



1. Preamble

Charles University is committed to ensuring that its research is transparent, replicable and its research results are widely accessible and reusable, in line with the principle 'as open as possible, as closed as necessary'. The University strongly believes that such practice improves the quality of research and benefits not only the wider research community but individual researchers as well by fostering collaboration and increasing their impact. Making research results widely available will further highlight the excellence of the University's research and enable public engagement.

The University recognizes that research data are an integral part of the research process and that research data management is a key component of research quality and integrity. The aim is for the University researchers to produce research data that are managed in accordance with the FAIR principles.

2. Definitions

Research data: Research data can be characterised as any information that has been collected, observed, generated, or created to validate or reproduce research findings. Research data can take various forms, including but not limited to documents, spreadsheets, images, audio and video recordings, code, software, laboratory notebooks or samples, and may be digital as well as non-digital.

Metadata: Metadata provide information about other data. They may include, for example, information about who the author of the data is, or when and where the data were created.

FAIR principles: The FAIR principles describe how research data should be organised so they can be more **F**indable, **A**ccessible, **I**nteroperable and **R**eusable.

Data management plan (DMP): Data management plan (DMP) is a document that specifies what data will be created and how, and outlines the plans for sharing and preservation of the data, both during and after the research project. DMP should be updated regularly to reflect what actually happened with the data.

Repository: Repository is a digital online storage for storing and sharing the results of creative activities (e.g., publications or data).

Persistent identifier: Persistent identifier is a long-lasting reference to a unique entity. Persistent identifiers may be used, for example, for digital objects (e.g., DOI, handle), researchers (e.g., ORCID, ResearcherID), organisations (e.g., ROR) or other entities.



Researcher: Under this policy, the term researcher includes all members of the University, including staff and students, and affiliated persons who conduct research at or on behalf of the University.

Principal investigator: Principal investigator is a researcher with an overall responsibility for a research project.a další entity.

3. Aim

The purpose of this policy is to specify the basic principles of research data management regarding data collection, storage, preservation and sharing of research data. Furthermore, the policy aims to delineate the responsibilities of the University and its researchers in terms of managing research data. The policy also provides information on available institutional support that researchers may use to meet the standards set out in the policy. The University acknowledges that there are various discipline specific norms across the diverse spectrum of research, thus the policy does not obligate researchers to use prescribed tools when working with research data. The aim is to promote good practice in research data management and provide guidance to researchers. The policy may be complemented by Faculty guidelines that take into account local environment, infrastructure and discipline specific norms.

4. Scope

The policy applies to all University employees and students, and affiliated persons and subjects conducting or supporting research at the University. The policy applies to all research data regardless of their form.

5. Basic principles

Research data will be managed to a high standard throughout the research data lifecycle. Researchers will make every reasonable effort to manage their research data in accordance with FAIR principles. Research data collection, processing and sharing must not infringe on Intellectual Property Rights, General Data Protection Regulation (GDPR), Act on Cyber Security, and must be in compliance with other legal, institutional and contractual requirements.

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 <u>methodological guidance on data security.</u>
- 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.
- 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.



- 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.
- 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.

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.
- Research data that are being preserved are to be accompanied with sufficient documentation to ensure they can be easily interpreted.

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 of shared data include references, via persistent identifiers, to other related outputs and entities.
- Research data should be assigned a persistent identifier.
- Research data should be shared via a trusted repository or a suitable platform that
 is established within the research field.
- 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).
- Where appropriate, published research should include a data availability statement which outlines how the underlying data may be accessed.



6. Responsibilities

In order to enable the policy, the responsibilities of the University and the researchers are as follows.

6.1 Responsibilities of the researcher

- Researchers are responsible for managing their research data in accordance with the basic principles outlined in this policy.
- When undergraduate and postgraduate students participate in research, the Principal Investigator or supervisor is obliged to introduce them to the basic principles of research data management. The students have a personal responsibility to contribute to effective data management of the data they work with.
- Researchers are obliged to comply with the Code of Ethics, General Data Protection Regulation (GDPR), Act on Cyber Security, and with other legal, institutional or contractual requirements.
- When reusing or referencing datasets, researchers are obliged to follow proper citation guidelines.
- Researchers are obliged to allocate appropriate resources for data management in research proposals and grant applications.
- When researchers find themselves unable to fulfil the requirements set out in this policy due to a failure of the University to provide appropriate resources or support, they should contact
 - the University support team (researchdata@cuni.cz) or the Department of Science and Research (researchdata@cuni.cz) to obtain additional advice or support.

6.2 Responsibilities of the University

- The University is responsible for disseminating information about the obligations of researchers with respect to research data management. Faculties, Research Institutes and Departments are expected to be proactive in disseminating the information within their communities.
- The University will provide suitable infrastructure and services to ensure that researchers can comply with the requirements under this policy.
- The University will provide training and guidance to promote best practice in research data management.
- The University will provide information and advice on issues related to all aspects of research data management, including research ethics, Intellectual Property Rights, or data protection.
- The University commits to engage with the research community to discuss the needs of the community in terms of support and infrastructure.



7. Available support

The Open Science Support Centre manages a website (https://openscience.cuni.cz/en) which provides guidance on best practices in research data management, including information on FAIR data, data collection and storage, data preservation and data sharing as outlined in this policy.

The following departments provide support with research data management:

- Research data management: Open Science Support Centre (researchdata@cuni.cz)
- IT support: Computer Science Centre (openict@cuni.cz)
- Legal advice
 - Copyright: Open Science Support Centre (<u>openlaw@cuni.cz</u>)
 - Commercialisation of Intellectual Property: Charles University Innovations Prague a.s. (<u>research.data@cuip.cz</u>)
 - Personal data protection and other legal support: Legal Department (pravni@ruk.cuni.cz)
- Research ethics: Department of Science and Research (veda@ruk.cuni.cz)

Additional support which reflects discipline specific requirements and local environment may be provided by individual Faculties and Research Institutes.

8. Review period

This policy will be reviewed and updated by the Working Group for the Strategy of Research Data Management at Charles University when changes are required.

9. Related documents

- Guidance on data security: https://hdl.handle.net/20.500.14178/1876
- Code of Ethics: https://cuni.cz/UKEN-731.html