



Deliverable D8.1

Project Management Handbook

Deliverable information

Responsible Partner:	IDENER R&D
Work Package	WP8 – Project Management
Author(s):	IDENER R&D
Contributing Partner(s):	All partners
Dissemination Level:	PU – Public
Type:	R – Document, report
Due Date:	30/11/2022
Submission Date:	29/11/2022
Version:	1.0



Funded by the European Union under the GA no **101060211**.

Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or REA. Neither the European Union nor the granting authority can be held responsible for them.

Project Profile

Programme	Horizon Europe
Call	HORIZON-CL6-2021-ZEROPOLLUTION-01
Topic	HORIZON-CL6-2021-ZEROPOLLUTION-01-10
Number	101060211
Acronym	BIOSYSMO
Title	BIOremediation systems exploiting SYnergieS for improved removal of Mixed pOllutants
Start Date	1 September 2022
Duration	48 months

Document History

Version	Date	Author(s)	Remarks
0.1	19/10/2022	Lila Otero (IDENER R&D)	First draft distributed to the consortium
0.2	02/11/2022	Lila Otero (IDENER R&D)	Document style updated according to the project template; procedure for quarterly internal reporting updated for alignment with update to the Project Officer
1.0	25/11/2022	Lila Otero (IDENER R&D)	Final deliverable version

Disclaimer

All the contributors to this deliverable declare that they:

- Are aware that plagiarism and/or literal utilization (copy) of materials and texts from other projects, works and deliverables must be avoided and may be subject to disciplinary actions against the related partners and/or the Project consortium by the EU.
- Confirm that all their individual contributions to this deliverable are genuine and their own work or the work of their teams working in the Project, except where is explicitly indicated otherwise.
- Have followed the required conventions in referencing the thoughts, ideas and texts made outside the Project.

Executive Summary

Deliverable *D8.1 – Project Management Handbook* is the first deliverable of *WP8 – Project Management* of the BIOSYSMO project. D8.1 is a result of *Task 8.1 – Project coordination*, *Task 8.2 – Administrative and financial management* and *Task 8.4 – Risk management*, which are the core of the day-to-day project management activities. The Project Management Handbook is a reference document that, under the umbrella of the Grant Agreement and Consortium Agreement, describes the procedures established for proper implementation and monitoring of the project.

Firstly, the Project Management Handbook describes the project management structure and the responsibilities of each of the governing bodies of the project. Secondly, the methodology for quality assurance is presented. This includes the reporting to the EC, the internal reporting, the preparation and submission of deliverables, the follow up of milestones and the management of risks for the implementation. Thirdly, the procedures for internal and external communication are introduced, including the rules of project meetings. Lastly, some issues regarding Intellectual Property management and conflict resolution are included. Whenever needed, references are included to other deliverables describing specific procedures in more detail.

The present document may be updated throughout the project whenever unexpected circumstances may result in the need for changes in the procedures. An updated version will always be available for consultation in the internal project repository.

Table of Contents

Executive Summary	3
List of Figures	6
List of Tables.....	7
Table of Abbreviations.....	8
1 Introduction	9
1.1 Description of the project	9
1.1.1 Key project information	9
1.1.2 Project participants	10
1.2 Governing documents and legal framework.....	12
1.3 Project management structure.....	13
2 Quality assurance	14
2.1 Project reporting	14
2.1.1 Reporting to the EC.....	14
2.1.2 Internal reporting.....	16
2.1.3 Timeline for reporting	16
2.2 Deliverables.....	17
2.2.1 Procedure for preparation, review and submission of deliverables	17
2.2.2 Deliverable types, template and naming.....	19
2.2.3 Writing style of deliverables and project reports	21
2.3 Milestones	22
2.4 Risk management.....	22
3 Internal communication	23
3.1 Email communication.....	23
3.1.1 Contact list	23
3.1.2 Email etiquette	23
3.2 Project meetings.....	23
3.2.1 General Assembly meetings	24
3.2.2 Executive Management Board meetings	25
3.2.3 Other meetings	25
3.2.4 Review Meetings with the European Commission.....	25

3.3	Project internal repository	26
3.3.1	Platform structure.....	26
3.3.2	Access and protection.....	26
4	External communication	26
4.1	Information on EU funding and disclaimer	27
4.2	Project corporate identity and communication package	27
4.3	Online tools	27
4.4	Dissemination.....	28
4.4.1	Open access to publications	28
4.4.2	Open access to research data	29
4.5	Reporting of communication and dissemination activities	30
5	Intellectual Property management.....	30
6	Conflict resolution.....	31
7	Continuous update	31

List of Figures

Figure 1. Schedule of the BIOSYSMO project.....	10
Figure 2. Geographic distribution of the BIOSYSMO consortium.....	12
Figure 3. Management structure of the BIOSYSMO project	13
Figure 4. Timeline of the internal and periodic reporting within the BIOSYSMO project.....	17
Figure 5. Example of deliverable file name following the proposed convention.....	20
Figure 6. Example of email subject line	23

List of Tables

Table 1. Key project information.....	9
Table 2. Participants in the BIOSYSMO project.....	11
Table 3. Overview of the schedule for the preparation and submission of deliverables	18
Table 4. Guidelines for internal reviewing of deliverables	19
Table 5. Foreseen schedule of the General Assembly meetings	24
Table 6. Foreseen schedule of the Review Meetings	25

Table of Abbreviations

Abbreviation	Definition
CORDIS	Community Research and Development Information Service
DESCA	Development of a Simplified Consortium Agreement
DMP	Data Management Plan
EC	European Commission
EDT	Exploitation and Dissemination Team
EEAB	External Expert Advisory Board
EMB	Executive Management Board
EU	European Union
IP	Intellectual Property
IPR	Intellectual Property Rights
PEDR	Plan for the Exploitation and Dissemination of Results
REA	Research Executive Agency
WP	Work Package

1 Introduction

1.1 Description of the project

Project summary: BIOSYSMO is a 48-month action that will develop a computationally-assisted framework for designing and optimizing synergistic biosystems combining the required pathways and traits to achieve the most efficient degradation and sequestration of pollutant mixtures. These biosystems will comprise combinations of bacteria, fungi and plants containing the natural or engineered pathways required for pollutants degradation and identified based on a computationally-assisted analysis. BIOSYSMO will take advantage of the high natural microbial diversity by screening samples from polluted sites and locations affected by diffuse pollution to identify natural microorganisms already present and able to metabolize the target pollutants. The search will be expanded to microorganisms previously identified and characterized by applying data mining tools to genomic and metagenomic data available in public repositories. The construction and optimization of synergistic biosystems will combine approaches based on 1) enhancing plant-microbe (bacteria, fungi) interactions to achieving combinations with improved pollutant uptake and/or degradation; 2) engineering bacteria, for improved degradation and bioaugmentation, and plants (poplar tree), for improved microbial colonization and pollutant uptake; 3) constructing artificial micro-structured consortia into aggregates and biofilms, containing all the required pathways for pollutant removal; and 4) applying bioelectrochemical systems as stand-alone or in hybrid systems. The different key players will be identified and combined to formulate innovative biosystems with the assistance of genome-scale metabolic models for elucidating and simulating the key metabolic pathways. The constructed biosystems will be applied in conventional (phytoremediation, biopile, bioaugmentation) and innovative (bioelectrochemical systems, hybrid bioelectrochemical-phytoremediation) bioremediation approaches optimized for the treatment of mixtures of pollutants in soil, sediments and water.

1.1.1 Key project information

The following table (Table 1) shows key administrative information of the BIOSYSMO project, which is also contained and expanded in the Grant Agreement Datasheet and in the CORDIS project factsheet (<https://dx.doi.org/10.3030/101060211>).

Table 1. Key project information

Project full title	Bioremediation systems exploiting synergies for improved removal of mixed pollutants
Project acronym	BIOSYSMO
Grant Agreement No.	101060211
Call and topic	HORIZON-CL6-2021-ZEROPOLLUTION-01-10
Type of action	HORIZON Research and Innovation Actions
Granting Authority	European Research Executive Agency (REA)
Schedule	Project starting date: 1 September 2022

	Project end date: 31 August 2026
	Project duration: 48 months
Estimated project budget	€ 4 873 331
EU contribution	€ 4 873 331

The duration of the BIOSYSMO project is of 48 months, starting on September 1, 2022, and ending on August 31, 2026 (Figure 1).

2022	Jan	Feb	Mar	Apr	May	Jun
	Jul	Aug	Sept	Oct	Nov	Dec
		M01	M02	M03	M04	
2023	Jan	Feb	Mar	Apr	May	Jun
	M05	M06	M07	M08	M09	M10
	Jul	Aug	Sept	Oct	Nov	Dec
	M11	M12	M13	M14	M15	M16
2024	Jan	Feb	Mar	Apr	May	Jun
	M17	M18	M19	M20	M21	M22
	Jul	Aug	Sept	Oct	Nov	Dec
	M23	M24	M25	M26	M27	M28
2025	Jan	Feb	Mar	Apr	May	Jun
	M29	M30	M31	M32	M33	M34
	Jul	Aug	Sept	Oct	Nov	Dec
	M35	M36	M37	M38	M39	M40
2026	Jan	Feb	Mar	Apr	May	Jun
	M41	M42	M43	M44	M45	M46
	Jul	Aug	Sept	Oct	Nov	Dec
	M47	M48				

Figure 1. Schedule of the BIOSYSMO project

1.1.2 Project participants

The BIOSYSMO consortium is formed by 16 participants (Table 2)—including 12 beneficiaries, 3 affiliated entities and 1 associated partner—coming from 8 European countries: Spain, Portugal, France, Germany, Slovenia, United Kingdom, Belgium and Greece (Figure 2).

Table 2. Participants in the BIOSYSMO project

No.	Role ¹	Short name	Legal name	Country
1	COO	IDE	IDENER RESEARCH & DEVELOPMENT AGRUPACION DE INTERES ECONOMICO	ES
2	BEN	UBU	UNIVERSIDAD DE BURGOS	ES
3	BEN	JSI	INSTITUT JOZEF STEFAN	SI
4	BEN	LEITAT	ACONDICIONAMIENTO TARRASENSE ASSOCIACION	ES
5	BEN	UBFC	COMMUNAUTE D'UNIVERSITES ET ETABLISSEMENTS UNIVERSITE BOURGOGNE-FRANCHE-COMTE	FR
5.1	AE	UFC	UNIVERSITE DE FRANCHE-COMTE	FR
6	BEN	BSY	BLUE SYNERGY SL	ES
7	BEN	CIIMAR	CENTRO INTERDISCIPLINAR DE INVESTIGACAO MARINHA E AMBIENTAL	PT
8	BEN	UPM	UNIVERSIDAD POLITECNICA DE MADRID	ES
9	BEN	AXIA	AXIA INNOVATION UG	DE
10	BEN	CNRS	CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE CNRS	FR
11	BEN	TAUW	TAUW GMBH	DE
11.1	AE	TAUW BE	TAUW BELGIE NV	BE
11.2	AE	TAUW IB	TAUW IBERIA SA	ES
12	BEN	EXE	EXELISIS IKE	EL
13	AP	ICL	IMPERIAL COLLEGE OF SCIENCE TECHNOLOGY AND MEDICINE	UK

¹ COO: Coordinator; BEN: Beneficiary; AE: Affiliated Entity; AP: Associated Partner

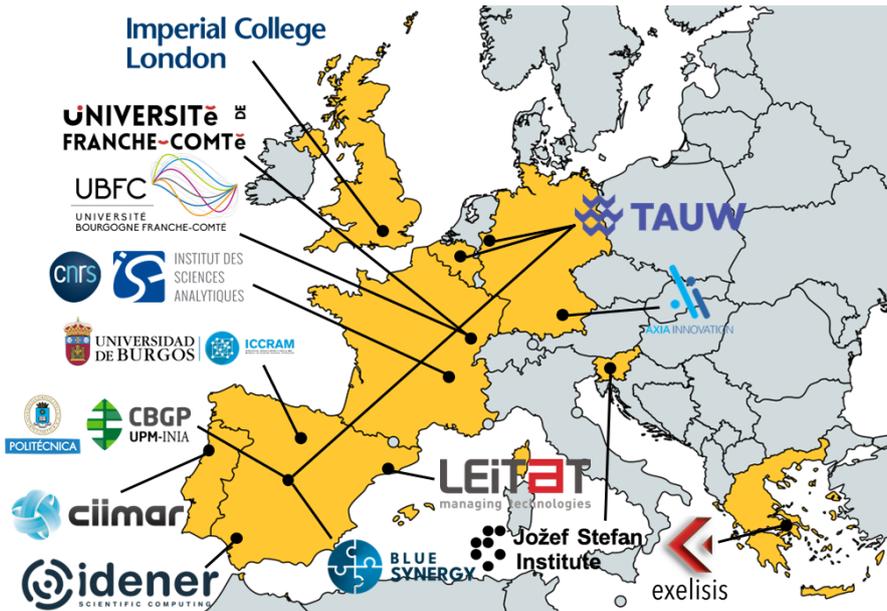


Figure 2. Geographic distribution of the BIOSYSMO consortium

1.2 Governing documents and legal framework

The implementation of the BIOSYSMO project is regulated by two main documents: the Grant Agreement, signed between the project beneficiaries and the EC (REA), and the Consortium Agreement, signed by all the project participants.

The Grant Agreement No. 101060211 was signed in June 2022 by the European Commission (EC) and the BIOSYSMO beneficiaries. The Grant Agreement establishes the contractual framework between the consortium and the Granting Authority. The 44 articles of the Grant Agreement Core describe the procedures that govern the project implementation including technical and financial reporting, justification of costs, dissemination and exploitation aspects, procedures for accession, applicable law, etc. In addition, the Grant Agreement contains 5 Annexes containing, among others, the Description of the Action (Annex 1, Part A and Part B), the estimated budget for the action (Annex 2) and specific rules (Annex 5). The Annotated Grant Agreement, issued by the EC, is a useful reference document with explanations and clarifications to each article of the Grant Agreement.

In addition to this, the consortium partners signed a Consortium Agreement for further defining specific aspects of the project management and implementation. Specifically, the Consortium Agreement details the governance structure within the project, the procedures for arranging meetings, partners' responsibilities and liabilities, access rights, etc. The Consortium Agreement is based on the DESCA Model Consortium Agreement for Horizon Europe and is considered as an addition to the Grant Agreement.

More generally, the BIOSYSMO project abides by the Horizon Europe regulatory framework, including the Horizon Europe Framework Programme Regulation 2021/695 and the Horizon Europe Specific Programme Decision 2021/764. Other official guidance documents are the Horizon Europe Programme Guide, the Online Manual and the Work Programme documents and its Annexes

For the avoidance of doubt, in case of ambiguity of interpretation or contradiction between the aforementioned documents (Grant Agreement, Consortium Agreement and official EC's documents) and the present handbook, the former will always prevail.

1.3 Project management structure

The Governing Structure of the BIOSYSMO project (Figure 3) is composed of several Consortium Bodies (Project Coordinator, General Assembly, Executive Management Board) as described in the Consortium Agreement. Additional management roles (WP Leader, Task Leader) are assigned and described in the Grant Agreement. In addition, other teams will be defined to management specific transversal tasks (Working Groups, Exploitation and Dissemination Team) or as advisory body (External Expert Advisory Board).

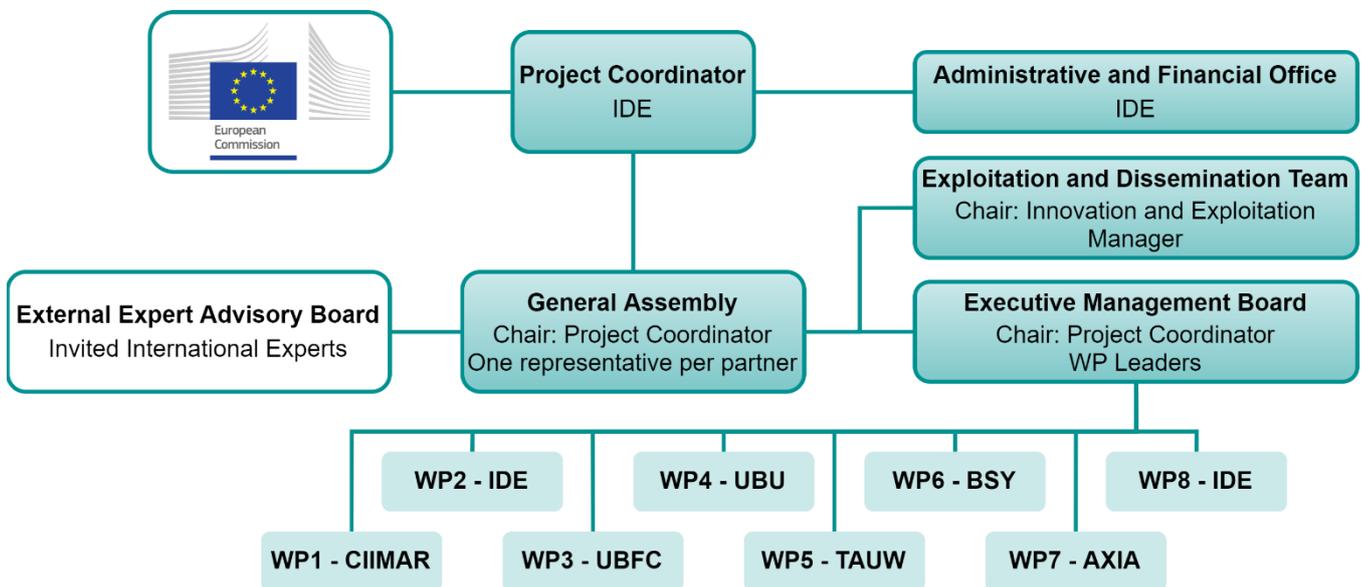


Figure 3. Management structure of the BIOSYSMO project

Project Coordinator

The Project Coordinator is the legal entity acting as the intermediary between the consortium and the EC. The Project Coordinator, in addition to its responsibilities as a partner, performs the tasks assigned to it as described in the Grant Agreement and the Consortium Agreement.

General Assembly (GA)

The GA is the ultimate decision making body of the consortium. It is chaired by the Project Coordinator and consists of one representative per partner, who shall be duly authorized to deliberate, negotiate and decide on all project matters. The responsibilities are clearly detailed in the Consortium Agreement and include responsibilities in the scientific, technical, financial and exploitation management of the project.

Executive Management Board (EMB)

The EMB will be a coordination body among and within WPs, consisting of one representative per WP Leader and will be chaired by the Project Coordinator. The responsibilities of the EMB revolve around the proper execution, implementation and monitoring of the decisions of the GA.

Work Package Leaders

The Work Package Leaders are responsible for the set of activities assigned to them in the Description of the Action and are in charge of the corresponding reports and deliverables.

Task Leaders

Task Leaders are responsible for allocating work to partners in the specific task and produce deliverables based on the partners' contributions and submit them to the WP Leaders.

Working Groups

Working Groups may be defined as needed to coordinate closely interrelated tasks of different WPs. Working Groups may have a restricted duration until the specific tasks are finished.

Exploitation and Dissemination Team (EDT)

The EDT members will be selected by the GA at the beginning of the project to address the supervision of the elaboration of the Plan for Exploitation and Dissemination, IP management and the dissemination activities. The EDT will be chaired by the Innovation and Exploitation Manager.

External Expert Advisory Board (EEAB)

The EEAB will be composed of up to 5 independent international experts. The candidates will be selected unanimously by the GA based on their background and relation to similar initiatives and avoiding conflict of interest. After the signature of an NDA, the EEAB members will be invited yearly to review the progress and provide inputs related to technological specifications, industrial needs and dissemination and exploitation plans.

2 Quality assurance

All partners are responsible for the quality assurance of the BIOSYSMO project. The quality of project activities and outputs will be monitored by Task Leaders, WP Leaders and the Project Coordinator according to the roles and responsibilities defined both in Section 1.3 and in the project reference documents (Grant Agreement and Consortium Agreement).

2.1 Project reporting

2.1.1 Reporting to the EC

The BIOSYSMO partners are obliged to report the project advances to the EC following the procedures established in the Grant Agreement in *Article 21 - Reporting*. The project partners are responsible for familiarizing with these procedures in order to report in a proper and timely manner. In case of doubts, partners can address the Project Coordinator, who will provide clarifications to the best of its capabilities. In case that the interaction with the EC (REA) is required, the Project Coordinator will act as intermediary by redirecting the questions to the Project Officer or the Project Financial Officer as needed.

Periodic reporting

Three reporting periods have been established according to the Grant Agreement:

- **Reporting Period 1:** M01 – M18
- **Reporting Period 2:** M19 – M36
- **Reporting Period 3:** M37 – M48

Following the procedures described in the Grant Agreement, scientific and financial reports will be presented to the EC at the end of each reporting period, specifically within 60 days after their completion in months M18, M36 and M48. Templates for the scientific and financial reports will be prepared by the Project Coordinator and distributed to the partners, along with instructions and a process schedule, as soon as the reporting period finishes. Each partner will report their activities within the defined schedule. The information provided by the partners will be compiled by the Project Coordinator for the preparation of the report for each period.

The Periodic Report will consist of a narrative part (scientific report) and a financial part (financial report). The narrative part will contain a description of the work carried out, overview of the progress, conclusions so far, deviations (if any), next steps and a summary for public publication. The financial part will contain the individual financial statement and explanation of the use of resources. The narrative part of the reports will be uploaded and submitted by the Project Coordinator, while the financial reports (after reviewing by the Project Coordinator) will be signed and submitted by each partner, both through the online Funding & Tenders Portal.

Continuous reporting

The partners must continuously report on the progress of the project in the Portal Continuous Reporting tool. Specifically, the continuous reporting includes the following items:

- **Deliverables** – The partners must prepare and submit the deliverables according to the procedure described in Section 2.2.
- **Milestones** – The partners must report the achievement of milestones the procedure described in Section 2.3.
- **Researchers involved in the project** – Each partner must report and update the information of the researchers involved in the project through the Funding & Tenders Portal. The Project Coordinator will periodically send reminders.
- **Critical risks** – The partners must report on the management of critical risks according to the procedure described in Section 2.4. The Project Coordinator will report any update through the Continuous Reporting Tool of the Funding & Tenders Portal.
- **Publications** – The partners must report any publication arising from the project according to the procedure described in Section 4.5, which will be further elaborated by the leader of the dissemination task (EXE).

- **Datasets** – The partners must report any dataset arising from the project according to the procedures that will be established in the Data Management Plan (D8.2).
- **Results (Key Exploitable results and other results)** – The report of Key Exploitable Results and other results will be managed through the innovation management task (Task 7.3) according to the guidelines elaborated and shared by the leader of the exploitation tasks (AXIA).
- **Communication activities** – The partners must report any communication activity related to the project according to the procedure described in Section 4.5, which will be further elaborated by the leader of the communication task (EXE).
- **Dissemination activities** – The partners must report any dissemination activity related to the project according to the procedure described in Section 4.5, which will be further elaborated by the leader of the dissemination task (EXE).
- **Patents (IPR)** – The report of patents and other IPR generated in the project will be managed through the IPR and knowledge management task (Task 7.4) according to the guidelines elaborated and shared by the leader of the exploitations tasks (AXIA).

2.1.2 Internal reporting

In addition to the official reporting to the EC, the BIOSYSMO consortium has established an internal reporting procedure that consists of:

- **Every 3 months**, technical report to the WP Leaders and discussion in the EMB meetings. WP Leaders will use the template in the project internal SharePoint to collect a brief summary (e.g., in the form of bullet points) of the work done in each period (including any communication or dissemination action), the issues encountered and the plan for the next period. The collection of the information may be centralized in online documents shared in the project internal SharePoint and should be finalized within the first 10 calendar days after the end of the 3-month period. The information collected will be discussed in the EMB meetings and shared with the Project Officer.
- **Every 6 months** (except when the period coincides with the official reporting period), interim financial report to the Project Coordinator. The Project Coordinator will distribute a template for the financial reporting and the partners will report their financial estimates within 30 days.

In addition, the partners will report and discuss the project progress in General Assembly meetings every 6 months.

In this way, each reporting period will count with several interim check points that will ensure a close monitoring of the project progress and the capacity to react in time to eventual deviations.

2.1.3 Timeline for reporting

As a result of the addition of the internal reporting procedures, the project will maintain a tight monitoring of the project progress. Figure 4 shows the overall reporting schedule with indication of the period covered by each Periodic Report and the internal check points.

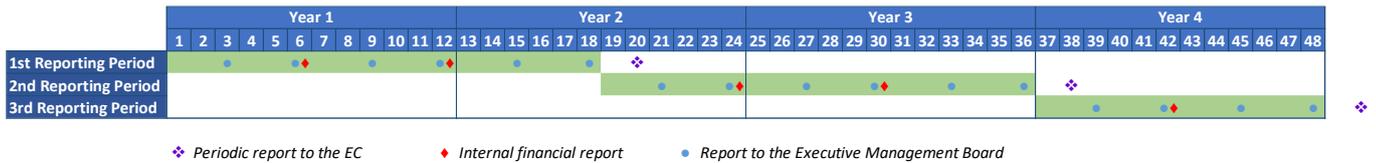


Figure 4. Timeline of the internal and periodic reporting within the BIOSYSMO project.

In summary, the following actions will fulfil the monitoring and reporting duties of the BIOSYSMO project:

- **Every 3 months:** EMB meetings → task leaders to report to the WP Leaders on project progress using a template document. Project Coordinator to send update to Project Officer.
- **Every 6 months:** internal financial reports → all partners to report to the Project Coordinator on financial estimates using a shared template.
- **Every 6 months:** GA meetings → all partners to report to WP Leaders and Project Coordinator in the form of presentations using shared template ppts.
- **Every reporting period:** reporting to EC → all partners to report to the Project Coordinator on project progress and incurred costs using shared templates and the Funding & Tenders Portal.

2.2 Deliverables

2.2.1 Procedure for preparation, review and submission of deliverables

The deliverable leader identified in the Grant Agreement is responsible for preparing, editing and ensuring the quality of a deliverable. The deliverable leader must coordinate with all the partners involved in the deliverable in order to agree on an overall structure and compile the necessary information. All the partners involved in a deliverable are responsible for collaborating with the deliverable leader by providing the necessary inputs in a timely manner and with the highest quality. In addition, in order to ensure the highest quality of the deliverables, a reviewing procedure has been defined, in which, besides the deliverable leader and partners, the WP Leader, Project Coordinator and one internal reviewer will be involved. Each deliverable will be assigned one internal reviewer, who will be appointed by the General Assembly from those partners that are not directly involved in the development of the deliverable. Each partner assigned as reviewer will appoint a specific person within their organization (from those involved in the project) to act as a reviewer. The appointed reviewers will be compiled in a list that will be shared in the internal project repository.

The following schedule has been set for the preparation, review and submission of deliverables:

- **Three months** before the deliverable deadline, the Project Coordinator sends a reminder of upcoming deliverables to the involved partners.
- **Two months** before the deliverable deadline, the deliverable leader sends an outline of the deliverable to the WP Leader and Project Coordinator. The outline will contain a Table of Contents, a brief description of each section and the identification of the partner(s) responsible for each section. The WP Leader and Project Coordinator will review if the scope and content

of the deliverable is aligned with the Description of Action and may suggest some changes, if necessary, within **one week** from receipt.

- **One month** before the deliverable deadline, the deliverable leader sends a complete first draft of the deliverable to the WP Leader, Project Coordinator and one reviewer. These may suggest some changes in the content of the deliverable, if necessary, within **one week** from receipt.
- **Ten days** before the deliverable deadline, the deliverable leader sends the final version of the deliverable (approved by all the partners involved) to the Project Coordinator. The Project Coordinator will make a final check of the deliverable and may suggest some final improvements. Once the deliverable is completely approved for submission, the Project Coordinator submits the deliverable to the EC through the Funding & Tenders Portal.

The following table summarizes the schedule for the preparation and submission of the project deliverables:

Table 3. Overview of the schedule for the preparation and submission of deliverables

When	What	Who	To whom
3 months before the due date	Reminder	Project Coordinator	Deliverable leader, WP Leader, appointed internal reviewer
2 months before the due date	Deliverable outline	Deliverable leader	Project Coordinator, WP Leader
1 week after receipt	Feedback on outline	Project Coordinator, WP Leader	Deliverable leader
1 month before the due date	First deliverable draft	Deliverable leader	Project Coordinator, appointed internal reviewer
1 week after receipt	Revision	Project Coordinator, appointed internal reviewer	Deliverable leader
10 days before the due date	Final deliverable draft	Deliverable leader	Project Coordinator
At the latest on the due date	Final accepted deliverable	Project Coordinator	EC through the Funding & Tenders Portal

The review of deliverables by the WP Leader, Project Coordinator and internal reviewer will focus on the following reviewing points:

Table 4. Guidelines for internal reviewing of deliverables

Scope	Review points
Scientific and technical content	<ul style="list-style-type: none"> • The content is consistent with the Description of Action • The objectives of the deliverable are clear and in line with the project objectives • The content is scientifically sound • The methodology is explained in sufficient detail • Scientific/technical decisions are adequately elaborated and justified • Results are clearly presented and described • Conclusions are correctly drawn from the results
Style and format	<ul style="list-style-type: none"> • The document complies with the project template • An executive summary is included • The document follows a logical structure and is clearly written • The content focuses on main aspects but contains a suitable level of detail • Appropriate references are cited in the text and included in a bibliography • The text is free of spelling and grammar mistakes • The writing style follows the guidelines in Section 2.2.3

Issues that may arise during the preparation of deliverables and, in particular, during the reviewing procedure will be addressed as follows:

- Any deviation from the proposed schedule must be notified immediately by the deliverable leader to the Project Coordinator and WP Leader. Corrective actions must be defined and agreed between the deliverable leader and the WP Leader in order to reduce the impact of the delay. The WP Leader shall inform the Project Coordinator about the decision.
- In case that the Project Coordinator does not accept the deliverable before the submission deadline due to lack of quality, the deliverable leader, WP Leader and Project Coordinator will agree on a corrective plan. In case of serious issues, an extraordinary EMB meeting or General Assembly could be convened. If needed, the Project Coordinator will inform the Project Officer about the issue and the corrective measures.

2.2.2 Deliverable types, template and naming

According to the Grant Agreement, BIOSYSMO will produce deliverables classified in 4 different types and coded as follows:

- **R** – Document, report
- **DEM** – Demonstrator, pilot, prototype
- **DEC** – Websites, patent filings, videos, etc.

- **DMP** – Data Management Plan

Regarding the dissemination level, deliverables are further classified as public (PU) or sensitive (SEN). Public deliverables will be openly accessible for the general public through the EC's CORDIS platform (<https://cordis.europa.eu/project/id/101060211>) right after submission. Conversely, sensitive deliverables will be confidential and only shared within the consortium and with the EC services. As described in the Grant Agreement, it is foreseen that most sensitive deliverables will be accompanied by an additional public deliverable containing a summary of the main content.

A template for all deliverables has been produced and is available on the internal project repository. The template provides the general structure and formatting to be followed, including:

- **Cover page** – containing the project name and logo, the deliverable key information (number, title, version, authors, dissemination level, etc.) as well as the mandatory EU visibility information
- **Control page** – containing the project profile, the revision history as well as the mandatory EU disclaimer and other disclaimers
- **Executive Summary** – containing enough information to understand the objectives, content and main results and conclusions of the document
- **Table of Contents**
- **List of Figures** – if > 5 figures
- **List of Tables** – if > 5 tables
- **List of Abbreviations** – if > 5 abbreviations or acronyms
- **Core part** – following the project template and always including introduction, objectives and conclusions (specific types of deliverables such as Data Management Plan, Plan for the Dissemination and Exploitation of Results, policy briefs, etc. may slightly deviate from this structure, when appropriate)
- **References** – following a style accepted by the scientific community
- **Annexes** – optional, as needed

Deliverable files shared within the consortium should be in MS Office® format (.doc, .docx) while the final deliverable version submitted to the EC should be in .pdf format. All document deliverables for the project should adhere to the following naming convention (Figure 5):



Figure 5. Example of deliverable file name following the proposed convention

2.2.3 Writing style of deliverables and project reports

The use of the BIOSYSMO templates is mandatory for all the project documents (deliverables, reports, presentations, etc.). The specific MS Office® templates are available for downloading from the internal project repository.

Style

Deliverables must be written in proper English. Both British and US English are acceptable as long as the chosen language is consistent throughout the document. The written style should be clear, succinct, precise and logical. The style should be adapted to the expected audience. The *Spelling and Grammar* check must be run before sharing any written document. Figures should be pasted as images and should not contain any spelling mistake or red underlines marking spelling mistakes.

Text styles

Headings, text and captions must be formatted with the appropriate styles defined in the template *Style Gallery*.

External references

Thoughts, ideas, texts, results and data generated outside the project must be properly acknowledged and referred to in the project documents by following the appropriate conventions. All the references used in the documents must be properly cited in the text and listed as a bibliography in the *References* section. All references cited in the text must be included in the bibliography and all references included in the bibliography must be cited in the text.

The use of a free, open source reference manager such as Zotero (www.zotero.org) is strongly recommended. The use of a numbered referencing style is recommended (e.g., *Nature*, *Science*, *American Chemical Society*, etc.) but any other style commonly used by the scientific community is acceptable as long as the style is consistently used throughout the document.

Figures and tables

The style of figures and tables should follow the color palette of the project as much as possible. Model figures and tables are included in the templates. The style of the tables can be modified by selecting the table and applying the model style from the tab *Table Design*. The figure type and style should fit the requirements of the plotted data, but readability must always be ensured and colors should be chosen from the project palette as much as possible. Always paste figures as images in the documents rather than as objects.

All the figures and tables in a report must have a descriptive caption and must be properly referred and linked to in the text. Captions should be added using the *Insert Caption* function so figures and tables are automatically re-numbered when new figures or tables are included.

Cross-references

Use cross-references to refer to a particular figure, table or section in the document. In this way, any change in the numeration will be automatically updated. The document numeration can be manually

updated by selecting all the text (Ctrl + A) and pressing F9. Always check for broken cross-references; these are marked by an error message in the place where the cross-reference used to be.

2.3 Milestones

Milestones are project checkpoints representing the achievement of an important waypoint that is deemed essential for the proper implementation of the subsequent activities of the project. Milestones help in the evaluation and monitoring of the progress of the project. The BIOSYSMO project will be monitored through the achievement of 8 milestones. Each milestone is linked to one or more reference deliverables as *means of verification*. The table with milestones, means of verification, due date and responsible partner is listed in the Grant Agreement – Annex 1.

The progress towards milestone achievement will be reviewed during the General Assembly and Executive Management Boards meetings. The responsible WP Leader and involved partners will be informed of upcoming milestones during the General Assembly meetings. Once a milestone has been reached, the responsible WP Leader should prepare a brief report documenting the achievement, means of verification and exact date of achievement, and send it to the Project Coordinator for archiving. Then, the Project Coordinator will record the accomplishment on the Funding & Tenders Portal.

WP Leaders are responsible for informing the Project Coordinator of any problem that may jeopardize the achievement of a milestone. The Project Coordinator will work with the responsible WP Leader and partners to develop a contingency plan.

2.4 Risk management

The BIOSYSMO project will monitor and control the project risks in a continuous manner. The main risk monitoring tasks are agreed upon the legal binding Grant Agreement and the Consortium Agreement.

A project risk is defined as an event that has a probability of occurring and may have a negative impact on the project implementation and achievement of objectives. A list of 20 identified risks is included in the Grant Agreement – Annex 1. This list will serve as a starting point of the risk management procedure. This list of risks will be monitored and, if required, updated during each General Assembly and Executive Management Board meeting. These updates may include the addition of new unforeseen risks and mitigation actions, the change in the level of likelihood of an identified risk or the suggestion of additional mitigation actions. The Project Coordinator will report any update through the Continuous Reporting Tool of the Funding & Tenders Portal.

In addition, WP Leaders will review the specific WP risks during WP meetings. Each WP and deliverable leaders are responsible to report any unforeseen risks and proposals of remedial actions to the Project Coordinator. Nevertheless, the Project Coordinator will proactively and reactively investigate the causes of possible problems, deviations from the work plan or delays with respect to the project schedule and identify corrective actions.

3 Internal communication

The procedures for internal communication within the consortium aim to ensuring efficiency and transparency in the consortium’s communications while avoiding misunderstandings. The main methods of internal communication within BIOSYSMO include email exchanges, face-to-face and online meetings and document sharing on an internal project repository with restricted access.

3.1 Email communication

Day-to-day communication between the partners will be based on e-mails. This means of communication is deemed secure, efficient and non-disruptive while keeping a written trace of the exchanged information.

3.1.1 Contact list

The Project Coordinator will maintain an updated project contact list, which will be shared in the internal project repository (Section 3.3). This list will include the contact details of all involved persons and their roles in the project (technical, management or administrative) to ensure the correct inclusion of the involved persons in the internal communications. Key roles such as WP and task leaders will be clearly identified. It is the responsibility of each partner to actively and timely inform the Project Coordinator about changes in the contact details or persons involved. Additional lists will be set up, if needed, e.g., at WP or working group level.

3.1.2 Email etiquette

In order to facilitate the classification and follow up of project emails, the subject line of emails should always include the acronym of the project (BIOSYSMO) and a clear description of the subject. The addition of the relevant WP/task and, if applicable, the deadline to take action is also recommended as shown in the example below (Figure 6).

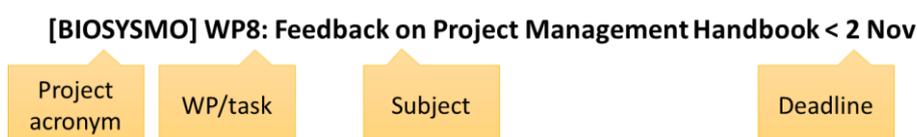


Figure 6. Example of email subject line

Distribution

- To: persons who need to take an action.
- Cc: persons who need to be informed but not to take an action; always Project Coordinator.

Replying

- Avoid using “Reply all” unless the reply is relevant to all the addressees.
- Avoid initiating a new issue/conversation under a different subject.

3.2 Project meetings

Several face-to-face, online or hybrid meetings will take place over the course of the project to monitoring the progress of the action, discussing ongoing activities, planning the future tasks and, if

necessary, developing corrective measures. The organization of meeting of the Consortium Bodies are governed by the procedures detailed in the Consortium Agreement. The organization of other meeting, such as WP meetings, is more flexible in terms of scheduling and setting the agendas.

The following documents should be produced to properly document all meetings and sent to the Project Coordinator for record-keeping:

- agenda
- minutes of the meeting
- attendance list (including signatures for face-to-face meetings)

Templates for each of these documents will be facilitated through the internal project repository.

For face-to-face meetings, the hosting partner will be responsible for the organization and logistics of the meeting in coordination with the Project Coordinator. The hosting partner will share with the attending partners relevant information such as traveling options to the venue and accommodation suggestions. Online and hybrid meetings organized by the Project Coordinator and Consortium Bodies will be held through Microsoft Teams®. The organizer of other online meeting (e.g., WP or working group meetings) is free to use any communication platform.

3.2.1 General Assembly meetings

The ordinary meetings of the General Assembly will be held at least twice a year. If needed, extraordinary meetings may be convened following the procedures agreed in the Consortium Agreement. The following table lists the tentative schedule of General Assembly meetings (Table 5):

Table 5. Foreseen schedule of the General Assembly meetings

	Timing	Location
Kick-off meeting	October 3, 2022	Online
General Assembly M6	M6 – February/March 2023	IDENER, Sevilla
General Assembly M12	M12 – August/September 2023	to be decided
General Assembly M18	M18 – February/March 2024	to be decided
General Assembly M24	M24 – August/September 2024	to be decided
General Assembly M30	M30 – February/March 2025	to be decided
General Assembly M36	M36 – August/September 2025	to be decided
General Assembly M42	M42 – February/March 2026	to be decided
General Assembly M48	M48 – August 2026	to be decided (together with review meeting)

General Assembly meetings require given notice of 45 calendar days if ordinary and 15 calendar days if extraordinary. The agenda should be sent to the participants at least 21 calendar days in advance for

the ordinary meetings and 10 calendar days in advance for the extraordinary ones. Additions to the original agenda can be done up to 14 and 7 calendar days before the ordinary and extraordinary meetings, respectively. Minutes of the meeting will be produced within 15 calendar days of the meeting and will be considered as accepted if no objection has been placed within the next 15 calendar days.

3.2.2 Executive Management Board meetings

Ordinary meetings of the Executive Management Board will take place at least quarterly. If needed, extraordinary meetings may be convened following the procedures agreed in the Consortium Agreement. Executive Management Board meetings being held every 6 months will be combined with General Assembly meetings as much as possible.

Executive Management Board meetings require given notice of 14 calendar days if ordinary and 7 calendar days if extraordinary. The agenda should be sent to the participants at least 7 calendar days in advance. Additions to the original agenda can be done up to 5 and 2 calendar days before the ordinary and extraordinary meetings, respectively. Minutes of the meeting will be produced within 15 calendar days of the meeting and will be considered as accepted if no objection has been placed within the next 15 calendar days.

3.2.3 Other meetings

It is expected that additional meetings will be required between specific partners at the WP, task or working group level. The organization of these meetings is more flexible. Nevertheless, official agendas and minutes should be produced for all meetings and sent to the Project Coordinator for record-keeping. It is additionally requested that the Project Coordinator is always informed and invited to these meetings.

3.2.4 Review Meetings with the European Commission

The EC Project Officer and external evaluators will periodically evaluate the progress of the project. The evaluation will be based on the submitted Periodic Report, Deliverables and any other information that the Project Officer may request, which will be further discussed in dedicated Review Meetings. The schedule of the Review Meetings is provided in the Grant Agreement (Table 6):

Table 6. Foreseen schedule of the Review Meetings

Review No.	Timing	Location
RV1	M21 – May 2024	to be decided
RV2	M39 – November 2025	to be decided
RV3	M48 – August 2026	to be decided

The Project Coordinator will liaise with the Project Officer for organizing the meeting agenda and logistics. WP Leaders and all partners should contribute and support the Project Coordinator in preparing the necessary material.

3.3 Project internal repository

A project web-based working space has been set up for internal collaboration and document distribution using the SharePoint platform. The SharePoint online space is linked to a Teams group for further collaboration space.

3.3.1 Platform structure

The internal platform currently contains a home page, a document library and task planter with an overview of the project deliverables (with due dates and leading partners). The home page features quick links to important information items (e.g., contact list), a section of recent activity and a quick access the document library. The document library is structured as follows:

- **Administration** – containing project administrative documents such as contact lists, instructions for reporting, etc.
- **Communication** – containing the materials for project communication (e.g., logos, poster, presentation, newsletter, press releases, etc.).
- **Deliverables** – containing the final version of the project deliverables.
- **Guidance** – Links to guidance and resources on Horizon Europe project management
- **Meetings** – containing the agenda, presentations, minutes and participants list of the project official meetings.
- **Reference documents** – containing official project reference documents (Grant Agreement and Consortium Agreement), as well as the Annotated Model Grant Agreement for guidance.
- **Reports** – containing the internal and official reports, as well as additional monitoring documents (e.g., risk monitoring, milestone monitoring, etc.)
- **Templates** – containing the project templates for reporting, deliverables and dissemination actions.
- **Working documents** – this folder is envisaged as a collaboration area where all project members can collaborate on shared documents.

Additional folders and subfolders may be created upon request to the Project Coordinator.

3.3.2 Access and protection

The partners are granted access to the internal platform by the Project Coordinator and the link to the internal platform is placed on the project external website.

4 External communication

The external communication and dissemination are governed by *Article 17 - Communication, Dissemination and Visibility* (and its Annex 5) of the Grant Agreement. In addition, the specific Communication and Dissemination Strategy of the BIOSYSMO project will be thoroughly described in

successive deliverables D7.3, D7.4 and D7.5. The following section provides a summary of the main aspects to be taken into account.

4.1 Information on EU funding and disclaimer

In line with the Grant Agreement provisions (Art 17.2), any “*communication activities of the beneficiaries related to the action (including media relations, conferences, seminars, information material, such as brochures, leaflets, posters, presentations, etc., in electronic form, via traditional or social media, etc.), dissemination activities and any infrastructure, equipment, vehicles, supplies or major result funded by the grant must acknowledge EU support and display the European flag (emblem) and funding statement (translated into local languages, where appropriate)*”.



Funded by the
European Union



Funded by the
European Union

Together with the EU flag, partners must include the following acknowledgement:

“The project BIOSYSMO has received funding from the European Union’s Horizon Europe research and innovation programme under grant agreement No 101060211.”

In addition, the following disclaimer must be included:

“Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or European Research Executive Agency. Neither the European Union nor the granting authority can be held responsible for them.”

4.2 Project corporate identity and communication package

Partners must use the project’s visual identity in all their external communication actions related to the project. The project identity has been developed as part of deliverable D7.1 and all the templates and logos are available for downloading in the internal project repository. Likewise, partner’s logos are available on the internal project repository as high-resolution image files. The communication package will be further complemented with communication materials, such as posters, presentations, videos, newsletters, etc., developed as part of Task 7.1.

4.3 Online tools

The BIOSYSMO project website (<https://www.biosysmo.eu/>) is presented in deliverable D7.1. The website has been set up and will be actively maintained by EXE. In order to increase the visibility of the website and project, each partner is encouraged to add a link to the website home page in their own institution website. The structure of the website is as follows:

- Home
- In brief, with the drop down menu: Concept, Objectives, Outcomes

- Meet the team
- Project activities, with the drop down menu: Workplan, Methodology, Applications, Field studies
- Media, with the drop down menu: News, Events, Newsletters and press releases
- Digital Library, with the drop down menu: Dissemination and Communication material, Publications, Public deliverables
- Clustering
- Contact

In addition to the website, social media accounts have been set up for the BIOSYSMO project in LinkedIn (<https://www.linkedin.com/company/biosysmo-project>) and Twitter (<https://twitter.com/biosysmo>), also as part of deliverable D7.1. The social media accounts have been set up and will be maintained by EXE.

Partners are encouraged to contribute to the visibility of the project through their own personal or institutional social media accounts. For instance, when mentioning the BIOSYSMO project on LinkedIn or Twitter, partners should always tag the project (@BIOSYSMO Project in LinkedIn and @biosysmo in Twitter). Likewise, tagging other relevant accounts such as those of Horizon Europe (@HorizonEU), European Research Executive Agency (@REA_research), DG Research & Innovation (@EUScienceInnov), EU green research (@EUGreenResearch) etc. and using hashtags such as #horizoneurope or #horizoneu is recommended. More detailed guidelines and procedures for online communication will be provided in D7.3.

4.4 Dissemination

The dissemination of the project results is governed by Article 17 of the Grant Agreement. In addition, according to Consortium Agreement Section 8.4:

“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 29.1 of the Grant Agreement 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 in writing to the Project 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.”

4.4.1 Open access to publications

According to the Grant Agreement:

“The beneficiaries must ensure open access to peer-reviewed scientific publications relating to their results. In particular, they must ensure that:

- at the latest at the time of publication, a machine-readable electronic copy of the published version or the final peer-reviewed manuscript accepted for publication, is deposited in a trusted repository for scientific publications;

- immediate open access is provided to the deposited publication via the repository, under the latest available version of the Creative Commons Attribution International Public License (CC BY) or a license with equivalent rights; for monographs and other long-text formats, the license may exclude commercial uses and derivative works (e.g., CC BY-NC, CC BY-ND); and

- information is given via the repository about any research output or any other tools and instruments needed to validate the conclusions of the scientific publication.”

The following procedure should be followed by the partners **before submitting any scientific article for peer-reviewed publication**:

1. Check if the journal's open access policy is compliant with the EC rules. Besides the specific journal website, partners are advised to consult the Sherpa-Romeo platform (<https://v2.sherpa.ac.uk/romeo/>).
2. If immediate open access (either green or gold) is possible, partners can publish in this journal. Partners should keep in mind that in case of gold open access, only publication fees in full open access journals are eligible for reimbursement (i.e., **publishing fees in hybrid journals are not eligible for reimbursement**).
3. If immediate open access is not granted, the partner is free to negotiate an embargo waiver with the publisher. If this is not possible, partners should refrain from publication in this journal and look for alternative options.
4. Partners should consider the publication in Open Research Europe (<https://open-research-europe.ec.europa.eu/>), which is fully compliant with the EC rules.

Once the publication is approved, the following steps should be followed:

1. Upon publication, a machine-readable electronic copy of the published version or the final peer-reviewed manuscript accepted for publication must be uploaded to Zenodo under the BIOSYSMO project community (<https://zenodo.org/communities/biosysmo/>).
2. The deposited publication should be enriched with the appropriate metadata and cross-references to datasets as defined in the Data Management Plan.
3. Open access to the deposited publication must be provided immediately via the repository.
4. If the publication is deposited in other repositories (e.g., institutional, subject-base), partners should pay attention not to duplicate the DOI assignment and make sure that the appropriate cross-reference to the original document is provided.

4.4.2 Open access to research data

According to the Grant Agreement:

“The beneficiaries must manage the digital research data generated in the action (‘data’) responsibly, in line with the FAIR principles and by taking all of the following actions:

- establish a data management plan (‘DMP’) (and regularly update it);*
- as soon as possible and within the deadlines set out in the DMP, deposit the data in a trusted repository;*
- as soon as possible and within the deadlines set out in the DMP, ensure open access—via the repository—to the deposited data, under the latest available version of the Creative Commons Attribution International Public License (CC BY) or Creative Commons Public Domain Dedication (CC 0) or a license with equivalent rights, following the principle ‘as open as possible as closed as necessary’, unless providing open access would in particular:*
- be 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 DMP*
- provide information via the repository about any research output or any other tools and instruments needed to re-use or validate the data.”*

Specific guidelines for data management will be described in the Data Management Plan (deliverable D8.2, and updates D8.3 and D8.4).

4.5 Reporting of communication and dissemination activities

All partners must keep track of their communication and dissemination actions related to the BIOSYSMO project, including publications. These actions will be periodically reported to the Exploitation and Dissemination Team. EXE, as leader of the dissemination task (Task 7.2) will maintain a list of publications and dissemination activities and ensure that this list is included on the BIOSYSMO website, the appropriate deliverables and the Periodic Reports to the EC. Specific guidelines for reporting of communication and dissemination activities will be elaborated and shared by EXE.

5 Intellectual Property management

The basis for Intellectual Property (IP) management and Access Rights are outlined in *Article 16 — intellectual property rights (IPR) — background and results — access rights and rights of use* (and its Annex 5) of the Grant Agreement and further detailed in *Section 8 – Results* and *Section 9 – Access Rights* of the Consortium Agreement. In addition, Task 7.4 will further develop the knowledge management strategy, which will be detailed in the successively developed Plan for the Exploitation and Dissemination of Results (PEDR; deliverables D7.3, D7.4 and D7.5), including the results ownership in the final version of the PEDR (D7.5).

Overall, the IP management strategy will be based on the following principles with regard to IP ownership:

- Results created by one partner will be owned by that partner, who will decide about protection and exploitation.
- Results created by several partners will be jointly owned by those partners and the partner co-owners will decide together about protection and exploitation.

Based on these ownership rules, the general strategy for knowledge management is driven by three main principles:

1. To publish open access (see Section 4.4.1)
2. To restrict access to confidential data given the exceptions allowed by the EC are met (deliverables containing confidential information are classified as sensible)
3. To protect the IP with the appropriate protection route

The pre-existing know-how (background) brought to the project by the partners and specific restrictions and/or conditions for implementation or exploitation have been identified in the Consortium Agreement (Attachment 1).

6 Conflict resolution

The partners have agreed within the Consortium Agreement to attempt solving amicably their conflicts, either on technical, financial or procedural issues. Problems that may arise during the execution of the project will be handled at the lowest level possible. First, the partner(s) encountering the problem will try to solve it. If the problem may affect the WP progress, the partner will inform and involve the WP Leader. Problems that may affect several WPs or the entire project will immediately be brought to the attention of the Project Coordinator. In case of major problems that cannot be solved by the EMB, the GA will take a decision on the issue. For urgent matters, an extraordinary GA meeting may be organized. All actions and decisions will be properly documented in the meeting minutes. Similarly, conflict resolution will first be addressed at the task or WP level, preferably in an amicable way. If no agreement can be reached, the conflict will be transferred to the Project Coordinator, then to the GA. If necessary, the authorization of the EC regarding a specific decision will be requested.

In the unfortunate case that the dispute cannot be solved amicably, provisions agreed within the Consortium Agreement (Article 11.8) will be put in place.

7 Continuous update

The present version of the Project Management Handbook provides the management framework applicable to the currently foreseen situations to be faced within the BIOSYSMO project. Nevertheless, this handbook is a living document and will be updated according to project needs to:

- include new procedures in order to handle unforeseen situations;
- improve or modify the present guidelines based on the gained experience; or
- reflect updates on the management structure that may occur during the execution of the project.

Partners will be informed of any update to the Project Management Handbook and will receive a copy of the amended document in a timely manner.