# **Charles University Research Data Policy**

## **Research Data Policy in practice**

Charles University has adopted an institutional <u>Research Data Policy</u>, the purpose of which is to promote good practice in research data management by specifying the basic principles of research data management, and by delineating the responsibilities of the University and its researchers.

Section 5 of the Data Policy describes the basic principles of research data management in terms of their collection, storage, and sharing. This page offers a basic guide on how to implement these principles and points to the support and infrastructure available at the university.

### 5.1 Data collection and storage

- Research data are to be stored in a secure location to prevent unauthorised access or data loss, following the methodological guidance on data security.
  - In addition to services provided by your faculty, you can use storage provided by <u>CESNET</u> or cloud services like Microsoft365 for storing data during research. More information about suitable storage options can be found on the <u>Categorization of storage</u> page.
- Where possible, research data should be accompanied by rich metadata using standardised vocabularies and should be stored in standard formats in order to increase their interoperability.
  - Metadata provide selected characteristics of research data, such as keywords, software used, measurement parameters, etc.
  - The topic of metadata and documentation is covered on the page Describing data
- If there is an exchange of personal data with a third party where the University is the data exporter, an agreement
  must be drawn up to ensure the data are protected.
  - For support in preparing an agreement, you may contact the legal support team at the Open Science Support Centre at <u>openlaw@cuni.cz</u>
- When conducting research involving external partners, researchers are advised to draw up an agreement that specifies rights and responsibilities of the involved parties, regarding, for example, intellectual property rights and licensing, or responsibilities in relation to research data management.
  - For support in preparing an agreement, you may contact the legal support team at the Open Science Support Centre at <u>openlaw@cuni.cz</u>
- Researchers are advised to prepare a data management plan for their research projects to ensure the data are complete, accurate, reliable, and secure. Data management plans should be updated regularly to reflect what actually happened with the data.
  - To create a data management plan (DMP), you can use the <u>FAIR Wizard</u> tool offered by the university. Information on what a DMP typically includes and how to create one can be found on the <u>Data management</u> <u>plan</u> page.

#### 5.2 Data preservation

- Research data that serve as a basis for a publication are to be retained for a period of minimum 10 years since the day the research results are published, so that the results may be verified. If it is necessary to delete some data earlier, for example due to contractual obligations, this information is to be provided in the documentation. Researchers are encouraged to retain their research data for as long as feasible.
  - The most suitable way to preserve (and share) data is through data repositories. Some repositories allow data to be stored only if you intend to share them, while others offer the option to store data without making them

publicly accessible, such as the <u>Zenodo</u> repository. More information about repositories can be found on the <u>How to share research data</u> page.

- Research data that are being preserved are to be accompanied with sufficient documentation to ensure they can be easily interpreted.
  - The topic of metadata and documentation is covered on the page Describing data .

#### 5.3 Data sharing

Research data should be made available for access and reuse as widely as feasible, in accordance with the principle "as open as possible, as closed as necessary". When researchers share their data, they should adhere to the following principles.

- Research data are to be shared along with rich metadata to provide sufficient information on their provenance and to increase their findability and reusability.
  - Metadata provide selected characteristics of research data, such as keywords, software used, measurement parameters, etc.
  - The topic of metadata and documentation is covered on the page Describing data .
- Metadata sdílených dat obsahují odkazy na další související výstupy a entity prostřednictvím perzistentních identifikátorů.
  - Pokud to vámi vybraný repozitář umožňuje, uvádějte perzistentní identifikátory přímo v metadatových polích záznamu. Odkazovat můžete například na související publikaci, zdrojový kód, software apod.

Related works			~

Specify identifiers of related works. Supported identifiers include DOI, Handle, ARK, PURL, ISSN, ISBN, PubMed ID, PubMed Central ID, ADS Bibliographic Code, arXiv, Life Science Identifiers (LSID), EAN-13, ISTC, URNs, and URLs.

#### Related works

F	telation*		Identifier*	Scheme*	Resource type		
	Select relation	*		•		•	×

Img.1: An example of metadata field for related outputs in the repository Zenodo.

- Research data should be assigned a persistent identifier.
  - Assigning a persistent identifier requires a service which is authorised to assign them for research data, some repositories may provide this service. When choosing an appropriate data repository, make sure that it assigns a persistent identifier to your data.
- Research data should be shared via a trusted repository or a suitable platform that is established within the research field.
  - The best way to preserve and share your data is to deposit them in a subject specific data repository. Subject
    specific repositories are generally better suited to the needs of the research community and also ensure that your
    data reach researchers in your field. You can find a suitable subject specific repository, for example, in the registry
    of research data repositories at re3data.org.
  - If you cannot find a suitable subject specific repository, you can deposit your data in a general-purpose repository such as <u>Zenodo</u>, <u>Figshare</u>, or <u>Dryad</u>. More information on ways to share data can be found in the dedicated section <u>How to share research data</u>.
- In compliance with intellectual property rights, research data should be assigned an appropriate license in order to clearly specify the conditions for reuse, unless funder requirements, statutory or contractual obligations provide otherwise. It is recommended to use open licenses such as Creative Commons Attribution (CC BY).

- You can assign a license to your data, for example, by selecting an appropriate license in the metadata fields of the repository (if the repository offers this option), or by attaching a "License" file to the dataset package that contains the terms of use. For data sharing, we recommend using public licenses, which are described in the section <u>Public licenses</u>.
- If you are not sure how to license your data or which license to use, you can contact the legal support team at the Open Science Support Centre at <u>openlaw@cuni.cz</u>.
- Where appropriate, published research should include a data availability statement which outlines how the underlying data may be accessed.
  - Information about data availability may be included, for example, in the list of references or as a separate section
    of the published article. Data availability statements can take one of the following forms (or a combination of more
    than one if required for multiple types of research data):
    - The datasets generated and/or analysed during the current study are available in the [NAME] repository, [PERSISTENT WEB LINK TO DATASETS]
    - The datasets generated and/or analysed during the current study are not publicly available due to [REASON WHY DATA ARE NOT PUBLIC] but are available from the corresponding author on reasonable request.
    - Data sharing is not applicable to this article as no datasets were generated or analysed during the current study.
    - All data generated or analysed during this study are included in this published article [and its supplementary information files].
    - The data that support the findings of this study are available from [third party name] but restrictions apply to
      the availability of these data, which were used under license for the current study, and so are not publicly
      available. Data are, however, available from the authors upon reasonable request and with permission of
      [third party name].