

# TU Delft Research Data Framework Policy



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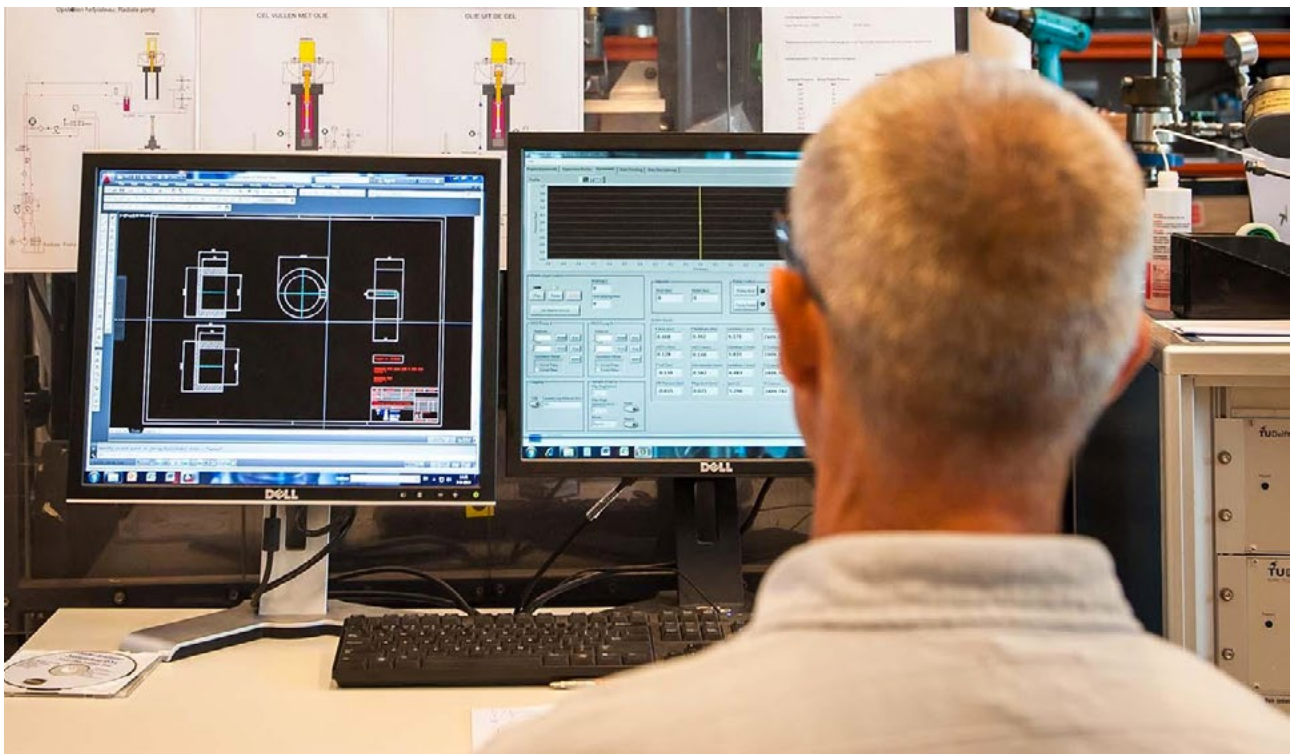
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# Introduction

The TU Delft Research Data Framework Policy supports high quality research data management across each of the faculties at TU Delft.

This document serves as an overarching general policy framework for TU Delft as a whole. It is accompanied by the Faculty Research Data Management Policy Template<sup>1</sup> and an online guidance on practical implementation<sup>2</sup>. The template is for faculties to define their own policies and procedures specific for their own staff. It is expected that, coordinated by Data Stewards, the development of these faculty policies will start in 2018, making use of this Framework to do so.

This policy framework is motivated by the belief that data stewardship cultivates:

Best practice for ensuring that **scientific arguments and results are reproducible** in the long term.

Better exposure of academic work of researchers at TU Delft leading to **recognition of quality of the research process** as a whole.

**Responsible management of research data**, including the safe storage of personal data or protection of intellectual capital developed by scientists across TU Delft.

**Improved practices for meeting the demands of funders and publishers** with respect to research data management and sharing.



*‘The data explosion is helping push the boundaries of what science can achieve. Good stewardship of that data - collecting, documenting, sharing and publishing - is therefore essential. This framework policy provides TU Delft with the foundations to make this happen’*

<sup>1</sup> Faculty Research Data Management Policy Template:

<https://www.tudelft.nl/library/RDM-policy-template>

<sup>2</sup> TU Delft Library Research Data Management website:

<https://www.tudelft.nl/en/library/current-topics/research-data-management/>

# University-wide roles and responsibilities

## The LIBRARY is expected to:

- Provide robust, high-quality infrastructure to facilitate good data management including:
  - Coordinate the creation and development of high quality advice on research data management.
  - A variety of services to assist with the management of raw and processed data (in combination with ICT).
  - A certified archival service (4TU. ResearchData) that offers at least 15 years of long-term curation for research data (in combination with ICT).
- Work with faculties to provide advice and training in good data management.
- Coordinate a network of Data Stewards, who are embedded within the faculties.

## The ICT DEPARTMENT is expected to:

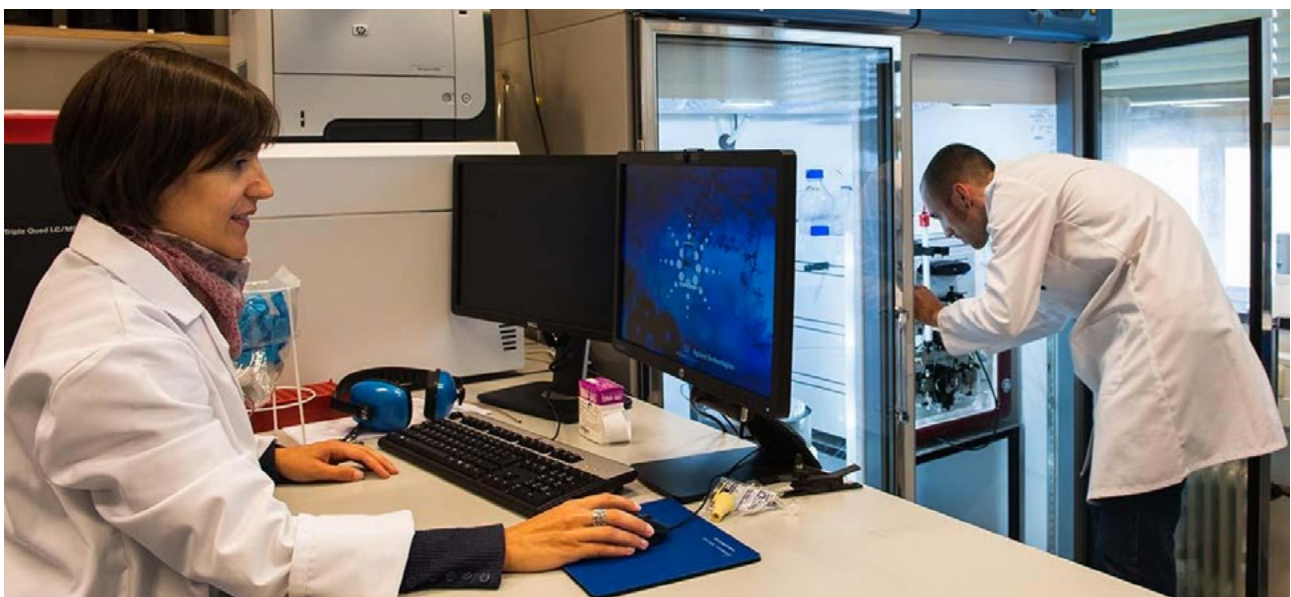
- Provide a standard, robust, high-quality infrastructure to facilitate good data management and storage where possible.
- Provide a custom, high-quality infrastructure to facilitate good data management and storage where necessary.
- Provide secure access management to data according to ICT security guidelines.

## The BOARD FOR DOCTORATES is expected to:

- oversee the parts of the policy related to the PhD process.

## UNIVERSITY SERVICES are expected to:

- Provide suitable training for researchers and students on good research data management (Graduate School / Education and Student Affairs).
- Provide expert contributions to policy and practical issues related to data protection and ownership (Legal / ICT).
- Ensure understanding of good research data practices is recognised as part of university profiles and behaviours (Human Resources).
- Devising strategies to deal with the economic aspects of long-term data archiving (Finance).







# Faculty-specific roles and responsibilities

Role and responsibilities for different stakeholders within the faculties are defined in the Faculty Policies. Nevertheless, there are some areas where specific commitments must be made.

**In each Faculty Policy, PRINCIPAL INVESTIGATORS are expected to:**

*Ensure that every research project starts with a data management plan, which needs to be regularly updated and adhered to by all project members.*

OR

*Ensure that all members of the group plan for good data management from the outset of any research project and adhere to good data management practice throughout the project's lifecycle.*



**In each Faculty Policy, PHD SUPERVISORS are expected to:**

- Ensure that PhD students attend relevant training on data management.
- Ensure that their PhD students make all data and code underlying their completed PhD theses appropriately documented and accessible for at least 10 years from the end of the research project, in accordance with the FAIR principles (Findable, Accessible, Interoperable and Reusable), unless there are valid reasons which make research data unsuitable for sharing. (For all PhDs starting from September 2018 onwards).

*Support their PhD students in preparation of a written data management plan for managing research outputs within the first 12 months of the PhD study.*

OR

*Develop and discuss a strategy for managing research data together with their PhD students.*

**In each Faculty Policy, all RESEARCHERS are expected to:**

- Ensure that research data, code and any other materials needed to reproduce research findings are appropriately documented and shared in a research data repository in accordance with the FAIR principles (Findable, Accessible, Interoperable and Reusable) for at least 10 years from the end of the research project, unless there are valid reasons not to do so.
- Should data not be made available in a repository, ensure that the relevant metadata is published in a suitable repository and any research publications resulting from the project have a statement explaining what additional datasets/materials exists; why access is restricted; who can use the data and under what circumstances.

**In each Faculty Policy, PHD STUDENTS are expected to:**

- Ensure that all data and code underlying completed PhD theses are appropriately documented and accessible for at least 10 years from the end of the research project, in accordance with the FAIR principles (Findable, Accessible, Interoperable and Reusable), unless there are valid reasons which make research data unsuitable for sharing.

*Develop a written data management plan for managing research outputs within the first 12 months of the PhD study, and attend the relevant training.*

OR

*Develop a strategy for managing research data and discuss it with their supervisors.*

*Attend the relevant training in data management.*





# Definitions

**Data Stewardship** is the oversight of the entire research data lifecycle, aiming to ensure that the right processes are put in place and that appropriate decisions are made to make research datasets Findable, Accessible, Interoperable and Reusable (FAIR).

## **FAIR Data Principles**

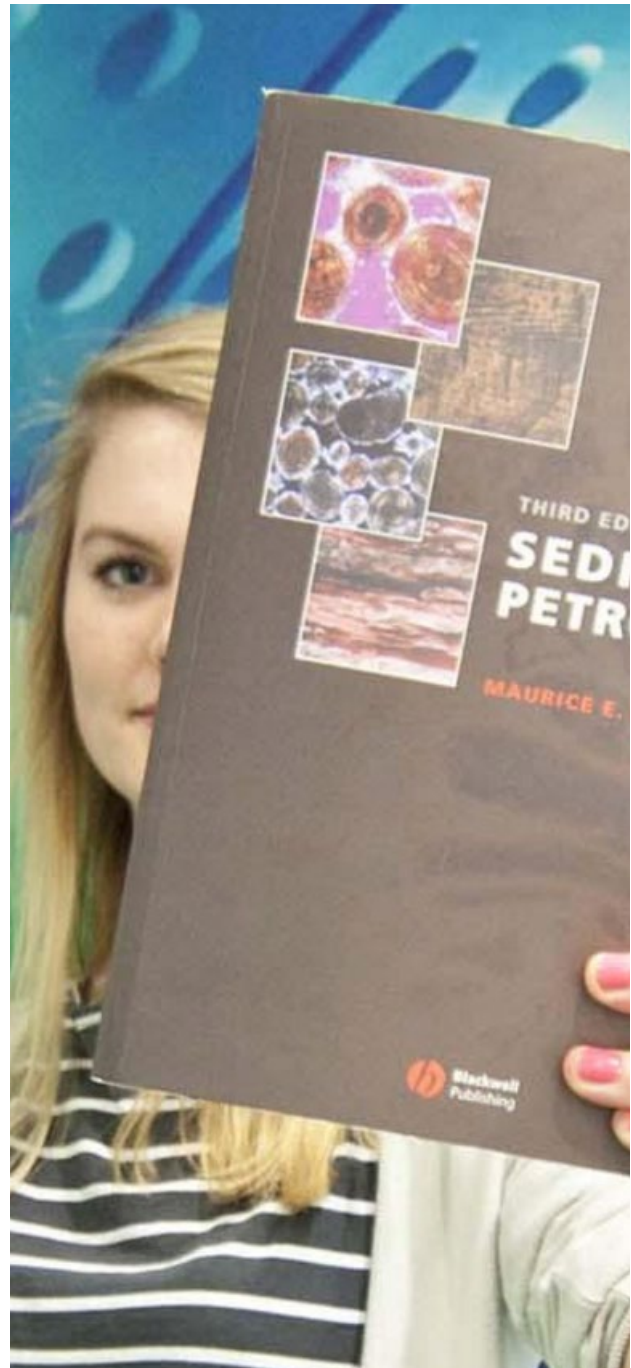
Set of guiding principles to make data Findable, Accessible, Interoperable, and Reusable. FORCE11 is the organisation which defined these principles and which also provides an explanation of their exact meaning and implementation.

## **Personal data**

According to new European Data Protection Regulation personal data means “any information relating to an identified or identifiable natural person (‘data subject’); 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.”

## **Research data**

Research data is the evidence that underpins answers to research questions, and which is necessary to validate research findings. Data can come in various forms and types, characteristic to specific disciplines of research. For example, data can be quantitative information or qualitative statements collected by researchers in the course of their work by experimentation, observation, modelling, interview or other methods, or information derived from existing evidence. Research data also includes elements that make the data reusable or re-workable, e.g. documentation of the research process (e.g. in lab- or notebooks), or underlying software<sup>3</sup>.



<sup>3</sup> The ICT department, Library, Valorisation and Legal Services are exploring the needs of the university for a related Software Policy



# Credits

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- LR (Aerospace Engineering)
- IO (Industrial Design Engineering)
- EWI (Electrical Engineering, Mathematics and Computer Science)
- TNW (Applied Sciences)

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The usefulness of existing Research Data Policies of the following universities are also acknowledged

- University of Bath:  
[Research Data Policy Guidance](#)
- University College London:  
[Research Data Policy](#)
- Erasmus University Rotterdam:  
[Research Data Management at Erasmus University Rotterdam](#) (vanaf p.53)
- Leiden University:  
[Provisional Regulation for Data Management](#).
- University of Twente:  
[data policy](#)
- Utrecht University:  
[Policy Framework for Research Data](#)
- Utrecht University:  
[Results survey Research and IT](#): Interest in data management services and expertise, per faculty and strategic theme
- Wageningen University & Research:  
[Data Management Support Services](#)
- Wageningen University & Research,  
Environmental Policy Group:  
[data management policy](#)

## Related resources:

- [Online data management guidance](#)
- [Scientific Integrity Policy](#)
- [Code of Ethics](#)
- [TU Delft Policy on Open Access Publishing](#)
- [Faculty Research Data Management Policy Template](#)

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