



D5.4

Exploitation and Sustainability Plan

Project Title Informing and educating young people on more sust behaviours and choices to build a future Generation in and interested in Bioeconomy - GenB		
Contract No.	101060501	
Instrument	HORIZON Coordination and Support Actions	
Funded under	Cluster 6: Food, Bioeconomy Natural Resources, Agriculture and Environment	
Start of Project	1 November 2022	
Duration	30 months	

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Deliverable title	Exploitation and Sustainability Plan
Deliverable number	D5.4
Deliverable version	V1.0
Previous version(s)	-
Contractual date of delivery	28 April 2023
Actual date of delivery	28 April 2023
Nature of deliverable	Report
Dissemination level	Public
Work Package	WP 5 Communication, dissemination, and exploitation
Task(s)	Task 5.3 Exploitation, replicability and sustainability
Partner responsible	Q-PLAN
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Revision History

VERSION	DATE	REVIEWER	MODIFICATIONS	
0.1	21/04/2023	APRE, FVA, PEDAL, AIJU, ZSI, BTG, EUN, HSPN	Feedback and comments	
1.0	25/04/2023	QPL	Final version addressing partners' comments	

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Table of Abbreviations and Acronyms

Abbreviation	Meaning	
BG	Background	
CA	Consortium Agreement	
СС	Creative Commons	
EC	European Commission	
EPC	European Patent Convention	
EM	Exploitation Manager	
ER	Exploitable Results	
FG	Foreground	
IP	Intellectual Property	
IPR	Intellectual Property Rights	
WP	Work Package	
WIPO	World Intellectual Property Organisation	





Executive Summary

Sound Innovation and Intellectual Property Rights (IPR) management is essential in order to enable the successful exploitation and market deployment of GenB's assets. Therefore, the consortium of GenB places great emphasis in managing innovation and IPR in the framework of the project, with a view to effectively paving the way for the smooth exploitation and sustainability of its results following its completion.

Along these lines, the current report presents the initial version of GenB's Exploitation and Sustainability Plan and it will be followed by at least two (2) internal updates in M18 and M30. This initial version sheds light on the key terms pertaining to the management and protection of intellectual property and lays down the main components of the relevant methodology to be applied throughout the project.

Preliminary description of the project results, along with initial identification of the contributing partners, protection types and access rights are provided within the report. An overview of GenB's assets as envisioned at this stage of the project is also presented, as well as the initial considerations of background and foreground IP, as currently perceived by the project partners. The methodology applied is supported by the IPR Matrix that facilitates registration of all background and foreground IPR and helps the timely identification and resolution of any potential conflict in this respect.

The report will be further elaborated and updated as the project progresses. After halfway of the project, as most project results will be developed and matured, the updated version of the Exploitation and Sustainability Plan will be developed (M18). This report will specifically describe the project's assets and their main exploitation routes, the target groups per project asset, the general terms of use of each asset and the relevant IPR provisions, the joint exploitation plans for the consortium as well as per individual project partner (or groups of partners), the means and procedures for the exploitation of the assets and a roadmap to this end.





1 Introduction

The GenB partners are committed to produce results that will be sustainable after the project's completion, all while ensuring that innovative ideas emerging from the project are fully identified and investigated in terms of exploitation potential. To this end, GenB places great emphasis not only on managing the Intellectual Property Rights (IPR) of the partners' ideas and project results, but also on mapping out the expected uses and benefits of each GenB asset, with a view to effectively paving the way for smooth exploitation and sustainability of its results, following its completion. With that in mind, the current document constitutes the initial version of GenB's Exploitation and Sustainability Plan, which lays down the strategy and basic principles of the project in this respect.

This initial version of the Exploitation and Sustainability Plan will serve as the basis for the activities to be implemented in the framework of Task 5.3 towards sound innovation management as well as towards exploitation and sustainability of the project's results after the end of the grant. The Exploitation and Sustainability Plan will be updated on M18 and M30, in order to reflect the partners' plans and actions aiming at exploiting the GenB's assets.

The initial version of the Exploitation and Sustainability Plan comprises 6 chapters, as follows:

- Chapter 1 provides introductory information about the context in which this report has been elaborated, its relation to other project activities, as well as to its structure.
- Chapter 2 clarifies the key terms pertaining to IPR management of the project, defines the underlying objectives and explains the main intellectual property protection instruments.
- Chapter 3 outlines the IPR Management Strategy and its underlying stages in the context of GenB and describes the methodology to be followed in this respect.
- Chapter 4 introduces the IPR Matrix and explains the procedures followed in order to identify the GenB background and foreground IPs, as perceived at this stage of the project.
- Chapter 5 offers a brief overview of the progress that has been achieved over the first semester of the project towards the implementation of the project's Exploitation and Sustainability Plan.
- Chapter 6 concludes on the next steps that need to be taken towards successfully exploiting the assets of the project.





2 IPR management Overview

The following subsections aim to set the objectives of the IPR management strategy as well as to clarify the main terms concerning the key elements of IPR management, which represent the principal aspects of the IPR management procedures of the project.

2.1 Objectives

GenB IPR management objectives embrace the need to protect project's assets in order to handle and manage efficiently all the outcomes that will stem during the project's life span with a view to ensure the sustainability of the GenB exploitable results, along with their proper dissemination. To this end, the main objectives of the GenB 's Innovation and IPR Management Strategy are the following:

- Describe the IPR management methodology to be followed within the context of GenB.
- Identify the assets that will emerge from the activities foreseen within the lifecycle of the project thus, determining an assets' portfolio from the early stages of the project.
- Develop a common understanding among the GenB's partners, concerning terms and issues of the background and foreground IPs and respective access rights.
- Define and eventually dissolve any possible conflicts in IPs within the consortium and beyond.
- Establish common guiding routes and actions within the consortium to safeguard the smooth operation of the IPR strategies to be implemented.

In general, the key concepts to consider for designing the Innovation and IPR management strategy of Horizon Europe projects are the following:

- Background IP knowledge
- Foreground IP knowledge
- Dissemination channels
- Access rights

Therefore, the following subsections aim to clarify the main terms concerning the key elements of IPR management, which represent key aspects of the IPR management procedures of the project.

2.2 Background

Background IP can be defined as data, know-how or information – including any rights - owned or licensed to a project partner prior to the commencement of the agreement and needed to





implement the action or exploit the project's assets¹. The background needed for carrying out the project activities or exploiting the underlying results must be accessible to the other project partners on a royalty-free basis. Under this frame, all project partners must identify the background that is pertinent for the project actions and grant access rights to this IP, in principle. The background of a project can be identified and agreed (i) within the consortium agreement, after the internal evaluation of pre-existing knowledge, or (ii) in a separate agreement ("agreement on the background"). In this respect, there are two main aspects to consider when dealing with the background of a project:

- Identification of Background: Naming of the assets that each project partner provides to the consortium, and which are imperative for successful implementation and exploitation of the project actions.
- Definition of Access Rights: Clarification of the rights to use knowledge under the terms and conditions agreed within the consortium and in alignment with the underlying background rules and obligations set by the EC in order to ensure the smooth implementation of the project.

2.3 Foreground

Foreground refers to the results and assets that are generated through the implementation of the project activities, including pieces of information, materials, and knowledge². These results comprise any tangible or intangible output of the project's actions which can be protectable or not. In this respect, foreground IP can arise and be obtained from project partners in order to protect and exploit the underlying exploitable assets of the project. It includes intellectual property rights (e.g. copyrights, industrial designs, patents), similar forms of protection (e.g. rights for databases) and unprotected know-how (e.g. confidential material). It should be noted that results generated outside the project activities cannot be defined as foreground.

The Grant Agreement of GenB establishes that the results of the project are owned by the beneficiaries that generate them ³. Given the collaborative nature of the project, some results can be jointly developed by several partners. In this case, joint ownership can arise among the contributing partners and is subject to the agreement on the allocation and terms of the exercise of their joint ownership. Although regulations concerning the frame of joint ownership are

³ See article 16 of the GenB Grant Agreement



¹ See Article 16 of the GenB Grant Agreement.

² See article 16 of the GenB Grant Agreement



embedded in the GenB Consortium Agreement⁴, it would be best practice for partners to establish during the project implementation a separate joint ownership agreement in order to define the allocation and terms of exercising their ownership. Each joint owner can grant non-exclusive licenses to third parties to exploit the jointly owned results unless otherwise agreed in the CA or the joint ownership agreement.

2.4 Access Rights

Access rights refer to user rights for requesting access to a project partner's background and foreground in order to implement its activities under the project or to use its own results. In addition, access rights can be utilized as long as they are needed for exploiting the project's results and assets. The granting of access rights within a collaborative Horizon Europe project follows specific rules in the Grant Agreement⁵ and the Consortium Agreement⁶. Depending on their purpose of use, access rights within GenB can be depicted in the following table.

Table 1 Access Rights

Purpose for Access	Access to Background (Article 16 of GenB's GA)	Access to Results (Article 16 of GenB's GA)
Project Implementation	 Royalty-free Unless otherwise agreed b participants before accession to G. 	/
Exploitation of Own Results • Subject on individual agreement Granted under fair and reasonable		conditions

2.5 Protection of Results

When considering IP protection, it must be noted that IP assets can be protected by several types of IPR, and consequently, the most appropriate protection strategy must be chosen. The selection of the most suitable form of IP protection depends on the nature and specific characteristics of the results under consideration and the objectives of the IP owner.

There are various types of instruments that may be considered for protecting IP, such as:

- Trade and service marks;
- Patents;
- Utility models;

⁶ See Section 9 of the GenB Consortium Agreement.



⁴ See section 8.2 GenB Consortium Agreement.

⁵ See Article 16 of the GenB Grant Agreement.



- Copyrights;
- Trade secrets;
- Confidentiality agreements.

Further details with respect to each of the above-mentioned protection instruments are provided in the subsections below.

2.5.1 Trademarks and Service Marks

Trademarks

A trademark constitutes an exclusive right over the use of a sign in relation to the goods and services for which it is registered⁷. Trademarks consist of signs capable of distinguishing the products (either goods or services) of a trader from those of others. The main function of a trademark is to identify the commercial origin of a product. This does not mean that it must inform the consumer of the actual person who has manufactured the product or even the one who is trading in it. It is sufficient that the consumer can trust in a given enterprise, not necessarily known to him, being responsible for the product sold under the trademark.

Service Marks

In modern trade, consumers are confronted not only with a vast choice of goods of all kinds but also with an increasing variety of services which tend more and more to be offered on a national and even international scale. There is therefore also a need for signs that enable the consumers to distinguish between the different services such as insurance companies, car rental firms, airlines, etc. These signs are called service marks and fulfil essentially the same origin-indicating and distinguishing function for services as trademarks do for goods. Since service marks are signs that are very similar in nature to trademarks, basically the same criteria can be applied. Thus, service mark protection has sometimes been introduced by a very short amendment to the existing trademark law, simply providing for the application to service marks of the provisions on the protection of trademarks⁸.

2.5.2 Patents

A patent is an exclusive right granted for the protection of inventions (products or processes) offering a new technical solution or facilitating a new way of doing something. The patent holder enjoys the exclusive right to prevent third parties from commercially exploiting his invention for a

⁸ See WIPO Intellectual Property Handbook 2008: Policy, Law and Use. Chapter 2: Fields of Intellectual Property Protection, p. 68.



See https://op.europa.eu/en/publication-detail/-/publication/ddf8fb93-ec0e-11e9-9c4e-01aa75ed71a1/language-en/format-PDF/source-164620483 for the definition of trademark in Europe.



limited period. In return, the patent holder must disclose the invention to the public in the patent application⁹. A patent does not give its owner the positive right to use the patented invention. Third party rights may have to be requested. Still, a patent owner has the right to decide who may or may not use the patented invention throughout the period during which the invention is protected. Moreover, the patent owner may give permission to other parties, or license them, to use the invention on mutually agreed terms. The owner may also sell the right to the invention to someone, who then becomes the new owner of the patent. Finally, patents are granted only country by country, some regionally, and may also be used in non-patented territories. Once a patent expires, the protection ends, and the invention becomes part of the public domain, in the sense that the owner no longer holds exclusive rights in it, and it becomes available for commercial exploitation, free of charge, by others¹⁰.

2.5.3 Utility Models

Also referred to as a "petty patent", a utility model is an exclusive right granted for an invention, which allows its owner to prevent others from commercially using the protected invention, without their authorisation, for a limited period¹¹. The inclusion of utility models into the intellectual property system in some countries has the primary objective of nurturing the rapid evolution of indigenous innovativeness, particularly in small and medium-sized enterprises and among individuals¹².

2.5.4 Copyrights

Copyright (or author's right) is the term used to describe the rights that creators have over their literary, scientific and artistic works. There is not an exhaustive list containing the works that can be protected by copyright. However, there are several works usually covered by copyright at international level¹³:

- literary works such as novels, poems, plays, newspaper
- articles

¹³ Definition of copyrights in the European context retrieved from. https://op.europa.eu/en/publication-detail/-/publication/ddf8fb93-ec0e-11e9-9c4e-01aa75ed71a1/language-en/format-PDF/source-164620483



⁹ Definition of patents in the European context retrieved from. https://op.europa.eu/en/publication-detail/-/publication/ddf8fb93-ec0e-11e9-9c4e-01aa75ed71a1/language-en/format-PDF/source-164620483

¹⁰ See WIPO Intellectual Property Handbook 2008: Policy, Law and Use. Chapter 2: Fields of Intellectual Property Protection, p. 17.

¹¹ Definition of utility models in the European context retrieved from https://op.europa.eu/en/publication-detail/-/publication/ddf8fb93-ec0e-11e9-9c4e-01aa75ed71a1/language-en/format-PDF/source-164620483.

¹² See WIPO Intellectual Property Handbook 2008: Policy, Law and Use. Chapter 2: Fields of Intellectual Property Protection, p. 40 retrieved from https://www.wipo.int/edocs/pubdocs/en/intproperty/489/wipo_pub_489.pdf



- computer programs, databases
- films, musical compositions, and choreographies
- artistic works such as paintings, drawings, photographs
- sculptures
- architecture; and
- advertisements, maps, and technical drawings

Copyright protection also includes moral rights, including the right to claim authorship of a work, and the right to oppose changes to it that could harm the creator's reputation. The creator - or the owner of the copyright in a work - can enforce rights administratively and in the courts, by inspection of premises for evidence of production or possession of illegally made "pirated" goods related to protecting works. The owner may obtain court orders to stop such activities, as well as seek damages for loss of financial rewards and recognition. Finally, it is important to note that copyright only protects the expression of ideas represented in a physical embodiment, not the ideas themselves, and provided the expression is original¹⁴.

A very common and useful copyright tool that is applied is the Creative Commons License (CC), which forges a balance inside the traditional "all rights reserved" setting that copyright law creates. These copyright licenses and tools give everyone from individual creators to large companies and institutions a simple, standardized way to grant copyright permissions to their creative work. There are several Creative Commons Licenses and each one helps the creators retain copyright while allowing others to copy, distribute, and make some uses of their work, at least non-commercially. Furthermore, every Creative Commons license ensures creators get the credit for their work they deserve, and also offers global coverage and lasts as long as applicable copyright lasts (because they are built on copyright). The set of Creative Commons licenses is composed of the following licenses¹⁵:

- CC BY (Attribution)
- CC BY-SA (Attribution-ShareAlike)
- CC BY-ND (Attribution-NoDerivs)
- CC BY-NC (Attribution-NonCommercial)
- CC BY-NC-SA (Attribution-NonCommercial-ShareAlike)
- CC BY-NC-ND (Attribution-NonCommercial-NoDerivs)

¹⁵ For more information about Creative Commons licenses visit: CreativeCommons.org



¹⁴ See WIPO Intellectual Property Handbook 2008: Policy, Law and Use. Chapter 2: Fields of Intellectual Property Protection, p. 40.



2.5.5 Trade Secrets

Any confidential business information providing a competitive advantage to an enterprise can be considered a trade secret. The type of information that can be protected as a trade secret is therefore highly diverse. It can include know-how, technical knowledge (potentially protectable as a patent), but also business and commercial data such as lists of customers, business plans, recipes or manufacturing processes¹⁶.

2.5.6 Confidentiality Agreements

Confidentiality is an extremely important issue for participants in R&I projects, from the setting-up to the implementation and exploitation phases. Exchanging valuable information with other partners is generally a necessity that regularly occurs in collaborative initiatives or undertakings. Accordingly, confidentiality issues and measures should be taken into consideration in order to safely exchange information, facilitating the project development and ensuring the non-disclosure of sensitive technology, business or commercially confidential information. Confidentiality agreements provide protection and more security to an organisation that is about to share or make available information to another organisation by ensuring that confidential information will be used only for the permitted purposes agreed between the signatories of the agreement and will not be used or revealed to third parties without consent.

¹⁶Definition of trade secrets in the European context retrieved from https://op.europa.eu/en/publication-detail/-/publication/ddf8fb93-ec0e-11e9-9c4e-01aa75ed71a1/language-en/format-PDF/source-164620483





3 IPR Management Strategy

Under the frame of GenB, key IP and innovation management will be employed, with a view to setting a common understanding concerning the background, foreground, ownership (including joint ownership), access and usage rights, dissemination and exploitation during and after the project development. In this respect, the GenB IPR management strategy applies a comprehensive framework which separates the IP management processes of the project in the following stages:

- Grant Agreement preparation stage;
- Project implementation stage;
- Post-project stage.

In this respect, the following figure illustrates the IPR management stages, as considered within GenB. More details about these stages are presented in the sub-sections that follow.

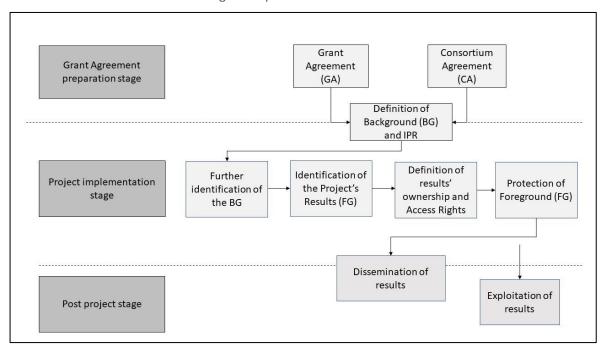


Figure 1: GenB IPR Management Stages

3.1 Grant Agreement preparation stage

Both the Grant Agreement and the Consortium Agreement constitute documents which include a description of several issues related to IPR. Their unique provisions represent a reference point for IPR issues within the project partners. In this respect, any further advancements regarding IPR actions to be put in place by project partners will be facilitated under the underlying provisions.





3.1.1 Grant Agreement

The Grant Agreement constitutes a contract which sets out the key rules and conditions of the project and is conducted between the EC and the GenB partners. It represents the main contractual basis for GenB while its main points and sections referring to IPR are included in Article 16. Under this scheme, the management of the GenB IP is regulated, whereas access rights and obligations related to the background are set. In addition, the GA defines issues concerning the ownership and protection of the project's generated results, as well as their exploitation and dissemination outcomes. Finally, transferability and access rights to results are also defined in the GenB GA.

3.1.2 Consortium Agreement

The Consortium Agreement constitutes a contract among the partners of GenB consortium which aims to define rights and obligations within the partnership for the purposes of carrying out the project's foreseen actions and activities. The CA minimises the probability of later disputes as it provides rules and responsibilities during the project as well as defines the access rights to be granted to the partners concerning the project. In addition, rights and responsibilities are outlined among the consortium members concerning issues of the IP.

The GenB Consortium Agreement main points and sections referring to IPR are contained in:

- Section 8 "Results", that sets out provisions on ownership and joint ownership of results, as well as on their transfer and dissemination.
- Section 9 "Access Rights", which clarifies the access rights governing principles along with the access rights for the exploitation and dissemination purposes. It also states specific provisions for access rights to the software.
- Attachment 1 "Background included" that presents the initial list of usable background.

3.2 Project implementation stage

During the implementation stage of the project, IP handling procedures are foreseen to be applied among the GenB partners in order to properly organise results/ assets management of the project. In this respect, as the project evolves, the focus will be on foreground identification, assets' ownership, access rights, and protection, as well as the exploitation of the project's results. The GenB IPR management emphasises on establishing robust handling procedures of the IPR issues that are of strategic importance to the project in order to facilitate exploitation of its results.

Therefore, partners should focus on two different points:

- Providing access rights to their knowledge for other partners to carry out their work on the project.
- Establishing early asset identification procedures with a view to protecting, disseminating, and exploiting the project's assets, all while fostering long-term cooperation among partners and efficient project management.

In this respect, key IP related issues in the GenB implementation phase include the following.





3.2.1 Background identification

During the first stages of GenB, it is imperative to identify the relevant knowledge, know-how and data of partners, complementary to those outlined in the consortium agreement, which constitute the background of the project. Under this framework, the underlying background can be attached to the generated assets of the project, which, eventually, will help the determination of access rights, ownership issues and IPR.

3.2.2 Foreground identification

A core process of the GenB IP management is the project assets' identification with a view to creating a concrete mapping of the project's assets and enhancing the GenB IP portfolio. Therefore, all IP valuable assets within the project must be identified, listed, named, described, and analysed in a systematic way.

3.2.3 Protection of results

Effective exploitation of the innovative concepts and assets developed under the frame of GenB depends on the protection of the project's results. In particular, the project's results must adequately be protected if protection is possible and justified, taking into account all relevant considerations, including the prospects for commercial exploitation, the legitimate interests of the other beneficiaries and any other legitimate interests (GenB GA, Annex 5, Article 16).

In this respect, when considering IP protection GenB partners must consider their own interests along with the interests of the whole consortium. Project partners must safeguard the identified exploitable GenB results with adequate protection schemes, which will offer a decent protection period within a suitable geographical territory. The table that follows, illustrates the different protection instruments that can be applied to a variety of subjects.

Table 2 Protection Instruments of Results

Subject Matter	Patent	Utility Model	Copyright	Trademark	Confidential Information
Invention	X	X			X
Software	X*	X	X		X
Scientific Article			Х		
Technology Design			X	X	
Name of Technology				Х	
Know How	Х	Х			Х
Website			X	X	X



3.2.4 Dissemination of results

GenB partners are set to select the appropriate means for dissemination of project results (e.g. scientific publications, publication on web sites, conferences, etc.), according to the conditions set forth in the CA¹⁷ and in other specific confidentiality agreements that might arise in order to maintain confidentiality during and after the end of the project. Additionally, partners are obligated to disseminate their results as soon as they are feasible by using publicly available formats in accordance with any restrictions due to IP protection, security rules or legitimate interests and the provisions of GA¹⁸. Along with that, the Open Science approach will be followed by partners, which focuses on spreading knowledge as soon as it is available using digital and collaborative technology. Considering that, GenB partners are requested to make their scientific publications available as Open Access publications, and grant access as open as possible and as closed as necessary¹⁹. All partners should be aware that they first ensure the protection of a project's exploitable result and then proceed to dissemination actions of this or any other underlying result.

3.3 Post Project Stage

At the project's conclusion, the final version of the Exploitation and Sustainability Plan will be submitted, outlining the use that GenB consortium intends to make of its exploitable results and the related plans and time frame for their exploitation. The Plan will describe the further activities that need to be implemented in order to ensure the use and sustainability of GenB results. In addition, it will include the final findings concerning IP issues, as well as the final update of the IPR Matrix (See Section 4), detailing the intellectual property rights applied and registered.

3.4 Role of the Exploitation Manager

The Exploitation Manager (EM) is responsible for defining the project's Innovation and IPR Management Strategy, preparing the respective reports and ensuring that innovative ideas which arise during the project will be thoroughly examined and assessed for potential exploitation, while at the same time all background and foreground intellectual property of the project is managed. To this end, the EM will be in close communication with the Project Coordinator to ensure continuous feedback from escalating project activities from the start until the project completion. The EM also assumes a mediation role in case of IP conflicts, monitors project activities and feeds the development of the subsequent versions of this report in the context of GenB.

¹⁹ European Commission, Your guide to IP management in Horizon Europe, p.19



¹⁷ See Section 8.4 of the GenB Consortium Agreement.

¹⁸ See Article 17 and Annex 5 of the GenB Grant Agreement



3.5 Knowledge Management of the Project

Efficient management of IP in GenB will be achieved through adopting a process able to identify IP results as well as to determine their adequate handling and protection. In this respect, it is essential to establish mechanisms that will guarantee that IP information is reliable and timely captured. Should WP Leaders identify a new asset that will be generated under their respective WP activities, the Exploitation Manager must be informed accordingly. The GenB EM constitute the party that will handle the screening and the managing of any newly identified assets and their corresponding IP issues that arise during the project's lifespan. The EM will direct the consortium partners in order to commonly establish the most adequate and efficient IPR strategy based on the nature of the newly identified asset and the purposes of the GenB consortium concerning the exploitation of this asset. To facilitate this process, the GenB IPR management strategy foresees creating and updating a living IPR Matrix (See Section 4) to be revised and extended with new pieces of project results as the project's implementation advances.

3.6 IP Conflicts

In order to proactively avoid IP conflicts, project partners will be well-informed about IP rules and guided through the exploitation process not only via the IPR Matrix but also through the help of the Exploitation Manager. The Exploitation Manager will provide assistance for the following indicative (and not exclusive) issues:

- Is there a possible misunderstanding about the definition of the exploitable result and therefore of the object of claims?
- Are there exploitation claims that should be further specified so that the partners can check the compatibility of their claims?
- Are the foreseen exploitation claims compatible with the ownership claims of the partners (related issue of access rights)?
- Are there any confidentiality issues e.g. on new knowledge of strategic importance for a partner and consequently the need for a confidential agreement?
- Are there any possible IP conflicts between the partners, both related to ownership and the related need for access rights and to exploitation claims?

In terms of IP conflict, the Exploitation Manager will encourage conflicting parties to get in contact and proactively find solutions, making written agreements whenever necessary. In case no agreement will be achieved, internal mediation process will be kicked off following the provisions of section 11.8 of the GenB Consortium Agreement.





4 IPR Matrix Methodology

The GenB IPR management approach foresees the utilisation of an IPR Matrix in order to define the main IPR issues concerning the GenB Innovation and IPR Management Strategy. This approach will support all project partners in identifying and managing the background, foreground knowledge and exploitable results of the project, and also of potential co-innovators, in order to have a full overview about IP protection and necessary agreements to enable successful exploitation of the project's offerings.

The IPR Matrix methodology is comprised of 4 distinct but interconnected steps, as follows:

- Step 1: Identification of the background IP and definition of access rights among partners within the project.
- Step 2: Identification of the results, which constitute the foreground IP of the project and are foreseen to be generated under the GenB activities.
- Step 3: Identification of the project's exploitable results/assets along with the main contributing partners to each asset. This activity will take place in the update of the Exploitation and Sustainability Plan (M18).
- Step 4: Definition of a preliminary framework of IPR protection for the defined GenB assets, which will enhance their further exploitation.

At this early stage of the project, the objective of the Innovation and IPR Management Strategy is to define the main assets on the one hand and identify, to the extent possible, the BG and FG IPs of the project along with their corresponding access rights on the other hand. During the later stages of the project's implementation, the IPR methodology will be devised accordingly, in order to capture and integrate the evolvement of the identified results and IPR approach of the project. In particular, the identification of exploitable assets would yield the need to establish an ownership regime among project partners for each one of the exploitable results. In addition, rules and conditions to get access to exploitable results will also to be considered later on.

Under this framework, the structure of the IPR Matrix that will be used throughout the duration of the project is summarised in the following table.

Table 3 Structure of the IPR Matrix

Background (BG)	Foreground (FG)	Exploitable results (ER)	
BG#Partner's BackgroundContributing Partner	FG#Project ResultContributing Partners	ER#Exploitable resultMain partner	





Background (BG)	Foreground (FG)	Exploitable results (ER)		
 Short Description of BG Type of Protection Conditions to Use within GenB Conditions to use outside GenB Interest in further exploitation through GenB results 	 Short Description of FG Related BG# Type of Protection Conditions to Use within GenB Interest in Further Exploitation of Project Results Conditions to Use after the end of the Project 	 Further contributing partner(s) Related FG# Related BG# (BG owner) Proposition for the ERowner Exploitation claims Relevance for IP Protection 		

4.1 Identification of Background IP

In the first part of the IPR Matrix, the background IP that will be used during the project's implementation shall be identified, as illustrated in the following table.

#	Relevant Background	Contributin g Partner	BG number	Short description of BG	Type of protection	Conditions to use within GenB	Conditions to use outside GenB	Interest in further exploitation through GenB's results	Remarks

Figure 2. IPR Matrix Background

In the 2nd column of this part of the IPR Matrix, the project background knowledge listed. In the 3rd column, the name of the partner who owns this background is indicated. For each identified background required for the creation of the result, a specific background number per partner shall be assigned. In column 4, the corresponding background number shall be indicated, while column 5 should include a short description of the background. In column 6, partners shall indicate the IP protection of the BG (if any). In the 7th column, the conditions to use the background within the project (e.g. free to use or subject to charges, etc.) shall be indicated by each partner, whether





there are any restrictions to use the background or not. In the 8th column, the background's condition to use outside GenB is indicated while in the last column partners shall mention if they have any interest in exploitation of the relevant background through the project results.

The background IP was registered by the project partners by M6, as perceived at that stage of the project. The results are presented in Section 5.

4.2 Identification of Foreground IP

In the second part of the IPR Matrix, the foreground IP of the project is registered, as presented in the following table.

WP	#	Project result (PR)/ Achievement	Specific project result	Main Partner(s)	Contributing partner(s)	Related BG number	Short description of FG	FG number	Type of protection	Conditions to use within GenB	Interest in Further Commercialization of Project Results	Conditions to use after the end of project

Figure 3. IPR Matrix Foreground

In the first four columns, the GenB results to be developed, along with the corresponding WP, are listed. In the 5th column, the main partner responsible for the foreground shall be indicated. In the 6th column, the further contributing partners for the foreground knowledge shall be indicated as well. In the 7th column, the related background number is attached to the underlying FG. In the 8th column, a short text describing the identified FG shall be included by the responsible project partner. In the 9th column, an FG number shall be attached to each result. In the 10th column, partners shall indicate relevant IP protection type for the FG, in terms of patents, copyright, etc. In the next column, the conditions to use the FG within GenB (e.g., free to use or subject to charges, etc.) shall be indicated by each partner whether there are any restrictions to use the FG or not. In the 12th column, the project partners shall describe if they have an interest in exploitation of the project result. Finally, in the last column, the conditions (e.g., free to use, license fee, etc.) to use after the end of the project shall be indicated by the project partners.

The results of the Foreground IP identification, as defined at this stage of the project, are presented in Section 5.

The identification of the Exploitable Results will be part of the next update of the Exploitation and Sustainability Plan on M18.





5 GenB's Assets, Background IP, Foreground IP

5.1 Identified Assets of GenB

The main assets of GenB, as identified by the consortium at this stage of the project, along with their description are presented in the table that follows.

Table 4 The GenB 's main assets

Title	Brief description	Main partner leading the development
GenB Resources Library	An online library designed to make available in a transparent, readily available, user-friendly and visual-attractive way at least 100 different materials on bioeconomy awareness, education and information	LOBA
6 educational toolkits for young people, teachers and other multipliers	3 toolkits for young people, 1 for the teachers, 1 for the other multipliers and 1 for boosting the collaboration among teachers, parents and youth towards a more sustainable production, consumption and lifestyles. The toolkits will be based on already existing material and tools as well as tools created by GenB.	AIJU
Results of the Living Labs	Within 9 living labs (3 living labs in 3 countries each) we will co-develop new materials and approaches with children and young people. This material could be teaching/learning material, games, videos, but also approaches of cooperation between teachers and students etc.	ZSI
Book for kids "What's Bioeconomy"	Book for kids "What's Bioeconomy" (BIOVOICES) updated version with additional four languages (PL, BG, MT, UA) for a total of sixteen languages for pre- and early-school (4-8 y.o.). New flaps with novelties from the biobased sector.	APRE





Game for Elementary school	1 Game or gamified educational experience for Elementary school in 9 languages	AIJU
Game for Primary/Elementary school	1 Game educational experience for Primary/Elementary school in at least 2 languages	APRE
20 Quizzes and Educational cards	20 Quizzes and Educational cards for social media and training for High schools (14-19 years old) in 9 languages	AIJU
Online factsheets "bioeconomy job profiles"	1 Online factsheet "bioeconomy job profiles" for High schools (14-19 years old) in 9 languages	AIJU, EUN
Lesson plans, training contents and MOOC	Lesson plans, training contents and MOOC (based on the BLOOM MOOC and Transition2Bio courses for teachers developed in collaboration with the EC Knowledge Centre for the Bioeconomy) compliant to the Seven Step Eco-Schools methodology for teachers and other multipliers.	EUN
Methodologies to inspire and inform young people on circular bioeconomy and biobased sectors	Methodologies to inspire and inform young people on sustainable and circular bioeconomy and bio-based sectors through the formats of "hands on labs", "bioeconomy village", "inside the bioeconomy" and "bioart gallery"	HSPN
Methodologies to inspire and inform students in bioeconomy careers	Methodologies to inspire and inform students in bioeconomy careers through the formats of "TEDX pitches", "Bioeconomy career info days", "a day in a biorefinery" and "school project"	BTG
Role Play Game	Methodologies to inspire and inform students in bioeconomy. "Role-play game" on bioeconomy jobs at school (AIJU) (circular farmers, biotech researchers, etc.)	AIJU





Methodologies to train young people on how to promote the biotransition	Methodologies, material, tools to train young people on how to promote the biotransition through the delivery of dedicated educational activities #24 Educational activities using toolkits, #8 "Bioeconomy talks/seminars" inquiry-based learning to stimulate young	BTG
	people' reflection and debate, #1 "online bio educational village" in EN	
Methodologies to educate teachers in teaching the bioeconomy	Methodologies, tools, material to educate teachers in teaching the bioeconomy through online courses in 9 languages: #1 "What's bioeconomy" MOOC, #3 "How to use GenB toolkits" for all target ages' teachers, #1 "Bioeconomy job profiles" on factsheets explanation for High School teachers	EUN
Methodologies to inform and educate multipliers to promote the bioeconomy	Methodologies, materials and tools to inform and educate multipliers to promote the bioeconomy through #8 informative webinars in partners' countries, #24 individual meetings with three multipliers in each partners' country	PEDAL
Methodologies, contents and formats to engage GenB Ambassadors	Methodologies, contents and formats to engage GenB Ambassadors through coordinated partners efforts and 1 "GenB in Action" call	APRE
GenB Ambassadors	A body of #20 young multipliers engaged to play as frontrunners to involve other young people as well as #8 young career testimonials, 8 green-sensitive young influencers and activists and 8 environmental young journalists engaged as GenB Ambassadors	FVA
Methodologies, contents and formats to empower GenB Ambassadors	Methodologies, contents and formats to empower GenB Ambassadors through #18 capacity building webinars (at least 2 per country + 2 in English), #1 online mutual learning workshop among GenB Ambassadors	ZSI



Methodologies for the deployment of bioeconomy awareness raising activities on social media	#3 social media profiles @GenBvoices (in Instagram, TikTok, Facebook) A connected strategy and methodology for the different social networks, disseminating relevant content on all channels through gamified approaches that help raise awareness as well as collect consumer perceptions and ideas.	FVA /
Methodologies, contents and formats to support GenB Ambassadors to take a role	Methodologies, contents and formats to support GenB Ambassadors take a role through: #1 "GenB driving the transition" International Competition, awarding educational oriented prizes, #10 GenB Ambassadors engaged in promotional activities as "Students2Students" testimonials, #3 social media campaigns by green-sensitive young influencers as GenB Ambassadors, #5 young journalists publishing on GenB social media	FVA
Methodologies, contents and formats to facilitate dialogue, debate and co-creation between European youth on bioeconomy	Methodologies, contents and formats to facilitate dialogue, debate and and co-creation between European youth on bioeconomy through: #3 thematic online debates on topics relevant for young people, #1 cross-contamination online workshop with other youth green communities, #1 "Our GenB future" international online workshop to generate ideas and recommendations	Q-PLAN
Position paper "Our GenB future"	A position paper titled "Our GenB future" aiming to consolidate recommendations stemming from the project to inform policy on how to involve the young generation in the ecological transition according to young people's needs and interests	Q-PLAN
Methodologies, contents and formats to run 8 online	Methodologies, contents and formats to run 8 online mobilisation and mutual learning workshops in partners' countries to share knowledge and experiences among the	PEDAL



mobilisation and mutual learning workshops	education community in light of consolidating the GenB educational model	
GenB educational model	The "GenB education model" produced as a factsheet and translated into 24 EU languages	PEDAL
Methodologies contents and formats to produce and present the Ministries of Education policy recommendation	Methodologies contents and formats to organise #1 requirements workshop in preparation of the recommendations and #1 recommendations workshop to present the policy recommendations	EUN
Ministries of education policy recommendations	#1 set of Policy Recommendations (with two-page executive summary translated into the 24 EU official languages) stemming from the lessons learnt from the GenB activities including: (i) integration of bioeconomy education in the existing school system; (ii) support stakeholders in adopting bioeconomy related curricula; (iii) promote new approaches for bioeconomy education through incentives, infrastructures, capacities and policies	EUN
GenB website	The GenB website offering access to the GenB offerings (e.g., library, toolkits, videos, educational cards, games, etc.)	LOBA





Relevant Background	Contr. Partner	BG numb	Short description of BG	Type of protection	Conditions to use within GenB	Conditions to use outside GenB	Interest in further exploit.
All data, information, concepts, processes, exercises, cases, simulations, tools, methodologies, theoretical approaches and know-how generated by employees of BTG who are not participating in the Project	BTG	BG.1	All data, information, concepts, processes, exercises, cases, simulations, tools, methodologies, theoretical approaches and know-how generated by employees of BTG who are not participating in the Project		Excluded	Excluded	
All data, information, concepts, processes, exercises, cases, simulations, tools, methodologies, theoretical approaches and know-how generated by employees of BTG participating in the Project but which is outside the scope of the Project or for which it is unable to grant	BTG	BG.2	All data, information, concepts, processes, exercises, cases, simulations, tools, methodologies, theoretical approaches and know-how generated by employees of BTG participating in the Project but which is outside the scope of the Project or for which it is unable to grant Access Rights due to Third Party restrictions		Excluded	Excluded	





Relevant Background	Contr. Partner	BG numb	Short description of BG	Type of protection	Conditions to use within GenB	Conditions to use outside GenB	in further exploit.
Access Rights due to Third Party restrictions							
Any and all know-how consisting part of an existing patent and/or on-going patent application	BTG	BG.3	Any and all know-how consisting part of an existing patent and/or on-going patent application		Excluded	Excluded	
Background subject to confidentiality agreements and/or other agreements preventing BTG from granting Access Rights to that Background	BTG	BG.4	Background subject to confidentiality agreements and/or other agreements preventing BTG from granting Access Rights to that Background		Excluded	Excluded	





Relevant Background	Contr. Partner	BG numb	Short description of BG	Type of protection	Conditions to use within GenB	Conditions to use outside GenB	Interest in further exploit.
Background subject to other third-party rights prohibiting BTG from granting Access Rights to that Background	BTG	BG.5	Background subject to confidentiality agreements and/or other agreements preventing BTG from granting Access Rights to that Background		Excluded	Excluded	
AIJU toys and children products manufacturers database	AIJU	BG.6	AIJU toys and children products manufacturers database		According to International data protection law	According to International data protection law	
Ethics procedures for social research with humans involving children or not	AIJU	BG.7	Ethics procedures for social research with humans involving children or not		According to International data protection law. These procedures are exclusively of AIJU	According to International data protection law. These procedures are exclusively of AIJU	
AIJU's consumer data base of families is of private	AIJU	BG.8	AlJU's consumer data base of families is of private		According to International data protection law. Access only by AIJU	According to International data protection law. Access only by AIJU due	





Relevant Background	Contr. Partner	BG numb	Short description of BG	Type of protection	Conditions to use within GenB	Conditions to use outside GenB	Interest in further exploit.
					due to data privacy limitations and will be used for the specific task described in the GenB project	to data privacy limitations and will be used for the specific task described in the GenB project	
TOYLAB and CHILDLAB as laboratories to disseminate project content and promote workshops and studies with consumers	AIJU	BG.9	TOYLAB and CHILDLAB as laboratories to disseminate project content and promote workshops and studies with consumers		It will be used by AIJU for the specific task in the GenB project	It will be used by AIJU for the specific task in the GenB project	
Scientix Initiative	EUN	BG.10	Scientix is the community for science education in Europe. It aims to promote and support a Europe-wide collaboration among STEM teachers, education researchers, policymakers and other educational stakeholders to	N/A	It will be used by EUN for the specific task in the GenB project	It will be used by EUN for the specific task in the GenB project	





Relevant Background	Contr. Partner	BG numb	Short description of BG	Type of protection	Conditions to use within GenB	Conditions to use outside GenB	Interest in further exploit.
			inspire students to pursue careers in the field of Science, Technology, Engineering and Mathematics (STEM). It offers project support and dissemination services.				
Scientix Ambassador Network	EUN	BG.11	Scientix Ambassador Network consists of more than 1,000 active or retired teachers and educators, who support and share Scientix activities at national level and play an active role in supporting innovation in STEM education in their countries.	N/A	It will be used by EUN for the specific task in the GenB project	It will be used by EUN for the specific task in the GenB project	
MOOC expertise and already existing MOOC content featured on the EUN Academy website	EUN	BG.12	All the content, learning materials, Learning Scenarios, displayed as a part of BLOOM	Creative Commons License, CC BY-SA	It will be used by EUN for the specific task in the GenB project	It will be used by EUN for the specific task in the GenB project	





Relevant Background	Contr. Partner	BG numb	Short description of BG	Type of protection	Conditions to use within GenB	Conditions to use outside GenB	Interest in further exploit.
			and other MOOCs featured on the EUN Academy.				
Career Profile templates	EUN	BG.13	Career Profile template developed by EUN before the beginning of the project and is used across the organization and EUN projects.	Creative Commons License, CC BY-SA	It will be used by EUN for the specific task in the GenB project	It will be used by EUN for the specific task in the GenB project	
Learning Scenario Templates	EUN	BG.14	Learning Scenario templates developed by EUN before the beginning of the project and is used across the organization and EUN projects.	Creative Commons License, CC BY-SA	It will be used by EUN for the specific task in the GenB project	It will be used by EUN for the specific task in the GenB project	
Bioeconomy Materials developed through BLOOM Project	EUN	BG.15	All the bioeconomy related content developed through the BLOOM project such as BLOOM Toolbox, Learning Scenarios, Documentaries, videos	Creative Commons License, CC BY-SA	It will be used by EUN for the specific task in the GenB project	It will be used by EUN for the specific task in the GenB project	





Relevant Background	Contr. Partner	BG numb	Short description of BG	Type of protection	Conditions to use within GenB	Conditions to use outside GenB	Interest in further exploit.
Relation and access to Ministries of Education and other policy makers	EUN	BG.16	European Schoolnet is the network of 34 European Ministries of Education, aiming to bring innovation in teaching and learning to our key stakeholders: Ministries of Education, schools, teachers, researchers, and industry partners.	Confidenti ality agreements	It will be used by EUN for the specific task in the GenB project	It will be used by EUN for the specific task in the GenB project	
STEM School Label	EUN	BG.17	STEM School Label is aimed at guiding European schools in increasing young Europeans' interest and skills in STEM subjects and to provide the schools with the necessary tools to engage their students, teachers and other actors in related activities by developing an appropriate STEM strategy.	N/A	It will be used by EUN for the specific task in the GenB project	It will be used by EUN for the specific task in the GenB project	





Relevant Background	Contr. Partner	BG numb	Short description of BG	Type of protection	Conditions to use within GenB	Conditions to use outside GenB	Interest in further exploit.
"European Bioeconomy Network" database and mailing lists	FVA	BG.18	"European Bioeconomy Network" database and mailing lists	N/A	Will be used for project's activities by FVA, but will not be shared among partners	Will be used for project's activities by FVA, but will not be subject of exploitation by the consortium	
"European Bioeconomy Network" website, knowledge and partnership	FVA	BG.19	"European Bioeconomy Network" website, knowledge and partnership	N/A	Will be used for project's activities by FVA	Will be used for project's activities by FVA	
@biovoices social media channels	FVA	BG.20	Biovoices social media channels	N/A	Will be used for project's activities by FVA	Will be used for project's activities by FVA	
Book "What is Bioeconomy?"	APRE, FVA, PEDAL, LOBA, Q- PLAN	BG.21	A book for kids written for children aged 5-9 in order to raise awareness of the sustainable and circular bioeconomy, and bio-based products in particular. Available in 16 languages, the book	Copyright	In accordance with regulations for copyrighted work	To be used in accordance with regulations for copyrighted work for partners BTG, EUN, ZSI, AIJU, HSPN. To be used according to the regulations of article 8.1	





R	televant Background	Contr. Partner	BG numb	Short description of BG	Type of protection	Conditions to use within GenB	Conditions to use outside GenB	Interest in further exploit.
				communicates scientifically sound contents in an easy and comprehensive way to children and their families			- Joint ownership of the Consortium Agreement of BIOVOICES for APRE, FVA, PEDAL, LOBA, Q- PLAN	
	Online gamified version of the look "What is Bioeconomy"	FVA	BG.22	An online gamified version of the book "What is bioeconomy" with mini-games, quiz, gamified call-for-action tools on bioeconomy, targeting from primary school to young adults available in 12 languages. (https://bb4k.fvaweb.eu/index.html)	Copyright	In accordance with regulations for copyrighted work	For contents: To be used in accordance with regulations for copyrighted work for partners BTG, EUN, ZSI, AIJU, HSPN. To be used according to the regulations of article 8.1 – Joint ownership of the Consortium Agreement of BIOVOICES for APRE, FVA, PEDAL, LOBA, Q-PLAN For online version: Free of use	





Relevant Background	Contr. Partner	BG numb	Short description of BG	Type of protection	Conditions to use within GenB	Conditions to use outside GenB	Interest in further exploit.
Transition2BIO capacity building package (EN)	APRE, FVA, PEDAL	BG.23	A capacity-building programme for educating Member States and Regions, as well as other national and regional stakeholders in the implementation of awareness and communication activities for the deployment of their Bioeconomy Strategies.	Copyright	In accordance with regulations for copyrighted work; Free to use within the project	Free	
Transition2BIO capacity building package (IT)	APRE, FVA	BG.24	A capacity-building programme for educating Member States and Regions, as well as other national and regional stakeholders in the implementation of awareness and communication activities for the deployment of their Bioeconomy Strategies.	Copyright	In accordance with regulations for copyrighted work; Free to use within the project	Free	





Relevant Background	Contr. Partner	BG numb	Short description of BG	Type of protection	Conditions to use within GenB	Conditions to use outside GenB	Interest in further exploit.
Transition2BIO toolkit for teachers (IT)	FVA	BG.25	Toolkit for Italian teachers (primary and secondary schools) collecting educational contents, videos and hands-on experiments to be replicated in class	Copyright	In accordance with regulations for copyrighted work; Free to use within the project	Free	
Transition2BIO toolkits	Ikits ransitio n2BIO students, communicators, pol makers and busine		https://www.transition2bio.eu/	Copyright	In accordance with regulations for copyrighted work; Free to use within the project	Free	
Games and gamified solutions for bioeconomy education	FVA	BG.27	Various games developed in the context of BIOWAYS, BIOVOICES, Transition2BIO: BIOChallenge, BioWHAT, several games using Mentimeter, games using Miro	Copyright	In accordance with regulations for copyrighted work; Free to use within the project	Free	





Relevant Background	Contr. Partner	BG numb	Short description of BG	Type of protection	Conditions to use within GenB	Conditions to use outside GenB	Interest in further exploit.
BioArt Gallery	FVA	BG.28	The BioArt Gallery is a collection of stunning pictures of the most promising feedstock and its related bioeconomy applications in everyday life. It offers an innovative approach of showcasing to the public some examples of bio-based products and applications currently available in the market through several examples: cosmetics, nutraceutics, tissues, toys and sport, disposable tableware, cleaning products, gadgets, and much more.		Will be used for project's activities	Will be used for project's activities, but will not be subject of further exploitation by the consortium	
Bioeconomy Village	FVA	BG.29	The Bioeconomy Village is a collection of more than 350 biobased products and aimed at raising public awareness, improving knowledge on bio-	N/A	Will be used for project's activities	Will be used for project's activities, but will not be subject of further exploitation by the consortium	





Relevant Background	Contr. Partner	BG numb	Short description of BG	Type of protection	Conditions to use within GenB	Conditions to use outside GenB	Interest in further exploit.
			based products and promoting the applications and benefits of the circular bioeconomy and sustainability, encouraging dialogue, discussion and sharing between the general public and representatives of universities, research centers, projects, companies, associations and start-ups.				
FVA Database of contacts in the bioeconomy sector	FVA	BG.30	FVA Database of contacts in the bioeconomy sector	N/A	Will be used by FVA for the project's activities, but not shared with the partners	activities by FVA, but will	
Bioeconomy quizzes and educational cards for social media and training	FVA	BG.31	Many tailored educational contents have been developed for @biovoices social media channels	N/A	Will be used for project's activities	Will be used for project's activities	





Relevant Background	Contr. Partner	BG numb	Short description of BG	Type of protection	Conditions to use within GenB	Conditions to use outside GenB	Interest in further exploit.
Videos (interviews, educational videos, etc.)	FVA	BG.32	Many videos including video interviews to young bioeconomy professionals, video "A bioeconomy day", videos engaging young ambassadors	N/A	Will be used for project's activities	Will be used for project's activities	
LIFT bioeconomy library	[AIV BILL BLL 55		resources stemming from EU funded projects and initiatives in	Copyright	In accordance with regulations for copyrighted work	Free	
Methodologies for Mobilisation and Mutual Learning (MML)	FVA, APRE, PEDAL, LOBA, Q- PLAN	BG.34	Methodologies' stemming from BIOVOICES, Biobridges, LIFT, Transition2Bio	N/A	Will be used for project's activities	Will be used for project's activities	
Transition2BIO Hands-on labs	FVA, APRE, PEDAL,	BG.35	Scientific experiments to engage young kids and their teachers in	Creative Commons License	Will be used for project's activities	Will be used for project's activities	





Relevant Background	Contr. Partner	BG numb	Short description of BG	Type of protection	Conditions to use within GenB	Conditions to use outside GenB	Interest in further exploit.
	LOBA, Q- PLAN, ZSI		the bioeconomy through a hands-on experience.				
Methodologies for school projects	FVA	BG.36	Extensive knowledge in developing methodologies to engage students and their teachers in school projects, stemming from Startupper School Academy, Bioeconomy4YOU	N/A	Will be used for project's activities	Will be used for project's activities	
"Students2Students" format	FVA	BG.37	This format promotes the engagement of youth, supporting students (of any age, including the little ones) in taking their role and explain the bioeconomy to their peers.	N/A	Will be used for project's activities	Will be used for project's activities	
Capacity building (soft skills and communication)	FVA, PEDAL	BG.38	Methodologies for capacity building activities to develop soft skills and communication,	Copyright	Will be used for project's activities	Will be used for project's activities	





Relevant Background	Contr. Partner	BG numb	Short description of BG	Type of protection	Conditions to use within GenB	Conditions to use outside GenB	Interest in further exploit.
			stemming from the project TETRA				
Bioheroes experience	FVA, LOBA, APRE, PEDAL, Q-PLAN	BG.39	Experience stemming from BIOBRIDGES project in engaging bioeconomy ambassadors	N/A	Will be used for project's activities	Will be used for project's activities	
Serious game and mobile application to channel citizens' voices to the bio-based industries	BTG	BG.40	Serious game as main outcome of the Allthings.bioPRO project, addressing four missions 'textiles', 'food packaging', 'kids and schools' and 'jobs and careers'.	Copyright	Can be used as part of the Toolboxes to be developed in WP1		
Quizzes and quiz questions	BTG	BG.41	Produced during the projects BioCannDo and Allthings.bioPRO		Can be made use of in the Toolboxes to be developed in WP1		





Relevant Background	Contr. Partner	BG numb	Short description of BG	Type of protection	Conditions to use within GenB	Conditions to use outside GenB	Interest in further exploit.
Bioeconomy Glossary	BTG	BG.42	Produced during the projects BIOSWITCH and Allthings.bioPRO		Can be made use of in the Toolboxes to be developed in WP1		
Social media (e.g. Allthings.bio, BIOSWITCH & BioGov.Net projects)	BTG	BG.43	The mentioned projects have set up their social media channels	N/A	Will not be directly used by the project, but can be deployed for joint activities and initiatives with BioGov.net social media channels		
Co-creation methodologies	ZSI	BG.44	knowledge in co-creation methodologies and citizen engagement and strategies on how to implement them	N/A	Will be used for project activities		
Memory Game	Transitio n2Bio/L OBA	BG.45					





Relevant Background	Contr. Partner	BG numb	Short description of BG	Type of protection	Conditions to use within GenB	Conditions to use outside GenB	Interest in further exploit.
APRE Database of contacts	APRE	BG.46	APRE Database of contacts	N/A	Will be used by APRE for the project's activities, but not shared with the partners	Will be used for project's activities by APRE, but will not be subject of further exploitation by the consortium	







PR#	Project result (PR)	Specific project result	Main Partner	Contrib.	Rel. BG	Short description of FG	Type of protection	Use in GenB	Use after the project
PR 1.1	GenB Resources Library		LOBA	All Partners		An online library designed to make available in a transparent, readily available, user-friendly and visual-attractive way at least 100 different materials on bioeconomy awareness, education and information	Copyright	Free	Payment of yearly hosting costs
PR 1.2	I neonle teachers and other		AIJU	All Partners		3 toolkits for young people, 1 for the teachers, 1 for the other multipliers and 1 for boosting the collaboration among teachers, parents and youth towards a more sustainable production, consumption and lifestyles. The toolkits will be based on already existing material and tools as well as on tools created by GenB.	Creative Commons license	Free	Free
PR 1.3	GenB new materials	Book for kids "What's Bioeconomy" (BIOVOICES) updated New Resion with additional APRE AII APRE Partners Book for kids "What's Bioeconomy" (BIOVOICES) updated version with additional four languages (PL, UA BG, I		(BIOVOICES) updated version with additional four languages (PL, UA BG, MT) for a total of sixteen languages for pre- and	Copyright	Free	Free		





PR#	Project result (PR)	Specific project result	Main Partner	Contrib. partner	Rel. BG	Short description of FG	Type of protection	Use in GenB	Use after the project
		for a total of fifteen languages for pre- and early-school (4-8 y.o.)							
PR 1.4		Game for Elementary school	AIJU	All Partners		1 Game or gamified educational experience for Elementary school in 9 languages	Creative Commons license	Free	Free
PR 1.5		Quizzes and Educational cards	AIJU	All Partners		20 Quizzes and Educational cards for social media and training for High schools (14-19 years old) in 9 languages	Creative Commons license	Free	Free
PR 1.6		Online factsheets "bioeconomy job profiles"	AIJU	All Partners	BG13	1 Online factsheet "bioeconomy job profiles" for High schools (14-19 years old) in 9 languages	Creative Commons License under CC- BY	Free	Free
PR 1.7		Lesson plans, training contents and MOOC	EUN	All Partners	BG12 BG13 BG14 BG15	Lesson plans, training contents and MOOC (based on the BLOOM MOOC and Transition2Bio courses for teachers developed in collaboration with the EC Knowledge Centre for the Bioeconomy) compliant to the Seven Step Eco-Schools	Creative Commons License under CC BY-SA	Free	Creative Commons License under CC BY-SA





PR#	Project result (PR)	Specific project result	Main Partner	Contrib. partner	Rel. BG	Short description of FG	Type of protection	Use in GenB	Use after the project
						methodology for teachers and other multipliers.			
PR 1.8		Game for Primary/Elementary school	APRE	-	BG16	1 Game educational experience for Primary/ Elementary school in at least 2 languages	Copyright	Free	Free
PR 2.1	inform you sustainable	ogies to inspire and ing people on e and circular ny and bio-based sectors	HSPN	All Partners		Methodologies to inspire and inform young people on sustainable and circular bioeconomy and bio-based sectors through the formats of "hands on labs", "bioeconomy village", "inside the bioeconomy" and "BioArt gallery"	Copyright	Free	Free
PR 2.2	Methodologies to inspire and inform students in bioeconomy careers		BTG	All Partners		Methodologies to inspire and inform students in bioeconomy careers through the formats of "TEDX pitches", "Bioeconomy career info-days", "a day in a biorefinery" and "school project"	TBD	TBD	TBD
PR 2.3	Role Play G	Game	AIJU	All Partners		Methodologies to inspire and inform students in bioeconomy. "Role-play game" on bioeconomy jobs at school (AIJU) (circular farmers, biotech researchers, etc.)	Creative Commons license	Free	Free





PR#	Project result (PR)	Specific project result	Main Partner	Contrib. partner	Rel. BG	Short description of FG	Type of protection	Use in GenB	Use after the project
			BTG	All Partners		Methodologies, material, tools to train young people on how to promote the biotransition through the delivery of			
PR 2.4	7	FVA		BG25 BG26 BG27 BG31 BG32	dedicated educational activities: #24 Educational activities using toolkits #8 "Bioeconomy talks/seminars" inquiry- based learning to stimulate young people' reflection and debate #1 "online bio educational village" in EN	TBD	TBD	TBD	
PR 2.5		EUN		BG12 BG13 BG14 BG15	Methodologies, tools, material to educate teachers in teaching the bioeconomy through online courses in 9 languages:	Creative Commons			
	Methodologies to educate teachers in teaching the bioeconomy		FVA	All BG21 partners BG22 BG25 BG26 BG27 BG31	#1 "What's bioeconomy" MOOC #3 "How to use GenB toolkits" for all target ages' teachers #1 "Bioeconomy job profiles" on factsheets explanation for High school teachers		Free	Free	





PR#	Project result (PR)	Specific project result	Main Partner	Contrib. partner	Rel. BG	Short description of FG	Type of protection	Use in GenB	Use after the project
					BG32 BG33				
PR 2.6		ogies to inform and ultipliers to promote the ny	PEDAL	All Partners		Methodologies, materials and tools to inform and educate multipliers to promote the bioeconomy through #8 informative webinars in partners' countries #24 individual meetings with three multipliers in each partners' country	Creative Commons license	Free to use	Free
PR 3.1	1	ogies, contents and engage GenB ors	APRE	All Partners		Methodologies, contents and formats to engage GenB Ambassadors through coordinated partners efforts and 1 "GenB in Action" recruitment campaign on social media	TBD	TBD	TBD
PR 3.2	GenB Amb	assadors	FVA	All Partners	BG39	A body of #20 young multipliers engaged to play as frontrunners to involve other young people as well as #8 young career testimonials, 8 greensensitive young influencers and activists and 8 environmental young journalists engaged as GenB Ambassadors			





PR#	Project result (PR)	Specific project result	Main Partner	Contrib. partner	Rel. BG	Short description of FG	Type of protection	Use in GenB	Use after the project
		ogies, contents and empower GenB ors	ZSI, FVA	All Partners	BG25 BG26	Methodologies, contents and formats to empower GenB Ambassadors through #18 capacity building webinars (at least 2 per country + 2 in English) #1 online mutual learning workshop among GenB Ambassadors	Creative Commons License	Free	Free
PR 3.3	of bioecon	ogies for the deployment omy awareness raising n social media	FVA	All Partners	BG20 BG31 BG32	#3 social media profiles @GenBvoices (in Instagram, TikTok, Facebook) A connected strategy and methodology for the different social networks, disseminating relevant content on all channels through gamified approaches that help raise awareness as well as collect consumer perceptions and ideas.	Not applicable	Free	Free
PR 3.4	formats to	ogies, contents and support GenB ors take a role	FVA	All Partners	BG24 BG25 BG 31 BG32 BG35 BG36 BG37	Methodologies, contents and formats to support GenB Ambassadors take a role through: #1 "GenB driving the transition" International Competition, awarding educational oriented prizes #10 GenB Ambassadors engaged in promotional activities as	Not applicable	Free	Free





PR#	Project result (PR)	Specific project result	Main Partner	Contrib. partner	Rel. BG	Short description of FG	Type of protection	Use in GenB	Use after the project
					BG38 BG39	"Students2Students" testimonials #3 social media campaigns by green- sensitive young influencers as GenB Ambassadors #5 young journalists publishing on GenB social media			
PR 3.5	formats to debate and	ogies, contents and facilitate dialogue, d and co-creation uropean youth on	Q-PLAN	All Partners		Methodologies, contents and formats to facilitate dialogue, debate and co-creation between European youth on bioeconomy through: #3 thematic online debates on topics relevant for young people #1 cross-contamination online workshop with other youth green communities #1 "Our GenB future" international online workshop to generate ideas and recommendations	Copyright	Free	Free
PR 3.6	Position pa	per "Our GenB future"	Q-PLAN	All Partners		A position paper titled "Our GenB future" aiming to consolidate recommendations stemming from the project to inform policy on how to involve the young generation in	Copyright	Free	Free





PR#	Project result (PR)	Specific project result	Main Partner	Contrib. partner	Rel. BG	Short description of FG	Type of protection	Use in GenB	Use after the project
						the ecological transition according to young people's needs and interests			
PR 4.1			PEDAL	All Partners		Methodologies, contents and formats to run 8 online mobilisation and mutual learning workshops in partners' countries to share knowledge and experiences among the education community in light of consolidating the GenB educational model	Creative Commons license	Free	Free
PR 4.2	GenB educ	ational model	PEDAL	All Partners		The "GenB education model" produced as a factsheet and translated into 24 EU languages	Creative Commons license	Free	Free
PR 4.3	formats to	ogies contents and produce and present ries of Education policy dation	EUN	All Partners	BG16	Methodologies contents and formats to organise #1 requirements workshop in preparation of the recommendations and #1 recommendations workshop to present the policy recommendations	Creative Commons License under CC- BY-SA	Free	Free
PR 4.4	Ministries (of education policy dations	EUN	All Partners	BG16	#1 set of Policy Recommendations (with two-page executive summary translated into the 24 EU official languages) stemming from the lessons learnt from the GenB activities including: (i) integration of	Creative Commons License under CC- BY-SA	Free	Free





PR#	Project result (PR)	Specific project result	Main Partner	Contrib. partner	Rel. BG	Short description of FG	Type of protection	Use in GenB	Use after the project
						bioeconomy education in the existing school system; (ii) support stakeholders in adopting bioeconomy related curricula; (iii) promote new approaches for bioeconomy education through incentives, infrastructures, capacities and policies			
PR 5.1	GenB webs	site	LOBA	All Partners		The GenB website offering access to the GenB offerings (e.g., library, toolkits, videos, educational cards, games, etc.)	Copyright	Free	Service to be paid
PR 1.9	Results of I	iving labs	ZSI	APRE, PEDAL, FVA		During the living labs students will develop new materials and approaches. They could be teaching/learning material, games, videos, but also approaches of cooperation between teachers and students etc.	Creative Commons	Free	Free





6. Conclusion

This initial version of the GenB Exploitation and Sustainability Plan has described the strategy and methodology employed in this respect within the framework of GenB, while also providing an overview of its Background and Foreground IP. A dedicated tool, namely the IPR Matrix, has been elaborated in order to facilitate the identification and management of GenB's assets by project partners under the supervision of the Exploitation Manager (Q-PLAN) throughout the project.

Accordingly, the Exploitation and Sustainability Plan of GenB project will be updated to reflect the interim (M18) and final (M30) project results along with their protection, ownership, access rights with the support of all partners. The final version of the "Exploitation and Sustainability Plan" will provide a more accurate outline of the main exploitable assets of the project, the main target groups of external stakeholders and the potential benefits they stand to gain from GenB's outcomes, the exploitation plans per asset, per partner and per groups of partners. Alongside, the updated report will encompass the measures that have been taken to protect the partnership's IP, fostering the successful post-project exploitation and sustainability of the project's assets.

The Exploitation Manager will keep the plan updated and monitor project activities as they evolve so as to timely become aware of any potential conflicts of interest and to facilitate their resolution before the end of the project, as well as to feed the development of the updated version of this report in the context of GenB.





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