



D1.3 – DATA MANAGEMENT PLAN

*Connecting Europe and Latin America
Transforming Today's Data into
Tomorrow's Solutions*

PROJECT INFORMATION

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Definitions, Acronyms and Abbreviations

Acronym	Title
CA	Consortium Agreement
DMP	Data Management Plan
Dx	Deliverable (where x defines the deliverable identification number, e.g. D1.1.1)
EC	European Commission
EU	European Union
ISO	International Organization for Standardization
JSON	JavaScript Object Notation
MSx	project Milestone (where x defines a project milestone, e.g. MS3)
OGC	Open Geospatial Consortium
PC	Project Coordinator
PO	Project Officer
PU	Public
R	Report
WP	Work Package
W3C	The World Wide Web Consortium
XML	Extensible Markup Language





Term	Definition
Consortium	Group of beneficiaries that have signed the Consortium Agreement and the Grant Agreement (either directly as Coordinator or by accession through the Form A).
Consortium Agreement	Contractual document signed by all the beneficiaries (and not the EC), explaining how the Consortium is managed and works together.
Description of Action	Annex 1 to the Grant Agreement. It contains information on the work packages, deliverables, milestones, resources and costs of the beneficiaries, as well as a text with a detailed description of the action. The DoA is made of Part A (structured data collected in web forms and work plan tables) and Part B (text document describing the action elements).
Dissemination	EC term for the communication of information to a broad audience.
Grant Agreement	The contractual document which defines the contractual scope of the COMUNIDAD project. It is signed between the EC and the beneficiaries.



Project Summary

The COMUNIDAD project, led by Lesprojekt, utilises Copernicus satellite data and the European Global Navigation Satellite System (EGNSS), along with Artificial Intelligence (AI) and Big Data technologies to transfer technologies and know-how to Latin America. The COMUNIDAD project focuses on improving agricultural and forestry management in Chile and Colombia and aims to develop an infrastructure and a platform that serves as the basis for creating applications that enhance precision, efficiency, and sustainability. This initiative contributes to the socio-economic growth of the South American region. Technological advancements are expected to contribute significantly to practical applications.

Lesprojekt, the project coordinator, draws on its expertise in technology applications in agriculture and forestry to guide the consortium. The project provides actionable insights by employing advanced techniques to incorporate Copernicus services, EGNSS and other spatial datasets. These insights help stakeholders, including farmers, advisors, policymakers, and land managers, make informed decisions that support sustainable practices. Essential data on crop health, land use, and forestry conservation are provided, enhancing land management practices and boosting agricultural productivity.

The COMUNIDAD project transfers experiences and know-how through developing technological components and various training activities and creating training materials that use the developed technical components, the infrastructure and the platform.

The COMUNIDAD project aims to transform agricultural and forestry management in Latin America through technological innovation and international collaboration based on experiences and know-how from European partners and based on international cooperation with partners from Latin America. The integration of cutting-edge technologies with strategic data analysis is set to improve different domains and promote environmental sustainability in the region.



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Executive Summary

The COMUNIDAD project aims to develop, test, and implement a platform using Copernicus data from agriculture, forestry, and rural development in Chile and Colombia. The platform will also integrate other data sets from national or regional providers in pilot countries. Data are an important part of the project and will be integrated, produced, and reused from existing sources. This Data Management Plan (DMP) is an initial document defining the data management in the COMUNIDAD project. This DMP describes the data management life cycle for the data to be collected, processed and/or generated by the COMUNIDAD project.

The DMP provides an initial overview of types of datasets integrated, processed, re-used and published during the COMUNIDAD project. The overview of recommended formats is listed based on recommendations of distinguished archives.

The research data integrated, used, processed and published during the COMUNIDAD project should be 'FAIR', which is findable, accessible, interoperable and reusable. The Findable aspect of data will be ensured by incorporating the Micka dataset catalogue. The Accessible element of data will be ensured by data publication by open licences, where possible, by the developed COMUNIDAD Platform. The interoperability aspect will be ensured by utilising and integrating standardised interfaces and formats for all data where possible. The reusability aspect will be ensured by attaching specific licences to the deposited data to define all conditions under which the work is provided under open or restricted access.



Introduction

This deliverable describes the COMUNIDAD Data Management Plan (DMP) for the Horizon Europe Open Access and Open Science obligations. The COMUNIDAD project is a Research and Innovation Action that aims to develop, test, and implement a platform using Copernicus data from agriculture, forestry, and rural development in Chile and Colombia. The platform will integrate other data sets from national or regional providers from pilot countries. This means that data is a very important part of the project. The COMUNIDAD project will be re-using existing data. However, new data collections will also be produced for use in the Platform - especially products based on Copernicus datasets.

The Open Science and Open Access approaches require that all publications arising from the work funded in the project are published in Open Access. The project will manage and share its data during the project and maintain the DMP updated. This will facilitate collaboration with other relevant projects to avoid duplication and, through synergy, achieve a more significant impact and better communications.

This Data Management Plan (DMP) document provides key elements of data management in the COMUNIDAD project. This DMP describes the data management life cycle for the data to be collected, processed and/or generated by the COMUNIDAD project.

To make research data findable, accessible, interoperable and reusable (FAIR), this DMP includes information on:

- the handling of research data during and after the end of the project,
- what data will be collected, processed and/or generated,
- which methodology and standards will be applied,
- whether data will be shared/made open access and
- how data will be curated and preserved, including after the end of the project.

This DMP, after submission of the first version, will be a living document that will serve all COMUNIDAD consortium members to adhere to the conventions to manage data generated in COMUNIDAD so that data can be found, accessed, made interoperable and reusable. The primary purpose of this DMP is to describe how FAIR data management principles will be maintained during and after the project's end. Its structure as a Deliverable follows the Guidelines on FAIR Data Management in Horizon Europe (Version 1.1 - 1 April 2022) provided by the European Commission.

COMUNIDAD has as objectives:



- **SO1:** Design and development of a complex platform providing services and methods utilising Copernicus and GEOSS data and services for final users in Chile and Colombia in different domains (example of the domains: agriculture, forestry, and rural development pilot sites).
- **SO2:** Increase awareness of the capability of Copernicus services and GEOSS data and tools through training events and workshops in Chile, Colombia, and Spain.
- **SO3:** Define possibilities for broader promotion and utilisation of the platform in further countries in Chile and Colombia. Define workflow for extending the platform for different target regions and domains.
- **SO4:** Enhancement of the combined use of EGNSS and Copernicus data to serve local user needs and provide opportunities for business-oriented partnerships and or sustainable development.

1. Data Summary

The COMUNIDAD project, aiming to leverage advanced technologies for improved agricultural, forestry, and land management in Chile and Colombia, uses diverse data sources from global to national and regional levels. These include satellite observations, geographical datasets, environmental datasets and socio-economic datasets. The project will produce qualitative and quantitative data, including processed and classified satellite images, maps, analysis results, training materials and workshops, videos, etc.

Here is an overview of the primary data types and sources integral to the project's research and development activities:

1. **COPERNICUS Sentinel Data:**
 - a. **Sentinel-1:** Provides radar imagery conducive to monitoring land and ocean, crucial for forestry and agriculture applications.
 - b. **Sentinel-2:** Offers high-resolution optical imagery, vital for observing vegetation health, land cover changes, and environmental monitoring.
2. **ERA5 Climate Data¹:** ERA5 is the fifth generation ECMWF reanalysis for the global climate and weather for the past eight decades. Data is available from 1940 onwards—furnishes comprehensive climate and weather data, supporting environmental assessment and decision-making processes.
3. **Sensor and Telemetry Data:** Includes various environmental and agricultural sensors (e.g., soil moisture, temperature, and weather conditions), pivotal for real-time

¹ <https://cds.climate.copernicus.eu/cdsapp#!/dataset/reanalysis-era5-land>





monitoring and precision agriculture practices. Monitoring of movement and location by utilising EGNSS services for effective management.

4. **Local Forestry, Environmental, and Agriculture Data:** Collected from local government and non-governmental organisations, farmers, and local coffee growers, this data encompasses land use patterns, crop types, forestry inventory, and historical environmental impact assessments.
5. **General and thematic geographical data:** Collected from global, national or regional providers as general data sources for base maps and spatial analyses.
6. **Personal Data of Stakeholders and Participants:** Involves demographic and socio-economic data of local communities, farmers, and stakeholders, critical for understanding community needs and impacts and ensuring the tailored development of project outputs. Collected data will be without sensitive personal data.
7. **Stakeholder Engagement and Feedback Data:** Gathered through surveys and workshops, this data helps refine project objectives and validate outcomes against actual user needs and environmental benefits.

The data will be collected/generated and re-used across the different WPs during the project period. Table 1 summarises the collected or generated information per work package and the way of publication.

Table 1 - Overview of types of information processed by work packages

Work package	Information collected/generated	Information published
WP1 Project management	<ul style="list-style-type: none"> • Private data, e.g. contact information, financial reporting 	<ul style="list-style-type: none"> • Reports, templates etc. • Public Deliverables (as in the DoA).
WP2 System architecture design and development	<ul style="list-style-type: none"> • List of data sources (partners and third parties) • Platform testing data • Qualitative data about pilot countries • Statistical databases • Copernicus images and products 	<ul style="list-style-type: none"> • Reports • Datasets (when originally under open licences) • Web services



WP3 Training and workshops in Chile and Colombia	<ul style="list-style-type: none"> • Research participant data collected through Informed Consent Forms • Training and supporting materials • Information about participants in workshops and hackathons 	<ul style="list-style-type: none"> • Reports • Training materials (presentations, tutorials, videos, courses)
WP4 Applications and services for forestry/agriculture	<ul style="list-style-type: none"> • Spatial datasets • Internal feedback from pilots in various formats 	<ul style="list-style-type: none"> • Reports • Documentations of technical components
WP5 COMUNIDAD Platform	<ul style="list-style-type: none"> • Spatial datasets • Platform testing data • Statistical databases 	<ul style="list-style-type: none"> • Reports • Documentations of technical components
WP6 Dissemination and exploitation	<ul style="list-style-type: none"> • Secondary sources, e.g. summary of regional news • Input from pilots on their engagement activities • Input from data gathered by partners 	<ul style="list-style-type: none"> • Online content: social media, posts on the COMUNIDAD website, websites, and social networks of COMUNIDAD partners. • Promotional material • Scientific papers and presentations.

Data will be stored on the COMUNIDAD Platform and Infrastructure during the project period. At the same time, COMUNIDAD Google Workspace, with access only to project partners, will be used as internal storage for documents for the consortium. Copies on local devices will be allowed during the data processing. Large datasets, especially spatial data, will be stored on the COMUNIDAD Platform. This ensures access to datasets via effective interfaces or web services.

Personal data collected from stakeholders, participants, pictures, videos, etc., should only be used for stakeholder engagement and not publicly shared.



2. Data recommended format

To maximise the dataset interoperability, management, and reuse, the COMUNIDAD consortium agreed to use formats that are non-proprietary, unencrypted, uncompressed, and commonly used by the research community when possible. Since there are no unique recommendations on data best formats and neither the selected data the repository provides such indication, COMUNIDAD partners have agreed to follow - when possible - the indications of the UK Data Archive or Library of Congress, recommended by OpenAIRE, as indicated in Table 2.

Table 2 - Data recommended format

Type of data	Recommended formats	Acceptable formats
Tabular data with extensive metadata	<ul style="list-style-type: none"> SPSS portable format (.por) 	<ul style="list-style-type: none"> Proprietary formats statistical packages: <ul style="list-style-type: none"> SPSS (.sav), Stata (.dta), MS Access (.mdb/.accdb)
Tabular data with minimal metadata	<ul style="list-style-type: none"> comma-separated values (.csv) tab-delimited file (.tab) 	<ul style="list-style-type: none"> delimited text (.txt) with characters not present in the data used as delimiters
(column headings, variable names)	<ul style="list-style-type: none"> delimited text with SQL data definition statements 	<ul style="list-style-type: none"> MS Excel (.xls/.xlsx), MS Access (.mdb/.accdb), dBase (.dbf), OpenDocument Spreadsheet (.ods)
Textual data	<ul style="list-style-type: none"> Rich Text Format (.rtf) plain text, ASCII (.txt) Adobe Portable Document Format (PDF/A, PDF) (.pdf) 	<ul style="list-style-type: none"> Hypertext Mark-up Language (.html) widely-used formats: MS Word (.doc/.docx) some software-specific formats
Image data	<ul style="list-style-type: none"> TIFF 6.0 uncompressed (.tif) 	<ul style="list-style-type: none"> JPEG (.jpeg, .jpg, .jp2), if initially created in this format GIF (.gif)





		<ul style="list-style-type: none"> • TIFF other versions (.tif, .tiff) • RAW image format (.raw) • Photoshop files (.psd) • BMP (.bmp) • PNG (.png)
Audio data	<ul style="list-style-type: none"> • Free Lossless Audio Codec (FLAC) (.flac) 	<ul style="list-style-type: none"> • MPEG-1 Audio Layer 3 (.mp3), if initially created in this format • Audio Interchange File Format (.aif) • Waveform Audio Format (.wav)
Video data	<ul style="list-style-type: none"> • MPEG-4 (.mp4) • OGG video (.ogv, .ogg) • motion JPEG 2000 (.mj2) 	<ul style="list-style-type: none"> • AVCHD video (.avchd)
Documentation and scripts	<ul style="list-style-type: none"> • Rich Text Format (.rtf) • PDF/UA, PDF/A or PDF (.pdf) • XHTML or HTML (.xhtml, .htm) • OpenDocument Text (.odt) 	<ul style="list-style-type: none"> • plain text (.txt) • MS Word (.doc/.docx), • MS Excel (.xls/.xlsx)
Spatial data - vector	<ul style="list-style-type: none"> • Shapefile • Esri File Geodatabase • OGC GeoPackage • GeoJSON 	<ul style="list-style-type: none"> • KML • GML
Spatial data - raster	<ul style="list-style-type: none"> • Raster formats compatible with widely adopted GIS, including GeoTIFF • OGC GeoPackage 	<ul style="list-style-type: none"> • TIFF (.tif) files with accompanying TIFF World File (.tfw and .tifw) • GML in JPEG 2000

3. FAIR data

The research data used and processed in the COMUNIDAD project will be 'FAIR', which is findable, accessible, interoperable and reusable. COMUNIDAD will manage the data and tools generated



based on the core principles of the open science movement, which aims towards openness and transparency of research and its results.

COMUNIDAD ensures all stages are met using the open science repository **Zenodo**². Zenodo is a general-purpose open repository developed under the European OpenAIRE program and operated by CERN. It allows researchers to deposit research papers, data sets, research software, reports, and any other research-related digital artefacts. For each submission, a persistent digital object identifier (DOI) is minted, which makes the stored items easily citeable. Uploading files to Zenodo and setting an embargo date is also possible.

3.1. Making Data Findable, Including Provisions for Metadata

For the COMUNIDAD project, metadata is the cornerstone of making diverse datasets findable. These datasets include COPERNICUS Sentinel 1 and Sentinel 2 data, ERA5 climate data, sensor and telemetry data, general and thematic geographical datasets, and local forestry, environment, and agriculture data from Chile and Colombia. The metadata will also cover the personal data of stakeholders, ensuring that all project data is managed responsibly and ethically.

The **Micka**³ catalogue will serve as a metadata catalogue tool in the COMUNIDAD project, enabling users to navigate and discover datasets effectively. By answering complex queries, the Micka catalogue facilitates identifying and utilising specific datasets crucial for applications and use cases in the targeted regions.

Micka provides back-end and front-end modular, scalable, and customisable solutions. Micka's primary goal is to connect all the relevant resources (datasets, web services, sensor measurements, models, maps, other kinds of visualisations, etc.) to answer complex queries. Micka implements metadata templates based on ISO 19115/19119/19139 standards.

The consortium has established a naming convention for project datasets. Aside from the temporarily identified title, the shared project datasets' name should contain the following items:

- Date - yyyyymmdd
- The prefix "COMUNIDAD" - indicates a COMUNIDAD dataset
- The prefix "WPx" - indicates which Work Package the data was produced in, if possible, to determine the WPx

² <https://zenodo.org/>

³ <https://micka.bnhelp.cz/>



- The title - the name of the dataset
- Versioning number - Major.Minor numbering rule

3.2. Making Data Openly Accessible for COMUNIDAD

In line with the Horizon Europe Open Research Data Pilot, the COMUNIDAD project is committed to making datasets, data visualisations, and research outcomes widely accessible. This commitment ensures free and open access to the project's outputs for commercial and non-commercial use, adhering to the principles of open science and data sharing. All datasets and data visualisations available on the COMUNIDAD Platform will be offered for free and open access for both commercial and non-commercial purposes. If the open access would be against the beneficiaries' legitimate interests, the beneficiaries will grant nonexclusive licenses (under fair and reasonable conditions) to legal commercial entities. This does not apply to those datasets and products belonging to commercial third parties. The set of datasets and analysis results, which will be the main product with the commercial potential of the platform, will be provided under a commercial nonexclusive licence. Sensitive data, particularly the personal data of stakeholders and participants, will be handled with strict compliance with GDPR and local data protection laws, ensuring anonymisation and pseudonymisation techniques where applicable. Detailed documentation on data collection methodologies, data processing algorithms and data usage guidelines will be provided to ensure transparency and facilitate replication and adoption by other initiatives. The COMUNIDAD Platform will combine functions of metadata catalogue for different kinds of datasets with data publication services for datasets and products stored on the Platform. Some features of the COMUNIDAD Platform should provide some level of user authentication; thus, the Platform will provide user management functions.

Creation of a User Account:

- To access certain features of the COMUNIDAD data platform, users may be required to create an account and provide a legal full name, a valid email address, and other necessary information to complete the signup process. The Platform will provide different user levels when the basic one is provided after registration, higher levels (editor, maintainer of datasets) are provided by the Platform administrator.
- Users are responsible for maintaining the confidentiality of their account information. COMUNIDAD will not be liable for any loss or damage resulting from a failure to comply with security obligations.
- COMUNIDAD reserves the right, at its discretion, to suspend or terminate any account and refuse any current or future use of the platform for any reason at any time.

Uploading of User Content:

- Intellectual property rights over the content uploaded by users remain with the users or third parties from whom the data originated.
- Users are responsible for all content posted and activity under their accounts.
- The platform must not be used for any illegal or unauthorised purpose. Users must comply with all applicable laws, including copyright laws.
- COMUNIDAD reserves the right to remove content or accounts containing materials deemed unlawful, offensive, threatening, libellous, defamatory, or otherwise objectionable.

General Conditions on Existing Content:

- Data provided by the COMUNIDAD project is available 'as-is' without any warranty. Users must adhere to any applicable data license terms and copyright attributions.
- While currently offering free access, COMUNIDAD reserves the right to introduce charges for services or access in the future.
- The COMUNIDAD platform and its services, including technical support, are provided on an "as is" and "as available" basis.

By adhering to these terms and conditions, COMUNIDAD aims to promote open data's responsible and ethical use, fostering innovation and knowledge sharing within the global research community and beyond. This approach ensures that the valuable data and insights generated by the project are accessible to stakeholders in Chile, Colombia and the wider international community supporting sustainable development and environmental management efforts.

3.3. Making Data Interoperable for COMUNIDAD

The COMUNIDAD project significantly emphasises data interoperability, recognising it as a cornerstone for research innovation and effectively utilising data across various domains. This focus ensures that the project's data management strategies align with current metadata standards within the spatial and open data realms and embrace emerging practices like linked open data and web-based metadata publication. COMUNIDAD will strive to collect and document the data in a standardised way to ensure that datasets can be correctly understood, interpreted, and re-used.

COMUNIDAD leverages various methodologies to enhance data clarity, interlinking datasets with additional resources to provide comprehensive information. This approach fosters:



- **Enhanced Clarity:** Linking datasets to resources, offering detailed explanations, and facilitating a deeper understanding of the data provided.
- **Standard-agnostic Metadata:** Enabling the inclusion of new metadata elements unforeseen by existing standards, thereby accommodating evolving data requirements.
- **Shift in Open Data Portals:** Moving from a download-centric model to one that emphasises understanding the origin and context of datasets, such as sensor measurements and legislative frameworks.
- **Visibility in Schema.org⁴ Compliant Engines:** Promoting datasets through platforms that are compliant with Schema.org, increasing their discoverability and utility in policy-making.
- **Backwards Compatibility:** Ensuring data remains compatible with existing frameworks like the INSPIRE directive and EU and national open data portals.
- **User-friendly Publication:** Utilising formats like Google rich cards/snippets to make data easily accessible and interpretable to end-users.

Metadata created within the COMUNIDAD project is available in interoperable formats such as XML and JSON, ensuring seamless integration and transferability across different systems and platforms.

The COMUNIDAD Platform will define its APIs based on international standards (ISO, OGC, W3C, etc.), facilitating data transfer and integration across related catalogues and systems. This structured approach to API development ensures that metadata can be effectively shared and utilised across various platforms, enhancing the overall interoperability of the project's data.

3.4. Making Data Reusable

In addition to the principles outlined for making data accessible and interoperable, COMUNIDAD is committed to ensuring the reusability of its data. Public data will be made available for re-use. To avoid doubt, the project will attach specific licences to the deposited data to define all conditions under which the work is provided under open or restricted access. This commitment is underpinned by clear terms and conditions that govern the use of the project's data and services, including:

- **No Warranty:** Acknowledging that services are provided 'as is' without guarantees to meet specific user requirements or error-free operation.
- **Limitation of Liability:** Clarifying that COMUNIDAD shall not be liable for any direct or indirect damages arising from the use or inability to use the services.

⁴ <https://schema.org/>



- **Terms of Service Agreement:** Stating that the Terms of Service represent the complete agreement between the user and COMUNIDAD governing the use of services provided by the project.

By addressing these key areas, the COMUNIDAD project ensures that its data adheres to the FAIR principles (if not against beneficiaries' legitimate interests) and is positioned for meaningful and widespread use in research, policy-making, and practical applications. This structured approach to data management facilitates the creation of a sustainable and valuable data ecosystem that benefits stakeholders in Chile, Colombia, and beyond.

In WP3, personal data collected for workshops or hackathons will only be used for participants' engagement and should not be shared publicly.

Data collected in WP1 cannot be shared, as the data collected as part of the project management is explicitly intended for internal use by the project management and the consortium.

3.5. Allocation of Resources for COMUNIDAD

The COMUNIDAD project will establish clear guidelines for the maintenance and technical development of its Infrastructure and Platform, ensuring sustainability and efficiency in managing the project outcomes beyond its official timeline.

Specific roles will be designated to partners for maintaining content and developing the technical aspects of COMUNIDAD Infrastructure and Platform throughout the project. After the project ends, the COMUNIDAD consortium commits to keeping the project's digital assets operational for at least four years, guaranteeing long-term accessibility and utility. An agreement between partners will be arranged to define the responsibility of Platform instances in pilot countries after the end of the project.

For operations, including data integration, modifications, and applications post-project, Lesprojekt or the relevant partner directly interested in the operation will take on the technical execution. This setup allows flexible and responsive management of the project's tools and data, accommodating new needs or opportunities.

Each partner is responsible for their own costs incurred from such operations, promoting efficient resource management and planning operations that add substantial value to the project.



Financial Model for Paid Services

When offering paid services, such as the visualisation of integrated datasets, a hierarchical approach to cost reimbursement is adopted:

1. **Operational Costs:** The partner(s) who performed the service, including subcontractors, are prioritised for cost reimbursement.
2. **Licence/IPR Costs:** Partners holding licences or intellectual property rights for used resources, potentially including third parties with specific datasets, are next in line for reimbursement.
3. **Management Costs:** Lesprojekt is recognised for managing the digital platform, with partial compensation for these efforts.

COMUNIDAD Digital Infrastructure

The digital assets of COMUNIDAD, which may encompass a variety of modules and tools for data analysis, visualisation and modelling, are essential for providing insights and support to stakeholders in Chile and Colombia. These assets are foundational for achieving the project's objectives.

Collaborative Agreements

To navigate the operational and financial aspects of sustaining the project's digital assets, COMUNIDAD partners may form Service Level Agreements (SLAs) and cooperation agreements as needed. These agreements will be tailored to fit specific situations and needs, facilitating effective collaboration among partners. This framework ensures that the outcomes and resources of the COMUNIDAD project remain beneficial and accessible to stakeholders, supporting sustainable development initiatives in the target regions well beyond the project's duration.

3.6. Data Security for COMUNIDAD

In the COMUNIDAD project, ensuring the security and integrity of data is crucial. Lesprojekt, on behalf of all consortium members, commits to the safe storage of data and information on servers that are specially protected and compliant with both the EU and the applicable national regulations of the participating countries Chile and Colombia. Partners are responsible for data security and backing up datasets while collecting and processing the data. Generally, the local backup system will be guaranteed during the project lifespan. Once uploaded to the



COMUNIDAD Platform, data will be backed up and stored on internal servers with state-of-the-art data protection software and processes.

3.7. Ethical Aspects: Privacy and AI

The COMUNIDAD project entirely agrees that protecting personal data is a priority and will ensure that all partnership activities, particularly stakeholders' engagement, dissemination, and communication activities, are conducted per the EU's General Data Protection Guidelines (GDPR). Further, in the case of data publication, all scientific and ethical principles will be respected. COMUNIDAD is committed to upholding the highest ethical privacy and artificial intelligence (AI) standards. Special attention is given to the ethical implications of AI technologies, focusing on developing and deploying AI in a manner that respects privacy rights and avoids biases that could harm individuals or groups.

Key considerations include the anonymisation of data to prevent identification risks and the ethical use of AI to ensure fairness, accountability, and transparency in processing personal data. The project's strategies and methodologies for addressing privacy concerns in AI applications are extensively discussed in the D1.2 - Ethical Procedures report.

3.8. Other Issues: Data Management and Open Access in COMUNIDAD

In the final iteration of the COMUNIDAD Data Management Plan (DMP), we will build on the work established in earlier versions while also evolving to address new data management challenges and opportunities. This evolution reflects the project's ongoing commitment to leveraging data for agriculture, forestry and land management. Despite these changes, the core principles and the relevance of previous DMP editions remain integral to our approach.

Embracing Green Open Access

COMUNIDAD plans to manage research data post-project according to Green Open Access principles. This commitment ensures the continued availability and accessibility of research outputs, enabling wider dissemination and exploitation of project findings.

DMP and Dissemination Plan

The DMP is positioned alongside the project's Dissemination Plan, highlighting the importance of outlining detailed provisions for sharing data and publications. This includes clarifying which



data will be directly exploited or protected and which will be available for sharing with third parties, potentially subject to fees.

Definitions and Open Access Mandates

- **Access:** Defined as the right to engage fully with the content, allowing various interactions from reading to data mining.
- **Research Data:** Digital information essential for research, including experimental results, observations, and statistics.
- **Scientific Publications:** Includes articles, books, conference proceedings, and grey literature.
- **Open Access Mandate:** Encompasses depositing publications in repositories and ensuring they are openly accessible.

Intellectual Property Rights (IPR) Management

The COMUNIDAD Consortium Agreement, echoing the principles outlined in Horizon Europe's framework, stipulates that results are owned by the party that generates them. It also details provisions for joint ownership and exploitation of results, ensuring that all project outputs, whether protected by patents or shared as open data, are managed effectively and ethically.

By adopting these strategies and principles, COMUNIDAD adheres to regulatory requirements and promotes an open research and innovation culture. This approach ensures that the project's outputs can be leveraged to inform policy-making, advance scientific understanding, and address societal challenges in mobility, transport, and beyond.

Contact Information

Regarding the COMUNIDAD Data Management Plan (DMP) or related rights, please direct your questions to the project coordinator: **Lesprojekt - Karel Charvat, Jr.** Email: lesprojekt@lesprojekt.cz





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