

BIOservicES

Linking soil biodiversity and ecosystem functions and services in different land uses: from the identification of drivers, pressures, and climate change resilience to their economic valuation

Communication, Dissemination and Exploitation Plan

Deliverable D6.1

Deliverable lead partner: JUNE

Contributing partner: ZABALA



Report

Document summary	
Document Title	Communication, Dissemination, and Exploitation Plan
Author	JUNE, ZABALA, SILAVA
E-mail of the principal author	Iuliana.floricica@junecom.ro
Lead beneficiary	JUNE
Deliverable No.	D6.1
Work Package	WP6. Communication, dissemination, and exploitation
Dissemination type	Report
Dissemination Level	Public
Estimated release date	31.01.2024 (M6)
Actual release date	27.02.2024 (M7)
Copyright	© 2024 BLOserviceES Project and Consortium



Table of Contents

1. Main Objectives.....	5
2. Communication Plan	6
2.1 Communication strategy	6
2.2 Target groups and audiences.....	6
2.3 Templates	7
2.4 Project Website.....	8
2.5 Social Media.....	9
2.6 PR and Media relations	11
2.7 The digital platform	13
3. Dissemination Plan	13
3.1. Dissemination strategy	13
3.2. External events	14
3.3. BIOserviceES events in the framework of stakeholder platforms	14
3.4. Field demonstrations	15
3.5. Publishing articles	15
3.6. Policy briefs.....	15
3.7. Dissemination Control File	16
3.8. Dissemination Practice Abstracts.....	16
4. Exploitation Plan.....	16
4.1 Maximizing Impact.....	16
4.2 Methodology.....	18
4.2.1 Identification of Project results.....	19
4.2.2 BIOserviceES exploitable result Identification Questionnaire	20
4.2.3 Intellectual Property Strategy	21
4.2.4 Non- Commercial Results	24
4.3 Funding Opportunities	25
4.4 Data Collection.....	25
4.5 EC Tools	26
4.6 Exploitation Timeline	30
5. KPIs and Measurements	31
6. Conclusions.....	33
Annex 1 – Dissemination Control File	34
Annex 2 – Communication, Dissemination and Exploitation Plan	37



Executive summary

BIOserviceES is a European-funded project under the Mission Soil umbrella, aiming to understand the interconnection between soil organisms and the delivery of multiple ecosystem functions and services at different scales, identifying the pressures and drivers resulting from different land uses and climate change, and performing an economic valuation of the contribution of soil organisms to ecosystem services.

To achieve its goals, a comprehensive Communication, Dissemination, and Exploitation plan is fundamental to ensure the maximum impact of the BIOserviceES project. This deliverable presents the project's main objectives regarding communication, dissemination, and exploitation, as well as methodology, key channels, and target audience used to obtain optimum coverage and impact.

This deliverable at the early stage of the project represents a first draft of the Communication, Dissemination, and Exploitation activities, closely monitored and optimised when required.



1. Main Objectives

Communicate and disseminate new knowledge on the contribution of soil organisms to the provision and delivery of ecosystem functions and services

Use the project's results to increase the use of soil biodiversity indicators

Establish effective process of continuous knowledge exchange with stakeholders beyond the project

Define and implement the corporate branding and communication strategy of the project

Carry out a dissemination strategy to share project results with specific target

Perform effective exploitation of results, aligned with exploitation requirements and IPR



2. Communication Plan

2.1 Communication strategy

Implementing BIOServicES relies on an effective communication strategy. A communication strategy has been designed to reach the right audience, raise awareness, and increase the impact and reach of the project and its objectives, principles, and findings.

The communication takes place throughout the entire duration of the project under the leadership of WP6, with active contributions from relevant partners involved in other WPs. The strategy includes various types of instruments, from public relations, scientific articles, and social media to audio-visual materials that create a clear image of the project. This way, we can ensure a clear representation of our project and ensure that stakeholders are consistently engaged and well-informed throughout the project's duration, contributing to the project's objectives.

2.2 Target groups and audiences

Specific target groups and audiences have been identified to ensure a tailored and impactful outreach strategy. These include:

- The general public: a broader community of individuals interested in environmental issues.
- The scientific community: researchers and professionals specialising in soil biology, microbial ecology, and related disciplines who can contribute and benefit from the project's findings.
- Farmers and farmer's associations: farmers and specific organisations interested in sustainable land management practices and their impact on soil health.
- Policy Makers and Regulators: government officials and policymakers responsible for environmental regulations and conservation policies.
- Non-governmental organisations: organisations involved in global environmental issues.
- Foresters: professionals involved in forestry and land management.
- Miners: individuals and companies engaged in mining activities.



- Industry stakeholders: businesses and investors involved in agricultural services, dependent on ecosystem services.

2.3 Templates

To ensure a clear image and visual identity of the BIOservicES project, a series of templates for documentation, presentations, and e-mail signatures have been developed, keeping in mind the project's branding.

All deliverables and project presentations will follow the branded templates while keeping in mind the project's visual identity guidelines (logo, main chromatic palette scheme, brand fonts, appropriate images, etc).



Figure 1. BIOservicES Logo

26/07/2023



Figure 2. BIOservicES presentation template





Figure 3. BIOServicES template for deliverables



Figure 4. E-mail signature design

2.4 Project Website

As the main information hub for the project, a user-friendly website has been established. The website is available at www.bioservices.co and will be available throughout the entire duration of the project. The website is available in



English and will be translated into Spanish, French, Romanian, German, Latvian, and Italian to ensure clear communication and dissemination of information for various stakeholders at the European level. It should be noted that the .co domain is currently being utilised due to the unavailability of the .eu domain, and the exceeding cost of the .com domain of \$49.000. This is a temporary measure, as JUNE is actively participating in a licitation process to secure the desired domain and be consistent with the other EU projects.

The website will be continuously updated with news, links, events organised by BIOservicES and external stakeholders, articles, and informational videos.

2.5 Social Media

To reach a broader audience, increase awareness, bridge other soil-related projects and share news regarding the project and its objectives, multiple social media pages have been created on the main platforms, addressing different target audiences.

At the project's launch, LinkedIn, Facebook, Instagram, Twitter, and YouTube pages have been created. While LinkedIn and Twitter gather a significant portion of the research and business community, Instagram and Facebook have been tailored to engage with a wider audience, including farmers and the general public. YouTube will be used to share informative videos, interviews with the project's consortium, and visual content that simplifies complex scientific concepts.

The social media strategy relies on sharing regular updates and relevant content, such as infographics, information on the project, and relevant topics and concepts regarding soil, sustainability, and soil health.



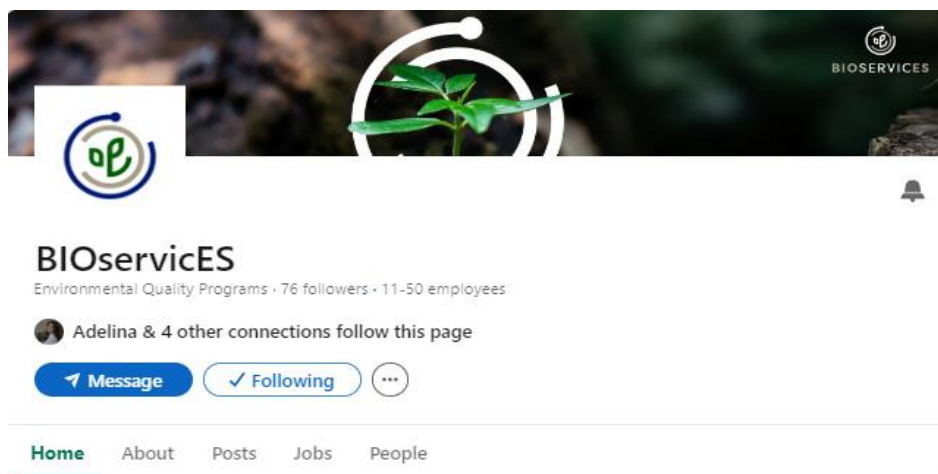


Figure 5. LinkedIn social media page (<https://www.linkedin.com/company/bioservicesproject/>)



Figure 6. Twitter social media page (<https://twitter.com/bioserviceseu>)

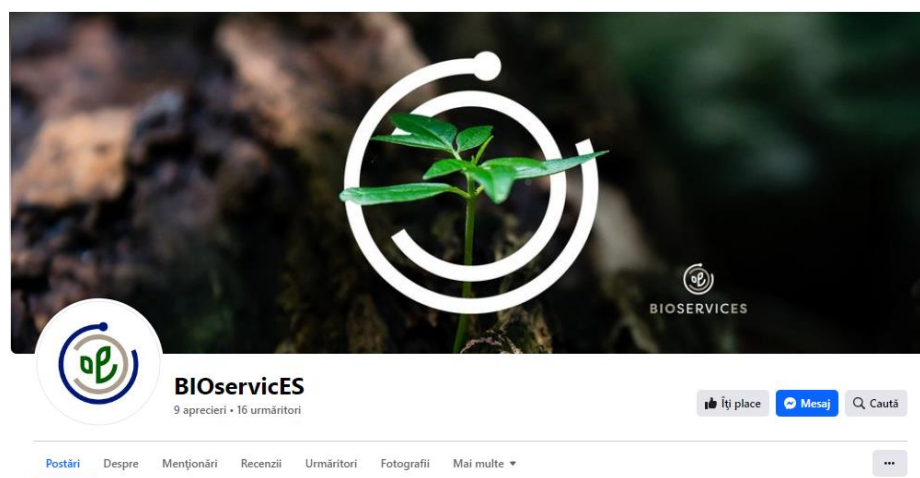


Figure 7. Facebook social media page (<https://www.facebook.com/profile.php?id=61551756084567>)





Figure 8. Instagram social media page (<https://www.instagram.com/bioservices.eu/>)

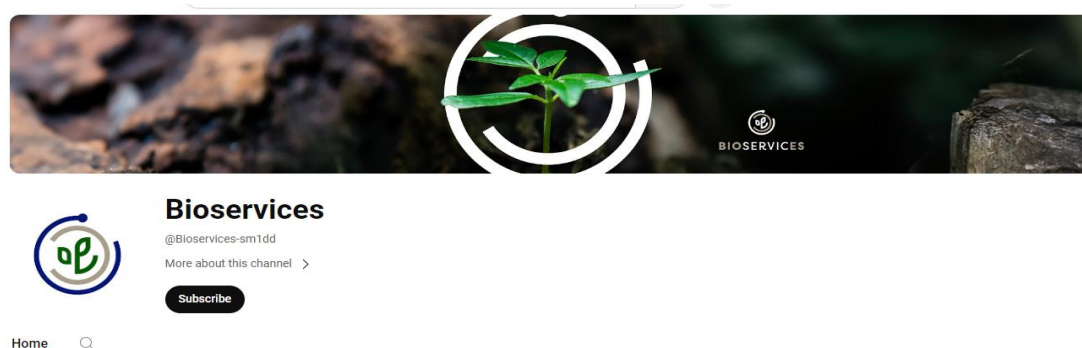


Figure 9. YouTube social media page (<https://www.youtube.com/channel/UC07E7uR2lOpTM9ExST74R0w/>)

2.6 PR and Media relations

A PR and media relations strategy has been defined to strategically position and promote BIOserviceES public in the public sphere and raise awareness among the target audience. To achieve this objective, press releases will be distributed throughout the project duration, highlighting important updates such as the project's launch, key findings, and events. A first press release was launched at the beginning of the project, at the European level and in Romania, Spain, Germany, Italy, and Latvia, increasing public awareness regarding the BIOserviceES project.



BIOServicES, un nou proiect Horizon Europe dedicat utilizării solului și biodiversității acestuia



Roxana Dobre - 7 noiembrie 2023 11:51



BIOServicES, un nou proiect Horizon Europe, anunță debutul

Figure 10. BIOServicES press release on the Romanian media

Moreover, to ensure clear communication, media interviews with key project partners will be intermediated to share news regarding the project's progress. The communication materials are centralised in a comprehensive document aimed at monitoring their timely delivery.

BIOServicES: Communication, Dissemination, and Exploitation Plan										
Nr. Cr.	Month (deadline)	Category	Topics	Target Audience	Content	Type of Content	Channels	Recurrence	Responsible	Status
1	M1	Comms	Brand Kit	Project partners	General Communications	Internal	Internal	1	June	done
2	M1	Comms	Social Media pages	General Public, Potential Partners, Stakeholders	Social Media posts	Marketing	Facebook, LinkedIn, Instagram, Twitter, Youtube	1	June	done
3	M2	Comms	Kick-off Meeting	General Public, Potential Partners, Stakeholders	Corporate Communications	Press Release	Sustainability, Business, General, Agriculture Media, BIOServicES Social Media	1	June, WP leaders	done
4	M4	Comms	Multilingual website	General Public, Potential Partners, Stakeholders	Website	Marketing	Website	1	June	in pro...
5	M5	Comms, Diss., Exp	C, D, E plan	WP Leaders	General Communications	Internal	Internal	1	June	in pro...
6	M6	Comms	Video campaign - LL & LH	General Public, Potential Partners, Stakeholders	Video	Marketing	Social Media, Website	1	JuneCom, LHs & LLs	not sta...
7	M9	Comms	Project Goals	General Public, Potential Partners, Stakeholders	Media Interview	Corporate Communication	Sustainability, Business Media, InBestSoil Social Media	1	JuneCom	not sta...
8	M12	Comms	Video campaign - LL & LH	General Public, Potential Partners, Stakeholders	Video	Marketing	Social Media, Website	1	JuneCom, LHs & LLs	not sta...
9	M14	Comms	Project Updates 1	General Public, Potential Partners, Stakeholders	Infographic	Marketing	Social Media, Website	1	All WP	not sta...
10	M15	Comms	Online Banner Campaign	General Public, Potential Partners, Stakeholders	Visual	Marketing	Consortium Partners Website, Social Media, Project's Website	1	All	not sta...
11	M18	Comms	Project Updates	General Public, Potential Partners, Stakeholders	Media Interview	Corporate Communication	Sustainability, Business Media, InBestSoil Social Media	1	JuneCom	not sta...
12	M20	Comms	Project Brochures	Potential Partners, Stakeholders	Leaflets	Marketing	Website	2	All WP	not sta...

Figure 11. BIOServicES Communication, Dissemination, and Exploitation Plan



2.7 The digital platform

A digital platform has been created to serve as a communication channel, available at <https://inbestsoil.app/social>, a dynamic hub that will evolve and expand its capabilities throughout the project's duration to cater specifically to the needs of BIOserviceES users. At its core, this platform is designed to unite stakeholders within the soil sector, offering them a dedicated space for seamless collaboration and the exchange of knowledge and expertise.

Structured around a central newsfeed, the platform facilitates the creation of thematic groups with customisable access authorisations, allowing users to tailor their engagement to their specific interests and professional affiliations. Beyond this, the platform will be equipped with an array of additional features, including a user-friendly chat facility, a responsive helpdesk, a comprehensive knowledge repository, and an interactive map highlighting registered players and users.

The overarching goal is to establish a secure and nurturing environment that fosters the consolidation of this professional community. As the project progresses, the collaborative platform will continue to grow and adapt, ensuring that it remains a cutting-edge resource for BIOserviceES users. This platform is not just a tool; it's a dynamic ecosystem fostering connectivity, knowledge-sharing, and collective growth within the soil sector.

To support the BIOserviceES user community, the platform will have thematic groups such as "economic valuation of soils" or "policy recommendations for soil health promotion". These groups will enable open discussion on specific topics and allow users to share their experiences. They will also be able to use the integrated video conferencing feature to create events within the groups themselves and invite all the members of a group or channel in just a few clicks. As for public webinars, these can be created directly from the home page and will be events to bring the professional community together. In terms of communication, the platform will enable users to promote their activities to a community of experts working on similar subjects.

3. Dissemination Plan

3.1. Dissemination strategy

Dissemination is a fundamental part of the project, ensuring the insights and findings of the BIOserviceES project reach a broad and diverse audience. The dissemination strategy focuses on stakeholder mobilisation and on providing



a reliable, smooth, and efficient knowledge transfer of the project results to the end-users and target groups.

At the EU level, the emphasis will be placed on effectively managing stakeholders involved in economic activities related to various soil uses and sectors, including farming, forestry, gardening, mining, conservation, restoration, and leisure. This consists of establishing connections between policymakers and overarching organisations to ensure active engagement, notably through the Stakeholder Advisory Board (STAB).

At the regional level, BIOserviceES will execute the stakeholder engagement plan detailed in WP1 to establish connections with local communities consisting of farmers, foresters, industries, public authorities, etc. This engagement will be tailored to address the unique needs of these communities, considering local languages and socio-economic particularities. The methodology proposed for engaging and organising the collaboration among different local/regional stakeholder communities adheres to the multi-actor approach, structured as a matrix organisational model.

3.2. External events

Key members of the BIOserviceES consortium will participate in external events, such as fairs, conferences, and congresses, where the project's results will be showcased. This action serves as a strategic initiative to disseminate findings, share insights, and foster collaboration with stakeholders, the scientific community, public authorities, and investors. In total, there will be 6 international and 20 regional events.

3.3. BIOserviceES events in the framework of stakeholder platforms

To gather insights and present the project's main results, 2 events for every experimental site will be created throughout the project's duration.

Promotional and dissemination activities before and after the events will be implemented as follows:

- Standardised and branded graphics;
- Dedicated event page on the BIOserviceES website;
- Email campaigns to reach relevant stakeholders;



- Event promotion on the project's social media pages.

3.4. Field demonstrations

To demonstrate the benefits of preserving soil health, the BIOserviceES project will organise one field demonstration per experimental site, totalling 25 field demonstrations. These field demonstrations serve as practical showcases to illustrate the positive impacts of sustainable soil management practices and highlight the tangible outcomes of the project.

The field demonstrations will provide a hands-on experience for stakeholders, including local farmers, foresters, industries, and public authorities. Participants will witness the application of techniques and best practices developed through the research conducted by BIOserviceES.

3.5. Publishing articles

At least 20 scientific articles will be created during the project's lifespan and published in peer-reviewed JCR journals under open access. The articles will be made freely available to the public, ensuring widespread accessibility to the valuable knowledge generated by the BIOserviceES project.

The scientific articles will cover a range of topics, presenting research findings, methodologies, and insights derived from the project's investigations into soil health, ecosystem functions, and related areas. This way, the project will contribute to the advancement of scientific knowledge within the respective fields.

To ensure clear management of the articles, a dedicated document will be created containing the writers' names, topics, and status of publication, ensuring that the consortium is informed regarding the topics addressed and their publication status.

3.6. Policy briefs

To identify key soil organisms related to key ecosystem services, select the best strategies to enhance the delivery of ecosystem functions, promote private and public investments in soil health, and facilitate international partnerships,



the BIOserviceES project will develop at least two policy briefs. The materials serve as recommendations for policymakers to influence future policy and regulatory actions, presented at the Final Conference.

3.7. Dissemination Control File

Aiming to gather, in a single place, all the actions, activities, and deliverables related to the dissemination of BIOserviceES throughout the life of the project, a Dissemination Control File was created. Each partner will fill in the file with their actions and activities throughout the project's duration. By adopting this structured approach, the project consortium aims to maintain clarity, accountability, and consistency in the dissemination efforts. The file facilitates real-time access to the status of dissemination activities, enabling partners to coordinate efforts, share insights, and collectively strategise to enhance the project's outreach.

3.8. Dissemination Practice Abstracts

All project outputs and results will be explained in an easy-to-understand language for end-users so they can properly implement them at a real scale in their fields. This involves the creation of at least 100 Practice Abstracts, divided into two separate batches. The division into two batches allows for a phased release of Practice Abstracts, ensuring a steady flow of accessible information throughout the project's lifespan. This approach facilitates the timely dissemination of valuable knowledge, allowing end-users to stay informed about the latest developments and seamlessly integrate these insights into their practices. The first batch will be delivered by M34, while the second one by M58.

4. Exploitation Plan

4.1 Maximizing Impact

The main objective of BIOserviceES exploitation activities (Task 6.3) is to ensure that the innovations and results created during the project are exploited



during and after the end of the project. This deliverable includes the guidelines to follow for the successful exploitation of BIOserviceES results. These guidelines will be adapted for each of the results. An updated version of the plan will be presented in M38 in D6.3, and the final exploitation strategies will be collected in D6.6 in M60.

Exploitation can be understood in several ways if we use the EC definition. To exploit a result means to identify the result and stakeholders (means owners or parties interested in exploitation internal to the projects, and external parties or clients) and to concretise the value and impact of the R&I activity for the societal challenges. Illustrated in Figure 1 is a diagram outlining various pathways for exploiting project outcomes. These pathways encompass commercial, societal, political, and educational dimensions, providing a comprehensive view of potential avenues for impact. Additionally, project partners have the opportunity to directly capitalise on these outcomes. Moreover, there's the option to facilitate external exploitation, for instance, by sharing results under open licenses to encourage broader utilisation by other entities.

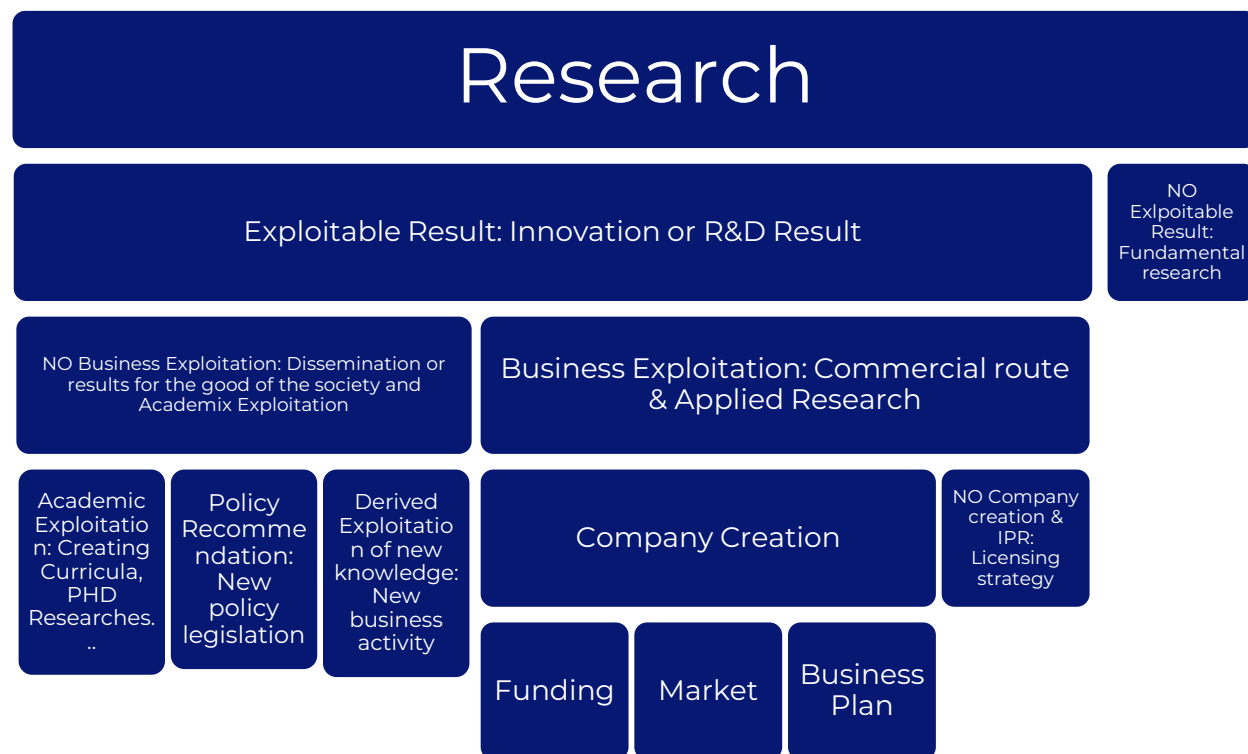


Figure 12. Exploitation routes scheme

The two main issues identified for lack of exploitation of results and innovations are:



- No clear owner of the specific result.
- No clear plan for use/exploitation/commercialisation after the end of the project.

Both issues will be addressed by how BIOserviceES is structured. The BIOserviceES is an interdisciplinary consortium composed by top scientists and companies with geographical representativeness, interdisciplinarity and complementarity with large interest in using the individual and overall results, mainly for further research activities but with ideas to commercial exploitation. BIOserviceES also has a dedicated task (Task 6.3) to focus on this aspect, and one of the objectives of this deliverable is to establish a long-term sustainability plan for the results obtained.

4.2 Methodology

Task 6.3 aims to develop an exploitation strategy for the results coming out of the BIOserviceES project. It is an iterative process in which each of the iterations regarding the exploitable results will add details and levels of planning.

The objective of the exploitation strategy encompasses, as outlined in the Grant Agreement, the management of knowledge and outcomes, taking into consideration Intellectual Property Rights (IPR) measures, all the while mindful of the interests of the partners as specified in the consortium agreement. More specifically, the exploitation plan will include:

- The foreground derived from the project and designated as exploitable by the Project Management Board will be compiled.
- Establish new collaboration projects to further exploit the knowledge acquired in BIOserviceES.
- An Exploitation & IPR workshop for consortium partners to raise awareness on exploitation and IPR protection of Key Exploitable Results and collect the interest and views of all partners.
- A map of key exploitable results and a corresponding IPR strategy.
- Definition of target markets and segments for the identified results & Identification of market competitors.
- Search for funding opportunities to complete the technological maturation.



- A long-term sustainability plan to describe in what way the results of the BIOServicES project (research, products, services, etc) can be exploited by project entities either individually or in collaborative schemes

This is a lot of information to cover and requires extensive work from the side of each project partner, supported by the exploitation manager (ZABALA). Given the nature of EU projects, the majority of necessary information will be generated throughout the project lifecycle. This is because the technical results and innovations evolve within the project, and business and financial planning may be contingent upon the ongoing progress.

BIOServicES is a majority of research-oriented project partners. For this reason, BIOServicES innovations and results may be expected to be exploited as new knowledge for research communities or policy recommendations and standardisations. This consortium was built with the aim of bringing the latest research into the hands of the end-user so that they are able to take advantage of recent developments in the area of investment in soil health.

The business partners and the Advisory Board will play an important role in the exploitation activities. ZAB will be in constant communication with them to analyse the results with their market experience and will also be invited to bring their experience and network contacts to discuss and define the market analysis and business plan of the key exploitable results (KER).

4.2.1 Identification of Project results

The initial step in any exploitation strategy is to identify all the potential and expected exploitable results of the project. The 1st task is to create an overview of potentially exploitable results from the BIOServicES project, identify the owner or owners and who wants to use it, the market potential of the innovation and gaps in knowledge.

Following the EC definition, a project result is any tangible or intangible output of the action, such as data, knowledge, and information whatever their form or nature whether they can be protected. Importantly, the exploitable results are not the equivalent of project deliverables or even project results, such as described or foreseen in the proposal. Depending on the type of result, different exploitation activities should be done to reach the principal stakeholders:

In order to identify and evaluate the potential exploitable results of the BIOServicES project, the BIOServicES methodology will be based in the use of the “BIOServicES Exploitable Result Identification Questionnaire”, explained in the following Section.



4.2.2 BIoServiceES exploitable result Identification Questionnaire

BIoServiceES´ Exploitable Result Identification Questionnaire is built on the structure of the Innovation Radar, but it has been adapted, and additional information has been included to create proper exploitation strategies, business plans, market analysis and business cases. The questionnaire will be used as a first method to collect information about exploitable results and to create an overview during the project. Three iterations of the questionnaire are planned during the project, the first will be sent at the beginning of the exploitation activities in M16, the next iteration will be done in M34 and the final iteration by M46.

The first version of the Questionnaire consists of 38 questions (plus risks). However, it can be adapted in the following months as the project progresses. The questionnaire will cover the following areas:

- General information
- Innovation description
- Market description
- Financial information
- IPR (Background/Foreground) & Standards
- Risks.

Typically, in the initial iteration, particularly within Consortia featuring numerous scientific partners, a substantial information gap exists, leaving many questions unanswered. To enhance the efficiency and effectiveness of the questionnaire and boost partner motivation and compliance, a concise version, containing only General Information and Innovation Descriptions, will be circulated to the partners (result owners) before the full questionnaire. As mentioned earlier, during this phase, exploitable results will be categorised into commercially viable business results and non-business results.

In addition, the exploitation manager (ZAB) will give a short seminar in M16 about what it is expected to be filled in the questionnaire, and they will also explain the different protection strategies available for the different types of results (patent, trademark, copyright, registered design and trade secrets), EU IP focus, patent process, requirements, costs, Freedom to Operate and examples of IP. After the filling of the Questionnaires, 1-to-1 virtual meetings will be established between the exploitation manager and the result owners.



THE INNOVATION RADAR

To further encourage exploitation, keep track of exploitable results and offer support to the most promising project outcomes, the EC's DG Connect created the Innovation Radar. This is a structure where the exploitation and project managers report on the exploitation potential of a project, usually 2-3 times during a project's lifetime, using a questionnaire format.

The Innovation Radar consists of 16 specific questions for each innovation and 11 general questions for the consortium.

The Innovation Radar is a useful structure and methodology to create an overview of a project's results. By using the characterisations and definitions as described in the Innovation Radar, we ensure consistency in the reporting. For that reason, the consortium is creating a modified questionnaire we call the "Exploitable Result Identification Questionnaire" adapted to the BIOServicES project.

4.2.3 Intellectual Property Strategy

Once the exploitable results have been identified from the BIOServicES Exploitable Result Questionnaires (for knowledge and for commercial purposes) filled by the partners, they will be analysed in order to identify the owner/owners of the results and to follow the most suitable IP protection strategy. The forms of protection for a result vary depending on its type. The formulation of a strategy in this regard is pivotal for the effective exploitation and subsequent utilisation of the developed outcome. Identifying the proprietor or proprietors of the Intellectual Property (IP) is crucial, as the inventor of the innovation is not always the owner of the technology. This scenario is common in non-business institutions such as research centres or universities.

It's essential to note that if an innovation seeks protection, it must not be publicly disclosed before initiating the protection procedure. This often conflicts with the publication requirements of scientists. Hence, the protection strategy for each outcome should be addressed promptly as soon as the results become available.

JOINT OWNERSHIP AGREEMENT

BIOServicES is a multidisciplinary project and we expect that a number of results can be shared by the different partners. This means that two or more



partners collaborate in the development of intellectual property (IP has been jointly generated). To avoid disputes that could bring to court litigation, it is necessary to establish the terms in which results IP is generated and subsequently exploited.

Is the IP jointly generated? - The results will be considered that is jointly generated when two or more parties have jointly generated them; and it is not possible to: or establish the respective contribution of each Party; or separate them for the purpose of applying for, obtaining or maintaining their protection.

The results will be considered as jointly generated when the partners involved are co-inventors and not only merely executors. When the result cannot be obtained, or at least not in the same way, without the participation of one of the partners, one can consider that it is a jointly generated IP.

Below is a very useful table that clarifies the consideration of shared results.

Joint Inventor	Executor
Conceives the idea	Puts forward a hypothesis
Materially contributes to the development of invention	Passively follows the instructions imparted
Provides solutions to problems	Performs routine task
Implements the innovation	Executes results testing

Joint Ownership Agreement (JOA) - Upon establishing that the generation of results is collaborative or joint, it becomes imperative to negotiate an agreement with all the involved partners. In such instances, the partners should come to a consensus on the terms of joint ownership through a separate agreement, addressing the key issues outlined below:

- Parties: identification of the partners that are considered co-inventors/co-owners of the IP.
- Allocation of shares between joint owners in collaborative research projects. Options to be considered are:
 - Shares split equally among all joint owners or
 - Shares split in proportion to the joint owners' contributions.
 - Rights of use. The JOA usually grants unrestricted use. Sometimes, restrictions are necessary when one of the partners foresees further research. In those cases' there are two options:



- The joint ownership regime will be maintained with the provision of restrictive mutual conditions.
- One party will be assigned the property of the entire asset and grant licenses to other partners.
- Rights of exploitation. the conditions under which each co-owner can assign, license and, in general, exploit results should be defined. One important issue is to discuss if a partner requires any compensation in change of refusing exploitation rights over the joint results.
- Dissemination rights and confidentiality: parties must agree on the limits and means to disclose data and results, bearing in mind that disclosures can be an impediment to future IP rights registration.
- IP management: indication of the partner responsible for maintaining and defending against potential infringements (including the costs incurred) of the IP rights over the results.
- Additional clauses: governing law and jurisdiction.

RESULTS AND IPR PROTECTION STRATEGIES - The results obtained in the framework of the project which by their characteristics are potentially exploitable will be analysed in detail from the point of view of the protection of intellectual property and its future commercial exploitation.

A key issue when doing this analysis is when the results are shared by two or more partners.

When this happens, aspects such as ownership, inventorship, definition of dissemination or exploitation rights or the need for a JOA must be determined.

In this sense, a very representative table of the particular situation of the BIOserviceES project will be next offered. This table will indicate for each partner the type of participation (background, results or both) in the generation of each of the results of the project.

Partner	R1	R2	R3	R4	R5	...	RX
Partner 1	B/R						
Partner 2							
...							



The main issues here to consider are:

- Identifying the partners who provide background support for each result is crucial. It is essential to ascertain which partners contribute their background knowledge to the implementation and exploitation of the results, as they may assert access and usage rights to that particular knowledge.
- Establishing the ownership trail for each result is vital. It is crucial to distinguish between inventorship and ownership, determining who retains ownership rights over the result and, consequently, who possesses the rights for the use and exploitation of the intellectual property.

Additionally, ownership can undergo transfer, emphasising the importance of maintaining clear traceability. This traceability must be officially approved by all participating partners during the corresponding meeting and documented in the meeting minutes convened for this specific purpose.

- Ensuring traceability of exploitation rights for results is essential. Exploitation rights may either be retained or transferred among partners, with the possibility of belonging to a single partner or being shared. In instances of shared rights, the distribution can be equal or based on various factors such as financial contributions, resource contributions, knowledge, development efforts, and more.
- Maintaining traceability of dissemination rights for results is crucial. Similar to the previous case, dissemination rights can either be retained or transferred, and they may belong to a single member or be shared among partners. In this context, it is imperative to define which party has the authority to disseminate specific information and establish effective means of control.

The background/results map offers information about who has contributed background (B) in what results (R) and who has contributed to the development of new knowledge/ products/ technologies during the projects.

4.2.4 Non- Commercial Results

As previously shown, results can also be exploited in a non-commercial way. This exploitation path is very important, especially in very disruptive projects in which the technology developed is not well known by the non-specialised community. In these results, the exploitation and dissemination activities almost overlap.



In that sense, the BIOserviceES project aims to create an ecosystem with relevant stakeholders and policymakers, thanks to the communication and dissemination activities, where BIOserviceES partners can be positioned as experts and promote the protocols and standards developed within the project and be part of the standardization or regulatory procedures definition.

4.3 Funding Opportunities

One of the most important elements to be defined for all results, but especially in early-stage innovations, is the funding or the resources needed to increase the TRL and reach the market after the end of the project. Depending on the maturity of the results, the resources needed and the expectations/requirements of the innovation owners, different strategies could be followed and go for private or public funding.

As most of BIOserviceES partners are scientific (from universities and research centres), and private funding is mostly dedicated to for-profit companies, special attention will be kept in future European open calls, like Soil Missions and Cluster 6 Horizon Europe in which the arisen innovations could be matured. To monitor all these opportunities, the KAILA tool will be used. KAILA is a matchmaking search engine developed by ZABALA for matching and identifying European public funding and financing.

Partnering with industry and private funding will also be explored for non-business and business partners, respectively. The Crunchbase (or similar platforms) and Innovation Radar platforms will be used to identify and link partners with investors in the sector. Academia-industry matchmaking platforms like Inospin and the services provided by the EC or other entities like industrial events and corporate days of interest for the partners will also be monitored and used during the project.

4.4 Data Collection

In order to make the communication between the exploitation manager (ZABALA) and the partners more agile, each of the partners has selected some members of their organisation as their exploitation contact person, who will be in charge of the internal communications with their colleagues and, in the case of the universities and research centres, it will also act as an intermediary with its respective officers.



The following are the main tools and methods that will be used for data collection and creating the BIOserviceES exploitation roadmap:

QUESTIONNAIRES

As described previously, the Exploitable Result Identification Questionnaire is used to collect information about exploitable results and to keep an updated overview of these. Three iterations will be sent out and analysed by M16, M34 and M46.

EXPLOITATION WORKSHOPS/SEMINARS

As most of the BIOserviceES partners do not have a business background, 2 different short workshops/seminars (not proposed at the beginning) will be held during the project to involve the consortium in the exploitation activities. The 1st in M22 for explaining the Exploitable Result Identification Questionnaire, preliminary results, and the different IPR strategies that can be used. The 2nd in M40 will explain the results obtained and the long-term sustainability plan. Depending on the global situation, these seminars/workshops will be held online or face-to-face, taking advantage of the technical meetings.

VIRTUAL/FACE-TO-FACE MEETINGS

Ultimately, the best way to define the exploitation roadmap for a specific result is to have an efficient conversation with the result owners to understand the results and know their expectations. The exploitation manager will contact the result owners to go deep into their answers and, in case it is needed, also to align their IPR and transfer policies with the BIOserviceES exploitation strategy. Business partners may also be invited to participate in these meetings to help develop the exploitation plan. Also, as the project advances, the innovation results will arise, and more information about the exploitation strategy will be defined, so contacts and meetings with the stakeholders will be established to obtain good practices and increase awareness about BIOserviceES innovations.

4.5 EC Tools

The GA states that “Each beneficiary must — up to five years after the period set out in Article 4—take measures aiming to ensure ‘exploitation’ of its results (either directly or indirectly, in particular through transfer or licensing; see Article 17)”, however, the experience has shown that not always the result is exploited, this is caused by several factors like; perceiving it not important for the “real work”, not focusing on aligning work with the needs of users and



stakeholders, lack of skills, interest or knowledge or because of interpreting the exploitation as an activity to be done after the project lifetime.

Recognising this, the European Commission (EC) consistently examines the primary barriers to exploitation and devises action plans to surmount them. An illustrative instance is the Intellectual Property Action Plan unveiled in November 2020, which pinpoints five challenges and outlines corresponding action plans slated for implementation in 2021 and 2022. The objective is to leverage Europe's intellectual assets to bolster recovery and resilience.

Consequently, the EC is extending a diverse array of services and calls that funded projects can leverage to enhance their exploitation strategies. The exploitation manager will monitor all these services and calls to select the most appropriate ones for the BIOserviceES project and will participate or encourage partners to participate in them.

Depending on the type of result and specific requirements, various tools have been pre-identified. The table below outlines some of the already recognised items that can be utilized as necessary.

Tool	Description and services offered
IP Booster	The IP Booster stands as a specialised professional Intellectual Property (IP) service tailored for public research organizations seeking to extract value from their research outcomes. This service encompasses five key offerings: Assess the type and extent of IP protection required for your project's intellectual assets, including evaluating the necessity to secure rights to third-party Intellectual Property Rights (IPRs). Develop a patent landscape to delineate optimal commercialisation pathways for your research clearly. Conduct a comprehensive due diligence process, evaluating both the quantity and quality of IP assets generated by your project while estimating their future value. Prepare patent, design, and trademark applications for your project. Offer guidance and support in negotiating technology transfer agreements, facilitating the



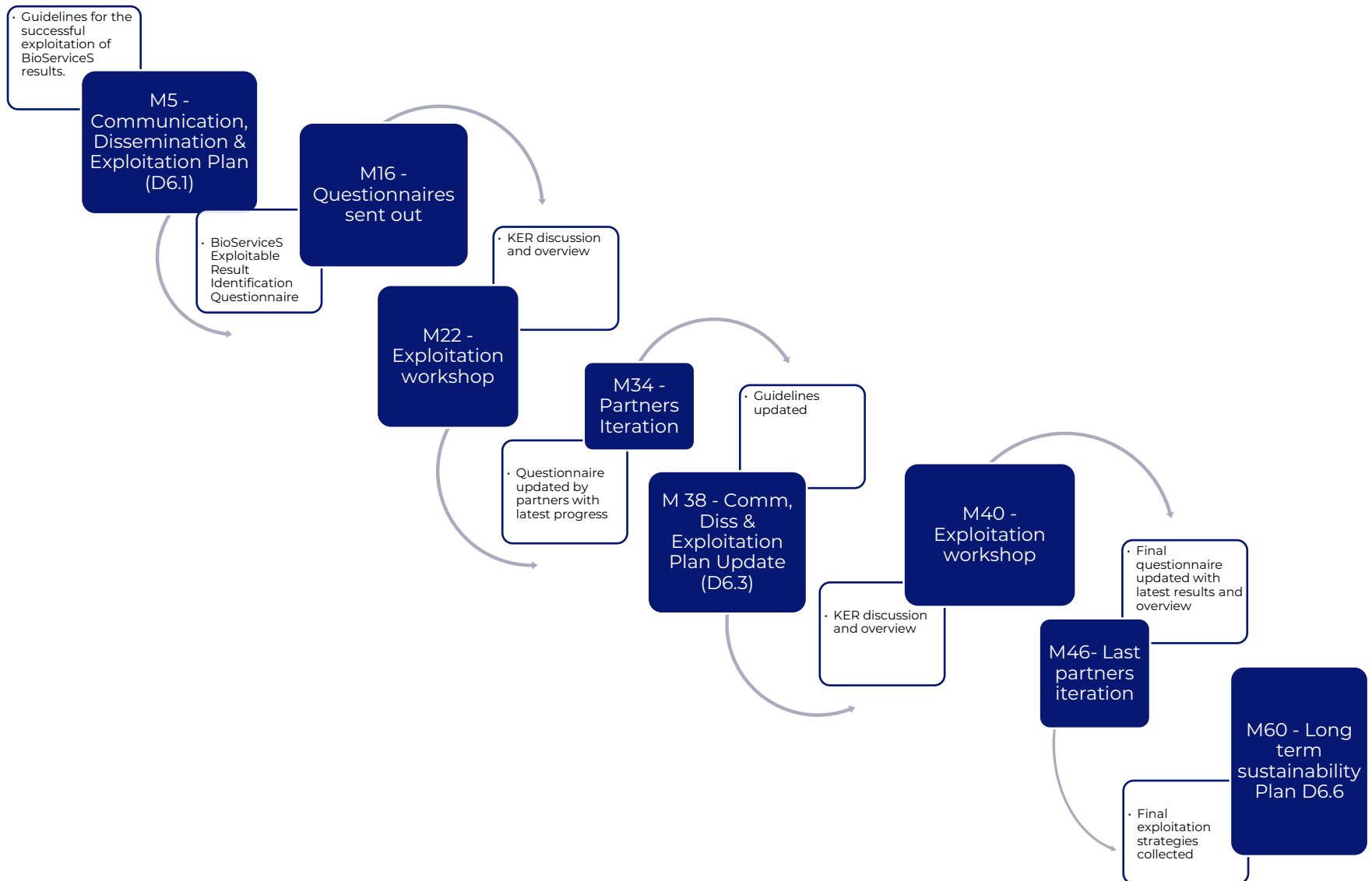
	smooth transition of technological innovations from research to application.
Horizon results Booster	The Horizon Results Booster presents a suite of specialised services to optimise the impact of public investments in Research and Innovation (R&I) and enhance the overall value derived from Framework Programmes (FPs). This comprehensive package facilitates a continuous flow of innovation into the market and beyond, expediting the journey towards impactful outcomes by addressing and overcoming obstacles. Experience the advantages of a customisable menu of services tailored to enhance your capacity for disseminating research results. Avail yourself of support to amplify the exploitation potential of your project results and improve your access to markets. The Horizon Results Booster offers three key services: Portfolio Dissemination & Exploitation Strategy Business Plan Development Go-To-Market Support These services are designed to empower you to build a robust foundation for disseminating research outcomes, maximising exploitation potential, and effectively navigating market entry.
European IPR Helpdesk	Managed by the European Commission's Executive Agency for Small and Medium-sized Enterprises (EASME) and guided by policy insights from the European Commission's Directorate-General for Internal Market, Industry, Entrepreneurship, and SMEs (DG Grow), the European IP Helpdesk is a service dedicated to aiding cross-border SME and research endeavours. Its mission is to assist in the effective management, dissemination, and valorisation of technologies and other Intellectual Property (IP) Rights and assets on a European Union scale. The helpdesk provides a comprehensive array of informative materials, a Helpline service for direct IP support, and both on-site and online training opportunities.



Innovation Radar	The Innovation Radar initiative by the European Commission employs a data-driven approach to pinpoint promising innovations and innovators within EU-funded research and innovation projects. It facilitates the identification of high-potential endeavours and guarantees that researchers and innovators supported by EU funding receive expert guidance throughout the duration of their projects. This guidance assists them in taking the most effective steps to bring their innovations to the market while also establishing connections with potential investors.
------------------	--



4.6 Exploitation Timeline



5. KPIs and Measurements

A file for monitoring and controlling the achievement of the plan has been designed for internal use, attached as Annex 1. This way, we can efficiently track the deliverables, enhancing our ability to achieve the Communication, Dissemination, and Exploitation goals.

The impact of all critical activities performed in WP6 is measured through a core set of key performance indicators. Table 1 shows the KPIs and target audiences for the communication activities.

Table 1. Communication KPIs and Measurements

Channel	Description	KPIs
Website	A user-friendly website will be established as the main information hub for the project (MS6.1).	> 30,000 visits > 70 items accumulated
Social Media	BIOserviceES specific social network profiles (Twitter, Facebook, Instagram, LinkedIn, YouTube) will be set up in English and other national languages. Particular procedures for partners to interact with social networks will be included in the Dissemination, Exploitation and Communication Plan.	> 1000 followers on social media > 10,000 interactions > 2500 YouTube visualisations > 3 key opinion leaders (KOLs) engaged
Audio-visual Materials	WP6 leader will design communication materials that will be centralised in a branding guideline document and updated regularly to adapt to different messages.	2 general leaflets/brochures 4 general infographics 2 promotional videos 6 short videos (> 2500 views)
Online Banners	Online banners will present the concept of BIOserviceES, following branding rules in different formats for communication media, websites, social media, etc.	2 campaigns
Press Releases	Press Releases will emphasise the BIOserviceES vision and key results. An international database of journalists will be built. The	> 20 interviews > 1000 media clippings



	Communication Manager will organise interviews with journalists to present project objectives and progress.	
Partners' Channels	Access to partners' existing communication channels, such as their websites, social network accounts, etc.	> 10.000 people as a potential audience to be reached

Regarding the communication activities, the KPIs are as indicated in Table 2.

Table 2. Dissemination KPIs and Measurements

Activities / Tools	Target Stakeholders	KPIs
Participation in external events, such as fairs, conferences, and congresses, where results will be show-cased (posters, presentations, etc)	Scientific community, farmers, foresters, miners, public authorities, industry, businesses, investors, land managers, policy-makers	> 6 international events > 20 national/regional events > 10,000 people reached (audience)
BIOserviceES workshops/seminars/webinars in the framework of the stakeholder platforms to present the main results	The scientific community, policy-makers, NGOs, civil society farmers, foresters, miners, industry, public authorities, businesses, investors	> 2 events per experimental site > 1000 people (attendees)
Field demonstration events organised in each experimental site to show benefits of preserving soil health	The scientific community, policy-makers, farmers/foresters/miners, industry, land managers, public authorities, business, investors, civil society	> 1 event per experimental site > 900 people (attendees)
University lectures to explain the recent project results and help upskill the next generation of students investing in soil health	Students	> 500 Bachelor, Master and PhD students addressed
Final International Conference in Brussels to disseminate results	Policy-makers, the scientific community, farmers/foresters/miners, industry, land managers, investors, public authorities, NGOs, civil society	> 200 attendees



Training and Dissemination materials: Partners will explain the project and Training and Dissemination materials: Partners will explain the project and	Farmers/foresters/miners, industry, businesses, investors, land managers, Farmers/foresters/miners, industry, businesses, investors, land managers,	More than: 100 Practice Abstracts (EIP-AGRI) and associated factsheets, 10 practice-oriented short videos (tutorials), 10 practice-oriented podcasts, 10 practice-oriented Infographics and 20 articles in the sector-specific magazines
Scientific publications in peer-reviewed JCR journals under open-access	Scientific community	> 20 articles
Policy briefs, as recommendations for policymakers to influence future policy and regulatory actions. These will be presented at the Final Conference	Policy-makers, authorities public	At least two policy briefs

6. Conclusions

This document describes the strategy and activities of the BIOserviceES project regarding the communication, dissemination, and exploitation of the project's outputs to maximise impact and ensure the best results.



Annex 1 – Dissemination Control File

Nu m.	Date	Name of the activity	Description and justification with project WPs/tasks	Target audience 1 (choose from the list)	Target audience 2 (choose from the list)	Target audience 3 (choose from the list)	The number of audiences reached	Communication channel (choose from the list)	Outcome (objective achieved with the activity)	Main WP involved	Partner/s
1	01-09-23	Announcement start of BIOServiceS-project on ILVO-website	Information about the BIOServiceS project: objectives, research approach, relevance/valorisation and partner institutes	Researchers	Industry, businesses	International organisations	17390 visitors/month	Social media	Communication of BIOServiceS project and objectives	WP6	EV-ILVO
2	01-11-23	Onda Regional radio programme	Information about the BIOServiceS project, objectives, development, partner countries, scope, stakeholders and main applications	Civil society	Citizens	Researchers	600000	TV/radio campaign	Communication of BIOServiceS project and objectives	WP6	UPCT
3	06-11-23	EU Soil Day, Brussels, Belgium	Information about BIOServiceS objectives	EU Institutions	Researchers	Industry, business	100	Event (conference, meeting, workshop,	Communication of BIOServiceS objectives and	WP6	UPCT



			and work plan					debate, roundtable, group discussion)	expected results		
4	08-11-23	Funding opportunities of Horizon Europe (Cluster 6 and 5), Murcia, Spain	Information about BIOServicES objectives and work plan	Industry, businesses	Researchers	Innovators	30	Event (conference, meeting, workshop, debate, roundtable, group discussion)	Communication of BIOServicES objectives and expected results	WP6	UPCT
5	17-11-23	3rd EU Soil Observatory Stakeholder Forum	Information about BIOServicES objectives and work plan	EU Institutions	Researchers	Industry, business	80	Event (conference, meeting, workshop, debate, roundtable, group discussion)	Communication of BIOServicES objectives and expected results	WP6	UPCT
6	04-12-23	Newsletter : ILVO backs European Ambitions for 75% Healthy Soils	Investigating biodiversity in BIOServicES for healthy soils	Researchers	Industry, businesses	International organisations	17390 visitors/month	Newsletter	Linking/clustering BIOServicES with other EV-ILVO projects	WP6	EV-ILVO
7	16-02-24	Seminar "The importance of soil health on	Information about BIOServicES objectives, expected	Citizens	Specific users	Researchers	25	Event (conference, meeting, workshop,	Communication of BIOServicES objectives and	WP6	UPCT



		agroecosystems"	results, partners and approach					debate, roundtable, group discussion)	expected results		
8	planned: 21/05/2024	Poster presentation on the 75th ISCP (International Symposium on Crop Protection), session Nematology	Information about BIOServicES objectives and work plan with a focus on nematodes	Researchers	Industry, businesses	Innovators	(still to be determined)	Event (conference, meeting, workshop, debate, roundtable, group discussion)	Communication of BIOServicES objectives and expected results, partim nematodes	WP2	EV-ILVO



Annex 2 – Communication, Dissemination and Exploitation Plan

BIOserviceES: Communication, Dissemination, and Exploitation Plan										
Nr. Crt	Month (deadline)	Category	Topics	Target Audience	Content	Type of Content	Channel	Recurrence	Responsible	Status
1	M1	Comms	Brand Kit	Project partners	General Communications	Internal	Internal	1	June	done
2	M1	Comms	Social Media pages	General Public, Potential Partners, Stakeholders	Social Media posts	Marketing	Facebook, LinkedIn, Instagram, Twitter, Youtube	1	June	done
3	M2	Comms	Kick-off Meeting	General Public, Potential Partners, Stakeholders	Corporate Communications	Press Release	Sustainability, Business, General, Agriculture Media, BIOserviceES Social Media	1	June, WP leaders	done
4	M4	Comms	Multilingual website	General Public, Potential Partners, Stakeholders	Website	Marketing	Website	1	June	in progress
5	M5	Comms., Diss., Expl.	C, D, E plan	WP Leaders	General Communications	Internal	Internal	1	June	in progress
6	M6	Comms	Video campaign - LL & LH	General Public, Potential Partners, Stakeholders	Video	Marketing	Social Media, Website	1	JuneCom, LHs & LLs	not started
7	M9	Comms	Project Goals	General Public, Potential Partners, Stakeholders	Media Interview	Corporate Communication	Sustainability, Business Media,	1	JuneCom	not started



							InBestSoil Social Media			
8	M12	Comms	Video campaign - LL & LH	The General Public, Potential Partners, Stakeholders	Video	Marketing	Social Media, Website	1	JuneCom , LHs & LLs	not started
9	M14	Comms	Project Updates 1	General Public, Potential Partners, Stakeholders	Infographic	Marketing	Social Media, Website	1	All WP	not started
10	M15	Comms	Online Banner Campaign	General Public, Potential Partners, Stakeholders	Visual	Marketing	Consortiu m Partners Website, Social Media, Project's Website	1	All	not started
11	M18	Comms	Project Updates	General Public, Potential Partners, Stakeholders	Media Interview	Corporate Communic ation	Sustainabi lity, Business Media, InBestSoil Social Media	1	JuneCom	not started
12	M20	Comms	Project Brochures	Potential Partners, Stakeholders	Leaflets	Marketing	Website	2	All WP	not started
13	M21	Comms	Project Updates	General Public, Potential Partners, Stakeholders	Media Interview	Corporate Communic ation	Sustainabi lity, Business Media, InBestSoil Social Media	1	JuneCom	not started
14	M22	Comms	Comms	Video Campaign - general project videos	Video	Marketing	Social Media, Website	2	All WP	not started
15	M24	Comms	Project Updates	General Public, Potential Partners, Stakeholders	Media Interview	Corporate Communic ation	Sustainabi lity, Business	1	JuneCom	not started



							Media, InBestSoil Social Media			
16	M26	Comms	Project Updates 1	General Public, Potential Partners, Stakeholders	Infographic	Marketing	Social Media, Website	1	All WP	not started
17	M28	Comms	Project Updates	General Public, Potential Partners, Stakeholders	Media Interview	Corporate Communication	Sustainability, Business Media, InBestSoil Social Media	1	JuneCom	not started
18	M34	Comms	Practice Abstracts - Batch 1	Potential Partners, Stakeholders	Leaflets	Marketing	Website, Digital Platform	50	All WP	not started
19	M36	Comms	Project Updates	General Public, Potential Partners, Stakeholders	Media Interview	Corporate Communication	Sustainability, Business Media, InBestSoil Social Media	1	JuneCom	not started
20	M38	Comms	C., D., E. plan Updated	WP Leaders	General Communications	Internal	Internal	1	June	not started
21	M39	Comms	Project Updates 1	General Public, Potential Partners, Stakeholders	Infographic	Marketing	Social Media, Website	1	All WP	not started
22	M40	Comms	Online Banner Campaign	General Public, Potential Partners, Stakeholders	Visual	Marketing	Consortium Partners Website, Social Media, Project's Website	1	All	not started



23	M23	Comms	Project Updates	General Public, Potential Partners, Stakeholders	Media Interview	Corporate Communication	Sustainability, Business Media, InBestSoil Social Media	1	JuneCom	not started
24	M45	Comms	Comms	Video Campaign - general project videos	Video	Marketing	Social Media, Website	2	All WP	not started
25	M46	Comms	Project Brochures	Potential Partners, Stakeholders	Leaflets	Marketing	Website	2	All WP	not started
26	M48	Comms	Project Updates	General Public, Potential Partners, Stakeholders	Media Interview	Corporate Communication	Sustainability, Business Media, InBestSoil Social Media	1	JuneCom	not started
27	M50	Comms	Project Updates 1	General Public, Potential Partners, Stakeholders	Infographic	Marketing	Social Media, Website	1	All WP	not started
28	M54	Comms	Project Updates	General Public, Potential Partners, Stakeholders	Media Interview	Corporate Communication	Sustainability, Business Media, InBestSoil Social Media	1	JuneCom	not started
29	M58	Comms	Practice Abstracts - Batch 2	Potential Partners, Stakeholders	Leaflets	Marketing	Website, Digital Platform	50	All WP	not started
30	M60	Comms	End of the project	General Public, Potential Partners, Stakeholders	Press Release	Corporate Communication	Sustainability, Business Media, InBestSoil Social Media	1	JuneCom	not started



31	M60	Comms	End of project report- Final International Conference	WP leaders, Potential Partners, Stakeholders, EU Commission	Report	Corporate Communication	Minutes on the Website and SoMe	1	All WP	not started
32	M60	Comms	Long-term Sustainability Plan	WP leaders, Potential Partners, Stakeholders, EU Commission	Report	Internal	Internal	1	JuneCom , WP leaders	not started
33	M60	Comms	Report on Comms & Dissem.	WP leaders, Potential Partners, Stakeholders, EU Commission	Report	Internal	Internal	1	JuneCom , WP leaders	not started
34	Ongoing	Dissemination	Participation in external events, such as fairs, conferences, and congresses, where results will be showcased (posters, presentations, etc.)	Scientific community, farmers, foresters, miners, public authorities, industry, businesses, investors, land managers, policy-makers	Events	Scientific Content	Live face-to-face event, social media comms, general public PR	6 international events, 20 national/regional events	All partners	not started
35	M1-M60	Dissemination	Field demonstration events organised in each experimental site to show benefits of preserving soil health	The scientific community, policy-makers, NGOs, farmers/ forest/ miners, industry, land managers, public authorities, businesses, investors, civil society	Demonstration	Scientific Content	Live face to face events, social media comms, scientific publications, general public PR	25	LL / LH leaders	not started
36	M1-M60	Dissemination	BIOserviceES workshops/seminars/webinars in the the framework	The scientific community, policy-makers, NGOs, civil society farmers,	Workshops/ Seminars/ Webinars	Scientific Content	Live face-to-face events, social media	50	LL / LH leaders	not started



			of the stakeholder platforms to present main results	foresters, miners, industry, public authorities, businesses, investors			comms, scientific publications, general public PR			
37	M1-M60	Dissemination	University lectures	Students	Lectures	Scientific Content	Universities	-	All partners	not started
38	M1-M60	Dissemination	Final International Conference	Policy-makers, the scientific community, farmers/foresters/miners, industry, land managers, investors, public authorities, NGOs, civil society	Event	Scientific Content	Live face-to-face event, social media comms, scientific publications, general public PR	1	All partners	not started
39	M1-M60	Dissemination	Training and Dissemination materials	Farmers/foresters/miners, industry, businesses, investors, land managers, public authorities, NGOs, civil society	Training and materials	Scientific Content	Articles published in national and international sectorial magazines	100 Practice Abstracts, 10 practice-oriented short videos (tutorials), 10 practice-oriented podcasts, 10 practice-oriented Infographics and 20 articles in the sector-specific magazines	All partners	not started
40	M1-M60	Dissemination	Scientific publications in peer-reviewed JCR journals	Scientific community	Articles	Scientific Content	Articles published in peer-reviewed JCR	20	All partners	not started



			under open-access				journals under open-access			
41	M1-M60	Dissemination	Policy briefs	Policy-makers, public authorities	Policy briefs	Scientific Content	Presented at the Final Conference	2	All partners	not started
42	M18	Exploitation	Collaborative platform for stakeholders and international initiatives	Stakeholders	Platform	Stakeholder tool	Platform	1	LGI	not started
43	M42	Exploitation	Model to estimate soil biological indicators	Stakeholders, scientific community, farmers/foresters/miners, industry, businesses, investors, land managers		Stakeholder tool	Utility model	1	FibL / UPCT	not started
44	M48	Exploitation	Toolkit of soil biological targets linked to key EF and ES	Stakeholders, scientific community, farmers/foresters/miners, industry, businesses, investors, land managers	Document, report	Stakeholder tool	Open licence	1	CREA	not started
45	M52	Exploitation	Web-based application to analyse the biota of soil samples against reference	Stakeholders, scientific community, farmers/foresters/miners, industry, businesses, investors, land managers	DEC — Websites, patent filings, videos, etc	Stakeholder tool	Open code application	1	UPCT	not started
46	M58	Exploitation	Web-based calculator for the economic value of soil	Stakeholders, scientific community, farmers/foresters/miners, industry, businesses, investors, land managers	Calculator	Stakeholder tool	Utility model	1	UPCT	not started



			ecosystem services							
47	M26	Exploitation	Policy conditions and catalogues of existing soil biodiversity-related economic and policy incentives	Stakeholders, scientific community, farmers/foresters/miners, industry, businesses, investors, land managers	Document, report	Event	Science-policy events	1	CMCC	not started
48	M42	Exploitation	Toolbox of incentive schemes for soil health	Stakeholders, scientific community, farmers/foresters/miners, industry, businesses, investors, land managers	Document, report	Stakeholder tool	Open access database	1	UNITUS	not started
49	M60	Exploitation	Report on Policy recommendations for soil health and biodiversity protection	Stakeholders, scientific community, farmers/foresters/miners, industry, businesses, investors, land managers	Document, report	Stakeholder tool	Report and open access scientific publication	1	CMCC	not started

