addresses FAIR data?	Main elements
FA/R 4S	FAIR data stewardship	Yes	Group of skills / competences for each research lifecycle stage; Identification of professional groups sharing stewardship responsibility.
FOSTER	Open Science	Yes	Open Science Taxonomy; Open Science training toolkit; Open Science Training Handbook oriented to practical teaching; Open Science Learning objectives.
Towards FAIR data steward as profession for the lifesciences	Data steward for Life sciences	Yes	Data Steward roles competencies (kno
BELMONT FORUM	Data skills in Global Environmental Change Research	No	Curricula goals, Cu Investigators).

https://www.fairsfair.eu/fair-frameworks-training-programmes
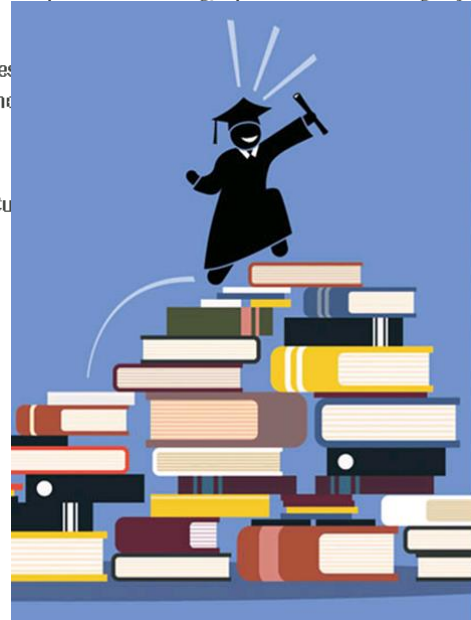
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Booksprint for FAIR Adoption Handbook for Universities

CALL FOR EXPERTS

DEADLINE 3 MAY 2021

https://fairsfair.eu/news/call-fair-experts-apply-and-join-booksprint-fair-adoption-handbook-universities

Thank you! Any questions?

DATA PRACTICES
- **Reports**
  - FAIR requirements for persistence and interoperability
  - Guidelines for ontology design and vocabulary interoperability
  - Basic framework for services enabling FAIR (including software)
- **Solutions for interoperability and machine accessibility for FAIR-aligned repositories**
- **Prototype for interoperability of repositories**
- **Workshops and hackathons: Recommendations for FAIR Semantics and Semantics in FAIR**

DATA POLICY
- **Reports**
  - Recommendations on data policy and analysis of practice
  - Integration of meta-data catalogues
  - White paper on alignment and synchronisation around FAIR, Open Science and EOSC
- **Support programme for repositories to reach FAIR compliance**

CERTIFICATION
- **European network of trustworthy repositories enabling FAIR data**
- **Support and guidance for certification of data repositories**
- **Tool to identify relevant trustworthy certified repositories**
- **Pilots to support the assessment of FAIR data in trustworthy repositories**

TRAINING, EDUCATION AND SUPPORT
- **Reports**
  - FAIR data in European higher education
  - Training for researchers in FAIR data science and its impact
- **FAIR competence centres tailored to different communities**
  - Three annual schools in core data skills for researchers
  - Five instructor training (train-the-trainer) events
- **FAIR competence framework for higher education**
  - Three annual FAIR data education stakeholder workshops
- **FAIR competences adoption handbook for universities**
  - Three workshops on integrating FAIR data competences
  - Case studies on good practices in FAIR competences education

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Fostering Fair Data Practices in Europe

MAIN OUTPUTS

March 2019 - February 2022

https://www.fairsfair.eu