





"D1.2 - Data Management Plan"





### 0 Document information

# 0.1 Project details

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of ultra-fine iron ores and smelting to green hot

metal

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## 1 Executive summary

By generating and collecting significant data, information is obtained. This information is then contextualized and transformed into knowledge that can be leveraged through targeted communication, dissemination, and data sharing. A well-structured Data Management Plan (D1.2) is critical to guarantee controlled access, data quality, reproducibility, and long-term sustainability. It governs access rights using role-based policies, assigns responsibility to data stewards, ensures quality assurance and control, enforces metadata and documentation standards, safeguards data with legal and security measures, and commits resources for data stewardship—all in line with FAIR and Open Science requirements.





# 2 Data generated in Hy4Smelt

Effective data management is a fundamental aspect of any research and innovation project. It ensures that data generated throughout the project lifecycle is collected, organized, stored, and shared in a secure, transparent, and sustainable manner. A structured approach to data handling enables traceability, improves collaboration among partners, and supports the reproducibility of results. Key elements include access control, metadata documentation, quality assurance, and compliance with legal and ethical standards. By adhering to FAIR (Findable, Accessible, Interoperable, Reusable) principles, the project maximizes the long-term value and impact of its data outputs.

### 2.1 Abbreviations

Table 1 - Abbreviations

Abbreviation	Meaning
WP	Work packages
FAIR	Findable, Accessible, Interoperable, Reusable
IP	Intellectual Property
EU	European Union
GDPR	General Data Protection Regulation





## 3 Corporate design and web presence

While the Data Management Plan primarily focuses on the handling, access, and preservation of research data, its effective implementation also requires a consistent and professional presentation of project outputs. Therefore, corporate design and web presence are key components that support the visibility, accessibility, and dissemination of research data.

The project has adopted a unified corporate design, including a project logo and standard templates (for reports, presentations, and deliverables). These elements ensure that all project outputs—particularly data publications, public deliverables, and dissemination materials—maintain a consistent and recognizable identity. This is essential not only for communication but also for increasing the credibility and traceability of open data and results.

In parallel, the project's web presence plays a central role in providing public access to information and data. A dedicated project website is maintained and regularly updated to include:

- Project objectives and structure
- Partner overview and contact information
- News and updates
- Public deliverables and downloadable materials
- Links to open-access data repositories and publications

Where appropriate, datasets or data-related tools will be referenced or directly hosted through the project website or via trusted repositories, ensuring FAIR principles are upheld.

By aligning the web presence and corporate design with the data strategy, the project ensures that research outputs are not only well-managed but also professionally communicated and widely visible to the target audience, stakeholders, and the broader research community.



Figure 1 – Template for presentations





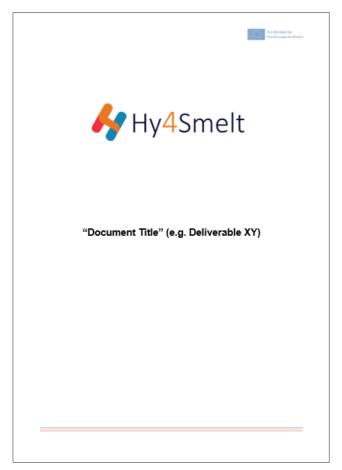


Figure 2 - Template for deliverables



# Project Hy4Smelt

Hydrogen-based fluidised bed direct reduction of ultra-fine iron ores and smelting to green hot metal

#### OVERALL APPROACH

The project Hy4Smelt demonstrates a breakthrough process of hydrogen-based,  $CO_2$ -neutral reduction and melting of non-agglomerated low/medium-grade iron ore, meeting objectives set by the EU on clean steel technologies, sustainability, and competitiveness. The Hy4Smelt industrial-scale demonstrator is first-of-its-kind worldwide in processing ultra-fine iron ores in an innovative fluidised bed direct reduction with 100 % green H<sub>2</sub>(HYFOR) and melting the direct reduction in the processing ultra-fine iron ores in an innovative fluidised bed direct reduction with 100 % green H<sub>2</sub>(HYFOR) and melting the



Figure 3 - Hy4Smelt webpage





### 4 Data sources and utilisation of data

As part of the data management strategy for the project, Microsoft Teams is used as the central collaboration and data management platform. The structure of Teams enables efficient and secure data handling, ensures controlled access, and supports transparency and traceability of project-related information.

### 4.1 Platform Selection: Microsoft Teams

Microsoft Teams was selected as the main digital workspace due to its:

- Integration with Microsoft 365 tools (SharePoint, OneDrive, Outlook, etc.)
- User-friendly interface and widespread adoption among project partners
- Built-in features for access control and data security
- · Ability to structure information across channels and teams

### 4.2 Team Structure and Channels

A dedicated Microsoft Team has been set up for the project, containing multiple channels that reflect the structure of the work packages, management needs, and communication requirements.

#### 4.2.1 Standard Channels

Standard channels are accessible to all members of the project team. These include:

- General: High-level communication, meeting announcements, shared documents
- Work Packages: Each work package (WP1, WP2, etc.) has its own channel for task-related discussions and document storage

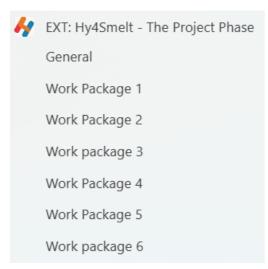


Figure 4 - Structure of Hy4Smelt-Teams





#### 4.2.2 Private Channels

To ensure confidentiality and role-specific data access, private channels can be created. These channels are restricted to selected individuals or sub-groups within the project team. Examples include:

- Ethics & Legal: Accessible only to legal and ethics officers
- Exploitation & IP: Limited to partners involved in intellectual property discussions
- Internal Review: Used for document pre-review before consortium-wide sharing

These private channels allow for:

- Controlled access to sensitive data
- Compliance with GDPR and project-specific confidentiality requirements
- Clear separation between general project information and restricted content

### 4.3 Access Management

Access rights to Teams and its individual channels are managed by the project coordinator in collaboration with IT administrators. Rights are assigned based on:

- Role in the project
- Work package involvement
- Responsibility for specific deliverables or tasks

Any change in personnel or role is immediately reflected in the access settings to maintain security and data integrity.

## 4.4 Document Management and Traceability

All documents uploaded to Teams are automatically stored in SharePoint, enabling:

- Version control and change tracking
- Metadata tagging and structured filing
- Full traceability for reporting and auditing purposes

Deliverables, meeting minutes, technical reports, and dissemination materials are organized and archived in a standardized manner to ensure easy retrieval and project-wide accessibility, where appropriate.

### 4.5 Conclusion

Microsoft Teams provides a robust and flexible framework for managing project data. Its structure of standard and private channels, combined with fine-grained access control, enables secure, transparent, and efficient collaboration across the consortium.





# 5 FAIR principles

All data in the Hy4Smelt project should be FAIR. These principles are valid for any kind of data independent of specific technology.

- **Findable:** The data should include metadata, so humans and search engines find the data quickly. The name should be given with the following structure:
  - Hy4Smelt [Title] [Version], if the document is a deliverable the deliverable number should be prefixed.
  - Example: Hy4Smelt D1.1 Project Management Plan 1.0
  - If the date is relevant for the document (presentation, minutes of the meeting etc.) the date is mentioned first in the format [YYYYMMDD]

Besides the name and the metadata, a folder structure in MS Teams was developed to provide an intuitive navigation.

- Accessible: All relevant data that should be shared among the partners is stored in MS
  Teams. Data from trials, programmes or confidential information is deposited in trusted
  repositories by the responsible beneficiary. All deliverables are uploaded to the funding and
  tenders portal. A general description of the project, the objectives, the partners and regular
  updates are given on the project website being widely accessible.
- Interoperable: In the project, it is foreseen to use common standard data formats to support
  the data exchange. These standard software applications support the project having different
  scopes, such as time schedule, quality, costs, etc. Furthermore, a broadly applicable
  language with a detailed description of the background, the procedures and the conclusions
  should be given in the reports
- **Re-useable**: Data and metadata should be provided meeting community standards regarding the description of the content and its origin.





## 6 Archiving Procedures and Responsibilities

As the coordinator of the Hy4Smelt project and the administrator of the central Microsoft Teams platform, Primetals Technologies Austria GmbH (PTAT) assumes a leading role in defining and enforcing the data archiving policy for the consortium.

All project-related documents and data are stored and structured within Microsoft Teams and its underlying SharePoint environment. PTAT ensures that the archiving of critical data follows its internal retention policy, which applies to all shared data repositories within the project scope.

In particular, the following document categories are subject to long-term archiving:

- · Technical reports and scientific results
- Financial documentation, such as accounting records, invoices, and time sheets
- · Contracts and agreements
- Correspondence with the European Commission

These documents will be archived for a minimum of 11 years, according to PTAT guideline.

The Project Manager (PM) is responsible for managing the archiving process in collaboration with the Legal Contact (LC) and Person in Charge (PiC), as applicable for each document type.

### 7 Conclusion

The Hy4Smelt project implements a professional and structured approach to internal data management by using Microsoft Teams as its central collaboration and documentation platform. The combination of standard and private channels, aligned with defined access rights and metadata tagging, ensures both open collaboration and controlled handling of sensitive information. The platform supports version control, traceability, and structured storage, enabling efficient project coordination and alignment with GDPR and EU data protection standards. This setup facilitates secure, role-based access to data and lays the foundation for compliance with the FAIR principles addressed in the following chapter.