

## **Data Management Plan**

**Title:** 'Project Name'

**Creator:** Project Manager

**Principal Investigator:** Name

**Data Manager:** Each Member of the Operational Group (Name; Organization)

**Project Administrator:** Project Manager

**Contributor:** Name

**Affiliation:** Organization Name

**Template:** DCC Template

**Project abstract:**

150/250 Word Description

**Start date:** XX-XX-20XX

**End date:** XX-XX-20XX

**Last modified:** XX-XX-20XX

## **Data Collection**

**What data will you collect or create?**

The project will collect and generate a diverse range of data types, which will include:

- Tabular data - quantitative surveys
- Text Based transcripts -qualitative interviews & workshops
- Visual Models - Frameworks & Business prototypes

Formats will include .xlsx, ,csv, .docx, .txt and other compatible files to ensure accessibility and long-term useability. Estimated data volume is 20-GB, which will include raw survey data, processed data sheets, and secondary outputs such as policy briefs and reports.

Publicly available data, such as regulatory frameworks, and circular economy/bioeconomy reports, will be integrated where appropriate. All formats are standard to facilitate sharing, storage, and compliance with open access and FAIR data principles.

**How will the data be collected or created?**

Data for the project will be collected using standardized data collection methodologies, including surveys, interviews, workshops, and living Lab's engagements. Surveys will be delivered through online platforms (e.g. Microsoft forms) and structured to ensure validity

using mandatory fields and skip logic. Qualitative data from interviews and workshops will be audio or video recorded where appropriate (using appropriate consent, anonymization, and GDPR protocols), transcribed and stored in text or other compatible formats.

All data will be stored in a hierarchical folder structure, with clear and consistent naming conventions including date, version number, and content description (e.g. Surveydata\_V1\_2025-01-15.xlsx). Version numbers and control will be managed using unique version numbers and a master tracking document to log any and all changes.

Quality will be managed through quality assurance measures which will include peer review of collected data, standardized data protocols, and validity checks for consistency and completeness. With regards to quantitative data, statistical validation and error-checking will ensure accuracy in this regard. Controlled vocabulary and metadata standards will support consistency in representation and ensure data is reusable and interoperable with existing data sets.

## **Documentation and Metadata**

### **What documentation and metadata will accompany the data?**

The 'Project Name' project to ensure complete open access will include comprehensive documentation to ensure ALL data can be understood, and reused in the future, which is also in line with the ethos of the project. All datasets will be accompanied by a README file detailing the methodology, data structure, file formats, variables, units of measure, and assumptions where appropriate. The project's metadata will follow **DUBLIN CORE STANDARDS** which will provide key details in line with the protocol:

- Title
- Creator
- Date
- Format
- Access Conditions

Controlled vocabularies and standardized naming conventions will aid in discovery and interoperability, enabling long term viability of the projects data and use into the future by other organizations and will align with FAIR principles.

## **Ethics and Legal Compliance**

### **How will you manage any ethical issues?**

The research aims of the 'Project Name' project are to XXXX therein ethical considerations are of primary importance for research methodology. These considerations will include full compliance with GDPR, research partner policies, and the Human Research Ethics Policy (if required by OG partner institutions). Informed consent will be obtained throughout ALL data collection activities, ensuring participants are aware of how all their input and associated data will be stored, used, and shared. Data will be anonymized to protect identities, and pseudonymization will be employed as appropriate, and access will be restricted to authorized researchers only.

Special measures (e.g., such as simplified language materials / translations) will be implemented for participants when needed if limited English proficiency is an issue at any stage of the research. For any marginalized groups involved in 'Project Name' research, ethical safeguards will prevent exploitation and lead to respectful engagement.

Anonymized datasets will be preserved in open-access repositories, whilst non-anonymized data (e.g., photographs) will be securely deleted post project. The project's ethical oversight will include a planned risk assessment schedule which will ensure compliance with institutional and regulatory frameworks.

### **How will you manage copyright and Intellectual Property Rights (IPR) issues?**

Whilst it is highly unlikely due to the nature of the project's research, if required 'Project Name' will receive guidance and support from an appropriate organization in line with the partner agreement.

## **Storage and Backup**

### **How will the data be stored and backed up during the research?**

All data will be stored on secure servers, ensuring compliance with GDPR and institutional (inc. partner's) policies. ALL data will be backed up regularly on projects MS OneDrive with automatic redundancy across multiple secure locations. Sensitive and anonymized datasets (and all other data) will be encrypted and password protected with external encrypted hard drives providing an additional safety layer for critical information, stored securely in a separate location. The project manager and the data management team will oversee the backup process, which will ensure restoration should data loss occur.

### **How will you manage access and security?**

All access to the project's data will be restricted to authorized project team members. Data will be securely stored on encrypted servers with full password protection. Anonymized data will be archived in open access repositories where appropriate post project as well.

Sensitive data (e.g., identifiable photos or videos) will be deleted following project completion, with secure devices and controlled access will ensure data confidentiality throughout collection of the project's data.

### **Selection and Preservation**

#### **Which data is of long-term value and should be retained, shared, and/or preserved?**

Data collected within the scope of 'Project Name' activities of long-term value including (but not exclusive to):

- Anonymized datasets
- Frameworks
- indicators

The repository will be preserved in open access repositories (in line with DAFMs requirements) ensuring reusability for validation, new research, and teaching. Sensitive data (e.g., photographs, videos, or any other identifiable inputs) will be securely deleted upon completion of the project.

Anonymized data will be archived following FAIR principles for at least 3 years - in line with GDPR, project, and funders requirements. As part of the project management, resources will be allocated for data preparation and repository submissions to maximize accessibility and overall impact.

#### **What is the long-term preservation plan for the dataset?**

In line with FAIR principles, all relevant data will be archived (and perhaps longer) for at least 3 years, ensuring compliance with GDPR, project, and DAFM's requirements.

### **Data Sharing**

#### **How will you share the data?**

Anonymized datasets and other outputs (e.g., frameworks and indicators) will be shared through open-access repositories which will follow FAIR principles. Metadata and all identifiers (e.g. persistent identities such as DOIs, etc.) will enhance discovery, as well as citation. As the project's ethos is to aid in the just transition of the Irish bioeconomy, in line with this all-appropriate data will be publicly available after project completion. Sensitive data in this regard will be removed or aggregated in line with GDPR compliance. Collaboration with DAFM will support dissemination enhancing usability for policy development, further research, and teaching.

**Are any restrictions on data sharing required?**

With regard to 'Project Name's ethical framework, certain responses to open ended questions may be withheld due to participant confidentiality and compliance with GDPR requirements.

**Responsibilities and Resources**

**Who will be responsible for data management?**

The entire project team is responsible for data management, with ultimate responsibility and oversight under the responsibility of the project manager. A planned risk assessment schedule will continuously monitor alignment with the data management plan.

**What resources will you require to deliver your plan?**

The 'Project Name' team (ultimate responsibility with the project manager) will oversee all data management to ensure FULL compliance with GDPR and all project partner's institutional policies. Required resources will be allocated for data analysis, secure storage, and support from MTU's (and where appropriate corresponding partner's) Metadata and Research Librarian. Training in data anonymization (to align with ethical review requirements) and GDPR compliance will be provided within the management of the project.

**Planned Research Outputs**

**List or table;**