

# Checklist for the Assessment of a Repository's Compliance with the FAIR Principles

Publishing research data according to the FAIR Principles is now standard practice and required at ETH Zurich. That's why it's important to choose a repository that operates in line with these principles. On [re3data.org](https://re3data.org), some of the FAIR criteria are shown as icons in the top-right corner of a repository's profile. You can find out more about these icons in the [re3data FAQs](#). However, these icons alone aren't enough to confirm whether your repository aligns with the [FAIR Principles](#). Further checks are needed!

Below, you can find a **detailed checklist of the FAIR criteria**<sup>1</sup> that we consider relevant for a repository's compliance. This checklist can guide your group, for instance, in selecting a research data repository for data publishing. The FAIR criteria are listed according to the letters in "FAIR". All criteria must be met, except those marked as optional.

## Findable

The selected repository...

1. assigns a globally **unique persistent identifier** to the uploaded dataset (see icon indicating the use of a persistent identifier on re3data).
2. supports data **versioning**.
3. collects at least some **metadata about data provenance** (e.g., the name of the creator(s), title of the dataset, link(s) to an associated publication(s) and/or dataset(s), date of creation).
4. explicitly includes the **persistent identifier** of the dataset in the **metadata**.
  - OPTIONAL is frequently **used within the research community**, as evidenced by the large number of datasets and other research output cited by researchers in the same field.
  - OPTIONAL: registers or **indexes (meta)data in a searchable resource** (e.g., Google Scholar).

## Accessible

The selected repository...

1. is publicly accessible (see open access icon on re3data).
2. uses **open standard communication protocols** (e.g., HTTPS, FTPS).
3. uses a communication protocol that allows for **authentication and authorisation** during the data publishing process.

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<sup>1</sup>Please check out the "[ETH Researcher's Guide to Data Repositories](#)" for simplified instructions on choosing the right research data repository.

4. grants **open access to at least some of the metadata** related to the published dataset (e.g., user license, name of the dataset, name of the creator(s)).
5. **keeps metadata accessible** even when the dataset is no longer available.

## Interoperable

The selected repository...

1. follows a **standard submission form** including mandatory input fields for at least some of the metadata that need to be completed to finalise the data publication.
2. employs **controlled vocabularies and schemas** (e.g., RDF model <https://www.w3.org/RDF/> or the Dublin Core schema <https://www.dublincore.org/specifications/>) that are open and commonly used for the description of datasets.
3. provides **(meta)data in a human- and machine-readable, open file format** (e.g., metadata in XML or JSON).

## Reusable

The selected repository...

1. supports **open file formats** (e.g., \*.csv, \*.txt, \*.pdf).
  2. enables the submission of **submitter-defined metadata** (e.g., in the form of a README.txt file).
  3. assigns, or allows the selection of, **clearly defined and officially recognised user licenses**, such as the [Creative Commons Licenses](#), which are preferably CC0 or CC-BY licenses.
  4. has a **long-term preservation policy** for the published data, which defines a minimum storage period of 10 years.
- OPTIONAL: employs **(discipline-)specific standards for the metadata** that accompany a dataset.

*The use of a community-based standard for metadata facilitates data reuse, especially among researchers who are very close or within the same research field. If your research community has an established standard, use it whenever possible.*

*Check the repository's webpage for more details and verify the metadata standard at <https://fairsharing.org/> under "STANDARDS". For the same purpose, you can also search the RDA Metadata Standard Catalogue at <https://rdamsc.bath.ac.uk/>.*

*The inclusion of your standard in one of the aforementioned lists indicates that any data published in a repository using it are enriched with sufficient, discipline-specific metadata. These metadata adhere to a community-driven standard vocabulary and structure. However, the absence of a standard from either list does not imply that the repository's metadata standard is inadequate.*

## Additional FAIR check using DataCite Commons

Verify whether the repository meets the FAIR criteria using the DataCite Commons database at <https://commons.datacite.org/repositories>.

Does the repository appear in this database?

Answer:

A Yes, it appears in the list.

*Lucky you! You can be very sure that your repository operates in line with the FAIR principles.*

or

B No, it does not appear in the list.

*Don't panic, this isn't the end. If your repository meets all the FAIR criteria outlined, your choice remains valid. However, if you're still uncertain, feel free to contact us. We are here to support you.*

## Contact

If you have any questions regarding your repository selection, please don't hesitate to contact us at [data-management@library.ethz.ch](mailto:data-management@library.ethz.ch).

We would also appreciate it if you could share your final repository choice with us, so that we can pass this information on to other researchers who may benefit from it.