



Deliverable 1.3: Data Management Plan

Work Package 01

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Executive Summary

This Data Management Plan (DMP) establishes the framework for effective data management across the EURAD-2 partnership. The plan addresses the complex challenge of coordinating data collection, storage, sharing, and preservation while ensuring compliance with FAIR (Findable, Accessible, Interoperable, Reusable) principles and EU research data requirements.

The EURAD-2 partnership utilizes an integrated platform approach with ProjectPlace as the primary collaboration and document management system, ZENODO for long-term data preservation, GitHub for code management, and EUSurvey for data collection. This multi-platform strategy ensures appropriate tools for each aspect of the programme's data lifecycle.

By implementing this DMP, EURAD-2 partnership will create a robust data ecosystem that enables efficient collaboration, enhances research visibility, ensures long-term data accessibility, and maximizes the impact of the programme's scientific outputs in the field of radioactive waste management.

List of Abbreviation

AI	–	Artificial Intelligence
DMP	–	Data Management Plan
DOI	–	Digital Object Identifier
EEA	–	European Economic Area
EU	–	European Union
EURAD-	–	European Joint Programme on Radioactive Waste Management
FAIR	–	Findable, Accessible, Interoperable, and Reusable
GDPR	–	General Data Protection Regulation
IPR	–	Intellectual Property Rights
IT	–	Information Technology
KM	–	Knowledge Management
KoM	–	Kick-off-Meeting
MoM	–	Minutes of Meeting
PID	–	Persistent Identifier
WP	–	Work Package

Glossary

GDPR

The General Data Protection Regulation (GDPR) is an EU law that governs the collection, processing, and protection of personal data of individuals in the EU/EEA. Enforced since May 25, 2018, it grants rights to individuals (e.g., access, erasure), mandates organizations to ensure data security, and imposes sanctions for non-compliance. It applies globally to any entity handling EU citizens' data.

Raw data

Data refers to raw facts, figures, or information that can be processed or analysed to extract meaning or insights. It can take various forms such as numbers, text, images, or recordings, and is typically unorganized or unprocessed until it is interpreted or structured. Data can represent anything from measurements, observations, or any form of collected information in its most basic form, often used as a foundation for decision-making, analysis, or further processing in various fields like science, business, and technology.

File

A file is a collection of data or information that is stored on a computer or digital device. It can contain a variety of content types such as text, images, videos, or even software code. Files are typically organized by name and have specific extensions (e.g., .txt, .jpg, .pdf) that indicate the type of data they contain, or the program used to open them. Files can be manipulated, edited, copied, moved, or deleted, and they serve as the primary unit for storing and managing information on digital systems.

Folder / Directories

In the field of Information Technology (IT), a folder (also known as a directory) is a container used to organize and store files on a computer or digital system. Folders allow users to group related files together, making it easier to manage, locate, and access them. Folders can also contain other folders, creating a hierarchical structure (also called a directory tree) that helps organize information in a logical way. This structure is used by operating systems like Windows, macOS, and Linux to facilitate file management and navigation.

Folders are usually represented as icons, often resembling a physical folder, and can be named to reflect their contents, such as "Documents" or "Pictures."

Data Lifecycle

Refers to the stages through which data passes, from initial creation or collection through active use, storage, sharing, and ultimately, archiving or deletion.

Metadata

Data that describes other data, providing information about its content, context, quality, structure, and accessibility.

Data Stewardship

The responsibility for managing data assets to ensure they are well-organized, accessible, and preserved for future use.

FAIR Principles

An acronym for Findable, Accessible, Interoperable, and Reusable. These principles guide the management and stewardship of data to enhance its utility and longevity.

Data Repository

A centralized location where data is stored and managed. Repositories can be open-access, discipline-specific, or institution-specific.

Data Retention

Policies or guidelines specifying how long data must be kept and under what conditions it can be deleted.

Data Sharing

The practice of making data available to other researchers or stakeholders, often through repositories, adhering to legal, ethical, and policy considerations.

Data Sensitivity

Refers to the level of confidentiality or security required for data, often determined by legal, ethical, or organizational standards.

Data Anonymization

The process of removing or masking personal or sensitive information from a dataset to protect individuals' identities.

Data Governance

The framework and policies that ensure the proper management, security, and integrity of data across an organization.

Persistent Identifier (PID)

A long-lasting reference to a document, file, or dataset that ensures continued access. Examples include DOIs (Digital Object Identifiers) for datasets.

Data Versioning

The process of assigning unique identifiers to different versions of a dataset to track changes and updates over time.

Intellectual Property Rights (IPR)

Legal rights protecting the ownership and use of data, including copyrights, patents, and licenses.

Data Accessibility

The ease with which data can be accessed, retrieved, and used, considering technical and legal constraints.

Controlled Vocabulary

A standardized set of terms used to describe data consistently within a specific domain or repository.

Data Backup

The process of creating copies of data to prevent loss in the event of hardware failure, human error, or cyberattacks.

Data Encryption

The use of algorithms to secure data by converting it into a format that can only be accessed with a decryption key.

Data Curation

The process of organizing, annotating, and maintaining data to ensure its quality, usability, and sustainability.

Open Data

Data that is freely available to the public, typically under a license that allows use, modification, and sharing.

Data Compliance

Ensuring that data management practices meet legal, ethical, and organizational standards, including data protection regulations such as GDPR.

Raw data

The data originally generated by a system, device or operation, and has not been processed or changed in any way.

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1. Introduction

The EURAD-2 partnership represents a pivotal initiative in advancing the research and development of radioactive waste management. For the collection, handling, storage, and dissemination of all types of data generated within the partnership, a DMP is required providing a comprehensive framework for an efficient management of the data. This includes, but is not limited to, management of research datasets, codes, pictures, and various files and use of Artificial Intelligence (AI) technology to improve data quality, analysis, and decision-making. The DMP is meticulously crafted to ensure absolute compliance with Open Access principles and the directives set forth by the European Commission. Given that the research is publicly funded, it is essential that data are easily accessible to the public, fostering transparency and trust in the outcomes of the EURAD-2 partnership. The DMP aligns with the FAIR data principles (Findable, Accessible, Interoperable, and Reusable) and mandates their application across all work packages within the EURAD-2 partnership.

2. FAIR data principles

The EURAD-2 partnership is committed to fully integrating the FAIR data principles into its operations, ensuring that all data produced is systematically organized, easily accessible, and reusable by the wider scientific community. This commitment is not just an ethical obligation but a legal one, dictated by the program's funding from the European Commission.

2.1 Findable:

- All datasets, codes, pictures, and files will be assigned Digital Object Identifiers (DOIs) or other persistent unique identifiers to ensure they are easily findable.
- Comprehensive metadata will be provided for each resource, including the title, description, keywords, authorship, and any relevant licensing information.
- All resources will be registered in discipline-specific repositories or those designated by EURAD-2 partnership, ensuring their discoverability by researchers and the public alike.
- Data and metadata are in machine readable formats and related by unique identifiers.

2.2 Accessible:

- Research data will be made openly accessible whenever possible, adhering to ethical, legal, and security constraints. This ensures that the data produced with public funds is available to the public.
- For data that is sensitive or restricted, appropriate access controls will be implemented to secure authorized access while maintaining transparency.
- Metadata will include detailed access instructions, enabling users to understand how and under what conditions they can access the data.

2.3 Interoperable:

- Standardized data formats, coding languages, and communication protocols will be utilized to facilitate seamless data exchange and integration across different systems and platforms.
- Metadata will adhere to recognized international standards, promoting ease of integration, discovery, and use.
- Uniform naming conventions for all codes, files, and pictures will be established to avoid confusion and maintain consistency across the whole programme.

2.4 Reusable:

- Detailed documentation of code development, including methodologies, assumptions, and algorithms, will be provided to ensure that the codes are reusable by other researchers.

- Where applicable, open-source licenses will be applied to the codes, clearly specifying the permissible uses, and encouraging broader reuse.
- Proper citation and attribution practices will be encouraged for all data types, including codes, pictures, and files, to ensure that original creators are credited appropriately.

3. Data types and management

Effective data management is increasingly critical but remains challenging due to varying interpretations and a lack of standardization. In EURAD-2 partnership, different types of data will need to be properly identified, structured, and managed to enhance accessibility, interoperability, and long-term preservation.

3.1 Research raw data

Raw data can be subject to different interpretations. For EURAD-2 partnership, we define research raw data as files directly generated from scientific instruments or equipment. These may include:

- Structured text-based formats: ASCII files such as .csv, .txt, .xml, and .json.
- Proprietary instrument outputs: Manufacturer-specific formats requiring specialized software for access.
- Binary data: Files that may not be human-readable but contain essential experimental outputs; their long-term usability should be assessed individually.

To ensure proper management, raw data should:

- Be collected using standardised methodologies and tools to ensure consistency.
- Include detailed metadata (e.g., acquisition parameters, equipment settings, timestamps) to enhance future usability.
- Be organized in structured directories with clear and standardized naming conventions.

3.2 Source codes

Source codes play a key role in data processing, modelling, and analysis within EURAD-2 partnership. Their management should adhere to best practices:

- Use version control systems (e.g., Git) to maintain development history.
- Store codes in secure repositories (e.g., GitHub, GitLab) to facilitate access and collaboration.
- Ensure comprehensive documentation, including code functionality, licensing, usage instructions, and dependencies.

3.3 Experimental and observational data

This category includes any processed data, calibrated measurements, or experimental results derived from raw data. It may exist in multiple formats, such as:

- Databases (SQL, NoSQL, relational data structures).
- Numerical models and simulations (NetCDF, HDF5, or other scientific data formats).
- Image and graphical data (e.g., .jpg, .png, .tiff, .svg) obtained from microscopy, remote sensing, or visualization tools.
- Geospatial data (e.g., GIS shapefiles, GeoTIFF, KML).

To ensure sustainability and usability:

- Data should be stored in interoperable, non-proprietary formats where possible.
- Metadata should follow established ontologies and standards to enhance findability and reusability.

3.4 Documents and communication records

In addition to scientific data, EURAD-2 partnership will generate various WP-related documents and communication records, such as:

- Meeting minutes, presentations, and reports (e.g., .pdf, .docx, .pptx).
- Project management logs, chat records, and email exchanges (managed through platforms like ProjectPlace, Teams, Zoom, Webex or other collaborative tools).
- Administrative data relevant to compliance, governance, and funding reports.

3.5 Towards a comprehensive data typology in EURAD-2

A structured approach to data classification is essential to improving data management within EURAD-2 partnership. Rather than relying solely on file extensions, we must establish a clear data typology based on content, usage, and required tools (See Appendix A). This typology will encompass:

- Research databases and structured datasets.
- Instrument-generated files, including raw and processed data.
- Computational outputs, including scripts, models, and simulations.
- Multimedia resources such as images, videos, and plots.
- Documentation and communication records.

Developing this typology during EURAD-2 partnership will enable us to implement better tools for data curation, storage, and sharing within the Knowledge Management (KM) platform, ensuring long-term accessibility and interoperability.

4. Data access

4.1 Open access

- EURAD-2 partnership will provide open access to all non-sensitive research data, codes, pictures, and files, reflecting the program's commitment to transparency and public accountability.
- Data shall be hosted in public repositories or platforms that align with the objectives of EURAD-2 partnership, ensuring wide availability.
- Metadata shall include clear instructions for accessing and using the data, ensuring that users can effectively engage with the resources.

4.2 Controlled access

- Within the EURAD-2 consortium framework, it is recognized that most of generated data is classified as public domain, consistent with the minimum 50% public funding allocation.
- In exceptional circumstances where data is classified as sensitive or restricted, a hierarchical access control mechanism shall be implemented and clearly justified and documented for access rights.
- Authentication and authorization systems shall be established to ensure that only authorized users can access restricted resources.
- A standardized, transparent process for access requests and authorization shall be maintained, incorporating principles of equitable distribution and evidence-based justification criteria.

5. Data sharing

- The partnership will actively promote a culture of data sharing among all EURAD-2 partnership researchers and collaborators, emphasizing the importance of transparency and collaboration.
- Data sharing plans will be included in all publications and presentations, highlighting the availability of the data and encouraging its use by the broader scientific community.
- Datasets, codes, pictures, and files shall be deposited in designated repositories (See Appendix A), making them available for wider dissemination and reuse.

6. Data preservation and archiving

- All data, codes, pictures, and files shall be stored on secure, reliable infrastructure, ensuring their long-term preservation.
- Repositories will be selected based on their ability to offer long-term preservation and robust backup mechanisms, protecting against data loss.
- Metadata shall be regularly updated, and the relevance of stored resources will be periodically reviewed to ensure ongoing accuracy and utility.

7. Ethical and legal considerations

- The partnership will ensure that all necessary permissions for data sharing are obtained, particularly when dealing with sensitive information.
- Potential intellectual property issues will be proactively addressed, ensuring that all codes and resources are properly licensed and that rights are respected.
- Compliance with data protection regulations, including GDPR, and privacy policies will be strictly enforced, safeguarding the rights of individuals and organizations involved.

8. Data management resources and responsibilities

- Clear roles and responsibilities for data management tasks will be assigned within the EURAD-2 partnership, ensuring comprehensive oversight of all data management aspects.
- Researchers will receive training and guidelines on best practices in data management, ensuring that all participants are equipped to contribute effectively to the partnership's data management objectives.
- A support system will be established to address any inquiries or issues related to data management, providing assistance and ensuring compliance with the DMP.

9. Monitoring and review

- The implementation of the DMP will be periodically assessed to ensure its effectiveness in achieving the partnership's data management goals.
- Feedback from stakeholders, including researchers, partners, and the public, will be gathered to identify areas for improvement and to refine the DMP as necessary.
- The DMP will be adjusted in response to lessons learned and evolving requirements, ensuring that it remains relevant and effective throughout the life of the EURAD-2 partnership.

10. Risk management

Data loss risks

To prevent data loss from deletion, corruption, or hardware failures, regular backups across all platforms following are being implemented. Version control in ProjectPlace provides additional protection, while critical data receives secondary backups on institutional servers.

Security threats

Security risks are being mitigated through strict access controls, role-based permissions, and data classification.

Technical failures

Contingency plans address system outages and platform malfunctions, including alternative backup communication channels.

Resource constraints

Resource limitations are being managed through capacity planning, storage optimization, and clear responsibility allocation.

11. Conclusion

The EURAD-2 Data Management Plan is a critical component of the program's commitment to advancing research in radioactive waste management. By adhering to FAIR principles and ensuring the responsible management of various data types, the program aims to foster collaboration, promote data-driven insights, and contribute to the broader scientific community. The DMP underscores the importance of accessibility, transparency, and compliance with ethical and legal standards, ensuring that the data generated within the program is a valuable resource for future research and public accountability.

Appendix A. Recommendation for using EURAD-2 ProjectPlace

This guide is intended to cover various aspects of project management, including meetings, tasks, reviews, documents, conversations, planning, boards, whiteboards, issues, reports, and templates which are tools already existing in ProjectPlace.

1. Getting started with ProjectPlace

Accessing the Platform: Log in to your ProjectPlace account using the credentials provided for EURAD-2 : <https://service.projectplace.com/>

Familiarization: Take a moment to explore the dashboard and familiarize yourself with the layout and available tools.

Members Tab: Manage team access permissions, track individual contributions, and facilitate collaboration across the consortium's organizations through this section. Set appropriate role-based permissions and organize members into functional teams to streamline communication.

2. Using meetings effectively

Scheduling Meetings: Use the Meetings tool to schedule regular WP meetings.

Select Schedule Meeting and fill in the meeting details (date, time, agenda).

Invite participants directly from the tool.

Meeting Notes: Use a designated section for meeting notes to document key points, action items, and decisions made during each meeting.

3. Managing tasks

Creating Tasks: In the Tasks section, create tasks for team members based on project requirements.

Assign tasks with clear titles, descriptions, due dates, and responsible members.

Use labels to categorize tasks (e.g., "Research", "Documentation", "Review").

Tracking Progress: Regularly update the status of tasks (To Do, In Progress, Completed) and encourage team members to do the same.

4. Conducting reviews

Setting Up Reviews: Schedule reviews for key project milestones or deliverables.

Use the Meetings tool to set up review sessions with relevant stakeholders.

Review Documentation: Upload relevant documents and drafts for review in the Documents section prior to the meeting.

To conduct a formal document review in ProjectPlace, first upload your document to the appropriate folder in the Documents section. Then select the document and click on "Send for review" option.

When sending for review, you'll be prompted to select reviewers from your team members. Add the relevant people, set a deadline if needed, and include any specific instructions in the review request. Reviewers will receive notifications and can add comments directly to the document. As the document owner, you can track review status, view all comments, and mark the review as complete when finished.

For more complex reviews, coordinate with a ProjectPlace meeting using the Meetings tool to discuss feedback in real-time while examining the document together.

5. Document management

Uploading Documents: Use the Documents tool to upload important project files (reports, presentations, data).

Organize documents in folders for easy access (e.g., "Proposals", "Reports", "Meeting Minutes").

Version Control: Version Control: Use ProjectPlace's robust version control system to maintain a comprehensive history of document changes. When uploading new versions of documents, the system captures each iteration automatically. Use the Lock-On/Off functionality when editing documents to prevent conflicts - this temporarily locks files while you're working on them, ensuring others cannot make simultaneous changes. This feature is particularly valuable for critical documents with multiple contributors, helping maintain document integrity throughout the development process while creating a clear audit trail of modifications.

In case of major failure or accidental file deletion, it is recommended to refer to EURAD-2 Secretariat which has super admin rights to recover files if possible or contact support teams which develop ProjectPlace.

Contact: secretariat@ejp-eurad.eu

6. Facilitating conversations

Using Conversations: Utilize the Conversations feature to facilitate ongoing discussions among team members.

Start a new conversation for specific topics or ongoing discussions. Tag team members in conversations to ensure relevant participants are notified.

For document-related discussions, add comments directly on the documents to keep feedback contextual and ensure all revisions and suggestions are tracked within the document itself. This approach maintains clear connection between discussions and their relevant files, making it easier to follow decision-making processes and implement feedback.

7. Planning the project

Creating a Project Plan: Use the Plan tool to outline the project timeline, key milestones, and deliverables.

Leverage the comprehensive scheduling capabilities with Gantt charts to visualize project timelines, set dependencies between tasks, and track milestones. This feature is essential for maintaining the overall project schedule and identifying potential delays early.

Update the project plan regularly to reflect progress and changes.

8. Setting up boards

Using Boards: Create Kanban-style boards to visualize task progress and team workload. Using Boards feature for visual task management with customizable workflows, allowing teams to track progress across work packages and individual tasks. Create separate boards for different project phases or activities, and use card systems to move tasks through various stages of completion.

Use columns to represent different stages of work (e.g., Backlog, In Progress, Done).

Drag and drop tasks to update their status easily.

9. Collaborating on whiteboards

Using Whiteboards: Use the Whiteboard tool for brainstorming sessions, mind mapping, or collaborative discussions.

Add sticky notes, drawings, and text to capture ideas visually.

Encourage team members to contribute their thoughts during meetings or planning sessions.

10. Managing issues

Tracking Issues: Use the Issues tool to log and track any problems or challenges encountered during the project.

Create issues with detailed descriptions, priority levels, and responsible members.

Update the status of issues as they are resolved.

11. Using templates

Accessing Templates: Leverage available templates for project documentation, task lists, meeting agendas, etc.

Use EURAD-2 Templates according to your WP needs.

Store commonly used templates in a dedicated folder within the Documents section for easy access, but ensure the templates are up-to-date with coordinator's ones.

12. Monitoring progress and adjustments

Regular Check-ins: Schedule regular team check-ins to discuss progress, challenges, and upcoming tasks.

Adjust Plans as necessary: Be flexible and adjust the project plan and tasks based on team feedback and project developments.

13. Feedback and continuous improvement

Gathering Feedback: Encourage team members (through specific meetings) to provide feedback to KM WP on tools and processes. Use Conversations or dedicated feedback sessions to collect insights.

Improving Processes: Regularly assess how well tools are being utilized and make adjustments to optimize workflows and collaboration.

Appendix B. Guidelines for implementing the DMP in individual WPs of EURAD-2 partnership

1. Proposed approach

This EURAD-2 Data Management Plan is intended to be a living document that we will need to be updated annually. To achieve this, the feedback from WPs partners through KM ambassadors (as WP Task 2 leaders) is crucial and will be invaluable. As an initial approach, it is considered all tools which are commonly used in almost all entities of EURAD-2 partnership, and which are relevant for the partnership. A number of other new tools are proposed because they are widely recognised within the international community and, as far as possible, referenced or supported by the European Commission.

The EURAD-2 partnership integrates diverse stakeholders across multiple organizations, necessitating robust systems for collaboration. To ensure seamless operations across work packages, we implement a comprehensive suite of digital tools that facilitate effective communication, standardized data exchange, and coordinated project management. The following section outlines the strategic relevance of each implemented tools.

Feedback from users through KM Ambassadors is expected and encouraged to help to update this document during the lifetime of EURAD-2.

2. Platforms overview

This section presents a set of tools specifically designed to meet the diverse needs of managing the EURAD-2 Partnership's activities efficiently. We begin by describing the existing tools, as they are already in use and will continue to serve EURAD-2 participants. Additionally, we introduce other tools that were not explicitly recommended in EURAD(-1) and PREDIS but are now more clearly defined to ensure that all participants can easily determine where to store specific types of information. The overarching principle is to promote structured and centralized information management, avoiding unnecessary dispersion across multiple platforms. By adhering to these guidelines, we enhance accessibility, collaboration, and long-term data integrity within the partnership.

Table 1– Primary Platforms and Communication Channels for EURAD-2 partnership

Platform or Communication Channel	Primary Function	Key Features	Usage
ProjectPlace https://service.projectplace.com/	Project Management	Central project management hub Task deliverables and milestones tracking Document storage Collaboration Communication Shared agenda	Primary tool for all WP activities. Use for short messages instead of email. Create subgroups for targeted communication. Utilize version control features for all documents.
ZENODO https://zenodo.org/communities/eurad-2/	Repository	DOI assignment Long-term storage Public dissemination, open data	Data preservation and sharing
GitHub https://github.com/EURAD-2-Partnership	Code Management	Code version control, Code review Issue tracking	Software development or code archiving and versioning
EUSurvey https://ec.europa.eu/eusurvey	Data Collection	Questionnaire distribution Data collection	Questionnaires and surveys, information collect

		Feedback gathering Assessment tools	
Microsoft Teams, Zoom, WebEx, etc.	Communication	Online communication Screen sharing	Meetings
KM Platform (pending)	Hub	Hub	Centralisation tool
Email	Official communication	Message-centric Limited collaboration Fragmented storage	It is recommended to limit usage of email as much as possible, typically when people do not have access to Project Place. Sharing files could be temporarily done through unique link to support collaborative work.

2.1 ProjectPlace

ProjectPlace has been designated by the EURAD-2 partnership coordinator to host all the restricted project management website and project management functionalities (see Appendix B). As this is a paid tool, it is strongly requested to use all possible functionalities for each WP life. This project management tool facilitates real-time collaboration, task tracking, and document management, making it ideal for coordinating activities across diverse teams and ensuring alignment on project milestones.

In the EURAD-2 partnership, it is recommended to use ProjectPlace for communication as the platform offers communication tool to all workspace members for general discussions, using links instead of attachments, adding specific comments to documents, and attaching notes to particular activities or tasks. This multi-layered communication approach keeps all WP-related conversations in context and easily searchable, eliminating the need to search through email threads or forward messages to new team members.

The platform's notification system allows users to customize alerts based on their role and needs, ensuring they receive relevant updates without being overwhelmed. Workspace members can mention colleagues (@colleagues) to draw attention to specific items, tag conversations for better organization, and create focused discussion groups for specialized topics.

ProjectPlace's version control system automatically tracks all document changes, maintains revision histories, and allows side-by-side comparisons – features that email simply cannot provide. This comprehensive documentation creates an auditable record of project evolution while significantly reducing unnecessary message traffic. By centralizing communications within ProjectPlace, teams can achieve more focused discussions, maintain better information organization, and dramatically reduce the email overload that typically plagues large collaborative projects.

It is recommended that WP Leaders setup administrator rights to task leaders, especially T2L or KM Ambassadors, in order to help them to setup correctly workspace (documents structure organisation, creation of roles and groups in members section, creation and management of boards, plans, etc.). Ideally interested people to improve data management are welcome to involve in this.

2.2 Email

Emails have been widely used for many years, and while they have accelerated communication, they also present significant drawbacks in project management if a consistent level of rigor is not maintained by all. The two main issues are, first, the increase in data volume due to the multiplication of attachments, which is not environmentally sustainable, as well as the loss of information which is often due to multiple versions circulating, increasing the risk of confusion and inefficiency. Second, some individuals may be

excluded from certain communications if senders do not adopt the practice of maintaining shared and up-to-date distribution lists.

This is the reason why it is recommended to avoid email for communication within the EURAD-2 partnership as much as possible, to promote more efficient and sustainable collaboration. One key reason is the need to prevent the attachment of files via email.

Using ProjectPlace platform for communication instead is supported by KM WP. Moreover, relying on a centralized tool helps limit the proliferation of fragmented communication channels, ensuring that all WP-related information is easily accessible in one place, improving transparency, consistency, and team coordination.

2.3 Teams and other communication tools

Microsoft Teams is a widely used tools since 2020 in a lot of organisations, thus it can be used as a main meeting tool for EURAD-2 participants but should not be used as a storage system (as that is the role of ProjectPlace). It combines video meetings and chat in one platform, making it easier for teams across Europe to join. The platform allows for organised discussions through dedicated channels and integrates well with other Microsoft tools.

Other tools are already used by several institutions like Zoom, WebEx, etc. and no recommendation is made about these tools. It is just recommended not to share data through such tools.

2.4 ZENODO – Data file long-term storage

ZENODO serves as the designated open-access repository for EURAD-2, facilitating the systematic dissemination of research outputs (see Appendix C). The platform ensures long-term preservation and accessibility of scientific deliverables, including datasets, publications, and technical documentation. The platform's robust digital object identifier (DOI) system enables precise citation tracking and permanent accessibility of all research outputs. By consolidating work package findings in ZENODO, EURAD-2 partnership enhances research visibility, promotes cross-disciplinary knowledge exchange, and fulfils open science requirements while maintaining appropriate version control. The platform's flexible access controls also allow for proper management of both public and restricted content, ensuring compliance with data sharing protocols.

2.5 GitHub – Source code long-term storage

GitHub serves as the main platform for managing code and software development within EURAD-2 (see Appendix D). It enables teams to work together on code, track changes, and maintain quality through version control. Teams can review each other's work, track issues, and store documentation in one place. This ensures consistent code development and makes collaboration easier across different technical teams.

2.6 EUSurvey for questionnaires and surveys

EUSurvey is the European Commission's tool for creating and managing surveys within EURAD-2 (see Appendix F). It supports multiple languages and offers various question formats to collect feedback effectively. The platform ensures data security and compliance with EU regulations while providing easy analysis of survey results. This makes it ideal for gathering structured input from partners and stakeholders across the project.

2.7 EURAD-2 website

The EURAD-2 website, managed by the Coordinator, serves as the public face of the partnership, and builds upon the previous EURAD(-1) programme and integrates key documentation from the earlier PREDIS project. It is the main platform for sharing public deliverables and research findings from

EURAD-2, and announcing events open to both the consortium and the public. The website makes the partnership's results accessible to stakeholders and the public, supporting transparency and knowledge sharing across the nuclear waste management community.

2.8 KM platform

The Knowledge Management platform will be built based on experiences from EURAD(-1), incorporating user feedback and technical improvements. The platform will focus on making knowledge easier to find, share, and use across the project. It will include better search capabilities and user-friendly features, while connecting with other EURAD-2 tools. Development will prioritize practical user needs to ensure the platform effectively serves the partnership.

An ideal KM platform could also be seen as a hub concentrating all relevant knowledge developed in the frame of EURAD-2 partnership. It will have to be decided to develop fully something to create a “platform” (website, SharePoint, other?), to use already developed tools which are existing in other KM initiatives or to use what we have in a smart way to allow creation of hub with links. This activity will be developed in sub-task 5.1, related to KM-platform development.

3. Integration workflows

3.1 Document lifecycle:

The document management process follows a structured lifecycle to ensure consistency, traceability, and proper versioning.

a. Drafting:

- i. Documents are created either locally or on ProjectPlace
- ii. Initial storage on ProjectPlace with proper naming convention (See Section 4.1 of Appendix A)
- iii. Assignment of responsible team members (See Section 2.1 of Appendix A)
- iv. Setting appropriate access rights

b. Review & Feedback:

- i. Collaborators review within ProjectPlace
- ii. Use comments feature for specific feedback
- iii. Track changes and suggestions
- iv. Document review decisions
- v. Maintain version history.

c. Version Control:

For code-containing documents:

- i. Managed using GitHub for version control
- ii. Linked to ProjectPlace
- iii. Synchronized between platforms

For other documents:

- i. Updated on ProjectPlace
- ii. Version tracking through platform tools

d. Finalization & Publication:

- i. The final version is published on ZENODO with a DOI for referencing.
- ii. A copy is stored on the EURAD-2 website for broader dissemination.

- iii. A backup version remains on ProjectPlace for internal reference.
- iv. Update relevant task status

3.2 Survey process

- a. **Survey Design:** Surveys are designed collaboratively on ProjectPlace using either Excel (for structured question flow and logic) or Word (for detailed descriptions and instructions). Both formats allow for effective team review and commenting through ProjectPlace.
- b. **Survey Implementation:** the final survey is built and configured on the EUSurvey Platform.
- c. **Data Collection:** Responses are collected through the EUSurvey Platform.
- d. **Data Processing & Analysis:**
 - v. If needed, data analysis scripts are developed and stored on GitHub.
 - vi. Processing and statistical analysis are conducted either within the EUSurvey Platform, using Excel for simpler analysis, or specialized statistical software for complex analysis.
- e. **Results Storage & Sharing:**
 - i. Final survey results are archived on ZENODO (for open access) or ProjectPlace (for internal access).

2. Code Management:

- a. **Development Phase:**
 - i. Code is written and stored in **GitHub repositories**.
- b. **Documentation:**
 - i. Documentation is maintained on **GitHub Wiki** to ensure accessibility and clarity.
- c. **Release Management:**
 - i. Official software versions are managed via **GitHub Releases**.
- d. **Final Publication:**
 - i. A stable version is published on **ZENODO**, assigned a DOI for citation and long-term accessibility.

4. Data Organization and Management

4.1 File naming convention

Each document circulating within EURAD-2 shall be filed with a unique code, regardless of the filenames and referencing conventions that each partner is free to use in local archives

All platforms use:

EURAD2_[WPN°]_[ACRONYM]_[TaskN°]_[SubtaskN°]_[Type]_[NAME]

Example: EURAD2_WP02_KM_T05_02_D01_03_DMP.docx (for this report)

Each part has a specific meaning:

1. EURAD-2: Keep always the same - it shows it's our project
2. WP02: This means Work Package 2
 - o If you're in Work Package 8, write WP08
 - o If you're in Work Package 12, write WP12
3. KM: WP Acronym from list below (see Table 2) based on four digits XXXX
4. T05: This means Task 5
 - o If you're working on Task 1, write T01
 - o If you're working on Task 5, write T05
5. 02: This means Subtask 2
 - o If you're working on Subtask 3, write 03
 - o If there's no subtask, write 00
6. Type of document (pick one):

- REP = Report
- PREP = Progress Report
- D = Deliverable
- MS = Milestone
- MOM = Minutes of Meeting
- DOC = Regular Document
- PRE = Presentation
- DAT = Data file
- etc. – This list could be enlarged following discussion between KM Ambassadors and KM WP.

7. Institution short name and country code responsible for the document delivery (see Table 3) if necessary (typically for contribution of countries, institutions in task work).
8. Version number is not recommended as ProjectPlace, ZENODO and GitHub are able to manage it automatically.

Practical Examples:

1. Meeting minutes from WP3, Task 2, no subtask:
 - EURAD2_WP03_ASTRA_T02_ST00_MOM_MEETING
2. Presentation for WP8, Task 1, Subtask 3, final version,
 - EURAD2_WP08_SARE_T01_03_PRE_MEETING03_VF
3. Report from WP12, Task 5, Subtask 2:
 - EURAD2_WP12_RAMP_T05_02 REP_SF_INVENTORY
4. Presentation from IRSN in the frame of the 1st workshop of the OPTI WP
 - EURAD2_WP13_OPTI_PRE_WORKSHOP01_IRSN_FR
5. Deliverable 1.3 from PMO WP01, Task 5, Subtask 2 Data management plan
 - EURAD2_WP01_PMO_T05_02_D01_03_DMP
6. Milestone n°6 from KM WP02 Task 3, no subtask, about additional documentation
 - EURAD2_WP02_KM_T03_MS06_ADDIT_DOC

Important rules:

- Don't use spaces, use “_” instead.
- Avoid using special characters like "é", "è", "(", "]", etc., and prefer uppercase letters.
- Keep names as short as possible, avoid “sentences” in naming files
- Don't skip any parts
- Always use two digits (01 instead of 1)

In order to ensure short file names, we ask everyone to use a strict codification based on ISO codes for country names and 4 letters codes for institution names. When document is for example a contribution from institution or specific country, the use of codes can be necessary.

Table 2 – Codification required for KM WP Acronyms

WP_NUMBER	WP_NAME	Acronym
WP01	PMO	PMO
WP02	KM	KM
WP03	ASTRA	ASTR
WP04	FORSAFF	FORS
WP05	ICARUS	ICAR
WP06	STREAM	STRE
WP07	LOPERA	LOPE
WP08	SAREC	SARE
WP09	INCOMAND	INCO

WP10	ANCHORS	ANCH
WP11	CLIMATE	CLIM
WP12	RAMPEC	RAMP
WP13	OPTI	OPTI
WP14	SUDOKU	SUDO
WP15	DITOCO2030	DITO
WP16	HERMES	HERM
WP17	CSFD	CSFD
WP18	DITUSC	DITU

Table 3 – Codification required for ISO country code ([Online Browsing Platform \(OBP\)](https://www.iso.org/obp/ui/#search))
<https://www.iso.org/obp/ui/#search>

COUNTRY	ISO_CODE	COUNTRY	ISO_CODE
Albania	AL	Moldova	MD
Australia	AU	Montenegro	ME
Austria	AT	Morocco	MA
Belgium	BE	Netherlands	NL
Bosnia and Herzegovina	BA	North Macedonia	MK
Bulgaria	BG	Norway	NO
Canada	CA	Poland	PL
China	CN	Portugal	PT
Croatia	HR	Romania	RO
Cyprus	CY	Serbia	RS
Czechia	CZ	Slovakia	SK
Denmark	DK	Slovenia	SI
Estonia	EE	South Korea	KR
Finland	FI	Spain	ES
France	FR	Sweden	SE
Georgia	GE	Switzerland	CH
Germany	DE	Taiwan	TW
Greece	EL	Türkiye	TR
Hungary	HU	Ukraine	UA
Iceland	IS	United States of America	US
Ireland	IE		
Italy	IT		
Japan	JP		
Latvia	LV		
Liechtenstein	LI		
Lithuania	LT		
Luxembourg	LU		
Malta	MT		
Mexico	MX		

4.2 Folder architecture for files management

A well-structured folder hierarchy is critical for organizing information across WPs in ProjectPlace. The following structure should be used for every WP, task, and sub-task to ensure consistency.

As ProjectPlace is managing releases versions, dates, etc. it is recommended not to put too much information in the names of the files.

4.2.1 Root folder structure for Each WP

01_BACKGROUND_DOCUMENTS

02_TASKS_SUBTASKS

TASK_01

BUDGET

SUBTASK_01_1

SUBTASK_01_2

[...]

TASK_02

SUBTASK_02_2

[...]

...

03_MEETINGS

TASK_01

EURAD2_WPXX_WPACRONYM_T01_ST00_MoM_KoM.docx

EURAD2_WPXX_WPACRONYM_T01_ST00_MoM_BOARD_MEETING.docx

TASK_02

[...]

[...]

04_DELIVERABLES_MILESTONES

EURAD2_WPXX_ACRONYM_Task0X_XX_D0X_XX_NAME

EURAD2_WPXX_ACRONYM_Task0X_XX_MS0X_XX_NAME

05_DISSEMINATION

PUBLICATIONS

PRESENTATIONS

POSTERS

[...]

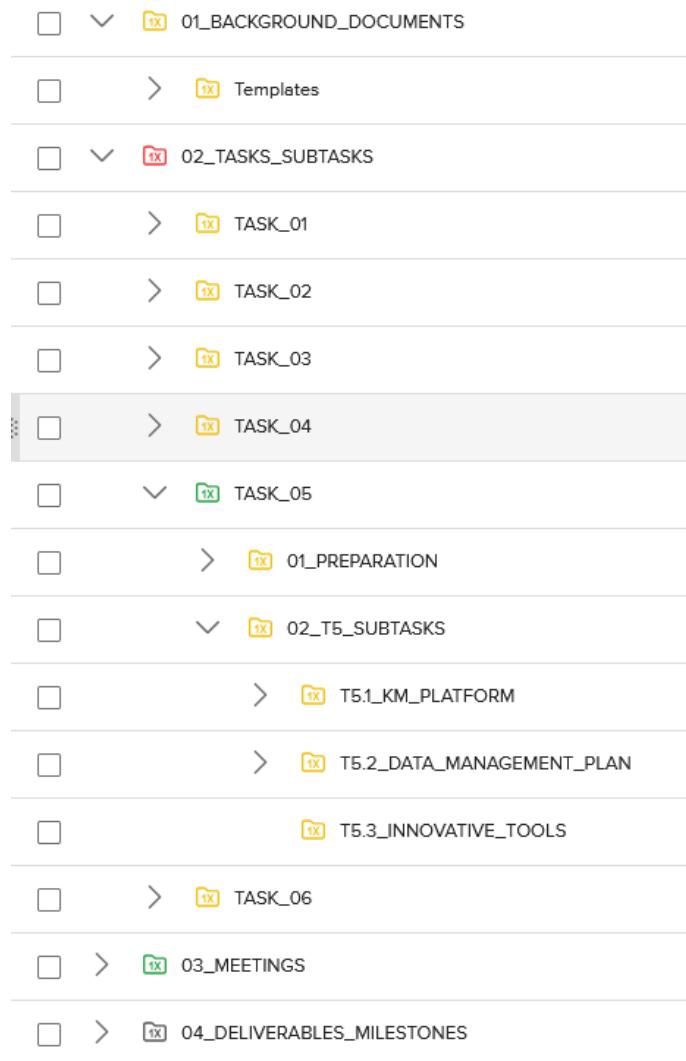


Figure 1 – Example of EURAD-2 Partnership ProjectPlace Folder Structure Design

This architecture provides a scalable and organized system that will be replicated for each WP. Below are descriptions of key folders.

4.2.2 Folder descriptions

- **01_BACKGROUND_DOCUMENTS:**

All documents which helped for WP preparation phase, especially content of the WP and budget.

- This section could house all work plans, budget allocations, schedules, and risk management documentation for the WP preparation stage, but it is recommended as much as possible to use ProjectPlace functionalities.
- Sub-folders like **Budgets** should be located in **TASK_01 (Management)**.

- **02_TASKS_SUBTASKS:**

- This is the main section for storing files, documentation, and metadata for each task and sub-task.

- Each **Task** should have its own sub-folder. Within each task folder, there will be sub-folders for **Subtasks**, ensuring finer granularity of organization.
- **Documentation:** Technical notes, method descriptions, and any other supporting documents.
- **Metadata:** Descriptions of data files, their formats, location, and the context of data collection. Metadata should be standardized across the WP.
- **03_MEETINGS:**
 - All meeting agendas, minutes, and notes relevant to WP, task, and sub-task meetings should be stored here.
 - Keep track of both high-level WP meetings and individual task or sub-task meetings.
- **04_DELIVERABLES_MILESTONES**
 - A folder for storing all formal deliverables: deliverables and milestones of the WP.
 - No sub-folders should be created for milestone and deliverables due to naming convention.
 - Refer to QMP for naming convention.
- **05_DISSEMINATION:**
 - This folder should contain abstracts, papers, presentations and posters produced in the frame of the WP.
 - Sub-folders could be created but not mandatory because of naming convention.

5. Data storage and backup

All WPs must use approved, secure data storage solutions for hosting project-related data. The following are key considerations:

- **Primary Storage** – ProjectPlace (Active working data, temporary storage, shared resources)
- **Data Security:** For sensitive data, use ProjectPlace's built-in security features: role-based access controls; password protection for specific documents; restricted sharing settings. All platforms used (ProjectPlace, ZENODO, EUSurvey) comply with EU data protection requirements.
- **Backup Policy:** All data should be regularly backed up to prevent accidental loss.
- **Long-term Preservation:** Once the WP concludes, ensure that all critical data is stored in a long-term preservation system (ZENODO or institutional repositories) – Publications, Final Reports, Deliverables: Procedure and Archive Requirements
- **Recovery procedures**
 - i. **Incident Response:** When data loss is detected, immediate notification must be sent to the WP Leader. The circumstances of the data loss should be investigated. An assessment of the scope and impact should be conducted to determine the appropriate recovery strategy.
 - ii. **Recovery Process:** The recovery process begins by identifying the most recent viable backup. Before proceeding with restoration, the backup integrity must be verified.
- **Storage monitoring:** Regular storage monitoring is essential for maintaining system performance and preventing capacity issues. The process includes capacity tracking, proactive file management, and performance verification to ensure all platforms function optimally.

6. Metadata standards

Metadata is crucial for ensuring data reusability. Each WP must include detailed metadata for every dataset, code, and file stored. A standardized metadata template should include:

- **Title:** Descriptive title of the data/code.
- **Authors:** Who created the data or code.
- **Description:** A brief explanation of what the data represents or what the code does.
- **Date of Creation:** When the data/code was created.
- **File Formats:** Specification of formats used (e.g., CSV, XML, JSON).
- **Licensing:** Licensing details for data/code reuse (e.g., open source, Creative Commons).
- **Version:** Specify the version of the data/code.
- **Access Instructions:** Any access restrictions or instructions for accessing the data.

Metadata should be provided in each **Metadata/** folder for every task and sub-task.

7. Responsibilities and roles

Each WP should assign the following roles to ensure proper data management:

- **Data steward:** Responsible for overall data management, including ensuring compliance with the DMP. Ideally this role should be endorsed by KM Ambassadors.
- **Task lead:** Manages data at the task level, ensuring that the folder structure and metadata are correctly maintained. Check regularly if data and codes are stored correctly.
- **Sub-task Lead:** Manages data at the sub-task level, ensuring adherence to documentation standards.

8. Review and compliance

Regular reviews of the data management practices should be carried out to ensure compliance with the DMP. Reviews should include:

- **Data Audits:** Ensure that the folder architecture is properly implemented, data and codes are available to public and that metadata is up to date.
- **Feedback mechanism:** it is strongly recommended to provide feedback from WPs to KM WP in order to improve DMP and adapt documentation if necessary.

9. Conclusion

By following this procedure and using the proposed folder architecture, each WP within EURAD-2 partnership will ensure consistent, transparent, and well-documented data management practices. This will enhance collaboration, facilitate data sharing, and ensure that the valuable insights generated within the program are accessible to the broader scientific community.

Appendix C. Procedure for using ZENODO website for data management

The following sections are a detailed procedure for the optimal use of ZENODO, to deposit, share, and manage research data:

1. Creating an account

Go to <https://zenodo.org/> and click on Sign Up to create an account. You can sign up using your email address or log in with a GitHub account.

Complete the required information and confirm your email address.

2. Preparing files for upload

Organize your data: Ensure your files are well-named and organized. For example, use descriptive file names and consistent folder structures.

File formats: ZENODO accepts various formats, but prioritize open and common formats (CSV, TXT, PDF, etc.) to ensure long-term accessibility.

Data documentation: Include README files or detailed metadata to describe the content of your data (context, structure, units of measure, acquisition methods, etc.).

3. Uploading data to ZENODO

Log in to your ZENODO account.

Go to page: <https://zenodo.org/communities/eurad-2/>

Click New Upload in the upper right corner.

Upload files: Drag and drop your files or click to select them from your computer.

Organize files: You can group multiple files in a single deposit or separate them according to relevance. Make sure the file order is logical and easy to follow for future users.

4. Filling in metadata

- **Title:** Provide a descriptive and concise title for your deposit that reflects the content.
- **Authors:** Add all contributors to the project, using their full names and affiliations. Reviewers can be added in «Additional information».
- **Description:** Write a detailed summary describing the data, its context, purpose, and how it can be used. This is where you can add additional details about the files. To add reviewers, include their information in the additional description field. This ensures proper attribution and helps establish clear responsibilities for document review processes.
- **Upload Type:** Choose the content type (Dataset, Publication, Image, Software, etc.) that best matches the files.
- **Publication Date:** Specify the publication date of the data. If it's for an ongoing project, you can use the current date.
- **Keywords:** Add relevant keywords to help users find your deposit.
- **Related/Alternate Identifiers:** If your data is linked to a scientific publication, add the DOI or identifiers of the related documents for cross-referencing.
- **Funding:** Provide information on funding sources as follows: select «add award» and enter *EURAD-2 reference “EURAD-2 is co-funded by the European Union under Grant Agreement N° 101166718.”*
- **License:** Choose a license that defines the usage rights for your data. The more open licenses allow for better reuse.

5. Verification and publication

Review the metadata to ensure it is complete and accurate.

When ready, click Publish to publish your deposit. ZENODO will assign a unique DOI (Digital Object Identifier) to your deposit, facilitating citation and referencing.

Note: Once published, data cannot be modified (only new versions can be published).

6. Version management

If you need to update the data, create a new version of the deposit:

Go to the original deposit, select New Version, then upload the new files and update the metadata.

This allows you to track different versions while maintaining a consistent link via the same root DOI.

7. Sharing and citation

Deposit Link: Share the DOI link generated by ZENODO in your publications, reports, or projects to ensure traceability.

Cite your deposit: Use the citation information provided by ZENODO. ZENODO automatically generates common citation formats for your deposit.

8. Creating and managing communities

ZENODO offers communities to group deposits around a specific theme, project, or institution.

Creating or joining a community: Go to the Communities tab, search for existing communities, or create a new one to group your deposits with those of collaborators.

Submitting a deposit to a community: When depositing, under Communities, add your deposit to one or more communities to increase its visibility among users with similar interests.

When setting up ZENODO for EURAD-2 partnership, create communities according to Work Package names for better organization and discoverability. Each WP should have its dedicated community with standardized naming (e.g., "EURAD2_WP05_ICARUS"). This approach allows for proper attribution, simplified navigation, and clearer organization of related outputs. Appoint WP Leaders as community curators to maintain consistent metadata practices and ensure appropriate content management throughout the project lifecycle.

9. Monitoring and interaction

Statistics: ZENODO provides download and view statistics for each deposit, allowing you to track its impact and interest.

Feedback and comments: Encourage colleagues and the community to provide feedback and ask questions. This can be done through social media, emails, or associated publications.

10. Long-Term archiving and FAIR Compliance

ZENODO ensures long-term archiving and is compliant with the FAIR principles.

By following the above steps, you ensure your data is easily accessible, well-documented, and ready for reuse in future research.

By following this procedure, you ensure that your deposit is complete, meets quality standards, and is readily usable by other researchers.

Appendix D. Procedure for using GitHub website for code and software sources management

Here is a detailed procedure for effectively using GitHub for research data storage, sharing, and collaboration:

1. Creating a GitHub account

Go to <https://github.com> and click Sign Up to create an account if you don't already have one.

Choose a username, provide your email address, and create a strong password.

Confirm your email address and set up two-factor authentication for enhanced security.

2. Setting up a new repository

Once logged in, go to : <https://github.com/EURAD-2-Partnership>

Click on the + icon in the upper-right corner and select New repository.

Repository Name: Choose a clear and descriptive name for your project.

Description: Add a short description that explains the purpose of the repository (e.g., "Data and scripts for the 2023 climate study project").

Visibility: Choose Public (accessible to everyone) or Private (restricted access).

Initialize with README: Check this box to automatically create a README file, which serves as an introductory document.

License: If applicable, select a license (e.g., MIT, GPL) to specify reuse and modification rights for others.

Click Create repository.

3. Organising files and folders

Folder Structure: Organize your repository by creating folders for different data types, e.g., data/, scripts/, notebooks/, docs/.

Naming Conventions: Use clear and consistent naming conventions for files and folders to help collaborators and users understand your structure (e.g., data_climate2023.csv).

Add a README for each Folder: Provide a README file in each major folder with details about its contents, such as descriptions of files, data formats, or usage instructions.

4. Uploading data and files

In your repository, click Add file > Upload files.

Drag and drop files from your computer or use Choose your files.

Write a commit message describing the change (e.g., "Added dataset for climate analysis 2023") and click Commit changes.

5. Writing a README.md

Open the README.md file (created during repository setup) to add essential information:

Project Title and Description: Summarize your project goals and background.

Data Overview: Describe the data types, sources, and any data preparation steps.

Folder Structure: Provide a brief explanation of the folder structure to guide users.

Installation and Requirements: List any dependencies, software, or setup steps needed to work with the data.

Usage Instructions: Add code examples, commands, or workflows for using the data and scripts.

Use Markdown formatting (e.g., # Headings, - Bullet Points, **bold**, etc.) to keep the README organized.

6. Managing data with Git version control

Git is essential for version control, which tracks and documents changes to files over time.

Cloning the Repository: Clone the repository to your local machine with `git clone [URL]` to work on the data locally.

Commit and Push: After making local changes, use `git commit -m "Message"` to record changes and `git push` to update the remote repository.

Tracking Changes and Collaborations: Use Git's branching and pull request features to allow multiple contributors to work on the project without overwriting each other's changes.

7. Adding and updating documentation

Documentation: GitHub's docs folder can store documentation files such as project reports, detailed guides, or Jupyter notebooks explaining analyses.

Metadata and Data Dictionaries: For datasets, add data dictionaries (e.g., `data_dictionary.md`) that define variables, units, and data sources.

CHANGELOG.md: Create a `CHANGELOG.md` file to document major updates and revisions (useful for projects with frequent changes or multiple contributors).

8. Licensing and attribution

GitHub makes it easy to add a license to your repository to clarify usage rights. Common licenses for research are MIT, GPL, and Creative Commons.

Citation File: Create a `CITATION.cff` file in the root directory to specify citation information, which GitHub will recognize and use to generate citation formats for users.

9. Creating GitHub pages for project documentation

GitHub Pages is a feature that allows you to create a simple website for your project.

Go to Settings > Pages in your repository and select a source branch (usually the main branch) to enable GitHub Pages.

Documentation Site: Use Markdown or Jekyll themes to format the site. You can use this page to host detailed project documentation, user guides, or visualizations.

10. Collaborating with others

Inviting Collaborators: Go to Settings > Collaborators to invite team members to work on the project.

Requests and Issues: Use pull requests to review and discuss contributions before merging. Use issues to track bugs, enhancements, and tasks.

GitHub Projects: Use the Projects tab to create Kanban boards, track project progress, and organize tasks.

11. Tracking and analysing repository activity

GitHub Insights: Access the Insights tab to view contributor activity, pull request history, and traffic to your repository.

Releases: Create releases for major versions of your project under Releases > Draft a new release to package your project with versioning and changelog summaries.

12. Archiving and long-term access

For long-term archiving, GitHub integrates with ZENODO to automatically generate a DOI for your repository when you create a release. This makes it citable and permanently accessible.

Connect to ZENODO by going to ZENODO's GitHub page, authorizing access, and selecting the repository to be archived. Creating a release on GitHub will then trigger DOI assignment in ZENODO.

By following this process, you can ensure your GitHub repository is well-organized, properly documented, and collaborative-friendly, making it a useful and enduring resource for research data sharing and reuse.

Appendix E. Recommendation for using EUSurvey in EURAD-2 partnership

1. Accessing EUSurvey platform

Step 1: Open the EUSurvey Platform

- Navigate to the official EUSurvey platform: <https://ec.europa.eu/eusurvey>

Step 2: Login or Register

- **Existing Users:** Click on "Login" and enter your credentials (EU Login account). –
- **New Users:** If you do not have an account, click "Sign up for EU Login" and follow the registration process:
 - Provide your email address.
 - Set a password.
 - Confirm your email by clicking the link sent to your inbox.
 - Complete your profile information.

After entering your password, you'll need to use a second verification method such as a mobile app authenticator, SMS code, or email verification depending on your setup. First-time users will be guided through setting up their preferred two-factor authentication method during the account creation process.

2. Creating a Survey

Step 1: Start a New Survey

- After logging in, click on "Create a New Survey".
- Choose between different templates or **start from scratch**.

Step 2: Configure Survey Settings

- Enter the survey **title** and a **brief description**.
- Define settings like:
 - **Language:** Choose the primary language (multilingual options are available).
 - **Survey Type:** Public or restricted access.
 - **Anonymity:** Choose whether responses are anonymous.

3. Designing the Survey

Step 1: Add Questions

- Click "Add Question" and choose the type:
 - **Multiple Choice** (single or multiple answers)
 - **Free Text**
 - **Likert Scale**
 - **Dropdown**
 - **File Upload**

Step 2: Customize Questions

- Define the question text and possible answers.

- Set rules such as:
 - **Help Message:** Add explanatory notes or guidance to clarify what information you're seeking
 - **Question Type:** Choose from single choice, multiple choice, text, number, date, etc.
 - **Accepted numbers of characters**
 - **Column Layout:** Adjust how answer options are displayed (horizontal vs. vertical)
 - **Order:** Change the sequence of questions or answer options
 - **Read-Only:** Make questions viewable but not answerable (for information purposes)
 - **Identifier:** Add unique IDs for data analysis purposes
 - **Attributes:** Add custom properties for specialized functionality
 - **Visibility Conditions:** Set when questions appear based on previous answers
 - **Response Limits:** Set character or word limits for text responses
 - **Default Values:** Pre-populate fields with suggested answers

Step 3: Add Sections (Optional)

- Use sections to **organize the survey** into logical parts or themes. **Visibility option** in **Properties panel** allows you to control when specific questions or sections appear to respondents based on their previous answers.

Step 4: Share editing access (Optional) to enable team collaboration on survey design. This allows for direct implementation of changes through a collaborative workflow.

- Click the "Privileges" tab in the top menu
- Under "Add User": Enter team members' email addresses (such as WP or Task members, who must be previously registered on the EUSurvey platform)
- Set all permissions to "green" for full editing rights, or select your preferred access levels.

Step 5: Testing the Survey

- Before publishing, click on "**Preview**" to test the survey as a participant.
- Make necessary adjustments based on the test results.

4. Publishing and Sharing the Survey

Step 1: Publish the Survey

- Once satisfied, click "**Publish**" to make the survey live.

Step 2: Share the Survey

- EUSurvey provides a **direct link** to share via email, social media, or embed on a website.
- You can also define **access controls** if it's a restricted survey (invite specific participants).

5. Monitoring and Managing Responses

Step 1: Monitor Responses in Real Time

- Access the "**Responses**" tab to view live results.
- Use filters to focus on specific segments or questions.

Step 2: Download Responses

- Export responses in such formats:
 - **Excel (.xlsx)**
 - **CSV**
 - **PDF**
- This allows for offline analysis or reporting.

6. Analysing Results

For processing and analysing the data collected through EUSurvey, you have several options:

- **Within EUSurvey Platform:**
 - Use the built-in analytics tools to generate basic statistics
 - View real-time results and summaries
 - Generate automated reports directly from the platform
- **Using Excel for simpler analysis:**
 - Export survey responses to Excel format (.xlsx)
 - Perform filtering, sorting, and basic statistical calculations
 - Create pivot tables for cross-tabulation
 - Develop charts and graphs for visualization
 - Conduct simple correlation analysis
- **Specialized statistical software for complex analysis**

7. Closing the Survey

- Once the survey is complete, click "**Close Survey**" to stop accepting new responses.
- You can archive it for future reference or reuse.

By following these steps, you can efficiently create, distribute, and manage surveys with the opensource EUSurvey, ensuring centralized, organized feedback collection or consultation needs.

References

ProjectPlace: <https://service.projectplace.com/#/myoverview>

EUSurvey : [EUSurvey - Documentation](https://ec.europa.eu/eusurvey/home/documentation) (<https://ec.europa.eu/eusurvey/home/documentation>)

GitHub : [Assistance GitHub](https://support.github.com/) (<https://support.github.com/>)

ZENODO : https://ZENODO.org/communities/eurad2_community