

Open Science dalla A alla Z

6 – Data Management Plan

Università Bocconi,
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@egiglia



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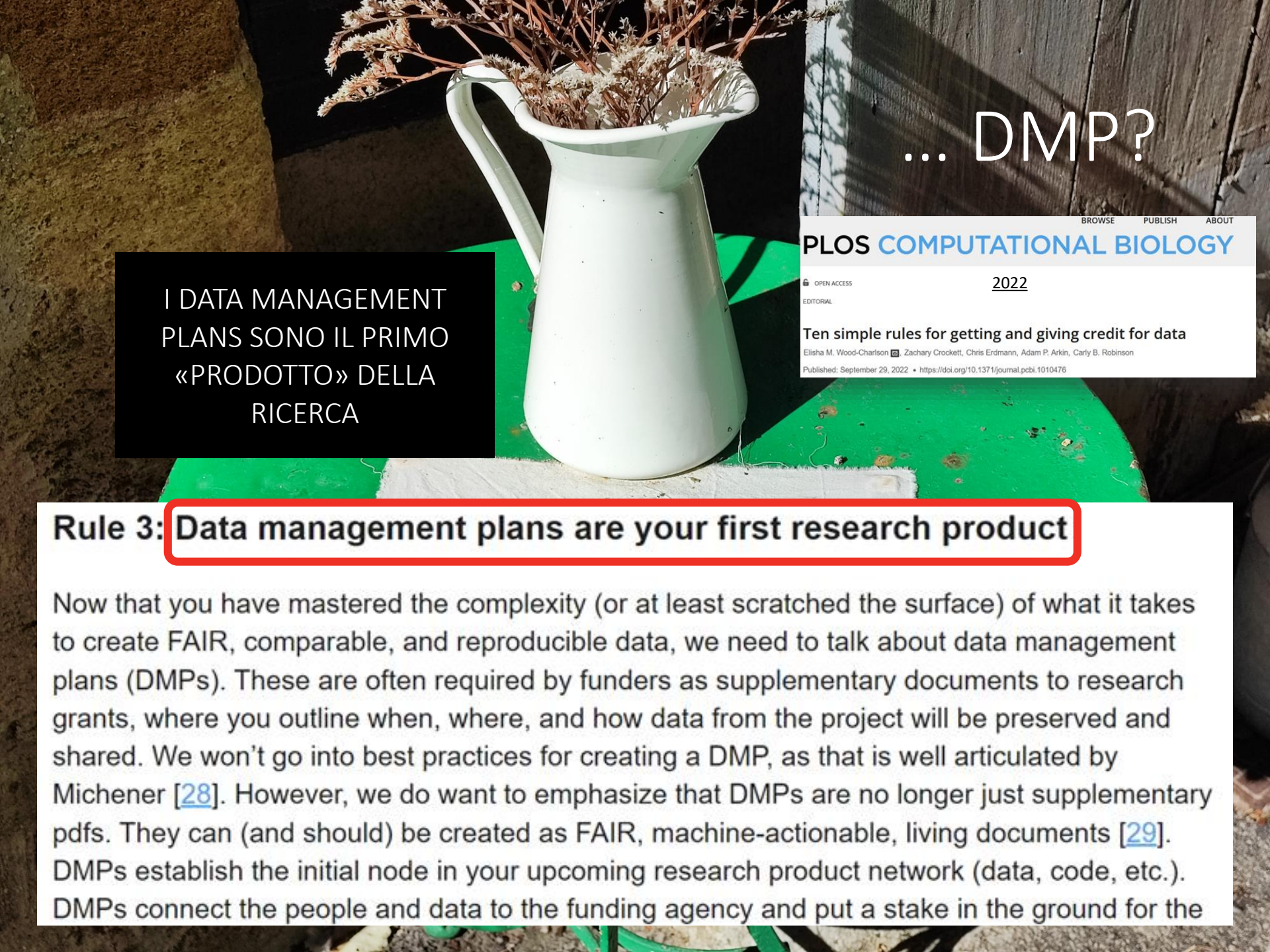
In questo modulo impareremo:

1. come scrivere un Data
Management Plan

2. Quali strumenti utilizzare

MESSAGGI CHIAVE

- gestire bene i dati è nell'interesse di chi fa ricerca – non c'entra Open!
- NON ci sarà una ricetta per DMP, ma strumenti utili (da imparare)



I DATA MANAGEMENT
PLANS SONO IL PRIMO
«PRODOTTO» DELLA
RICERCA

... DMP?

BROWSE PUBLISH ABOUT
PLOS COMPUTATIONAL BIOLOGY

OPEN ACCESS

2022

EDITORIAL

Ten simple rules for getting and giving credit for data

Elisha M. Wood-Charlson, Zachary Crockett, Chris Erdmann, Adam P. Arkin, Carly B. Robinson

Published: September 29, 2022 • <https://doi.org/10.1371/journal.pcbi.1010476>

Rule 3: Data management plans are your first research product

Now that you have mastered the complexity (or at least scratched the surface) of what it takes to create FAIR, comparable, and reproducible data, we need to talk about data management plans (DMPs). These are often required by funders as supplementary documents to research grants, where you outline when, where, and how data from the project will be preserved and shared. We won't go into best practices for creating a DMP, as that is well articulated by Michener [28]. However, we do want to emphasize that DMPs are no longer just supplementary pdfs. They can (and should) be created as FAIR, machine-actionable, living documents [29]. DMPs establish the initial node in your upcoming research product network (data, code, etc.). DMPs connect the people and data to the funding agency and put a stake in the ground for the



UN MODO STRUTTURATO
DI PENSARE AI DATI

REGOLE CHIARE=MENO
ERRORI DA SUBITO

UN DOCUMENTO
FORMALE SULLA
GESTIONE DEI DATI

UN MODO NUOVO DI PENSARE
ALLA VOSTRA RICERCA, DALLA
PROSPETTIVA DEI DATI

È UN «LIVING DOCUMENT»,
CRESCE COL PROGETTO

È LA SEDE IN CUI
GIUSTIFICATE LE SCELTE
OPEN/CLOSED

...IL DATA MANAGEMENT PLAN

DMP?

...CHIARIAMO:
IL PROBLEMA NON È
«IMPARARE» A FARE UN DMP
MA IMPARARE A GESTIRE I
DATI IN MODO FAIR E
RESPONSABILE

NEL DMP SEMPLICEMENTE
«DICHIARO» COME TRATTERÒ
I MIEI DATI

NON È UNA FORMALITÀ MA
UNA RESPONSABILITÀ (E UNO
STRUMENTO PREZIOSO)



...accompagna tutto il ciclo

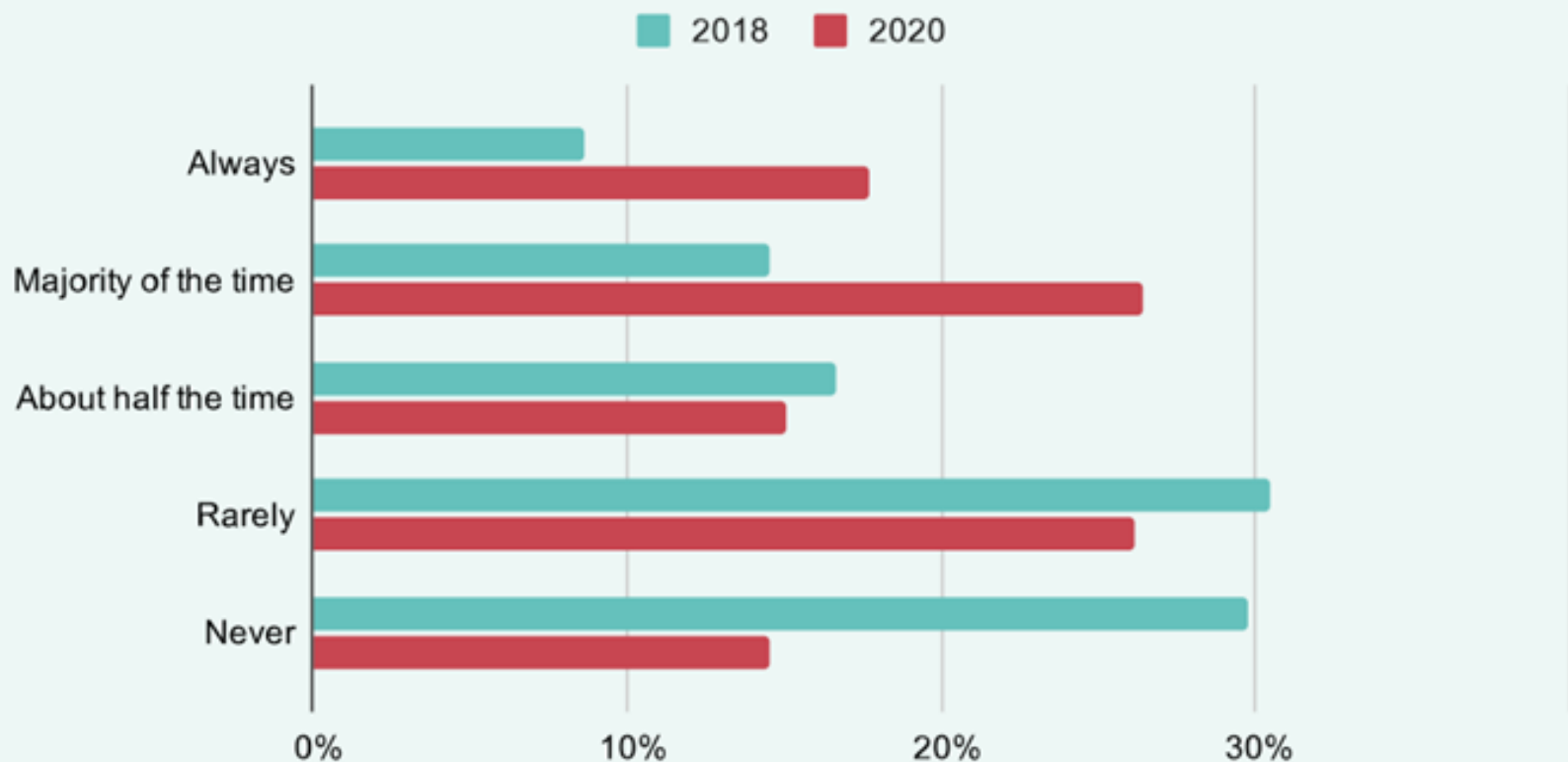
Ciclo di vita dei dati



AIUTA A FARE LE
SCELTE GIUSTE
DALL'INIZIO DEL
PROGETTO (E
DOCUMENTARLE)

DMP in crescita

How often do you create a data management plan for the research you carry out? by Year



Data Management Plan - caveat



[DMP]

Therefore, it doesn't necessarily matter if you plan to share your data with other scholars, what matters is considering this prospect as you work out how you are going to go about your research. It will help you to understand what it is you are doing more clearly and give you the basis to share that data later on if you so wish.

PORT
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PORT DMP

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OF LONDON

NON IMPORTA SE ALLA FINE CONDIVIDERETE I DATI O NO.
QUI SI DOCUMENTANO IL PROCESSO DI RICERCA E LE SCELTE DI METODO

Data management ABC – Per partire

Ask yourself this:

[DMP]

What is needed to validate the results of your research?

If you were to produce an article researching, for example, the criminal underclass in early-twentieth century New York, what data would you need to include for someone else to replicate your results? Think about it in terms of your own research.

A bibliography would be the most immediate and obvious starting point, revealing to the reader all the sources that you have used to base your research. But what of the gathering mechanisms you used? Did you create a database or undertake statistical analysis? If so you need to make the database and statistics available. This doesn't just mean providing the files in a readable format, but to provide documentation and to make sure that the data is clearly identified with explicit headings, well-structured, and easily identified.

Focusing on what is needed for validation and re-use, rather than the obvious attributes of research data, is useful. It helps you to think through the process of research from a different perspective and what it is you have actually done to come to your conclusions. It also allows you to show the process you have undertaken; revealing how valuable your approach might be and making the

COSA SERVE A VALIDARE
LA MIA RICERCA?
TUTTO QUESTO VA
INSERITO NEL DMP.
PROSPETTIVA DIVERSA
SULLA VOSTRA RICERCA



Trucchi e suggerimenti

SINTETICO E
SPECIFICO

Top tip - keep it short and specific!

This very short extract from a presentation by Peter Dukes, Medical Research Council, gives really useful advice on writing a DMP from the funding body perspective. The advice applies to all disciplines. The quality of the video isn't great, but it's definitely useful!



NON COPIATE

OGNI DATASET È
UNICO, OGNI
INFRASTRUTTURA È
UNICA, OGNI RICERCA
HA LA SUA
IMPOSTAZIONE

ESSERE GENERICI NON SERVE
A NULLA
[we expect a huge size of data;
data will be available]

- USATE TABELLE,
ELENCHI PUNTATI
- SIATE SCHEMATICI E
NON DILUNGATEVI

- SE NON LO SAPETE, DITELO
- SE NO, SEMBRA CHE NON SIATE AL
CORRENTE DI QUELLO SPECIFICO
ASPETTO [STESSA DIFFERENZA FRA UNA
CELLA VUOTA E CELLULA CON N.A.]

CIÒ CHE DICHIARATE NEL
DMP POI VA FATTO
VERAMENTE... QUINDI

- A) NON FATE GLI
SPLENDIDI
- B) NON IMPEGNATEVI A
FARE COSE CHE
SAPETE IMPOSSIBILI
Es. DATI PSEUDONIMIZED, non
ANONIMIZED

1

START EARLY

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

2

CONSIDER REUSE

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

3

CHECK POLICIES

Talk to your supervisor or lab members about existing data management policies and standards

4

MAKE USE OF SUPPORT

Use your in-house support services like RDM Support, the Library, IT department or legal desk

5

THINK BROAD

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

6

COPY WHERE YOU CAN

Look at other (submitted) plans and copy when appropriate

7

BE UNIQUE WHERE NEEDED

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

8

BE CONCRETE

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

9

SAY SO IF YOU DON'T KNOW

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

10

UPDATE

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

Tips&tricks / 2

[sui dati FAIR e DMP]

TROVATE I CORSI COMPLETI, LA
PAGINA SUI DMP, E LA NUOVA
SEZIONE OPEN SCIENCE IN
INTRANET

OA@unito.it

Seminari

2022

1. Open Science dalla A alla Z, Università Bocconi, 25/11
2. Open Science come e perché / biblioteche UniTO (pro...
3. Laboratorio Open Science prof. Paccagnella nov-dic 2...
4. Open Science come e perché / biblioteche civiche (pro...
5. Open Science why and how / LTTA event (progetto CE...
6. Open Science why and how, MSCA candidates, Unive...
7. Open Science, questa sconosciuta, Dipartimento di N...
8. Come fare Open Access (con un pizzico di Open Scie...
9. Open Science come e perché, Università di Trieste, 05...
10. Open Science why and how, SISSA, Trieste, 05/03
11. Lavorare su Open Science alla luce di Horizon Europe
12. Open Science is here to stay, Digital Humanities course, Prof. Silvio Peroni, Università di...
13. Open Science, la ricerca al servizio dell'innovazione e della crescita, Master Management Technology - MIP Politecnico di Milano, 04/9
14. Il futuro è Open: come cambia la comunicazione scientifica, scuola di Dottorato in Scienze letterarie - la Sapienza, Roma, 04/7
15. Open Science A to Z, Phd School, Università di Camerino, 02/-22-25
16. FAIR data basics, ISPAS project, IMIBAS, 02/16-18
17. Open Science dalla A alla Z, Phd Scuola di economia, Università di Torino, 01/25-02/15
18. Principi FAIR (con un pizzico di EOSC), ISPAS project, Fondazione 1563, 01-21
19. Open Science A to Z, ISPAS project, IMIBAS, 01/17-19
20. FAIR data basics ISPAS project, University of Girona, 01/11-13

In UniTO Come Cos'è utile Perché è importante Editori e Politiche Open Access (EPOcA) Eventi Corsi e formazione Video Open Science

Come scrivere un Data Management Plan

Il Data Management Plan (DMP) è un documento strutturato, vivo, che cresce con il progetto. Serve a dichiarare come si producono i dati, come li si conserverà e come li si condividerà (se possibile).

Pensatelo come le "Istruzioni per l'uso" dei vostri dati.

Deve essere

- **sinetico:** evitate sproloqui, non è una dissertazione. Frasi chiare che diano informazioni precise
- **schematico:** utilizzate il più possibile tabelle e punti elenco
- **preciso:** evitate frasi (viste davvero) tipo "we expect a huge size of data" o "data will be available". Servono solo a far perdere tempo a chi lo scrive e a chi lo legge. Quantificate: we expect max 50 GB; data will be available in Zenodo upon publication of the paper
- **specifico:** non copiate da modelli. Ogni ricerca è a sé, ogni ente ha le sue procedure
- **coerente:** scrivete solo ciò di cui siete

In Unito

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Ricerca ▾

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Qualità e valutazione della ricerca

Assegni di ricerca

Privacy nella ricerca

Open science

A data planning process ensures that all aspects of data management are holistically explored at the start of a project. Short-term and long-term aims can be balanced, so that decisions made early in a project do not negatively impact on the ability to find and use the research data in future.

Effective management of data provides researchers with many benefits, including

- time saved through reduced duplication of effort
 - decreased risk of loss, theft or inappropriate use of data
 - good research practice ensures the integrity and quality of data
 - data can be understood and used now and in the future
-
- helps researchers find and gain access to data management – expertise and infrastructure offered at the University
 - increased researcher profile through data dissemination and re-use.

A data planning process is particularly important in the context of collaborative research projects. Researchers may identify areas of potential difficulty or conflict, and these can be resolved with colleagues and collaborators before they escalate into issues. Clarifying ownership of data, and ensuring early agreement on technical standards and frameworks across institutions, are an important part of establishing trust and ensuring that a project runs smoothly.

EVITA SFORZI DI
DUPLICAZIONE
EVITA LA PERDITA
RISOLVE I
CONFLITTI

Vantaggi di un DMP

CESSDA Guide



⊖ Benefit 3. Clarifies needed budget

Data management is not free. You do not want to find yourself running out of funding before the end of the project because you have ignored or underestimated the cost of structured, detailed, and safe data management. Therefore, an important aspect of a DMP is its use in calculating how much money will be required for managing your research data during your research project.

A DMP can be useful in the process of applying for funding. Grant applications should not only include time and resources for collecting, analysing, and publishing on data in their budget, time and resources for careful documentation as well as server space, backup solutions, and documentation software need to be included as well. A DMP is also useful once funding is granted to plan and manage your expenses. Many research funders require a DMP as part of the application and decision-making process. The arguments for making data available are several, the most popular being that the data produced by public funds should be used to the greatest extent possible and available to the public. Unless there are legal, ethical or commercial barriers, data should also be openly available so that research results can be verified, replicated and reused.

Examples of Data Management cost assessments are given by the [University of Utrecht](#) (n.d.) and the Dutch Landelijk Coördinatiepunt Research Data Management ([LCRDM](#), n.d.) inspired by the '[Data management costing tool](#)' by UK Data Service, 2013.

È FONDAMENTALE PER
STIMARE I COSTI DI GESTIONE
- STIMATE LA DATA
STEWARDSHIP (IN-KIND?)
-POSSIBILI COSTI DI STORAGE
COSTI ERANO RIMBORSABILI IN
H2020 (6.2.D.3 AMGA) E IN
HORIZON EUROPE (6.2.C.3)

Guida al DMP



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Jan. 27, 2021

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ABOUT US | OUR PRIORITIES | WHAT'S GOING ON | OUR RESOURCES

> Our resources

27.01.2021



SCIENCE EUROPE
PRACTICAL GUIDE TO
THE INTERNATIONAL ALIGNMENT OF
RESEARCH DATA MANAGEMENT
Extended Edition
with DMP Evaluation Rubric

Practical Guide to the International Alignment of Research Data Management - Extended Edition

This resource offers targeted guidance for organisations, scientific communities, as well as individual researchers, to organise research data and preserve it appropriately

Originally released in 2019, and following its successful uptake by many organisations, the extended edition features a brand-new rubric to facilitate the evaluation of a data management plan (DMP). The guide also presents core requirements for DMPs, criteria for the selection of trustworthy repositories, and guidance to comply with organisational requirements.

EDIZIONE AGGIORNATA
DELLA GUIDA 2018

DMP Core Requirements

CORE REQUIREMENTS FOR DATA MANAGEMENT PLANS



When developing solid data management plans, researchers are required to deal with the following topics and answer the following questions:

- ☐ **1. Data description and collection or re-use of existing data**
 - a. How will new data be collected or produced and/or how will existing data be re-used?
 - b. What data (for example the kinds, formats, and volumes) will be collected or produced?
- ☐ **2. Documentation and data quality**
 - a. What metadata and documentation (for example the methodology of data collection and way of organising data) will accompany data?
 - b. What data quality control measures will be used?
- ☐ **3. Storage and backup during the research process**
 - a. How will data and metadata be stored and backed up during the research process?
 - b. How will data security and protection of sensitive data be taken care of during the research?
- ☐ **4. Legal and ethical requirements, codes of conduct**
 - a. If personal data are processed, how will compliance with legislation on personal data and on data security be ensured?
 - b. How will other legal issues, such as intellectual property rights and ownership, be managed? What legislation is applicable?
 - c. How will possible ethical issues be taken into account, and codes of conduct followed?

SEZIONI MINIME IN UN DMP

- ☐ **5. Data sharing and long-term preservation**
 - a. How and when will data be shared? Are there possible restrictions to data sharing or embargo reasons?
 - b. How will data for preservation be selected, and where will data be preserved long-term (for example a data repository or archive)?
 - c. What methods or software tools will be needed to access and use the data?
 - d. How will the application of a unique and persistent identifier (such as a Digital Object Identifier (DOI)) to each data set be ensured?
- ☐ **6. Data management responsibilities and resources**
 - a. Who (for example role, position, and institution) will be responsible for data management (i.e. the data steward)?
 - b. What resources (for example financial and time) will be dedicated to data management and ensuring that data will be FAIR (Findable, Accessible, Interoperable, Re-usable)?

CORE REQUIREMENTS
FOR DATA MANAGEMENT PLANS



SCIENCE EUROPE

PRACTICAL GUIDE TO
THE INTERNATIONAL ALIGNMENT OF
RESEARCH DATA MANAGEMENT

Extended Edition
with DMP Evaluation Public

Jan. 27, 2021



DMP Core Requirements

Translating the Core Requirements into a DMP template

The following example of a data management plan template is based on the core requirements for DMPs.⁶ These core requirements should be considered as a minimum standard, leaving the flexibility to formulate additional guidelines according to the needs of specific domains or to national or local legislation.

The template presented below refers to the 15 questions covering six core requirements for good data management. Additional guidance and explanations are provided to help researchers fill out such a template and to assure that all relevant aspects of research data management are covered. The below table is an example of how the core requirements can be transformed into a DMP template. It will be up to the individual organisations and disciplines to develop templates that fit their needs.

GENERAL INFORMATION

- Administrative information**
- Provide information such as name of applicant, project number, funding programme, version of DMP.

1 DATA DESCRIPTION AND COLLECTION OR RE-USE OF EXISTING DATA

1 a

How will new data be collected or produced and/or how will existing data be re-used?

- Explain which methodologies or software will be used if new data are collected or produced.
- State any constraints on re-use of existing data if there are any.
- Explain how data provenance will be documented.
- Briefly state the reasons if the re-use of any existing data sources has been considered but discarded.

2 DOCUMENTATION AND DATA QUALITY

2 a

What metadata and documentation (for example the methodology of data collection and way of organising data) will accompany the data?

- Indicate which metadata will help others identify and discover the data.
- Indicate which metadata standards (for example DDI, TEI, EML, MARC, CMDI) will be used.
- Use community metadata standards where these are in place.
- Indicate how the data will be organised during the project, mentioning for example conventions, version control, and folder structures. Consistent, well-ordered research data will be easier to find, understand, and re-use.
- Consider what other documentation is needed to enable re-use. This may include information on the methodology used to collect the data, analytical and procedural information, definitions of variables, units of measurement, and so on.
- Consider how this information will be captured and where it will be recorded for example in a database with links to each item, a 'readme' text file, file headers, code books, or lab notebooks.

2 b

What data quality control measures will be used?

- Explain how the consistency and quality of data collection will be controlled and documented. This may include processes such as calibration, repeated samples or measurements, standardised data capture, data entry validation, peer review of data, or representation with controlled vocabularies.

UTILI COME
SPUNTO PER LE
PRIME VOLTE,
PER CAPIRE
QUALI DOMANDE
FARSI



Jan. 27, 2021

DMP – Rubric for evaluation



3 STORAGE AND BACKUP DURING THE RESEARCH PROCESS

Guidance for Researchers

3a

How will data and metadata be stored and backed up during the research?

- Describe where the data will be stored and backed up during research activities and how often the backup will be performed. It is recommended to store data in least at two separate locations.
- Give preference to the use of robust, managed storage with automatic backup, such as provided by IT support services of the home institution. Storing data on laptops, stand-alone hard drives, or external storage devices such as USB sticks is not recommended.

Sufficiently Addressed The DMP...

- Clearly (even if briefly) describes:
 - › The location where the data and backups will be stored during the research activities.
 - › How often backups will be performed.
 - › The use of robust, managed storage with automatic backup (for example storage provided by the home institution).

or

- Explains why institutional storage will not be used (and for what part of the data) and describes the (additional) locations, storage media, and procedures that will be used for storing and backing up data during the project.

Insufficiently Addressed The DMP...

- Provides no information or very vague reference to how data will be stored and backed up during the project.

Guidance for Researchers

1a

How will new data be collected or produced and/or how will existing data be re-used?

- Explain which methodologies or software will be used if new data are collected or produced.
- State any constraints on re-use of existing data if there are any.
- Explain how data provenance will be documented.
- Briefly state the reasons if the re-use of any existing data sources has been considered but discarded.

Sufficiently Addressed The DMP...

- Gives clear details of where the existing data come from and how new data will be collected or produced. It clearly explains methods and software used.
- Explains, if existing data are re-used, how these data will be accessed and any constraints on their re-use.

Insufficiently Addressed The DMP...

- Provides little or no details on where the data come from and what data will be collected or re-used.
- Does not, if applicable, provide sufficient rationale for generating new data.

DMP questions

CESSDA guide

Adapt your Data Management Plan

A list of Data Management Questions based on the Expert Tour Guide on Data Management



Overview

Title of the project

Date of this plan

Description of the project

- What is the nature of the project?
- What is the research question?
- What is the project time line?

Origin of Data

- What kind of data will be used during the project?
- If you are reusing existing data: What is the scope, volume and format? How are different data sources integrated?
- If you are collecting new data can you clarify why this is necessary?

Principal researchers

- Who are the main researchers involved?
- What are their contact details?

Collaborating researchers (if applicable)

- What are their contact details and their roles in the project?

Funder (if applicable)

- If funding is granted, what is the reference number of the funding granted?

Data producer

- Which organisation has the administrative responsibility for the data?

Project data contact

- Who can be contacted about the project after it has finished?

Data owner(s)

- Which organisation(s) own(s) the data?
- If several organisations are involved, which organisation owns what data?

Roles

- Who is responsible for updating the DMP and making sure that it's followed?
- Do project participants have any specific roles?
- What is the project time line?

Costs

- Are there costs you need to consider to buy specific software or hardware?
- Are there costs you need to consider for storage and backup?
- Are potential expenses for (preparing the data for) archiving covered?

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PER CAPIRE
QUALI DOMANDE
FARSI

Organising and documenting your data

Data collection

- How will the data be collected?
- Is specific software or hardware or staff required?
- Who will be responsible for the data collection?
- During which period will the data be collected?
- Where will the data be collected?

Data organisation

- How will you organise your data?
- Will the data be organised in simple files or more complex databases?
- How will the data quality during the project be ensured?
- If data consists of many different file types (e.g. videos, text, photos), is it possible to structure the data in a logical way?

Data type and size

- What type(s) of data will be collected?
- What is the scope, quantity and format of the material?
- After the project: What is the total amount of data collected (in MB/GB)?

File format

- In what format will your data be?
- Does the format change from the original to the processed/final data?
- Will your (final) data be available in an open format?

Folder structure and names

- How will you structure and name your folders?

File structure and names

- How will you structure and name your files?

Documentation

- What documentation will be created during the different phases of the project?
- How will the documentation be structured?

Metadata

- What metadata will be provided with the collected/ generated/ reused data?
- How will metadata for each object be created?
- Is there any program that can be used to document the data?
- Can metadata be added directly into the files or will the metadata be produced in another program or document?

Metadata standard (if applicable)

- What metadata standard(s) will you use?

ORGANISE &
DOCUMENT

DMP questions

Processing your data

Versioning

- What is your strategy concerning versioning your data files (and scripts) during the project?
- Will you create and/or follow a convention for versioning your data?
- Who will be responsible for securing that a "Masterfile" will be maintained, documented and versioned according to the project guidelines?
- How can different versions of a data file be distinguished?

Interoperability

- Will you make use of established software and hardware? If not, how does the software and hardware you use relate to other research?

If applicable:

- Will you make use of established terminologies/ontologies (i.e. structured controlled vocabularies) in the project? If not, how do your terminologies relate to established ones?
- Which coding is used (if any)? Will you build on established coding schemes? If not, how does your coding relate to other research?

Storing your data

Storage

- How and where will the data be stored during the project?
- For how long will the data be stored?

Backup

- How, where and at what intervals will the data be backed-up?
- How will data be recovered in the case of a data loss incident?

Security

- How will sensitive data be protected? (if applicable)
- How will data access be managed?

Protecting your data

Ethical review (if applicable)

- Does your project require approval by a local ethics committee?

Informed consent (if applicable)

- Do you require informed consent for your project?
- If so, how will permission be obtained?
- How are consent files organised and stored?

(sensitive) Personal data /confidential information (if applicable)

- How will access to (sensitive) personal data during the project be controlled?
- How will collaborators be granted access to the data in a secure way?
- If the research project is going to have data that includes confidential information or information that requires informed consent, is there a requirement to notify a privacy officer?
- Is there any confidential information within the material that requires special treatment and/or limits the access to it during/after the project?
- How will the material be protected during/after the project?
- How will permissions and restrictions be enforced?

Intellectual property rights (IPR)/Copyrights

- Are there IPR or copyright issues to consider?
- Will permission be needed to collect/reuse the data?
- Will these rights be transferred to another organisation for data distribution and archiving?

Agreements (if applicable)

- What are the agreements with other stakeholders?

Restrictions (if applicable)

- Any other restrictions that need to be considered?

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PER CAPIRE
QUALI DOMANDE
FARSI

Basic Information.

- State the purpose of the data collection/generation.
- Explain the relation to the objectives of the project
- Consider what data will be collected or created as part of the study (RAW data).
- Consider what data will be produced by processing the RAW data (Secondary, processed data).
- Specify if existing data is being re-used (if any)
- Specify the origin of the data
- Specify the types and formats you plan to use for the data generated/collected (raw, processed, published).
- Consider what data will be published as the result of your study (Published data).

Volume and Life Cycle of the Data.

If you are using FAIRDOM, we will look after data that will be retained and potentially exchanged by your projects. It will help with local storage for temporarily-held local data prior to processing.

For RAW data, please consider the following:

- How much RAW data you think will be produced (Estimates, per month, year, full project duration)?
- Will all of the RAW data be kept for the duration of the study or will the RAW data be deleted once it is processed?
- For large scale RAW data (images, sequence) have you planned the local storage capacity necessary for processing?
- Do you require help to organise a suitable local management system for RAW data?
- Do you have policies that govern the management and usage of RAW data?
- How long will RAW data be kept? Will there be a long-term archive?

For Secondary and Published data, please consider the following:

- What data processing is foreseen in the project?
- How much processed data will be produced, and stored (can you make estimates per month, year, full project)?
- How much of this data will be published? (Estimates per month, year, full project)?
- Does your institution, or the project funders, have policies governing the access and usage of processed data?

Additional for personally sensitive data (e.g medical data)

- When looking at the data flow through the project, define what data is:
 - aggregated (typically safe to share, if names cannot be recovered)
 - anonymized (name cannot be recovered from the data)
 - pseudonymized (name can be recovered by some)
 - non-anonymized (name linked to data)
- Determine which organisational boundaries have to be traversed by which data.
- Make sure with your "local" data protection officer and ethics commission that the data can be shared with your partners along the flow described with the anonymisation levels as described. Why local? Some laws change across surprising boundaries. E.g. in Germany Universities and other public organisations are subject to another data protection law than enterprises. Why seek advice? In some cases you may be required to be able to recover the name-data-relation, e.g. to enable study participants to "leave" a study.

Data Management Checklist

<https://fair-dom.org/knowledgehub/data-management-checklist/>

UTILI COME
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PRIME VOLTE,
PER CAPIRE
QUALI DOMANDE
FARSI

Data decision tree

STRUMENTO UTILISSIMO PER UN
PRIMO PAPPROCCIO AL DATA
MANAGEMENT [PLAN]

Legend:

DATA MANAGEMENT

INTELLECTUAL PROPERTY RIGHTS

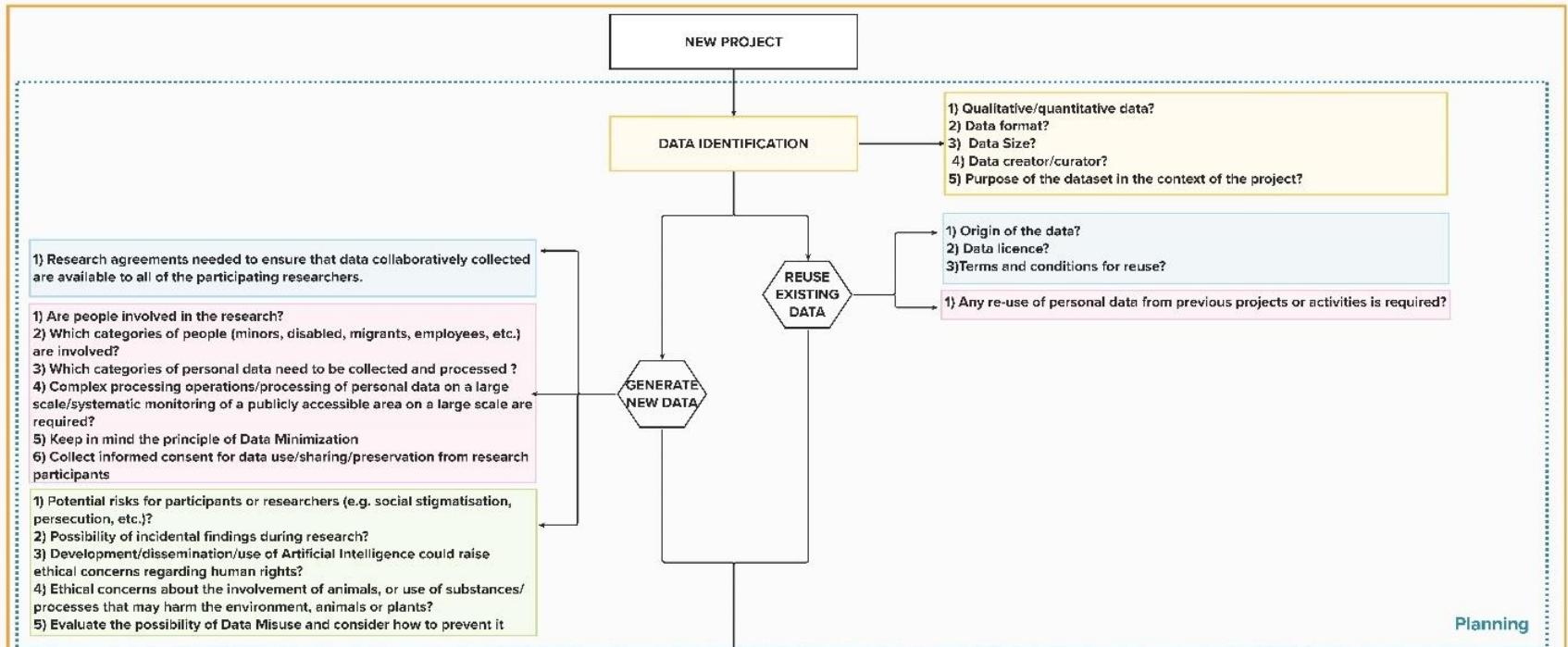
PRIVACY

ETHICS

Caldoni, Giulia, Gualandi, Bianca, & Marino, Mario. (2022). Research Data Management Decision Tree

DECISION TREE FOR DATA MANAGEMENT

Data management





RECOMMENDATIONS

Report ALLEA p. 12



- » If applicable, determine if the body funding your research has particular requirements for a DMP, or offers a template for framing your plan. If there is no required template, choose an existing appropriate one (e.g. via [DMPOnline](#)).
- » Devise a DMP prior to collecting data. Define and plan for your data: all research projects deal with data. If your project includes the analysis of text corpora, for example, then the corpora themselves are data, and you should make sure they are clearly described, documented, and managed according to the FAIR principles so your research is reusable by others.
- » Plan documentation of metadata: In order for your data to be comprehensible in the future and/or reusable by others, they will need descriptive metadata created according to a common schema to understand the context/purpose of the research. The richer the metadata, the more intelligible and useful the dataset (see section on [Metadata](#)).
- » Use standardised terminology to increase interoperability. Consider employing vocabularies or ontologies that follow FAIR principles to increase interoperability and findability (e.g. see [FAIRsharing.org](#)).
- » Consider the right questions to be answered in your DMP that can account for discipline-specific requirements. The DMP templates suggested by funders are quite high level and provide generic guidance for file naming or versioning conventions, database structuring, and can be a good start. Tools like the [dmponline.dcc.ac.uk](#) provide discipline specific examples that can be of further reference.
- » DMP as living documents: Update your data management plan regularly in order to take into account any potential relevant changes such as using new data types and/or models, technology, new institutional data management policies, reassessing legal aspects or licences for legal compliance etc.

DMP in Horizon Europe

IN HORIZON EUROPE
- NELLA PROPOSTA 1 PAGINA
SULLA GESTIONE DEI DATI
- DMP COME DELIVERABLE M6



V.1 Feb. 2021

Horizon Europe (HORIZON)
Euratom Research and Training Programme
(EURATOM)

General Model Grant Agreement
EIC Accelerator Contract

(HE MGA — Multi & Mono)



V.2 April 2021



Horizon Europe Programme
Standard Application Form (RIA, IA)

Application form (Part A)
Project proposal – Technical description (Part B)

Version 2.0
22 April 2021

⚠ *Proposals selected for funding under Horizon Europe will need to develop a detailed data management plan (DMP) for making their data/research outputs findable, accessible, interoperable and reusable (FAIR) as a deliverable by month 6 and revised towards the end of a project's lifetime.*

⚠ *For guidance on open science practices and research data management, please refer to the relevant section of the [HE Programme Guide](#) on the Funding & Tenders Portal.*

Open science: research data management

The beneficiaries must manage the digital research data generated in the action ('data') responsibly, in line with the FAIR principles and by taking all of the following actions:

- establish a data management plan ('DMP') (and regularly update it)
- as soon as possible and within the deadlines set out in the DMP, deposit the data in a trusted repository; if required in the call conditions, this repository must be federated in the EOSC in compliance with EOSC requirements

DMP in Horizon Europe



HEU DMP

Horizon Europe

Data Management Plan Template

Version 1.0
05 May 2021

Data Summary

- Will you re-use any existing data and what will you re-use it for?
- What types and formats of data will the project generate or re-use?
- What is the purpose of the data generation or re-use and its relation to the objectives of the project?
- What is the expected size of the data 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 useful ('data utility'), outside your project?

FAIR data

- 2.1. Making data findable, including provisions for metadata: Will data be identified by a persistent identifier?
- 2.1. Making data findable, including provisions for metadata: Will rich metadata be provided to allow discovery? What metadata will be created? What disciplinary or general standards will be followed? In case metadata standards do not exist in your discipline, please outline what type of metadata will be created and how.
- 2.1. Making data findable, including provisions for metadata: Will search keywords be provided in the metadata to optimize the possibility for discovery and then potential re-use?
- 2.1. Making data findable, including provisions for metadata: Will metadata be offered in such a way that it can be harvested and indexed?
- 2.2. Making data accessible - Repository: Will the data be deposited in a trusted repository?
- 2.2. Making data accessible - Repository: Have you explored appropriate arrangements with the identified repository where your data will be deposited?

- 2.2. Making data accessible - Repository: Does the repository ensure that the data is assigned an identifier? Will the repository resolve the identifier to a digital object?
- 2.2. Making data accessible - Data:
Will all data be made openly available? If certain 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 it is also possible for specific beneficiaries to keep their data closed if opening their data goes against their legitimate interests or other constraints as per the Grant Agreement.
- 2.2. Making data accessible - Data:
If an embargo is applied to give time to publish or seek protection of the intellectual property (e.g. patents), specify why and how long this will apply, bearing in mind that research data should be made available as soon as possible.
- 2.2. Making data accessible - Data:
Will the data be accessible through a free and standardized access protocol?
- 2.2. Making data accessible - Data:
If there are restrictions on use, how will access be provided to the data, both during and after the end of the project?
- 2.2. Making data accessible - Data:
How will the identity of the person accessing the data be ascertained?
- 2.2. Making data accessible - Data:
Is there a need for a data access committee (e.g. to evaluate/approve access requests to personal/sensitive data)?
- 2.2. 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?

TROVATE GIÀ IL
TEMPLATE IN
DMPONLINE

AGATHOCLES

DMP online

Project Details Contributors Plan overview Initial DMP Detailed DMP Final review DMP Share Download

expand all | collapse all

8/9 answered

1. Data summary (1 / 1)

2. FAIR data (3 / 4)

3. Allocation of resources (1 / 1)

4. Data security (1 / 1)

5. Ethical aspects (1 / 1)

DS Wizard

Knowledge Models

Projects

Leiden Booksellers - Giglia IFDS homework week 5

Questionnaire

Metrics

Preview

Documents

Settings

View

Comments

TODOs

Version history

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.

Chapters

I. Administrative information

✓

II. Re-using data

✓

III. Creating and collecting data

✓

IV. Processing data

✓

V. Interpreting data

✓

VI. Preserving data

✓

1 What existing data formats/types will you be using?

Horizon 2020 DMP Science Europe DMP

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" [comma separated values]) that help to make these data reusable. Are you using such common data formats?

Please make sure you list all the data types that are important for your project. You should make sure also to list the formats used in any data sets that you are re-using.

☒ Desirable: Before Submitting the Proposalin Science: [by](#)

ABOUT

RESOURCES

CONTACT

LOG IN



Argos

Plan and follow your data

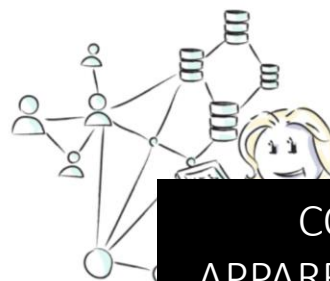
Create machine actionable DMPs.

Configure to best fit your discipline.

Link to EOSC components out of the box.

Share easily in your repository.

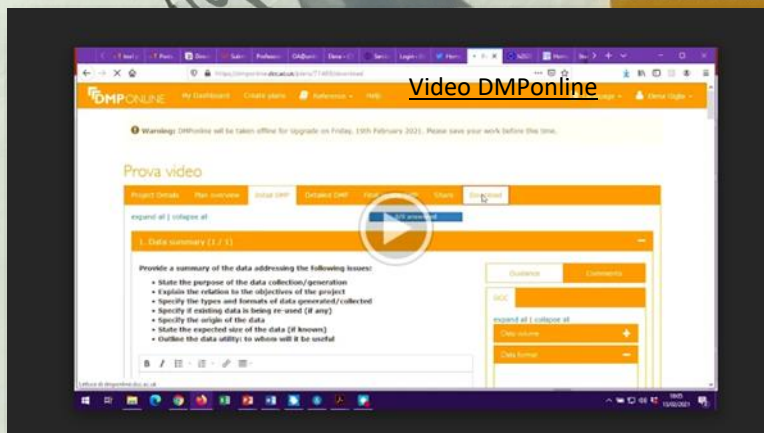
Bring your Data Management Plans closer to where data are generated, analysed and stored.

[Start your DMP](#)

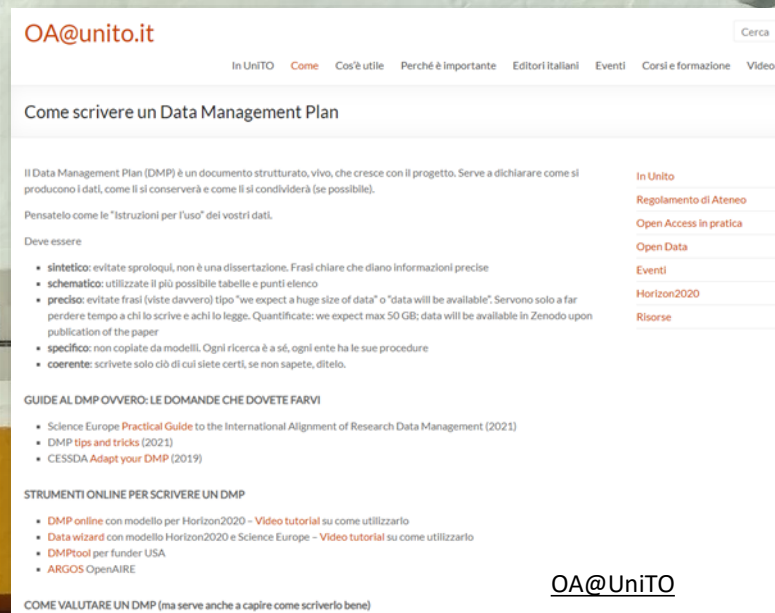
COMPILAZIONE GUIDATA.
APPARENTEMENTE PIÙ COMPLESSO
MA ALLA FINE GENERA IL DMP
AUTOMATICAMENTE

TESTO LIBERO. DOVETE
SAPERE COSA SCRIVERE PER
NON DIMENTICARE NULLA

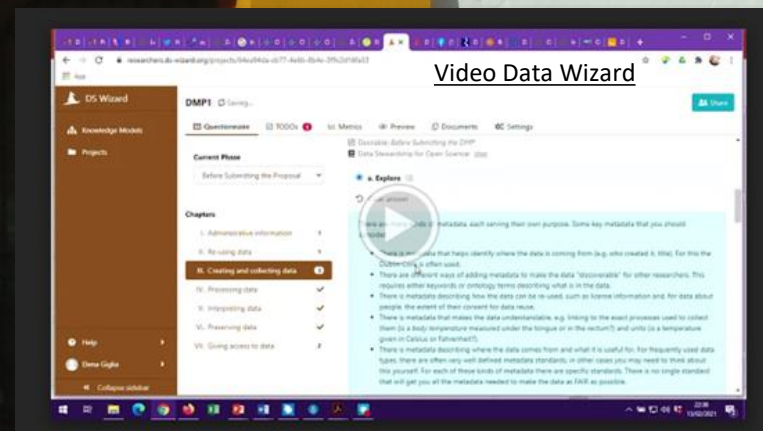
DMP online e Data Wizard video



Video DMPonline



OA@UniTO



Video Data Wizard

VISITA PLAZA DE TOROS

DMP online

PERSONALIZZABILE

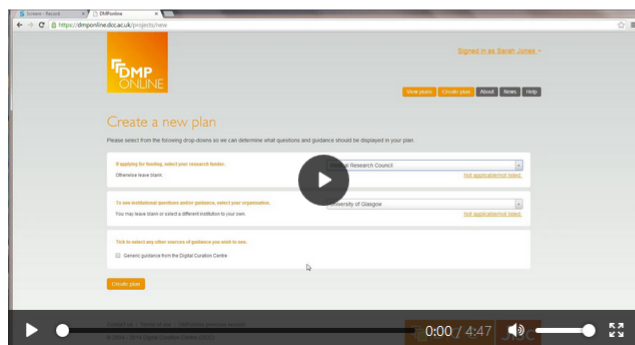


Home About Future plans Help Change language

Welcome.

DMPonline helps you to create, review, and share data management plans that meet institutional and funder requirements. It has been jointly developed by the Digital Curation Centre (DCC) and the University of California Curation Center (UC3).

Screencast on how to use DMPonline



Sign in

Veteran tapes

Project Details Plan overview Write Plan Share Download

expand all | collapse all

13/13 answered

Data Collection (2 / 2)

What data will you collect or create?

B *I*

The "Veteran tape " project will collect and generate different types of datasets:

Type of data	Volume	Format	Storage format
Video recordings	600 x 1Gb	.mkv	.mkv
Transcriptions	600 x 1500Kb	MS Word	.txt
Structured interview text	1 x 500Kb	MS word	.txt

For the video recordings the selected format is .mkv; the same .mkv format will be used for the long-term preservation .

Transcriptions will be written in MS Word and then stored as .txt files.

We checked the format compatibility against EASY File format
<https://dans.knaw.nl/en/deposit/information-about-depositing-data/before-depositing/file-formats>

As the total volume of data is greater than 50Gb, DANS requires a fee for the storage. We are currently in touch with EASY to determine the costs of archiving.

Save

Guidance

Comments (1)

DCC

DCC guidance

Guidance

Questions to consider:

- What type, format and volume of data?
- Do your chosen formats and software enable sharing and long-term access to the data?
- Are there any existing data that you can reuse?

Guidance:

Give a brief description of the data, including any existing data or third-party sources that will be used, in each case noting its content, type and coverage. Outline and justify your choice of format and consider the implications of data format and data volumes in terms of storage, backup and access.

GRATUITO
BASTA REGISTRARSI; POI SI
ACCEDE E SI TROVANO TUTTI I
PROPRI DMP NEL DESKTOP

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

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

* Select the primary funding organisation

☒ European Commission (Horizon 2020)☐ European Research Council (ERC)

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

PREDISPOSTO PER
LE 3 VERSIONI

ALLA FINE, SCARICA
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CONDIVISIBILE
PER
SCRIVERLO
INSIEME

IDENTIFICATIVI

GUIDA

Prova

Project Details

Plan overview

Initial DMP

Detailed DMP

Final review DM

Share

Download

* Project title

☒ mock project for testing, practice, or educational purposes

Funder

Grant number

Project abstract

Briefly summarise your research project to help others understand the purposes for which the data are being collected or created.

[See the full list](#)

Save

Guidance

write your plan, DMPonline can show from a variety of organisations.

5 organisations to see their

Curation Centre

from additional organisations

ID

Principal Investigator

Name

ORCID iD

Email

Phone

Data Contact Person

☒ Same as Principal Investigator

Save

[Project Details](#)[Plan overview](#)[Initial DMP](#)[Detailed DMP](#)[Final review DMP](#)[Share](#)[Download](#)

Set plan visibility

Public or organisational visibility is intended for finished plans. You must answer at least 50% of the questions to enable these options. Note: test plans are set to private visibility by default.

- ☐ Private: visible to me, specified collaborators and administrators at my organisation
- ☐ Organisation: anyone at my organisation can view
- ☐ Public: anyone can view

PRIVATO O PUBBLICO?

Manage collaborators

Invite specific people to read, edit, or administer your plan. Invitees will receive an email notification that they have access to this plan.

Email address	Permissions
elena.giglia@unito.it	Owner

Invite collaborators

* Email

* Permissions

- ☐ Co-owner
- ☐ Editor
- ☐ Read only

SI POSSONO INVITARE
COLLABORATORI CON LIVELLI DI
PERMESSO DIVERSI

Template version 0, published on 04 August 2021

Instructions

Data Summary

- Will you re-use any existing data and what will you re-use it for?
- What types and formats of data will the project generate or re-use?
- What is the purpose of the data generation or re-use and its relation to the objectives of the project?
- What is the expected size of the data 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 useful ('data utility'), outside your project?

FAIR data

- 2.1. Making data findable
- 2.1. Making data accessible - Repository: What disciplinary or general standards will be followed?
- 2.1. Making data accessible - Data: Will all data be made openly available?

FAIR data

- 2.1. Making data findable, including provisions for metadata: Will data be identified by a persistent identifier?
- 2.1. Making data findable, including provisions for metadata: Will rich metadata be provided to allow discovery? What metadata will be created? What disciplinary or general standards will be followed? In case metadata standards do not exist in your discipline, please outline what type of metadata will be created and how.
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- 2.1. Making data findable, including provisions for metadata: Will metadata be offered in such a way that it can be harvested and indexed?
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- 2.2. Making data accessible - Repository: Have you explored appropriate arrangements with the identified repository where your data will be deposited?
- 2.2. Making data accessible - Repository: Does the repository ensure that the data is assigned an identifier? Will the repository resolve the identifier to a digital object?
- 2.2. Making data accessible - Data:
Will all data be made openly available? If certain 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 it is also possible for specific beneficiaries to keep their data closed if opening their data goes against their legitimate interests or other constraints as per the Grant Agreement.
- 2.2. Making data accessible - Data:
If an embargo is applied to give time to publish or seek protection of the intellectual property (e.g. patents), specify why and how long this will apply, bearing in mind that research data should be made available as soon as possible.
- 2.2. Making data accessible - Data:
Will the data be accessible through a free and standardized access protocol?

[Project Details](#)[Contributors](#)[Plan overview](#)

Horizon Europe Template

[Write plan](#)

- 2.4. 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.)?
- 2.4. Increase data re-use:
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?
- 2.4. Increase data re-use:
Will the data produced in the project be useable by third parties, in particular after the end of the project?
- 2.4. Increase data re-use:
Will the provenance of the data be thoroughly documented using the appropriate standards?
- 2.4. Increase data re-use:
Describe all relevant data quality assurance processes.
- 2.4. Increase data re-use:
Further to the FAIR principles, DMPs should also address research outputs other than data, and should carefully consider aspects related to the allocation of resources, data security and ethical aspects.

Other research outputs

- In addition to the management of data, beneficiaries should also consider and plan for the management of other research outputs that may be generated or re-used throughout their projects. Such outputs can be either digital (e.g. software, workflows, protocols, models, etc.) or physical (e.g. new materials, antibodies, reagents, samples, etc.).
- Beneficiaries should consider which of the questions pertaining to FAIR data above, can apply to the management of other research outputs, and should strive to provide sufficient detail on how their research outputs will be managed and shared, or made available for re-use, in line with the FAIR principles.

Data Summary

- Will you re-use any existing data and what will you re-use it for?
- What types and formats of data will the project generate or re-use?
- What is the purpose of the data generation or re-use and its relation to the objectives of the project?
- What is the expected size of the data 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 useful ('data utility'), outside your project?

...E NON «A HUGE AMOUNT OF DATA»

COSTI

Data volume

- Note what volume of data you will create in MB/GB/TB. Indicate the proportions of raw data, processed data, and other secondary outputs (e.g., reports).
- Consider the implications of data volumes in terms of storage, access and preservation. Do you need to include additional costs?
- Consider whether the scale of the data will pose challenges when sharing or transferring data between sites; if so, how will you address these challenges?

Data format

TABELLA PER DATI DI FORMATO DIVERSO

- Clearly note what format(s) your data will be in, e.g., plain text (.txt), comma-separated values (.csv), geo-referenced TIFF (.tif, .tiff).
- Explain why you have chosen certain formats. Decisions may be based on staff expertise, a preference for open formats, the standards accepted by data centres or widespread usage within a given community.
- Using standardised, interchangeable or open formats ensures the long-term usability of data; these are recommended for sharing and archiving.
- See UK Data Service guidance on [recommended formats](#) or DataONE Best Practices for [file formats](#).

SCRIVETE DIRETTAMENTE (USATE TABELLE E PUNTI ELENCO)

IN OGNI PASSAGGIO POTETE SALVARE E CONTINUARE DOPO

USATE FORMATI STANDARD (CON ELENCO)

DMP ONLINE My Dashboard Create plans Reference Help Language Elena Gigli

Perugia Prova

Project Details Contributors Plan overview Write Plan Share Download

expand all | collapse all 0/41

Data Summary (0 / 6)

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

B I [List Icon] [Table Icon] [Link Icon] [Grid Icon]

Save

Guidance **Comments**

DCC

the reasons if re-use of any existing has been considered but discarded.

PREVIEW DI TUTTE LE DOMANDE

FAIR data

- 2.1. Making data findable, including provisions for metadata: Will data be identified by a persistent identifier?
- 2.1. Making data findable, including provisions for metadata: Will rich metadata be provided to allow discovery? What metadata will be created? What disciplinary or general standards will be followed? In case metadata standards do not exist in your discipline, please outline what type of metadata will be created and how.
- 2.1. Making data findable, including provisions for metadata: Will search keywords be provided in the metadata to help others identify and discover the data?
- 2.1. Making data findable, including provisions for metadata: Will metadata be offered in such a way that

FAIR data (0 / 25)

2.1. Making data findable, including provisions for metadata: Will data be identified by a persistent identifier?

Guidance

DCC

Metadata & documentation

GUIDE SPECIFICHE

Save

2.1. Making data findable, including provisions for metadata: Will rich metadata be provided to allow discovery? What metadata will be created? What disciplinary or general standards will be followed? In case metadata standards do not exist in your discipline, please outline what type of metadata will be created and how.

Guidance

DCC

Metadata & documentation

- What metadata will be provided to help others identify and discover the data?
- Researchers are strongly encouraged to use community metadata standards where these are in place. The Research Data Alliance offers a [Directory of Metadata Standards](#). Data repositories may also provide guidance about appropriate metadata standards.
- Consider what other documentation is needed to enable reuse. This may include information on the methodology used to collect the data, analytical and procedural information, definitions of variables, units of measurement, any assumptions made, the format and file type of the data and software used to collect and/or process the data.
- Consider how you will capture this information and where it will be recorded, e.g., in a database with links to each item, in a 'readme' text file, in file

2.2. Making data accessible - Data:

Will all data be made openly available? If certain 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 it is also possible for specific beneficiaries to keep their data closed if opening their data goes against their legitimate interests or other constraints as per the Grant Agreement.

B I [list icon] [link icon] [table icon]

Save

AS OPEN AS POSSIBLE AS
CLOSED AS NECESSARY

RICORDATEVI CHE
AVETE FIRMATO UN
GRANT AGREEMENT...

Guidance

Comments

DCC

Data sharing

COMMENTI

- How will you share the data e.g. deposit in a data repository, use a secure data service, handle data requests directly or use another mechanism? The methods used will depend on a number of factors such as the type, size, complexity and sensitivity of the data

Open science: research data management

The beneficiaries must manage the digital research data generated in the action ('data') responsibly, in line with the FAIR principles and by taking all of the following actions:

- establish a data management plan ('DMP') (and regularly update it)
- as soon as possible and within the deadlines set out in the DMP, deposit the data in a trusted repository; if required in the call conditions, this repository must be federated in the EOSC in compliance with EOSC requirements
- as soon as possible and within the deadlines set out in the DMP, ensure open access — via the repository — to the deposited data, under the latest available version of the Creative Commons Attribution International Public License (CC BY) or Creative Commons Public Domain Dedication (CC0) or a licence with equivalent rights, following the principle 'as open as possible as closed as necessary', unless providing open access would in particular:
 - be against the beneficiary's legitimate interests, including regarding commercial exploitation, or
 - be contrary to any other constraints, in particular the EU competitive interests or the beneficiary's obligations under this Agreement; if open access is not provided (to some or all data), this must be justified in the DMP

Other research outputs (0 / 2)

In addition to the management of data, beneficiaries should also consider and plan for the management of other research outputs that may be generated or re-used throughout their projects. Such outputs can be either digital (e.g. software, workflows, protocols, models, etc.) or physical (e.g. new materials, antibodies, reagents, samples, etc.).

B *I*

Save

NUOVA SEZIONE: GESTIONE DI
«ALTRI RISULTATI» (SOFTWARE,
PROTOCOLLI, MODELLI...)

Beneficiaries should consider which of the questions pertaining to FAIR data above, can apply to the management of other research outputs, and should strive to provide sufficient detail on how their research outputs will be managed and shared, or made available for re-use, in line with the FAIR principles.

B *I*

Comments

Add comments to share with collaborators

B *I*

Save

Comments

Add comments to share with collaborators

B *I*

Allocation of resources (0 / 4)

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.) ?

B I ☰ ☷ 🔗 📊

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)

B I ☰ ☷ 🔗 📊

General > Article 6.2.C.3 Other goods, works and services

Costs related to research output management (HE) – Costs for research output management (e.g. *management of research data*) are eligible if the eligibility conditions are fulfilled, including open access to peer-reviewed publications (but see the additional eligibility condition referenced immediately below), research data and other outputs.

COSTI SONO
RIMBORSABILI (GRANT
6.2.C.3)

CHI RISPONDE DELLA
GESTIONE DEI DATI?

Who will be responsible for data management in your project?

B I ☰ ☷ 🔗 📊

Roles & responsibilities

- Outline the roles and responsibilities for all activities, e.g., data capture, metadata production, data quality, storage and backup, data archiving & data sharing. Individuals should be named where possible.
- For collaborative projects you should explain the coordination of data management responsibilities across partners.
- See UK Data Service guidance on [data management roles and responsibilities](#) or DataONE Best Practices: [Define roles and assign responsibilities for data management](#).

Data security (0 / 1)

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

B I    

Save

SICUREZZA DEI DATI: SERVE
POLICY DI ATENEO

Storage & security

- Describe where the data will be stored and backed up during the course of research activities. This may vary if you are doing fieldwork or working across multiple sites so explain each procedure.
- Identify who will be responsible for backup and how often this will be performed. The use of robust, managed storage with automatic backup, for example, that provided by university IT teams, is preferable. Storing data on laptops, computer hard drives or external storage devices alone is very risky.
- See UK Data Service Guidance on [data storage](#) or DataONE Best Practices for [storage](#).
- Also consider data security, particularly if your data is sensitive e.g., detailed personal data, politically sensitive information or trade secrets. Note the main risks and how

Are there, or could there be, any ethics or legal issues that can have an impact on data sharing? These can also be discussed in the context of the ethics review. If relevant, include references to ethics deliverables and ethics chapter in the Description of the Action (DoA).

B I [list icon] [link icon] [table icon]

Save

Guidance

Comments

DCC

Ethics & privacy



Will informed consent for data sharing and long term preservation be included in questionnaires dealing with personal data?

B I [list icon] [link icon] [table icon]

Save

Guidance

Comments

DCC

6. Other (0 / 1)

Refer to other national/funder/sectorial/departmental procedures for data management that you are using (if any)

B I [list icon] [link icon] [table icon]

Save

Guidance

Comments

DCC

Related policies

- Consider whether there are any existing procedures that you can base your approach on. If your group/department has local guidelines that you work to, point to them here.
- List any other relevant funder, institutional, departmental or group policies on data management, data sharing and data security.

BASE LEGALE PER DATI
PERSONALI; CONSENSI
INFORMATI VANNO IN
QUESTA SEZIONE

QUI SAREBBE
URGENTE UNA
POLICY DI ATENEO O
IL NATIONAL PLAN
OPEN SCIENCE

Perugia Prova

Project Details

Contributors

Plan overview

Write Plan

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Format

pdf

csv

html

pdf

text

docx

json

☐ project details coversheet

☒ question text and section headings

☒ unanswered questions

PDF formatting

Font

Face

Arial, Helvetica, Sans-Serif

Size (pt)

10

Margin (mm)

Top

25

Download Plan

1. Data summary

Provide a summary of the data addressing the following issues:

- State the purpose of the data collection/generation
- Explain the relation to the objectives of the project
- Specify the types and formats of data generated/collected
- Specify if existing data is being re-used (if any)
- Specify the origin of the data
- State the expected size of the data (if known)
- Outline the data utility: to whom will it be useful

Purpose: _____

Relation: _____

Data will be created as the research is original.

Reuse: videos watched on YouTube, chats coming from social platforms

Origin: interviews and observations; content analysis

Type of data	Format (ongoing)	Format (preservation)	Expected Size	Consent collected	Reuse Rights
A Textual	.doc	.txt	10 M		
A1 [Interview template					
A2 [Consent form					
A3 [Interview transcriptions				x	
A4 [Code book	.txt				
A5 [Report					
A6 [Video transcriptions					CC BY
B Tabular data	.xls	.csv	50 M		
B1 [Participants description					
B2 [Thematic analysis					
B3 [Content analysis					
C Audio			10 G		
C1 [Recording	.mp3	still to be decided		x	
D Video			100 G		
D1 [Recorded interviews	.mp4			x	
D2 [Downloaded					CC BY

Data stewardship wizard

The image shows the Data Stewardship Wizard interface. On the left is a sidebar with a brown background. It contains a logo at the top, followed by 'Knowledge Models' and 'Projects' (which is highlighted with a red box). At the bottom of the sidebar are 'Help' and 'Elena Giglia' with expandable arrows. The main area is titled 'Projects' and features a search bar, a filter dropdown set to 'Updated', and an upward arrow. A red box highlights a 'Create' button in the top right corner. Below this, two project entries are listed: 'LABORATORIO PROVA' by Elena Giglia, updated 11 days ago, and 'Survey 21/22 WG Food', updated 18 days ago. A modal window titled 'Create Project' is open in the foreground. It has two tabs: 'From Template' and 'Custom' (highlighted with a red box). The 'Name' field is empty. Below it, the 'Knowledge Model' section (highlighted with a red box) shows a selection of 'Common DSW Knowledge Model 2.3.0'. The 'Tags' section at the bottom has three checkboxes: 'Horizon 2020 DMP', 'Science Europe DMP' (highlighted with a red box), and 'maDMP'. At the very bottom of the modal are 'Cancel' and 'Save' buttons.

Projects

Search projects... Updated ↑

Create

LABORATORIO PROVA
Elena Giglia · Common DSW Knowledge Model, 2.3.0 (dsw:root:2.3.0) · Answered 22/26
Updated 11 days ago

Survey 21/22 WG Food
Common DSW Knowledge Model, 2.3.0 (dsw:root:2.3.0) · Answered 7/12
Updated 18 days ago

Create Project

From Template Custom

Name

Knowledge Model

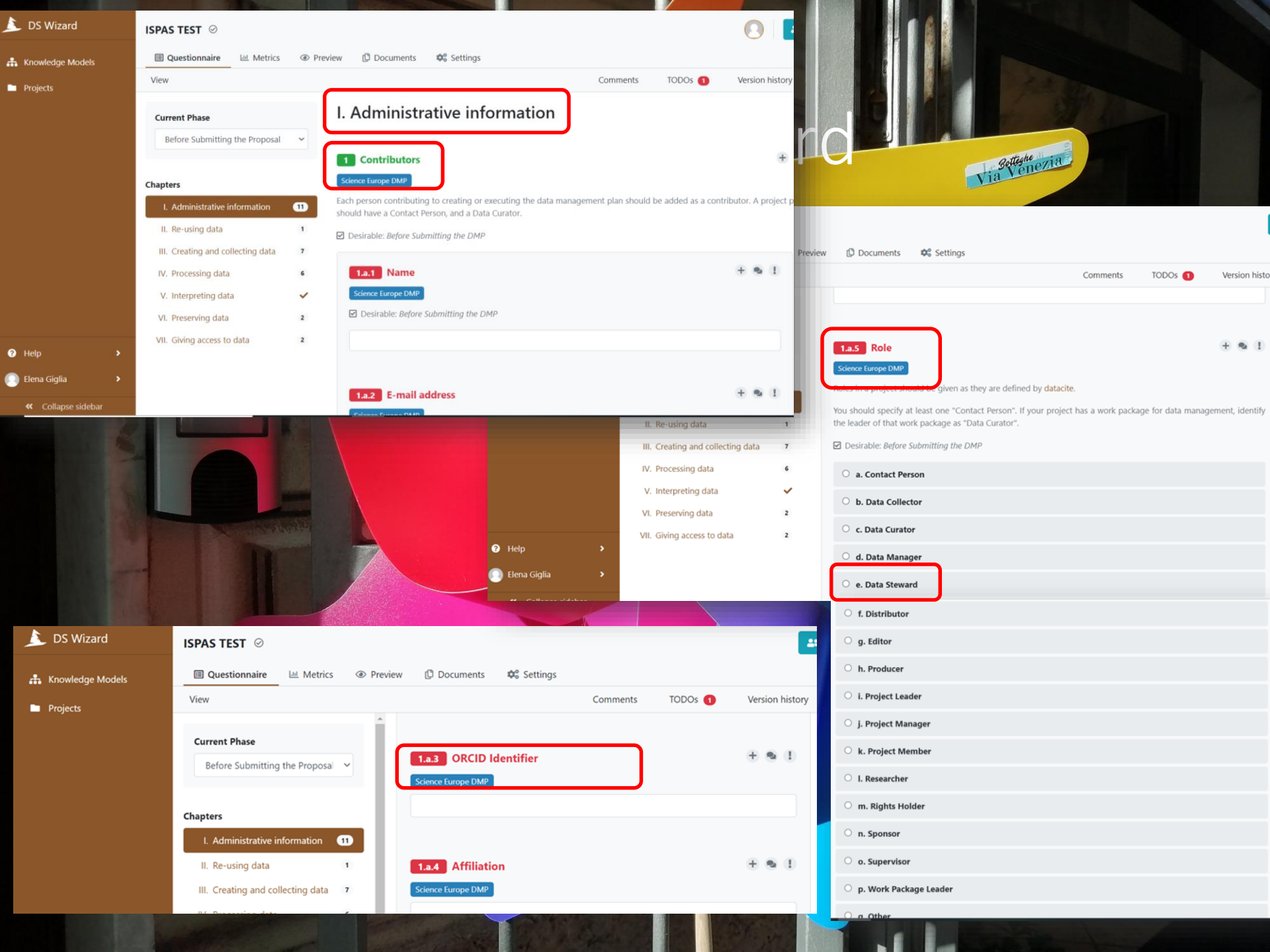
Common DSW Knowledge Model 2.3.0
DSW Knowledge Model originated from mindmap made by Rob Hooft

Tags

☐ Horizon 2020 DMP ☒ Science Europe DMP ☐ maDMP

You can filter questions in the Questionnaire by tags. If no tags are selected, all questions will be used.

Cancel Save



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I. Administrative information

1 Contributors

Science Europe DMP

Chapters

I. Administrative information 11

II. Re-using data 1

III. Creating and collecting data 7

IV. Processing data 6

V. Interpreting data 7

VI. Preserving data 2

VII. Giving access to data 2

Each person contributing to creating or executing the data management plan should be added as a contributor. A project should have a Contact Person, and a Data Curator.

☒ Desirable: Before Submitting the DMP

1.a.1 Name

Science Europe DMP

☒ Desirable: Before Submitting the DMP

1.a.2 E-mail address

Science Europe DMP

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1.a.5 Role

Science Europe DMP

Roles should be given as they are defined by datacite.

You should specify at least one "Contact Person". If your project has a work package for data management, identify the leader of that work package as "Data Curator".

☒ Desirable: Before Submitting the DMP

☐ a. Contact Person

☐ b. Data Collector

☐ c. Data Curator

☐ d. Data Manager

☐ e. Data Steward

☐ f. Distributor

☐ g. Editor

☐ h. Producer

☐ i. Project Leader

☐ j. Project Manager

☐ k. Project Member

☐ l. Researcher

☐ m. Rights Holder

☐ n. Sponsor

☐ o. Supervisor

☐ p. Work Package Leader

☐ q. Other

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1.a.3 ORCID Identifier

Science Europe DMP

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1.a.4 Affiliation

Science Europe DMP

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II. Re-using data

Before you decide to embark on any new study, it is good practice to check all options to re-use existing available data, either collected or generated by yourself in an earlier project, or data from others (Barend Mons calls this "Other PEople's Data And Services" or OPEDAS). This can include reusable data that have been created for an earlier study, and also so-called "reference data" which is used by many projects.

It is not because we can generate massive amounts of data that we always need to do so. Creating data with public money is bringing with it the responsibility to treat those data well and (if potentially useful) make them available for re-use by others. And the circle is only complete if such data is actually re-used.

1 Is there any pre-existing data?

 Science Europe DMP

Are there any data sets available in the world that are relevant to your planned research?

☒ Desirable: *Before Submitting the Proposal*

 Data Stewardship for Open Science: [atq](#)

 External links: [Google dataset search](#), [Datacite Search](#)

☐ a. No

☒ b. Yes

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Answered about 1 month ago by Elena Giglia.

1.b.1 Will you be using any pre-existing data (including other people's data)?

Science Europe DMP

Will you be referring to any earlier measured data, reference data, or data that should be mined from existing literature? Your own data as well as data from others?

☒ Desirable: Before Submitting the Proposal

☒ Data Stewardship for Open Science: [eZi](#)

☐ a. No

☒ b. Yes

Clear answer

Answered about 1 month ago by Elena Giglia.

1.b.1.b.1 What reference data will you use?

Science Europe DMP

Much of today's data is used in comparison with reference data. You may be comparing your own data with a "standard set" which is maintained as a collection by someone else. Or you could be determining differences to a standard (for example in bioinformatics, a genome is often compared with a reference genome to identify genomic variants). If you use reference data

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DS Wizard

Knowledge Models
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1.b.1.b.1.a.3 What are the conditions of use for this database or dataset?

Science Europe DMP

Although there is no world-wide rule for the application of copyright on data sets (copyright only applies to things that require a so-called "creative step"), it is wise to check for an explicit permission to use a data set and not to assume that data can be used freely just because you can access it. Note that copyright laws explicitly *forbid* the use of a copyrighted work, *except* if you get permission. Such a permission is called a "licence". So: if you can not find a licence, you have to assume you can not use the data.

External links: [Wikipedia on Copyright](#)

- ☒ a. They are freely available for any use (public domain or CC0)
- ☐ b. They are freely available with obligation to quote the source (e.g. CC-BY)
- ☐ c. They are available under some restrictions, which we will follow in our project

Clear answer

Answered about 1 month ago by Elena Giglia.

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Data Stewardship for Open Science: *nij*

1.a.1 Data format/type

Science Europe DMP

☒ Desirable: Before Submitting the Proposal

Data Documentation Initiative Codebook (DDI-Codebook)

FAIRsharing <https://fairsharing.org/bsg-s001512>

Clear answer

Answered 7 months ago by Elena Giglia.

1.a.2 Is this a standard data format widely used by researchers in this field?

Science Europe DMP

☒ a. No

Interoperability

☐ b. Yes

Interoperability

Clear answer

Answered in less than 5 seconds by Elena Giglia.

1.a.2.a.1 Why are you using a non-standard format?

Science Europe DMP

☒ a. There is no standardized format for this data type☐ b. It is optimized for processing speed and/or volume☐ c. Another reason

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Elena Giglia

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2.a.1.a.3 Will you document the data with DDI metadata

Science Europe DMP

DDI metadata is more extensive than Dublin Core and DataCite, it details more of what is in the data and really can help other researchers locate your data set as an interesting source.

☒ Desirable: Before Submitting the DMP

☒ External links: [DDI metadata documentation](#)

☐ a. No

Findability

Reusability

☒ b. Yes

Findability

Reusability

Clear answer

Answered about 1 month ago by Elena Giglia.

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Elena Giglia

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2.a.2 How will you be keeping track of the "provenance" of the data?

Science Europe DMP

Data analysis is normally done step-by-step. It is essential to make sure all steps are properly documented and not be reproducible. Re-users of the data also need this information to decide whether the data can be reproduced.

☒ Desirable: Before Submitting the DMP

☒ a. We use lab notebooks

Reusability

☐ b. We use an electronic lab notebook

Reusability

☐ c. We use other arrangements

Reusability

Clear answer

Answered about 1 month ago by Elena Giglia.

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LABORATORIO PROVA 

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Settings

Name

Description

Default document template

 **Science Europe DMP Template 1.7.0** 
Default DCC DMP Template recommended by Science Europe

Default document format

☐  HTML Document	☒  PDF Document
☐  LaTeX Document	☐  MS Word Document
☐  OpenDocument Text	☐  Markdown Document

 Save

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Section A: Data Collection

1. What data will you collect or create?

Re-used datasets

We will use the following reference datasets:

- **databae COVID del Ministero salute**
(<https://www.salute.gov.it/portale/nuovocoronavirus/dettaglioPubblicazioniNuovoCoronavirus?lingua=italiano&id=3147>)

We will use version "bollettino 9/12/2021 (ver 2.2)" of this dataset. If a new version becomes available during the project, we will stay with the old version.

Data formats and types

We will be using the following data formats and types:

- **tabellari**

It is a standardized format. This is not a suitable format for long-term archiving; however, we plan to convert it to a suitable format before the end of the project. We expect to have 30 GB of data in this format.

- **testuali**

2. How will the data be collected or created?

There will be no instrument dataset in this project.

Storage and file conventions

We will use a filesystem with files and folders with the following folder

Data Management Plan

LABORATORIO PROVA

Contact person: There are no contact people specified yet

Based on: Common DSW Knowledge Model, 2.3.0 (downroot:2.3.0)

Project phase: Before Submitting the Proposal

Created by: Elena Giglio (elena.giglio@unibo.it)

Generated on: 21 Dec 2021

Data Management Plan created in Data Stewardship Wizard - ds.wizard.org/

your
best

BUON LAVORO!