EPFL

FAST GUIDE #2
FAIR DATA PRINCIPLES [1]

Data and metadata are easy to find by both humans and computers

Both humans and computers can readily access or download datasets

Data from different datasets are prepared to be combined or exchanged

Published data can be easily combined/replicated in future research

FINDABLE

ACCESSIBLE

INTEROPERABLE

REUSABLE

F1 (Meta)data are assigned a globally unique and persistent identifier.

F2 Data are described with rich metadata.

F3 Metadata clearly and explicitly include the identifier of the data they describe.

F4 (Meta)data are registered or indexed in a searchable resource.

A1 (Meta)data are retrievable by their identifier using a standardized communication protocol:

A1.1 the protocol is open, free and universally implementable;

A1.2 the protocol allows for an authentication and authorization procedure where necessary.

A2 Metadata are accessible, even when the data are no longer available.

I1 (Meta)data use a formal, accessible, shared and broadly applicable language for knowledge representation.

I2 (Meta)data use vocabularies that follow FAIR principles.

I3 (Meta)data include qualified references to other (meta)data.

R1 (Meta)data are richly described with a plurality of accurate and relevant attributes:

R1.1 (meta)data are released with a clear and accessible data usage license;

R1.2 (meta)data are associated with detailed provenance;

R1.3 (meta)data meet domain-relevant community standards.

DESCRIBE
Describe provenance, usage, and organization of data with standardized metadata [2].
Make metadata available even if data is not.

OPEN
Open up your data using standardized licenses [3]. Limitations may apply (ex. data protection, commercial datasets, and double-use technology).

LINK
Use persistent identifiers (ex. DOI, HANDL, URN) to cross-link datasets. Publish files in open formats, even alongside proprietary formats.

PUBLISH
Deposit datasets in data repositories, favoring services with user-friendly interfaces. Make sure to choose a FAIR-compliant data repository, also for the relative code.

MY FAIR DATA?

Check the FAIRness of your dataset with this self-assessment test [4]

FAIR ≠ Open

✓ FAIR ensures data can be found, understood and reused

✓ Data can be shared under restrictions & still be FAIR:
"**As open as possible, as restricted as necessary**"

Karel Luyben, president of the EOSC [5]

WHERE TO PUBLISH DATA?

To find the appropriate repository for your FAIR data, check the **Data platforms dissemination table** [6] on the EPFL Library pages

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Want to dig more? Check re3data.org & fairsharing.org

re3data.org
REGISTRY OF RESEARCH DATA REPOSITORIES

FAIRsharing.org
standards, databases, policies

Credits and sources
[1] go-fair.org/fair-principles
[2] go.epfl.ch/rdm-fastguide05
[3] go.epfl.ch/rdm-fastguide12
[4] ardc.edu.au/resources/aboutdata/fair-data/fair-self-assessment-tool
[5] doi.org/10.5281/zenodo.6807345
[6] go.epfl.ch/datarepo

■ Bibliothèque

Contact and info
🔍 go.epfl.ch/rdm

👥 researchdata@epfl.ch