



IFIGENEIA

Innovative Facility for Isotope GENERation
with Efficient Ion Accelerator

T1.5 Data management

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T1.5 Data Management



Objectives:

- a) Develop and implement a **Data Management Plan (DMP)** for all project data
- b) Ensure proper **collection, organization, storage and preservation** of data throughout the project
- c) Guarantee compliance with **FAIR principles** (Findable, Accessible, Interoperable, Reusable)
- d) Enable **secure access, sharing and re-use of data**, while protecting sensitive and confidential information
- e) Maintain high **data quality, integrity and documentation (metadata)** to support validation and reproducibility
- f) Ensure compliance with **ethical, legal and GDPR requirements** in data handling



Task T1.5 focuses on the design, implementation and continuous update of the **Data Management Plan (DMP)**



Data Management Task 1.5 Overview

- › Task T1.5 focuses on the **development and continuous update of the Data Management Plan (DMP)**
- › Covers the **entire data lifecycle**: generation → processing → storage → sharing → preservation
- › The DMP is a **living document**, updated throughout M1–M48 to reflect:
 - New datasets
 - Policy or consortium changes
 - Innovation and exploitation needs
- › Led by **TALOS**, with **responsibility distributed across all partners and WPs**
- › **Scope:**
 - Defines how data will be managed, accessed, reused, stored and preserved
 - Ensures availability and utility of research data
 - Supports Open Science and FAIR principles (Findable, Accessible, Interoperable, Reusable)

WP1 Leader: AUTH
T1.5 Leader: TALOS
Start Month: 1
End Month: 48



Data Types & Volume Overview

Data collected is only what is necessary (minimal personal data)

Types of Data Generated:

- Open data (reports, articles, databases)
- Project data (deliverables, technical documents)

Key Data Categories:

- Scientific (lab, simulation, beam)
- Technical (designs)
- Economic (market, costs, feasibility)
- Surveys & population data

Estimated size of the data : at least 10TB



FAIR Implementation in Practice

- **Findability:**
 - Use of metadata (description, keywords, Digital Object Identifiers (DOI), versioning)
 - Data stored in FAIR-compliant repositories like Zenodo and the Ifigeneia website
- **Accessibility:**
 - Open access via project website, CORDIS portal, Zenodo
 - Restrictions only when required (privacy, IPR, confidentiality)
- **Interoperability:**
 - Use of standard formats and shared vocabularies/ontologies
 - Data structured for integration and exchange
- **Reusability:**
 - Clear licensing (e.g. Creative Commons)
 - High-quality documentation to support reuse
 - Long-term availability (at least 20 years via Zenodo)



Objectives:

- ✓ **Maximise access and re-use of research data**
- ✓ **Maintain balance between openness and protection of sensitive data**



Ensuring Data Security

The project ensures high-level data security through CERN's infrastructure, combining controlled access, encryption and long-term secure storage

- **Data is securely stored using CERN infrastructure (CERNBOX & Zenodo)**
- **Access Control:**
 - Restricted to authorised project partners
 - Access removed when members leave
- **Data Protection Measures:**
 - Backup & recovery systems to prevent data loss
 - Multiple data replicas for safety
- **System Security:**
 - Secure servers with regular updates
 - Network monitoring & intrusion detection
 - Encrypted access (HTTPS)
- **Data Encryption:** Strong password protection & encrypted user data



Dataset Registry & Data Volume

Annex I of the DMP document acts as a central registry of datasets, and will be updated to reflect the actual data collected during the project

- Provides a structured overview of all project datasets => **26 pages**
- Includes:
 - Data type, format, size and origin
 - Responsible partners and Work Packages
 - Dissemination level (Public / Sensitive)
- Supports:
 - Transparency and organisation of data
 - Effective monitoring and management across the project



Next DMP revision by end of February, 2027



Revision and Update of the current Data Management Plan

Preparation of a checklist for compliance with the principles defined in the DMP D1.3

- Storage facility for each partner
- Project storage facilities/platforms
- Type of data generated so far
- Amount of data generated and stored
- Metadata amount stored
- FAIR principles applied
- GDPR principles and controls applied
- Security and access measures applied



Partners shall report current status of each data/document already described in Annex I of D1.3
TALOS will update D1.3 accordingly

Thank you for your attention



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