Large OMARS designs: construction, evaluation and blocking 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?

• No

Large OMARS designs: construction, evaluation and blocking DPIA

DPIA

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

• Not applicable

Large OMARS designs: construction, evaluation and bl	ocking
GDPR	

GDPR

Have you registered personal data processing activities for this project?

• Not applicable

Large OMARS designs: construction, evaluation and blocking FWO DMP (Flemish Standard DMP)

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.

The research described in this project proposal will lead to a catalog of non-isomorphic orthogonal minimally aliased response surface or OMARS designs. This catalog will be primary, derived data and will be stored as a collection of text files. To create these catalogs, computer code will be developed in R or Python. That code will be primary data of the software format. Our research articles will be created using LaTeX.

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:

The research will be based on an existing catalog of OMARS designs, developed within the research group of Prof. Peter Goos, stored at a KU Leuven drive in the folder K:\SET-BIOSTAT-DESIGN-D0743\Complete_Catalogs_of_OMARS-0003, and licensed to the software company Effex.

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.

No

Not applicable

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.

No

Not applicable

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

We will attempt to valorize our newly created catalog of OMARS designs by licensring it to statistical software companies such as KU Leuven's spin-off company Effex, JMP, Design Expert, etc.

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

Yes, the license agreement between KU Leuven and the spin off company stipulates that KU Leuven can only publish 5 OMARS

designs per year, that it cannot share the catalog with external parties and that it has to pay Effex if it wants to use an OMARS design for commercial purposes.

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.

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).

The folder structure will be self explanatory. For every type of OMARS design developed during the project, a separate folder will be created on the above mentioned K-drive

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.

No

As explained above, accessing and reusing the research data will be facilitated by the clear folder structure on the above mentioned K-drive.

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

Where will the data be stored?

All data will be stored on the K-drive at KU Leuven, as recommended by the IT department of the Science, Engineering and Technology group at KU Leuven.

How will the data be backed up?

The IT department of the Science, Engineering and Technology group at KU Leuven guarantees that the K-drive is backed up permanently.

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

Not applicable

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

Only the principal investigator, Prof. dr. Peter Goos, and the Ph.D. students working on the project will have access to the K-drive containing the catalog and the code.

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

95 euro / year. The principal investigator, Prof. dr. Peter Goos, will cover these costs with internal KU Leuven funds.

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...).

All data described above will be retained for at least five years.

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

As described above, all data are archived in a dedicated folder on the K-drive, as recommended by the IT department of KU Leuven's SET group (where SET is short for Science, Engineering and Technology).

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

95 euro/year. The principal investigator, Prof. dr. Peter Goos, will cover these costs with internal KU Leuven funds.

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.

No (closed access)

As pointed out above, we will attempt to valorize the results from the project, by licensing them to statistical software companies. For this reason, we will not immediately share the designs with external parties.

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

The principal investigator, Prof. Peter Goos, will have access to the research data on the K-drive. In the event this would be useful for future research, he can share the research data with members of his research group.

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, Other

License agreement with the software company Effex concerning some of the data (=OMARS designs) previously developed and used as a starting point for the present project.

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

As explained above, the data will not be made available because we will attempt to valorize the research results through licensing agreements with statistical software companies.

When will the data be made available?

The data will be made available when the attempts to valorize them have failed.

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

As explained above, the data will initially not be made available due to valorization plans.

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.

No

Not applicable.

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

As explained above, the data will initially not be made available due to valorization plans.

6. Responsibilities

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

Jade Lejeune-Herman

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

Jade Lejeune-Herman

Who will manage data preservation and sharing?

Prof. Peter Goos

Who will update and implement this DMP?

Prof. Peter Goos