Open and Universal Science Project (OPUS)

OPUS helps reform the assessment of research towards a system that incentivise researchers to practice #OpenScience

WP6
PROJECT COORDINATION AND DATA MANAGEMENT

Deliverable 6.2
Data Management Plan (DMP)

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ABBREVIATIONS AND ACRONYMS

AA	Full Name
DC&E	Dissemination, Communication, and Exploitation
DMP	Data Management Plan
DPO	Data Protection Officer
FAIR	Findability, Accessibility, Interoperability, and Reusability
GA	Grant Agreement
GDPR	General Data Protection Regulation
OA	Open Access
OS	Open Science
PC	Project Coordinator
PM	Project Manager
SC	Steering Committee
WP	Work Package

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1. Introduction

This document is intended to guide OPUS partners through the process of establishing systematic and standardised data management actions for the benefit of the project and all partners involved.

OPUS places a strong emphasis on the thoughtful and responsible sharing of research data. Careful consideration will be given to the future users of the data, taking into account factors such as the anticipated size of the dataset, the use of persistent identifiers, and the inclusion of comprehensive metadata. We are committed to promoting open access and will publish our research data on Zenodo, a platform that supports the research community to implement the principles of Findable, Accessible, Interoperable, and Reusable (FAIR) data.

In handling personal data, our project will adhere to rigorous privacy standards, ensuring proper anonymization of datasets before publication. This approach aligns with our dedication to fostering transparency, collaboration, and the ethical use of research data. OPUS will ensure that the publication of anonymized data will not lead (either directly or indirectly) to a breach of agreed confidentiality and anonymity. In addition, OPUS tick the no box for "Does your activity involve processing of personal data? in the Data proposal (Ethics section of the Gran Agreement).

The Data Management Plan (DMP) will ensure a standard approach to:

- processing data;
- managing data;
- sharing data;
- preserving data.

As such, the OPUS DMP covers the following main sections:

- General Data Protection Regulation (GDPR)
- OPUS Data Steward and implementation of FAIR data principles
- What type of data that opus will collect and where (in what WPs / with what methods) it will be collected
- Data controller in OPUS
- Where data will be stored
- Various principles related to data consent, anonymisation and privacy

OPUS will aim to be as open as possible and as closed as necessary in the implementation of the project and sharing of project outputs. The data is expected to be accessed and/or re-used by stakeholders across academia including researchers, research institutions, research funding agencies, Open Science Advocacy Groups and policy-making bodies.

OPUS will adhere to the European Commission's FAIR data management in as much as is possible, with the intention of following the four main components (Findability, Accessibility, Interoperability, and Reusability) in order to maximize access to, and re-use of the data generated by the project. These principles serve to guide data producers and publishers as they navigate around these obstacles, thus maximizing the added-value gained by contemporary, formal scholarly digital publishing (Wilkinson et al., 2016 https://www.fosteropenscience.eu/node/2495). Article 17 (Annexe 5 – Specific Rules) of the OPUS Grant Agreement sets out detailed legal requirements on open access to scientific publications.

5

Data management is managed through OPUS Work Package 6 – Project Management and Coordination. The DMP will be a living document, which will evolve during the lifespan of the project.

2. General Data Protection Regulation (GDPR)

The General Data Protection Regulation (GDPR) significantly increases the obligations and responsibilities for research organisations in how we collect, use and protect personal data. At the centre of the law is the requirement for organisations to be fully transparent about how they are using and safeguarding personal data, and to be able to demonstrate accountability for their data processing activities.

The GDPR affects (1) all organisations established in the EU, and (2) all organisations involved in processing personal data of EU citizens. The latter is the GDPR's introduction of the principle of "extraterritoriality"; meaning, the GDPR will apply to any organisation processing personal data of EU citizens – regardless of where it is established, and regardless of where its processing activities take place. This means the GDPR could apply to any organisation anywhere in the world, and all organisations should perform an analysis to determine whether or not they are processing the personal data of EU citizens. The GDPR also applies across all industries and sectors.

The Oceanic Platform of the Canary Islands (PLOCAN), in its role of coordinating the OPUS Project, will apply all the technical and organisational measures required by the current data protection regulations. Adequately informing those affected at the time of collecting the data and applying the necessary procedures to avoid the loss, alteration or unauthorized access of the data.

3. OPUS Data Steward & implementation of FAIR data

OPUS Data Steward role is to assist researchers with effective management of research data.

The data steward helps researchers with all kinds of data related questions or refers them on to other partners. He/she supplies information and training with regard to policy requirements and guidelines and helps to update the data management plan.

For the purpose of the OPUS project, the role of the data steward specifically will be:

- Implement the FAIR data principles within the project

- Upload relevant data to the Zenodo platform with adequately described metadata[1].

OPUS will avail of a range of features in the Zenodo repository to implement FAIR through DOI assignment, open access, metadata standards, versioning, implementation of persistent identifiers, and copyright and licensing for research data outputs. Embargoing of research data is not considered necessary at the moment but can be implemented in Zenodo if required at a later stage.

4. Type of data collected in OPUS

OPUS is a Coordination and Support Action and will collect and create data to achieve its six objectives:

- Objective 1: Conduct a comprehensive state-of-the-art on existing literature and initiatives for Open Science
  - Expert Group survey

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[1] https://zenodo.org/communities/opus?page=1&size=20

- o The generated bibliography will be published as an open library on the Zotero open-source reference management service and as a file on Zenodo. The file will be a csv-file of less than 50MB.
  - o Data will be included in the WP1 report deliverables and published on Zenodo. The file will be a pdf of less than 50MB.
- Objective 2: Develop a comprehensive set of interventions to implement Open Science at RPOs and RFOs
  - o Survey data that OPUS will collect during the public consultation on the draft researcher assessment framework and interventions. The file will be a csv-file of less than 50MB.
  - o Data will be in the form of a Framework embedded in a report Deliverable published on Zenodo. The file will be a pdf of less than 50MB.
- Objective 3: Develop realistic indicators and metrics to monitor and drive Open Science at RPOs and RFOs
  - o Data will be in the form of a Framework embedded in a report Deliverable published on Zenodo. The file will be a pdf of less than 50MB. This may include a high-quality infographic of the Framework.
- Objective 4: Test the interventions and indicators and metrics via action plans in pilots at RPOs and RFOs
  - o Questionnaires about Pilot Open Science policies and practices will be published as a file on Zenodo. The file will be a csv-file of less than 50MB.
  - o Data OPUS will collect during the monitoring of their pilots.
  - o Interviews will be published in a report Deliverable published on Zenodo. The report will include Rapporteur´s report. All interviews will have a consent form added to the report. The file will be a pdf of less than 50MB.
- Objective 5: Utilise a stakeholder-driven feed-back loop to develop, monitor, refine, and validate actions
  - o Data will be published on Zenodo in the form of Surveys data in spreadsheet form and Interviews in a report Deliverable. The spreadsheet form will be a csv-file of less than 50MB. The deliverable will be a pdf of less than 50MB.
- Objective 6: Synthesise outcomes into policy briefs and a revised OS-CAM2 for research(er) assessment
  - o Data will be in the form of report deliverables published on Zenodo. The files will be pdfs of less than 50MB.

5. What type of data will Opus collect

5.1. Publication data collected for literature review

The OPUS project will collect data on publications (literature / articles) and initiatives (projects, networks, schemes) as part of the review of the open science ecosystem. This runs through WP1 at project outset (Initial state of the art) and in the final project year (Update). This is secondary data, already available in published and/ or public format.

Results for the review will be included in public project deliverables from WP1 and WP5 (as input to policy briefs). No personal data will be included.

5.2. Survey and Questionnaire data

OPUS will collect data in the form of Questionnaires, using surveys with mostly quantitative questions and some open ended questions.

The following surveys are currently planned in OPUS (subject to modification during the project):

7

WP	Survey description
WP1	Expert survey
WP2 / WP3	Survey data that OPUS will collect feedback during the public consultation on the draft researcher assessment framework and interventions
	Questionnaires to RPO/RFO about their Pilot Open Science policies and practices (baseline)
	Feedback surveys midway through Trial
WP4	Feedback surveys midway through Trial, linked to WP2

5.3. Monitoring data

Data on progress of activities (perceptions, satisfaction, progress towards internal indicators) will be collected during the monitoring phase of the pilot trails. Data will most likely be collected via Excel spreadsheet.

5.4. OPUS Data collection / creation in project WPs

Data collection in the project relates to activities conducted in WP 1,2,3,4,5&7:

- In WP1:

  o List of Open Science experts (Excel)

  o Database search (SCOPUS / OPENAire / Google Scholar) for literature pertaining to the goals and objectives of OPUS (Excel)

- In WP2:

  o Interventions to support the implementation of a researcher assessment framework at RPOs and RFOs

  o Feedback from stakeholders to co-design the interventions (Survey questionnaire, excel)

  o Surveys/interviews with pilot RPOs and RFOs to define the audit scope; (Survey questionnaire, excel)

  o Baseline audits of Open Science for pilot RPOs and RFOs; (Survey questionnaire, excel)

  o Monitoring and Evaluations of interventions tested in the pilot RPOs and RFOs. (Excel)

- In WP3 (as per WP2):

  o Interventions to support the implementation of a researcher assessment framework at RPOs and RFOs

  o Feedback from stakeholders to co-design the interventions (Survey questionnaire, excel)

  o Surveys/interviews with pilot RPOs and RFOs to define the audit scope; (Survey questionnaire, excel)

  o Baseline audits of Open Science for pilot RPOs and RFOs; (Survey questionnaire, excel)

  o Monitoring and Evaluations of interventions tested in the pilot RPOs and RFOs. (Excel)

- In WP4:

  o co-monitoring and mutual learning exercises for the pilots (Survey questionnaire, excel)

- In WP5:

  o Policy Briefs (reports)

  o   Open Science Career Assessment Matrix (Excel matrix)

- In WP7:

  o   Collection of data about and from the expert group.

6. Data Controller

MCAA has been appointed as data controller and, will undertake the following tasks:

a. Final approval of all data management of project;

b. Responsible for the data repository;

c. Guide WP leaders to provide data with correct content and format for the OPUS repository;

d. Ensure GDPR is adhered to according to European, National and PLOCAN standards. Related GDPR issues will be validated by OPUS Data Controller;

e. Managing administration and collection of replies of Consent forms:

  i. Data controller will be responsible to store the consent forms (it is not the individual responsibility of a partner to store such forms);

  ii. The consent forms should be available in a protected folder in the OPUS Microsoft SharePoint online storage location.

The data controller will work closely with the WP leaders and ICoRSA DC&E, who support:

- data collection for the different WPs;

- replies on data queries.

ICoRSA (leader of DC&E) is also manager of the webpage (through which on-line surveys run) and WP7 "Dissemination, Communication and Exploitation" leader.

7. Data consent guidelines

Data consent guidelines are summarised below (see full privacy and example of Consent form in Annex):

- All people whose data is collected need to consent to the relevant level of data processing and publication necessary;

- This includes consent to publication of anonymised data and use of their data for research purposes;

- When conducting interviews, consent for recording is required;

- Consent has to be attained in an informed manner and may never be assumed (opt-in not opt-out). This can be as simple as a checkbox on a survey or interview registration page;

- A template for informed consent is available on MS SharePoint;

- The forms will be stored and will be deleted within 5 amount of time after the project ends.

8. Data anonymisation principles and guidelines

Personal data will only be shared where relevant and where explicit consent has been granted by the data providers and that data will be anonymised where relevant and upon request of the data providers.

9. Data Storage Plan

9.1 Short term storage SharePoint Online Site

For short term storage of the data that OPUS will collect, OPUS will use MS Teams and OPUS website.

9.1.1 MS SharePoint

Safety features of SharePoint:

- GDPR compliant;

- MS SharePoint Server is located in Dublin;

- OPUS will use the PLOCAN MS Teams account, managed by PLOCAN IT.

- MS SharePoint will store all of the OPUS project data (as described in Chapter 5 above.

Overview of security compliance in Microsoft Teams: here: https://learn.microsoft.com/en-us/sharepoint/safeguarding-your-data

9.1.2 OPUS website

- For 5 years;

- Supervised by DC&E partner: ICoRSA;

- Content administered by DC&E Committee.

- OPUS website will store and make available:

    o   OPEN Access data sets

    o   All OPUS open access Results and Publications

9.2 Long term storage

For long-term storage of final outputs OPUS will use Zenodo, see following:

- For 10 years;

- Conforms with the FAIR principles;

- Content guided by DC&E Committee;

- Administered by PLOCAN.

- Zenodo will store and make available:

    o   OPEN Access data sets

    o   All OPUS open access Results and Publications

Annex 1: OPUS Privacy Policy

Ethical requirements

Procedures and criteria to identify/recruit participants

The participants will be selected on the basis of their participation in Open Science related projects. All participants will be over 18 years old, and in terms of gender, the selection will be balanced. Permission will be asked to use the information they provide while securing their anonymity; however, due to the nature of the OPUS project work packages no sensitive data will be collected.

We are currently creating a contact database. The contacts are provided by OPUS partners. Criteria are

- Participant is a member of one of our stakeholder groups: Research Performing Organisations (RPO), Research Funding Organisations (RFO), Industry, Civil Society, Policy, Non-Governmental Organisations (NGOs), researchers and grassroots societies.

- Participant is an expert in Open Science

- Primary knowledge area: Open Science, policy drivers, frameworks and actors

The possible participants will be approached by phone or Email by OPUS. OPUS will supply sufficient information about the project and asks the informed contact to sign a consent form. If the person agrees to participate he/she may be contacted for interview and/or surveys by the respective partner.

PLOCAN, as the leading partner organisation has ethical approval for the OPUS project, and the project coordinator is currently collecting relevant information from the partners. Other partners who will gather data and conduct the interviews/surveys are also partly required to apply separately for ethical approval at their institution. This way, OPUS aims to comply with ethical standards in social research.

Informed consent procedures

We will obtain informed consent by email or in person (interviews) through an information sheet and consent form. Please refer to the annexes.

Additional information

- Vulnerable individuals/groups will not be involved on the research.

- Additional information on the selection procedures of research participants can be found in the stakeholder selection and consultation guidelines

Project information, privacy information

The outline provided below is intended as a general model for our partners on how the information sheet should look like. At a minimum, such a sheet must provide participants with details regarding the voluntary nature of participation, the right to withdraw (including time limits), confidentiality and anonymity, the nature and duration of data storage (in secure form, and for at least ten years), and whether there is potential for harm arising from participation.

What will the study involve?

- Task A1.1.3 - Conduct landscaping of key experts and organizations linked to Open Science

11

Why have you been asked to take part? You have been asked because we consider you a relevant Open Science stakeholder and deemed you suitable to provide data for our research.

Do you have to take part? No, participation is voluntary. If you agree to participate, please sign the consent form. You may keep this information sheet and can get a copy of the consent form. You have the option to withdraw before the study commences (even if you have agreed to participate) or to discontinue after data collection has started.

However, this right to withdraw is limited; for example, once a paper has been published or a thesis submitted, withdrawal is impossible. Where the data have been gathered anonymously (e.g. through online survey), the withdrawal of consent is only possible up to the point at which the data are submitted. Where data are identifiable (e.g. from interviews yielding qualitative data), you may withdraw within two weeks of participation and ask to have your data destroyed.

Will your participation in the study be kept confidential? We ensure anonymity as much as possible. For example if you take part in surveys, interviews or focus groups. For these events, a consent form and the data will be kept separately. We will use coded ID i.e. the respective consent form will be marked e.g. A1, and any information that will be kept on the data, will use the A1 code thereafter (instead of the name). This way, your name does not appear on a dataset.

When conducting online surveys, we will use the option not to gather IP addresses (available on e.g. limesurvey.org). However, it might be possible that those online portals do keep records.

What will happen to the information which you give?

- The data will be kept confidential.

- Data will be stored in the OPUS MS SharePoint for up to 5 years.

- Laptops we use during interviews are encrypted and kept secure at all times.

- The data will be on password-protected files.

- Any Hardcopies are kept in a strongbox or safe, the consent form and the data will be stored separately to avoid putting your anonymity at risk.

- Personal data information is available only to OPUS researchers and project managers involved in this data collection. To support data re-use, anonymized raw data will be made available through online repositories.

- On completion of the project, the data will be retained at PLOCAN for minimum of a further ten years and then destroyed.

What will happen to any results? The results may be published in a research journal, a book, our website (www.OPUS.eu) and/or our planned database and other online portals and repositories. However, any published results will be anonymized and participants notified in advance.

What are the possible disadvantages of taking part? We don't envisage any negative consequences for you in taking part. If you, however, may feel distressed during or after the questioning, please refer to the next section.

What if there is a problem? You can withdraw your data and consent at any time. If we are conducting an interview, we will stop the interview if you show symptoms of distress. We will ask you if you want to proceed with the interview after a short break or if you want to stop and/or need any further assistance from a third party.
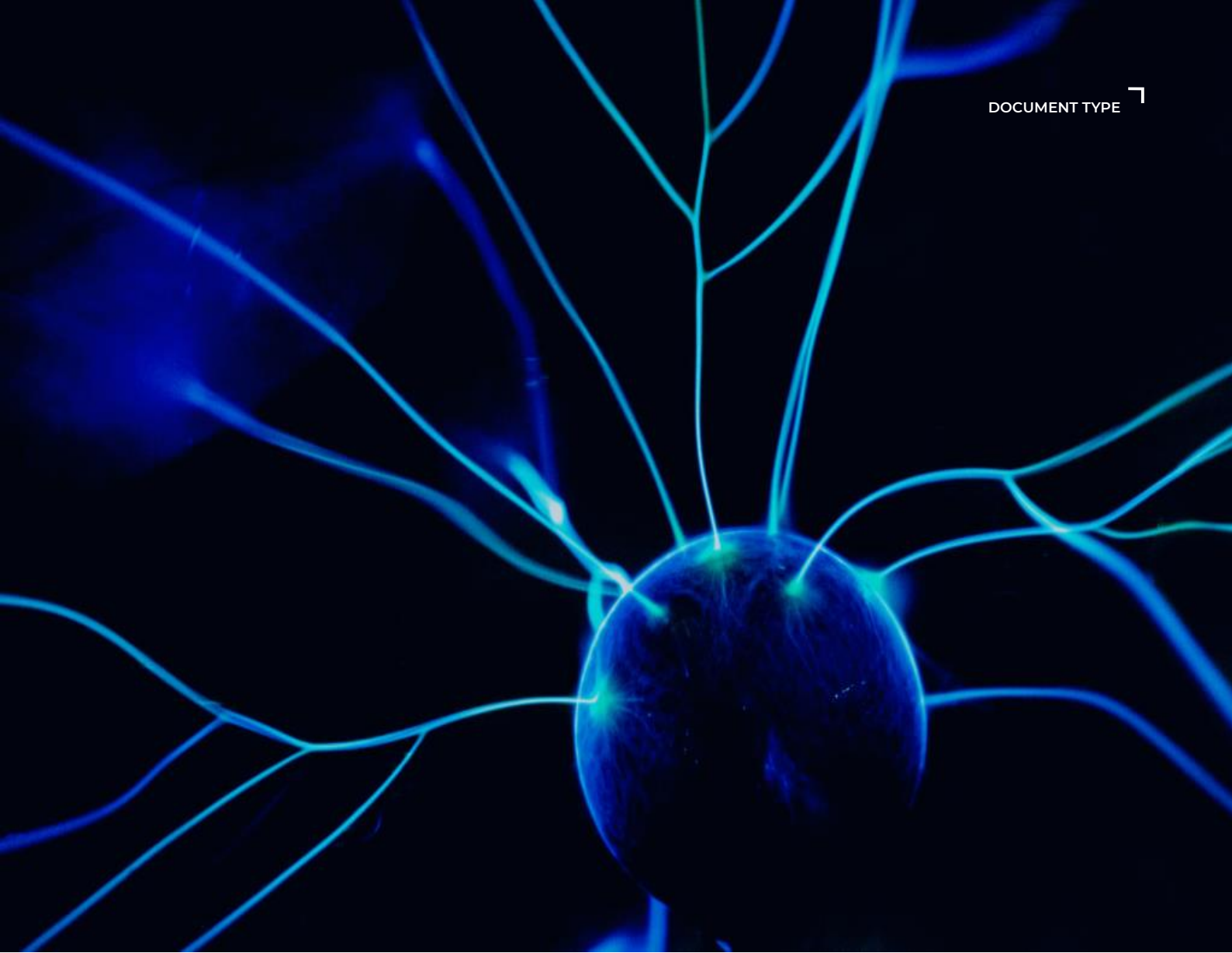
Any further queries? If you need any further information, you can contact me: [*Name, mobile number, email address of the respective partner. It is also advisable to use a dedicated mobile phone number for this purpose, as distinct from your personal mobile*].

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Open and Universal Science Project (OPUS)

IF YOU WOULD LIKE TO KNOW MORE ABOUT
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