Fonds voor Wetenschappelijk Onderzoek - Research Foundation Flanders (FWO): FWO DMP (Flemish Standard DMP) - Application DMP

Questionnaire

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 <a href="resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resources-resource

- discipline-specific data repositories (if available), e.g. as recommended by journals with data availability policies such as <u>Scientific Data (Nature)</u>, <u>PLoS</u>, <u>F1000 (section 4.1)</u>
- general-purpose/multi-disciplinary repositories, e.g. <u>Zenodo</u>; <u>Open Science Framework</u>; EUDAT's <u>B2Share</u>; <u>Harvard's Dataverse</u>
- repositories for non-digital materials, e.g. the <u>Belgian Co-ordinated Collections of Micro-Organisms (BCCM)</u> 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.

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1. Research Data Summary

List and describe all datasets or research materials that you plan to generate/collect or reuse during your research project. For each dataset or data type (observational, experimental etc.), provide a short name & description (sufficient for yourself to know what data it is about), indicate whether the data are newly generated/collected or reused, digital or physical, also indicate the type of the data (the kind of content), its technical format (file extension), and an estimate of the upper limit of the volume of the data.

Guidance:

Data can be digital or physical (for example biobank, biological samples, ...). Data type: Data are often grouped by type (observational, experimental etc.), format and/or collection/generation method.

Examples of data types: observational (e.g. survey results, sensor readings, sensory observations); experimental (e.g. microscopy, spectroscopy, chromatograms, gene sequences); compiled/aggregated data[1] (e.g. text & data mining, derived variables, 3D modelling); simulation data (e.g. climate models); software, etc.

Examples of data formats: tabular data (.por,. spss, structured text or mark-up file XML, .tab, .csv), textual data (.rtf, .xml, .txt), geospatial data (.dwg,. GML, ..), image data, audio data, video data, documentation & computational script.

Digital data volume: Please estimate the upper limit of the volume of the data per dataset or data type.

Physical volume: Please estimate 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] These data are generated by combining multiple existing datasets.

If you reuse existing data, please specify the source, preferably by using a persistent identifier (e.g. DOI, Handle, URL etc.) per dataset or data type:

Are there any ethical issues concerning the creation and/or use of the data (e.g. experiments on humans or animals, dual use)? Describe these issues in the comment section. Please refer to specific datasets or data types when appropriate.

- Yes, human subject data
- Yes, animal data
- · Yes, dual use
- No

Will you process personal data? If so, briefly describe the kind of personal data you will use in the comment section. Please refer to specific datasets or data types when appropriate.

- Yes
- No

Guidance:

Personal data is any information that relates to an **identified or identifiable living individual**. Different pieces of information, which collected together can lead to the identification of a

particular person, also constitute personal data.

Personal data that has been de-identified, encrypted or **pseudonymised** but can be used to reidentify a person remains personal data and falls within the scope of the GDPR.

Personal data that has been rendered **anonymous** in such a way that the individual is not or no longer identifiable is no longer considered personal data. For data to be truly anonymised, the anonymisation must be irreversible[1].

Examples:

- a name and surname;
- a home address:
- an email address such as name.surname@company.com;
- an identification card number:
- location data (for example the location data function on a mobile phone);
- an Internet Protocol (IP) address;
- a cookie ID:
- the advertising identifier of your phone;
- data held by a hospital or doctor, which could be a symbol that uniquely identifies a person.

[1] https://ec.europa.eu/info/law/law-topic/data-protection/reform/what-personal-data_en#examples-of-data-not-considered-personal-data

Does your work have potential for commercial valorization (e.g. tech transfer, for example spin-offs, commercial exploitation, ...)? If so, please comment per dataset or data type where appropriate.

- Yes
- No.

Do existing 3rd party agreements restrict exploitation or dissemination of the data you (re)use (e.g. Material/Data transfer agreements/ research collaboration agreements)? If so, please explain in the comment section to what data they relate and what restrictions are in place.

- Yes
- No

Are there any other legal issues, such as intellectual property rights and ownership, to be managed related to the data you (re)use? If so, please explain in the comment section to what data they relate and which restrictions will be asserted.

- Yes
- No

2. Documentation and Metadata

Clearly describe what approach will be followed to capture the accompanying information necessary to keep data understandable and usable, for yourself and others, now and in the future (e.g., in terms of documentation levels and types required, procedures used, Electronic Lab Notebooks, README.txt files, Codebook.tsv etc. where this information is recorded).

Will a metadata standard be used to make it easier to find and reuse the data? If so, please specify (where appropriate per dataset or data type) which metadata standard will be used. If not, please specify (where appropriate per dataset or data type) which metadata will be created to make the data easier to find and reuse.

Yes

No

Guidance:

Repositories could ask to deliver metadata in a certain format, with specified ontologies and vocabularies, i.e. standard lists with unique identifiers.

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

Where will the data be stored?

How will the data be backed up?

Guidance:

What storage and backup procedures will be in place to prevent data loss? Describe the locations, storage media and procedures that will be used for storing and backing up digital and non-digital data during research [1].

[1] https://osf.io/2z5g3/

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

- Yes
- No

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

Guidance:

Clearly describe the measures (in terms of physical security, network security, and security of computer systems and files) that will be taken to ensure that stored and transferred data are safe [1].

[1] https://osf.io/2z5g3/

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

Which data will be retained for at least five years (or longer, in agreement with other retention policies that are applicable) after the end of the project? In case some data cannot be preserved, clearly state the reasons for this (e.g. legal or contractual restrictions, storage/budget issues, institutional policies...).

Where will these data be archived (stored and curated for the long-term)?

What are the expected costs for data preservation during the expected retention period? How will these costs be covered?

5. Data sharing and reuse

Will the data (or part of the data) be made available for reuse after/during the project? In the comment section please explain per dataset or data type which data will be made available.

• Yes, in an Open Access repository

- Yes, in a restricted access repository (after approval, institutional access only, ...)
- No (closed access)
- · Other, please specify:

Guidance:

Note that 'available' does not necessarily mean that the data set becomes openly available, conditions for access and use may apply. Availability in this question thus entails both open & restricted access. For more information: https://wiki.surfnet.nl/display/standards/info-eu-repo/#infoeurepo-AccessRights

If access is restricted, please specify who will be able to access the data and under what conditions.

Are there any factors that restrict or prevent the sharing of (some of) the data (e.g. as defined in an agreement with a 3rd party, legal restrictions)? Please explain in the comment section per dataset or data type where appropriate.

- Yes, Privacy aspects
- Yes, Intellectual Property Rights
- Yes, Ethical aspects
- · Yes, Aspects of dual-use
- · Yes, Other
- No

Where will the data be made available? If already known, please provide a repository per dataset or data type.

When will the data be made available?

Guidance:

This could be a specific date or an indication such as 'upon publication of research results'

Which data usage licenses are you going to provide? If none, please explain why.

Guidance:

A data usage license indicates whether the data can be reused or not and under what conditions. If no licence is granted, the data are in a grey zone and cannot be legally reused. Do note that you may only release data under a licence chosen by yourself if it does not already fall under another licence that might prohibit that.

Do you intend to add a PID/DOI/accession number to your dataset(s)? If already available, you have the option to provide it in the comment section.

- Yes
- No

Guidance:

Indicate whether you intend to add a persistent and unique identifier in order to identify and retrieve the data.

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

6. Responsibilities

Who will manage data documentation and metadata during the research project?

Who will manage data storage and backup during the research project?

Who will manage data preservation and sharing?

Who will update and implement this DMP?

Fonds voor Wetenschappelijk Onderzoek - Research Foundation Flanders (FWO): FWO DMP (Flemish Standard 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): FWO DMP (Flemish Standard DMP) - DPIA

DPIA

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

- Yes
- No
- · Not applicable