

# Workshop on *(23 Things for)* Research Data Management

Lithuania, Kaunas  
March 5, 2020

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# Program

09.30-10.00	Registration & coffee
<b>10.00-11.00</b>	<b>Session 1. Introduction</b>
11.00-11.30	Coffee break
<b>11.30-12.30</b>	<b>Session 2. 23 Things project</b>
12.30-13.15	Lunch
<b>13.15-14.15</b>	<b>Session 3. Creating a first 23 Things version for the Lithuanian context</b>
14.15-14.45	Coffee break
<b>14.45-15.45</b>	<b>Session 4. The benefits of Research Data Management (RDM) support</b>
<b>15.45-16.30</b>	<b>Session 5. Other (Dutch) developments that can help strengthen RDM in Lithuania</b>
16.30-17.00	Closure

# Session 1. Introduction

## 10.00 – 11.00

# 1. Introduction to the workshop

# Background workshop

- Chair of the RDA's 23 Things project
- Benefit of adopting the 23 Things project in the Lithuanian context
- It will be a practical, hands-on session
- As the 23 Things project is about the main principles (including tips & tricks) of RDM: discuss RDM support in general
- Set up RDM support at Radboud University
- Involved in the national coordination of RDM in the Netherlands; the Dutch national developments can also help strengthen RDM in Lithuania

# Session 1. Introduction

## 10.00 – 11.00

1. Introduction to the workshop and the sessions
2. Getting to know each other
3. Expectations for today's workshop

# Session 2. 23 Things

## 11.30 – 12.30

1. Introduction to the 23 Things project
2. Explanation of the steps taken in the Dutch project
3. Decide on the benefit of adopting the 23 Things project in the Lithuanian context

# Session 3. Creating a first 23 Things version for the Lithuanian context

## 13.15 – 14.15

Practical, hands-on session



# Session 4. The benefits of RDM support

## 14.45 – 15.45

Examples of RDM support (Radboud University), including policy and infrastructure

Topics:

- data management planning
- storage during research
- archiving and publishing data
- data curation
- data ethics
- data privacy

# Session 5. Other (Dutch) developments that can help strengthen RDM in Lithuania

## 15.45 – 16.30

Examples of (Dutch) developments Mijke is involved in, including:

- the National Coordination Point Research Data Management (LCRDM)
- the Association of European Research Libraries (LIBER)
- and the Research Data Alliance (RDA)

## 2. Getting to know each other

## 3. Expectations for today's workshop

Website: **menti.com**

Code: **90 94 66**

<http://www.mentimeter.com/join/radboud>



What challenges do **you** experience concerning research data management?

**Coffee break**  
**11.00 – 11.30**

# Session 2. 23 Things project

## 11.30 – 12.30

1. Introduction to the 23 Things project
2. Explanation of the steps taken in the Dutch project

# Adoption grant

- **What?** Creating Dutch versions of the 23 Things for different audiences improves national cooperation, and a common understanding of RDM among diverse practitioners and supporters
- **Why?** 23 Things as a shared reference tool for knowledge on RDM
- **How?** For this RDA adoption grant, a LCRDM task group generates four deliverables between June '19 and May '20



National **Coordination Point**  
Research Data Management



## 23 Things: Libraries for Research Data

*An overview of practical, free, online resources and tools that you can begin using today to incorporate research data management into your practice of librarianship.*

*Research Data Sharing Without Barriers*

### Learning Resources

Librarians are learning how to apply the principles of library science to solve problems and to provide new services related to research data.

1. A "top ten" list of **recommendations** for libraries to get started with research data management from LIBER, <http://bit.ly/RDAthing1>
2. Relevant concepts are presented and mapped in the **e-Science Thesaurus**, <http://bit.ly/RDAthing2>
3. Understanding the life of research data with the **DCC Curation Lifecycle Model**,

Learning Resources  
Data Reference and Outreach  
Data Management Plans  
Data Literacy  
Citing Data  
Data Licensing and Privacy  
Digital Preservation  
Data Repositories  
and a Community of Practice

*..to help librarians engage in research data management!*

### Data Reference & Outreach

Librarians are answering questions about data from patrons and conducting outreach to assess the data needs of their researchers and

10. Questions about data answered by experts on the **DataQ** forum, <http://bit.ly/RDAthing10>

### Data Management Plans

Librarians are becoming familiar with funder requirements and consulting with researchers to help them write and implement effective data management plans.

11. One example is the **DMPTool** that lists funder requirements in the United States and builds a plan by asking the researcher to answer a series of questions. Other countries such as the U.K. and Canada have similar tools, <http://bit.ly/RDAthing11>

The original 23 Things was created by the Libraries for Research Data Interest Group and can be found at [edu.nl/w7e34](http://edu.nl/w7e34)



# Phase 1

## Creating a Dutch nationwide commitment



The project's implementation plan is shared in the LCRDM pool of experts and other Dutch stakeholder groups on data management.

*Deliverable:*

[doi.org/10.5281/zenodo.3337870](https://doi.org/10.5281/zenodo.3337870)

<https://doi.org/10.5281/zenodo.3337870>

# Phase 2



## Adjusting the 23 Things

We started creating local versions of the 23 Things for the Dutch community. Via joint sprint sessions, the original resource is being updated and adapted to the Dutch community, and different audiences.

*Deliverable:*

[doi.org/10.5281/zenodo.3465895](https://doi.org/10.5281/zenodo.3465895)

<https://doi.org/10.5281/zenodo.3465895>

# Highlight 1: adjusting the 23 Things

**Phase 2. Review the 23 Things content** (July - November '20)

**Deliverable:** reviewed versions of the 23 Things for different target audiences

**Approach:** via sprint sessions (7) with the Dutch community

- **Part 1.** Update according to recent RDM developments (FAIR, GDPR, Open Science)
- **Part 2.** Update links and references to reflect Dutch and European initiatives and resources
- **Part 3.** Textual adaption to other target audiences

## Impressions

- Kept the original layout, style, pages, themes and numbers
- Introductory texts were less changed, most links updated
- Added FAIR, GDPR and Open Science things
- Curious about the needs of our 'audiences', so actively reached out to them, inviting them to sprint sessions and visiting them in their own community meetings



## 23 Things: Support for Research Data

*Updated Version for the Dutch Community.*

*An overview of practical, free, online resources and tools that you can begin using today to incorporate research data management into your support practices.*

*Research Data Sharing Without Barriers*

### Learning Resources

Data supporters have different professional backgrounds and are learning to provide services related to research data.

1. A "top ten" list of recommendations for libraries to get started with research data management from LIBER, [edu.nl/qtaff](http://edu.nl/qtaff)
2. Relevant concepts are presented in a glossary at the Essentials 4 Data Support training website, [edu.nl/emgym](http://edu.nl/emgym)
3. Understand the life of research data with examples of data life cycles at JISC and at RDNL, [edu.nl/p4nke](http://edu.nl/p4nke) & [edu.nl/j8cr6](http://edu.nl/j8cr6)
4. Check out MANTRA for more training modules for data supporters, [edu.nl/mq9ah](http://edu.nl/mq9ah)
5. Read the current literature on research data management and contribute to the list, [edu.nl/t8kd8](http://edu.nl/t8kd8)

### Data Reference & Outreach

Data supporters are answering questions about data from researchers and are conducting outreach to assess the data needs of their researchers and students.

Learning Resources  
Data Reference and Outreach  
Data Management Plans  
Metadata  
Citing Data  
Data Licensing and Privacy  
Digital Preservation  
Data Repositories and a  
Community of Practice

*... to help data supporters engage in research data management!*

6. Facilitate a community of researchers who are interested in communicating to the larger community, like the Data Champion Initiative, or join the Open Science Communities, [edu.nl/fw7ct](http://edu.nl/fw7ct) & [edu.nl/xrtgm](http://edu.nl/xrtgm)
7. Develop engagement materials, such as the Best Practices of Data Management by DataOne or RDM Starter Kit by GOFAIR, [edu.nl/4gttk](http://edu.nl/4gttk) & [edu.nl/bffv4](http://edu.nl/bffv4)
8. Learn which local infrastructures and policies are in place to support researchers by checking LCRDMs RDM Put into Practice, [edu.nl/43pqf](http://edu.nl/43pqf)

### Data Management Plans

Data supporters are becoming familiar with funder requirements and consulting with researchers to help them write and implement effective data management plans.

9. One example is DMPonline, a tool that builds a plan to set up DMPs by asking the researcher to answer a series of questions. Institutional and funder templates are available, [edu.nl/qxtbt](http://edu.nl/qxtbt)
10. Consult DCCs catalog of public DMPs, [edu.nl/7abtb](http://edu.nl/7abtb)
11. Use outreach materials like LCRDMs Ten Tips for Writing a DMP, [edu.nl/w7r8k](http://edu.nl/w7r8k)

### Metadata

Data supporters are helping to organize and describe research data and developing standards for metadata to make data more easily discovered, understood and preserved.

12. Determine what metadata standard is appropriate to recommend or apply, [edu.nl/ct8en](http://edu.nl/ct8en)



## Input asked

### Audience-specific versions

Join the community effort in creating an overview of RDM resources. Help us finalize audience-specific versions of the 23 Things for researchers & PhD candidates, Bachelor & Master students, data & subject librarians, data stewards, IT support staff & IT specialists, research software engineers, and policy makers.



Scan the code or browse the URL, and contribute before March 1! [edu.nl/9w9wm](https://edu.nl/9w9wm)

<https://edu.nl/9w9wm>

# Phase 3

## Getting the 23 Things adopted

Particularly in training, the 23 Things are expected to be useful, as it may help creating a consensus on the content of RDM courses in the Netherlands. One way of doing this is by developing an online tool for browsing the various audience-versions of the 23 Things.

*Deliverable:*

Recommendations for use of the 23 Things

# Highlight 2: 23 Things and training


**Phase 3. Getting the 23 Things adopted (in training) for different target audiences** (December '19 - April '20)

*Deliverable:* use cases and recommendations

- **Part 1.** Test adoption in daily practice. **Approach:** local working sessions (RDM supporters with target audiences)
- **Part 2.** Test adoption as a basis for training. **Approach:** local/national working sessions (RDM supporters with training coordinators)
- **Part 3.** Test usefulness. **Approach:** national meeting to collect use cases (with stakeholder groups/audiences)

## Current steps (adjustments to the original plans)

- Developing an online tool for browsing the various audience-versions of the 23 Things
- Contact existing RDM trainings in the Netherlands to create use cases based on that 23 Things tool




Essentials 4 Data Support

ABOUT THE COURSE · START THE COURSE · LOGIN ·

Essentials 4 Data Support is an introductory course for those people who (want to) support researchers in storing, managing, archiving and sharing their research data.

Essentials 4 Data Support is a product of Research Data Netherlands.



<https://datasupport.researchdata.nl/en>

### 23 (Research Data) Things

23 (research data) Things is a self-guided training concept for anybody interested in data. If you are a person who cares for, and about, research data and want to fill in some gaps, learn more or find out about the rapidly changing research data landscape, then this is for you! The program is likely to be of interest to those who:

- care for data: Librarians, Managers, Data custodians
- create data and want recognition for their data
- want to learn more about the potential of data for innovation and start-ups
- are looking to incorporate data into their current or future careers.

#### Attributions

We wish to acknowledge Helene Blowers who created the original 23 Things (2006) and Michael Witt who developed 23 Things: Libraries for Research data (2015), and Australian National Data Service (ANDS), who created their 23 (research data) Things program in 2016. This version is based primarily on the ANDS version.

#### Prerequisites

Come to the meeting with question you have about research data in your discipline or field.

#### Schedule

Setup	
Thing 1: Ready Set Data	What is research data? Where can you find research data in your discipline?

<https://ucsdlib.github.io/23-Research-Data-Things>

# Phase 4

## Dissemination of experiences and final versions

The project will be promoted via blogs, webinars, conferences and an article in an international data journal. All materials and outputs (including sharing our experiences to allow others to follow in our footsteps) will be published on Zenodo.

*Deliverable:*  
Sustainability plan



### 3. Decide on the benefit of adopting the 23 Things project in the Lithuanian context



What do **you** see as a benefit?

What steps could **you** take to contribute?

Decide about next session:

- Joint document?
- Clean version?
- Lithuanian version?
- Use challenges put forward before?

<https://edu.nl/9w9wm>

<https://doi.org/10.5281/zenodo.3465895>



**Lunch**  
**12.30 – 13.15**

# Session 3. Creating a first 23 Things version for the Lithuanian context

## 13.15 – 14.15

<https://edu.nl/jbkvp>

<https://edu.nl/9w9wm>

<https://doi.org/10.5281/zenodo.3465895>

**Coffee break**  
**14.15 – 14.45**

# Session 4. The benefits of RDM support

## 14.45 – 15.45

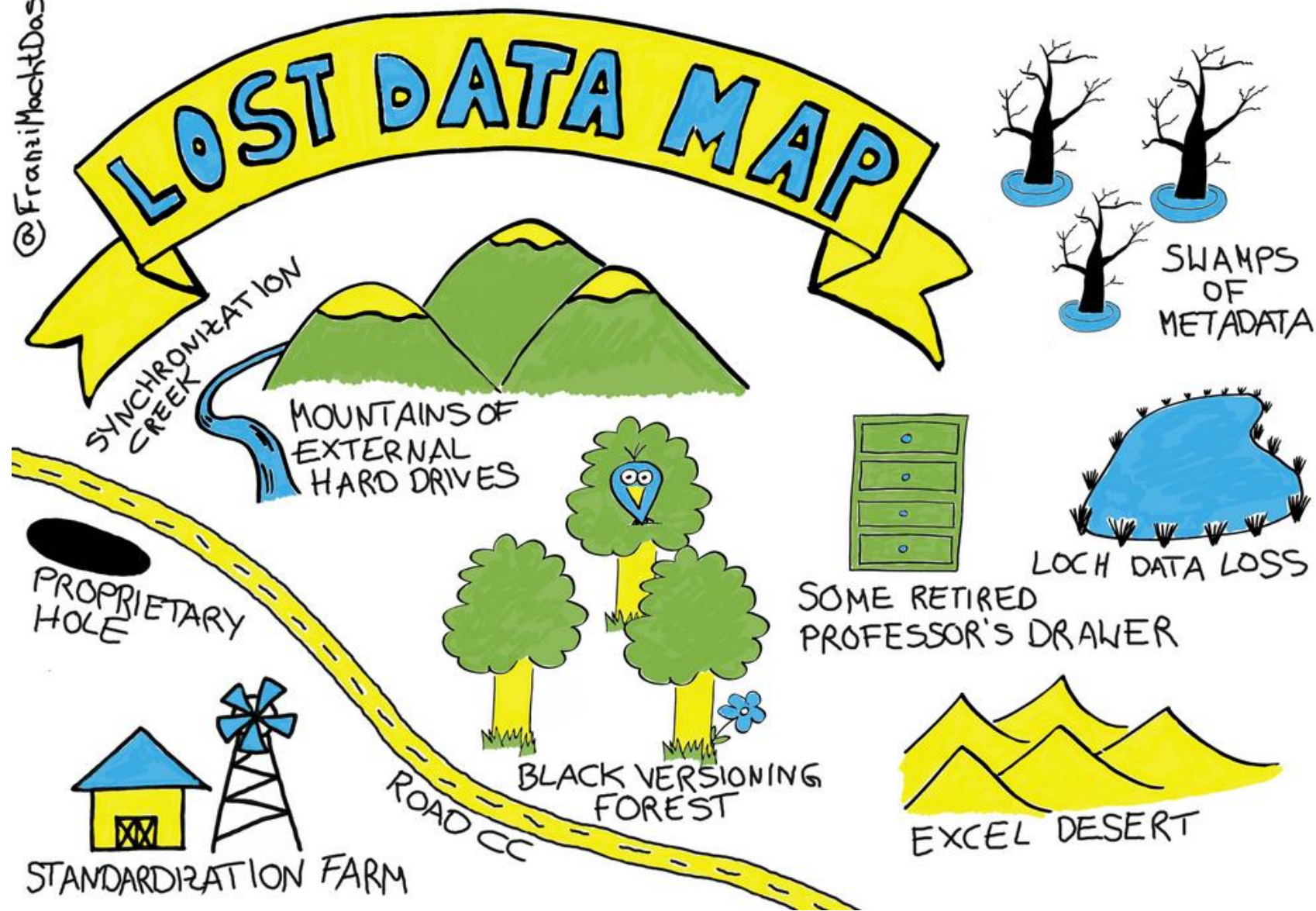
# Examples of RDM support (Radboud University), including policy and infrastructure

Please shout out if your challenge comes along!

## Topics:

- data management planning
- storage during research
- archiving and publishing data
- data curation
- data ethics
- data privacy

@FranzMoeltDas



# Realise: how much of your research data would you lose if ...

- your laptop got stolen?
- your lab/office burnt?
- you've lost your USB stick?
- your portable hard drive got damaged?
- data from your Dropbox account disappeared?





# RESEARCH DATA MANAGEMENT

“Research Data Management describes the process to manage research data along the **research data lifecycle**”

And: includes various activities such as **planning, producing, selection, analysis, archiving, and preparation for reuse.**

Because data are very heterogeneous,  
**discipline and data specific  
solutions** can be required.”





# WHY RESEARCH DATA MANAGEMENT

It prevents **unauthorized** access, avoids data **loss** and facilitates the **documentation** and **reuse** of data

Radboud University values proper **storage** and **management** of data as well as making data **available** to others

A growing number of **funders** and **journals** have set conditions to the management of research data

RDM stimulates **open science**, **FAIR data** and **GDPR** compliance

**Data is research output!** RDM helps you to make conscious decisions about the data in your project



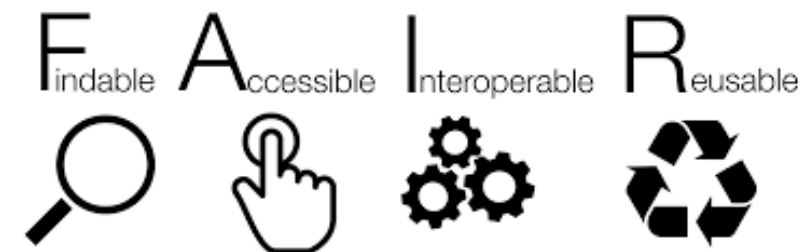
# OPEN DATA



- Open Data = (research) data that is **freely available online for (re)use and republish** for everyone provided that the data source is attributed
- However: “**as open as possible, as closed as necessary**”
- Sharing is not giving away, to work in an open environment benefits all, especially the data sharer
  - reach as many people as possible
  - be cited more often
  - build cooperation
  - etc.

Essential: **Data Management Planning**

# FAIR DATA



- FAIR Guiding Principles for scientific data management and stewardship
- Developed by [FORCE 11](#)
  - **F**indable
  - **A**ccessible
  - **I**nteroperable
  - **R**eusable
- Note: **Not all FAIR Data is Open Data** (e. g. sensitive data) and not all **Open Data is FAIR**

## FUNDER, JOURNAL AND UNIVERSITY REQUIREMENTS

- [Funders](#) have set conditions for the proper management of data
- [Journals](#) have policies regarding research data availability
- [RU policy](#): storage of research data at the latest at the time of publication, including information needed for potential re-use (metadata). Minimum period of ten years
- RU: primary responsibility: researcher / project leader  
RU: ultimate responsibility: director research institute
- University policy is supplemented by each [research institute](#)



## Welcome to the Donders Repository

The [Donders Institute for Brain, Cognition and Behaviour](#) is a cognition and behavior in health and disease.

The Donders Repository is used by 1,294 researchers to manage collections, 365 work-in-progress and 27 finalized [research data](#). Everyone can request access to the published data sharing collections.

When working at the RU, please contact your [data steward](#) for more information.

### Featured collections

Data Sharing Collection	di.dccn.DSC_3011020.09_236	Published	24 May 2019	1.3 TB
<b>Mother of unification studies, a 204-subject multimodal neuroimaging dataset</b>				
The Mother Of Unification Studies (MOUS) dataset contains multimodal neuroimaging data from 204 subjects.				
Publication date	20 February 2019			
Authors	Schoffelen, J.M. (Jan Mathijs), Robert Oostenveld			
Managers	Schoffelen, J.M. (Jan Mathijs), Robert Oostenveld			
Contributors	Annika Hultén, Nietzsche Lam, Julia Udder			

Data Sharing Collection	di.dcmn.DSC_3013018.02_325	Published	22 November 2019	1.3 TB
<b>5-HTT MODULATION OF FEAR BRADYCARDIA</b>				
The folder 'human' contains data from experiment 1: preprocessed (unide				



## What is the Digital Research Environment?

The Digital Research Environment (DRE) is a cloud based, globally available research environment where data is stored and organized securely and researchers can quickly generate workspaces to collaborate in and use the applications they love. Globally available and accessible 24/7.

### Dataset archiving and registration

Use RIS to make a dataset available via the certified DANS EASY archive.

Choose 'register only' if you've archived a dataset elsewhere.

- > **Step-by-step: registering and archiving a dataset**
- > **Step-by-step: registering a dataset**

### DMP tool

You can make a good start on managing your data by writing a data management plan.

Radboud University has developed a tool for writing such a plan, included in the RIS interface.

- > **Step-by-step: writing a DMP**
- > **DMP user manual**

### Open science



### Log in to RIS

Use your RU credentials (u/z-number and password) to log in:

**SURFCONEXT** 

Institution  
(Radboud University)

Data hosting Provider  
(DANS)

Researcher



Enters metadata  
Uploads dataset



Check

(possible) request for  
correction



Front Office (UB)

DOI, URL and License file

Data Files and Metadata  
(SWORD Protocol)



Check

Published  
On line



Communication to report and correct possible errors

Communication to inform about on line publication



Back Office



RDM support: [www.ru.nl/rdm](http://www.ru.nl/rdm)

RIS servicedesk: [www.ris.ru.nl](http://www.ris.ru.nl)

Research Information Services

Search

Planning research



- > Funder and journal requirements
- > Data management paragraph
- > Data management plan
- > Costing data management

Processing data



- > Anonymisation, pseudonymisation and personal data
- > Storing and sharing data
- > Documenting data
- > Organising data

Collecting data



- > Use of existing data
- > Informed consent and ethics committees
- > Data privacy
- > Data security

Archiving data



- > What data should be archived
- > Archiving for scientific integrity
- > Archiving for reuse
- > Archiving non-digital data

HOMEMANUALSSUPPORT

### Register your publication

You can use the RIS interface to register your publication.

Link your publications and datasets and make them visible in the [Radboud Repository](#) and on your [personal profile page](#).

> Step-by-step: registering a publication

### Upload your full text

You can use the RIS interface to upload the full text of your publication to the [Radboud Repository](#).

Your publication will be easy to find through the usual search engines like Google (Scholar).

> Step-by-step: uploading full text to a publication

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> Step-by-step: registering a dataset

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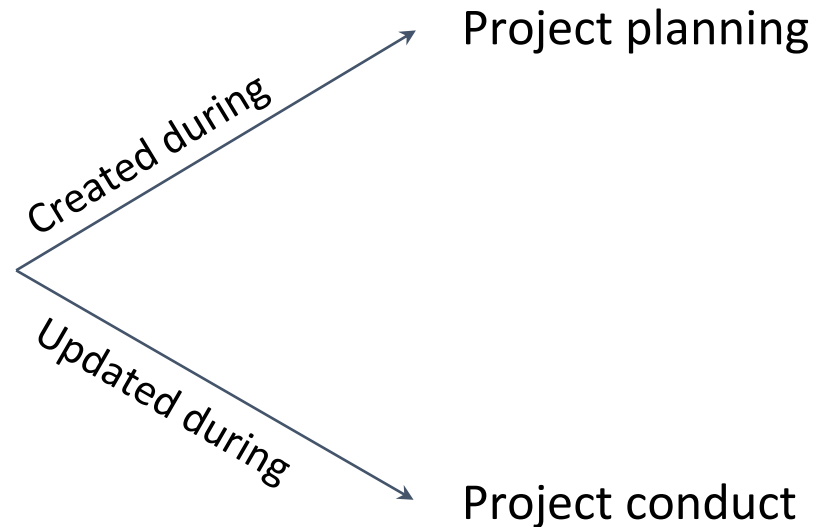
Radboud University has developed a tool for writing such a plan, included in the RIS interface.

> Step-by-step: writing a DMP

> DMP user manual

## WHAT IS A DATA MANAGEMENT PLAN?

A [Data Management Plan \(DMP\)](#) is a document which outlines how research data will be managed over the course of a research project.





A data management plan helps you to anticipate to and organize all aspects of proper data management. **Writing a data management plan is mandatory in more and more research institutes.**

### Goals:

- You think and decide **timely** about research data management issues
- Use it as a **dynamic** document (mention date / version)
- Use it as a **discussion** document
- Useful in meetings for monitoring **progress** of your research

# TOPICS OF A DATA MANAGEMENT PLAN

## 1. Research project

### Planning research

- 2. Organisational context
- 3. Data management roles
- 4. Costs

### Collecting data

- 5. Collection process
- 6. Overview of research data
- 7. Informed consent
- 8. Ethics committee
- 9. Privacy in the collection phase
- 10. Security in the collection phase
- 11. Storing during research

### Processing and analysing data

- 12. Privacy in the processing/analysing phase
- 13. Structuring and documenting your data
- 14. Sharing data during research

### Preserving and giving access

- 15. Long-term storage
- 16. Metadata and documentation
- 17. Giving access to data

# 10 tips for writing a Data Management Plan

1

## **Start early**

Read the guidance and ask for advice early on in the process, as writing a DMP may take some time

2

## **Consider reuse**

Think about reusing existing data. Describe what you will need to know about your data five years from now

3

## **Check policies**

Talk to your supervisor or data steward about existing data management [policies](#) and standards

4

## **Make use of support**

Use your in-house support services: [RDM Support team](#), the [IT department](#) and/or [privacy officer](#)

# 10 tips for writing a Data Management Plan

5

## **Think broad**

Also address software code, algorithms and any other valuable research assets in your DMP

7

## **Say so if you don't know**

Indicate what you do not yet know and how you will resolve these questions later

6

## **Be concrete**

Make your answers as concrete as possible. Show that you have consulted RDM experts

8

## **Update**

DMPs add to the planning of your research methods. Therefore define, carry out and update your DMP just as you would any method

# 10 tips for writing a Data Management Plan

9

## **Copy where you can**

Look at other (submitted) plans and copy when appropriate

10

## **Be unique where needed**

Since every research project is unique, so are the data it generates. Copying from sample DMPs is not sufficient

# Non-digital data

Tips for filing and storing paper documents:

- Simple filing system (alphabetical, numerical, thematic, type)
- Make sure you have enough space
- Make sure everything is kept safe
- Think about the long term (will you understand your filing system ten years from now?)
- Make a content file and give every document a code
- Make copies and store them separated from your originals
- Digitize important documents (substitution manual; original files can be destroyed after 6 months)



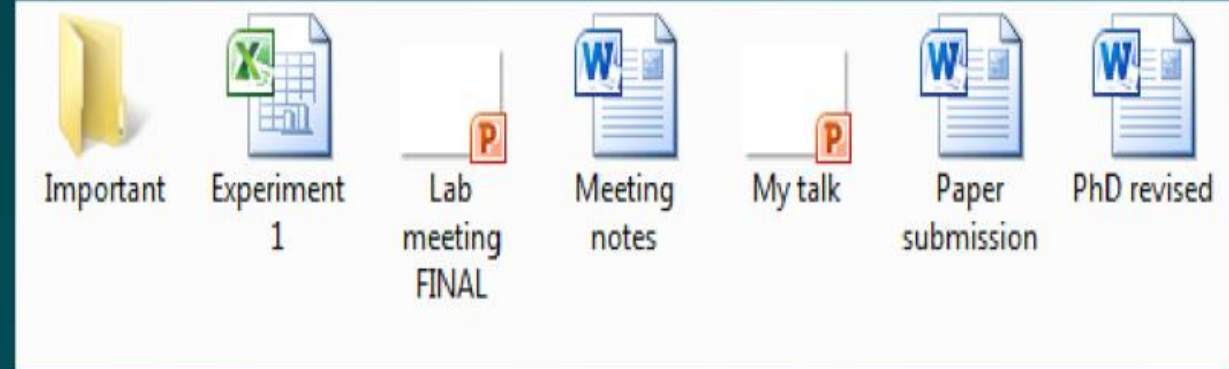
## DATA ORGANISATION

- Use folders and subfolders, but not too many!
- Name folders and files appropriately
- Be consistent
- Mention which version is concerned
- When adding dates, use yyyyymmdd
- Separate ongoing and completed work



[www.digitalbevaring.dk](http://www.digitalbevaring.dk)

## WHY IS FILE NAMING IMPORTANT?



Would you know in 3 years time what are all these?



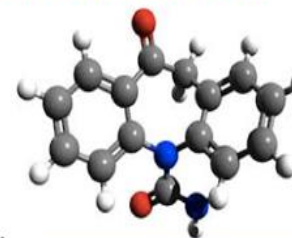


- understandable
- verifiable
- reusable (by you or by others)

- understandable
- verifiable
- reusable (by you or by others)

context

Files explaining  
the **context** of the  
dataset & how the  
research was done



Files that describe  
the **structure** of the  
dataset (read me)



Files that describe the **content** of the dataset, at the data level (code book)



Document steps to:

- create your data
- process your data
- analyse your data



# TYPES OF DATA DOCUMENTATION

## Embedded documentation

- Code, field and label descriptions
- Descriptive headers or summaries

## Additional documentation

- Codebook
- Readme file
- Methodology file
- Questionnaires or interview guides
- Working papers or laboratory books



## ARCHIVING DATA: 2 PERSPECTIVES



Making data available for [reuse](#)



[Scientific integrity](#)

## WHY MAKE DATA AVAILABLE FOR REUSE?

- Promote innovation and potential new data uses
- Build on each others work, which is (in most cases) funded by public money
- No duplication of data creation
- Prevent fraud and improve research integrity
- Increase visibility of research and therefore citations
- Make possible new collaborations and (possibly) publications
- Encourage scientific debate
- Meet requirements of funders, journals and universities
- Preparing data for sharing makes it also suitable for long term preservation



## QUESTIONS TO CONSIDER REGARDING DATA ARCHIVING

- Are there ethical and legal reasons not to share my data?
- Must all data be shared?
- Where is my data safe?
- Is my data in an easy to use format?
- Will my data be accessible in the long term?
- Do I have sufficient documentation and metadata?





# WHICH DATA SHOULD BE ARCHIVED?



From the perspective of **reuse**:

- Final (definitive) versions of data used for analysis, possibly also raw and processed data
- Documentation/codebooks necessary for understanding the data
- Read me.txt for understanding the structure and content of the deposit



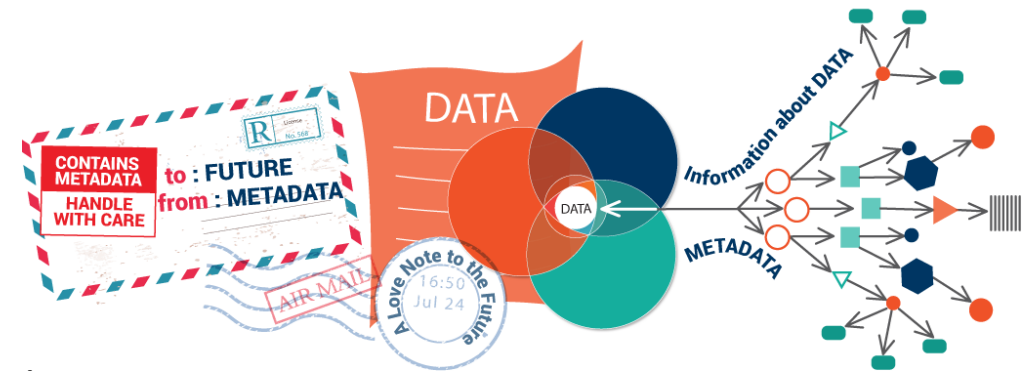
From the perspective of **scientific integrity**:

- Approval ethical committee
- Informed consent & information sheet
- Raw, processed and analyzed data
- Documentation/codebooks
- Read me.txt
- Data Management Plan
- Audit trails and query trails

# HOW TO MAKE YOUR DATA ACCESSIBLE

## Use good metadata

- Who collected the data, where, when, what kind of data, subjects etc.
- General standards (Dublin Core) and standards for disciplines
- Especially important when the data itself is not searchable



## When choosing an archive:

- Make sure copyright procedures are in place: the depositor holds the right to the data
- Archive is certified with the [Data Seal of Approval](#)
- Makes use of [preferred standard formats](#) that guarantee that data will be readable in the long term
- Uses persistent identifiers, such as DOI's that ensure the findability of the data



# WHEN NOT TO SHARE YOUR DATA

## **Personal data**

Your research data include personal data which can or may not be anonymized.

## **Confidential data**

Your research data are confidential due to arrangements made with for example a third (commercial) party sponsoring your research or because of the confidential nature of the data.

## **Patent application**

You intend to make a patent application and want to avoid prior disclosure.

# ALTERNATIVES TO DIRECT AND OPEN ACCESS SHARING



## Embargo

This means that the metadata for the data will be available (allowing it to be cited in related publications), but the data itself will not be made publicly accessible until the embargo has expired.



## Access levels

Research data can also be shared with a restricted access. This means that the data are accessible to potential re-users only once the researcher grants access.

# WHAT IS PERSONAL DATA?

DEFINITION AND SCOPE UNDER THE GDPR



## ANY INFORMATION

Objective (earns 10k per year); Subjective (opinion); and, Sensitive data (gay woman).



## RELATING TO

An individual, about a particular person, impacts a specific person.



## IDENTIFIED OR IDENTIFIABLE

Direct or indirectly e.g. You know me by name, direct, you know me as "a Lawyer doing these graphics", indirect.



## NATURAL PERSON

applies ONLY to a living human being. National Law may give rules for deceased persons.



## ONLINE IDENTIFIER & LOCATION DATA

Include data provided by the electronic devices we use: mobiles, cookies identifiers, IP address, others.



## TO ONE OR MORE FACTORS

Include data that when combined with unique identifiers and other info create a profile and identify a person.

# Anonymisation & pseudonymisation



**Anonymisation:** re-identification of the anonymised data combined with any other population data is impossible.



**Pseudonymisation:** personal data can no longer be attributed to a specific data subject without the use of additional information (pseudonymisation key).

# Privacy by Design

## ***Privacy by Design***

A brief instruction video with guidelines for processing personal data by RU staff (animation: Rikkert Veltman)

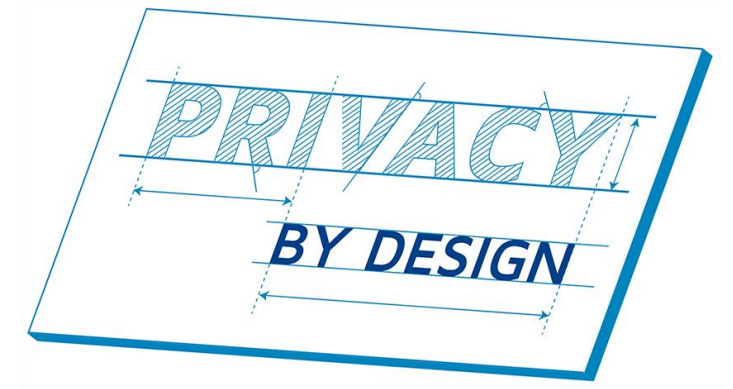


[Youtube link](#)

Build in privacy-enhancing measures in the design of your research. Without a good plan, opportunities for data breaches are growing.

There are 8 guidelines for Privacy by Design:

- Data minimization
- Data quality
- Goal setting
- Minimisation of use
- Security measures
- Transparency
- Rights of data subjects
- Liability



# 1. Data minimization

Personal data in research data has to be:

***adequate, relevant and limited***

to what is necessary for the purposes for which they are processed.

## 1. Data minimisation

2. Data quality

3. Goal setting

4. Minimisation of use

5. Security Measures

6. Transparency

7. Rights of data subjects

8. Liability

Review your



naire and data collection

- Are a question entirely necessary to a
- Do you
- Or do
- Is it possible to

the data that you collect  
data because it may come  
ize/pseudonymize your



ch

a harking”)

## 2. Data quality

Personal data in research data has to be:

*of good quality, accurate and up-to-date*



1. Data minimisation

2. Data quality

3. Goal setting

4. Minimisation of use

5. Security Measures

6. Transparency

7. Rights of data subjects

8. Liability



## 2. Data quality

**QUALITY**



You have this **dataset** containing personal data:

Participant number	Surname	Current residence	Job location
1	Jansen	Nijmegen	Utrecht
2	Velde, van der	Arnhem	Nijmegen

Participant 1 moves to Wageningen. The dataset has to be updated, since the current data is not up-to-date.

1. Data minimisation

2. Data quality

3. Goal setting

4. Minimisation of use

5. Security Measures

6. Transparency

7. Rights of data subjects

8. Liability

**QUALITY**



You have this **dataset** containing personal data:

Participant number	Surname	Residence at time of interview	Interview date
1	Jansen	Nijmegen	17-4-2019
2	Velde, van der	Arnhem	28-4-2019

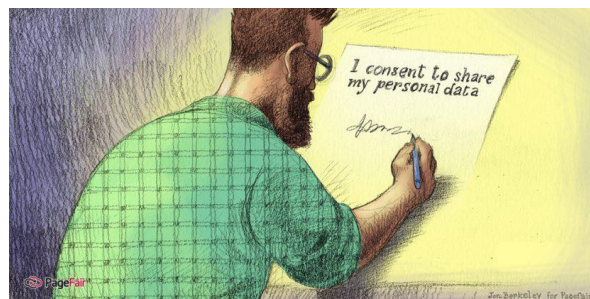
Participant 1 moves to Wageningen. The dataset doesn't have to be updated.

# 3. Goal setting

In your goal setting, you must describe in detail:

- what personal data you will be processing,
- with which legal base,
- and for how long you are going to keep this data.

In research:  
Informed consent



1. Data minimisation

2. Data quality

3. Goal setting

4. Minimisation of use

5. Security Measures

6. Transparency

7. Rights of data subjects

8. Liability

## 4. Minimisation of use

The fewer people who have access to the personal data in your research, the better.



Will a read-only access privilege be sufficient for your colleague?  
Do not give any editing rights.



Do you have permission to share personal data? If not, you must ask for permission if you have to transfer personal data.



1. Data minimisation

2. Data quality

3. Goal setting

4. Minimisation of use

5. Security Measures

6. Transparency

7. Rights of data subjects

8. Liability

# 5. Security measures

Make sure that your data is well secured

When working with personal data in research, you should at least make use of privacy protection techniques and measures, such as:

- [Encrypt devices](#)
- [Encrypt files](#)
- [Data anonymization](#)
- [Data pseudonymization](#)
- [Substitution of paper documents](#)



1. Data minimisation

2. Data quality

3. Goal setting

4. Minimisation of use

5. Security Measures

6. Transparency

7. Rights of data subjects

8. Liability

# 6. Transparency

Transparency is a fundamental principle in the GDPR.

Transparency is about being open toward participants regarding the processing of their personal data in the research project. Transparency is an obligation of the researcher which applies to:

- Informing participants about what personal data is collected and why.
- Informing participants about how they can call on their data subject rights.
- Complying to data subject rights.

## Informed Consent procedure



1. Data minimisation

2. Data quality

3. Goal setting

4. Minimisation of use

5. Security Measures

6. Transparency

7. Rights of data subjects

8. Liability

# 7. Rights of data subjects

There are 8 fundamental data subject rights



- 1. Data minimisation
- 2. Data quality
- 3. Goal setting
- 4. Minimisation of use
- 5. Security Measures
- 6. Transparency
- 7. Rights of data subjects
- 8. Liability



# 8. Liability

Make sure that you know who has ultimate responsibility over the collected data and how the various roles, tasks and authorizations have been established.

**RDM policy**: researcher & institute

**Data ownership**: Radboud University

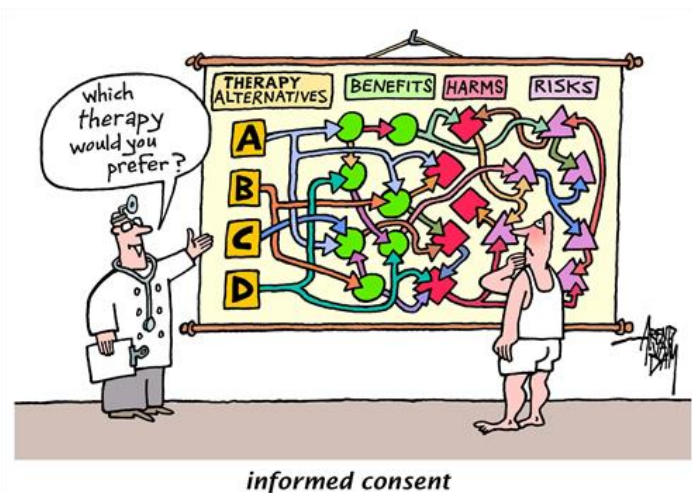
- 1. Data minimisation
- 2. Data quality
- 3. Goal setting
- 4. Minimisation of use
- 5. Security Measures
- 6. Transparency
- 7. Rights of data subjects
- 8. Liability



# WHAT IS AN INFORMED CONSENT?

**Agreement** between the researcher and the data subject (i.e. participant), including

- The data subject is **informed**: provide information that is received and understood. Usually this is in the form of an information brochure.
- The data subject gives **consent**: you need an explicit statement that the data subject freely agrees to participation in the research project



# WHEN DO YOU NEED INFORMED CONSENT?



## **Legal perspective**

As a legal base for collecting  
personal data

GDPR



## **Ethical perspective**

Participant is informed and thus  
enabled to make a voluntary  
decision about accepting or  
declining participation in research.

## WHAT SHOULD AN INFORMED CONSENT FORM CONTAIN?

- The name and contact details of the researcher and data protection officer
- Research procedures
- Benefits, discomfort and risks
- The purposes of the processing of the personal data
- The (categories of) recipients of the personal data
- The retention period for the personal data
- Data subject's rights with regard to the processing of personal data
- The right to withdraw consent
- The right to withdraw data (for example up to 2 weeks after collection)
- The right to lodge a complaint with the Autoriteit Persoonsgegevens.
- If applicable: compensation and insurance

Always check the informed consent [templates](#) from your institute/ethical committee.

# HOW TO OBTAIN INFORMED CONSENT?



Written informed consent



Oral informed consent



Online informed consent

# DATA USE AGREEMENTS

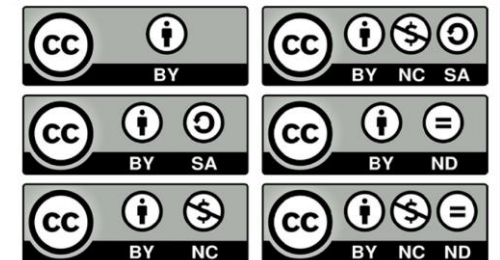
**Data use agreements** – also known as data exchange agreements – are contracts used for the transfer of data which are non-public or otherwise subject to restrictions.



Agreement between the data owner (Radboud University) and a recipient.  
Composing a data use agreements may be particular relevant in research that involves privacy-sensitive data.]

Consider at least the following aspects:

- Legal aspects – including the GDPR
- Ownership of the data
- Privacy/anonymisation of human data
- Use of data by third parties
- Embargo period
- Citations and/or co-authorship
- Specific scientific purpose



# Session 5. Other (Dutch) developments that can help strengthen RDM in Lithuania

15.45 – 16.30

## Examples of (Dutch) developments Mijke is involved in, including:

- the National Coordination Point Research Data Management (LCRDM)
- the Association of European Research Libraries (LIBER)
- and the Research Data Alliance (RDA)





# National network research data management

## Two new pitches



—Ilhor Obratsov

Read the new LCRDM pitches  
and take action!

New pitches

The two pitches are about digitizing informed

## Procedure



If you as RDM expert see the importance  
of contributing to a national collaborative  
project, join the **pool of experts**. Get in  
touch with LCRDM coordinator Margriet  
Miedema at

## Pool van experts



Expertslijst

Strategy 2018-2022

Strategic Directions

Innovative Scholarly  
Communication

Digital Skills & Services

Research Infrastructure

## Working Groups

Launching A Working  
Group

Architecture

Copyright & Legal Matters

Citizen Science

Digital Humanities & Digital  
Cultural Heritage

**This Working Group collects good practices and lessons learned in the area of Research Data Management (RDM) in libraries. It also collaborates with other initiatives to evaluate and support skills development.**

The RDM Working Group operates as part of LIBER's Strategic Direction on [Research Infrastructure](#), which in turn is one of the pillars of our [2018-2022 Strategy](#). Under our previous strategy, it operated as the [Scientific Information Infrastructures Working Group](#).

## Priorities

- **Priority #1:** Publish an annotated library of Data Management Plans;
- **Priority #2:** Run Webinars on key Research Data Management topics;
- **Priority #3:** Produce a FAIR Data Factsheet.

## News



FAIRness of Repositories & Their Data: Research Data Management Working Group Report

June 24, 2019

LIBRARY

Two new LIBER Case Studies on Research Data Management Support



Questions? Please contact the group's chairs [Rob Grim](#) and [Mijke Jetten](#).

[See all Working Group Members.](#)

## Key Resources

- FACTSHEET: [Implementing FAIR Data Principles: The Role of Libraries](#)
- FACTSHEET: [Libraries & Research Data: Towards a new leadership role](#) (plus supporting [infographic](#))
- [11 RDM Case Studies](#)
- [10 Recommendations for Libraries to Get Started with Research Data Management](#)

<https://libereurope.eu/strategy/research-infrastructures/rdm/>



## O&A Members

58

Active Organisational & Affiliate members

## MEMBERSHIP

Members: 9981

Becoming a member of RDA is simple and open to both individuals and organizations

[Register now](#)

## RDA Groups

WG & IGs: 90

Discover what RDA Working and Interest Groups and all other Groups are up to and find out how to join them. [Explore Groups](#)

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[RECOMMENDATIONS & OUTPUTS](#) ▾

[RDA FOR DISCIPLINES](#) ▾

[PLENARIES & EVENTS](#) ▾

[NEWS & MEDIA](#) ▾



## RDA Solutions

RDA Outputs are the technical and social infrastructure solutions that enable data sharing, exchange and interoperability

[Discover them all](#)

[NEW! Recommendations & outputs catalogue](#)

[Adoption Use Cases](#)

[Adoption Stories](#)

[RDA Europe Adoption Grants](#)

[Interest in RDA Recommendations](#)

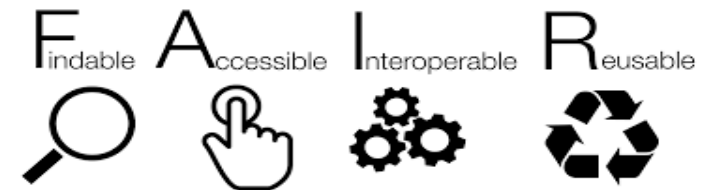
[Standards](#)



# FAIR data stewardship: background of the project

- Small-scaled (though ambitious) Dutch **project** (Aug. '18 – Sep. '19 (ZonMw), continued up to Sept '20 (NPOS))

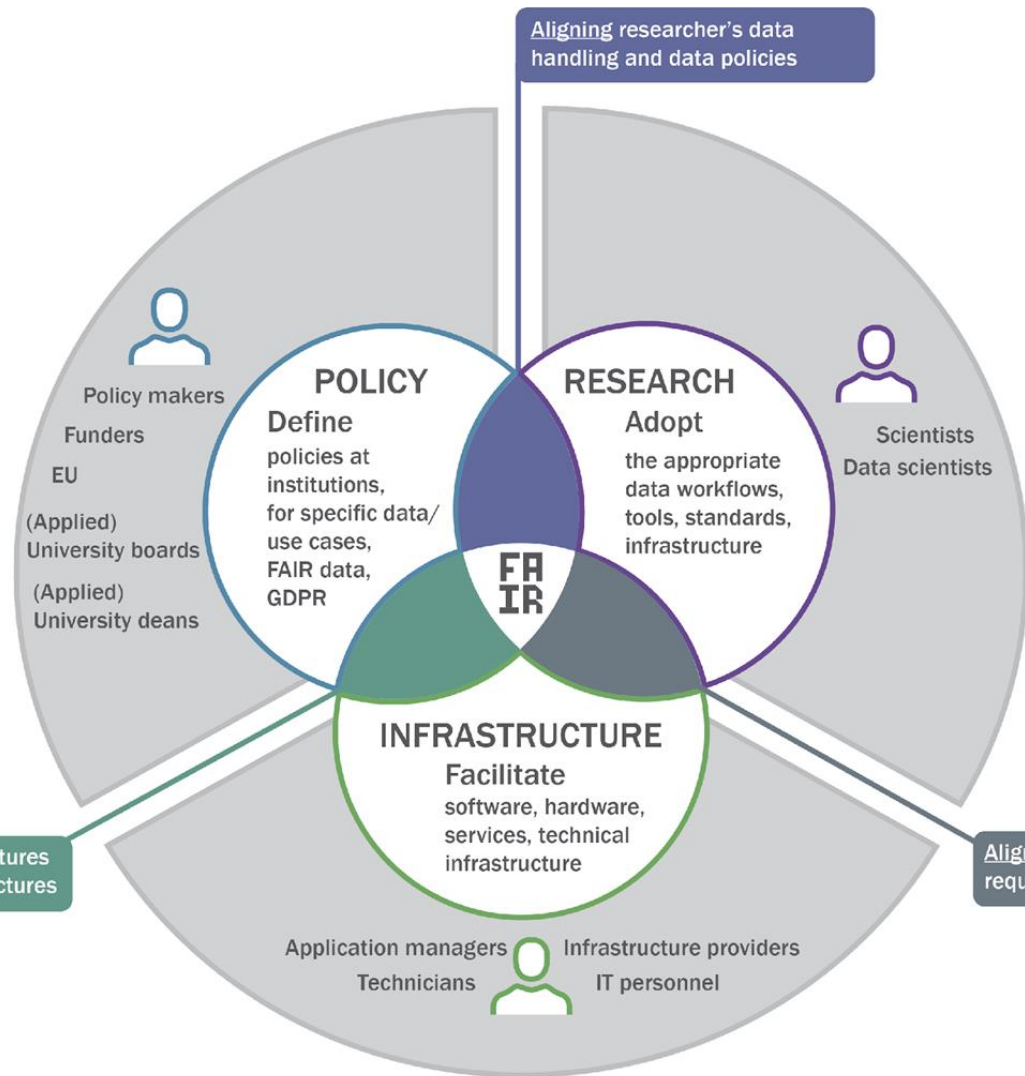
- **Aim:** professionalise the data steward function, with a focus on the implementation of FAIR



CC-BY-SA-4.0, Sangya Pundir, Wikimedia Commons

- **Context:**
  - Lack of sufficient and high-quality data stewardship expertise
  - Lack of consensus on what a data steward is and does (function profiles)
  - Lack of tailored education, incl. certification
- Deliverables available via <https://zenodo.org/communities/nl-ds-pd-ls>, incl. report of the ZonMw part at <https://doi.org/10.5281/zenodo.3471707>

# The data stewardship landscape and its stakeholders



## Data stewardship









The responsible planning and executing of all actions on (digital) data before, during and after a research project, with the aim of optimising the usability, reusability and reproducibility of the resulting data

<https://doi.org/10.5281/zenodo.3243909>

## Community-endorsed

In 2019 tested and rewritten in two one-day sessions with 50 Dutch data stewards

# Knowledge areas

<b>Policy/strategy</b>		Responsible for advice on and development, implementation and monitoring of a RDM policy and strategy for the research institute, which includes the complete research data life cycle, and supports FAIR data and Open Science, in alignment with the relevant stakeholders and within financial and legal constraints, within the institute and in the context of the institute.
<b>Compliance</b>		Responsible for compliance of the RDM policy to the Netherlands Code of Conduct for Academic Practice, the Netherlands Code of Conduct for Research Integrity and the GDPR, as well as continuous alignment with legal and ethical standards.
<b>Alignment with FAIR data</b>		Responsible for alignment of the RDM policy to the FAIR data principles and the principles of Open Science
<b>Services</b>		Responsible for the availability of sufficient support on RDM, in staff or services, for the researchers and research support staff of the institute.
<b>Infrastructure</b>		Responsible for the availability of adequate e-infrastructure for RDM to comply with the institute's RDM policy and alignment to (inter)national data and e-infrastructures.
<b>Knowledge management</b>		Responsible for an adequate level of knowledge and skills on RDM within the institute in order to comply with the institute's RDM policy.
<b>Network</b>		Responsible for obtaining and maintaining a network of aligned expertise areas and relevant departments and organizations inside and outside the institute with regard to RDM.
<b>Data archiving</b>		Responsible for policy and adequate support and e-infrastructure for FAIR and long-term archiving of data of the institute, stored internally as well as externally, and for sustainable and legitimate access to data sources of the institute, for the required period.

3 data steward roles:

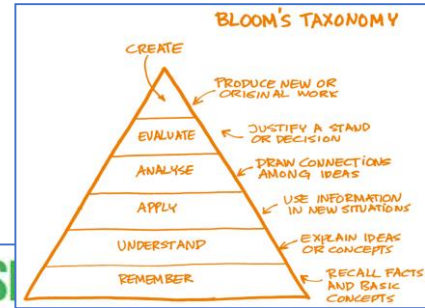
- Policy
- Research
- Infrastructure

Extended **matrices** created by analysing job advertisements and data stewardship competency frameworks (e.g. EOSC pilot, Purdue, DAMA & EDISON) and to the data life cycle and FAIR principles

Matrices are available via <https://doi.org/10.5281/zenodo.3239079>



# Function profiles for a FAIR data steward



## RESPONSIBILITIES



**POLICY/STRATEGY** Responsible for advice on and development, implementation and monitoring of a RDM policy and strategy for the research institute, which includes the complete research data life cycle and supports FAIR data and Open Science, in alignment with the relevant stakeholders and within financial and legal constraints, within the institute and in the context of the institute. The policy is the basis for (project) DMPs.



**COMPLIANCE** Responsible for compliance of the RDM policy to the Netherlands Code of Conduct for Academic Practice, the Netherlands Code of Conduct for Research Integrity and the General Data Protection Regulation (GDPR), as well as continuous alignment with legal and ethical standards.



**ALIGNMENT WITH FAIR DATA PRINCIPLES** Responsible for alignment of the RDM policy with FAIR data principles and the principles of Open Science.

## EXAMPLES OF ACTIVITIES/TASKS

- Develops, implements and monitors the institute's RDM policy.
- Advises the institute's management on short- and long-term actions to advance RDM in the institute.
- Assesses and monitors the institute's time and financial investments in relation to the institute's needs for RDM.
- Explores new needs, opportunities and trends in RDM.

- Ensures compatibility of the RDM policy and monitors compliance.
- Contacts the institute's privacy officer, legal advisors or ethical board in case of questions regarding compliance.
- Translates policies from legal/privacy officer to the institute's practice.

### RESPONSIBILITY

Compliance

### SKILL/ABILITY

- Translate RDM policy and legislation and codes of conduct with regard to research data to practical implications and guidelines that researchers can understand.

### LEARNING OBJECTIVES

- List relevant legislation, ethical principles, and codes of conduct for RDM (remembering).
- Examine and list the practical implications of legislation, ethical principles, and codes of conduct with regard to research data (analysing).
- Translate RDM policy and legislation, ethical principles, and codes of conduct with regard to research data to researchers (applying).
- Create guidelines and procedures based on legislations, ethical principles, and codes of conduct with regard to research data (creating).

Translation of **responsibilities** and **activities** into knowledge, skills and abilities, and into learning objectives



## Objective 1

National coordination on the competences and learning outcomes for data professionals

- I.e. obtaining formal agreement by relevant Dutch national stakeholders, incl. willingness to actively incorporate them in policy (implementation)
- Agreement is needed to enable developers of educational programs to develop curricula for future data professionals

## Objective 2

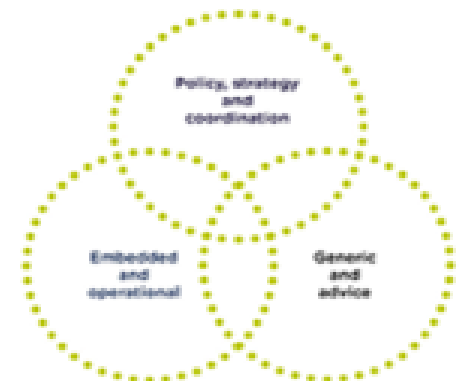
A well-annotated and searchable overview of training in open science and data stewardship for the scientific community

## Resources

- Responsibilities & tasks
- Knowledge, skills & abilities
- Learning objectives
- Inventory training resources

## Scope

- Data stewardship (context: open science)
- Data professionals
- Domain agnostic
- Universities (of applied sciences)
- Junior & senior level



## Data stewardship on the map:

A study of tasks and roles  
in Dutch research institutes



**Closure**  
**16.30 – 17.00**

1. Wrap up
2. Making future plans