What Makes a Data Repository FAIR

## CHECKLIST: HOW TO RECOGNIZE A FAIR REPOSITORY



You can recognize a FAIR data repository by the four FAIR principles. This means in detail:

### Findable

A repository helps ensure that your research data is easy to find. To do this, it itself is searchable and provides the means to describe your research data with rich, accurate, machine-readable metadata and keywords. The repository should also enable you to obtain or assign a unique, persistent identifier to a dataset, such as a DOI.

### Accessible

A repository helps you keep your research data well accessible by ensuring its long-term availability and, again, by enabling persistent identifiers (for example, DOI). Describing a dataset through metadata also contributes to this and makes even research data that must remain closed for certain reasons accessible to some extent. In this case, you should be able to provide your contact information in the repository for questions about access. Furthermore, you should be able to deposit a data licence or an accessibility statement.

### Interoperable

A repository contributes to the interoperable delivery of your data again by allowing you to describe it with sufficient and standardized structural metadata. It should also give preference to <u>open, long-term sustainable file formats</u> such as LaTeX, TXT, TIFF, XML or RDF.

### Reusable

Reuse of your research data is readily possible, both for yourself and for others, if you can store all the contextual information relevant to this either in the documentation or in the metadata on the repository. Also, for the benefit of reusability, the repository should allow you to use sufficient and standardized structural metadata. You should be able to include a machine-readable data licence (for example, Creative Commons (CC)) and use the open, long-term usable file formats for the data and metadata already mentioned above.

A FAIR Data Repository Should Meet the Following Minimum Requirements

# CHECKLIST: HOW TO RECOGNIZE A FAIR REPOSITORY

Each dataset is given a unique, persistent identifier (for example, a DOI).
It is possible to describe the research data with important metadata, and the metadata is publicly accessible.
Structured and machine-readable metadata is supported.
It must be possible to define the conditions for reuse of the data clearly, preferably in the form of machine-readable Creative Commons licences.
The data repository has a plan for long-term archiving of the data.
The repository has long-term funding to ensure that the data persist and remain accessible.
A landing page ensures that records are easy to find and provides appropriate search capabilities
The repository provides an interface (API) to other services (search for " <repository name=""> API" in a search machine) that aggregate and index information about repositories.</repository>
Preference is given to open file formats that are sustainable over the long term.
You can provide contact information.

2





The content on this checklist is licensed under the Creative Commons licence BY 4.0



More general criteria for repository selection can be found on our <u>Open Economics Guide</u> (openeconomics.zbw.eu/en/).

(3)

Checklist FAIR Data Repository, status: March 2022