



# CHEERS

Producing novel non-plant biomass feedstocks  
and bio-based products through upcycling and  
the cascading use of brewery side-streams

Grant Agreement No. 101060814.

## D8.1

# Project Management Plan – 1st version

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# Executive Summary

This Project Management Plan describes the management and quality control procedures of the CHEERS project, with Grant Agreement (GA) nr. 101060814, which are meant to ensure the quality of the work carried out.

This document sets up the working procedures and rules, defines document templates, means of communication, control and other management procedures.

The recommendations it contains, if used with some discipline, will reduce the project overhead and may, therefore, be considered crucial for the overall success of the project. Also, these rules will ensure comply with the obligations detailed in the Grant Agreement nr. 101060814 signed by all the members of the CHEERS consortium, and the European Research Executive Agency (REA).

This document aims to give an overview regarding the management and coordination issues from CHEERS Project and is a complement to all other key documents that the coordination team should have read and have accessed while the project is running: the Grant Agreement (GA) and its Annexes along with the Annotated Model Grant Agreement – EU Funding Programmes 2021-2027.

In this sense, this document will serve as a support to the project consortium in the properly implementation and monitoring of CHEERS project.

# 1 Introduction

## 1.1 Overview of CHEERS

CHEERS is a new biorefinery concept, inspired on nature biodiversity (insect and microbial platforms), to sustainably and efficiently upgrade underused or waste sidestreams such as bagasse, wastewater, CO<sub>2</sub> and CH<sub>4</sub> from bio-based industries into innovative bio-based products. CHEERS will help biobased industries to improve their feedstock use efficiency and overall sustainability and competitiveness via upcycling and cascading use of biomass produced from their side-streams.

This project is developed as a modular solution where bio-based industries can configure their optimal combination by selecting among 5 novel biotechnological routes which generate 5 bio-based products for industrial applications, with attractive market opportunities: insect protein, disinfectant, microbial protein, ectoine and caproic acid. All value chains are based on new bioprocesses and/or innovative biofermentors combined with sustainable downstream processes, which will be validated at demoscale at an industrial brewery. A min. 45% carbon footprint reduction will be achieved in each value chain.

The evaluation of CHEERS impacts will consider go beyond the classic LCA and will cover broader impacts such as biodiversity and land use. The beer company MAHOU is project coordinator of a consortium encompassed by 11 partners of 5 European countries, including technology suppliers, end-users and research entities.

CHEERS will contribute to a “zero waste” biorefinery approach, fully aligned with the EU Green Deal, Circular Economy Action Plan and Bioeconomy Strategy, and foster the understanding of biotechnology-based value chains through the engagement of relevant actors, from small bio-based industries to consumers.

## 1.2 Participants

Table 1: CHEERS Project Participants

Nº	Role	Participant name	Short name	Country
1	COO	MAHOU SA	MAHOU	ES
2	BEN	FCC AQUALIA SA	AQUA	ES
2.1	AE	HIDROTEC TECNOLOGIA DEL AGUA SL	HID	ES
3	BEN	UNIVERSIDAD DE VALLADOLID	UVA	ES
4	BEN	PROTEINSECTA SOCIEDAD LIMITADA	PROTE	ES
5	BEN	EURIZON SL	INNV	ES
6	BEN	SYMRISE AG	SYM	DE
7	BEN	GENIA BIOENERGY SL	GEN	ES
8	BEN	SYSPRO AUTOMATION SL	SYS	ES
9	BEN	AINIA	AINIA	ES
10	BEN	THUNDER FOODS LDA	THUNDER	PT
11	AP	ZURCHER HOCHSCHULE FUR ANGEWANDTE WISSENSCHAFTEN	ZHAW	CH
12	AP	CONSERVATION EDUCATION AND RESEARCH TRUST	EARTHWATCH	UK

### 1.3 Summary of Person Month (PM) Distribution

Although no problems are envisaged regarding the team members and personnel capacity would not be compromised during the project life, the consortium counts with a multidisciplinary team that covers all the necessary profiles for the correct development of the project.

Concerning staff effort, personnel costs allocated to the project are 989 Person Months (PMs). Equivalent actual and/or unit costs shall be justified.

**Table 2: CHEERS PM distribution by WP and partner**

PARTNER	WP1	WP2	WP3	WP4	WP5	WP6	WP7	WP8	TOTAL
1 – MAHOU	11	10		6	12	12	8	20	81
2 – AQUA	3		51	23	8	2	2	2	91
2.1 – HID			5,5						5,5
3 – UVA	15		56	6	2	4	5	4	92
4 – PROTE	3	57		3	1	1	1	1	67
5 – INNV							48	8	56
6 – SYM				3	10		2	2	17
7 – GEN	15		53	76	5	13	4	4	170
8 – SYS	13		75	11	7	5	4	4	119
9 – AINIA	19,5	3	37	68,5	7	19	30	16	200
10 – THUNDER	1	3		3	3		1	1	12
11 – ZHAW	3					36	6	2	47
12 – EARTHWATCH						13,5	16	2	31,5
<b>TOTAL</b>	<b>82,5</b>	<b>73</b>	<b>277,5</b>	<b>199,5</b>	<b>58</b>	<b>105,5</b>	<b>127</b>	<b>66</b>	<b>989</b>

The complete contact information of the project can be found in section 2.1 of this document, and it is available for the project partners in the Microsoft Teams project account.

New contact details or changes/corrections to the current data should be sent to the Project Coordinator (PC) helpdesk ([rverad@mahou-sanmiguel.com](mailto:rverad@mahou-sanmiguel.com)).

### 1.4 Purpose and scope of the Project Management

The main objectives of the project management are to set-up the CHEERS management structure, to foresee or predict as many dangers and problems as possible and to plan, organize and control activities so that the project is completed as successfully as possible despite all the potential risks.

The CHEERS management structure is designed to reach the following objectives:

- Ensuring compliance with EC rules and contractual commitments.
- Measuring the objectives of the project within the agreed budget and timeframe.
- Coordinating the project partners and activities and ensuring effective communication.
- Carrying out the quality control of the work performed and deliverables.
- Identifying risks or conflicting situations and resolving them.
- Maintaining the required reporting activities towards the European Commission (EC).
- The CHEERS management is based on several principles which are important in the internal organizational collaboration within the consortium:
- The units of the CHEERS consortium are collaborating to achieve a common objective, share experience and know-how, and develop results with complementary skills.
- Work must be organized and planned in a result-driven way. Common planning must hence be a reference for everybody and must always be up to date.
- The collaboration inside the project involves different levels of decision-makers in various domains (strategic, technical, financial, and administrative). The rules for such decision making need to be clear.
- The effectiveness of meetings is absolutely critical to the progress of the work. An inconclusive meeting can cause serious delays, risks and costs.

Procedures are defined to facilitate operations and management of the project. Their objectives are not to create management tasks with a heavy structure, but to give simple tools, allowing all activities to be managed properly.

## 1.5 Structure of the document

The Project Management Plan provides guidelines concerning:

- **Project Governance:** Several bodies have been established to govern the different aspects of the project. The structure includes the General Assembly (GA), the Project Coordination Team (PCT), the Steering Committee (SC), the Scientific Technical Committee (STC), The Ethics Advisory Board (EAB), The Innovation Committee (IC), the Business Committee (BC) and the Scientific Expert Advisory Board (SEAB). As well, information about the project decision making process is presented.
- **Changes management:** To complete the project according to the established level of quality, some changes and adjustments might be necessary throughout the project life. The rules to proceed are included in this document.
- **Communication:** Three different kinds of communication are distinguished: internal, external and towards the European Research Executive Agency (REA). Details are included in this Plan.
- **Document management:** During the lifetime of the project, many documents will be produced, and some simple rules should be followed in order to facilitate the management of this production. Responsibilities of documents are specified in this plan, as well as other general rules of formats and instructions on the level of confidentiality of the documents.
- **Risk management:** To identify potential risks, assessing their potential impact, and developing strategies to mitigate or minimize them. It includes the different phases such as risk identification, risk analysis, risk evaluation, and risk response planning.
- **Periodic reporting and progress monitoring:** The REA will monitor the progress of the project through periodic reports (PR), deliverables, project reviews and meetings. Besides, internal

progress meetings will be carried out every eight-months report which will consist of update on the resource consumption information. The information provided will be used to detect eventual deviations by comparing actual and planned resources. A set of financial rules applicable to CHEERS will also be summarized. Good Practices regarding the keeping of records and supporting documents for the justification process are also included, as well as the EC Audit's process.

# 2 Project Governance

## 2.1 Management structure

The CHEERS project is based on a management structure able to deal with the consortium internal management and with the complexity of dealing with the different actors involved in the project execution. The project will involve a team with members at different levels of responsibility within the partners' organizations, assisted by the different bodies comprised within the Management Team.

Giving the importance of this project for the consortium, key staff within each partner organization will be involved and committed in CHEERS project. In case of departure of any key member, the rest of team is informed and up-to-dated to ensure its absence has the least possible impact on the project as a contingency plan.

### 2.1.1 General Assembly

The highest decision-making body in the CHEERS Project is the General Assembly, which consist of one representative of each party. The Project Coordinator shall chair all meetings of the GAs, at least once every six months, with all the bodies of the Management Team to discuss the progress and important matters of each field of the project.

Also, extraordinary meetings at any time can be scheduled, upon written request of any Member.

The following decisions shall be taken by the General Assembly:

- Content, finances and intellectual property rights.
- Proposals for changes to Annexes 1 and 2 of the Grant Agreement to be agreed by the Granting Authority
- Changes to the Consortium Plan
- Modifications or withdrawal of Background in Attachment 1 (Background Included) of the Consortium Agreement
- Additions to Attachment 3 (List of Third Parties for simplified transfer according to Section 8.3.2)
- Additions to Attachment 4 (Identified entities under the same control)
- Appointments of the Scientific and Experts Advisory Board members
- Evolution of the consortium
  1. Entry of a new Party to the Project and approval of the settlement on the conditions of the accession of such a new Party
  2. Withdrawal of a Party from the Project and the approval of the settlement on the conditions of the withdrawal
  3. Identification of a breach by a Party of its obligations under this Consortium Agreement or the Grant Agreement
  4. Declaration of a Party to be a Defaulting Party
  5. Remedies to be performed by a Defaulting Party
  6. Termination of a Defaulting Party's participation in the consortium and measures relating thereto
  7. Proposal to the Granting Authority for a change of the Coordinator
  8. Proposal to the Granting Authority for suspension of all or part of the Project

9. Proposal to the Granting Authority for termination of the Project and the Consortium Agreement.

### 2.1.2 Management Team

**Project Coordination Team (PCT)** and **Steering Committee (SC)** compose the Management Team, as both will act alongside each other for the administrative and technical management of the CHEERS Project.

A Project Coordination Team (PCT) has been established within the consortium to carry out activities of Work Package 8 (WP8).

Mr. Rubén Vera Domingo, Environmental R+D Coordinator of MAHOU, who, together with his team, will compose the **Project Coordination Team (PCT)**, is responsible for the project coordination, management and the project strategic monitoring. In regards of the technical management of the CHEERS Project, the PCT will rely on the support of the **Steering Committee (SC)**, which is composed by a representative from each institution within the consortium. Together, those two bodies are in charge of guaranteeing the correct development of the project and enabling the monitoring of the overall project progress, ensuring effective project management and fluent communication and achievement of project goals.

The PCT will be in charge of the following actions:

- **Planning and scheduling:** The team is responsible for creating project plans, defining project objectives, and developing a comprehensive schedule that outlines the tasks, timelines, and dependencies.
- **Communication and coordination:** The team facilitates effective communication among project stakeholders, team members, and other relevant parties. They coordinate meetings, disseminate information, and ensure everyone is aligned with project goals and objectives.
- **Monitoring and reporting:** The team closely monitors project progress, tracks milestones, and identifies any deviations from the plan. They prepare regular status reports, highlighting key achievements, risks, and issues, and provide updates to project stakeholders.
- **Risk management:** The team identifies potential risks and develops strategies to mitigate them. They conduct risk assessments, implement risk response plans, and monitor risk factors throughout the project lifecycle.
- **Documentation management:** The team maintains project documentation, including plans, reports, meeting minutes, and other relevant records. They also facilitate knowledge sharing and capture lessons learned for future projects.
- **Change management:** The team handles changes and modifications to project scope, objectives, or requirements. They assess the impact of changes, communicate them to stakeholders, and ensure proper documentation and implementation.
- **Team support and coordination:** The team provides support to project team members, fostering collaboration, resolving conflicts, and promoting a positive team environment. They facilitate teamwork and ensure that everyone has the necessary resources and information to fulfill their roles effectively.

#### 2.1.2.1 Management responsibilities

The **Project Coordinator Team (PCT)** is the focal point for all technical and administrative content of the project, and for ensuring that the guidelines are followed. The Project Coordinator Team's responsibilities will be the following:

- **To organize the Consortium meetings** with representatives from each partner.

In this meeting the leaders of each WP will be assigned to know who will be the people responsible, together with their team, of the correct execution of each work package. They will centralize the tasks of:

- Technical Execution of the WP.
  - Contact with suppliers.
  - WP budget control.
  - Compilation of relevant documentation.
  - Follow-up of deviations.
  - Direct communication with the management team for the follow-up of possible deviations.
  - Risk management control.
- **To organize the Steering Committee meetings.** The SC will have monthly meetings to make the correct follow-up of the project progress, cover the needs at each moment and communicate with the leaders of each WP to undertake the necessary actions.
  - To **monitor the technical, scientific and commercial progress** of the project on the basis of periodical reporting and to decide about the project progress, as well as on the need to implement necessary changes and new procedures.
  - **Financial control.** All costs incurred in each work package will pass through the SC to have a real time financial control.
  - To **liaise with the EC** regarding any contractual issues. They will be responsible for informing the PO of possible deviations or changes to the PO well in advance, the impact this will have on the project and possible mitigation measures: amendments, modifications, etc.
  - To **solve conflicts** on issues that might have an impact on project objectives, resources or progress.
  - To **schedule, call and chair the coordination meetings.**
  - To manage **periodic reporting with the PO, appointment of the SEAB, monitoring of 'gender issues.**

Regarding the Exploitation activities within the project, an **Innovation Committee (IC) and Business Committee (BC)** is also established.

In addition, three committees have been created to discuss separately the main issues related to:

- Scientific and technical developments and demonstrators (**Steering Committee**). Formed by representatives from all partners that are in charge of:
  1. Reviewing and **analyzing the progress and results** achieved in the project during the reporting period.
  2. **Collecting and compiling technical data** and information from the project teams and other relevant sources.
  3. **Verifying the accuracy and validity of the data and results** presented in the technical reports.
  4. **Collaborating with the PCT** to ensure alignment between the technical reports and project objectives.
  5. **Participating in meetings or discussions to clarify technical aspects** and provide additional information or insights for the reports.
- Communication, dissemination, and exploitation of results (**Innovation committee**). Formed by the communication managers, IP and innovation managers, in charge of:
  1. **Developing and implementing** a comprehensive **communication and dissemination strategy** to promote the project's innovations, achievements, and outcomes to relevant stakeholders.
  2. Coordinate all communication and **dissemination activities** and monitoring and evaluating their impact, ensuring that the IP rights of the partners is compromised by any publication and information disclosure.
  3. Support the partners to assure that the legal obligations to protect, exploit and disseminate the results of the project are met, and the expected impact of the project is achieved.

- Commercial products development and CHEERS Ltd company creation. (**Business committee**). Formed by the exploitation manager and industrial partners, in charge of:
  1. **Establishing and managing the process of creating a Limited Company**, including legal and financial considerations, drafting the necessary documentation, and coordinating with relevant stakeholders such as lawyers, accountants, and government agencies.

The Innovation Committee and Business Committee will mainly collaborate in activities covered within WP6 “Environmental & economic impact and exploitation strategy” and WP7 “Communication and Dissemination”.

### 2.1.3 Steering Committee (SC)

The Steering Committee, as the executive body, is chaired by Coordinator. The Steering Committee organizes the General Assembly including kick-off and final meetings.

The Steering Committee will be composed of one representative per partner and chaired by the coordinator. The Steering Committee will meet monthly to ensure proper implementation of the project plan.

For each work package, a WP leader has been assigned, who together with his or her team, will be responsible for managing the work package tasks at both technical and financial level, as well as managing the different suppliers involved and generating and safeguarding the corresponding documents.

In this way, the Work Package Leaders will manage and execute their respective WPs and report progress to the Steering Committee, with the support of the rest of the partners involved in the respective activities.

The duties of the Steering committee include:

- To organize consortium meetings, propose decisions and prepare the agenda of the General Assembly.
- To implement the decisions taken in the General Assembly.
- To monitor the effective and efficient implementation of the Project.
- To monitor the preparation, revision, and submission of deliverables.
- To verify the accomplishment of the project milestones.
- To review next dissemination and communication actions.
- To advise the General Assembly on ways to rearrange tasks and budgets.

The SC meetings also serve as a valuable platform for the discussion and alignment of deliverables within the consortium. Through these meetings, the consortium members can identify the specific expertise (within the consortium) required to evaluate each deliverable effectively. The SC can then assign evaluators from the consortium based on their relevant knowledge and expertise, ensuring a thorough and comprehensive review process.

Due to the limited size of the consortium, 13 partners in total, it was agreed that the SC would be comprised by one representative from each partner.

**Table 3: CHEERS Project Governance structure**

CHEERS Project Governance	Role definition	Person in charge
Project Coordinator (PC) / WP1 & WP8 Leader	Provides policy direction and it's in charge of the General Assembly. <i>Responsible for the side-streams mapping and optimization according to circular economy needs.</i>	Rubén Vera Domingo <a href="mailto:rverad@mahou-sanmiguel.com">rverad@mahou-sanmiguel.com</a>

	<p><b>Responsible of the Project Management.</b> Partner involved in WP2, WP4, WP5, WP6 and WP7.</p>	
WP2 Leader	<p><b>Responsible for the insect platform management.</b> Partner involved in WP1, WP4, WP5, WP6, WP7 and WP8.</p>	<p><b>Manuel Lucena (PROTE)</b> <a href="mailto:innovacion@proteinsecta.es">innovacion@proteinsecta.es</a></p>
WP3 Leader	<p><b>Responsible for the microbial platform management.</b> Partner involved in WP1, WP4, WP5, WP6, WP7 and WP8.</p>	<p><b>Patricia Zamora (AQUA)</b> <a href="mailto:patricia.Zamora@fcc.es">patricia.Zamora@fcc.es</a></p>
WP4 Leader	<p><b>Responsible of the integration and cascading processing.</b> Partner involved in WP1, WP3, WP5, WP6, WP7 and WP8.</p>	<p><b>José Manuel Iranzo (GEN)</b> <a href="mailto:jmiranzo@geniaglobal.com">jmiranzo@geniaglobal.com</a></p>
WP5 Leader	<p><b>Responsible of the bio-based product development and validation.</b> Partner involved in WP4, WP7 and WP8.</p>	<p><b>Dominik Stuhlmann (SYM)</b> <a href="mailto:Dominik.Stuhlmann@symrise.com">Dominik.Stuhlmann@symrise.com</a></p>
WP6 Leader	<p><b>Responsible of the environmental &amp; economic impact and exploitation strategy.</b> Partner involved in WP1, WP7 and WP8.</p>	<p><b>René Itten (ZHAW)</b> <a href="mailto:ittn@zhaw.ch">ittn@zhaw.ch</a></p>
WP7 Leader	<p><b>Responsible of the communication and dissemination actions.</b> Partner involved in WP1, WP2, WP3, WP4, WP5, WP6 and WP8.</p>	<p><b>Julia Ponce González (AINIA)</b> <a href="mailto:jponce@ainia.es">jponce@ainia.es</a></p>
Representative from UVA	<p>Partner involved in WP1, WP3, WP4, WP5, WP6, WP7 and WP8</p>	<p><b>Raúl Muñoz (UVA)</b> <a href="mailto:raul.munoz.torre@uva.es">raul.munoz.torre@uva.es</a></p>
Representative from INNV	<p>Partner involved in WP7 and WP8</p>	<p><b>Ana Díaz (INNV)</b> <a href="mailto:a.diaz@innovarum.es">a.diaz@innovarum.es</a></p>
Representative from SYS	<p>Partner involved in WP1, WP3, WP4, WP5, WP6, WP7 and WP8</p>	<p><b>Daniel Alcántara (SYS)</b> <a href="mailto:daniel.alcantara@sysproautomation.com">daniel.alcantara@sysproautomation.com</a></p>
Representative from THUNDER	<p>Partner involved in WP1, WP2, WP4, WP5, WP7 and WP8</p>	<p><b>Diogo Palha (THUNDER)</b> <a href="mailto:diogo.palha@thunderfoods.pt">diogo.palha@thunderfoods.pt</a></p>
Representative from EARTH	<p>Partner involved in WP6, WP7 and WP8</p>	<p><b>James Sprinks (EARTH)</b> <a href="mailto:jsprinks@earthwatch.org.uk">jsprinks@earthwatch.org.uk</a></p>

### 2.1.4 Scientific Technical Committee (STC)

The selection of profiles for the **Scientific Technical Committee (STC)** requires members within the consortium with experience in the development of technical reports in the frame of European projects.

The Scientific Technical Committee (STC) seeks individuals capable of treating the outputs of the CHEERS Project in topics like waste sidestreams, biobased products, entomology, and cosmetics, and formulate technical reports that will be presented in each official reporting period.

**Table 4: CHEERS STC Composition**

Member	Person in charge
MAHOU	Rubén Vera (MAHOU) <a href="mailto:rverad@mahou-sanmiguel.com">rverad@mahou-sanmiguel.com</a>
AINIA	Julia Ponce (AINIA) <a href="mailto:jponce@ainia.es">jponce@ainia.es</a>
UVA	Raúl Muñoz (UVA) <a href="mailto:raul.munoz.torre@uva.es">raul.munoz.torre@uva.es</a>
AQUA	Patricia Zamora (AQUA) <a href="mailto:patricia.Zamora@fcc.es">patricia.Zamora@fcc.es</a>

### 2.1.5 Ethic Advisory Board (EAB)

The main responsibility of the **Ethics Advisory Board (EAB)** is to provide guidance and oversight regarding ethical considerations in a project or research endeavor.

The board's primary role is to ensure that the project adheres to ethical principles, guidelines, and legal requirements. They review and assess the ethical implications of the project's design, methods, and potential impact on participants, society, and the environment.

The EAB offers recommendations, suggestions, and expertise to ensure that the project maintains high ethical standards throughout its execution. Their goal is to safeguard the rights, welfare, and dignity of individuals involved in the project and to promote ethical conduct in research and innovation.

This board will work alongside the partners to give support in the supervision of:

- **MS6:** Engagement of biomass producers and end-users.
- **MS7:** Final validation of the bio-based products.
- **MS8:** TEA and LCA confirm sustainability of the value chains.
- **MS9:** Biodiversity impact fully assessed.
- **MS10:** Exploitation plan.

### 2.1.6 Innovation Committee (IC)

The **Innovation Committee (IC)**, consisting of the Communication Manager and the Innovation Manager, plays a pivotal role in driving the success of a project by overseeing the effective communication, dissemination, and exploitation of results. This committee is conformed by:

**Table 5: CHEERS IC Composition**

Member	Person in charge
AINIA	Julia Ponce González (AINIA) <a href="mailto:jponce@ainia.es">jponce@ainia.es</a>
INNV	Ana Díaz (INNV) <a href="mailto:a.diaz@innovarum.es">a.diaz@innovarum.es</a>

### 2.1.7 Business Committee (BC)

The **Business Committee (BC)**, comprised of the Exploitation Manager and the Industrial Partners, plays a vital role in the decision-making for the creation of CHEERS Ltd.

Working closely with the Industrial Partners, who bring industry expertise and resources, they drive the development of commercial products and services.

Additionally, the BC takes charge of creating CHEERS Ltd, overseeing the legal and financial aspects of company formation and ensuring compliance with relevant regulations.

By leveraging their collective knowledge and experience, the Business Committee strives to transform project outcomes into marketable solutions, driving innovation, and contributing to long-term business success.

**Table 6: CHEERS BC Composition**

Member	Person in charge
AINIA	<b>Julia Ponce González (AINIA)</b> <a href="mailto:iponce@ainia.es">iponce@ainia.es</a>
Industrial Partner 1	<b>(Pendant)</b> <a href="#">mail</a>
Industrial Partner 2	<b>XXXX (Pendant)</b> <a href="#">mail</a>
Industrial Partner 3	<b>XXXX (Pendant)</b> <a href="#">mail</a>

### 2.1.8 Scientific Expert Advisory Board (SEAB)

The **Scientific Expert Advisory Board (SEAB)** will assist the project’s scientific and technical issues by the request of any partner. The SEAB will be the one responsible for giving scientific support to the WP leaders and resolve any issues that might arise on technical level. For this aim, the members of the SEAB must be profiles that possess considerable background in some key topics that are considered relevant for the CHEERS Project, such as:

- Professionals with a profound **understanding of waste sidestreams** can contribute to the committee's efforts in finding sustainable solutions for managing and repurposing waste materials. Their expertise in waste management, recycling, and circular economy principles will be invaluable in formulating strategies to minimize environmental impact and maximize resource utilization.
- Furthermore, individuals **well-versed in biobased products** bring essential insights into the development and implementation of sustainable alternatives to conventional materials. Their expertise in biofuels, bioplastics, and other biobased innovations will help steer the committee towards promoting greener practices and reducing reliance on fossil fuels and non-renewable resources.
- **Expertise in entomology**, the study of insects, is of great importance due to the vital role insects play in various ecosystems and their potential applications in waste management and biobased industries. Knowledgeable entomologists can provide valuable perspectives on insect rearing, insect-based protein production, and insect-mediated bioconversion, which are emerging fields with significant potential for sustainable development.
- Additionally, a **comprehensive understanding of the cosmetics industry** is crucial for addressing sustainability challenges in this field. Committee members well-versed in cosmetics can contribute to discussions on the development and utilization of environmentally friendly and ethically sourced ingredients, as well as strategies for reducing waste generation and promoting responsible manufacturing and consumption practices.

The PC will ensure that a non-disclosure agreement will be developed between all Parties and each SEAB member.

The SEAB members are the following:

Table 7: CHEERS Scientific Expert Advisory Board Composition

Member	Position	Expertise	Contact
To be defined in D8.2	(Pendant)	Biogas, anaerobic digestion, fermentation	(Pendant)
To be defined in D8.2	(Pendant)	Wastewater treatment	(Pendant)
To be defined in D8.2	(Pendant)	Novel foods	(Pendant)
To be defined in D8.2	(Pendant)	Circular economy	(Pendant)
		...	

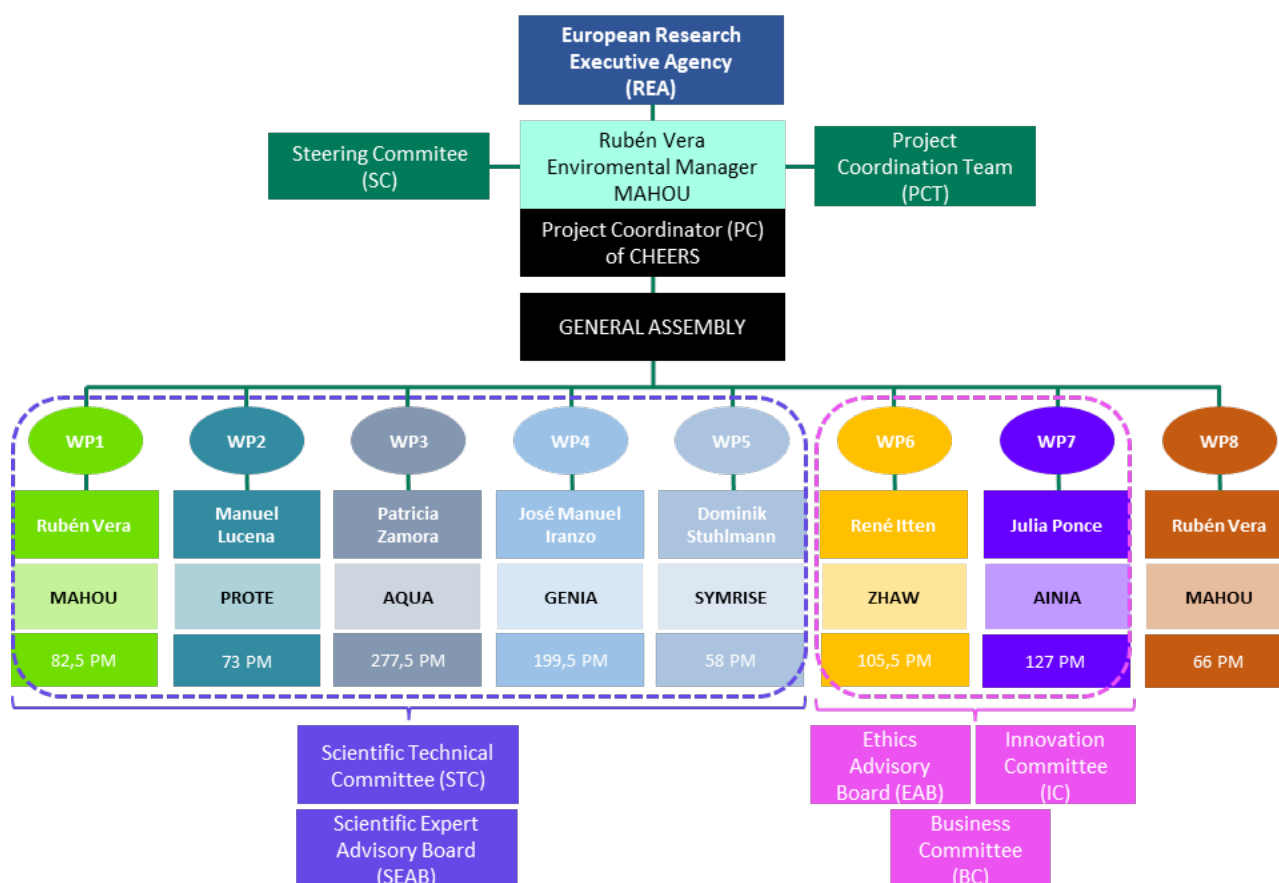


Figure 1: CHEERS bodies and roles' definitions

## 2.2 Decision-making

### 2.2.1 Project Coordination Team (PCT)

The **Project Coordination Team (PCT)**, led by Rubén Vera, Environmental R+D Coordinator at MAHOU (PC) will be the responsible of the correct execution of the project.

The PCT plays a crucial role in providing valuable support to both the General Assembly and the SC throughout the decision-making process, ensuring the smooth and effective development of the CHEERS Project. The PCT

will also be responsible for the elaboration of amendments, as a result of the decisions made by all the partners of the consortium in the General Assembly.

### 2.2.2 Steering Committee (SC)

- The WP leaders will meet **every month** in specific coordination meetings; these sessions will be the most relevant decision-making forum for the coordination of actions within each WP.
- The SC has the capacity to propose amendments which may include adjustments to timelines, reallocation of tasks or resources, or even reevaluation of partnership agreements, among others, with the final aim of addressing the issues hindering progress and ensuring that the project stays on track to achieve its goals. Once the SC has formulated the proposed amendments, it has the power to elevate them to the GA for consideration and approval. Successively, the PC will be in charge of elaborating and submitting the requests for amendment through F&T portal.

By having this mechanism in place, the SC can effectively address delays caused by specific partners and take necessary measures to mitigate any potential negative impacts on the project's success. It ensures that project activities and deliverables remain aligned with the established timeline and objectives.

### 2.2.3 Scientific Expert Advisory Board (SEAB)

A Scientific Expert Advisory Board (SEAB) will be appointed and steered by the General Assembly. The SEAB shall assist and facilitate the decisions made by the GA.

The SEAB is in charge of the CHEERS technical and scientific management, consisting in the following activities:

- **SEAB Meetings** with WP leaders that will be carried in a timely manner. These meetings will focus on:
  - Technical and scientific incidents that may occur in tasks.
  - Providing solutions and helping tracing contingency actions for those incidents.
- **Elaboration of minutes.** The Coordinator shall write the minutes of the SEAB meetings and submit them to the General Assembly.

The SEAB members shall be allowed to **participate in General Assembly** meetings upon invitation **but have not any voting right**.

### 2.2.4 Ethics Advisory Board (EAB)

The Ethics Advisory Board (EAB) is in charge of supervising and making decisions regarding the ethical factors in the framework of the CHEERS Project, most likely in the following issues:

- **Defining Purpose and Scope:** The EAB in a project of circular economy must first establish the purpose and scope of its activities. State the specific goals and objectives of the project, including the conversion of underused or waste sidestreams into bio-based products. Clearly define the boundaries and limitations of the project, considering sustainability, efficiency, and environmental impact. This step helps the board understand the ethical implications and potential challenges associated with the project.
- **Identifying Ethical Considerations:** Once the purpose and scope are established, the EAB needs to identify and assess the ethical considerations related to the project. This includes the following actions: i) evaluating potential environmental impact, social implications, and economic factors, ii) considering aspects such as the responsible use of resources, impact on local communities, potential health and safety concerns, fair distribution of benefits, and transparency in decision-making, iii) determining if there is any conflict of interest and ensuring the project is aligned with ethical principles and legal frameworks.

- **Developing Ethical Guidelines and Recommendations:** Based on the identified ethical considerations, the EAB should develop a set of ethical guidelines and recommendations for the project. These guidelines should provide a framework for decision-making and guide the project team in their actions, address issues such as sustainability, resource efficiency, waste management, stakeholder engagement, and the responsible use of bio-based materials, promote transparency, accountability, and long-term benefits for both the environment and society, regularly review and update the guidelines to adapt to emerging ethical challenges and changing circumstances.

*This body can be invited to participate in the SC meetings and GA to facilitate the proper decision-making process in this matter.*

## 2.2.5 Innovation Committee (IC)

The **Innovation Committee (IC)** is in charge of making the final decisions in regards of the following aspects:

- **Strategy Development:** The IC begins by developing a comprehensive communication and dissemination strategy. This involves identifying the project's key innovations, achievements, and outcomes, and determining the appropriate channels and methods to promote them effectively. This committee decides which strategy should be used to outline clear goals, messaging, and timelines for dissemination activities.
- **Coordination and Monitoring:** The IC should establish mechanisms for monitoring and evaluating the impact of these activities. It regularly assesses the reach, effectiveness, and reception of communication efforts and makes adjustments as needed. Throughout this process, it ensures that the intellectual property rights of project partners are safeguarded, ensuring that no publication or information disclosure compromises these rights.
- **Legal Obligations and Impact Assurance:** The IC should work closely with legal advisors and ensure compliance with relevant regulations and contractual agreements. Additionally, the committee plays a role in supporting partners to achieve the expected impact of the project, aligning dissemination activities with impact objectives and tracking progress towards these goals.

*This body can be invited to participate in the SC meetings and GA to facilitate the proper decision-making process in this matter.*

## 2.2.6 Business Committee (BC)

The **Business Committee (BC)** is the main body in charge of the decision-making process for the creation of CHEERS Ltd., which comprises:

- **Determination of the Business Structure:** The first step in the decision-making process for creating a Limited Company (Ltd.) is to evaluate and determine whether this business structure is suitable for the project needs. Secondly, to consider the advantages of a Limited Company, such as limited liability protection, tax benefits, and the ability to raise capital through shares. Then, to assess the nature of the business, its growth potential, and long-term goals to ensure that a Limited Company is the most appropriate structure.
- **Name and Registration:** Once to the decision to establish a Limited Company has been made, the next step is to choose a unique and suitable name for the company, and to ensure that the name aligns with the business objectives, brand identity, and is compliant with the legal requirements of the jurisdiction. To conduct a thorough search to confirm the availability of the chosen name. Following this, to register the company with the relevant government authority, providing all the required

documentation, such as the memorandum and articles of association, shareholders' details, and registered office address.

- **Compliance and Ongoing Obligations:** After the formation of the Limited Company, it is crucial to understand and adhere to the legal and regulatory obligations that come with this business structure. Being familiarized with tax requirements, accounting standards, financial reporting, and filing deadlines, ensuring to maintain accurate records of company activities, including accounts, minutes of meetings, and share transactions. Additionally, to appoint directors and company officers, as required, and establish procedures to comply with legal obligations such as conducting annual general meetings, filing annual returns, and updating the Companies House with any changes in the company's structure or administration.

*This body can be invited to participate in the SC meetings and GA to facilitate the proper decision-making process in this matter.*

# 3 Changes Management

If any changes to the project shall occur, actions and/or procedures are necessary. In case adjustments are needed on the project, the SC will inform and advise the PC, about any operational, financial or administrative matters to be discussed in a General Assembly meeting.

If the changes are approved by the General Assembly, the Project Coordinator will then inform the Grant Authority REA about the adjustments they wish to make, to officially know if undertaking the simplified procedure to get the approval of the changes propose or submit an official amendment request via Funding & Tender Opportunities Portal.

When the intended changes differ substantially from the initial plans, the Grant Agreement will need to be updated by means of an amendment. The procedure to submit an amendment is further explained in section 3.1.

## 3.1 Amendments

An amendment to the agreement represents a substantial change to the Grant Agreement originally approved by REA. The amendment cannot modify the general objective of a project nor increase the maximum contribution.

Only the non-substantial changes can be accepted by simplified procedure.

The following are considered as **substantial changes**:

- Nature and content of deliverables.
- List of deliverables.
- Name, legal address, legal status, bank account and/or VAT of the coordinating beneficiary.
- Name of any beneficiary.
- Partnership structure (addition or withdrawal of beneficiary or affiliate).
- Withdrawal of a co-financer or significant reduction of its contribution.
- Project duration.
- Financial structure.
- Changes to the budget category for volunteers (if used) always require an amendment.
- Changes to budget categories with lump sums costs or contributions (if used; including financing not linked to costs) always require an amendment.
- Changes to budget categories with higher funding rates or budget ceilings (if used) always require an amendment.
- Addition of amounts for subcontracts not initially foreseen.

The budget breakdown may be adjusted — without an amendment — by transfers between budget categories, as long as this does not imply any substantive or important change to the Description of the Action.

The procedure to request an amendment is as it follows:

The beneficiary will launch the amendment preparation via the Funding & Tender Opportunities portal, after clicking on the “Actions” button in the project and going to “Manage Project”. Then, the beneficiary can access to the “launch a new interaction with the EU” and select “Request for Amendment”. Once launched the request, the amendment is automatically assigned to a reference number.

Then, according to the Grant Agreement data modified, the system will select the relevant amendment type, providing an overview of the modifications entered, and list the compulsory supporting documents. The amendment request formally consists of two documents: the Amendment core and the Amendment request letter.

After all these steps, the preparation of the amendment will be ready to be submitted to the REA officer for informal review. After any necessary adjustment, finally, if the PO accepts the amendment request the CHEERS Project Legal Signatory (PLSIGN) must e-sign.

The EU services have 45 calendar days to access the request and the possibility to extend this deadline. If the amendment is accepted, the document will be signed by REA, and the Grant Agreement data updated in the system accordingly.

If an amendment is started at the same time as a payment is requested, the payment will be suspended until the amendment is solved.

### **3.1.1 Amendments to the CA**

Partners requesting an amendment to the CA must inform the PCT by email about their interest in proposing an amendment to the CA. Amendments can be related to a change in their legal status or to request an update in their background section. The partner request will be forwarded to the General Assembly, who will decide on the approval or not of such change. Other articles referred to payment distribution and rules can be amended also, if a justified situation applies. In any case, the PCT will always forward the request to the General Assembly for acceptance. Once the amendment has been approved, the PCT will prepare the new version and distribute it among the partners for signature. The PCT will retain the full original copy of the amended version and will distribute the full electronic copy to the partners. Each amended version will contain a list of track changes indicating place within the document and date of the change.

### **3.1.2 Amendments to the GA**

The conditions that apply to an amendment to the GA are described in Article 55.1 of the GA. If a partner needs to propose an amendment, it must be formally requested to the PCT by e-mail. A short description of the amendment request together with a detailed justification will be provided by the partner. If the amendment affects the partner individually, the PCT will proceed with the amendment. If the request applies or affects other partners of the project, the PCT will forward the request to the General Assembly for approval. Once accepted, the PCT will proceed with the amendment.

# 4 Communication

## 4.1 Internal communication

Internal communication refers to the process of information exchange among CHEERS key staff members on one hand, and with project third parties (i.e., suppliers) in the framework of the project, on the other.

Although the main decisions should be taken within project team meetings, through the daily internal communication a high amount of project tracking is done. Therefore, procedures for the “registration” of the communications are defined.

**Table 8: CHEERS Internal Communication List**

Issues	Responsible	Main contacts
<b>Administrative, financial and/or legal</b>	Coordinator	Rubén Vera (MAHOU)
<b>Technical</b>	WP Leaders	WP1: Rubén Vera (MAHOU) WP2: Manuel Lucena (PROTE) WP3: Patricia Zamora (AQUA) WP4: José Manuel Iranzo (GEN) WP5: SYM WP6: René Itten (ZHAW) WP7: Julia Ponce (AINIA) WP8: Rubén Vera (MAHOU)
	Scientific Technical Committee	Rubén Vera (MAHOU) Julia Ponce (AINIA) Raúl Muñoz (UVA) Patricia Zamora (AQUALIA)
<b>Dissemination &amp; Communication, Exploitation and IP</b>	Innovation Management Team	Julia Ponce (AINIA) Ana Díaz (INNOVARUM)

### 4.1.1 Communication channels

The PCT, led by Rubén Vera (MAHOU), will oversee coordinating with the rest of the consortium members the necessary actions for the correct execution of the project.

Although other channels may be used, only “traceable” communications will be taken into account in the scope of the procedure and thus encouraged as the most suitable way to consult and proceed.

Informal day-to day communication will be conducted by:

- e-mail (please use “CHEERS” as a reference on subject field).
- Telephone.
- Videoconference to discuss particular issues, via Microsoft Teams. The PCT will have periodic meetings to make the correct follow-up of the progress of the project and cover the needs at each moment, communicating with the leaders of each WP to take the necessary actions.
- To upload all documentation in the Microsoft Teams Repository. AINIA team has set up a Microsoft Teams Repository where all the project documents will be collected.

Since other communication channels keep no evidence of the communication, communications through the above-mentioned channels will be encouraged.

## 4.1.2 Consortium Meetings

Face-to-face meetings should take place every eight months, following the next schedule (proposal):

Table 9: Planning meetings (\*Tentative)

Month	Date	Hosted by	Location	Comments
KOM	29-30 Sept 2022	AINIA	Paterna, Valencia (Spain)	Kick off meeting. Visit to AINIA facilities
M8	July 2023	UVA	Valladolid (Spain)	2 <sup>nd</sup> Consortium Meeting. Show Taylor Flow Bioreactor
M17	Jan 2024	MAHOU*	Alovera, Guadalajara (Spain)*	visit to insect demo
M25	Sept 2024	SYSPRO*	Nigrán, Galicia (Spain)*	visit to High transfer bioreactor
M33	May 2025	AQUALIA*	* (Pendant)	visit BES reactor
M41	Jan 2026	AINIA*	Paterna, Valencia (Spain)*	Show batch ingredient processing
M48	Aug 2026	MAHOU*	* (Pendant)	Consortium meeting + Project review + showcase of project results

Ad hoc virtual meetings will be organized when necessary.

## 4.2 External communication

AINIA, as leader of Task 6.5 “Exploitation strategy” and WP7 “Communication and Dissemination”, will be the in charge of defining the Exploitation and Business Plan and coordinating the Communication and Dissemination plan and activities, together with the task leader INNOV.

Deliverables D6.1 “Preliminary Exploitation Plan”, D6.5 “Final Exploitation Plan”, D7.1 “Dissemination and Communication Plan”, D7.3 “Report on Dissemination and Communication actions – first version” and D7.4 “Report on Dissemination and Communication actions – final version” will be devoted to the design and execution of the Exploitation Plan and the Communication and Dissemination Plan respectively, in order to reach the expected impact of the project.

According to the Grant Agreement, target audience for CHEERS will be identified within Task 7.1 “Development of the Dissemination & Communication plan”, which aims to carry out the definition of target audiences (industry players -feedstock suppliers and end-users-, academia, policy makers, and the general public) and key networks and projects; D&C actions details.

The IC, chaired by AINIA and INNV, will also lead the following specific outputs for outreach strategies:

- **Creation of the project’s visual identity** and online presence to disseminate project news and findings.
- **Project website:** It will be the means through which the results achieved in the project are communicated to external stakeholders. The website will be a channel for announcing the latest news and promoting relevant events.
- **Organization of networking activities** (meetings to promote results or promotion through network resources-newsletters, social media).

- **Organization of online workshops** and offline workshops at the demo site targeted at academia and biobased industry professionals.
- **Participation in industry events** (trade shows and workshops) and scientific conferences.
- Ensuring the **dissemination of the project** progress and results by publishing sectorial publications (technical publications and papers), press releases and general media publications.
- **Social Media**: CHEERS will be actively promoted on the CHEER Project’s social media such as LinkedIn, Twitter, YouTube, etc. in order to ensure a strong social media presence.

As well, it is crucial that each partner in the consortium uses the following EU logo in all documents resulting from the project activities. The emblem must remain distinct and separate and cannot be modified by adding other visual marks, brands or text. Apart from the emblem, no other visual identity or logo may be used to highlight the EU support. When displayed in association with other logos (e.g. of beneficiaries or sponsors), the emblem must be displayed at least as prominently and visibly as the other logos.



Figure 2: EC emblem

Also, any communication or dissemination activity related to the action must use factually accurate information. Moreover, it must indicate the following disclaimer (translated into local languages where appropriate):

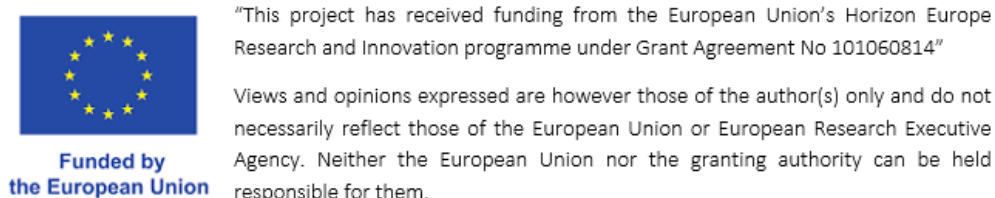


Figure 3: Disclaimer, as indicated in the GA

#### 4.2.1 Communication & Dissemination actions procedure

All partners are encouraged to disseminate their results to target audiences and comply with the obligation to disseminate stated in Article 17 of the Grant Agreement. Nevertheless, **the dissemination obligation is made subject to any restrictions linked to the protection of intellectual property**, as written in the GA.

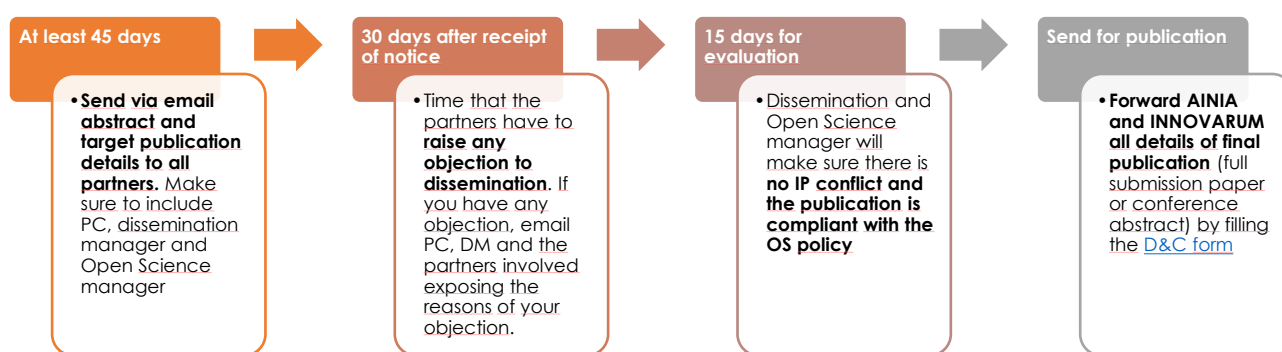
Open Science obligations and dissemination obligations in Horizon Europe are NOT a general obligation to disseminate. **They are even less an obligation to surrender IP rights, and for this reason should not be construed in opposition to IP protection.**

In order to prevent any dissemination of background or foreground from third parties and avoid IP breach conflicts any dissemination actions must have the prior consent from all partners before it takes place. To get that consent, a Dissemination procedure has been set in place. This procedure is compliant with article 8.4.2.1 of the Consortium Agreement, which states that: *‘During the Project and for a period of 1 year after the end of the Project, the dissemination of own Results by one or several Parties including but not restricted to*

*publications and presentations, shall be governed by the procedure of Article 17.4 of the Grant Agreement and its Annex 5, Section Dissemination, subject to the following provisions.*

*Prior notice of any planned publication shall be given to the other Parties at least 45 calendar days before the publication. Any objection to the planned publication shall be made in accordance with the Grant Agreement by written notice to the Coordinator and to the Party or Parties proposing the dissemination within 30 calendar days after receipt of the notice. If no objection is made within the time limit stated above, the publication is permitted.'*

The **Dissemination procedure** must be used by any consortium member willing to publish (e.g. scientific journals publication, thesis,...) or perform **any public disclosure of results from the project** in any media (poster or oral presentations in conferences, sectorial fairs, workshops or events in their organizations...) during the course of the Project and for a period of 1 year after the end of the implementation. This Dissemination procedure is outlined in **¡Error! No se encuentra el origen de la referencia..**



**Figure 4: Dissemination actions procedure**

Communication actions, public disclosure of information of project info not involving project results, do not need to follow the Dissemination procedure, although partners are encouraged to make the Communication manager (INNOVARUM) aware of any action to promote the project before it takes place.

Once any Communication or Dissemination action has been completed (i.e. submission of a paper for publication or contribution in a conference has been done), all partners must complete, in less than 15 days, the D&C actions form, available online. This info will be used to evaluate and keep track of the progress in reaching D&C KPIs and the whole consortium is responsible for keeping this information up to date on a regular basis. This file will provide information on the type of actions, audience groups involved, and the number of people impacted through it.

#### 4.2.1.1 Open Science policy

The Open Science Policy (OPS) is part of the CHEERS Project Management Plan (D8.1). The OPS aims to specify how open science assumptions will be implemented during the project, regarding research data, methodologies or any other knowledge generated during the project. According to Article 17 of the Grant Agreement, Open Science Obligations must follow the principle *“As open as possible, as closed as necessary”* unless providing open science are against the beneficiary’s legitimate interests, including regarding commercial exploitation, or be contrary to any other constraints, in particular the EU competitive interests or the beneficiary’s obligations under this Agreement; if open access is not provided (to some or all data), this must be justified in the Data Management Plan.

Open Science is a priority for the European Commission (EC), and it is the standard method to perform research under their funding programmes, where partners from academia, industry, public authorities among others, participate to create collaborative research. This multi-actor approach creates creativity and trust in

sciences increases. For this reason, the EC, requires beneficiaries to make their finding accessible. Indeed, the aims for OPS under Horizon Europe Funding research programmes are the following<sup>1</sup>:

- Ensure that beneficiaries retain the intellectual property rights they need to comply with their open access obligations.
- Require research data to be FAIR and open by default (with exceptions notably for commercial purposes).
- Promote the adoption of open science practices, from sharing research outputs as early and widely as possible, to citizen science, and developing new indicators for evaluation research and rewarding researchers.
- Engage and involve citizens, civil society organisations and end-users in co-design and co-creation processes and promote responsible research and innovation.
- The [European Open Science Cloud](#) (EOSC), available from 2021, is a pan-European project designed to create a virtual environment for sharing and accessing research data across borders and scientific disciplines.
- Fund the development of an open-access publishing platform to host Horizon 2020 and Horizon Europe beneficiaries' publications.

#### 4.2.1.1.1 FAIR Principles

Along with the Data Management Plan (D8.5), CHEERS Open Science Policy will be aligned with the following FAIR principles:

1. **FINDABILITY**: including any identifiers (such as DOIs), keywords, metadata standards and other practices that will optimize the potential of finding and re-using the data.
2. **ACCESSIBILITY**: first, details on the repository in which the data will be deposited should be given. Second, the access to the data itself, including open access, access protocols and restrictions aspects. Third, issues relating to metadata accessibility and availability should be described. In the case of certain data or metadata that will not be shared – proper justification should be provided.
3. **INTEROPERABILITY**: the vocabularies, standards, formats, or methodologies that will be used to enable data exchange, re-use and interoperability.
4. **REUSABILITY**: research data will be well-documented and prepared for reuse. This sub-section should provide information on the expected documentation (e.g., explaining methodology, codebooks, variables).

For more information on how CHEERS project complies with the FAIR principles, please refer to D8.5 Data Management Plan.

As CHEERS is a collaborative project, formed by partners from different fields which cooperate together, Open science is at the core of the project. CHEERS consortium will share not only results but also methodologies along with the research (i.e., co-creation strategies). Additionally, CHEERS aims to share knowledge openly and more specifically with related sectors such as the bio-based and the brewery sector (e.g., through networking activities from WP7). Specific focus will be put on **interoperability** of the data, to ensure CHEERS results can be uptaken by other stakeholders especially other biobased industries. In this context, an ad-hoc roadmap of scientific knowledge transfer of the new biotechnology value chains validated at CHEERS to the main industrial stakeholders, society and the European Commission's Knowledge Centre for Bioeconomy will be drafted in the framework of WP7. Bio-based industries and SMEs will be identified at

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<sup>1</sup> European Commission (2021) Open Science. [Link](#).

industry events and through definition of target audiences (T7.1) and invited to a series of online workshops, and offline workshops at the demo sites (see T7.2, T7.5) to demonstrate the effectiveness of the CHEERS bio-refinery to new companies. End-users of the products and policy makers will also be invited to demonstrate market potential. This work will be performed during the whole project length (M1-M48) and involves all partners effort, but mostly AINIA, INNV and EARTHWATCH as task leaders of WP7.

#### 4.2.1.1.2 CHEERS Open Science Policy

The project coordinator (MAHOU SAN MIGUEL) and the Open Science leader (INNOVARUM) will ensure the correct compliance of the Open Science Policy and monitor all actions related to Open Science. Moreover, communication with the IPR Manager will be done on a regular basis to ensure the OSP do not enter in conflict with the IPR strategy. This OSP will be reviewed in each reporting period to ensure that it is kept up to date.

It is important to remark that the Open Science Practices and the Obligation to disseminate (Article 17 of Grant Agreement) are not incompatible with the IP Protection Obligation (Article 16 of the Grant Agreement). In general, and to guarantee the future exploitation strategies of the technologies under development, the dissemination of results can be postponed and published after protection via a patent or other means of protection (e.g., utility models, trade secrets, trademarks, copyrights, industrial designs, etc.) is completed. It is important to remark that, according to the Grant Agreement, a budget of 15K€ for IPR purposes are foreseen for AQUALIA, so that, IP protection for several project results and/or methodologies is expected for this project. Further details will be provided in the final version of the Project Management Plan.

According to the potential commercial interest we have set the following schema:

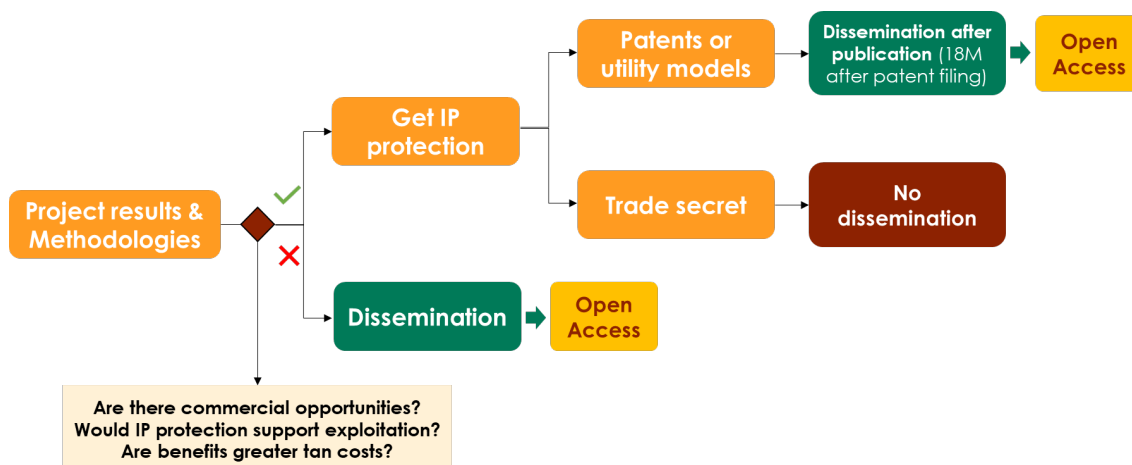


Figure 5. CHEERS Project results & methodologies pathways.

To sum-up up, projects results and methodologies need to be assessed to see if they are going to be protected. If IP protection measures are not applicable, it needs to be published as soon as possible following the Open Access rules (Article 17 Grant Agreement). If a project result or methodology gets IP protection, two options are possible: 1) Trade secret: the results/methodologies are not disseminated, 2) Patent/utility model: results and/or methodology are published after patent/utility model concession. Therefore, the research output to be published can be interoperable at the end of CHEERS. In addition, all published data will be reusable for research purpose.

Specifically, to date (August 2023) the following actions are foreseen in the CHEERS Grant Agreement:

- **Scientific publications.** Production of scientific publications to promote results in academia. These scientific publications will be delivered in relevant journals (e.g., Sustainability; Bioresource Technology, JEMA). They will be published as digital open access and as public deliverable at Zenodo/UVaDOC as repository. **KPI: 5 scientific publications.**

- **Materials prototype.** Once the prototypes of the products developed by CHEERS are ready, press notes will be published digitally on the website and as a public deliverable in Zenodo repository to disseminate these achievements (a previous consent from partners will be requested) Additionally, other materials such as pictures, presentations, videos, etc. Will be developed during the project execution. **KPI: 3 press releases.**
- **Educational materials.** Digital open access and as public deliverable at the Cordis as repository. **KPI: 6 workshops (1 online, 5 face-to-face). 10 audio-visual materials.**

In addition, we expect that the developed technologies will represent breakthrough innovations with commercial interest that will require measures of IP protection such as patent. If patenting is not possible, trade secret will be ensured.

#### 4.2.1.1.3 Open Science Protocol for Peer reviewed publications

##### 4.2.1.1.3.1 Before publication of a peer reviewed publication

According to Article 17 of the Grant Agreement, the beneficiaries must disseminate their results as soon as feasible, in a publicly available format, subject to any restrictions due to the protection of intellectual property, security rules or legitimate interests. Moreover, each beneficiary who intends to publish results, must notify the consortium in advanced. In order to ensure transparency and consensus among the consortium members regarding planned publications, a specific methodology has been established:

- Any planned publication by a consortium member shall be communicated to the coordinator and the Party or Parties proposing the dissemination.
- As stated in the Consortium Agreement (article 8.4.2.1), prior notice of intended publication must be given to the consortium at least **45 calendar days** before the publication.
- The recipients of the notice have a period of **30 calendar days** from the date of receipt to review the planned publication and raise any objections.
- If no objections are raised within the specified 30-day period, the publication is deemed permitted, and the author can proceed with the dissemination.
- In the event of objections being raised, the involved parties shall engage in discussions to address the concerns and reach a consensus.

As it is stated in the Grant Agreement, the consortium opted for the “**gold open-access**” model. The gold open access model consists of publishing in journals that do not establish any barriers to content and use copyright to permit reuse, generally under the terms of a licence, thus providing the integrity of published work and authorship is properly attributed. CHEERS consortium allocated the resources needed for the corresponding gold publication fees to further promote CHEERS visibility. A budget of 7.5 k€ for open access publications has been allocated to UVA. All publication activities will carefully consider the legislative requirements for patent applications, particularly those already envisioned and budgeted.

##### 4.2.1.1.3.2 After publication of a peer reviewed publication

According to **D8.4 Data Management Plan – 1<sup>st</sup> version** developed by AINIA, CHEERS Project Open data rules will follow the Article 17 of the Grant Agreement. the following rules should be followed by all the consortium partner to comply with the FAIR Principles:

1. To make data **FINDABLE**, a PID identifier (document reference) will be assigned. In addition, two EU standards will be applicable with the associated metadata document ([INSPIRA](#), [DCAT](#)). Metadata will include project information (i.e., project title, researchers, etc.).
2. To make data **ACCESIBLE**, the data and associated metadata will be deposited in an internal common repository of the consortium. As for the chosen data to publish, it will be deposited in an open access platform. However, data publication will be restricted when necessary to allow the protection of

results. All copyright and Intellectual Property issues respect to all the data generated during the project will be managed by the IPR manager of CHEERS project.

Universidad de Valladolid (UVa) will deposit their open and shared data at UVaDOC (Documentary Repository of Universidad de Valladolid <https://uvadoc.uva.es/>) following its Open Access policy. Other open Science to be used by the Consortium include [Zenodo](#).

3. To make data **INTEROPERABLE**, all data will be published using standard file formats (docx, xlsx, txt, pdf, csv etc.) as noted above, and therefore will be interoperable and ready to be exchanged and re-used. Moreover, researchers involved in the project are registered in different databases and research networks (i.e., ResearchGate, Web of Science, ORCID, Scopus) to interact with other researchers.
4. To make data **REUSABLE**, the data that is published in Open Access will be reusable and this data will be provided under a CC-BY licence (<https://creativecommons.org/licenses/>). This approach will increase data reusing. Unique data identifier and access to links associated to public repositories will be provided when data are deposited. For publication, gold open access is the preferred option; therefore, data susceptible of publication will be available upon publication.

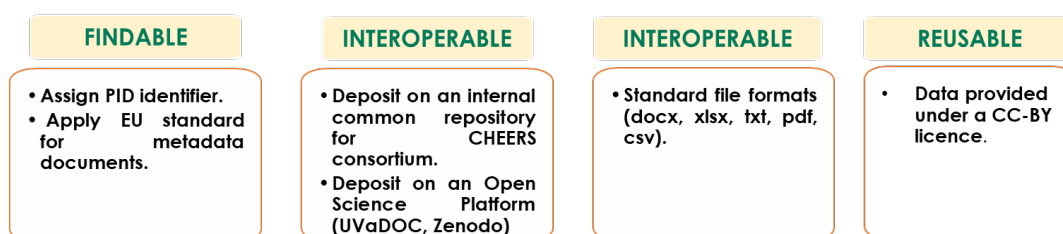


Figure 6. FAIR principles applied to CHEERS Open Science Policy.

For more information, please refer to D8.5 Data Management Plan.

#### 4.2.1.1.4 Open Science protocol for non-peer reviewed publications, or publication of results in other formats

The beneficiaries will identify which data will be open and which data cannot be shared (or need to be shared under restriction). **For those results that will not be open, a clear justification should be provided.** The release of data will be previously discussed and agreed in the framework of the general assembly to deal with the statements collected in the GA and CA. According to Article 17 of the Grant Agreement “*The beneficiaries must disseminate their results as soon as feasible, in a publicly available format, subject to any restrictions due to the protection of intellectual property, security rules or legitimate interests*”. However, objections to publish results may arise if it is possible to show legitimate interests in relation to the results or background would be significantly harmed. In such cases, the results may not be disseminated although appropriate steps are taken to safeguard those interests.

However, it has been agreed that several project data are already public and **free-to-disseminate**, and it is possible to distribute them for communication purposes without previous notice to the consortium. These public data include the following:

- Project title and acronym.
- Project objectives.
- Project scope.
- Foreseen bio-based products.
- Expected project impact.
- Project partners.
- Project length.
- Work Package titles.

This information is already public and available at CORDIS and at the project website.

For those data which will not be shared outside of the consortium and will not be patented (e.g., internal meeting minutes, workshop, conferences, seminars, etc.), they will be considered as trade secrets and the consortium members will not be authorised to share them for external purposes.

The consortium aims at using the project website (or other easily accessible repositories) as repository for open accessible (public) data, ensuring easy access to anyone interested. **Examples of data/information/content that will be available on the website in this regard includes:**

1. **Public deliverables:** according to the Grant Agreement, 23 deliverables out of 32 are public. These public deliverables will be published through the project website once they are approved by the EC. INNOVARUM (communication manager) will be in charge on publishing the deliverables through the website as soon as they are approved.
2. **Power point presentations (PPT):** according to the Data Management Plan, the execution of several presentations is foreseen, for both internal (e.g., steering committee) and external purposes (e.g., fairs). For the external purposes, if the presentation does not contain the project public information, the presentation will be shared 45 days in advanced with the consortium and agreed by it. After the consortium's feedback or acceptance, the presentation will be shared with its members via mail or common repository, so that all of them have access to it.
3. **Media publications (newspaper, magazines).** 15 media publications to disseminate CHEERS project results are foreseen in the Grant Agreement. If the media publications contain results (dissemination action), it should be shared with the consortium with 45 days in advanced. Objections can be made in the following 30 days after notice receipt. If the media publication does not contain results but general information about the project, it should be sent to the project coordinator MAHOU SAN MIGUEL 15 days in advanced for approval. Objections can be made during the following 10 days.
4. **Website, blog & social media content.** Regular project content related to project's advancements and results is foreseen to be release through blog publications, on the website and through social media. If the blog post to be published contains project results, the dissemination protocol should be followed (see above). If general content about the project is about to be published, it should be approved by the project coordinator MAHOU SAN MIGUEL. It should be sent to the coordinator 15 days in advanced. Objections can be made during the following 10 days.
5. **Events (workshops, conferences, networking meetings).** When partners attend events to promote/present the project's results, pictures, videos and social media posts facilitated by the attendees will be published across the project's profiles. When organising workshops, the consent for recording and publishing clips/screenshots will be requested before the event kicks off. Objections can be made when the information is provided.
6. **Methodologies.** CHEERS project knowledge (including methodologies) is expected to be shared as part of the engagement with the bio-based industries (Task 7.3). When methodologies will be disseminated, it will be monitored by the IPR manager to confirm there is no IP conflict.
7. **Graphic materials (e.g., roll-up, posters, flyers).** 10 audiovisual materials related to the project's results and progress will be developed throughout the project. The content generated for these materials will come from the technical partners who will carry out specific prototypes within the project. Before the materials are published, it should be approved by the project coordinator MAHOU SAN MIGUEL and the Work Package leaders involved in these results. It should be sent to the Work Package leaders and Project Coordinator 15 days in advanced. Objections can be made during the following 10 days.
8. **Other project materials (e.g., equipment imagery).** Partners are highly encouraged to take pictures of equipment, record videos, take pictures or carry out interviews to promote the results that are being developed, which will be validated prior to its publication on the CHEERS channels.

#### 4.2.1.1.5 CHEERS protection of exploitable results

For Innovation Actions such as CHEERS is important to ensure Open Access to relevant results and at the same time to protect results that could lead to exploitable results. As said before, the Dissemination Obligation and the IP Obligations are not incompatible. The Key Exploitable Results (KER) will be selected by the consortium due to their high degree of novelty, commercial exploitation or impact. Once the KERs are identified, their potential will be assessed based on their technology readiness, commercialisation potential among others and the possibilities regarding IP protection and exploitation routes will be assessed by the CHEERS Innovation Manager (AINIA) who will be monitoring results identifications and ways to protect them (e.g., patents, utility models, trade secrets, etc.). This will be done through a results identification form to be sent to the consortium to complete the list of KERs and add new one not initially foreseen in the proposal writing phase. The KERs lists will be regularly updated, once per year during the project execution. Once the KERs are correctly protected via the preferred IP route (e.g., patent, utility model) they will be openly shared, thus ensuring accomplishment with the Open Science obligations and the IP Protection Obligation at the same time.

#### 4.2.1.1.6 CHEERS Open results

The project results that will be published will be evaluated during the project execution and will be listed in the final version of the D8.1 “Project Management Plan” to be delivered in M24.

# 5 Document Management

Documentation stands for the set of files related to the work carried out under the CHEERS Workplan by each partner within the consortium.

Documentation will not be limited but should follow agreements reached in the project meetings (conclusions and tasks on the minutes) or in formal communications. Circulation of documentation will be defined in the same manner.

The documentation will be intended to be used internally and following the dissemination rules stated by the Grant Agreement with the REA.

## 5.1 Format

- Documentation will be shared in formats compatible with: MS Office 365.
- Preferably the above-mentioned software should be used on its generation.
- Language used for official written documents and all the reporting will be English.
- Templates for the production of documents (such as presentations, agendas and minutes) are available in the MS Teams Repository.

## 5.2 Codification of documents

The codification of documents tries to clearly identify a relevant set of information: the type of documentation, the deliverable it contributes to, author/responsible and version.

Files will be identified according to the following structure:

**CHEERS\_[DOCUMENT TYPE AND REFERENCE]\_[DISSEMINATION LEVEL]\_v[VERSION NUMBER]-[STATUS]**

Where:

- **DOCUMENT TYPE:** A code that will identify the direct destination of the information included. Below are shown the considered codes.

**Table 10: Document identification**

<b>Dxxxx</b>	Deliverable number according to the Grant Agreement.
<b>PRx</b>	Contributions to Periodic Report x (including financial statements)
<b>PUB</b>	Documentation addressed to direct dissemination/publication
<b>CHEERS</b>	General documentation not specifically linked to any D or WP, but in the framework of the project.

- **FILENAME:** Non-restricted name. Just what the author considers a logical name. Only one rule will be stated: assembled versions (both intermediate and final) of Ds and PRs will not have name.
- **AUTHOR:** Participant short name as it appears in the Description of Work of the Grant Agreement. Consolidated PRs will not state author, as they will be responsibility of the coordinator. Codes are shown below.
- **DISSEMINATION LEVEL:** Public (PU) or sensitive (SEN), as stated in the GA.

➤ **VERSION:** Two-digit code identification the document version:

**Table 11: Example of document identification**

Intermediate versions	01 to 09
Final versions	deF
Further modifications to final versions	deF 01 to 99

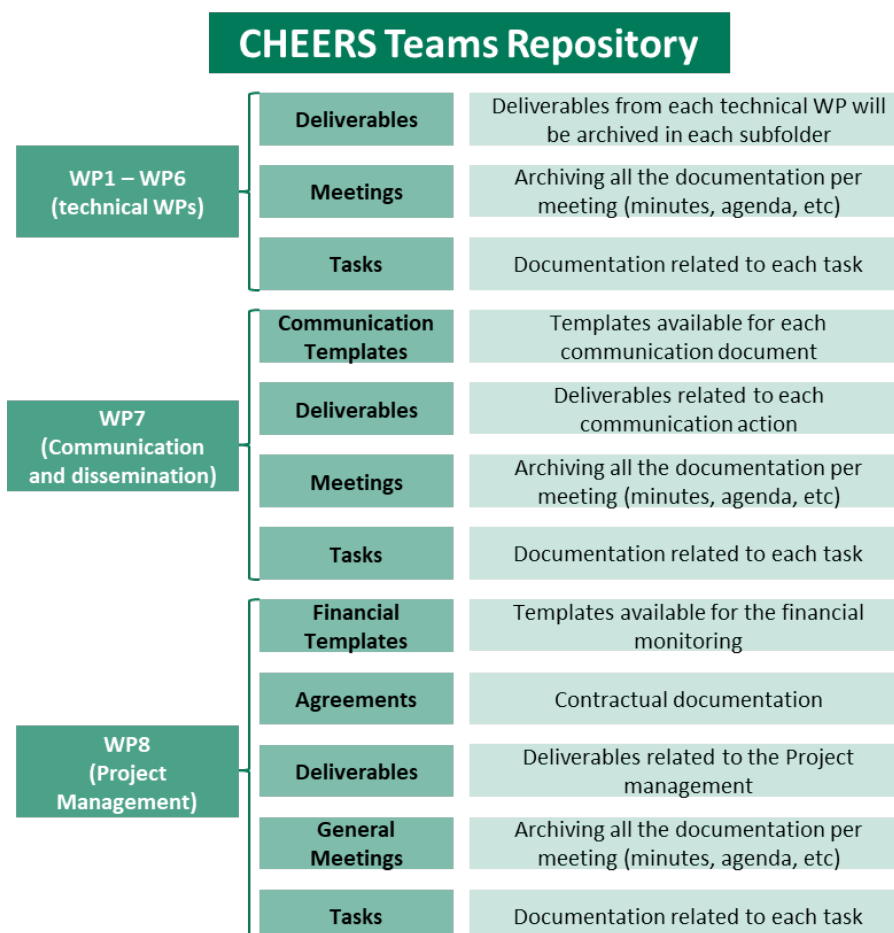
## 5.3 Examples

**Table 12: Example of document identification**

Final version of D1.1:	CHEERS_D1.1_PU_deF.doc
Intermediate version of D2.2:	CHEERS_D2.2_PU_04.doc
Periodic Report 2 (first version):	CHEERS_PR2_SEN_01.doc
Periodic Report 2 (final version):	CHEERS_PR2_SEN_deF.doc

## 5.4 Documental Archive

All CHEERS Project related documentation will be archived in AINIA's Microsoft Teams Repository. This Repository is organized by the following structure:



**Figure 7: AINIA's Microsoft Teams Repository Structure**

## 5.5 Availability and storage

Official documents (Dxxxx\_, PRx\_) will have for a limited period its latest two versions available in the Microsoft Teams Repository, in a folder that will contain the whole CHEERS Project dossier. The PCT will keep in its internal records these two versions.

## 5.6 Deliverables production process

All deliverables prepared in CHEERS, before being submitted to the REA, must undergo an official review by the SC, which will propose reviewers within the consortium to generate a final version of the deliverables and send it to the PC for its submission in the F&T Portal. This review process is further organized in the following tasks:

- A deliverable template is available in the MS Teams Repository, with the structure of all the information that the documents must contain for all the WP Leaders to use it for the production of deliverables.
- The Deliverable draft by the Deliverable responsible and reviewed by the respective WP leader. Then, an assigned internal reviewer within the consortium, will revise it and send feedback to the Deliverable responsible, to produce the final version and send it to the PC for its submission within the deadline indicated in Work Plan.
- Upon revision, iterations between the internal reviewer and the responsible of the deliverable might be required to produce a final version internally approved for submission.
- Finally, the Project Coordinator approves the deliverable and submits it to the REA through the Funding & Tender Opportunities Portal. One sample of each developed material shall be stored at the Project dossier in the consortium's Microsoft Teams Repository for control and audit purposes.

Deliverables which contain classified information must be submitted according to special procedures agreed with the REA.

In case of one or more deliverable targets are not successfully reached, adequate corrective measures are put in place to ensure the project performance as well as to minimize the impact at the Programme level following the procedures specified in the Programme Manual.

Deliverables are generated under the responsibility of the WP Leader, who will be responsible for ensuring that all deliverables under its WP are prepared correctly and in time. The PCT will also check on the status of upcoming deliverables during the Steering Committee meetings where follow-up actions and corrective measurements will be proposed, if needed.

### 5.6.1.1 Deliverable preparation

All project deliverables must be elaborated following the template produced for that purpose and which can be found in the project's repository on Teams, under WP7 Dissemination & Communication > CHEERS templates.

This template depicts the structure that all deliverables should follow:

- Table of Contents
- Executive Summary – a brief summary of the key points of the main document
- Abbreviations and acronyms
- Introduction – an outline of the aims and objectives of the deliverable and where it fits in the context of CHEERS project. The introduction should also explain the interdependences related to this

deliverable, whether this work is drawing on earlier tasks and deliverables and what other tasks will use this deliverable as input or for structuring their work.

- Main body of the report – this section will explain the task that was carried out and the results generated and illustrate the technical and scientific progress made within the task.
- Conclusions
- References
- Annexes – Annexes of data or further information not suitable for the main body of the report either due to its detailed nature or separated for confidentiality purposes.

The deliverable leader is the person responsible to produce the document according to the guidelines described herein. WP leaders should get involved from the beginning in the process of deliverable preparation. The scope, methodology employed, and high-level structure of each deliverable must be agreed between the WP leader and deliverable leader, as well as the needed contributions from other partners. Such discussions can be managed in the respective WP meetings or in dedicated meetings arranged for that purpose.

### 5.6.1.2 Deliverable review and submission

To assure expected quality levels are met, all deliverables must be subjected to an internal review process before submission to the EC Participants Portal. At least two reviewers will be named for every deliverable: the WP leader, and an internal reviewer from the consortium who has not been involved in its elaboration. Deliverable internal reviewers can be members from any of the participating partners and will be assigned in the General Assembly at least 6 months in advance the deliverable due date.

The partner responsible for each deliverable must provide a first version to the WP leader at least 35 days before the official submission deadline. WP leaders have 12 days to provide their revisions to the document’s responsible and pass it to the internal reviewer assigned. Internal reviewers have 14 days to send their document revisions to the deliverable’s responsible and WP leader. The final version of the deliverable, amending all revisions introduced by the reviewers, must be sent to the PCT at least two days before the final submission deadline. Final submission will be done by the Project Coordinator.

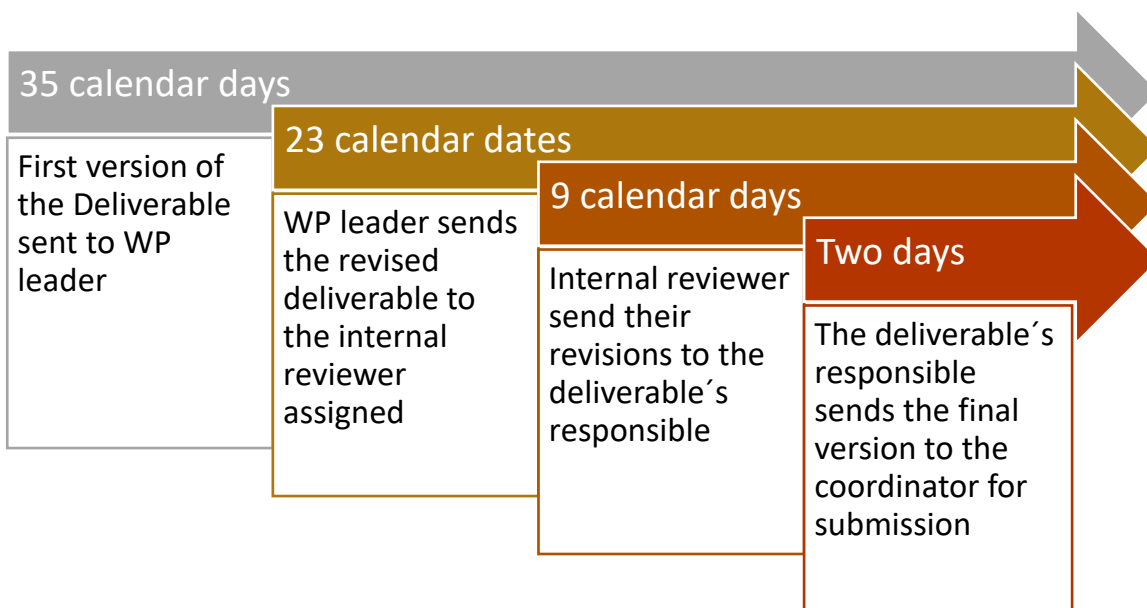


Figure 8: Deliverable review process

The following checklist will be used by WP leaders and internal reviewers to assess the quality of the Deliverables.

**Table 13: Quality of deliverables checklist**

Technical criteria	YES/NO
Does the report address properly and match the description of the workplan?	
Does the report reflect the effort foreseen in the workplan/task?	
Is the contribution from all partners involved in the WP effectively reflected in the report?	
Does it have enough technical detail: description of work performed, methodology, technology used, experimental design & trials, and results?	
Final versions	YES/NO
Was the report issued on time?	
Has the report been written using the right template?	
Has the report a front page?	
Are the pages numbered correctly?	
Are all figures, tables and diagrams clear, easy to understand and due referenced in the report?	
Are all photos, tables and diagrams titled?	
Is the content clear and easy to understand?	

Unless otherwise stated, submitted deliverables would be made available to all project beneficiaries under the respective WP channel folder. Those deliverables containing data or information which is confidential or commercially valuable have been classified as Sensitive, and no public dissemination must be made outside the project consortium by any of the project beneficiaries. By contrast, public deliverables will be automatically posted online on the Project Results platforms and published on the CHEERS website, once approved in the EC Participants Portal.

## 5.7 List of deliverables

**Table 14: Deliverables List as in the GA**

Deliverable Nº	Deliverable Name	WP Nº	Lead Beneficiary	Type	Dissemination Level	Due Date (month)
D1.1	Report on the characterization of sidestreams of bio-based industries	WP1	3 - UVA	R — Document, report	SEN - Sensitive	5
D1.2	Report on the biomass/bioproducts yields and optimal platform operation	WP1	9 - AINIA	R — Document, report	SEN - Sensitive	7

D1.3	Report on the bio-based products regulatory and market uptake barriers	WP1	9 - AINIA	R — Document, report	PU - Public	7
D1.4	First feasibility study of CHEERS approach at the case study site	WP1	7 - GEN	R — Document, report	PU - Public	7
D2.1	Engineering and commissioning of insect bioconversion platform	WP2	4 - PROTE	DEM — Demonstrator, pilot, prototype	PU - Public	15
D2.2	Report on demo insect production and quality assessment of the intermediate produced	WP2	4 - PROTE	DEM — Demonstrator, pilot, prototype	PU - Public	47
D3.1	Engineering and commissioning of CO <sub>2</sub> and CH <sub>4</sub> bioconversion platforms	WP3	2 - AQUA	R — Document, report	SEN - Sensitive	18
D3.2	Report on CO <sub>2</sub> bioconversion to caproic acid and hypochlorite, and CH <sub>4</sub> bioconversion into SCP and ectoine, at demo scale	WP3	7 - GEN	DEM — Demonstrator, pilot, prototype	PU - Public	47
D3.3	Quality assessment of the intermediates of the microbial platform	WP3	9 - AINIA	R — Document, report	PU - Public	47
D4.1	Engineering and commissioning of DSP units	WP4	7 - GEN	R — Document, report	SEN - Sensitive	18
D4.2	Report on the optimal operating conditions of DSP and integration of CHEERS side streams	WP4	7 - GEN	R — Document, report	SEN - Sensitive	48
D4.3	Report on the properties of the purified ingredients and bioproducts	WP4	9 - AINIA	R — Document, report	PU - Public	48
D5.1	Validation report of insect-based protein drinks	WP5	1 - MAHOU	R — Document, report	PU - Public	48
D5.2	Validation report of caproic-based feed and Cl <sub>2</sub> -based disinfectant	WP5	2 - AQUA	R — Document, report	PU - Public	48
D5.3	Validation report of ectoine-based cosmetic and SCP-based petfood	WP5	6 - SYM	R — Document, report	PU - Public	48
D6.1	Preliminary Exploitation Plan	WP6	9 - AINIA	R — Document, report	SEN - Sensitive	6
D6.2	Report on TEA and LCSA methodology and scale-up	WP6	11 - ZHAW	R — Document, report	PU - Public	12

D6.3	Final report on TEA and LCSA including biodiversity impacts	WP6	11 - ZHAW	R — Document, report	PU - Public	42
D6.4	CHEERS business model for three scale brewery plants	WP6	1 - MAHOU	R — Document, report	SEN - Sensitive	47
D6.5	Final Exploitation and Business Plan	WP6	9 - AINIA	R — Document, report	SEN - Sensitive	47
D6.6	Policy Brief - First Version	WP6	1 - MAHOU	R — Document, report	PU - Public	18
D6.7	Policy Brief - Final Version	WP6	1 - MAHOU	R — Document, report	PU - Public	47
D7.1	Dissemination and Communication Plan	WP7	5 - INNV	R — Document, report	PU - Public	6
D7.2	Engagement strategy targeting bio-based industries	WP7	12 - EARTHWATCH	R — Document, report	PU - Public	12
D7.3	Report on Dissemination and Communication actions - first version	WP7	9 - AINIA	R — Document, report	PU - Public	24
D7.4	Report on Dissemination and Communication actions - final version	WP7	9 - AINIA	R — Document, report	PU - Public	48
D8.1	Project Management Plan - first version	WP8	1 - MAHOU	R — Document, report	PU - Public	12
D8.2	Project Management Plan - final version	WP8	1 - MAHOU	R — Document, report	PU - Public	24
D8.3	Risk Management Plan	WP8	1 - MAHOU	R — Document, report	PU - Public	36
D8.4	Data Management Plan – first version	WP8	9 - AINIA	DMP — Data Management Plan	PU - Public	6
D8.5	Data Management Plan – interim version	WP8	9 - AINIA	DMP — Data Management Plan	PU - Public	36
D8.6	Data Management Plan – final version	WP8	9 - AINIA	DMP — Data Management Plan	PU - Public	46

## 5.8 Milestones monitoring process.

The PCT and the SC jointly shoulder the responsibility of effectively monitoring milestones throughout the project's lifecycle.

The PCT, consisting of dedicated members, is tasked with day-to-day oversight and management of the project. They closely track the progress of activities, ensure adherence to schedules, and identify any deviations or obstacles that may impact milestone achievement.

Working closely with the PCT, the SC plays a critical role in providing guidance and strategic direction. They review milestone progress reports and actively engage in discussions to assess the overall project trajectory on each SC meeting. Their valuable insights and expertise help identify potential risks and suggest necessary adjustments to keep the project on track.

The collaborative effort between the PCT and the SC ensures timely milestone monitoring and allows for proactive decision-making. By leveraging their combined knowledge and experience, they can promptly address challenges, allocate resources effectively, and make informed adjustments when required, thereby maximizing the project's chances of success.

## 5.9 List of Milestones

Table 15: Milestones List as in the GA

Milestone Nº	Milestone Name	WP Nº	Lead Beneficiary	Means of verification	Due date (month)
1	Project website launched	WP7	5 - INNV	Website available and D7.1 submitted. Supervision of the WP Leader.	6
2	Operational parameters established for demo-scale operation of insect and microbial platforms	WP1	9 - AINIA	Operational conditions for production of expected amounts of bioproducts. D1.2 submitted. Supervision of the WP Leader. Supervision of the Regulatory and the SEAB.	7
3	Insect demo site start-up	WP4, WP2	4 - PROTE	Construction finished: insect demo plant ready for operation. WP Leaders will supervise the correct performance of the unit applying basic operational parameters. Supervision of the Regulatory and SEAB.	16
4	Microbial demo site start-up	WP4, WP3	2 - AQUA	Construction finished: microbial demo plant ready for operation. WP Leaders will supervise the correct performance of the unit applying basic operational parameters. Supervision of the Regulatory and SEAB.	19
5	First batches of intermediates from insect and microbial biomass generated at expected yields and analyzed	WP2, WP3	9 - AINIA	5 kg insect protein, 5 kg caproic acid mixture, 0,5 m <sup>3</sup> hypochlorite, 5 kg ectoine characterized. WP Leaders will ensure optimal parameters are applied during production and will periodically supervise that the amount of bioproduct obtained according to time of operation for the final achievement required. Supervision of the Regulatory and SEAB.	30

6	Engagement biomass producers and end-users	WP7	9 - AINIA	Reach 20 potential customers of CHEERS Ltd. Supervision of the WP Leader. Supervision of the SEAB.	35
7	Final validation of the bio-based products	WP5	6 - SYM	Insect protein tested for novel drinks. Caproic acid tested as animal feed ingredient. Hypochlorite tested as disinfectant agent of industrial application. Ectoine tested as cosmetic ingredient. Supervision of the WP Leader. Supervision of the Regulatory and SEAD. Supervision of the Ethics Advisory Board.	42
8	TEA and LCA confirm sustainability of the value chains	WP6	9- AINIA	Positive results of TEA (payback < 5 years) and LCA (confirms CO <sub>2</sub> -eq emission reduction > 20%). Supervision of the WP Leader. Supervision of the Regulatory and SEAD. Supervision of the Ethics Advisory Board.	42
9	Biodiversity impact fully assessed	WP6	9- AINIA	Qualitative impact of project activities on the biodiversity aspects determined. Supervision of the WP Leader. Supervision of the Regulatory and SEAD. Supervision of the Ethics Advisory Board.	48
10	Exploitation plan	WP6	9- AINIA	Exploitation strategy & agreed among all partners. Supervision of the WP Leader. Supervision of the Regulatory and SEAD. Supervision of the Ethics Advisory Board.	47

# 6 Risk management

Risk management, in a general way, is the process of identifying and controlling to an acceptable level, business, programme, project, services technical, financial and commercial and opportunities risks. Risks might include events or occurrences that affect the image of the business as well.

The management of risk within any phase of the Project life is an essential element of the overall Project Management activity. By the use of the Risk Management Process, MAHOU as Project Leader of CHEERS will have the means of understanding the inherent uncertainties in the whole project.

During SC meetings, a monitoring of risks throughout the project lifecycle will be carried out. This proactive approach will enable the consortium to maintain an updated register of risks, capturing new threats and reassessing existing ones. By incorporating mitigation measures into the discussions, we ensure effective risk management and enhance the project's overall success.

The Risk Management Plan will be developed within WP8 “Project Management”, which will obtain a document compiling all the risks identified by each partner. This document will be D8.3 “Risk Management Plan” and it is planned to be submitted on M36.

## 6.1 Impact of AI tools being managed and the potential 'leakage' of IP

The coordinator and the consortium are aware that in project management, effective communication, planning, and risk management are critical to success. However, effectively managing these aspects can often prove to be a challenge amid the myriads of tasks and stakeholders involved. This is where AI tools can prove invaluable assets for project managers.

We acknowledge this fact, and the data manager and IP manager will raise awareness on this issue among the rest of the consortium. A series of recommendations will be shared based on the latest recommendations of the European Commission on the responsible use of generative AI in research, in the Factsheet [‘Living Guidelines on the responsible use of generative AI in research’](#).

In this sense, the following recommendations will be shared with the consortium team:

- Pay attention to issues related to privacy, confidentiality and intellectual property rights when sharing sensitive or protected information with AI tools.
- Be aware that generated or uploaded input (text, data, prompts, images, etc.) could be used for other purposes, such as the training of AI models. If you upload unpublished or sensitive work (of your own or others’ unpublished work), from that moment it could be considered prior art, therefore making that work not patentable for a future application.

For that reason, do not to upload it into an online AI system unless there are assurances that the data will not be re-used, e.g., to train future language models or to the untraceable and unverifiable reuse of data. Sharing research data with AI tools may have implication regarding confidentiality and intellectual property rights.

- Take care not to provide third parties’ personal data to online generative AI systems unless the data subject (individual) has given them their consent and researchers have a clear goal for which the personal data are to be used so compliance with EU data protection rules<sup>16</sup> is ensured<sup>17</sup>. Sharing personal data with AI tools may have ethical implication regarding privacy.

- Check, the privacy options of the tools, who is managing the tool (public or private institutions, companies, etc.), where the tool is running and implications for any information uploaded. This could range from closed environments, hosting on a third-party infrastructure with guaranteed privacy, to open internet-accessible platforms.
- The output produced by generative AI can also be sensitive in relation to the protection of intellectual property rights and personal data:
  - Pay attention to the potential for plagiarism (text, code, images, etc.) when using outputs from generative AI. Researchers respect others’ authorship and cite their work where appropriate. The output of a generative AI (such a large language model) may be based on someone else’s results and require proper recognition and citation.
  - The output produced by generative AI can contain personal data. If this becomes apparent, researchers are responsible for handling any personal data output responsibly and appropriately, and EU data protection rules are to be followed.

# 7 Periodic reporting and progress monitoring

In order to receive project payments, the beneficiaries (and their linked third parties) must report on the technical and financial implementation of project through the Official Project Reporting. While, project monitoring will be used to track project progress and identify rapidly problems and risks, in order to enforce pro-active management. It will also help to address the requirements for the external reporting and to meet the short contractual deadlines.

## 7.1 Reporting calendar

The progress and achievements of the CHEERS project will be assessed through:

- **IR:** Internal Financial Reports, which will be elaborated **every 8 months** to track the financial project performance.
- **RP:** Periodic reports, which are the official reports that will be submitted to the Commission (**RP1 at M18, RP2 at M36 and RP3 at M48**).

The complete calendar of reporting during the life of CHEERS is as follows:

2023												2024												2025												2026											
May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec				
IR																				X	IR															X	IR										

The project financial monitoring tool contains tables for collecting the partners' incurred costs per each Cost Category and WP, detailed data on personnel costs (staff involved in the project, implemented PMs, days-equivalents and corresponding costs spent over the last 8 months period). The PCT will check the declared costs and asks for eventual corrections in order to properly declare the incurred costs according to the HE Programme regulation.

## 7.3 Continuous & periodic reports

### 7.3.1 Structure of the periodic report

The Periodic Report must be submitted by the coordinator within **60 days** following the end of each Reporting Period (RP). It contains the periodic technical and financial reports:

- The technical part includes an overview of the action implementation, and it must be prepared in the Periodic Reporting tool on Funding & Tender Opportunities portal.
- The financial part of the periodic report includes:
  - the financial statements and;  
the explanation on the use of resources (PMs per WP, purchase and subcontracting costs, among others).

Reporting will gather information on:

- Main activities carried out during the period.
- Status of milestones and deliverables.
- Problems encountered; risks identified.
- Dissemination activities during the period.
- Resource consumption.
- Results achieved.
- Meetings attended, etc.

The PO shall be informed in case of:

- Events that are likely to affect/delay the implementation of the Action or the EU's financial interest.

Circumstances affecting the decision to award the grant or compliance with the agreement.

### 7.3.2 Preparation and submission of the continuous and the periodic report

- **Continuous reporting** functionality in the Funding & Tender Opportunities Portal: it is activated at the time the project starts and it is continuously open to submit deliverables, to report on progress in achieving milestones, to follow up of critical risks, ethics issues, publications, communication activities, and the answers to the questionnaire on horizontal issues. It will be the **part A of the Periodic Report**.
- **Periodic reporting** functionality in the Funding & Tender Opportunities Portal: following the end of each reporting period, the functionality of periodic reporting in the Funding & Tender Opportunities Portal will be activated.

While the periodic reporting session is open in the electronic exchange system:

- All partners will be able to complete online its own Financial Statement, including the explanations on the use of resources.  
The Financial Statement describes the cost declarations, and it contains information such as:
  - Information about the Beneficiary.

- The declaration of costs.
  - The declaration of receipts.
  - The declaration of cost details (cost, explanations, work package).
  - The requested EC contribution.
- MAHOU, on behalf of the consortium, will be able to upload **the Part B of the periodic technical report** as a pdf document (containing the explanation of the work carried out and the overview of the progress as well as an explanation on deviations from the DoA) and include the financial statements into the report. To produce the periodic technical report, the following timeline has been established:
- The PCT will send the template asking all partners for inputs about the work carried out , deviations from the original plan and next steps in their respective tasks, at least 8 weeks before the periodic report submission deadline.
  - The contributions from partners must be provided at least 4 weeks before the deadline.
  - The S&T committee will have 4 weeks to merge all contributions and prepare a consolidated version of the technical periodic report. Over this time, partners may be asked for further contributions or clarifications.

Once MAHOU has submitted the periodic report on behalf of the consortium, the IT tool will capture the information from the continuous reporting module in order to generate the Part A of the periodic technical report. The IT tool will automatically generate the report with explanations of all partners' use of resources and the periodic summary financial statements, which corresponds to the request for payment.

The periodic technical report will be 'locked for review' before its submission. MAHOU will make sure the information in the continuous reporting module has been up-to-dated before the periodic report is 'locked for review'. Updates entered after this step will be included in the periodic report of the following period.

After submission to the Commission, the report will be available on the Funding and Tender Opportunities Portal to be downloaded. The Commission will review it and ask for clarifications and/or reject some expenses. In that case, MAHOU on behalf of the consortium must correct the information following Commission's suggestions and send it corrected back to the Commission.

Finally, and after its reception and the corresponding approvals, the payment is expected to be delivered within 90 days after closure of reporting period.

A Certificate of Financial Statements (CFS) will be necessary only if the requested EU contribution to costs at beneficiary level is  $\geq$  EUR 430 000.00. The CFS will be submitted only for the final report (RP3) and it is an external audit report on the partners' declared costs incurred all over the project duration.

#### Overview of the timeline of the whole procedure:

- **Technical Report:**
- **2 weeks before the RP opening:** Sending of the templates for Part A and Part B to the partners.
  - **10 days after the RP opening:** Receiving of the Part A fulfilled by all the partners.
  - **3 weeks after the RP opening:** Receiving of the Part B fulfilled by all the partners.
  - **4 – 5 weeks after the RP opening:** Elaboration of the final version of Part B and submission via F&T
  - **6 – 7 weeks after the RP opening:** Submission of the consolidated versions of Part A, Part B and Financial report via F&T portal.
- **Financial Report:**
- **10 days after the RP opening:** Receiving the Financial Tool from the partners.
  - **4 – 5 weeks after the RP opening:** After performing the corresponding corrections, receiving the final version of the Financial Tool form the partners.

- **5 – 6 weeks after the RP opening:** Submission and e-signing of the Financial Statement by each partner via F&T portal.

## 7.4 Keeping of records and supporting documents

All partners must keep records and other supporting documents to prove the proper implementation of the action in line with the accepted standards in the respective field (if any) and keep the following to justify the amounts declared:

- **Actual Costs**
  1. Adequate records and supporting documents must be kept to prove the costs declared.
  2. Examples include contracts, subcontracts, invoices, and accounting records.
  3. Beneficiaries' accounting and internal control procedures must enable reconciliation between declared amounts, recorded amounts, and supporting documents.
- **Flat-Rate Costs and Contributions:** Adequate records and supporting documents must be maintained to prove the eligibility of costs or contributions subject to flat rates.
- **Simplified Costs and Contributions:** As indicated in the Grant Agreement:
  1. **Unit Costs and Contributions:** Adequate records and supporting documents must be kept to prove the number of units declared.
  2. **Lump Sum Costs and Contributions:** Adequate records and supporting documents must be maintained to prove the proper implementation of the work described in Annex 1 of the GA.
  3. **Financing not Linked to Costs:** Adequate records and supporting documents must be kept to prove the achievement of results or fulfillment of conditions described in Annex 1 of the GA.
- **Unit, Flat-Rate, and Lump Sum Costs and Contributions** (according to usual cost accounting practices)
  1. Beneficiaries must maintain adequate records and supporting documents to prove consistent application of cost accounting practices based on objective criteria.
  2. These records should demonstrate compliance with eligibility conditions stated in Articles 6.1 and 6.2 of the GA.
- **Personnel costs**
  1. Time worked for the beneficiary under the action must be supported by monthly declarations signed by the person and their supervisor.
  2. Alternative evidence supporting declared time worked may be accepted by the granting authority if it offers an adequate level of assurance.

The records and supporting documents must be made available upon request as outlined in Article 19 of the GA. They should also be accessible in the context of checks, reviews, audits, or investigations, as stated in Article 25 of the GA.

If there are ongoing checks, reviews, audits, investigations, litigation, or other pursuits of claims under the Agreement, including the extension of findings (refer to Article 25 of the GA), the beneficiaries are required to retain these records and supporting documentation until the conclusion of these procedures.

All partners are obligated to keep the original documents. Digital and digitalized documents will be considered originals if authorized by the applicable national law. In certain cases, the granting authority may accept non-original documents if they provide a comparable level of assurance.

## 7.5 Financial management

The following section sets out a number of financial rules applicable to EC funded projects and which apply to CHEERS.

- **Actual Costs:** CHEERS is a cost-sharing contract, which is based on the actual costs incurred for the work under the project, except for two partners (please, refer to the following point). No estimated, budgeted or imputed rates are allowed, and the consortium cannot make any kind of financial profit from their participation in this project. The amounts that have been negotiated for the technical annex are only estimates and, as such, they cannot be claimed as actual costs. The fact that REA will make periodic payments for the costs claimed does not mean that these costs have been accepted. Costs can be considered as definitively accepted only after the final review of the Project Officer.
- **Unit costs:** According to Annex 2a of the Grant Agreement, financial reporting based on unit costs is allowed for those partners declaring personnel costs of *A.4 SME owners/natural person beneficiaries without salary* and those partners having *D.2 Internally invoiced goods and services* foreseen in their Budget. SME owners/natural person beneficiaries without salary's work for the action may be declared as unit cost, if they fulfil the general eligibility conditions and are calculated as indicated in Annex 2a of the Grant Agreement. Costs for internally invoiced goods and services directly used for the action may be declared as unit cost according to the partners' usual cost accounting practices if they fulfil the general eligibility conditions.
- **Indirect costs identification:** The EC will consider, as a general rule, 25% of the eligible direct costs (categories A-D, except subcontracting costs, financial support to third parties, internally invoiced goods and services and exempted specific cost categories, if any).
- **Timesheets:** Time worked by the partners under the action must be supported by declarations signed monthly by the given person and the supervisor unless another reliable time-record system is in place. The actual number of hours spent on the project must be stated in the periodic reports and the financial statements. The absence of timesheets will make it impossible for the European Commission to contribute to the costs claimed for the carried out activities.
- **Justification of Costs:** All the documentation to support and justify the costs reported must be kept in order and made available for possible checks, reviews, audits, investigations, litigation or other pursuits of claims under the Agreement.

It will be taken into account that the EC does not finance the deductible value added tax (VAT).

The beneficiaries must keep the original documents for 5 years after the final payment. Digital and digitalized documents are considered originals if they are authorized by the applicable national law.

## 7.6 EC Audit

- **Audits:** The granting authority has the authority to conduct audits to ensure proper implementation of the action and compliance with the Agreement.
- **Audit Initiation:** Audits may commence during the action's implementation and continue until the time-limit stated in the Data Sheet of the Grant Agreement. The beneficiary will be formally notified of the audit initiation, and the audit period will begin from the notification date.
- **Audit Options:** The granting authority can choose to use its own audit service, delegate audits to a centralized service, or employ external audit firms.
- **External Audit Firm:** If an external audit firm is used, the beneficiary will be informed and granted the right to object on grounds of commercial confidentiality or conflict of interest.
- **Cooperation and Information Provision:** The beneficiary must cooperate diligently and provide requested information within the specified deadline to verify compliance with the Agreement. This information may include complete accounts, individual salary statements, or other personal data.

Sensitive information and documents will be handled in accordance with Article 13 of the Grant Agreement.

- **On-Site Visits:** During on-the-spot visits, the beneficiary must allow access to sites and premises, including access for external audit firms. The beneficiary must also ensure that the requested information is readily available.
- **Accuracy and Format:** The provided information must be accurate, precise, complete, and in the requested format, including electronic format.
- **Draft Audit Report:** Based on the findings, a draft audit report will be prepared.
- **Observations:** The auditors will formally notify the beneficiary of the draft audit report, and the beneficiary will have 30 days from the notification to provide observations through a contradictory audit procedure.
- **Final Audit Report:** The final audit report will take into account the observations provided by the beneficiary and will be formally notified to them.
- **Language:** Audits, including audit reports, will be conducted in the language of the Agreement.

# 8 Conclusions

As mentioned above, a certain level of rigor when using these guidelines will reduce overhead, ease the management work and increase the efficiency and quality of the work carried out in the project. All persons involved in CHEERS project tasks should understand and use these rules, standards and recommendations specified hereafter. In addition, with CHEERS being a long-term project, the individuals involved in project may change during the project lifetime. Clear procedures will assist newcomers joining the project and help them to become quickly operational.

The present document should be considered as a complement to all other important documents which should be used for reference while the project is running: the Grant Agreement and its Annexes as well as the Annotated Model Grant Agreement – EU Funding Programmes 2021-2027.





# CHEERS

**Producing novel non-plant biomass feedstocks  
and bio-based products through upcycling and  
the cascading use of brewery side-streams**

**Grant Agreement No. 101060814.**



**Funded by  
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