



# Data Management Plan Seminar:

## Based on the Horizon Europe DMP Template

**Richard Dennis**  
**Research Consultant – Data Steward**  
reNEW – Copenhagen Platforms and Technology Team  
Copenhagen, Denmark  
3 May 2023

Transforming  
lives with stem  
cell medicine

# Seminar Outline

- Brief Introduction

## Part 1

- Open Science in HE
- FAIR Data Principles in HE

## Part 2

- Research Data Management in HE

## Part 3

- What is a Data Management Plan?
- Demo and Access to DMPonline

## Part 4

- Horizon Europe Data Management Plan Template
  - 1. Data Summary
  - 2. FAIR Data
  - 3. Other Research Outputs
  - 4. Allocation of Resources
  - 5. Data Security
  - 6. Ethics
  - 7. Other Issues

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# 5 Main Keys to Writing a Good Data Management Plan

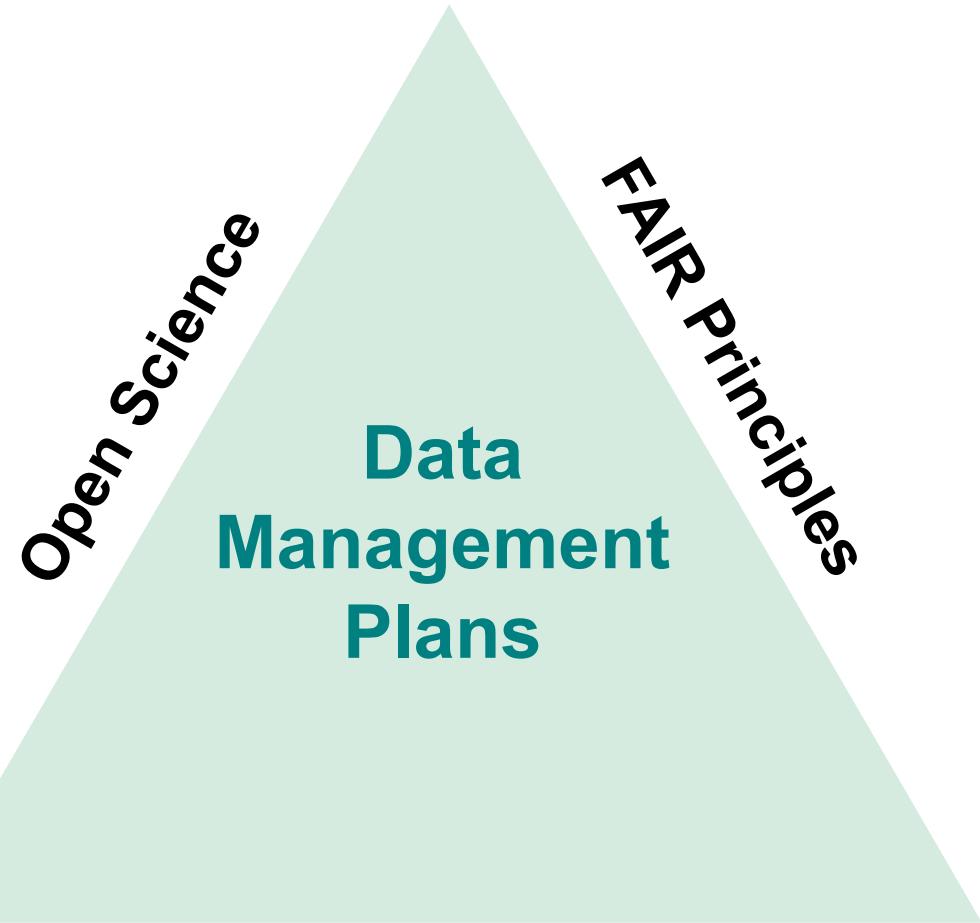


**FAIR Principles:** Adhere to the FAIR regulations (Findable, Accessible, Interoperable, and Reusable) when creating your DMP. These principles promote the optimal use and reusability of research data, benefiting your project and the wider research community. Ensure that your DMP includes clear strategies for making your data findable (e.g., by assigning unique identifiers), accessible (e.g., by using open access repositories), interoperable (e.g., by adopting standard data formats and vocabularies), and reusable (e.g., by providing clear licenses and documentation).

**Clear data organization and documentation:** A well-structured DMP should provide detailed information about the types of data you will collect, generate, or reuse, the methods and tools you will use to collect and analyze the data, and how you will store and preserve the data. Include information about metadata standards, data formats, and file naming conventions to ensure consistency and facilitate data sharing.

**Data sharing and ethical considerations:** Your DMP should address data sharing policies and practices, including any restrictions on data sharing due to legal, ethical, or commercial concerns. Be transparent about the conditions under which your data will be made available to others, and describe the procedures for granting access to the data. Address any data protection and privacy issues, mainly when dealing with sensitive or personal data. Ensure that your DMP complies with relevant data protection regulations, such as the EU General Data Protection Regulation (GDPR) and includes strategies for obtaining informed consent from data subjects, anonymizing data, and securely storing and transferring data.

# 5 Main Keys to Writing a Good Data Management Plan



## Research Data Management

**Data storage and preservation:** Outline your strategies for secure and long-term data storage and access protections, including selecting appropriate storage solutions (e.g., institutional repositories, domain-specific repositories, or general-purpose repositories) that meet the FAIR principles. Specify the data retention periods for different types of data, considering both the requirements of Horizon Europe and the research community's needs. Also, provide a plan for data backup and disaster recovery to minimize the risk of data loss.

**Roles and responsibilities:** Clearly define the roles and responsibilities of all project team members involved in data management, including data collection, processing, storage, and sharing. Assign a dedicated data manager or data steward to oversee the implementation of the DMP and ensure that data management practices are followed consistently throughout the project. Include training and capacity-building plans to ensure all team members have the necessary skills and expertise to manage the data effectively.

A **data management plan (DMP)** is essential to any research project funded by Horizon Europe. It helps ensure that the research data is collected, stored, and shared responsibly and efficiently.

By incorporating these **five primary keys** into your **data management plan**, you can ensure that your research project complies with Horizon Europe's requirements and contributes to the broader goals of open science and research collaboration.

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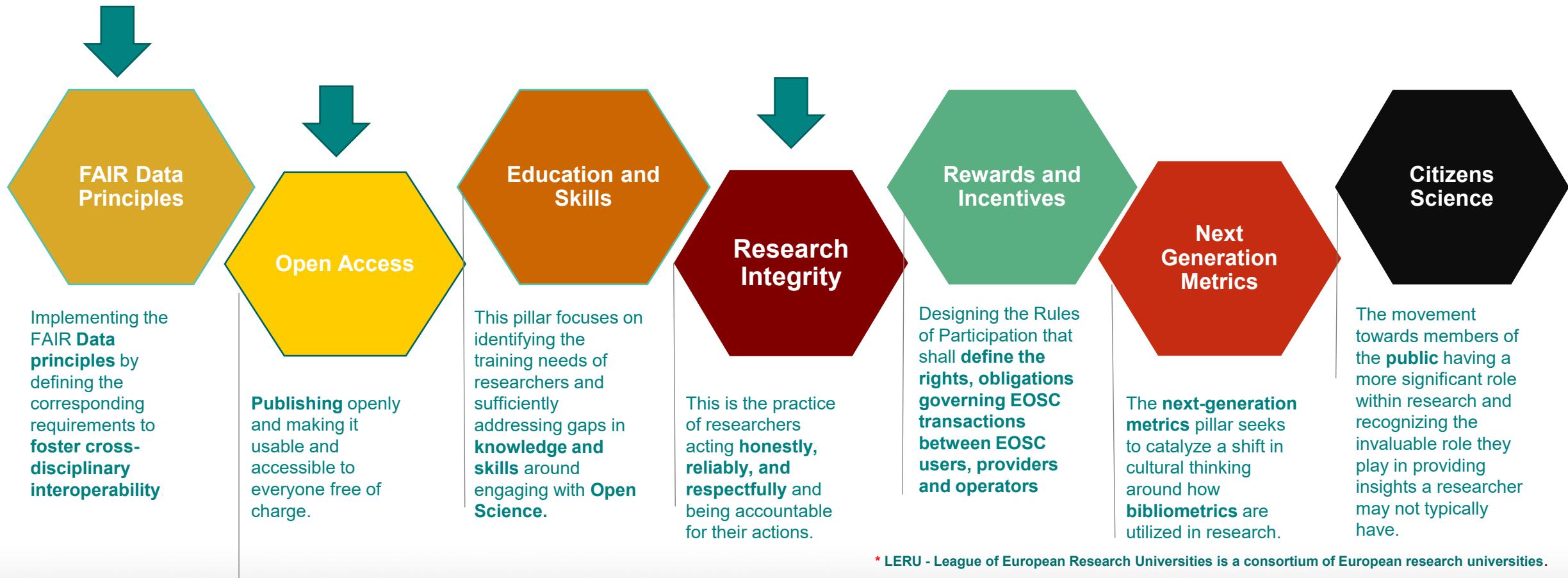
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**"Open Science is the movement to make scientific research, data, and dissemination accessible to all levels of an inquiring society."**

The Open Science Training Handbook <http://book.fosteropenscience.eu/en/> At UCPH, Open Science is based on these seven pillars \*:



\* LERU - League of European Research Universities is a consortium of European research universities.

# Open Science in Horizon Europe

**"Open Science is the movement to make scientific research, data, and dissemination accessible to all levels of an inquiring society."**

*The Open Science Training Handbook <http://book.fosteropenscience.eu/en/>*

- Open Science applies to **all disciplines** ("Open Research," "Open Scholarship")
- Open Science implies **public open access to scientific information**
  - For other researchers as well as corporate and private users
  - **Free of charge**
- Open Science comprises **principles** and **practices**
  - transparency, re-use, participation, cooperation, accountability, and reproducibility for research
  - Data sharing, open notebooks, transparency in research evaluation, open-source code, software and infrastructure, citizen science, and open educational resources

# Open Science in Horizon Europe

## Open Science in Horizon Europe

<https://doi.org/10.2777/18252>

- **Open Access** to research outputs such as publications, data, software, models, algorithms, and workflows
- Early and **Open Sharing** of research, for example, through preregistration, registered reports, pre-prints, and crowd-sourcing solutions to a specific problem.
- Use of **Open Research Infrastructures for knowledge and data sharing**
- Participation in **Open Peer-Review**
- **Open Collaboration** within science and with other knowledge actors involving citizens, civil society, and end-users, such as citizen science.
- Measure to ensure the **reproducibility of results**



## Horizon Europe (HORIZON) – Programme Guide

[https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/guidance/programme-guide\\_horizon\\_en.pdf](https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/guidance/programme-guide_horizon_en.pdf)

## EU Grants AGA – Annotated Model Grant Agreement

[https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/common/guidance/aga\\_en.pdf](https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/common/guidance/aga_en.pdf)



# Open Access to Publications

In Horizon Europe, beneficiaries must provide Open Access to all peer-reviewed publications:

- online and free of charge to the end-user!
- in fully open-access journals or APC-free journals only!
- under CC-BY license!
- without embargo!
- through deposition of post-print or copy of publisher version in a trusted repository (CURIS)!

Beneficiaries must provide information about other research outputs, tools, and instruments to validate the conclusions.

They should provide (early) Open Access to other research output whenever possible, including pre-prints, data, software, algorithms, protocols, models, workflows, electronic notebooks, etc.

Authors must provide their ORCID or ResearcherID.



<https://open-research-europe.ec.europa.eu/>  
Fast publication and open peer review for research stemming from Horizon 2020 and Horizon Europe funding across all subject areas.



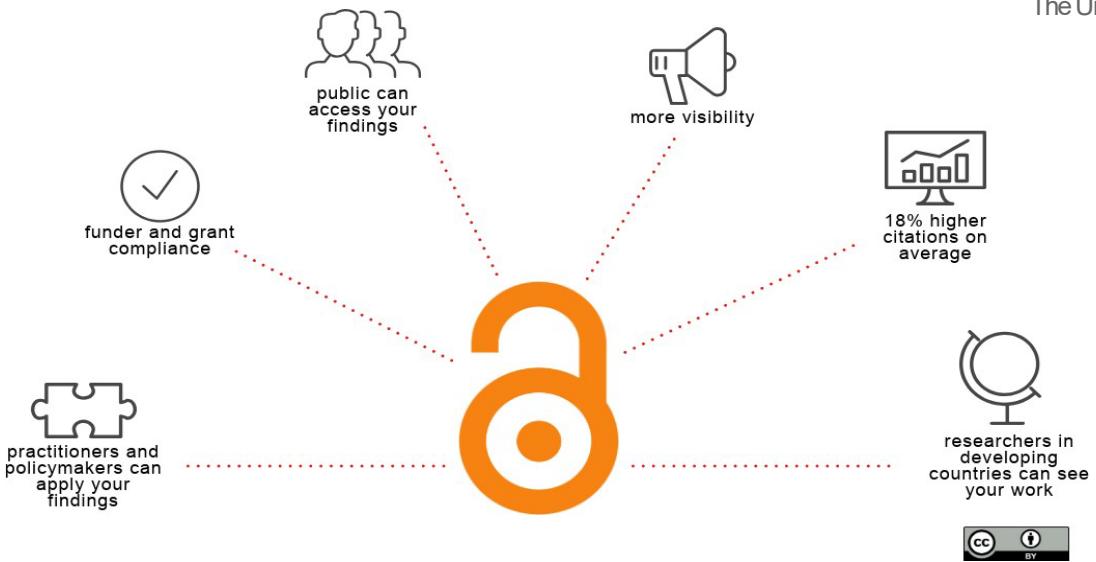
UCPH Journal Finder: <https://ku.chronoshub.io/>

## Webinar: A basic introduction to Open Access

3 May 2023, 13:00-14:00

- The different Open Access routes
- Archiving accepted manuscripts in CURIS
- Publishing with a reduced or waived publishing fee
- How Copenhagen University Library supports researchers in publishing Open Access

<https://kubkalender.kb.dk/event/3975903>



## Webinar: Open Access and Funding compliance

24 May, 13:00-14:00

- The Danish public funds' Open Access conditions
- Open Access conditions from the EU framework programs Horizon 2020 and Horizon Europe
- How to determine the journals' Open Access policies
- How Copenhagen University Library supports researchers in complying with Open Access requirements

<https://kubkalender.kb.dk/event/3975908>

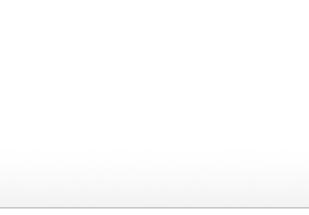
# Research Integrity

Horizon Europe beneficiaries must respect the fundamental principles of research integrity:

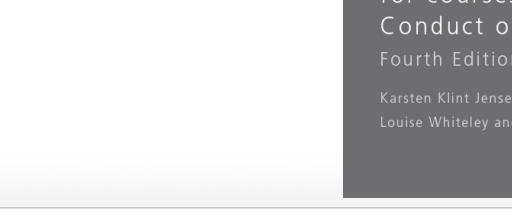
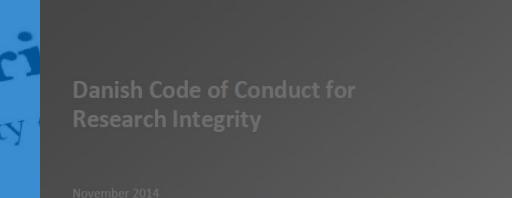
- Reliability in ensuring the quality of research reflected in the design, the methodology, the analysis, and the use of resources
- Honesty in developing, undertaking, reviewing, reporting, and communicating research in a transparent, fair, and unbiased way
- Respect for colleagues, research participants, society, ecosystems, cultural heritage, and the environment
- Accountability for the research from idea to publication, for its management and organization, for training, supervision, and mentoring, and its broader impacts

Beneficiaries must ensure that persons carrying out research tasks follow good research practices, including ensuring, where possible, openness, reproducibility, and traceability, and refrain from the research integrity violations described in the **Code of Conduct**.

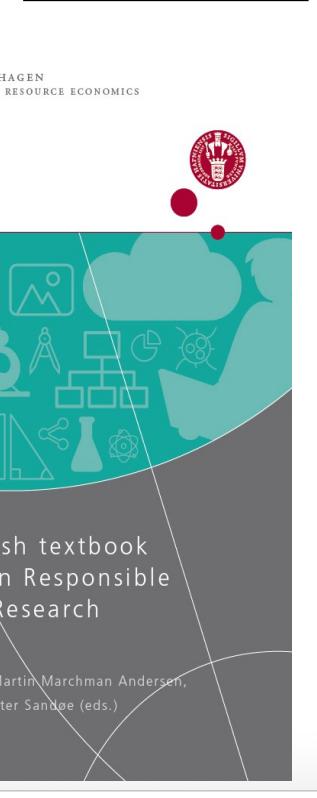
<https://allea.org/code-of-conduct/>



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



<http://ifro.ku.dk/rcr.pdf>



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# FAIR Research Data in Horizon Europe



- ✓ Establish a Data Management Plan (DMP).
- ✓ Make data and metadata FAIR.
- ✓ Deposit data in a 'trusted' repository.
- ✓ Provide open access to deposited data and documentation.
- ✓ Justify any reasons for not making data openly available in the DMP.

**“As open as possible, as closed as necessary.”**

- Legal and contractual obligations/constraints (GDPR, NDAs, copyright)
- Commercial exploitation (IPR, patents)
- Ethical considerations (sensitivity, confidentiality)

# FAIR Data Principles

DOI: 10.1038/sdata.2016.18

The **FAIR Data Principles** are **guidelines** for making research data, code, digital objects, and documentations **Findable, Accessible, Interoperable, and Reusable**.

Drafted by researchers, funders, and publishers in 2016, described in the [Nature article](#): “*The FAIR Guiding Principles for scientific data management and Stewardship.*”

## Please note:

- Open data = Open Access to data = depositing data in a data repository from where they can freely be downloaded.
- **FAIR data ≠ Open data!**
- All open data must be FAIR, but not all FAIR data must be open.



The Magnifying glass, Tap, Gears set, Recycle sig, Storage, Infinity, Discussion, Shield, and Man User icons made by [Freepik](#) from [www.flaticon.com](#) are licensed by CC 3.0 BY. ARDC makes all other icons. The entire FAIR resources graphic is licensed under a [Creative Commons Attribution 4.0 International License](#).

# Findable

## F1. METADATA: Use rich metadata to describe your data

Metadata is data about your data

### Examples

#### Metadata captured by equipment

Contextual metadata added manually; authors, keywords, date, location, information on the data source, how data is arranged, treatment names, devices used, materials, etc.

No  
metadata



Metadata



Rich  
metadata



### Why is metadata necessary?

Help humans/machines understand your data.

Allow machines to carry out searching, sorting, and prioritizing tasks.

# Findable

## F2. Assign **PERSISTENT IDENTIFIERS (PIDS)** to your data sets:

Unique, unbreakable internet links to data sets and other objects



### Examples:

ORCIDs for researchers (<https://orcid.org/0000-0001-9149-527X>)

DOIs for data sets and publications (<https://doi.org/10.1126/science.1184709>)

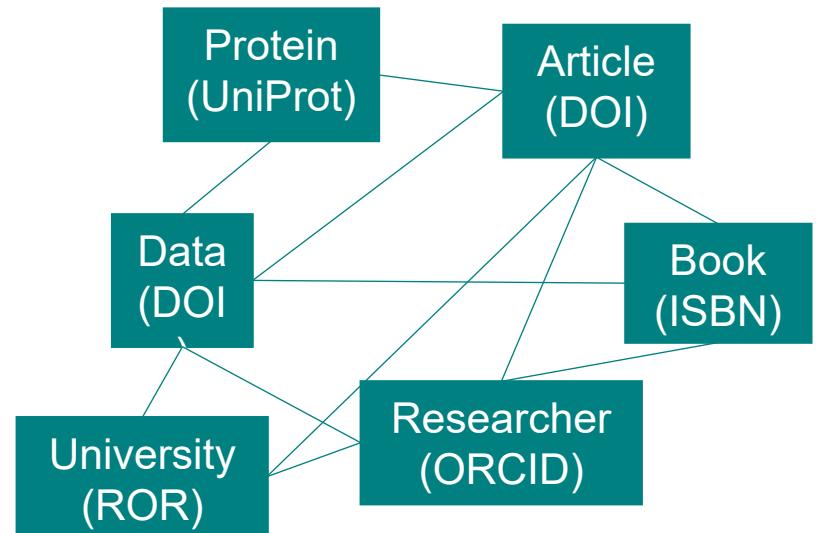
UniProt IDs for proteins (<https://www.uniprot.org/uniprot/P0DP23>)

ISBN for books

### Why are they important?

- Unique identifiers remove doubt as to what it is referred to
- Others can use identifiers to cite your work
- Identifiers can link research objects together, improving findability.

Hanigan, Ivan (2012): Monthly drought data for Australia 1890-2008 using the Hutchinson Drought Index. The Australian National University Australian Data Archive. <http://doi.org/10.4225/13/50BBFD7E6727A>



#### Data availability

Confocal images not included in the manuscript can be found at: <https://doi.org/10.6084/m9.figshare.5279956.v1>. All other data are available from the authors upon reasonable request.

# Findable

## F3. MAKE METADATA SEARCHABLE: Add metadata to the data set in a repository where search engines index them

May 7, 2021

Dataset Open Access

Data set title: Dialogue and Argumentation for Cultural Literacy Learning in Schools: Multilingual Data Corpus

Author names: Rapanta, Chrysi; Cascalheira, Dilar; Gil, Beatriz; Gonçalves, Cláudia; Garcia, D'Jamila; Morais, Rita; Pereira, João Rui; Čermáková, Anna; Maine, Fiona; Peck, Julia; Brummernhenrich, Benjamin; Jucks, Regina; Petronyté, Miglė; Valančienė, Daina; Juskiene, Vaiva; Badaukienė, Ramunė; Eigminienė, Dainora; Stonkuviene, Irena; Zaleskienė, Irena; Garcia-Mila, Mercè; Remesal, Ana; Castells, Nuria; Gilabert, Sandra; Miralda-Banda, Andrea; Luna, Jose; Vrikki, Maria; Evagorou, Maria; Chatzianastasi, Maria; Karousiou, Christiana; Papanastasiou, Elena; Stylianou-Georgiou, Agni; Rodosthenous, Marina; Talli, Cedar; Cohen, Irit; Shalom Greenberg, Chaim; Bar, Noa; Sarfati, Neta; Schwarz, Baruch

Unique identifier (ORCID): This dataset is the Multilingual Corpus of the DIALLS (Dialogue and Argumentation for Literacy Learning in Schools) project ([dials2020.eu/](https://dials2020.eu/)) and consists of a set of transcripts of classroom interactions of students from ages 5 to 15 years old. These classroom interactions took place in seven DIALLS participant countries (UK, Portugal, Germany, Lithuania, Spain, Cyprus, and Israel). The corpus is a set of 202 transcripts in the participant countries' native language (English, Portuguese, German, Lithuanian, Catalan, Cypriot Greek, and Hebrew). The transcripts in each native language range from a maximum of 35 for

Files (12.0 MB)

Name	Size
1.DIALLS_Multilingual_Corpus_description.V2.pdf	408.5 kB
2.DIALLS_Multilingual_Corpus.V2.zip	3.8 MB
3.DIALLS_Multilingual_Corpus.V2.xlsx	7.8 MB

Data set description: md5:5af69a0de34782cf3ccca14fa4b9422  
md5:7fc349a3716163ca48f2f55c8bec628e  
Data set names: https://dials2020.eu/wp-content/uploads/2019/06/D3.1-final.pdf (Project deliverable)  
[https://dials2020.eu/wp-content/uploads/2019/01/D2.3\\_final-submitted.pdf](https://dials2020.eu/wp-content/uploads/2019/01/D2.3_final-submitted.pdf) (Project deliverable)

zenodo

913 views 465 downloads See more details...

Indexed in OpenAIRE

Publication date: May 7, 2021

DOI: DOI [10.5281/zenodo.4742176](https://doi.org/10.5281/zenodo.4742176)

Keyword(s): Multilingual corpus, Education, Classroom Dialogues, European Identity, Cultural Literacy Learning, Dialogical teaching, Argumentation, Cultural Texts, Empathy, Dialogicity

Grants: European Commission:  
• DIALLS - Dialogue and Argumentation for cultural Literacy Learning in Schools (770045)

Related identifiers: Cites  
<https://dials2020.eu/wp-content/uploads/2019/06/D3.1-final.pdf> (Project deliverable)  
[https://dials2020.eu/wp-content/uploads/2019/01/D2.3\\_final-submitted.pdf](https://dials2020.eu/wp-content/uploads/2019/01/D2.3_final-submitted.pdf) (Project deliverable)

Unique identifier (DOI):

Keywords:

# Accessible

## A1. To provide access to data, upload your data in a DATA REPOSITORY

*Discipline or data type specific repository/db*



*Generalist repository*



*Institutional repository*



Browse repositories:  
[www.re3data.org](http://www.re3data.org)

# Accessible

## A2. Indicate MODE OF ACCESS

- **Open Access**
- **Embargoed Access**
- **Restricted Access**
- **No Access**

This is not just about access to DATA but also access to METADATA.

March 2, 2019      Dataset Open Access

### EvoBib: A Bibliographic Database for Historical Linguistics

May 12, 2020      Dataset Embargoed Access

### Transient Electromagnetic data from the Acoculco area in Mexico: raw data

September 11, 2020      Other Closed Access

#### Multi-Point Compositional Measurements of Solar Wind and Transient Phenomena

Yeimy J. Rivera; Aleida Higginson; Susan T. Lepri; Nicholeen M. Viall

White paper for the Heliophysics 2050 workshop on the necessity for continuous  $4\pi$  coverage of compositional measurements to study plasma between the Sun and heliosphere to gain a comprehensive understanding of the solar wind's method of release and its energization.

Files

Closed Access  
Files are not publicly accessible.

Beta Citations 0

Show only:  Literature (0)  Dataset (0)  Software (0)  Unknown (0)  
 Citations to this version

No citations.

115 views      82 downloads  
See more details...

Indexed in **OpenAIRE**

Publication date: September 11, 2020  
DOI: DOI 10.5281/zenodo.4036462  
Keyword(s): solar wind, coronal mass ejection, ion and elemental composition  
Meeting: Heliophysics 2050 Workshop  
Communities: Heliophysics 2050 Workshop White Papers

# Interoperable

## I1. Use **OPEN FILE FORMATS** as much as possible

= Formats that can be used and implemented by anyone

### Examples

CSV for tabular data

RTF for textual data

TIFF for images

NetCDF for geospatial data

HOW DO YOU  
OPEN A .XZQ FILE?



### Please note:

- If you cannot share your data in an open format, provide information on how data sets can be opened
- Take into account the format's obsolescence
- You may consider sharing in multiple formats

# Interoperable

## I2. Use **STANDARDS** common in the discipline / for the data type

**For example:**

**Minimum information:** metadata that, as a minimum, should be included to describe a data set

**Vocabularies:** predefined and authorized terms for metadata

**Taxonomies:** organization of content into hierarchical relationships

**Ontologies:** definitions and relations between metadata elements

**Minimum information about a microarray experiment (MIAME)-toward standards for microarray data**

### 1. Experimental design: the set of hybridisation experiments as a whole

This section describes the experiment, which may consist of one or more hybridisations, as a whole. Normally ‘experiment’ should include a set of hybridisations which are inter-related and address a common question. For instance, it may be all the hybridisations related to research published in a single paper.

- a) author (submitter), laboratory, contact information, links (URL), citations
- b) type of the experiment - maximum one line, for instance:  
normal vs. diseased comparison  
treated vs. untreated comparison  
time course  
dose response  
effect of gene knock-out  
effect of gene knock-in (transgenics)  
shock
  - (multiple types possible)
- c) experimental variables, i.e. parameters or conditions tested (e.g., time, dose, genetic variation, response to a treatment or compound)
- d) single or multiple hybridisations.

For multiple hybridisations:

- serial (yes/no)
  - o type (e.g., time course, dose response)
- grouping (yes/no)
  - o type (e.g., normal vs. diseased, multiple tissue comparison)

Relationships between all the samples, arrays and hybridisations in the experiment. Each sample, each array, and each hybridisation should be given a unique ID, and all the relationships should be listed (with appropriate comments where necessary). For instance:

Samples: S1, S2, S3

# Reusable

**R1. Create sufficient DOCUMENTATION that explains the data. Make this documentation available along with the data.**

- **Data provenance**

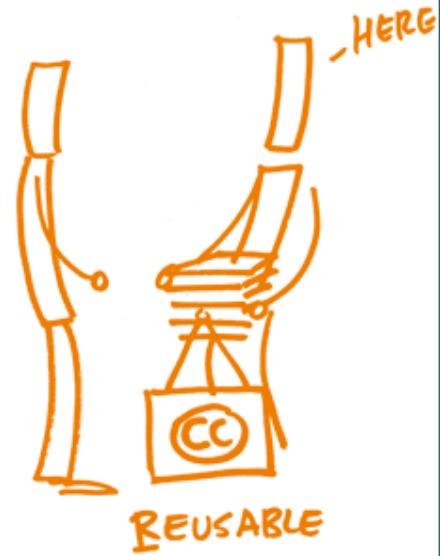
A record trail following the data from its origin to its current form: Origin of the data, who contributed to the data, how many versions there are, etc.

- **Research documentation**

The information necessary, and the appropriate level of detail, so that others can repeat the study: protocol, description of variables, choice of statistics, etc.

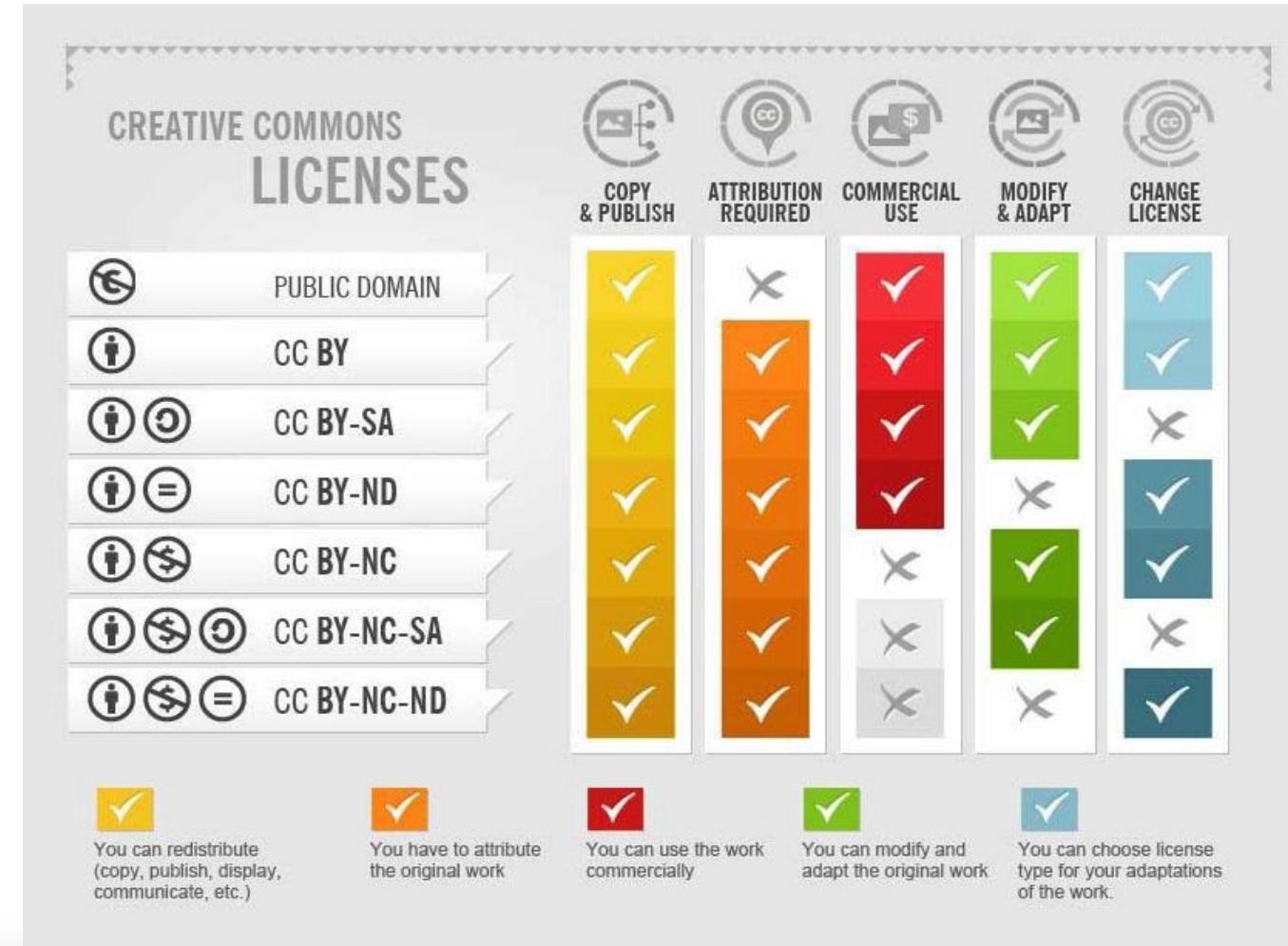
- **Open-source code/software**

If relevant and possible, include open-source code or software in your data.



# Reusable

## R2. Use REUSE LICENSES to communicate how others can reuse your data files



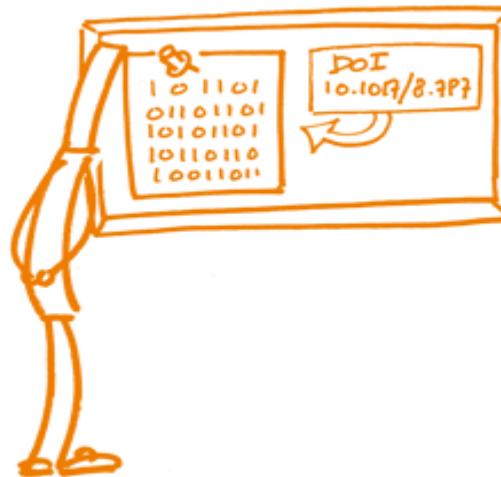
Overview of open licenses  
<https://opendefinition.org/licenses/>

# Summary

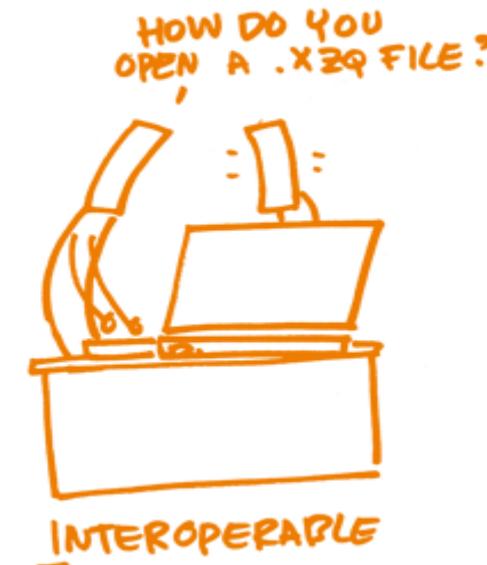
## FAIR DATA PRINCIPLES



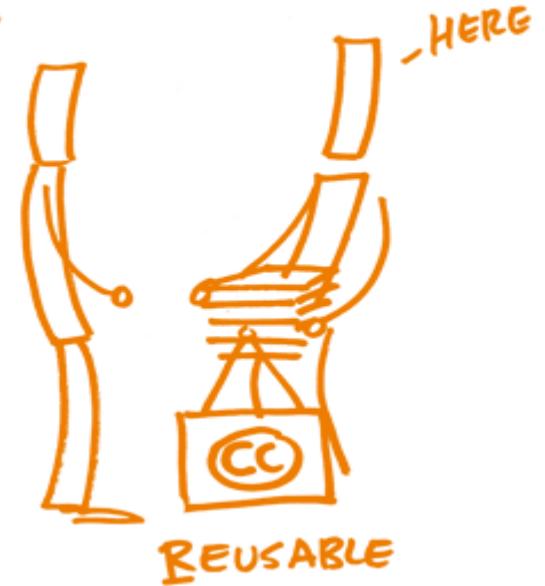
FINDABLE



ACCESSIBLE



INTEROPERABLE



REUSABLE

- ✓ Publish searchable metadata
- ✓ Assign unique, persistent identifiers
- ✓ Upload to public data repository
- ✓ Define access conditions for data and metadata (if any)
- ✓ Use open file formats
- ✓ Use community standards
- ✓ Attach sufficient documentation
- ✓ Add usage license

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# Policy for Research Data Management

## 1. Preface

### 1.1 Introduction

Research data management is a collective term for the planning, collection, storage, sharing and preservation of research data, and it therefore covers the entire research data lifecycle (Figure 1). Good management of research data contributes to improved efficiency and transparency of research processes, and to increased reliability and reproducibility of research results. Thorough planning can ensure compliance with legislation, promote a clear division of responsibilities between collaborators, and safeguard secure storage and handling of data to prevent loss or misuse. For the individual researcher, good data management can lead to improved visibility and impact of their research, for example by facilitating the reuse of their data sets by others.



Figure 1. An illustration of a research data lifecycle

<https://kunet.ku.dk/work-areas/research/data/ucph-policy-for-research-data-management/>

DIRECTIVE (EU) 2019/1024 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL  
of 20 June 2019  
on open data and the re-use of public sector information  
(recast)

<https://doi.org/10.48715/ea59-tp35>

## National strategy for FAIR research data management

Find the National Strategy for Research Data Management based on the FAIR Principles here.



The strategy targets research institutions and research funding foundations. It defines a number of principles and associated areas of action that can strengthen the dissemination and financing of good data management practices, resulting in more FAIR research data (Findable, Accessible, Interoperable, Reusable) in Denmark.

The strategy is part of the implementation of the EU directive on open data and the Danish implementation of this in the PSI Act. It must thus contribute to meeting the expectations of research and society for increasing accessibility of publicly funded research.

DeIC (2021): National strategy for data management based on the FAIR principles. <https://doi.org/10.48715/ea59-tp35>

<http://data.europa.eu/eli/dir/2019/1024/oj>

# Research Data Management – UCPH and SUND requirements

## 2.1 Data management plans

2.1.1 The management of research data must be thoroughly considered before physical materials and digital data are collected, observed, generated, created or reused. Data management plans (DMP) must be developed and documented, preferably in electronic format. As a minimum, the topics addressed in this policy (clauses 2.2-2.7) must be reviewed, for example by using the DMP template provided at UCPH. DMPs should be updated when significant changes to the management of research data occur and (references to) the DMP should be stored with the corresponding research data as long as they exist.

2.1.2 The DMP should be discussed with project collaborators, research managers and supervisors (if any), ensuring that agreements are reached regarding responsibilities for different research data management activities during and after research projects.

UCPH policy for RDM, Jan 2022

## 1. Planning the research project

(1.1) Researchers should design a data management plan (DMP) for the data they will create or collect in their research projects, describing most of the features of the research data lifecycle (Figure 1) and this policy. Information should include as a minimum:

- The origin and type of data to be collected
- Where data will be stored, both during and after the project, and for how long
- Who is responsible for the data collected, both during and after the project
- How and to whom access to data is given, both during and after the project

SUND policy for RDM, April 2016

# Research Data Management in Horizon Europe

- **Funders** have set conditions for the proper management of data (e.g., submission of RDM plans)
- **Journals** have policies regarding research data availability
- **Funders often provide their template**, including data management guidelines. More and more often, university templates are accepted.



Horizon 2020



HORIZON  
EUROPE



UNIVERSITY OF COPENHAGEN  
FACULTY OF HEALTH AND MEDICAL  
SCIENCES



UNIVERSITY OF  
COPENHAGEN

CellPress



# Research Data Management in Horizon Europe

In **Horizon Europe**, beneficiaries must manage their research data in line with the FAIR principles:

- Establish and maintain a Data Management Plan (DMP).
- Justify reasons for not making data openly available.
- Deposit data in a trusted repository.
- Follow applicable metadata standards.
- Assign persistent identifiers and user licenses.

Participants must provide information about other research outputs, tools, and instruments to re-use or validate the data.



- Findable
- Accessible
- Interoperable
- Reusable

<http://doi.org/10.1038/sdata.2016.18>

# Research Data Management on UCPH (Research Portal)

- Working with personal data at UCPH
- UCPH Policy for Research Data Management
- DMPs, incl. Templates & Guidance
- The FAIR principles explained
- Available data storage solutions at UCPH
- Where to get help

## Need help?

Find contact info on the relevant content page  
Or Contact Richard Dennis for [Research Data Management Questions](#)

## Research Portal

### Research Data Management and GDPR

INTRODUCTION TO  
RESEARCH DATA  
MANAGEMENT

GDPR AND RESEARCH  
Working with personal data in  
research projects

### CONTACT

**Research Data Management**  
Contact person for SUND &  
SCIENCE  
Susanne den Boer Beckers  
Senior Adviser Research Data  
Management  
Tel: +45 93 56 52 31  
Email: [datamanagement@ku.dk](mailto:datamanagement@ku.dk)

Contact person for SAMF, JUR,  
TEO, HUM  
Katrine Düring Davidsen  
Senior Adviser Research Data  
Management  
Tel: +45 23 71 27 17  
Email: [datamanagement@ku.dk](mailto:datamanagement@ku.dk)

**Information Security**  
Thomas Schlichting  
Chief Information Security  
Officer (CISO)  
+45 21551288  
[datamanagement@ku.dk](mailto:datamanagement@ku.dk)

**Personal data and GDPR**  
Olga Nielsen  
Data Protection Officer (DPO)  
+45 93 56 50 51  
[dpo@adm.ku.dk](mailto:dpo@adm.ku.dk)

DATA MANAGEMENT  
PLANS

INFORMATION SECURITY  
FOR RESEARCHERS

DATA COLLECTION,  
PROCESSING AND  
ANALYSIS

DATA STORAGE AND  
COLLABORATION

DATA SHARING  
Including data repositories and  
the FAIR principles

DATA PRESERVATION

UCPH POLICY FOR  
RESEARCH DATA  
MANAGEMENT

SUPPORT  
Where to get help with RDM

WORKSHOPS AND  
TRAINING

GLOSSARY

### NEWSLETTER

Subscribe to  
"News about  
GDPR, data  
management and  
information  
security".



# Seminar Outline

- Brief Introduction

## Part 1

- Open Science in HE
- FAIR Data Principles in HE

## Part 2

- Research Data Management in HE

## Part 3

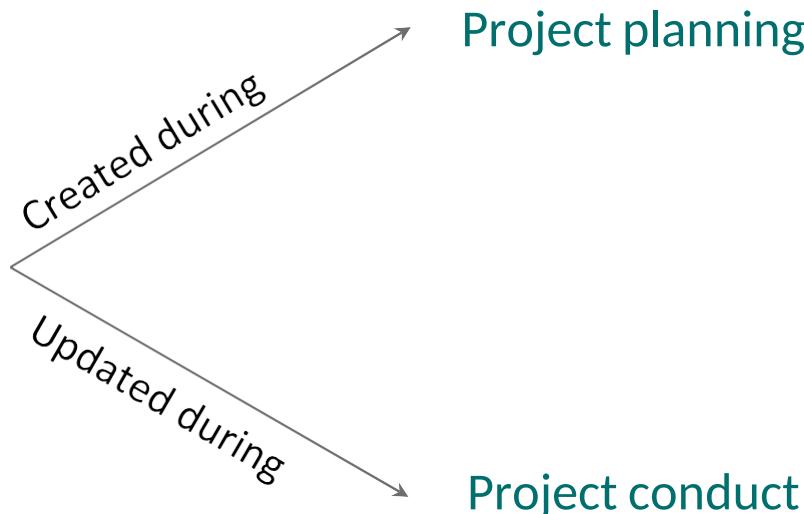
- What is a Data Management Plan? ←
- Demo and Access to DMPonline

## Part 4

- Horizon Europe Data Management Plan Template
  1. Data Summary
  2. FAIR Data
  3. Other Research Outputs
  4. Allocation of Resources
  5. Data Security
  6. Ethics
  7. Other Issues

# Data Management Plan (DMP) – What is it?

A **Data Management Plan (DMP)** is a **formal document** that outlines **how data are to be handled** both **during** a research project and **after** the project is completed.



Research Data Management Lifecycle by [LMA Research Data Management Working Group](#)  
Licensed under a [Creative Commons Attribution-Non-Commercial 4.0 International License](#).

# Data Management Plan:



The **goal** of a data management plan is to consider the many aspects of:

- Data management (throughout the research data lifecycle)
- Metadata generation (documentation of your data)
- Data preservation (storage, archiving, and publishing)
- Analysis before the project begins

**This leads to data being better managed and prepared for preservation in the future.**

**Note:** The DMP is a **living document** that should be updated (yearly)!

# Data Management Plan in Horizon Europe

Beneficiaries must establish a DMP addressing essential aspects of RDM.

Beneficiaries **must submit a DMP as a deliverable** to the granting authority per the Grant Agreement (**usually by month 6**). An **updated DMP deliverable must also be produced mid-project** (for projects longer than twelve months) **and at the end of the project** (where relevant).

**Best practice:** Beneficiaries should maintain the DMP as a living document and **update** it throughout the project **whenever significant changes arise**. This includes but is not limited to the generation of new data, changes in data access provisions or curation policies, attainment of tasks (e.g., datasets deposited in a repository, etc.), changes in relevant practices (e.g., innovation potential, the decision to file for a patent), changes in consortium composition.

**Beneficiaries are encouraged to encode their DMP deliverables as non-restricted, public deliverables** unless there are reasons (legitimate interests or other constraints) not to do so. In the case they are made public, it is also recommended that open access is provided under a OCBY License to allow broad re-use.

[EU Grants: AGA — Annotated Model Grant Agreement: V0.2 DRAFT – 30.11.2021 \(HE Annex 5, 2.2. Open science: research data management, page 157\)](#)

# Data Management Plan in Horizon Europe

## Project Coordinators:

- Submit only one DMP for the whole project.
- Structure the DMP according to Work Packages.
- Collect detailed information from all participants.



## During the project:

- Use the DMP as guidelines for data management in your project.
- Discuss and review the DMP regularly with the project members.
- Update the DMP with new information when available.

Publish your DMP in a repository and register it in OpenAIRE.



# Data Management Plan in Horizon Europe

## First draft:

- ✓ Highlight and address elements of research data management specific to your project.
- ✓ State explicitly when questions are not (yet) applicable.
- ✓ Describe and distinguish between different types of researchdata.
- ✓ Outline your strategy for research datamanagement.
- ✓ Keep the principles of Open Science (including research integrity) in mind.
- ✓ Refer to traditions and best practices (in your field), where possible.
- ✓ Indicate and explain any exemptions from public open access to your researchdata.

REA suggests max. Five pages for MSCAIF/max. 15 pages for MSCAITN (in H2020)

# Data Management Plan Assessment (H2020)

- REA\* project officers and/or external reviewers review the DMP.
- REA project officers use an assessment grid corresponding to the H2020 template.
- DMP needs to demonstrate your strategy for data management, with consensus between project members. It is not a sales pitch!
- PO might give feedback (or not).
- PO might request you to resubmit DMP if the information is missing or your strategy for data management is unclear.

\*Research Executive Agency

## 1. DATA SUMMARY

a. Is header information provided (action ID, acronym, DMP version, name of the DMP responsible)?  
Yes  N/A  No

b. Are the purpose of the data collection and its relation to project objectives explained?  
Yes  N/A  No

c. Are data types and formats specified?  
Yes  N/A  No

d. Is the expected volume of the data estimated?  
Yes  N/A  No

e. Is reuse of pre-existing data described including its origin?  
Yes  N/A  No

f. Is data utility outlined (to whom will the data be useful)?  
Yes  N/A  No

### Recommendations:

## 2. FAIR DATA

### 1. Making data findable, including provisions for metadata

2.1.a Will the data be assigned a unique and persistent identifier and registered in a searchable resource?  
Yes  N/A  No

2.1.b Are data naming conventions described?  
Yes  N/A  No

2.1.c Will the data be described with rich metadata (following standard practices in the field)?  
Yes  N/A  No

### Recommendations:

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## Part 4

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# DMPonline – a tool for data management planning

DMPonline

My Dashboard Create plans Reference Help

Richard Dennis

KØBENHAVNS UNIVERSITET

UCPH Homepage Research Data Management and GDPR (KUnet)

Copenhagen University Library UCPH Support for Data Management Plans

## Create a new plan

Before you get started, we need some information about your research project to set you up with the best DMP template for your needs.

\* What research project are you planning?

mock project for testing, practice, or educational purposes

\* Select the primary research organisation

Københavns Universitet / University of Copenhagen

- or -  No research organisation associated with this plan or my research organisation is not listed

\* Select the primary funding organisation

European Commission

- or -  No funder associated with this plan or my funder is not listed

Which DMP template would you like to use?

Horizon Europe

We found multiple DMP templates corresponding to your funder.

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DeIC

[dmponline.deic.dk](https://dmponline.deic.dk)

to access Horizon Europe Template

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## Part 3

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# Data Management Plan Template in Horizon Europe

## Questions on:

- Type and origin of data
- Reuse of existing data
- Making data and metadata findable
- Making data and metadata accessible
- Making data interoperable
- Increasing data reuse
- Other research outputs
- Resources, costs, and responsibilities
- Data security and ethics



# DMP Template: Data Summary - Questions

## 1. Data Summary

Will you re-use any existing data, and what will you re-use it for?

State the reasons if the re-use of any current data has been considered but discarded.

What types and formats of data will the project generate or reuse?

What is the purpose of the data generation or re-use and its relation to the project's objectives?

What is the expected data size that you intend to generate or re-use?

What is the origin/provenance of the data, either generated or re-used?

To whom might your data be valid ('data utility') outside your project?

# The DMP Template: Data Summary

Data types, formats, and sizes

Origin of the data ('provenance')

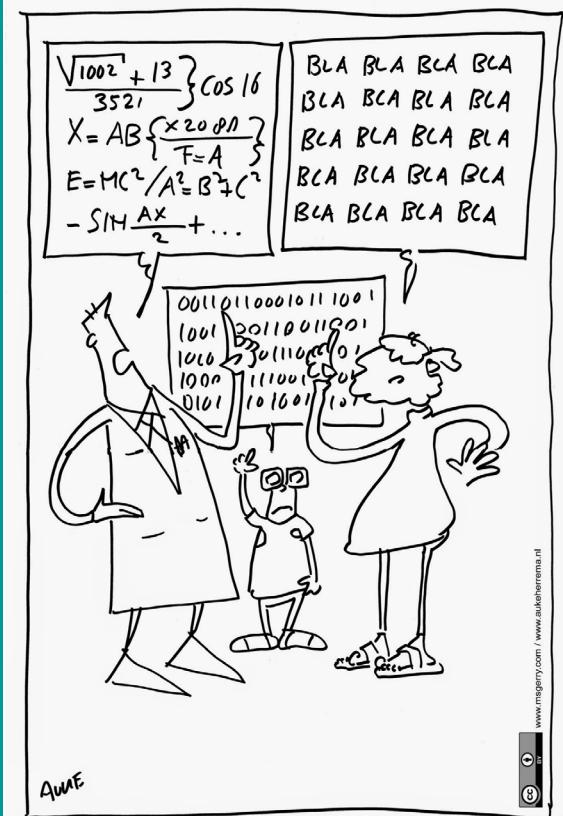
Reuse of existing data

Use of the data within the project ('purpose')

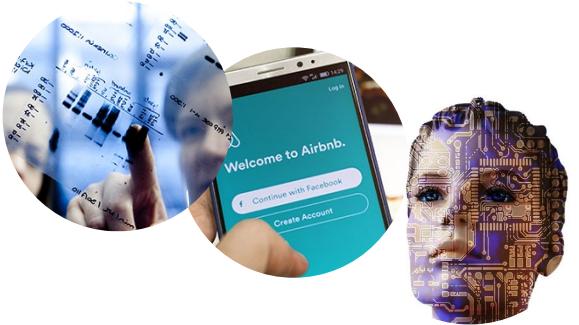
Potential use of the data outside the project ('utility')



[www.aukeherrema.nl](http://www.aukeherrema.nl)



# The DMP Template: Data Summary



- Allocation of resources
- Data security
- Access to data



- Data utility
- Deposition in repository
- Long-term preservation

Data Types	Collaborators
Personal / sensitive data	UCPH Hospital
Confidential data	Public sector
Data with commercial value	Private sector outside DK/EU
Third-party data	Citizens
Big data	...
Physical samples	...
...	...
Target Groups	External Requirements
Own research field	GDPR
Other research fields	Policies
Interest groups	Legal compliance
Policy makers	Ethical guidelines
Industry	Journal Requirements
General public	Research Integrity
...	...



- Reuse of existing data
- Data provenance
- Rights and responsibilities



- Documentation
- Data quality assurance
- Legal or contractual obligations

# The DMP Template: Data Summary

Types, Formats, Sizes	Origin and Provenance	Classification, Security, Ethics	Availability and Restrictions
<p>Measurements:</p> <ol style="list-style-type: none"> <li>1. Mass Spectrometry (proprietary format, around 2GB)</li> <li>2. 3D Electron Spectroscopy (mrc, 2000 images, ~ 100 MB each)</li> <li>3. Catalytic Activity (xlsx, single spreadsheet)</li> </ol>	<ol style="list-style-type: none"> <li>1. Measurements performed at <i>[partner institution]</i> with <i>[equipment]</i>.</li> <li>2. Images collected at <i>[external facility]</i> between <i>[start date]</i> and <i>[end date]</i>.</li> <li>3. Experiments conducted in <i>[lab]</i> at UCPH following procedure described in <i>[reference]</i>.</li> </ol>	<p>All data are non-personal and non-sensitive.</p> <p>Data collected by <i>[external partner]</i> are property of <i>[external institution]</i>. A separate agreement will be set up to specify details regarding access to, usage and dissemination of those data.</p>	<p>Raw data will be made openly available immediately in <i>[discipline-specific repository]</i> under a public license along with relevant documentation.</p> <p>Analyzed data underlying manuscripts will be made available in <i>[general repository]</i> upon publication of the respective article.</p>
<p>Existing Data:</p> <ol style="list-style-type: none"> <li>1. Compiled results from presidential elections in the US between 1788 and 2020.</li> <li>2. Articles from online news portals in the US regarding the presidential elections in 2020.</li> <li>3. Scholarly publications investigating potential biases of online media during the presidential elections in 2020.</li> </ol>	<p>Election data are retrieved from <i>[public database]</i>.</p> <p>Articles are accessed via <i>[online archive]</i>.</p> <p>A systematic review is carried out for available literature using <i>[database 1]</i> and <i>[database 2]</i>.</p>	<p>All data from <i>[public database]</i> are freely available under a CC-BY-NC license.</p> <p>Articles and publications are subject to the terms and conditions specified by their respective copyright holder.</p>	<p>All original data are already publically available.</p> <p>Therefore, the project will only make relevant documentation (e.g. information on search methodologies) and metadata files (including references and access details) openly available through <i>[general repository]</i> at the end of the project.</p>

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# The DMP Template: Findable

## ***Making data findable, including provisions for metadata***

*Will a persistent identifier identify data?*

*Will rich metadata be provided to allow discovery?*

*What metadata will be created? What disciplinary or general standards will be followed? If metadata standards do not exist in your discipline, please outline what type of metadata will be created and how.*

*Will search keywords be provided in the metadata to optimize the possibility for discovery and then potential re-use?*

*Will metadata be offered so that it can be harvested and indexed?*

Findable is about:

- Metadata, including persistent identifiers
- Making metadata searchable

### **Tip 1 – Describe your metadata**

You are being asked about metadata repeatedly (also in I and R). Here, focus on metadata that aid findability.

### **Tip 2 – Keep your data repository of choice in mind when answering**

- Investigate what your repository can do to make data findable
- Does it offer an option to add a persistent identifier to the data?
- Can you enter keywords?
- What is its policy to make metadata searchable?

# Example answer for Findable

## **Example answer 1 (e.g., if you have not yet selected a repository)**

“I aim to deposit my data set and the associated metadata in a repository that allows me to attach a digital identifier (DOI) to my data set. The repository should be set up so that the metadata I include are discoverable (indexed) by search engines such as Google. The metadata that I will include to facilitate findability is, as a minimum: author name, data set title and keywords describing my research topic (using as many standard terms as possible in my field), data type, and data format.”

## **Example answer 2 (e.g., if you have selected a repository)**

“All research data are stored in the repository Zenodo in the community “ROMSOC H2020-MSCA-ITN”. Zenodo allows us to describe our data with metadata (including keywords), which it registers and indexes in searchable resources. Zenodo also automatically assigns a DOI (Digital Object Identifier) to every published record and version to allow globally unique and persistent identification of the data. Research data can be linked to the corresponding publications and vice versa via their DOIs.”

# Example answer for Findable

## Example 3 (metadata according to a standard)

"Metadata is being modeled from "A Model Information Management System for Ecological Research, Rick C. Ingersoll, Tim R. Seastedt, and Michael Hartman, BioScience Vol. 47, No. 5 (May 1997), pp. 310-316"

For each data set, we will, as a minimum, record the following metadata:

- Title of the data set
- Creator
- Location: ID, name, description, latitude, longitude
- Climate: temperature, humidity
- Date and time
- Equipment used
- Descriptive keywords covering the topic, methods
- Variables
- Version

Metadata will be saved in .csv format along with the data set."

# The DMP Template: Accessible (1/3)

## ***Making data accessible: Repository***

*Will the data be deposited in a trusted repository?*

*Have you explored appropriate arrangements with the identified repository where your data will be deposited?*

*Does the repository ensure that the data is assigned an identifier? Will the repository resolve the identifier to a digital object?*

Accessible is about:

- Repositories
- Making data accessible
- Making metadata accessible



A trusted repository

- Can ensure > 5 years of data storage
- Are recognized by researchers in the field
- Are run by active, reputational organisations
- May have a certificate / seal to indicate that they are trustworthy

Arrangements with the identified repository

- Do you have to pay money to upload data?
- Do you have to be a member?
- What are the rights to data & metadata?
- Does the repository meet the needs for e.g. security, access, long-term preservation defined in the project?

# The DMP template: Accessible (2/3)

## Making data accessible: Data.

*Will all data be made openly available? If specific datasets cannot be shared (or need to be shared under restricted access conditions), explain why, clearly separating legal and contractual reasons from intentional restrictions. Note that in multi-beneficiary projects, specific beneficiaries can keep their data closed if opening their data goes against their legitimate interests or other constraints as per the Grant Agreement.*

*If an embargo is applied to give time to publish or seek the protection of the intellectual property (e.g., patents), specify why and how long this will use, bearing in mind that research data should be made available as soon as possible.*

*Will the data be accessible through a free and standardized access protocol?*

*If there are restrictions on use, how will access be provided to the data, both during and after the end of the project?*

*How will the identity of the person accessing the data be ascertained?*

*Is there a need for a data access committee (e.g., to evaluate/approve access requests to personal/sensitive data)?*

Accessible is about:

- Repositories
- Making data accessible
- Making metadata accessible

What data are made openly available, which data are not available at all, and which data have restricted access?

➤ Lists datasets, their access methods reasoning for choosing that access method.

Embargo = a period of time in which the data is not available

Free standardized access protocol = easy web access protocol that is not proprietary.

In case of restricted access: What are the conditions for access? What is the procedure for verifying that these conditions are met? Who decides whether access is provided (person or group of persons)?

# The DMP Template: Accessible (2/3)

## Making data accessible: Data.

Will all data be made openly available? If specific datasets cannot be shared (or need to be shared under restricted access conditions), explain why, clearly separating legal and contractual reasons from intentional restrictions. Note that in multi-beneficiary projects, specific beneficiaries can keep their data closed if opening their data goes against their legitimate interests or other constraints as per the Grant Agreement.

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If there are restrictions on use, how will access be provided to the data, both during and after the end of the project?

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Accessible is about:

- Repositories
- Making data accessible
- Making metadata accessible

## **Translation:**

- What data are made openly available, which data are not available at all, and which data have restricted access?
  - > Lists datasets, their access methods & reasoning for choosing that access method.
- Embargo = a period of time in which the data is not available
- Free standardized access protocol = easy web access protocol that is not proprietary.
- In case of restricted access:
  - What are the conditions for access?
  - What is the procedure for verifying that these conditions are met?
  - Who decides whether access is provided (person or group of persons)?

# The DMP Template: Accessible (3/3)

## Making data accessible: Metadata

*Will metadata be made openly available and licenced under a public domain dedication CC0, as per the Grant Agreement? If not, please clarify why. Will metadata contain information to enable the user to access the data?*

*How long will the data remain available and findable? Will metadata be guaranteed to remain available after data is no longer available?*

*Will documentation or reference about any software be needed to access or read the data be included? Will it be possible to include the relevant software (e.g. in open source code)?*

Accessible is about:

- Repositories
- Making data accessible
- Making metadata accessible

CC0 for metadata = all rights waived. Metadata are openly available and freely reusable, no credit should be given. Default under Horizon Europe.

If specific software is needed to open the datasets, either include the software when you upload the data or refer to it in the metadata.

# The DMP Template: Accessible (3/3)

## Making data accessible: Metadata

As per the Grant Agreement, will metadata be made openly available and licensed under a public domain dedication CC0? If not, please clarify why. Will metadata contain information to enable the user to access the data?

How long will the data remain available and findable? Will metadata be guaranteed to remain available after data is no longer available?

Will documentation or reference about any software be needed to access or read the data be included? Will it be possible to include the relevant software (e.g., in open-source code)?

Accessible is about:

- Repositories
- Making data accessible
- Making metadata accessible

CC0 for metadata = all rights waived.

**Metadata** is openly available and freely reusable; no credit should be given. Default under Horizon Europe.

If specific software is needed to open the datasets, either include the software or refer to it in the metadata.

# Example answer for Accessible

## Example answer (describing which datasets will not be shared and why)

“The different types of data that are generated during the project for the four demonstrator sites or for general purpose are open by default with the following general exceptions:

- ***copyright and permissions for reusing third-party data sets***

Processing and combining input data from many different sources may lead to unclear IPR situations regarding the generated output data; therefore, such repurposed data (e.g., model output data) can only be made open if any of the underlying data (e.g., model input data) is open, too.

- ***personal data treatment and confidentiality issues***

Datasets referring to the quality and quantity of specific elements at risk, such as people and critical infrastructures, are not open by default as their publication may pose privacy, ethical or security risks.

- ***data-driven business model***

Data that is exploited commercially through the MyClimateService.eu marketplace will not be made open.“

# Example answer for Accessible

**Describing how access will be given using information provided by the repository.**

“Data and metadata will be made freely available via the repository Zenodo.

(Meta)data are retrievable using the open, free and universally implementable protocols OAI-PMH and REST API.

The metadata will be licensed under public domain (CC0) and no authorization is necessary to retrieve the metadata.

Metadata will be accessible even if the data are no longer available, stored in high availability database servers at CERN. CERN guarantees a minimum storage period of 20 years for data and metadata.”

# The DMP Template: Interoperable

## ***Making data interoperable***

What data and metadata vocabularies, standards, formats or methodologies will you follow to make your data interoperable to allow data exchange and re-use within and across disciplines? Will you follow community-endorsed interoperability best practices? Which ones?

In case it is unavoidable that you use uncommon or generate project specific ontologies or vocabularies, will you provide mappings to more commonly used ontologies? Will you openly publish the generated ontologies or vocabularies to allow reusing, refining or extending them?

Will your data include qualified references to other data (e.g. other data from your project, or datasets from previous research)?

Interoperable is about:

- Standards for describing data
- File format

What will you do to standardize your data set as much as possible?

- What disciplinary standards will you use?
- Or: How do your home-built ontologies relate to other disciplinary ontologies?

Show how your data relate to other data (code, publications, interview guides, standard codebooks). Where possible, refer to these data using persistent identifiers.

# The DMP Template: Reusable

## Increase data re-use

*How will you provide documentation needed to validate data analysis and facilitate data re-use (e.g. readme files with information on methodology, codebooks, data cleaning, analyses, variable definitions, units of measurement, etc.)?*

*Will your data be made freely available in the public domain to permit the widest re-use possible? Will your data be licensed using standard reuse licenses, in line with the obligations set out in the Grant Agreement?*

*Will the data produced in the project be useable by third parties, in particular after the end of the project?*

*Will the provenance of the data be thoroughly documented using the appropriate standards?*

*Describe all relevant data quality assurance processes.*

Reusability is about:

- Providing information so others understand your data
- Providing information so that others understand how to reuse your data

What information is necessary for others to understand the data and repeat the project? How will you make this info available?

Do you have conditions for reuse? Who can reuse your data? Will you use a standard license (e.g. CC) to communicate these conditions?  
>Repositories often allow you to choose a license when you upload data

Provenance: history of what happened to the data until now. Part of the metadata.

What did you do to ensure the quality of the data? How will you add that info? e.g. Peer review of project plan, interview guides, code, data. Inclusion/exclusion criteria. Pilot studies. Calibration of equipment. Controls, etc.

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# The DMP Template: Allocation of resources

## 4. Allocation of resources

*What will the costs be for making data or other research outputs FAIR in your project (e.g., direct and indirect costs related to storage, archiving, re-use, security, etc.)?*

*How will these be covered? Note that costs related to research data/output management are eligible as part of the Horizon Europe grant (if compliant with the Grant Agreement conditions)*

*Who will be responsible for data management in your project?*

*How will long-term preservation be ensured? Discuss the necessary resources to accomplish this (costs and potential value, who decides and how, what data will be kept, and for how long).*

### **Investigate costs at project start!**

- What additional resources are needed to deliver your plan?
- Is additional specialist expertise (or training for existing staff) required?
- Do you have sufficient storage and equipment or do you need to pay for more?
- Will charges be applied by data repositories?
- Have you budgeted for time and effort to prepare the data for sharing / preservation?

### **Discuss responsibilities with collaborators at project start**

- Who covers any additional costs for data management?
- Who manages the data during the project?
- Who curates the data after the project (preservation)?
- Who is the contact person for the data?
- Who is responsible for ensuring that all legal, ethical and contractual obligations are upheld?

Where, how, in what format and how long will you preserve data after project end, what does this cost?

# What are the **costs** for making data FAIR?

## **Example answer** (costs for preservation)

"The main task to be undertaken to ensure data is FAIR, is the deposition of the final dataset with the Archaeology Data Service, estimated at 1200 euros. These archiving costs are one-off and cover the management and preservation of the dataset for eternity."

## **Example answer** (costs for data management services)

"For the statistical analyses of WP2, we will employ a statistician at the University of Heidelberg. The costs for this will correspond to 2 days of full-time work, and will amount to approximately EUR xxx."

# Who will be responsible for Data Management in your project?

**Project Coordinator:** The PC is responsible for **overall data management** in the framework of PROJECT Z, including elaborating the DMP and its updates. The PC coordinates with Work Package Leaders to **determine whether and how the data collected/generated by the project will be shared and become available for re-use.**

**Work Package Leaders:** The WPL is responsible for **coordinating the implementation of the data processing activities** performed under the WPs they are leading. They are the main ones responsible for **assuring the quality of the data.**

**Data managers:** Data managers are tasked to **collect, digitize, anonymize, store, destroy and/or otherwise process** data for the specific purpose of the activity in which it has been collected/generated within the framework of the project."

# The DMP Template: Data security

## 5. Data security

*What provisions are or will be in place for data security (including data recovery and secure storage/archiving and transfer of sensitive data)?*

*Will the data be safely stored in trusted repositories for long term preservation and curation?*

### Tip 2

Examine [UCPH information security guidelines](#).

If you work with personal data, check UCPH procedures [here](#).

### Tip 1: Determining data storage and security approach:

- 1) Always start with a **data classification**
  - What data will I work with?
  - Are these data sensitive? confidential? potentially patentable?
- 2) Then conduct a **risk assessment** for the solution you have in mind.  
What could go wrong?  
Is there a risk that...
  - ...unauthorized people get access to the data?
  - ...data/materials are lost or misplaced?
  - ...data/materials are altered without you knowing?
  - ...data become inaccessible for shorter or longer periods?
- 3) Identify the **consequence** for the researcher, project and workplace/company etc. if the above happens? The larger the consequence the more you should focus on security.
- 4) When designing a secure set-up for data storage, consider:
  - The **IT solution** to store and back up the digital data AND
  - Any **physical measures** you should take AND
  - Your **procedures** (behavior) when handling the data AND
  - **Who should have which responsibility** for data storage in collaborative projects

**Q: What provisions are in place for data security (including data recovery, secure storage, and transfer of sensitive data)?**

**Example answer** (non-sensitive data sets)

“I will store the master copy of my data behind a firewall on university servers. Here, they will be automatically backed up and therefore be retrievable in case of accidental data loss.”

**Example answer** (sensitive data sets)

“Digital data sets, as well as the associated documentation that identifies the participants in the study (ID key), are stored on a secure university drive (S drive) where all activities are logged. Only project participants can access the digital data files, and only the project PI can access the ID key. A subset of the samples will be sent to German university X for analysis Y using the Sensitive Information Facility (SIF), a secure platform for sharing sensitive data at UCPH. A data processing agreement will be set up, specifying the security requirements the German university must have to manage our samples.”

# Seminar Outline

- Brief Introduction

## Part 1

- Open Science in HE
- FAIR Data Principles in HE

## Part 2

- Research Data Management in HE

## Part 3

- What is a Data Management Plan?
- Demo and Access to DMPonline

## Part 4

- Horizon Europe Data Management Plan Template
  - 1. Data Summary
  - 2. FAIR Data
  - 3. Other Research Outputs
  - 4. Allocation of Resources
  - 5. Data Security
  - 6. Ethics
  - 7. Other Issues



# The DMP Template: Other issues

## 7. Other issues

Do you, or will you, use other national/funder/sectorial/departmental procedures for data management? If yes, which ones (please list and briefly describe them)?

**Policies for research data management (RDM):**  
[University policy](#)

**Codes of Conduct for Research Integrity:**  
[National](#) or at the [University of Copenhagen](#)

**Other policies/ guidelines:**

[Policy for information security](#)

[Code for good scientific practice in collaboration](#)

[Code for authorship](#)

Good clinical practice guidelines

[SUND guidelines about the use of animals](#)

[SUND guidelines for work with human biological materials](#)

[UCPH guidelines for working with personal data](#)

Etc. Etc.

# Training



[vidensportalen.deic.dk/rdmlearn](http://vidensportalen.deic.dk/rdmlearn)

HOW TO  
**FAIR**  
[howtofair.dk](http://howtofair.dk)



4eu+  
Open for you!  
An introduction series to open science  
*Everything you always wanted to know about open science but were afraid to ask!*

The banner features a blue background with white text. It includes the 4eu+ logo, the slogan 'Open for you!', and a subtitle 'An introduction series to open science'. Below this, a quote in italics reads 'Everything you always wanted to know about open science but were afraid to ask!'. To the right of the banner is an illustration of a hand holding an open book, with various scientific and educational icons (lightbulbs, brain, microscope, DNA helix) floating above it.

[4euplus.eu/4EU-273.html](http://4euplus.eu/4EU-273.html)

The Novo Nordisk Foundation Center for Stem Cell Medicine (reNEW) is supported by a Novo Nordisk Foundation grant number NNF21CC0073729

**GO FAIR**  
[www.go-fair.org/fair-principles](http://www.go-fair.org/fair-principles)



[fosteropenscience.eu](http://fosteropenscience.eu)

Open Access Journals  
Predatory Publishers  
Open Research Software  
Citizen Science  
Research Integrity  
Research Impact



# UCPH-recommended Data Storage and Collaboration solutions

	<b>Normal data</b>	<b>Sensitive data</b>
Working by yourself	Personal drive (P/H)	Personal drive (P/H)
Collaborating with UCPH employees	Group drive (Q/I) MS One Drive for Business	S drive
Collaborating with externals	MS One Drive for Business Electronic Research Data Archive – <a href="#">ERDA</a>	Bluewhale plug-in for email Sensitive Information Facility – <a href="#">SIF</a> + legal documents/approvals for transfer

# Suggestions

- First versions don't have to be perfect
- Look at example DMPs; there are many online
- Look at existing guidance to write a DMP

!!!Guidance for the Horizon Europe template in DMPonline

- Ask others
  - Colleagues who have already written a DMP
  - Data management support person at Central UCPH, the Faculties, or Library
  - Ask Richard

# Useful resources

**Example Data Management Plans:**

[OpenAIRE](#), [Zenodo](#), [DCC](#), [RIOjournal](#), [LIBER](#)

**Calculate costs for research data management:**

[National Coordination Point for RDM \(Netherlands\)](#)

**Browse for a repository to share and/or archive research data:**

[www.re3data.org](#)

**About metadata standards:**

[DCC](#)

**About Horizon Europe**

Guides <http://www.openaire.eu/guides>

Factsheets <http://www.openaire.eu/factsheets>

# Faculty of Health and Medical Sciences (SUND)

## Personal data

Email: [data@sund.ku.dk](mailto:data@sund.ku.dk)

Person: SUND HR team

Questions about registration of personal data projects

## Post-award fellowship support

Email: [funding@sund.ku.dk](mailto:funding@sund.ku.dk)

Person: *Kristine Impgaard Sørensen*

Amendments (e.g., maternity/paternity leave), reporting, and all other issues

## Finance

Please contact your project accountant from SUND Accounting (your supervisor will know his/her name).

## HR

Email: [SUND-HR-INT-RAADGIVNING@sund.ku.dk](mailto:SUND-HR-INT-RAADGIVNING@sund.ku.dk)

Transforming  
lives with stem  
cell medicine



## Questions and Answer

Thank you for your Attention

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