

How to FAIRify your research data - a practical guide

The FAIR data-principles help researchers make their data 'as open as possible and as closed as necessary'. In this short and practical guide you learn out more about the *What, Why and How* of making your research data FAIR.

What is FAIR?

FAIR stands for **F**indability, **A**ccessibility, **I**nteroperability, and **R**euse of data. The [FAIR principles](#) are the standard for responsible data management and practicing open science.

- **Findable** - easy discovery by both fellow researchers and computers
- **Accessible** - availability under well-defined conditions
- **Interoperable** - easy integration and sharing across systems and platforms
- **Reusable** - optimize the reuse of research data

FAIR does not equal Open

FAIR does not necessarily mean that your data is openly available to everyone. There can be reasons to restrict access to your data, for instance when this would affect the privacy of participants, intellectual property rights or commercial interests. The UG asks you to make your research data 'as open as possible and as closed as necessary'.

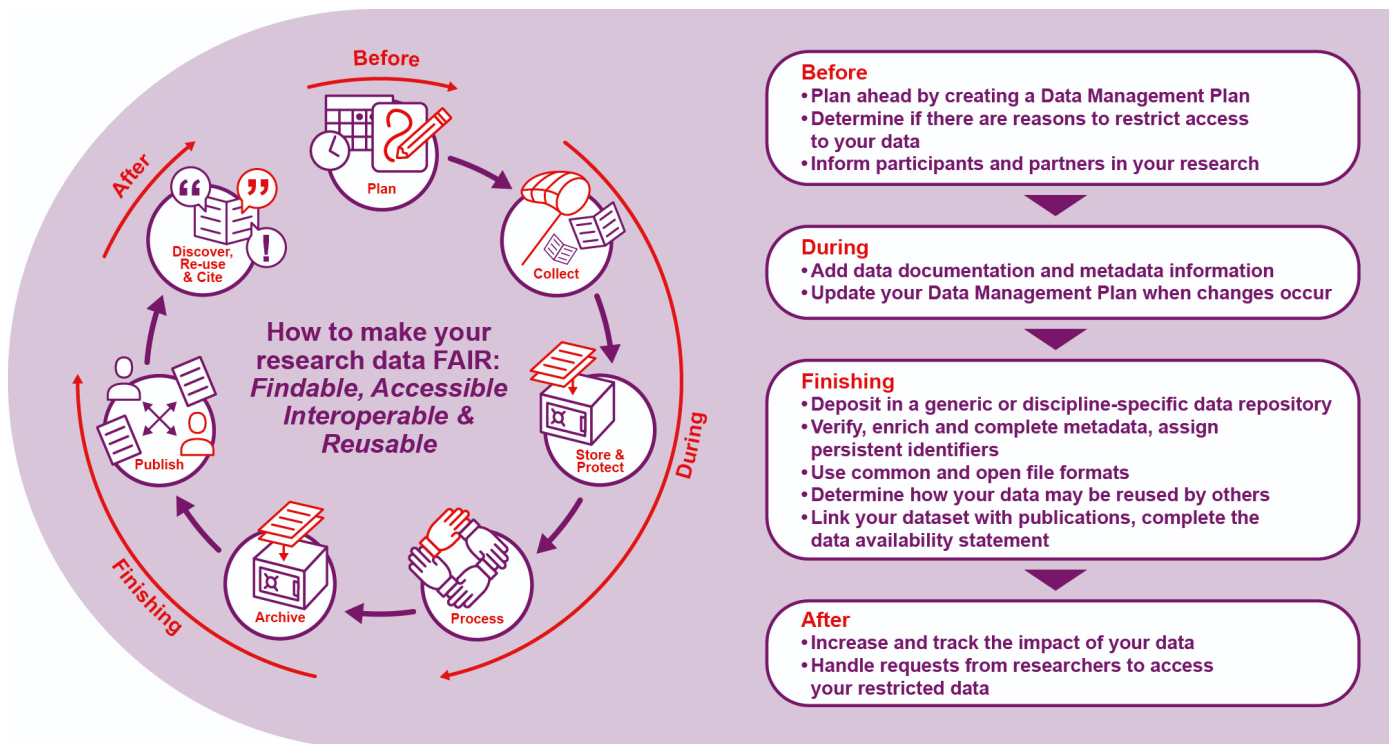
Why FAIR?

If your research data is FAIR, it can be reused by fellow researchers from other institutions and disciplines. The benefits are for instance:

- **Better science** - others can reproduce your findings, leading to more reliable research
- **Credit for your work** - increased visibility and citations for your published articles and datasets
- **More impact** - gain maximum potential from your dataset
- Alignment with **international standards and requirements** of your institution and funder
- Opportunities for **new partnerships** with fellow researchers and the broader community

How to FAIR?

Practicing FAIR means integrating the FAIR principles in your research workflow:



Before research

- **Plan ahead** by creating a Data Management Plan → [Create a Research Data Management Plan](#)
- Determine if there are **reasons to restrict access** to your data → **What are reasons for restricted access?**
- **Inform** participants and partners in your research → [Learn more about informed consent](#)

During research

- Add **data documentation** and metadata information → [Advice for good data documentation](#)
- **Update** your Data Management Plan when changes occur

Finishing your research

- Deposit your data in a generic or discipline-specific **data repository** → [Find a repository](#)



Digital Competence Centre

- Verify, enrich and complete **metadata**, assign **persistent identifiers** → [More about metadata & How to create an ORCID iD](#)
- Use **common and open file formats** → [Learn more about preferred formats](#)
- Determine how your data may be **reused** by others → [Contact the DCC for support](#)
- Link your dataset with publications, complete a **Data Availability Statement** → [Find out more](#)
- Make sure your publication **refers** to your dataset → [Cite using the Digital Object Identifier \(DOI\) of your deposited dataset](#)

After research

- Increase and track the **impact** of your data → [Design your communication strategy & Check out Web of Science's Data Citation Index](#)
- **Handle requests** from researchers to access your restricted data → [Contact the DCC for support](#)

*Use the [FAIR-Aware tool](#) (DANS) to assess the FAIRness of your dataset

FAIR Example - DataverseNL

DataverseNL ([DVNL](#)) is a data repository with management and support by the UG DCC and Library. It welcomes contributions from all disciplines. Deposited datasets and software receive rich metadata and a unique Digital Object Identifier (DOI) that allows for data citation. Datasets from DVNL are made 'findable' through the UG's [Research Portal](#).