ULB Institutional policy on Research Data Management

Introduction

At its Academic Council meeting of 26 April 2021, ULB adopted the following policy¹ on the management of Research Data, generated and processed by Researchers as part of their research activities at ULB.

This policy aims to develop and promote a solid and secure management of Research Data to increase the efficiency, the quality, the integrity and the transparency of scientific research, as well as to facilitate the development of new knowledge, and to ensure compliance with relevant laws and regulations, ethical and contractual obligations, and provisions of external research funding agencies. Ideally, Research Data management should be considered and integrated throughout the life cycle of the research data.



Furthermore, various research funders such as the FNRS or the European Commission are increasingly requesting that a Data Management Plan accompanies any funded project. This is thus an evolution that urgently needed to be acknowledged in our institution.

¹ The version published below differs from the version approved by the Academic Council by some clarifications of form only.



This document represents an aspirational policy; its implementation will likely take several years and require communication and support efforts towards the scientific community

Practical Guidelines are available on the ULB personnel portal: https://portail.ulb.be/en/research/research-data-management

Definitions

Anonymisation: Process by which personal data is irreversibly altered in such a way that a data subject can no longer be identified directly or indirectly, either by the data controller alone or in collaboration with any other party.

Archive or Data Repository: Copy of Curated Data made for long-term usage and reference. Archived data need to be replicated in several regularly checked copies. Migration to open file formats is recommended to ensure re-usability in the long term.

Archiving: Process of depositing data in an Archive or Data Repository for access and preservation, ensuring that data can still be found, understood, accessed, and used in the future.

Backup: Copy of active data used to quickly restore the original data in case of accidental data deletion, corruption or disaster recovery.

Confidential Data: Data to which only a limited number of persons have access and which are meant for restricted use.

Curated Data: Collected data that are organised and integrated from various sources. It involves data that are annotated, published and presented such that the value of the data is maintained over time, and the data remains available for reuse and preservation.

Data Management Plan: A living document describing how data will be generated, handled, stored, used, disseminated and archived following the FAIR principles.

Data Repository: See Archive.

Encryption: Process of converting information or data into a cipher or code.

FAIR Principles: FAIR stands for Findable, Accessible, Interoperable, Reusable. The FAIR principles describe how research outputs should be organised to be easily accessed, understood, exchanged and reused. Major funding bodies, including the European Commission, promote FAIR data to maximise the integrity and impact of their research investment.

GDPR: General Data Protection Regulations (link).

Guidelines: Institutional and practical advices for Research Data management provided on the ULB website devoted to research data management.



Personal Data: Any information about an identified or identifiable natural person (the data subject). This definition is very broad: an identifiable natural person is one who can be identified, directly or indirectly, in particular by reference to an identifier such as a name, an identification number, location data, an online identifier or to one or more factors specific to the physical, physiological, genetic, mental, economic, cultural or social identity of that natural person.

Preservation: All measures taken after the Research Project ends, including financial and strategic decisions, to maintain the integrity and to extend the lifetime of data, documents or collections.

Principal Investigator (PI): Experienced Researcher usually leading team members carrying out a research project under his/her scientific guidance.

Pseudonymisation: Processing of personal data in such a way that the data can no longer be attributed to a specific data subject without the use of additional information. More specifically, each data subject is assigned a code and the table of correspondence is kept in a separate file and is subject to technical and organisational measures to ensure non-attribution to an identified or identifiable person.

Registration: Process following data acquisition by which data is identified as a unit for subsequent access and processing.

Research Data: Data collected, observed, created or obtained from third parties by Researchers, for purposes of data analysis to produce original research information and results. Data can be raw, processed to a greater or lesser extent, or analysed, and can adopt a digital or non-digital form. Examples : software codes, equations, images, photos, audio and video recordings, survey results, excel tables, texts, etc.

Research Project: Scientific endeavour to answer a research question or a set of research questions. A Research Project must include a description of a defined protocol, clearly articulated goal(s), defined methods and outputs, and a defined start and end date.

Research Supervisor: Experienced Researcher in charge of one or a group of early stage Researchers (PhD s) and/or experienced Researchers (post-doctoral Researchers or others) or of an area of work, who is guiding the Researchers to ensure that the scientific activities are conducted according to the rules and regulations.

Researchers: Staff members, students or persons who conduct scientific research at ULB, regardless of whether the research is internally funded or not. The term comprises statutory and contractual staff members at ULB, doctoral students, unpaid and/or voluntary researchers hosted by ULB, as well as bachelor and master students.

Retention Period: Period during which relevant research data and accompanying documentation must be retained to verify and reproduce the scientific claims communicated by the Researcher.

Storage: Process of keeping and depositing data on a computer system during the active phases of the Research Project.

Regulatory provisions

ULB has ownership and legal responsibilities of research results of any nature, whether or not they can be patented, that were obtained during any research activity, study, or service performed by one or several Researchers. For more details and exceptions:

Regulation on ownership, protection and valorization of the intellectual property of the Université libre de Bruxelles (ULB)

Where research is carried out under a contract, the terms of the agreement should determine ownership and rights to disclose and exploit the results. Of note, common results acquired during the Project are considered confidential until their disclosure.

Although students are not subject to the IPR regulation mentioned above, they agree to comply with the ULB IPR regulation. This implies that they agree to maintain the information and the results related to the project as strictly confidential and to disclose information to any third party only with ULB's prior written agreement. Research results that can potentially be exploited must be dealt with the ULB Technology Transfer Office (contact ULBTTO@ulb.be).

Relationship with internal policies

Research data will be managed in accordance with ULB's regulations, policies and guidelines:

<u>CODE DE DÉONTOLOGIE ET D'INTÉGRITÉ EN MATIÈRE DE RECHERCHE, DE VALORISATION ET DE CRÉATION DE SPIN-OFFS</u>

Conseils pour la gestion des données en accord avec le Comité d'Ethique de l'ULB.

Protection des données à caractère personnel (RGPD)

Obligations regarding the confidentiality of personal data

Bonnes pratiques informatiques à destination des membres de la Communauté universitaire

Regulation on ownership, protection and valorization of the intellectual property of the Université libre de Bruxelles (ULB)

ULB's commitments

1. Infrastructures

ULB is committed to providing secure mechanisms and services for Storage, Backup, Registration, Deposit and Archiving of research data assets in support of current and future access and Preservation, during and after completion of Research Projects.



2. Services and support

ULB is committed to providing training, support, advice and where appropriate guidelines and templates for the research data management and research Data Management Plans.

Researchers' commitments

1. Responsibilities

The Research Supervisor/Principal Investigator of a project has the ultimate responsibility for the research data management. Nevertheless, all Researchers are responsible for the careful management of the Research Data they collect, generate, and/or obtain from third parties to ensure that the data are reliable, secure, sustainable, findable, and, where possible, openly accessible.

It is therefore advised to create a Data Management Plan prior to a Research Project, i.e. a living document describing how data will be generated, handled, stored, used, disseminated and archived following the FAIR Principles.

It is strongly recommended that Researchers store their Research Data on infrastructures hosted on premises by ULB as indicated in the Guidelines.

Research Data that the Researchers collect or generate at ULB and the accompanying documentation must be preserved and must remain accessible to ULB during a relevant Retention Period (see below).

2. Policies and regulations

Research data management must always respect relevant laws and regulations (e.g. on the protection of Personal Data and other Confidential Data, or on intellectual property rights...), ethical codes, and/or contractual obligations with third parties, as well as the requirements included in the applicable regulations of external research funding agencies (e.g. FNRS, Belspo, European Commission...).

If the regulations of the external research funding agencies or the contracts with third parties impose more stringent or specific data management requirements than the ones proposed by ULB, they will override this policy framework's provisions unless they violate basic principles outlined in the ULB Policy of Research Data Management.

3. Personal data protection

Researchers who use Personal Data as Research Data must ensure the correct treatment and protection of these Personal Data in accordance with national and European General Data Protection Regulation (GDPR), as well as the <u>ULB regulations on the protection of</u>

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personal data. They must respect the basic principles of privacy protection: purpose limitation, proportionality, transparency, correct retention period, and secure destruction (after the Retention Period has expired). Technical and organizational measures to ensure secure Storage and secure processing (e.g. Anonymisation, Pseudonymisation, or Encryption) must be provided, in accordance with the institutional <u>guidelines for working with Personal Data and</u> confidential information in a secure manner.

Personal Data protection principles remain applicable throughout all the phases of the data lifecycle, including sharing, archiving, and deleting.

4. Access to data

ULB

Researchers should identify data of future historical interest, and all Research Data that represent records of ULB, including data that substantiate research findings, for deposit and retention (see below) in the ULB repository or in a compliant and secure national or international data service or domain repository in accordance with the Guidelines. Researchers must ensure that Research Data are available for access and re-use where appropriate and under adequate safeguards, including Anonymisation, Pseudonymisation, etc.

Exclusive rights to reuse or publish Research Data should not be handed over to publishers or agents without retaining the rights to make the data openly available for re-use, unless this is a condition of funding or publication.

5. Data retention

5.1. Unless provided otherwise either by legal, contractual, ethical or other specific obligations, or by requirements of external research funding agencies, relevant Research Data and accompanying documentation must be retained for a minimum of 5 years after completion of the Research Project or the project funding, or after publication of the conclusions based on the data (the latest date is applicable here). Of note, medical data related to patients must be kept for 30 years (link).

Data retention primarily concerns all Research Data and accompanying documentation which are reasonably required or appropriate to verify (and reproduce) the scientific claims communicated by the Researcher. The degree of processing of the Research Data which are to be retained will partly depend on the type of research, the kind of Research Data, and/or possible practical considerations. It can also be relevant to retain Research Data with potential value for reuse.

5.2. Research Data and accompanying documentation which were selected for retention should be deposited in a reliable Archive or Data Repository in accordance with the institutional Guidelines to ensure secure, long-term retention and accessibility (with appropriate access rights).



At minimum, if Research Data is deposited in an external Archive, Researchers should supply the metadata for these Research Data in DI-fusion, the ULB institutional repository, with a link to the data in the external Archive. (See institutional Guidelines for depositing and providing access to research data available on the ULB website.)

Researchers who are supervised (e.g. master students, doctoral students, unpaid and/or voluntary researchers) need to make prior arrangements with their research mentor, supervisor, or coordinator on where these research data will be retained, for whom they will be accessible, and how they are allowed to be used in the future.