



D1.2 – Ethical procedures report

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

PROJECT INFORMATION

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Table of Content

Project Summary	5
Executive Summary	6
Introduction	7
1. Legal framework	7
2. Project management approach from the ethical point of view	10
3. Ethics Handbook	11
3.1. Procedures implemented for the COMUNIDAD project	12
Procedures and criteria used to identify participants for project activities	12
Description of the informed consent procedures implemented for the participation of humans in the research	13
Opinions/approvals by ethics committees and/or competent authorities	14
Conclusion	15

Table of Figures

N/A

List of Tables



N/A

Definitions, Acronyms and Abbreviations

Acronym	Title
CA	Consortium Agreement
CO	Coordinator; except when referring to a deliverable, in which case it refers to "Confidential", i.e. only for members of the consortium (including EC Services)
Dx	Deliverable (where x defines the deliverable identification number, e.g. D1.1.1)
EC	European Commission
EU	European Union
Mx	Month (where x defines a project month, e.g. M10)
MoM	Minutes of Meeting
PC	Project Coordinator
PM	Person Month (a unit to count workload)
PO	Project Officer
PU	Public
R	Report
WP	Work Package



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 utilising 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.



Executive Summary

Emphasising ethical management, the COMUNIDAD project navigates the complexities of deploying these sophisticated technologies within the international collaboration framework.

Lesprojekt role encompasses project management, ensuring compliance with the highest ethical standards across COMUNIDAD's diverse activities. BOSC addresses ethical considerations, mainly focusing on the application of data privacy, Copernicus and GNSS technologies, and AI and Big Data, reflecting a structured approach to handling ethical complexities associated with these technologies.

The governance framework within the project outlines the collaborative roles of Lesprojekt and BOSC in ensuring ethical integrity. This framework includes comprehensive strategies for work plan execution, change management, online collaboration, and stakeholder engagement, with particular emphasis on safeguarding stakeholder privacy.

The COMUNIDAD project specialises in privacy protection in subsequent Work Packages, notably in Training and Workshops planned in Chile and Colombia. These activities, under SOCIALINNOVATION and Applications and Services for Forestry/Agriculture, managed by UAYSEN and two other partners, prioritise protecting participants' privacy and data security.

The project is prepared to address potential ethical challenges, such as conflicts of interest, data privacy concerns, and security breaches, with strategies developed for respectful and confidential stakeholder engagement.

Introduction

The COMUNIDAD project mainly focuses on transferring modern technologies utilising Copernicus services and EGNSS to Latin American countries – in the project case, Chile and Colombia. The COMUNIDAD project's activities focus on designing and developing technical components for the Infrastructure and Platform. However, the important part of planned project activities is training activities, where interaction with active participants at workshops and hackathons will be realised. The COMUNIDAD project considers privacy protection in subsequent Work Packages, notably in Training and Workshops planned in Chile and Colombia. These activities, under SOCIALINNOLABS and Applications and Services for Forestry/Agriculture, managed by UAYSEN and two other partners, prioritise protecting participants' privacy and data security.

Privacy and protection of sensitive information are crucial. The COMUNIDAD project will address them as the project involves end-users and stakeholders in the design and evaluation phase of the solution to be developed. Even though there are critical ethical issues related to the project, data collection and processing occur within several COMUNIDAD project activities – surveys and questionnaires involving end-users and stakeholders. The present ethics manual document describes the ethical and legal issues that may arise within the COMUNIDAD, along with the methodology that will be used to collect, store and process the data.

The deliverable provides an overview of the legal framework not only on the EU level but also on the national level in countries of Beneficiaries in the first chapter.

1. Legal framework

The beneficiaries must carry out the action in compliance with ethical principles (including the highest standards of research integrity) and with applicable EU, international and national law, including the EU Charter of Fundamental Rights and the European Convention on Human Rights.

- Regulation (EU) N° 1291/2013 of the EU parliament and the council of 11 December 2013
- Charter of Fundamental Rights of the European Union (2012/C 326/02)
- Council of Europe. European Convention on Human Rights

The legal framework governing the COMUNIDAD project is primarily based on Regulation (EU) 2016/679, known as the General Data Protection Regulation (GDPR), which was enacted by the European Parliament and the Council on 27 April 2016. This regulation focuses on protecting



natural persons regarding the processing of personal data and the free movement of such data, replacing Directive 95/46/EC. A corrigendum was issued on 23rd May 2018 to address specific amendments.

In January 2012, the European Commission initiated a comprehensive reform of the EU's 1995 data protection rules through proposal 2012/0011 (COD), aiming to strengthen online privacy rights and foster Europe's digital economy. This reform underscores the European Union's commitment to enhancing data protection standards and adapting to technological advancements.

Directive 2006/24/EC, issued by the European Parliament and the Council on 15 March 2006, mandates the retention of data generated or processed in connection with publicly available electronic communications services or public communications networks, amending Directive 2002/58/EC. This directive relates to processing personal data and protecting privacy in the electronic communications sector.

The Handbook on European data protection law, published by the European Union Agency for Fundamental Rights and the Council of Europe in 2013, provides further guidance on data protection laws within the EU context.

National regulations within states of consortium partners also play a crucial role in the legal framework. In instances where multiple regulations may apply, particularly in the context of data imports and exports, the project adheres to all applicable laws, using the most restrictive regulation to ensure the highest level of data protection. For each beneficiary, the following national legislation applies:

- Czech Republic
 - **Beneficiaries** – Lesprojekt-sluzby, s.r.o., Česká zemědělská univerzita v Praze
 - Zákon č. 110/2019 Sb. o zpracování osobních údajů and Zákon č. 111/2019 Sb., kterým se mění některé zákony v souvislosti s přijetím zákona o zpracování osobních údajů (Data Processing Act No. 110/2019 Coll. and Act No. 111/2019 Coll., amending certain acts in connection with the adoption of the Act on Personal Data Processing)¹
- Latvia
 - **Beneficiary** – Baltic Open Solutions Center, SIA
 - Likums 2018/132.1: Fizisko personu datu apstrādes likums²
- Spain

¹ <https://aplikace.mvcr.cz/sbirka-zakonu/ViewFile.aspx?type=c&id=38632>

² <https://likumi.lv/ta/id/300099-fizisko-personu-datu-apstrades-likums>



- **Beneficiary** – Fundacion SocialInnolabs
- Ley Orgánica 3/2018, de 5 de diciembre, de Protección de Datos Personales y garantía de los derechos digitales³
- Chile
 - **Beneficiaries** – Universidad de Aysén, Fundación para la Innovación Agraria
 - Ley 19628: SOBRE PROTECCION DE LA VIDA PRIVADA⁴ ('the Law')
 - 11144-07: Regula la protección y el tratamiento de los datos personales y crea la Agencia de Protección de Datos Personales⁵ ('the Bill')
- Colombia
 - **Beneficiaries** – Universidad Autónoma de Manizales, Federacion Nacional de Cafeteros de Colombia
 - Ley 1581 de 2012: Por la cual se dictan disposiciones generales para la protección de datos personales⁶ ('the Personal Data Protection Law')
 - Ley 1266 de 2008: Por la cual se dictan las disposiciones generales del hábeas data y se regula el manejo de la información contenida en bases de datos personales, en especial la financiera, crediticia, comercial, de servicios y la proveniente de terceros países y se dictan otras disposiciones⁷ ('Law No. 1266 of 2008')

Furthermore, during its 2019–2024 term, the European Parliament adopted the Artificial Intelligence Act on 13 March 2024 under legislative resolution P9_TA(2024)0138. This act proposes harmonised rules on artificial intelligence (AI), amending certain Union Legislative Acts and signifying a significant development in regulating AI technologies within the EU. This legislation, along with the GDPR and other relevant directives, forms the comprehensive legal framework that guides the COMUNIDAD project's adherence to data protection and privacy standards, ensuring compliance with existing and emerging data protection regulations and AI.

³ <https://www.boe.es/buscar/doc.php?id=BOE-A-2018-16673>

⁴ <https://www.bcn.cl/leychile/navegar?idNorma=141599>

⁵ <https://www.camara.cl/legislacion/ProyectosDeLey/tramitacion.aspx?prmID=11661&prmBoletin=11144-07>

⁶ <https://www.alcaldiabogota.gov.co/sisjur/normas/Normal.jsp?i=49981>

⁷ <https://www.alcaldiabogota.gov.co/sisjur/normas/Normal.jsp?i=34488>



2. Project management approach from the ethical point of view

The COMUNIDAD project integrates ethical management as a core component in deploying Copernicus and GNSS services, Artificial Intelligence (AI), and Big Data within an international framework. This approach is tailored to meet rigorous ethical and legal standards, with a particular emphasis on data protection and privacy, which are crucial in the realm of advanced technology applications.

Integration of Ethical Guidelines: Ethical guidelines are thoroughly integrated into COMUNIDAD's operations, underscoring the project's commitment to ethical handling and data safeguarding. This ensures comprehensive management practices that extend to all aspects of the project, from the initial data collection using Copernicus and GNSS services to the processing and analysis via AI and Big Data technologies, all conducted with a prioritisation of ethical considerations.

Specific Focus Areas for Ethical Consideration:

- **Personal and Other Data:** Acknowledging the difference between personal and other types of data, the project establishes distinct protocols for handling to ensure transparency, security, and respect for individual privacy rights. The project activities will minimise the need to collect or process personal data. Most of the data will be anonymised or aggregated to values where identification of the individual person is impossible.
- **AI Utilization:** AI technologies are applied cautiously, recognising their potential for bias and the necessity for ethical algorithms that do not compromise data integrity or privacy.
- **Participant Consent:** The project adopts rigorous measures for participants' ethical recruitment and informed consent, safeguarding their privacy and personal data to uphold high ethical standards in research involving human subjects.

Adherence to Ethical and Legal Compliance: The project's leadership ensures all activities comply with GDPR, Horizon Europe (HE) regulations, and relevant national laws. A proactive approach is taken to navigate the complexities of data protection regulations across different jurisdictions, ensuring the application of the most restrictive regulation when multiple laws are applicable.

Stakeholder Engagement: Ethical considerations are deeply woven into the fabric of stakeholder engagement strategies, ensuring respectful and transparent involvement of end-users, industry partners, and policymakers. This structured approach to engagement underscores the project's dedication to ethical governance.

Technological Deployment: The project emphasises the ethical aspects of deploying technologies such as Copernicus, GNSS, AI, and Big Data. Efforts are focused on developing and implementing these technologies in a manner that is both advanced and ethically responsible, reflecting a balanced approach to technological advancement and ethical integrity.

3. Ethics Handbook

The Ethics Handbook chapter for the COMUNIDAD project is the guide for adopting a focused approach, prioritising personal or sensitive data management and utilising Copernicus services ahead of the application of Artificial Intelligence (AI) and Big Data technologies. This adjustment aligns with feedback for a more concrete and targeted strategy in addressing ethical concerns, particularly emphasising safeguarding stakeholder privacy and the ethical use of geospatial data. This chapter will be updated based on the needs of individual pilots and use cases.

Introduction to Ethics Management

The project's commitment to ethical management is exemplified through specific strategies prioritising protecting personal data and the responsible use of Copernicus's services. With support from Lesprojekt, BOSC ensures a vigilant oversight of these aspects, focusing on precise actions and reducing generalised statements. This includes maintaining an up-to-date communication channel with all partners regarding their ethical obligations and any standards or practice changes, especially data privacy and geospatial data usage.

Defined Actions and Responsibilities

The ethics appraisal framework has been updated to clearly define the actions and responsibilities of project partners concerning key ethical considerations:

1. **Preemptive Identification of Ethical Concerns:** In management meetings, WP leaders collaboratively identify upcoming activities that may pose ethical concerns, focusing on handling personal data and applying Copernicus services. For example, problems related to data privacy in WP4 would be flagged for attention.



2. **Oversight by WP Leaders:** WP leaders are responsible for ensuring that activities within their WPs comply with ethical guidelines, particularly concerning protecting personal data and using Copernicus-derived data.
3. **Reporting and Collaborative Resolution of Ethical Issues:** Should potential ethical issues be identified; WP leaders must promptly report these to the coordinator and BOSC. This facilitates a proactive approach to resolving ethical concerns, particularly concerning privacy and Copernicus data usage.
4. **Routine Evaluation and Response to Ethical Risks:** Regular teleconferences among WP leaders provide a forum for updating and evaluating potential ethical risks. Discussions focus on developing and implementing mitigation strategies, especially about data privacy and using Copernicus services.

Concrete Steps for Addressing Ethical Challenges Adapting to feedback, the project's methodology for handling ethical challenges now clearly outlines realistic procedural steps, emphasising the protection of private data and the conscientious use of Copernicus services. This approach ensures that the project's ethical management strategy is practical and focused, offering clear guidelines for maintaining ethical integrity in handling sensitive data and utilising geospatial information.

Through these specified measures within the Ethics Handbook, the COMUNIDAD project underscores its dedication to ethical practices, ensuring the protection of private data and responsible utilisation of Copernicus services as foundational aspects of its international collaboration efforts. This refined focus aims to navigate the ethical complexities associated with technological innovation, ensuring compliance and accountability in all project activities.

3.1. Procedures implemented for the COMUNIDAD project

This chapter of the Ethics Handbook describes the main procedures that will be implemented during the execution of the COMUNIDAD project.

Procedures and criteria used to identify participants for project activities

Recruitment of participants (end-users and stakeholders, participants in workshops and hackathons) must be equitable and include participants from various institutional, professional, social, ethnic, and academic backgrounds. The following criteria are of high importance:

- Participant's knowledge and experience
- The participant's role in the region's target domain - agriculture, land management, forest management, and education.

Relevant participants include but are not limited to:



- Associations and persons that represent agricultural professions, such as farmers, advisors, young farmers, women farmers, and entrepreneurs of any age and gender
- Associations and persons that represent land management professions, such as urban planners, geologists, hydrogeologists, and water management experts of any age and gender
- Authorities and public sector actors, including those that deal with policies related to agriculture and land management, rural development
- Higher education institutions - universities, colleges, long-life education institutions - students and lecturers of any age and gender

The COMUNIDAD project follows a strict non-discrimination policy, meaning that no one will be discriminated against to participate on any grounds such as sex, race, colour, ethnic or social origin, genetic features, language, religion or belief, political or any other opinion, membership of a national minority, property, birth, disability, age, sexual orientation or nationality, respecting the Fundamental Rights of the European Union (2000/C 364/01, article 21). Overall, apart from people who cannot provide legal consent, no other exclusion will be made, and there will not be any discrimination in data processing.

Description of the informed consent procedures implemented for the participation of humans in the research

All participants in project activities will be given an informed consent form and a detailed information sheet. The participant must obtain the subject's voluntary, informed, specific and unambiguous consent. The subject's consent must be given in a clear statement. The consent is revocable at any point.

The informed consent form must contain:

- The identity and contact details of the participant
- The purposes of the processing for which the personal data are intended, as well as the legal basis for the processing
- The recipients or categories of recipients of the personal data, if any
- Where applicable, the fact that the participant intends to transfer personal data to a non-EU country or international organisation
- The period for which the personal data will be stored, or if that is not possible, the criteria used to determine that period
- The existence of the right to request from the participant access to and rectification or erasure of personal data or restriction of processing concerning the data subject or to object to processing, as well as the right to data portability



- The existence of the right to withdraw consent at any time without affecting the lawfulness of processing based on consent before its withdrawal

Consent forms must be written in the subject's language clearly and concisely. The controller must ensure confidentiality and security of the processing of personal data under their control. Signed consent forms will be held securely by the controller. If participants cannot sign consent forms, the researcher will provide alternative methods of obtaining consent (e.g. verbal consent with a witness, recording, etc.)

If applicable, data transfers to non-EU countries must comply with relevant legislation, as described in Article 45 of Regulation 2016/679, the Commission Decision 2001/497/EC and 2004/915/EC.

Especially in the use case of Tracking coffee harvesting labourers, the participants in this use case will participate on a voluntary basis with agreed informed consent and clearly informed about the types of data collected and details of data. The raw data will be available only for the FNC as the main contact with the harvesters, other partners will use for analyses only pseudonymised data or aggregated if not agreed differently in the consent.

Opinions/approvals by ethics committees and/or competent authorities

Opinions/approvals by ethics committees and/or competent authorities are not required given that the COMUNIDAD project is not intended to perform human cloning, modify the genetic heritage of human beings or create human embryos for whatever purpose, and that no health, ethical or reputational risks to participants are foreseen. The project will not conduct any activities that can be considered unlawful according to European and international as well as national law.

Conclusion

The COMUNIDAD project integrates ethical management with the technical deployment of the Infrastructure and the Platform incorporating Copernicus services, EGNSS with Artificial Intelligence (AI), Big Data, and the facilitation of international collaboration. Coordinated by Lesprojekt with BOSC providing ethical oversight, the project implements a systematic approach to address ethical considerations linked to global technological projects.

The deliverable emphasises the criticality of ethical decision-making, risk identification and policy assessment in compliance with legal and regulatory frameworks in a global context. The involvement of Lesprojekt and BOSC has been key in weaving ethical considerations throughout the project's structure, ensuring that a strong ethical foundation guides all operations.

The Ethics Handbook delineate COMUNIDAD's commitment to ethical governance by incorporating participants in project activities and cross-border collaboration. This commitment not only aligns with the project's goals of technological advancement but also contributes to the broader ethical discourse in technology. The COMUNIDAD project will continue refining its ethical strategies, aiming to maintain its position as a leader in ethical practices within the international scientific and technological community, focusing on practically integrating ethical standards in all aspects of project execution.



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