### D A T A M A N A G E M E N T P L A N





EVROPSKÁ UNIE Evropské strukturální a investiční fondy Operační program Výzkum, vývoj a vzdělávání



#### 2021-10-21



## Seminar for PhD students, Faculty of Science, MU Data Management Plan

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2021-10-21



## **Research Data Life-Cycle**

## **Research Data Life-Cycle**



Source: ELIXIR RDMkit, https://rdmkit.elixir-europe.org/

- What data you are (re)using
  - including licensing allowing you to do so,
- what data you generate and how,
- where you store them, back them up,
- store them for the long term,
- how you persistently and uniquely identify them,
- process them,
- analyse them,
- where you publish and share them,
- who will pay for all these data handlings;
- what the data really is about,
- for what the data is suitable,
- who can reuse the data,
- what particular data supports your results,
- how to use them to repeat your experiments etc.



# **FAIR Principles**

# **FAIR Principles – Findable**

The first step in (re)using data is to find them. Metadata and data should be easy to find for both humans and computers. Machine-readable metadata are essential for automatic discovery of datasets and services, so this is an essential component of the **FAIRification process**.

- F1. (Meta)data are assigned a globally unique and persistent identifier.
- F2. Data are described with rich metadata (defined by R1 below).
- F3. Metadata clearly and explicitly include the identifier of the data they describe.
- F4. (Meta)data are registered or indexed in a searchable resource.

Source: GO FAIR, https://www.go-fair.org/fair-principles/

# **FAIR Principles – Accessible**

Once the user finds the required data, she/he/they need to know how can they be accessed, possibly including authentication and authorisation.

- A1. (Meta)data are retrievable by their identifier using a standardised communications protocol.
  - A1.1 The protocol is open, free, and universally implementable.
  - A1.2 The protocol allows for an authentication and authorisation procedure, where necessary.
- A2. Metadata are accessible, even when the data are no longer available.

Source: GO FAIR, https://www.go-fair.org/fair-principles/

# **FAIR Principles – Interoperable**

The data usually need to be integrated with other data. In addition, the data need to interoperate with applications or workflows for analysis, storage, and processing.

- I1. (Meta)data use a formal, accessible, shared, and broadly applicable language for knowledge representation.
- I2. (Meta)data use vocabularies that follow FAIR principles.
- I3. (Meta)data include qualified references to other (meta)data.

Source: GO FAIR, https://www.go-fair.org/fair-principles/

# **FAIR Principles – Reusable**

The ultimate goal of FAIR is to optimise the reuse of data. To achieve this, metadata and data should be well-described so that they can be replicated and/or combined in different settings.

- R1. (Meta)data are richly described with a plurality of accurate and relevant attributes.
  - R1.1. (Meta)data are released with a clear and accessible data usage license.
  - R1.2. (Meta)data are associated with detailed provenance.
  - R1.3. (Meta)data meet domain-relevant community standards.

Source: GO FAIR, <a href="https://www.go-fair.org/fair-principles/">https://www.go-fair.org/fair-principles/</a>



## **Data Management Plan**

# **DMPlanning vs. DMPlan**

### 1. Data Management Planinng

"The **process** of planning, describing, and communicating the life cycle of data and the activities associated with its management during research."

### 2. Data Management Plan (DMP)

"A **document** that describes these activities (documents are often required by grant or grant providers)."

Source: Petra Dědičová, Data management a jak psát data management plan https://www.slideshare.net/butlibrary/data-management-a-jak-pst-data-management-plan-41441697

## **Research Funding Agencies Requirements**

- More and more common to require DMP as a standard part of the project.
- Horizon Europe wants
  - an initial DMP,
  - the DMP in the middle of the project,
  - the final DMP.
- DMP is a living document should be kept up-todate during the project.

## **DMPonline**

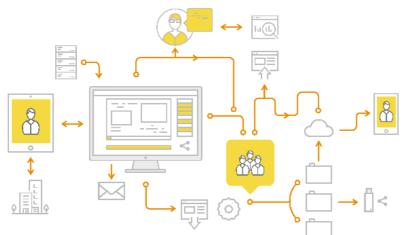
Home

### https://dmponline.dcc.ac.uk/

c DMPs Funder requiremen

#### Plan to make data work for you

Data Management Plans that meet institutional funder requirements.



Sign in	Create account
* Email	
* Passw	ord
Forgot pa	assword?
🗌 Remer	nber email
Sign in	
	- or -
Sign ir	n with your institutional credentials

DMPonline helps you to create, review, and share data management plans that meet institutional and funder requirements. It is provided by the Digital Curation Centre (DCC).





🕅 Language 🗸

### **DMPonline – Public DMPs**

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Public DMPs Fund

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#### Public DMPs

Public DMPs are plans created using the DMPonline service and shared publicly by their owners. They are not vetted for quality, completeness, or adherence to funder guidelines.

Project Title 🗢	Template 🗢	Organisation	Owner	Download
EXPECTPERCEPT - How our expectations can make us hallucinate: the neural mechanisms underlying perception	ERC DMP	University College London	Peter Kok	
TEST - Studie on metamorphose - TEST	Uppsala University - data management plan	Uppsala University	Jacob Hakansson	
Wellbeing Project During COVID-19	EUR Data Management Plan	Erasmus University Rotterdam	Sophie Sweijen	
Fieldlab Besmettingsrisicoanalyse	TU Delft Data Management Questions	Delft University of Technology	Daniel Brus	
Validation Studies of a Questionnaire for Evaluating Human Interaction with An Artificial Social Agent	TU Delft Data Management Questions	Delft University of Technology	Siska Fitrianie	ß
DEVELOPMENT OF A PROJECT RISK MANAGEMENT FRAMEWORK A STUDY OF AFRICAN MAJOR ECONOMIES	University of Manchester Generic Template	University of Manchester	BABATUNDE DOSUMU	ß
Quantum-accelerated algorithmic feature learning	TU Delft Data Management Questions	Delft University of Technology	Aritra Sarkar	
Radiocarbon geochronology of the Southern Brazilian upper margin: Data revision and new information	DCC Template	Other	Michel Michaelovitch de Mahiques	
Long Distance Accessibility By Air Transportation Focus Group Meeting	TU Delft Data Management Questions	Delft University of Technology	Sihyun Yoo	
Uncertainty, Ambivalence and Doubt: 'Indo-Guyanese' futures in the context of oil, flooding, and COVID-19	ESRC Template	London School of Economics and Political Science	Rhys Madden	Þ

### **DMPonline – Public DMPs: Example**

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Radiocarbon geochronology of the Southern Brazilian upper margin: Data revision and new information

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 Radiocarbon geochronology of the Southern Brazilian upper margin: Data revision and new information

Data Collection

Documentation and Metadata

Ethics and Legal Compliance

Storage and Backup

Selection and Preservation

Data Sharing

Responsibilities and Resources Radiocarbon geochronology of the Southern Brazilian upper margin: Data revision and new information

#### **Data Collection**

Radiocarbon data from published and unpublished scientific papers

The data was partially determined by research funds. Other data refer to published scientific papers. All of the papers are cited

#### **Documentation and Metadata**

All of the data will be available as an MS Excel file

#### Ethics and Legal Compliance

Most of the data belong to me. The rest is already published and, thus, public

I am the owner of most data. The remaining data are already published

#### Storage and Backup

The data will be stored at a data bank belonging to the University of São Paulo

The data are open for access (reading). Changes will be performed by myself

#### Selection and Preservation

### **DMPonline – Funder Requirements**

Public DMPs Fun

Funder requirements He

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#### Funder requirements

Templates for data management plans are based on the specific requirements listed in funder policy documents. The DCC maintains these templates, however, researchers should always consult the funder guidelines directly for authoritative information.

Q	Sea	rch				
Template Name 🔶	Download	Organisation Name 🗘	Last Updated 🗘 🗘	Funder Links	Create a new plan	Sample Plans (if available)
AHRC Data Management Plan	w (2)	Arts and Humanities Research Council (AHRC)	28-05-2020	Data Management Plan guidance Data Management Points	0 6	Religious studies DMP from Bristol Language studies DMP from Glasgow UK and German International Criminal Co-operation example from Robert Gordon University
BBSRC Template		Biotechnology and Biological Sciences Research Council (BBSRC)	16-05-2019	BBSRC policy on DMPs	0 🖪	TRDF Grant DMP from Cambridge Drosophila Genetics DMP from Glasgow
Data Management Plan NWO (September 2020)	<b>N</b>	Netherlands Organisation for Scientific Research (NWO)	26-10-2020	NWO Data management protocol NWO	0	
Datamanagement ZonMw-template 2016-2018	<b>W</b> 🖄	ZonMw (Nederlands)	16-06-2020	ZonMw FAIR data management (2016-2018)	0	ischemic heart disease example
Data management ZonMw-template 2019	w 🖄	ZonMw (Nederlands)	15-06-2020	ZonMw FAIR data management (2019)	06	
DCC Template	w B	Digital Curation Centre	15-06-2020		•	
EPSRC Data Management Plan	<b>W</b> 🖌	Engineering and Physical Sciences Research Council (EPSRC)	16-05-2019	Policy framework on research data	0	Synthetic chemistry example from Glasgow
ERC DMP	w B	European Research Council (ERC)	18-10-2018		•	



### https://argos.openaire.eu/

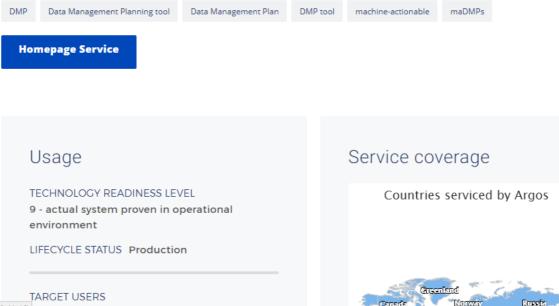
SERVICES SUPPORT OPEN SC

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#### Argos

#### Plan and follow your data. Create, Configure, Link, Share DMPs.

Argos (argos.openaire.eu) is the online machine-actionable tool developed by OpenAIRE to facilitate Research Data Management (RDM) activities concerning the implementation of Data Management Plans (DMPs). It is an open, extensible and collaborative tool which follows global standards as endorsed by the Research Data Alliance (RDA). Argos uses OpenAIRE guides created by its RDM Task Force to familiarize users with basic RDM concepts and guide them throughout the process of describing their data. It also utilises the OpenAIRE pool of services and inferred sources to make DMPs more dynamic in use and easier to be completed and published. Argos is based on the OpenDMP open source software, developed in collaboration with EUDAT CDI.



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#### 2020-11-16)

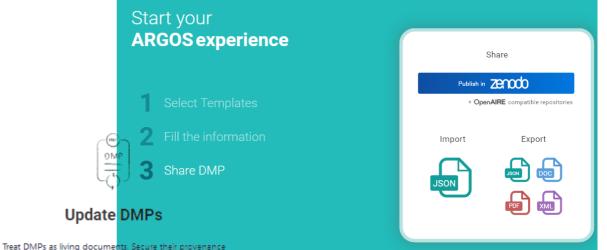
researchers: research communities: research administrators; research institutions; academic libraries: research libraries: funders

## **Argos – Features**



#### Produce DMP outputs

Close the data management planning lifecycle by publishing your DMPs in a FAIR manner. Assign licenses, PIDs and publish DMPs in a repository of your choice.



5

#### Re-use datasets & templates

Identify datasets to be re-used in your DMP. Copy or clone dataset descriptions to other DMPs.



#### **Customise dataset descriptions**

Differentiate DMPs from dataset descriptions. Describe your datasets with more than one template and tailor its content to your specific needs.

### DIMP

and continue work in new versions (new DOIs assigned).

#### Import and Export DMPs

Import a json file of your DMP and continue work in ARGOS. Export DMPs in machine readable (.xml) and machine-actionable (.json) formats.



#### **Connect with OpenAIRE & EOSC**

Use OpenAIRE and EOSC underlying services, sources and semantics to ease completion of DMPs and trace the quality of your research.



## **Argos – Public DMPs**

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e	Public DMPs	Published DMPs				Y
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		DMP DMP For Grant : Demonstration and implementation of an integrated process for to Deposition of PMMA-multicomponent coatings on wood and wood-based substra	the Plasma-Enhanced		gust 21, 2020 al Solution	
		<ul> <li>Seposition of PMMA-multicomponent coatings on wood and wood-based substates</li> <li>Grant: Demonstration and implementation of an integrated p Solution Deposition of PMMA-multicomponent coatings on</li> <li>Contained Datasets: (1)</li> <li>Horizon 2020 Dataset Description</li> </ul>	process for the Plasma-E		hemical:	
		Export ***				
		DMP	Pub	lished: Aı	ugust 5, 2020	
() ?	Co-Branding 🛛 Support 🖸	ENHANCEMENT OF UV STABILITY OF THERMALLY MODIFIED WOOD THROUGH E BASED STABILISERS © Published . Version 0 . Grant: H2020-MSCA-IF-WF-2018	ENVELOPE IMPREGNA	TION WI	TH NANO	
	Send feedback 🛛	Contained Datasets: (1) NewSiest_DMP				
About		Z Export ····				

# Argos – Public DMPs

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#### Datasets

Title: Horizon 2020 Dataset Description Template: Horizon 2020 External References Data Repositories Zenodo, GitHub

External Datasets Registries Services

#### **Dataset Description**

1 Data Summary

1.1 What is the purpose of the data collection/generation and its relation to the objectives of the project?

The data is collected to validate the novel approach and demonstrate the new coating technology. The construction details, protocols, process parameters, and analytical measurements on the produced coatings all aim to fulfil the three objectives. The raw data on plasma-treated and plasmacoated wood substrates might further be helpful for readers of our scientific articles, that are to be published, allowing them to verify our findings. Thus, publishing all data allows to achieve a more complete transparancy and reproducibility. Furthermore, the data may help to form a more complete view on the effects of different plasma treatments on wood surfaces, and thus might enable to generate a general model covering all different plasma treatments. The three main objectives of the action are: (I) Building an integrated device. (II) optimizating the parameters of PMMA deposition for exterior use, thereby further improving the understanding of the processes, and (III) demonstrating the technique's capability and priming the industrial implementation. The created data will therefore include: (I) construction details and computer-aided design (CAD) assisted drawings, (II) coating deposition protocols, plasma diagnostic data, and data for the characterisation of the deposited coatings, as well as (III) aging, wheathering and adhesion tests of the coatings, amongst other measurements, that indicate the industrial usability. However, variables and types of the data required to fulfil these three objectives are too complex to be stated in one paragraph. These will be explored in more detail later within this plan.

> 1.2 What types and formats of data will the project generate/collect? (I) Construction details, CAD drawings, simulations: CAD drawings:

SolidWorks; .sldprt, .sldasm, .slddrw / .pdf, .jpg Simulations: COMSOL Multiphysics; .mph / .pdf, .jpg (II) Coating deposition protocols, plasma diagnostic data, and data for the characterisation of the deposited coatings: Protocols: Word; .docx / .txt Optical Emission Spectroscopy (OES) spectra: .xls / .pdf Tensiometer: KRÜSS Laboratory Desktop; .xls / .mdb Goniometer: Attension; .xls / .bmp, .png, .jpg Fourier-Transform InfraRed (FTIR) Spectrometer: Spectrum; .xls , .txt / .bmp, .png, .jpg, .gif, .tif Secondary

## **Argos – Public Datasets**

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A	Home	Published Datasets				_
٥	Public DMPs					<b>Y</b>
•	Public Dataset Desc.	Sort by: Published -	Search Datasets		٩	
		Dataset	Publis	shed: Au	gust 21, 2020	
		Horizon 2020 Dataset Description         Image: Public       Grant: Demonstration and implementation of an integrated process for the Plass PMMA-multicomponent coatings on wood and wood-based substrates         Part of       DMP       DMP For Grant : Demonstration and implementation of an integrated process for the Plass PMMA-multicomponent coatings on wood and wood-based substrates         Part of       DMP       DMP For Grant : Demonstration and implementation of an integrated process for the Plass PMMA-multicomponent coating         Image: DMP       DMP For Grant : Demonstration and implementation of an integrated process for the Plass PMMA-multicomponent coating         Image: DMP       DMP For Grant : Demonstration of PMMA-multicomponent coating         Image: DMP       Image: DMP         Dataset       NewSiest_DMP         Image: DMP       Image: DMP	grated process for the	e Plasma od-base	a-Enhanced	
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## **Argos – Public Datasets**

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	Public DMPs Public Dataset Desc.	Dataset H2020 NEANIAS WP4 Space Astrophysics Datasets	EXPORT		
		Part of	Dataset author	S	
		DMP For H2020 NEANIAS WP4 Space Astrophysics       Image: Comparison of the state	George Kakaler Member	tris	
		Grant	Eva Sciacca Owner		
		Novel EOSC services for Emerging Atmosphere, Underwater and Space Challenges	Marco Molinaro Member	o	
		Researchers			
		Marco Molinaro,Eva Sciacca,Eugenio Schisano,Robert Butora,Filomena Bufano			
		Description			
		The H2020 NEANIAS Project aims to design, deliver, and integrate into the European Open Science Cloud innovative thematic services, derived from state- of-the-art research assets and practices in three major sectors: underwater			
$(\bigcirc$	Co-Branding 🛛	research, atmospheric research and space research. In particular the Work Package 4 is focused on the thematic services related to the Space environment. The Space environment comprises astrophysicists and planetary			
?	Support 🛛	scientists that will handle data within three services: S1 - FAIR Data Management and visualization for complex data and metadata service: S2- Map			

making and mosaicking for multidimensional images service; S3 - Structure

covering the Galactic Plane. Data holdings come partly from the ViaLactea Knowledge Base (VLKB) hosted at the Italian center for Astronomical Archives

(IAO heated at INIAE Astronomical Observations of Triasts) and reath fro

detection on large map images with machine learning techniques service. This document describes datasets employed from astrophysics surveys mainly

📕 🛛 Send feedback 🛛

About Terms Of Service Glossary User Guide

### Data Stewardship Wizard https://ds-wizard.org/

ዾ DS Wizard	My Experiment 🏥 🔗 ⊘	I Create Document More -
<ul> <li>Knowledge Model Editor</li> <li>Knowledge Models</li> </ul>	Current Phase Before Submitting the Proposal	III. Creating and collecting data We will make sure that we know what data will be coming together in the project, when it will be coming. We also need to make sure that we have adequate storage space to deal with it, and that all the responsibilities have been taken care of.
<ul> <li>Questionnaires</li> <li>Documents</li> </ul>	Chapters	1 What data formats/types will you be using?
Storage Costs Evaluator	I. Administrative details	Have you identified types of data that you will use that are used by others too? Some types of data (for example "images" or "tables") are used by many different projects. For such data, often common standards exist (in our example "JPG" and "CSV") that help to make these data reusable. Are you using such common data formats?
	III. Creating and collecting data     7       IV. Processing data     3       V. Interpreting data     1       VI. Preserving data     6	You should make sure also to list the formats used in any data sets that you are re-using.
	VII. Giving access to data 3	1.a.1     Data format/type       RDF/XML Syntax Specification
	More TODOs Summary Report	FAIRsharing https://fairsharing.org/bsg-s001261         Image: Desirable: Before Submitting the Proposal
Help >		1.a.2       Is this a standard data format used by others in this field?
🎝 Jan Slifka 🔹 🔸		O a. No :≡ Interoperability
<ul> <li>Collapse sidebar</li> </ul>		

MUNI

# **DMP Tools – Comparison**

### DMPonline

- Well known.
- Simple interactive form.
- Helps and comments on forms questions from many organizations.

### Argos

- Connection to OpenAIRE Research Graph.
- Publish to DMP in Zenodo.
- Export to RDA DMP Common Standard.
- Separates the description of datasets.
  - Datasets can be referenced in multiple DMPs.

### Data Stewardship Wizard

- Development in the Czech Republic (ELIXIR).
- Concept of Knowledge Models.
- Metrics measuring the fulfilment of FAIR attributes.
- Targeted for machining.

https://dmponline.dcc.ac.uk/

https://argos.openaire.eu/

https://ds-wizard.org/

"In preparing for battle I have always found that plans are useless, but planning is indispensable"...

— Dwight D. Eisenhower

## **Examples of DMPs**

 University of Vienna's Phaidra repository – several hundreds of publicly available Horizon 2020 DMPs:

https://hdl.handle.net/11353/10.1140797

– DMPonline:

https://dmponline.dcc.ac.uk/public\_plans

- Argos:

- DMP: <u>https://argos.openaire.eu/explore-plans</u>
- Datasets: <u>https://argos.openaire.eu/explore</u>

### University of Vienna's Phaidra Repository – DMP Collection Overview

Phaidra_link	- document_title	<ul> <li>document_description</li> </ul>	project_id project_acronym	- project_title -	cordis_project_link	<pre>project_star</pre>
haidra.univie.ac.at/o:1139130	Data management plan	Data management plan providing a detailed outline of APPLICATE data management strategy, includi	727862 APPLICATE	Advanced Prediction in Polar regions and beyond: Modelling, observing system design and LInkages	ahttps://cordis.europa.eu/project/id/727862	2016
haidra.univie.ac.at/o:1139131	D7.1 Data Management Plan & Handbook	This deliverable describes internal quality assurance and communication procedures & will also include	780298 Made4You	Open and Inclusive Healthcare for Citizens Based on Digital Fabrication	https://cordis.europa.eu/project/id/780298	2018
haidra.univie.ac.at/o:1139132	Data management plan	This deliverable comprises the project data management plan.	642018 GREEN-WIN	Green growth and win-win strategies for sustainable climate action	https://cordis.europa.eu/project/id/642018	2015
haidra.univie.ac.at/o:1139133	Data Management Plan (DPM) V1	The DPM comprises the provision for making the project data findable, accessible, interoperable and	769255 SAFEWAY	GIS-BASED INFRASTRUCTURE MANAGEMENT SYSTEM FOR OPTIMIZED RESPONSE TO EXTR	https://cordis.europa.eu/project/id/769255	2018
haidra.univie.ac.at/o:1139134	Data Management Plan	Data Management Plan for the data generated by Slidewiki platform. This plan will include the suitable	e 688095 SlideWiki	Large-scale pilots for collaborative OpenCourseWare authoring, multiplatform delivery and Learning A	https://cordis.europa.eu/project/id/688095	201
haidra.univie.ac.at/o:1139135	Data Management Plan	Data Management Plan	723853 COROMA	Cognitively enhanced robot for flexible manufacturing of metal and composite parts	https://cordis.europa.eu/project/id/723853	2016
haidra.univie.ac.at/o:1139136	Data management plan (DMP) based on data policies o	f t/A first version of the data management plan for CALIPSOplus is available	730872 CALIPSOplus	Convenient Access to Light Sources Open to Innovation, Science and to the World	https://cordis.europa.eu/project/id/730872	201
haidra.univie.ac.at/o:1139137	Data Management Plan	This Deliverable will describe how to cope with the Data Management Plan Pilot as described in Article	688188 MURAB	MRI and Ultrasound Robotic Assisted Biopsy	https://cordis.europa.eu/project/id/688188	201
haidra.univie.ac.at/o:1139138	Data Management Plan	Data Management Plan will be submitted in M6 and checked and updated for M36 and as appropriate	686865 BREAKBEN	Breaking the Nonuniqueness Barrier in Electromagnetic Neuroimaging	https://cordis.europa.eu/project/id/686865	201
haidra.univie.ac.at/o:1139139	Data Management Plan	WP1 will produce a Data Management Plan in M6.	675451 CompBioMed	A Centre of Excellence in Computational Biomedicine	https://cordis.europa.eu/project/id/675451	2010
haidra.univie.ac.at/o:1139140	ORDP: Data Management Plan	This Deliverable will describe how to cope with the Data Management Plan Pilot as described in Article	688188 MURAB	MRI and Ultrasound Robotic Assisted Biopsy	https://cordis.europa.eu/project/id/688188	2016
haidra.univie.ac.at/o:1139141	A data management plan for the Icelandic RIF station in	c(A data management plan for the Icelandic RIF station in connection with ABDS for the selected focal	e 730938 INTERACT	International Network for Terrestrial Research and Monitoring in the Arctic	https://cordis.europa.eu/project/id/730938	2016
haidra.univie.ac.at/o:1139142	Data management plan	The data management plan describes how existing and newly generated data are processed, manage	733032 HBM4EU	European Human Biomonitoring Initiative	https://cordis.europa.eu/project/id/733032	201
haidra.univie.ac.at/o:1139143	First version of the Data Management Plan	Report on First version of the Data Management PlanThe progress of the implementation of Data Ma	642154 FISSAC	FOSTERING INDUSTRIAL SYMBIOSIS FOR A SUSTAINABLE RESOURCE INTENSIVE INDUSTRY	https://cordis.europa.eu/project/id/642154	201
haidra.univie.ac.at/o:1139144	Data Management plan - M12	Data Management plan - yearly updateThis is a document outlining how the research data collected o	654650 Residue2Heat	Renewable residential heating with fast pyrolysis bio-oil	https://cordis.europa.eu/project/id/654650	201
haidra.univie.ac.at/o:1139145	Data management Plan	This report exposes the Open Data Management Plan and Open Research Data Pilot preparation and	731148 INVADE	Smart system of renewable energy storage based on INtegrated EVs and bAtteries to empower mot	https://cordis.europa.eu/project/id/731148	20
haidra.univie.ac.at/o:1139146	Data Management plan - M24	Data Management plan - yearly updateThis is a document outlining how the research data collected o	654650 Residue2Heat	Renewable residential heating with fast pyrolysis bio-oil	https://cordis.europa.eu/project/id/654650	20
haidra.univie.ac.at/o:1139147	Project Management, Quality and Risk Plan	Includes plans for project management(also a detailed data management plan), quality and risk mana	740698 MARISA	Maritime Integrated Surveillance Awareness	https://cordis.europa.eu/project/id/740698	201
haidra.univie.ac.at/o:1139148	Data management plan	Data Management plan, including publication policy and Intellectual Property Rights (IPR).	641762 ECOPOTENTIAL	ECOPOTENTIAL: IMPROVING FUTURE ECOSYSTEM BENEFITS THROUGH EARTH OBSERVATI	https://cordis.europa.eu/project/id/641762	201
haidra.univie.ac.at/o:1139149	INTERACT Data Management Plan	INTERACT Data Management Plan	730938 INTERACT	International Network for Terrestrial Research and Monitoring in the Arctic	https://cordis.europa.eu/project/id/730938	201
haidra.univie.ac.at/o:1139150	Data management plan	This deliverable will deliver the data management plan produced within DataBio, following the EC reco	732064 DataBio	Data-Driven Bioeconomy	https://cordis.europa.eu/project/id/732064	201
haidra.univie.ac.at/o:1139151	Data Management Plan (v1)	First version of the Data Management Plan	740712 COMPACT	COmpetitive Methods to protect local Public Administration from Cyber security Threats	https://cordis.europa.eu/project/id/740712	20
haidra.univie.ac.at/o:1139152	Data management plan	Data management plan	730403 INNOPATHS	Innovation pathways, strategies and policies for the Low-Carbon Transition in Europe	https://cordis.europa.eu/project/id/730403	20
haidra.univie.ac.at/o:1139153	Admin: Data management plan	Data management plan (3)	722346 EUROPAH	The Extensive and Ubiquitous Role of Polycyclic Aromatic Hydrocarbons (PAHs) in Space	https://cordis.europa.eu/project/id/722346	201
haidra.univie.ac.at/o:1139154	Data Management Plan	"The Data Management Plan is developed as part of the ""Clearing House"" (Task 2.4). The purpose	731289 InterFlex	Interactions between automated energy systems and Flexibilities brought by energy market players	https://cordis.europa.eu/project/id/731289	201
haidra.univie.ac.at/o:1139155	FAIR Data Management Plan	FAIR (findable, accessible, interoperable and reusable) Data Management Plan defining collection, tre	776465 RURITAGE	Rural regeneration through systemic heritage-led strategies	https://cordis.europa.eu/project/id/776465	201
haidra.univie.ac.at/o:1139156	Data Management plan	Data Management plan	766840 COSY-BIO	Control Engineering of Biological Systems for Reliable Synthetic Biology Applications	https://cordis.europa.eu/project/id/766840	201
haidra.univie.ac.at/o:1139157	First Updated Data Management Plan	The project data management plan will be developed during the first six months of the project and sho	730944 RINGO	Readiness of ICOS for Necessities of integrated Global Observations	https://cordis.europa.eu/project/id/730944	201
haidra.univie.ac.at/o:1139158	Open Data Management Plan	Open Data Management Plan	770143 ReFreeDrive	Rare Earth Free e-Drives featuring low cost manufacturing	https://cordis.europa.eu/project/id/770143	20
haidra.univie.ac.at/o:1139159	Initial Data Management Plan (DMP).	The project data management plan will be developed during the first six months of the project and sho	730944 RINGO	Readiness of ICOS for Necessities of integrated Global Observations	https://cordis.europa.eu/project/id/730944	20
haidra.univie.ac.at/o:1139160	Open Research Data Pilot Management Plan	Report on the Open Research Data Management Plan for WEARPLEX	825339 WEARPLEX	Wearable multiplexed biomedical electrodes	https://cordis.europa.eu/project/id/825339	20
haidra.univie.ac.at/o:1139161	Data Management Plan	Development (and regular updating) of a Data Management Plan (DMP) outlining the project's policy t	838335 Net4Society5	National Contact Points (NCPs) Network of Societal Challenge 6 'Europe in a changing world - inclusi	https://cordis.europa.eu/project/id/838335	201
haidra.univie.ac.at/o:1139162	Data Management Plan (DMP)	Data Management Plan (DMP)	780839 MOLOKO	Multiplex phOtonic sensor for pLasmonic-based Online detection of contaminants in milK	https://cordis.europa.eu/project/id/780839	201
haidra.univie.ac.at/o:1139163	Data Management Plan	D8.6 : Data Management plan	736937 M-CUBE	MetaMaterials antenna for ultra-high field MRI	https://cordis.europa.eu/project/id/736937	201
haidra.univie.ac.at/o:1139164	Data Management Plan	Data Management Plan: Report on consortium Data Management Plan finished, detailing what data th	736899 MagnaPharm	Magnetic Control of Polymorphism in Pharmaceutical Compounds	https://cordis.europa.eu/project/id/736899	2017

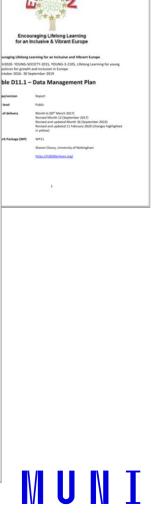
### https://hdl.handle.net/11353/10.1159821

# ENLIVEN ('Encouraging Lifelong Learning for an Inclusive and Vibrant Europe') Data Management Plan

#### <u>https://hdl.handle.net/11353/10.1139743</u>

- DMP from the area of Social Sciences.
  - Audio and video data, transcription of interviews.
  - Restricted access to the data.
- Use of existing data + collection of own data.
- Continuous updating of the DMP.
  - Changes are summarized in a table.
  - Migration of some of the data to the UK.
  - Data saved encrypted in MS O365 Teams.
- Ethic aspects are described in a standalone document referenced from the DMP.
- Joined project of multiple institutions → explicit definition of responsibilities.
- Nice description of data protection.
  - Information on anonymization procedures in the DMP appendix.
- Documentation and produced publications (including project website) are covered in the DMP.
- Description of the used hardware and software could be more detailed.
  - Nevertheless, the backup process and strategy are described.
- Described intellectual properties and QA process.

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### **Examples of DMPs**

# **RECETOX MU**

# **RECETOX MU – Examples**

- Generic document describing RECETOX infrastructure as a whole.
  - LaTeX dokument develped in Overleaf.
- DMP for particular projects derived as subsets of the generic document.
  - Project-specific description references specific sections from the generic DMP.

```
Source
         Rich Text
     %&program=xelate>
  2 %&encoding=UTF-8 Unicode
     \newif\iftodos\todostrue
     \newif\ifgenericDMPtemplate\genericDMPtemplatetrue
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    3% Typeset final version of CETOCOEN Excellence (a.k.a. CE) DMP, i.e. without generic sections, TODOs etc.?
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## **RECETOX MU – generic**

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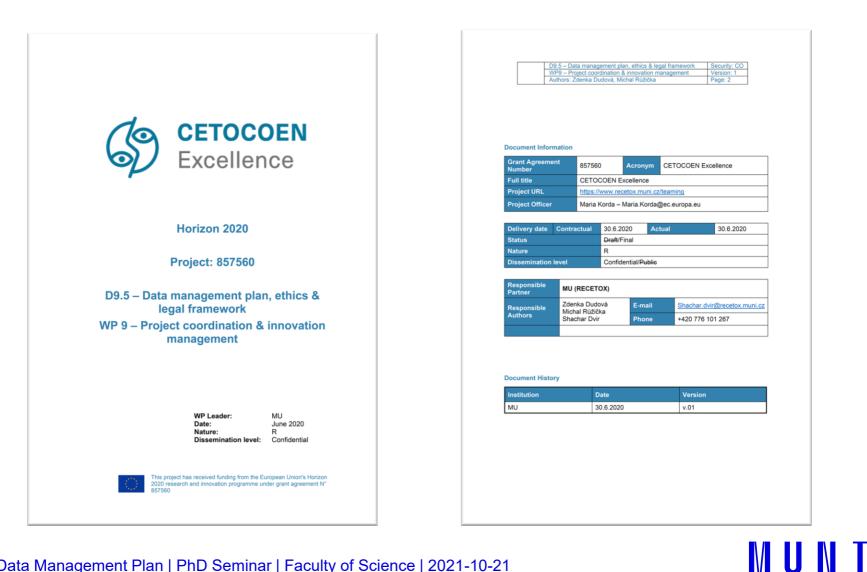
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### **RECETOX MU – CETOCOEN Excellence**



### **RECETOX MU – CETOCOEN Excellence**

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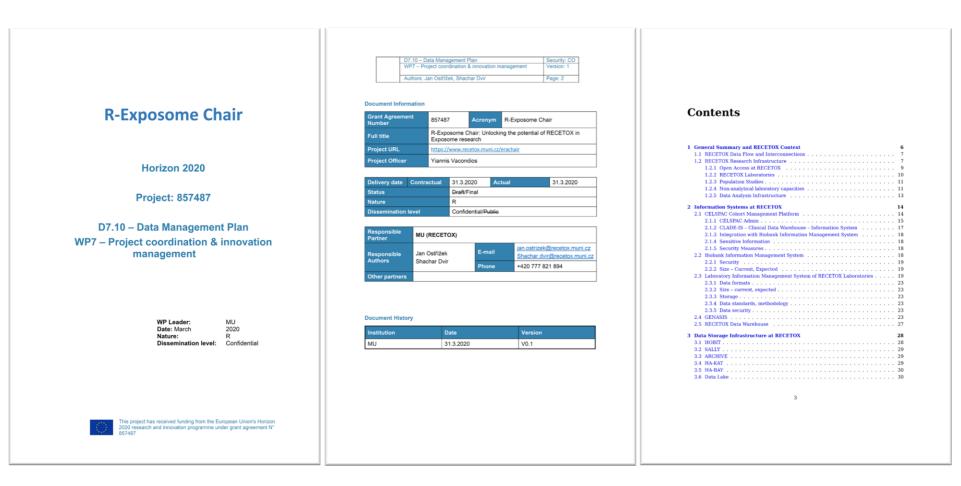
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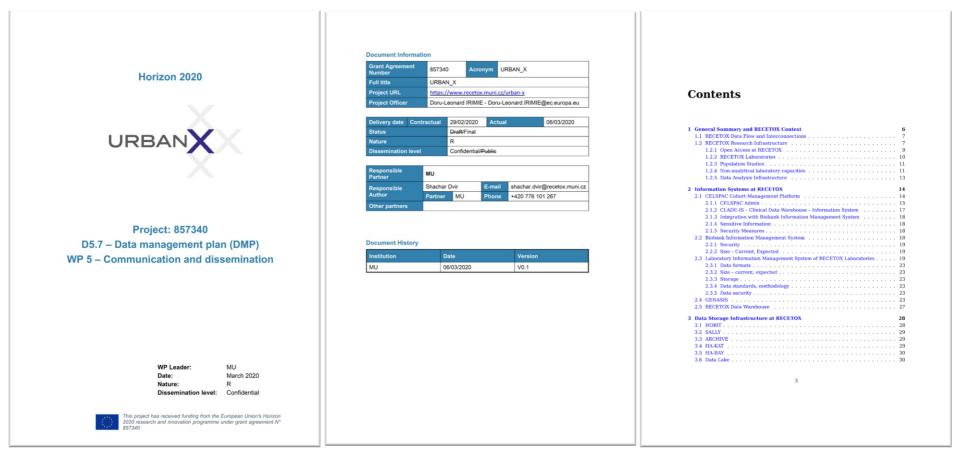
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### **RECETOX MU – ERA-Chair**





### **RECETOX MU – URBAN\_X**



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Demo

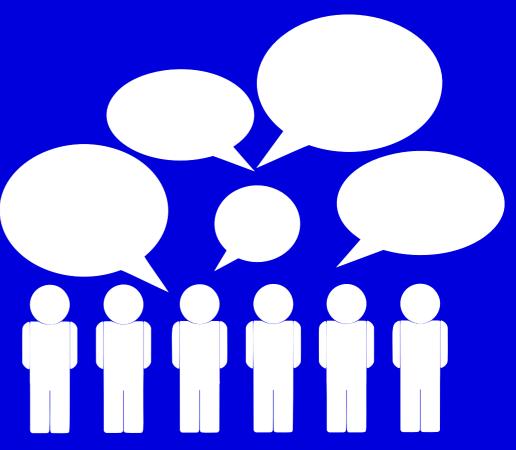
# **Data Stewardship Wizard**

## **DSW Demo**

### https://researchers.ds-wizard.org/

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## **Questions?**



Source: Communicate\_communication\_conference\_2028004 by OpenClipart-Vectors from Pixabay

38 Data Management Plan | PhD Seminar | Faculty of Science | 2021-10-21

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### D A T A M A N A G E M E N T P L A N





EVROPSKÁ UNIE Evropské strukturální a investiční fondy Operační program Výzkum, vývoj a vzdělávání



#### 2021-10-21