

# Fonds voor Wetenschappelijk Onderzoek - Research Foundation Flanders (FWO): Flemish data management plan (DMP) - Application DMP

## Questionnaire

The questions in this section should only be answered if you are currently applying for FWO funding.

Are you preparing an application for funding?

- Yes - default
- No

Describe the datatypes (surveys, sequences, manuscripts, objects ... ) the research will collect and/or generate and /or (re)use. (use up to 700 characters)

*Guidance:*

When answering this question, include information about the following:

- will you reuse existing data, generate new data, or do both?
- will you be working with personal data (= any information relating to an identified/identifiable natural person)?
- make a list of all data types (interviews, samples, observations, manuscripts, experiments, models...) that you will presumably be using during the project. Also provide information on data formats (e.g. .txt, .csv...).
- if possible, estimate the expected total volume of data (e.g. in KB/MB/GB/TB...); this will be indicative of whether you will need a budget for data storage or preservation.

If you expect that your project will not use/generate any research data (in which case you can skip questions 2-5), explain here why that is the case.

Specify in which way the following provisions are in place in order to preserve the data during and at least 5 years after the end of the research? Motivate your answer. (use up to 700 characters)

*Guidance:*

1. FWO expects relevant research data to be preserved for a minimum term of 5 years beyond the end of the research. Who is the person responsible for data preservation (if known already)? In case the FWO wants to contact someone with questions regarding the long-term preservation of the data, who can be contacted?
2. Is sufficient storage capacity guaranteed during and after the research project? In view of the type, format and estimated volume of the data, will you be able to guarantee safe and secure storage during the project and for at least 5 years beyond the end of the project? It is good practice to already mention where data will be kept (and who will have access to them).

You can also do more than passively archive the data, and opt to share/publish them (if appropriate given the nature of the data). Best practice here is to make use of established, trusted resources listed in [re3data.org](https://re3data.org) or [FAIRsharing.org](https://FAIRsharing.org), such as:

- discipline-specific data repositories (if available), e.g. as recommended by journals with data availability policies such as [Scientific Data \(Nature\)](https://www.nature.com/scientificdata/), [PLoS](https://www.plos.org/), [F1000 \(section 4.1\)](https://www.f1000.com/)

- general-purpose/multi-disciplinary repositories, e.g. [Zenodo](#); [Open Science Framework](#); EUDAT's [B2Share](#); [figshare](#); Harvard's [Dataverse](#)
- repositories for non-digital materials, e.g. the [Belgian Co-ordinated Collections of Micro-Organisms \(BCCM\)](#) for the deposit of biological material

When answering this part of the DMP section in the FWO application form, keep in mind that not all data should or can be kept (indefinitely) beyond the lifetime of a project. Data to keep include:

- data that you are legally obliged to keep
- data crucial for the verification of research results
- data that cannot be re-created
- data obtained at great cost of time and money
- data with great potential re-use value, incl. for your own research unit
- data with great scientific, historical or cultural significance

What's the reason why you wish to deviate from the principle of preservation of data and of the minimum preservation term of 5 years? (max. 700 characters)

*Guidance:*

In case keeping (some of) the data for at least 5 years after the end of the research is not possible, explain why this is so. Reasons could include:

- legal/ethical restrictions (e.g. research participants have not given informed consent for archiving personal data)
- contractual restrictions (e.g. when you re-use data from a third party, the latter may not allow you to keep the data beyond the project's lifetime)
- practical obstacles

Are there issues concerning research data indicated in the ethics questionnaire of this application form? Which specific security measures do those data require? (use up to 700 characters)

*Guidance:*

For all projects that work with personal data, human participants, animals, or data with dual use/misuse potential (i.e. data that could be used maliciously for military, criminal or terrorism purposes) this section should receive an answer.

To all personal or otherwise sensitive data (e.g. data from research with dual use potential, data that - if disclosed - could cause harm to endangered species, to vulnerable sites or groups, to public health and safety, etc.) stringent security measures relating to storage and access apply. Provide a short description of how this can be guaranteed by the project/the host institution.

Which other issues related to the data management are relevant to mention? (use up to 700 characters)

*Guidance:*

FWO is eager to receive feedback to update its guidance or Research Data Management policy.

For whom might your data be useful outside of the research project, e.g. researchers or other stakeholders? How will you share this data?

# Fonds voor Wetenschappelijk Onderzoek - Research Foundation Flanders (FWO): Flemish data management plan (DMP) - Flemish data management plan (DMP)

## Version information

Version of this DMP:

Date of this DMP version:

Changes made in this version compared to the previous version:

## 1. Research Data Summary

1.1 List and describe all data and research materials that you plan to generate/collect and/or reuse throughout your research project (e.g. original, output, raw, processed, analyzed datasets).

*Guidance:*

Start a new row in the table for each dataset that you will generate/collect or reuse during your research project and fill in the following information:

**Dataset reference:** provide an abbreviation or ID per dataset to be able to refer to it in other sections of the DMP.

**Description:** describe for each dataset its content and method of collection/creation (e.g. workflow, methodology, software used).

**New or reused:** indicate for each dataset whether it is newly generated within this research project or whether it existed already outside of the project.

**Data type:** select for each dataset one or more data types from the list.

**Digital data format:** indicate the format for each digital dataset.

**Digital data volume:** give an estimation of the upper limit of the volume for each dataset.

**Physical volume:** give an estimation of the physical volume of the research materials (for example the number of relevant biological samples that need to be stored and preserved during the project and/or after).

1.2 If you reuse existing data, specify the source:

- previous research from myself or my group
- publicly available data including journal papers and data repositories
- data from an academic, clinical or other not-for-profit collaborator
- data from an industry partner
- commercial data provider or other purchased data
- other, specify:

1.3 Are there any ethical considerations for your project? If applicable, indicate your ethical approval number.

- No ethical considerations
- Human participants (e.g. interviews/surveys, experiments)
- Human bodily material or patient data
- Experiments on animals
- Research results that can be used for military or unethical purposes (dual use or

- violations of human rights)
- Other, specify:

*Guidance:*

If any of the listed options apply to your project, you may need to seek ethical approval from your institution's ethical committee (EC). Be aware that the mentioned list is not exhaustive

1.4 Will you process personal data (data in scope of the GDPR)? If so, mention the dataset reference to which this applies. If applicable, provide a reference to the privacy register.

- Yes: I collect and process personal data
- Yes: I process existing personal data (including pseudonymous data)
- No

*Guidance:*

Consult the DMP [glossary](#) for an elaborate explanation of what is “personal data”.

1.5 Do any of the following ethical and legal considerations apply to your research? If so, indicate to which dataset(s) they relate and which restrictions they imply.

- Potential for commercial valorization
- Material/data transfer agreements, research collaboration agreements, etc.
- Intellectual property rights
- Data ownership
- Other, specify:

*Guidance:*

Contact your institution's legal department (e.g. Tech Transfer Office) for more information or guidance.

## **2. Documentation and Metadata**

2.1 What documentation or other supporting material will accompany the data for it to be interpreted correctly? e.g. (Electronic) Lab Notebooks, README files, codebooks etc.

2.2 How will metadata be provided for the data? If already known, list for each dataset which standard metadata schema will be used and/or what type of metadata will be provided.

- Provided in the data file
- Via a data storage or management platform
- Via a data repository
- As a separate file accompanying the data
- Other, specify:

*Guidance:*

Repositories could ask to deliver metadata in a certain format, with specified ontologies and vocabularies, i.e. standard lists with unique identifiers. Please check target repositories' metadata requirements.

## **3. Data storage & back-up during the research project**

### 3.1 Where will the digital and physical data be stored during the project?

*Guidance:*

Describe the storage locations and procedures that will be used for storing digital and physical data during research.

### 3.2 How will the digital data be backed up?

- I store my data on the institution's storage for which back-up is provided by the institution.
- I make my own backups, for which I describe the procedure below.

### 3.3 Is there currently sufficient storage & backup capacity during the project? If no or insufficient storage or backup capacities are available, then explain how this will be taken care of.

### 3.4 How will you ensure that the data are securely stored and not accessed or modified by unauthorized persons?

- Define for each dataset who (role) has access to it and how, including secure data transfer between project partners during the project.
- When working with personal or otherwise confidential data, explain the pseudonymization procedures and other security measures (e.g. encryption, multi-factor authentication, etc.).

### 3.5 What are the expected costs for data storage and backup during the research project? How will these costs be covered?

## 4. Data preservation after the end of the research project

4.1 Indicate for each dataset how long it will be preserved after the research project is finished, and at which storage location. If you cannot preserve the data for at least five years (**or longer**, in agreement with other preservation policies that are applicable), clarify the reason for this.

4.2 What are the expected costs for data preservation? How will these costs be covered?

## 5. Data sharing and reuse

5.1 Specify for each dataset how it will be made findable or discoverable by others: access level, access conditions, location. If you cannot share the (meta)data, clarify the reason for this.

*Guidance:*

Access level[2]:

- **Open:** immediately and permanently online, and free for all on the Web, without financial and technical barriers.
- **Embargoed:** metadata only access until released for open access on a certain date.
- **Restricted:** available in a system but with some type of restriction for full open access (e.g. login or data access request required).
- **Metadata only:** access is limited to metadata only.
- **Closed:** not findable or discoverable, i.e. stored on a private (institutional)

platform.

[2] modified from [https://vocabularies.coar-repositories.org/access\\_rights/1.1/](https://vocabularies.coar-repositories.org/access_rights/1.1/)

5.2 When will the data be made available? For each dataset, state when it will be made findable and if an embargo is foreseen.

*Guidance:*

This could be a specific date or an indication such as ‘upon publication of research results’, ‘after protection of intellectual property rights has been secured’, etc.

5.3 If already known, please specify the data usage licenses that you are going to assign to each dataset. Check your institutional guidance for more information.

- The default license of the repository, namely ...
- A Creative Commons license, namely ...
- An open source software license, namely ...
- Other, specify:

*Guidance:*

A data usage license indicates under which conditions the data can be reused. If no license is granted, the data cannot be legally reused. You may only release data under a license chosen by yourself if it does not already fall under another license that might prohibit that.

If there are restrictions for sharing the data, a data sharing agreement may be needed, which can be clarified under the category “other”. Contact your institution’s research support team for guidance.

5.4 For each dataset deposited in a repository, mention the persistent identifier (e.g. DOI, accession number, ...) provided by that repository.

*Guidance:*

This question is only applicable if there are already datasets deposited in a repository.

5.5 What are the expected costs for data sharing? How will these costs be covered?

*Guidance:*

Additional resources might be needed to prepare data for deposit or to meet any charges from data repositories. If yes, explain how much is needed and how such costs will be covered.

## 6. Responsibilities

6.1 Who is responsible for managing the data and updating the DMP **during** the project? Please state a position and the current person in that position.

6.2 Who is responsible for the data management **after** the project ends? Please state a position and the current person in that position.

6.3 Who bears the overall responsibility of this DMP?

# **Fonds voor Wetenschappelijk Onderzoek - Research Foundation Flanders (FWO): Flemish data management plan (DMP) - GDPR**

## **GDPR**

Have you registered personal data processing activities for this project?

- Yes
- No
- Not applicable

# **Fonds voor Wetenschappelijk Onderzoek - Research Foundation Flanders (FWO): Flemish data management plan (DMP) - DPIA**

## **DPIA**

Have you performed a DPIA for the personal data processing activities for this project?

- Yes
- No
- Not applicable