REARQ.IB – BUILT ENVIRONMENT KNOWLEDGE FOR RESILIENT, SUSTAINABLE COMMUNITIES: UNDERSTANDING EVERYDAY MODERN ARCHITECTURE AND URBAN DESIGN IN THE IBERIAN PENINSULA (1939-1985)

ERC STARTING GRANT – GA 949686

DATA MANAGEMENT PLAN

1. DATA SUMMARY

A data management plan (DMP) is a structured, living document that records what research data is created and used during a project, and what happens to it afterwards. It assists in planning the research process and defining responsibilities within a research project involving multiple researchers or institutions. We followed the Horizon Europe DMP template when writing this DMP.

Table 1 presents an overview of datasets that we will create within the project. Research data generated by this project might include, among others:

Dataset ID	Title	Type	Format	Estimated volume	Sensitiveness yes/no
	Deliverables and reports	Standard office documents	Word, PowerPoint, PDF, Excel	100 MB (Sharepoint)	No
	Research notes and materials, fieldwork output (raw)	Standard office documents, photos, audio recordings	Word, PowerPoint, PDF, Excel, JPG, TIFF, m4a	2 TB (Sharepoint)	Yes / No
	Research datasets uploaded onto Arquitectura Aqui (AA) database	Data input on database structured forms	Shiro	2 TB (http://arquitecturaaqui.eu)	Yes / No
	Research and output datasets exported from AA database and deposited in repository	Spreadsheets and metadata files	CSV, Excel	2 TB (zenodo.org)	No

Table 1 – Produced datasets

2. FAIR DATA

2.1 Making data findable, including provisions for metadata

We will use DataCite Metadata Schema v4 to record metadata. This metadata standard is supported by Zenodo. Advantages of this metadata schema include: data objects will be assigned with a globally unique, persistent identifier (DOI); ORCID identifier of creators; ROR for organisation; access right; license; version of the resource (https://about.zenodo.org/principles/).

The data package will contain: the processed data and a 'read_me.txt' describing the data, with an explanation of all variables and terms used in each file.

2.2. Making data accessible

All public datasets will be deposited, anonymized, in the Zenodo "Iscte" community (https://zenodo.org/communities/iscte/).

The project will follow the principle of *as open as possible, as closed as necessary*, depending on the level of sensitivity of data.

Data will be acquired, processed and stored using one of the open formats for: Text (PDF/A, Plain Text); Still Image (TIFF, JPEG 2000, PNG, JPEG/JFIF, BMP, GIF); Audio (m4a); Datasets (CSV).

Where possible, files will be stored in open archival formats e.g. Word files converted to PDF-A or simple text files encoded in UTF-8 and Excel files converted to CSV. In case this is not possible, information on the software used and its version number will be included.

Datasets will be assigned with, at least, a globally unique, persistent identifier (DOI); ORCID identifier of creators; ROR for organisation; grant number; access right; license, and version of the resource.

Dataset ID	**Access conditions**	**Restrictions / embargo reasons**	**Estimated publication date**	**Location for publication**	**PID**	**License**
To be given by the platform (e.g. 10.5281/zenodo.17048340)	Open	N/A	Following dataset production	Zenodo	DOI	CC BY 4.0

2.3. Making data interoperable:

Zenodo Metadata records are harvestable using the OAI-PMH protocol by the record identifier and the collection name. Interoperability between Zenodo and the European Commission's Funding & Tenders Portal enables the research team to easily share and manage the project research outputs, ensuring compliance with open science requirements.

In addition, Iscte has a well-developed infrastructure that ensures interoperability between the current scientific information management system (Ciência-IUL), the institutional repository (Repositório Iscte) and the data repository (Zenodo). This solution highlights the relationship between the different types of research output produced within the project, including scientific publications, research data and the project's data management plan. For example, the ReARQ.IB project page on Ciência-IUL will provide a comprehensive overview of the project, and will include links to team member profiles, information on the funding programme (which ensures full interoperability with OpenAIRE), scientific publications, related research data, and the project's data management plan.

One of the key premises of ReARQ.IB, which has been embedded in the project's structure from the application stage, is to publish, open access, all our research material, including archival reading notes, which is why we are investing considerably in creating a custom-made database and website. The procedure of depositing in a stable repository such as Zenodo allows us to take this intention further as it ensures interoperability, academic validation, durability and enhanced accessibility and shareability. In this way, present and future researchers, community members and the wider public will be able to use out research outputs in their own projects and initiatives, accessing those outputs both at our platform (https://arquitecturaaqui.eu/pt) and at the repository, in a built-in open science and citizen history construction process.

2.4. Increase data re-use:

By complementing the initial goal of rendering all our research available open access in a widely appropriable manner (through the project's platform and database) with the repository record deposit procedure, we are ensuring that our datasets can be reused. To increase the potential for correct source citation (which is an important point in history research and writing) and encourage this according to best practices in the field, we are including a "To quote this work" sentence both in our platform records, e.g.
Catarina Ruivo para Arquitectura Aqui (2025) *Casa da Estação dos C.T.T. de Miranda do Douro*. Acedido em 30/09/2025, em
https://arquitecturaaqui.eu/pt/documentacao/processos/8818/casa-da-estacao-dos-c-t-t-de-miranda-do-douro
and in the Zenodo records, e.g.
Ruivo Pereira, C. (2023). Conjunto de notas de leitura de processos relativos à ação de construção do Edifício dos CTT, Caixa Geral de Depósitos e Auditório em Miranda do Douro (1945-c.1983) [Data set]. Zenodo. https://doi.org/10.5281/zenodo.17048341

3. OTHER RESEARCH OUTPUTS

All research materials and collaborative work (production files and outputs) are to be kept in digital form in a Sharepoint group (Office). This is their first “home” before being uploaded to the Arquitectura Aqui platform and, later, being deposited on Zenodo: the latter two steps apply when data is meant to be disseminated and reused; if not, materials and outputs (reports, workflows, protocols) are kept accessible only to team members.

4. ALLOCATION OF RESOURCES

The principal investigator and the core research team are responsible for day-to-day data management. They are responsible for anonymisation, secure storage, routine backups, and preparing metadata and documentation. The digital files will be stored in the secured institutional server infrastructure of Iscte.
Following Iscte requirements, data and documentation needed to reproduce findings from this project will be stored for at least 10 years after the completion of the project.
Arquitectura Aqui will be registered as a trade mark of Iscte, to protect the use of the name and also with the intention of turning the platform into an asset of the institution, thus ensuring it maintenance in the long run, funded both by research grants obtained by the PI and by other infrastructural funding resources of the university.

5. DATA SECURITY

All files, whether raw or processed, are stored on encrypted institutional servers, which only authorised team members can access.

6. ETHICS

Ethics matters and requirements are discussed in the ethics deliverables and ethics chapter in the Description of the Action (DoA).
Informed consent for data sharing and long-term preservation will be included in questionnaires dealing with personal data.

7. OTHER ISSUES