

CBS Research Data Management Policy

1. Preface

1.1 Purpose

Copenhagen Business School (CBS) envisions itself as a “world-leading business university” that contributes to society with academically excellent research and research-based education.¹ Academic excellence presupposes trustworthiness and high integrity, i.e. honesty, transparency, and accountability of research, as stated in the *Danish Code of Conduct for Research Integrity*.²

Research data management ensures honest, transparent, and accountable research practices. Therefore, CBS encourages researchers to manage their data according to the FAIR-principles, thus making them findable, accessible, interoperable, and reusable.³

CBS and the individual researchers share responsibilities to comply with the principles of responsible and FAIR research data management outlined in this policy. The policy specifies in more detail the obligations of both the institution and the researchers.⁴

1.2 Scope

This policy applies to staff, students, emeriti, visiting researchers, as well as honorary and adjunct appointees involved in research activities at CBS (in the following referred to as *researchers*).

This policy applies to research data that have been collected and/or used during CBS research activities, including primary materials, data, records, and datasets, in all formats and media.

2. Definitions

According to the *Danish Code of Conduct for Research Integrity Research* the term of *research data* contains two elements: primary materials and data.⁵ Primary materials and data are defined as:

- *Primary material* is any material (e.g. biological material, notes, interviews, texts and literature, digital recordings, etc.) that forms the basis of the research.
- *Data* are the detailed records of the primary materials that comprise the basis for the analysis that generates the results.

¹ See <https://cbsshare.cbs.dk/fromdir/UK/dir/Pages/Strategi.aspx> and <https://cbsshare.cbs.dk/fromdir/UK/dir/Documents/CBS%20Strategy%202017.pdf>.

² See the *Danish Code of Conduct for Research Integrity*, “Foreword” & “I. Principles of Research Integrity”: <http://ufm.dk/en/publications/2014/the-danish-code-of-conduct-for-research-integrity>.

³ See *Force11/ Guiding Principles for Findable, Accessible, Interoperable and Re-usable Data Publishing version b1.0* <https://www.force11.org/fairprinciples> and <http://www.datafairport.org/>

⁴ See also the *Danish Code of Conduct for Research Integrity*, “II. Responsible Conduct of Research”: <http://ufm.dk/en/publications/2014/the-danish-code-of-conduct-for-research-integrity>.

⁵ See the *Danish Code of Conduct for Research Integrity*, “II.2. Data Management”: <http://ufm.dk/en/publications/2014/the-danish-code-of-conduct-for-research-integrity>

Research data management comprises the processes of collecting, processing, analysing, storing, sharing, long-term preserving, and disposing of research data. The key purpose of research data management is to ensure honest, transparent, and accountable research practices.

The CBS Research Data Management Policy covers all kinds of primary materials and data relevant for CBS Research, but does not cover primary materials such as biological materials etc. Published and publicly available literature is considered as important primary material that is to be treated in accordance with the principles for Responsible Conduct. However, published and publicly available literature are exempted from the CBS Research Data Management Policy, and thereby not covered by its rules and recommendations.

3. Division of responsibilities in the research data life cycle

CBS acknowledges the importance of responsible research data management according to the FAIR-principles (see *Preface*). Data management responsibilities are shared between the researchers and CBS. In the following, they are described according to the research data lifecycle depicted in Figure 1.

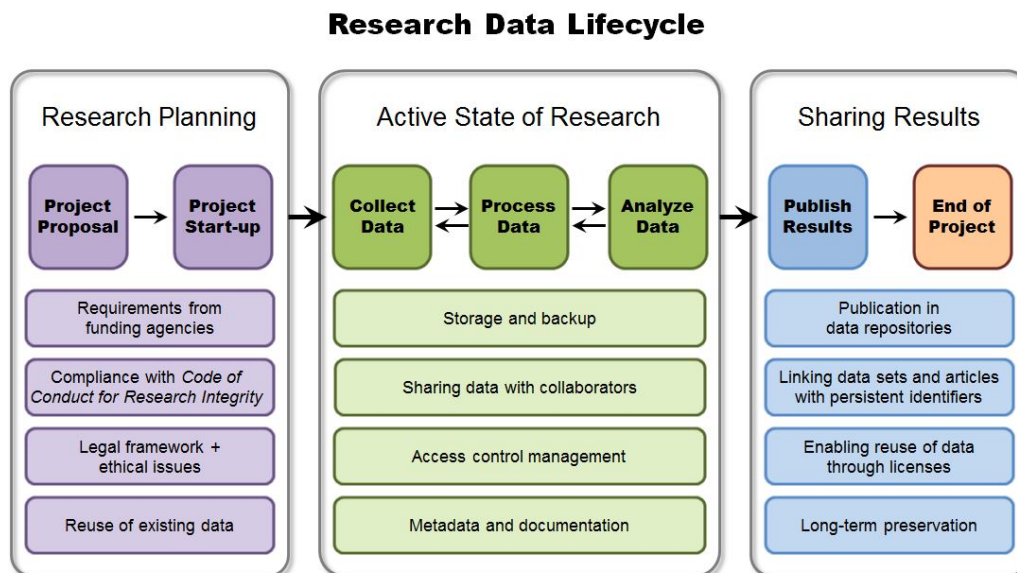


Figure 1: [Research Data Lifecycle](#) (by [DTU AIS Bibliometrics and Data Management](#) - licensed under [CC0 1.0](#))

3.1 Research Planning

CBS will support good research data management practices by providing information, education, and training opportunities for all CBS researchers.

3.1.1 Legal framework

Researchers must adhere to Danish legislation and CBS regulations, and they must obtain the appropriate approvals, e.g. ethical approvals, to be kept with the research data as long as they exist.

CBS provides researchers with information regarding the legal requirements underlying research data management.

Researchers must acquaint themselves with legal requirements concerning the use of personal data and other classified information for research purposes, before data collection starts. **Researchers** must register projects involving personal data with **CBS Legal** that administer the

umbrella license that the Danish Data Protection Agency (Datatilsynet) has issued to CBS regarding the use of personal data for scientific and statistical purposes.

Researchers must complete a notification form regarding their use of personal data in a research project.⁶ CBS Legal will sign the completed form, assign a case number, and enter the project into the record of research projects that CBS is obliged to keep in accordance with the umbrella license.

CBS Legal provides guidance on all questions concerning processing of personal data for research purposes.

3.1.2 Entitlements

Entitlements comprise rights of ownership, access, disposal, and use relating to research data as defined by Danish legislation or contracts and agreements. Entitlements may vary according to the specifics of the research project in question, for instance, whether data is collected or captured by the researcher on his/her own or whether data is bought or licensed in connection with the project.

It is recommended to clarify entitlements for all collaborative research projects with external partners either from national and international public or private universities or from firms, and if necessary, to document the clarification by written agreement.

It is recommended to clarify entitlements for all externally funded research projects.

Furthermore, it is important to clarify entitlements when the researcher conducts research in the course of the employment with CBS without external funding.

The clarification and a potential written agreement should take into account, among other things, who owns the data, how the data can be used in relation to the specific research project for which the data was initially collected, and how the data can be used and accessed upon completion of the research project.

Researchers should, especially in relation to collaborative research projects, clarify, and if necessary, document by written agreement all entitlements to research data in compliance with Danish legislation and CBS regulations.

CBS Legal negotiates all third party contracts containing regulations on intellectual property rights, such as Non-Disclosure Agreements, Collaboration Agreements and other agreements related to CBS research projects.

CBS Legal provides guidance on all questions concerning entitlements to research data.

CBS Library provides guidance on all questions concerning use of commercial data services and providers.

3.1.3 Data Management Plan (DMP)

Researchers must ensure that research data are managed according to best practice within their field. CBS encourages **researchers** to write a Data Management Plan (DMP) following the research data lifecycle (Figure 1). If no other specific requirements apply, e.g. funders' requirements, it is recommended to include as a minimum:

⁶ The form can be obtained by contacting CBS Legal.

- Origin and type of the research data that will be created and used throughout the project
- Data documentation and metadata, data storage, backup, and sharing during the active research phase
- Data selection for long-term preservation, data disposal, and data access management
- Description of the roles and responsibilities with regard to the above processes

Researchers should regularly update the DMP throughout the research data lifecycle and keep a copy of the DMP with the research data as long as they exist.

Templates for DMPs will be provided on CBSshare and will be regularly updated by **CBS Research Data Management Support**.

CBS Research Data Management Support provides guidance on all questions concerning Data Management Plans (DMPs).

3.2 Active State of Research

3.2.1 Collecting and processing research data

Researchers should document the data collection process and subsequent data processing according to best practice within their field. This includes, among others things:

- Clearly and accurately describing the project methodology
- Choosing data formats, hardware and software solutions that are widely adopted within their field and deemed durable
- Describing data quality assurance processes

Data documentation reports allow research results to be assessed, research procedures to be retraced and, if relevant, the research to be reproduced. Data documentation reports should be stored together with the research data as long as they exist.

Metadata facilitate searching for and identifying research data. **Researchers** should describe all research data with appropriate metadata according to best practice within their field. Metadata should be linked to the research data as long as they exist.

CBS IT is responsible for offering appropriate software solutions in cooperation with the system owner of the relevant IT systems.

CBS Research Data Management Support provides guidance on all questions concerning data documentation and metadata.

3.2.2 Storing research data

Researchers must adhere to CBS Information Security Policy, CBS Information Security Rules, and CBS Information Security Instructions.⁷ This includes, among other things:

- Data storage
- Data backup
- Data sharing in collaborative research
- Access control management

CBS must provide a storage system that allows researchers to manage their research data responsibly. Such a storage system includes storage space, backup, and access control. In addition to locally provided storage facilities and network infrastructures, **CBS** provides a regular-

⁷ In English: https://cbsshare.cbs.dk/it/english/it-department/Pages/information_security.aspx and in Danish: <https://cbsshare.cbs.dk/it/dansk/it-afdelingen/Pages/informationssikkerhed.aspx>

ly updated list of trusted data repositories and approved cloud services for data sharing purposes.

CBS IT provides guidance and support concerning information security:

CBS Research Data Management Support provides guidance on trusted data repositories and approved cloud services.

3.3 Sharing Results

3.3.1 Access to research data

Researchers are responsible for managing access to the research data after the completion of the research project. If they make the research data available for reuse, researchers must clearly communicate the terms and conditions for reuse where and whenever appropriate, e.g. by use of appropriate licenses.

CBS encourages researchers to make research data openly accessible according to the FAIR-principles (see *Preface*), except when this is in conflict with contractual obligations, existing regulations on e.g. ethical, confidentiality or privacy matters, or intellectual property rights.

CBS Research Data Management Support provides guidance on open access to research data.

CBS Legal provides guidance on contractual legal obligations, immaterial rights, etc. in connection with open access to research data.

3.3.2 Long-term preservation of research data

When the research project ends, **researchers** should prepare the research data for long-term storage. This includes among other things:

- *Data selection*: **Researchers** should archive all research data of high value (costly or difficult to replace), unless Danish legislation states otherwise. **Researchers** are encouraged to archive research data that could help defend their research against possible challenges.
- *Data disposal*: **Researchers** should plan for appropriate disposal of research data that are not selected for long-term preservation. Data disposal has to take place in accordance with CBS Information Security Policy, CBS Information Security Rules, and CBS Information Security Instructions.⁸
- *Long-term preservation*: In accordance with the *Danish Code of Conduct for Research Integrity*⁹, **researchers** must ensure that research data selected for long-term preservation remain archived for a minimum of five years after project completion. **Researchers** working with personal data must archive their research data at the Danish National Archives (Rigsarkivet), unless Danish legislation states that the research data must be destroyed upon project completion.

CBS IT provides guidance and support concerning safe data disposal.

CBS Research Data Management Support provides guidance on trusted data repositories and on archiving data at the National Archives (Rigsarkivet).

⁸ In English: https://cbsshare.cbs.dk/it/english/it-department/Pages/information_security.aspx and in Danish: <https://cbsshare.cbs.dk/it/dansk/it-afdelingen/Pages/informationssikkerhed.aspx>

⁹ See <http://ufm.dk/en/publications/2014/the-danish-code-of-conduct-for-research-integrity>