FWO DMP Template - Flemish Standard Data Management Plan

Project supervisors (from application round 2018 onwards) and fellows (from application round 2020 onwards) will, upon being awarded their project or fellowship, be invited to develop their answers to the data management related questions into a DMP. The FWO expects a **completed DMP no later than 6 months after the official start date** of the project or fellowship. The DMP should not be submitted to FWO but to the research co-ordination office of the host institute; FWO may request the DMP in a random check.

At the end of the project, the **final version of the DMP** has to be added to the final report of the project; this should be submitted to FWO by the supervisor-spokesperson through FWO's e-portal. This DMP may of course have been updated since its first version. The DMP is an element in the final evaluation of the project by the relevant expert panel. Both the DMP submitted within the first 6 months after the start date and the final DMP may use this template.

The DMP template used by the Research Foundation Flanders (FWO) corresponds with the Flemish Standard Data Management Plan. This Flemish Standard DMP was developed by the Flemish Research Data Network (FRDN) Task Force DMP which comprises representatives of all Flemish funders and research institutions. This is a standardized DMP template based on the previous FWO template that contains the core requirements for data management planning. To increase understanding and facilitate completion of the DMP, a standardized **glossary** of definitions and abbreviations is available via the following link.

1. General Project Information		
Name Grant Holder & ORCID	Wout Vandermeulen 0000-0002-2630-7372	
Contributor name(s) (+ ORCID) & roles	Wout Vandermeulen (0000-0002-2630-7372), author	
Project number¹ & title	FWO-fellowship fundamental research	
Funder(s) GrantID ²	1112723N	
Affiliation(s)	□ KU Leuven	
	☐ Universiteit Antwerpen	
	□ Universiteit Gent	
	□ Universiteit Hasselt	
	□ Vrije Universiteit Brussel	
	□ Other: UC Louvain	
	Provide ROR ³ identifier when possible: 05f950310 (KU Leuven)	
Please provide a short project description	I look into the early modern framework through which lawyers studied issues of "monopolia", which entailed all major issues of what we now know as "competition". In this, they were heavily influenced by theological thought of the so-called "School of Salamanca". I try to establish (for the first time) a full picture of this framework, and I also studied the impact it is alleged to have had on the German Ordoliberal School during the 20th century.	

¹ "Project number" refers to the institutional project number. This question is optional since not every institution has an internal project number different from the GrantID. Applicants can only provide one project number.

² Funder(s) GrantID refers to the number of the DMP at the funder(s), here one can specify multiple GrantIDs if multiple funding sources were used.

³ Research Organization Registry Community. https://ror.org/

2. 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 data⁴.

				ONLY FOR DIGITAL DATA	ONLY FOR DIGITAL DATA	ONLY FOR DIGITAL DATA	ONLY FOR PHYSICAL DATA
Dataset	Description	New or Reused	Digital or	Digital Data Type	Digital Data	Digital Data	Physical Volume
Name			Physical		Format	Volume (MB, GB,	
						TB)	
Scans of early	Scans of printed	☐ Generate new	□ Digital	☐ Observational	☐ .por	□ < 100 MB	
modern	works of both	data	☐ Physical	☐ Experimental	☐ .xml	□ < 1 GB	
books	lawyers and	□ Reuse existing		☐ Compiled/	☐ .tab	⊠ < 100 GB	
	theologians	data		aggregated data	□ .csv	□ < 1 TB	
				☐ Simulation	⊠ .pdf	□ < 5 TB	
				data	☐ .txt	□ < 10 TB	
				☐ Software	☐ .rtf	□ < 50 TB	
				⊠ Other	\square .dwg	□ > 50 TB	
				□NA	☐ .tab	□NA	
					☐ .gml		
					\square other:		
					□NA		
Bibliographic	A machine-	⊠ Generate new	□ Digital	☐ Observational	☐ .por	□ < 100 MB	
al references	readable	data	☐ Physical	☐ Experimental	☐ .xml	⊠ < 1 GB	
	attachment to	☐ Reuse existing		☐ Compiled/	☐ .tab	□ < 100 GB	
	the bibliography	data		aggregated data	□ .csv	□ < 1 TB	
	of my PhD-			☐ Simulation	☐ .pdf	□ < 5 TB	
	thesis.			data	⊠ .txt	□ < 10 TB	

⁴ Add rows for each dataset you want to describe.

	☐ Software ☑ Other ☐ NA	☐ .rtf ☐ .dwg ☐ .tab ☐ .gml ☐ other: ☐ NA	□ < 50 TB □ > 50 TB □ NA	
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 ⁵ (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).				
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 sources of my existing data are the d	atabases of governm	ents, libraries and acad	emic journals.

 $^{^{\}rm 5}\,{\rm These}$ data are generated by combining multiple existing datasets.

Are there any ethical issues concerning the	☐ Yes, human subject data
creation and/or use of the data	☐ Yes, animal data
(e.g. experiments on humans or animals, dual	☐ Yes, dual use
use)? If so, please describe these issues further	⊠ No
and refer to specific datasets or data types	If yes, please describe:
when appropriate.	
Will you process personal data ⁶ ? If so, briefly	□ Yes
describe the kind of personal data you will use.	⊠ No
Please refer to specific datasets or data types	
when appropriate. If available, add the reference	
to your file in your host institution's privacy	
register.	- Privacy Registry Reference:
Does your work have potential for commercial	□ Yes
valorization (e.g. tech transfer, for example spin-	⊠ No
offs, commercial exploitation,)?	If yes, please comment:
If so, please comment per dataset or data type	
where appropriate.	
Do existing 3rd party agreements restrict	□ Yes
exploitation or dissemination of the data you	⊠ No
(re)use (e.g. Material/Data transfer agreements,	If yes, please explain:
research collaboration agreements)?	
If so, please explain to what data they relate and	
what restrictions are in place.	
<u>-</u>	

⁶ See Glossary Flemish Standard Data Management Plan

Are there any other legal issues, such as	□ Yes
intellectual property rights and ownership, to be	⊠ No
managed related to the data you (re)use?	If yes, please explain:
If so, please explain to what data they relate and	
which restrictions will be asserted.	

	3. 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 only real metadata of note are the bibliographical data of my primary and secondary sources. They include author, title, date, place of printing, and page numbers. I have also used tags for identification. They are primary/secondary, nationality of author, profession of author for primary sources (lawyer or theologian), and adherence to a certain type of monopoly thinking (yes/partially/no).
Will a metadata standard be used to make it	□ Yes
easier to find and reuse the data?	⊠ No
	If yes, please specify (where appropriate per dataset or data type) which metadata standard will be used:
If so, please specify which metadata standard will be used. If not, please specify which metadata will be created to make the data easier to find and reuse.	If no, please specify (where appropriate per dataset or data type) which metadata will be created:
REPOSITORIES COULD ASK TO DELIVER METADATA IN A CERTAIN FORMAT, WITH SPECIFIED ONTOLOGIES AND VOCABULARIES, I.E. STANDARD LISTS WITH UNIQUE IDENTIFIERS.	

4. Data Storage & Back-up during the Research Project		
Where will the data be stored?	KU Leuven OneDrive	
How will the data be backed up? 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. Refer to institution-specific policies regarding backup procedures when appropriate.	The data of external providers will be kept by them. Personal notes will be kept on the J:-drive of the Department of Roman Law and Legal History of the Faculty of Law and Criminology at KU Leuven.	
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 If yes, please specify concisely: If no, please specify: 	

⁷ Source: Ghent University Generic DMP Evaluation Rubric: https://osf.io/2z5g3/

How will you ensure that the data are securely stored and not accessed or modified by unauthorized persons?	The servers are secured, both physically and in the sense of computer security, by the KU Leuven.
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. 7	
What are the expected costs for data storage and backup during the research project? How will these costs be covered?	There are no additional costs for the storage.

5. 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 will be preserved for at least five years.	
Where will these data be archived (stored and curated for the long-term)?	As stated above: the J:-drive of the Department of Roman Law and Legal History.	

What are the expected costs for data preservation during the expected retention period? How will these costs be covered?	There are no expected extra costs.

	6. Data Sharing and Reuse
Will the data (or part of the data) be made available for reuse after/during the project? 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:
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.	The data will be accessible to the users of the KU Leuven institutional framework via login. The published works will be available under Open Access 1 year after publication (cf. Belgian legal rules on Open Access)
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 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 If yes, please specify:
Where will the data be made available? If already known, please provide a repository per dataset or data type.	On the websites of the respective journals and publishers in the case of published works. The personal notes will be available at the J:-drive (upon request or through login)

When will the data be made available? This could be a specific date (DD/MM/YYYY) or an indication such as 'upon publication of research results'.	Upon publication for the published output. Other elements upon transfer to the J:-drive, at the latest by the end of 2026.
Which data usage licenses are you going to provide? If none, please explain why.	Not applicable.
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. EXAMPLE ANSWER: E.G. "DATA FROM THE PROJECT THAT CAN BE	
SHARED WILL BE MADE AVAILABLE UNDER A CREATIVE COMMONS ATTRIBUTION LICENSE (CC-BY 4.0), SO THAT USERS HAVE TO GIVE CREDIT TO THE ORIGINAL DATA CREATORS." 8	
Do you intend to add a PID/DOI/accession number to your dataset(s)? If already available, please provide it here.	☐ Yes ☐ No If yes:
INDICATE WHETHER YOU INTEND TO ADD A PERSISTENT AND UNIQUE IDENTIFIER IN ORDER TO IDENTIFY AND RETRIEVE THE DATA.	

⁸ Source: Ghent University Generic DMP Evaluation Rubric: https://osf.io/2z5g3/

What are the expected costs for data sharing?	There are no specific costs for this data sharing.
How will these costs be covered?	

7. Responsibilities	
Who will manage data documentation and	Wout Vandermeulen
metadata during the research project? Who will manage data storage and backup	Wout Vandermeulen
during the research project? Who will manage data preservation and	Wout Vandermeulen
sharing? Who will update and implement this DMP?	Wout Vandermeulen