



D6.1

# **D6.1: Dissemination, Communication and Exploitation plan, 1<sup>st</sup> version**



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## ABBREVIATIONS

<b>BG</b>	Background
<b>CA</b>	Consortium Agreement
<b>D&amp;C</b>	Dissemination and Communication
<b>DCEP</b>	Dissemination, communication and exploitation Plan
<b>DCP</b>	Dissemination and Communication plan
<b>EC</b>	European Commission
<b>EM</b>	Exploitation Manager
<b>EPC</b>	European Patent Convention
<b>ER</b>	Exploitable Results
<b>FG</b>	Foreground
<b>GA</b>	Grant Agreement
<b>GDPR</b>	General Data Protection Regulation
<b>iLUC</b>	Indirect land use change impacts of biofuels
<b>IP</b>	Intellectual Property
<b>IPR</b>	Intellectual Property Rights
<b>KPIs</b>	Key Performance Indicators
<b>M</b>	Milestone
<b>NDA</b>	Non-disclosure agreement
<b>NGOs</b>	Non-governmental Organization
<b>PR</b>	Project Result
<b>R&amp;D</b>	Research and Development
<b>SEO</b>	Search Engine Optimisation
<b>SMA</b> s	Social Media Accounts
<b>WIPO</b>	World Intellectual Property Organization
<b>WP</b>	Work Package



# 1. Introduction to CARINA

CARINA is a cross-national 4-year long Innovation Action (01/11/2022- 31/10/2026), supported by the European Union within the framework of the Horizon Europe programme.

The project focuses on new sustainable and diversified farming systems including 2 new oilseed crops, carinata and camelina, able to provide multiple low iLUC feedstocks for the bio-based economy. CARINA will demonstrate that increasing the diversification of cropping systems by adopting a well-thought and effective crop combination will enhance yield stability, farmers' revenue and the overall sustainability of farming systems, and, at the same time, to supplement the bioeconomy sector.

To facilitate the deployment of innovative systems, CARINA will also address certification issues of low iLUC feedstocks intended for bio-based industry. 9 Lighthouses, 5 Living Labs, and 9 Policy Innovation Labs will be established across Europe playing a leading role in the co-creation of CARINA innovation actions.

CARINA capitalizes on a highly experienced team of 19 partners, +5 affiliated entities, from 13 EU and Associated Countries (Italy, France, Spain, Germany, Greece, Slovakia, Bulgaria, Poland, UK, Serbia, Tunisia, Morocco, Switzerland).

Coordinator: ALMA MATER STUDIORUM - UNIVERSITA DI BOLOGNA

PARTNERS	SHORT NAME	COUNTRY
ALMA MATER STUDIORUM - UNIVERSITA DI BOLOGNA	UNIBO	IT
ARVALIS INSTITUT DU VEGETAL	ARVALIS	FR
AGRAREN UNIVERSITET - PLOVDIV	AUP	BG
CAMELINA COMPANY ESPANA SL	CCE	ES
CENTRE FOR RENEWABLE ENERGY SOURCES AND SAVING FONDATION	CRES	EL
DBFZ DEUTSCHES BIOMASSEFORSCHUNGSZENTRUM GEMEINNUTZIGE GMBH	DBFZ	DE
FLANAT RESEARCH ITALIA SRL	FLANAT	IT
INTERNATIONAL CENTRE FOR AGRICULTURAL RESEARCH IN THE DRY AREAS	ICARDA	LB

INSTITUT ZA RATARSTVO I POVRTARSTVO INSTITUT OD NACIONALNOG ZNACAJA ZA REPUBLIKU SRBIJU	IFVNCS	RS
INSTITUT NATIONAL DE LA RECHERCHE AGRONOMIQUE DE TUNISIE	INRAT	TN
NOVAMONT SPA	NVMT	IT
PEDAL CONSULTING SRO	PEDAL	SK
UNIWERSYTET PRZYRODNICZY W POZNANIU	PULS	PL
SAIPOL	SAIPOL	FR
COOPERATIVAS AGRO-ALIMENTARIAS DE ESPANA U DE COOP SOCIEDAD COOPERATIVA	SPANISH CO-OPS	ES
COOPERATIVAS AGRO-ALIMENTARIAS DE ANDALUCIA	FAECA	ES
FEDERACIÓN ARAGONESA DE COOPERATIVAS AGRARIAS	FACA	ES
UNION REGIONAL DE COOPERATIVAS AGRARIAS DE CASTILLA Y LEON	URCACYL	ES
COOPERATIVAS AGROALIMENTARIAS CASTILLA LA MANCHA UNION DE COOPERATIVAS	CACLM	ES
FEDERACIO DE COOPERATIVES AGRARIES DE CATALUNYA	FCAC	ES
TERRES INOVIA	TI	FR
KIMITEC BIOGROUP SL	KIMITEC	ES
RSB ROUNDTABLE ON SUSTAINABLE BIOMATERIALS ASSOCIATION	RSB	CH
NUSEED EUROPE LTD	NUSEED	UK

## 2. Objectives

The current document, titled **Dissemination, communication and exploitation plan, 1st version** (DCE) has been elaborated within the framework of the **CARINA** project which is co-funded by the European Union's Horizon Europe framework programme under Grant Agreement No. 101081839

In this context, the **main objectives** of the DCE are to offer partners a set of guidelines, responsibilities and timelines on how/when/where to disseminate the project, as well as to encourage them to use their channels (corporate websites, social networks, etc) to support the dissemination, with the main goal of gathering the ideal conditions to:

- Raise awareness of the project activities and events;
- Communicate and disseminate the findings and results among CARINA target groups;
- Identify and use the right channels to efficiently communicate with the target groups and stakeholders (including the identification of events, social media networks, press releases, multiplier organisations, etc.).
- Produce the necessary supporting material to ensure an effective dissemination, including printed material (i.e. brochure, poster, roll-up, goodies...) and digital materials (videos, infographics...).
- Create a link to other existing projects within the same scope;
- Facilitate regular communication, through press releases and newsletters, to inform about the latest news and developments of the project to the media.

In addition CARINA partners focus on producing results that will be sustainable after the project's completion and ensuring that innovative ideas, methodologies, and results of the project will be fully identified, preserved and considered in terms of wider availability to all relevant stakeholders and, where applicable, commercialization potential. Thus, the consortium defines basic principles, from the early stages of the project, that will yield a solid management framework for the Background (BG), as well as the Foreground (FG) Intellectual Property Rights of CARINA.

The CARINA DCE plan sets the ground for monitoring the protection of IP and IPR within the consortium, which eventually will support the creation of value as regards the exploitable results of the project and facilitate successful innovation.

The current document aims to identify the project's key assets, set the premises for the determination of their underlying IPR, as well as for the development of a common understanding regarding their exploitation framework after the end of the project.



### 3. Structure

The first 3 chapters include general introduction to CARINA and the objectives of the DCE with a short description of its structure. Afterwards the DCE is divided into **2 main parts**:

#### Dissemination and Communication (Chapter 4)

- **Subchapter 4.1, 4.2 and 4.3** presents the strategy – the respective steps to be followed in the process of planning, realization and assessment of effective communication and dissemination of project results.
- **Subchapter 4.4** describes different tools and channels for the project communication and dissemination such as web platforms, newsletters, social media, events or promotional video and how they are planned to be used.
- **Subchapter 4.5** matches the most suitable tools and channels identified in **chapter 4.4** with each respective target group of CARINA.
- **Subchapter 4.6** identifies the both CARINA and external events.
- **Subchapter 4.7** describes the planned collaboration with relevant projects and initiatives.
- **Subchapter 4.8** proposes indicative timeline for the creation of main dissemination materials that will be created by the project as well as general timeline for dissemination and communication activities to be produced per project month.
- **Subchapter 4.9** presents the monitoring and evaluation methods used to track dissemination and communication activities.

#### Exploitation IPR Management and Sustainability (Chapter 5)

- **Subchapter 5.1** provides introductory information about the context in which this part has been elaborated as well as its targets and structure.
- **Subchapter 5.2** outlines the IPR management strategy and its underlying stages in the context of CARINA. Clarifies the key terms pertaining to IPR management of the project, defines the underlying objectives and explains the main intellectual property protection instruments to be employed.
- **Subchapter 5.3** describes the methodology to be followed in this respect. introduces the IPR Matrix and explains the procedures followed in order to identify the CARINA background and foreground IP, as perceived at this stage of the project.
- **Subchapter 5.4** offers a preliminary overview of the project's assets to be co-created, as identified at this stage of the project, as well as the background and foreground IPs as perceived by all CARINA partners.
- **Subchapter 5.5** Presents the individual exploitation plans per partners.

**Exploitation IPR Management and Sustainability (Chapter 6)** Concludes on the next steps towards the exploitation of the assets of the project as well as on dissemination and communication activities.

Finally, the **Annexes** of the DCEP include graphic templates to be used in the project communication.

The CARINA Dissemination, Communication and Exploitation Plan will be updated and further elaborated on a systematic basis throughout the project. Specifically, an updated version of D6.3 is expected at M36 and D6.2 Final Exploitation plan at M48. This will include the description of project's final assets, as well as the consortium's plans regarding their IPR protection and their main exploitation routes that will facilitate their exploitation after the end of the project.

DRAFT

## 4. Dissemination and Communication Plan

### 4.1 The strategy

The strategy focuses on establishing and executing a realistic dissemination and communication plan in line with the progress of the project and the utilisation of appropriate tools, channels and actions to communicate with the target audiences in a defined timeline.

To achieve dissemination and communication objectives in a timely and adequate manner, CARINA consortium will follow the roadmap below:

- Planning of Activities (M1 – M6): Identify the communication and dissemination strategy and plan to ensure the best impact of project's outcomes (Task 6.1).
- Implementation Phase (M1 – M48): Produce a comprehensive set of tools (supports and channels) to diffuse key messages extracted from the project results to the identified targeted groups (Task 6.1).
- Monitoring Activities (M1 – M48): Carefully analyse and assess the impact and success of dissemination activities against pre-established key performance indicators (KPIs).
- Sustainability (M1 – M48): Identify and establish mechanisms needed to ensure persistent and long-lasting visibility of CARINA outcomes (Task 6.3 and Task 6.4).
- Knowledge transfer (M7 – M48): Ensuring that elements of excellence of the project can be re-used and replicated in other projects (Task 6.2)

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## 4.2 Target audience and dissemination and communication objectives

The general objectives of the communication and dissemination common to all project target groups including the broad public are:

- creating awareness, making the project, its vision and activities known among its target groups;
- disseminating the achievements of the project; and
- demonstrating the benefits and impact of CARINA solutions to foster the sustainable diversification of EU farming system

The key stakeholders of CARINA with more specific dissemination and communication objectives to be passed can be segmented in the target groups outlined by the following table.

Target groups	Dissemination objectives	Communication objectives
<b><u>FARMERS-Primary Group</u></b> <ul style="list-style-type: none"> <li>• <b>Farmers Cooperatives</b></li> <li>• <b>Agronomists</b></li> <li>• Farmers Unions</li> <li>• Farmers from areas with marginal land at high desertification and soil erosion risk</li> </ul>	<ul style="list-style-type: none"> <li>• Promote CARINA biobased products</li> <li>• Promote CARINA solutions</li> <li>• Promote CARINA Stakeholder database</li> <li>• Expand the CARINA mailing list (newsletter)</li> <li>• Promote Technical guidelines for the implementation of CARINA farming systems D1.4</li> <li>• Promote CARINA Lighthouse achievements D1.2</li> <li>• Promote Results from demo fields D1.3</li> <li>• Promote Factsheets about local challenges and field visits D5.2</li> <li>• Promote Practice Abstracts D6.4 and D6.5</li> </ul>	<ul style="list-style-type: none"> <li>• Communicate and receive feedback on CARINA solutions</li> <li>• Receive feedback on public deliverables</li> <li>• Receive feedback on CARINA Stakeholder database</li> </ul>
<b><u>EU BIOBASED INDUSTRY</u></b> <ul style="list-style-type: none"> <li>• <b>Entities looking for affordable and sustainable domestic feedstock</b></li> <li>• <b>Oilseed growers and crushers interested in alternative to staple oilseeds, such as rapeseed</b></li> </ul>	<ul style="list-style-type: none"> <li>• Promote CARINA Stakeholder database</li> <li>• Expand the information about CARINA objectives through stakeholders' own networks thanks to common communication goals - raising awareness about sustainable and diversified agriculture topics</li> <li>• Expand the CARINA mailing list (newsletter)</li> <li>• Promote Carinata and camelina seeds full characterization D2.1</li> </ul>	<ul style="list-style-type: none"> <li>• Communicate and receive feedback on CARINA biobased products</li> <li>• Receive feedback from stakeholders</li> <li>• A considerable pool of promising businesses they can tap to enhance their client portfolio</li> <li>• Raise awareness through CARINA activities</li> <li>• Receive feedback on public deliverables</li> </ul>

	<ul style="list-style-type: none"> <li>Promote Summary report on the main product development from CARINA D2.8</li> <li>Promote Carinata and camelina seeds full characterization D2.4</li> <li>Promote National roadmap and business plan reports D5.4</li> <li>Promote Market opportunities for camelina and carinata in the bioeconomy D5.5</li> </ul>	
<b><u>BUSINESSES</u></b> <ul style="list-style-type: none"> <li>Traders</li> <li>Logistic operators</li> <li>Animal feed production plants</li> <li>Public and private (green banking) financial officers involved in green financing.</li> </ul>	<ul style="list-style-type: none"> <li>Promote CARINA Stakeholder database</li> <li>Expand the information about CARINA objectives through stakeholders' own networks thanks to common communication goals - raising awareness about sustainable and diversified agriculture</li> <li>Expand the CARINA mailing list (newsletter)</li> <li>Promote Social innovation solutions at local level D5.3</li> <li>Promote National roadmap and business plan reports D5.4</li> <li>Promote Market opportunities for camelina and carinata in the bioeconomy D5.5</li> </ul>	<ul style="list-style-type: none"> <li>Communicate and receive feedback on CARINA solutions</li> <li>Communicate and receive feedback on CARINA biobased products</li> <li>Receive feedback on the CARINA Stakeholder database</li> </ul>
<b><u>POLICY</u></b> <ul style="list-style-type: none"> <li>Certification entities</li> <li>EU Policy makers interested in understanding the best way to diversify primary production whilst promoting and sustaining biodiversity</li> <li>Decision-makers</li> <li>National and regional policy makers, interested to promote locally the adoption of conscious, sustainable farming systems</li> </ul>	<ul style="list-style-type: none"> <li>Promote CARINA Stakeholder database</li> <li>Expand the information about CARINA objectives through stakeholders' own networks thanks to common communication goals - raising awareness about sustainable and diversified agriculture</li> <li>Expand the CARINA mailing list (newsletter)</li> <li>Promote Report on integrated sustainability assessment D3.5</li> <li>Promote Current policy landscapes D4.1</li> <li>Promote Policy needs in the countries with demonstration fields D4.3</li> <li>Promote Policy impact assessment D4.4</li> </ul>	<ul style="list-style-type: none"> <li>Communicate and receive feedback on CARINA solutions</li> <li>Receive feedback on the CARINA Stakeholder database</li> <li>Receive feedback on D3.5, D4.1, D4.3 and D4.4)</li> </ul>
<b><u>EDUCATION</u></b> <ul style="list-style-type: none"> <li>Research and development institutes in sustainable farming solutions.</li> </ul>	<ul style="list-style-type: none"> <li>Promote CARINA Stakeholder database</li> <li>Expand the information about CARINA objectives through stakeholders' own networks thanks to common</li> </ul>	<ul style="list-style-type: none"> <li>Communicate and receive feedback on CARINA solutions and biobased products</li> <li>Receive feedback on the CARINA Stakeholder database</li> </ul>

<ul style="list-style-type: none"> <li>• <b>Academics and experts</b> within the sustainable agriculture community.</li> <li>• Academia interested in analysing how the different policy strategies will impact in the future respect of biodiversity at national and EU level</li> </ul>	<p>communication goals - raising awareness about sustainable and diversified agriculture</p> <ul style="list-style-type: none"> <li>• Expand the CARINA mailing list (newsletter)</li> <li>• Promote Technical guidelines for the implementation of CARINA farming systems D1.4</li> <li>• Promote CARINA Lighthouse achievements D1.2</li> <li>• Promote Results from demo fields D1.3</li> <li>• Promote Factsheets about local challenges and field visits D5.2</li> <li>• Promote Practice Abstracts D6.4 and D6.5</li> <li>• Promote Carinata and camelina seeds full characterization D2.1</li> <li>• Promote Summary report on the main product development from CARINA D2.8</li> <li>• Promote Carinata and camelina seeds full characterization D2.4</li> <li>• Promote National roadmap and business plan reports D5.4</li> <li>• Promote Market opportunities for camelina and carinata in the bioeconomy D5.5</li> <li>• Promote Report on methodological concept for all assessments D3.1</li> <li>• Promote Report on economic assessment D3.2</li> <li>• Promote Report on social Assessment D3.3</li> <li>• Promote Report on environmental Assessment D3.4</li> <li>• Promote Report on integrated sustainability assessment D3.5</li> </ul>	<ul style="list-style-type: none"> <li>• Receive feedback on D3.2, D3.3, D3.4, D3.5)</li> </ul>
<p><b>CIVIL SOCIETY</b></p> <ul style="list-style-type: none"> <li>• <b>Action groups</b> such as <b>citizen's initiatives</b>, and <b>NGOs</b>, aiming to address environmental challenges with the help of sustainable agriculture.</li> <li>• <b>Consumers</b> and their <b>associations</b>.</li> </ul>	<ul style="list-style-type: none"> <li>• Expand the information about CARINA objectives</li> <li>• Expand the CARINA mailing list (newsletter)</li> <li>• Promote CARINA Stakeholder database</li> </ul>	<ul style="list-style-type: none"> <li>• Increase public involvement and spread information about CARINA solutions and biobased products</li> </ul>

Table 1. List of CARINA target groups with D&amp;C objectives



## 4.3 Brand strategy

The visual identity of a project consists of a set of elements that forms its graphic individuality that aims to ensure consistency in the project communication and promotional material throughout its duration.

With the above-mentioned in mind, PEDAL developed a visual identity for the CARINA project:

- Deliverable, brochure and presentation's templates
- Stationery (poster and roll-up)
- Logo
- Claim

CARINA has a logo designed by the University of Bologna (UNIBO), and all of its visual materials reflect the logo's design created by PEDAL. The logo serves as a visual representation of the project's goals and values. The Brand Manual for CARINA (Annex III) contains guidelines regarding the proper usage of the logo and visual identity.

In terms of the project's claim, after analyzing various alternatives, the chosen claim is "Boosting sustainable diversification in farming systems." The final claim was chosen by the consortium from 3 options. This statement reflects the project's focus on promoting crop diversification and soil protection in agriculture. The use of the term "farming systems" indicates that the consortium has a broad and diverse representation beyond the borders of the European Union.

## 4.4 Tools and channels

### 4.4.1 Website

The CARINA website, was set to launch on M5 (March 2023), serves as the primary digital platform for disseminating information about the project to a wider audience. Designed to be user-friendly and engaging for stakeholders, the website will provide key information about the project's approach and objectives, as well as details about the Consortium.

The initial splash page of the CARINA website was launched in November 2022 (M1) as a landing page at the URL: <https://www.carina-project.eu/> Having a landing page at the very early stage of the project allowed the Consortium to fully leverage on social media channels and build initially community of the project.

All public deliverables, dissemination materials, and newsletters will be available for free download on the website, which will also feature a dedicated connection to CARINA Stakeholder Platform. Partners are expected to provide relevant content for the website's development, maintenance, and updates, ensuring that visitors are kept up to date on the project's actions and results.

As a key asset of the project, a link to the CARINA Stakeholder Platform will be prominently featured in the menu of the website.

All website contents will be reviewed by PEDAL regarding SEO (Search Engine Optimisation) best practices for a better indexation and accessibility of the project. Additionally, the project will use

Google Analytics as its web analytics service to track website traffic and assess useful statistics that will help to optimise the website and the communication and dissemination strategy.

Relevant statistics that will be monitored are the following:

- Number of visitors;
- Number of unique visitors;
- Page views
- Bounce rate
- Session duration
- Geography – what is the geographical distribution of the visitors (which countries);
- Source – how people find the website (from social media, direct etc.);
- Number of downloaded documents, newsletters, etc.

## 4.4.2 Newsletters

As part of the project, a bi-annual newsletter will be produced and distributed to the project's community. This newsletter will provide stakeholders with updates on the project's progress, an overview of the project's concept, and information about upcoming activities.

Developed and distributed using Mailchimp, the newsletter will be released by the PEDAL, and all partners will be required to provide input and content as requested. Although the content of each issue will be agreed upon by the partners, in general, it will indicatively include the following topics:

- A brief overview of the CARINA project;
- An update on the progress of the project, including project meetings and important milestones;
- Recent results and ongoing activities related to the project;
- Plans and events for the future development of the project;
- A section highlighting relevant projects and initiatives in our field;
- News and updates from the industry

The individual networks of project partner as well as the stakeholders' database will be addressed by the newsletters in compliance with EU Regulation 2016/679 (GDPR).

## 4.4.3 Social Media Accounts (SMAs) and blogging

In order to promote the project and engage stakeholders, social media accounts have been created on Facebook, Twitter, LinkedIn, and YouTube during the first stages of the project. The overall objective of social media usage will be to increase awareness about the project and engage with the target audience. Thanks to the appropriate leverage and involvement of multipliers, influencers and thematic groups, as well as a constant monitoring of the megatrends to identify the correct messages and arguments to be adopted, this activity will increase the impact and effectiveness of the CARINA awareness and public engagement activities.

The different types of social networks used will be appropriate to reach specific target groups, and likewise the content disseminated will also depend on these groups. The same applies for paid campaigns (if any) launched for the promotion of specific initiatives or results, which will be tailored based on contents and the target audience and agreed in synergy with the Consortium.

**LinkedIn:** LinkedIn was chosen as the platform to promote the project to a professional audience. The project's profile was created in M2 to present the project and provide updates on its progress which will be assessed using the metrics and insights provided by LinkedIn.

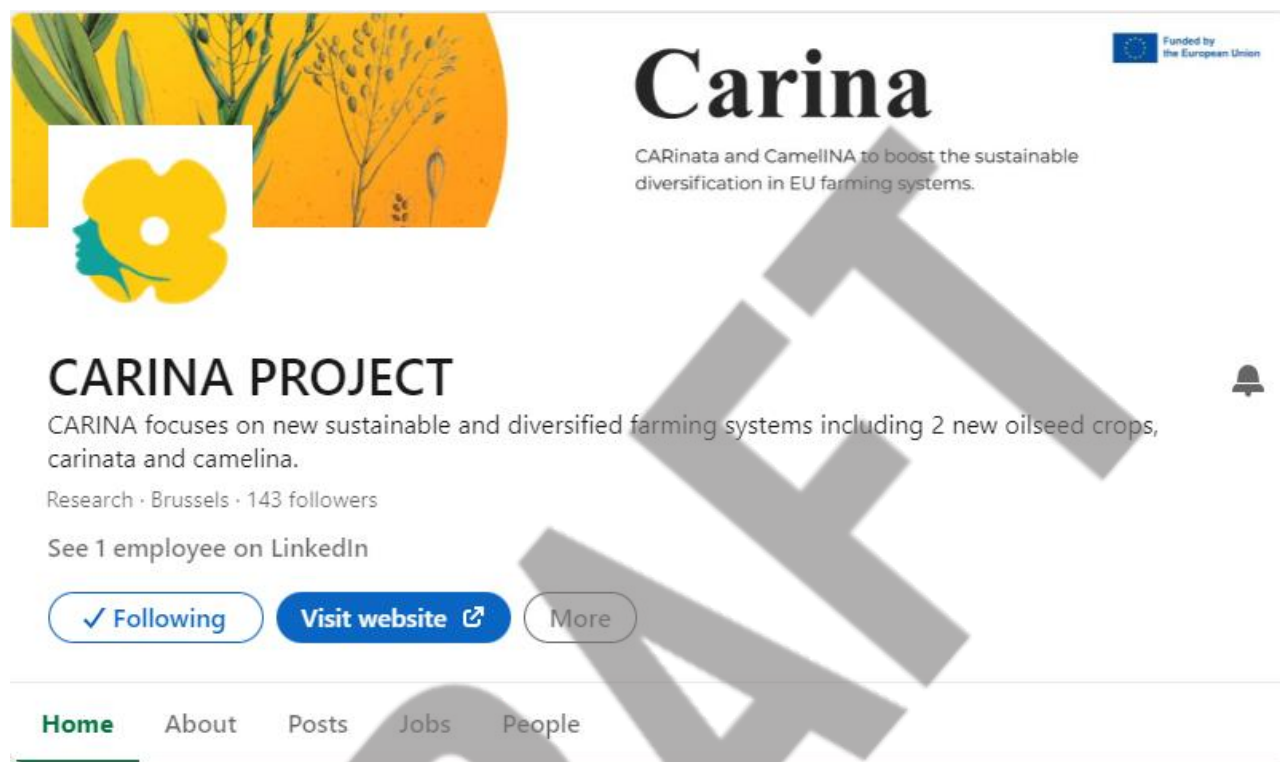


Figure 1. CARINA's LinkedIn Homepage

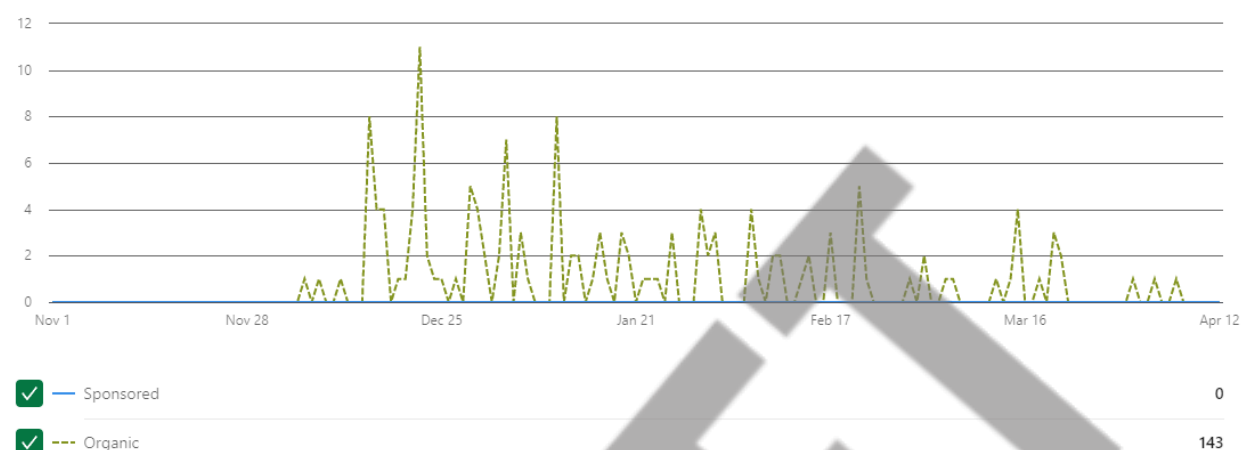
The following graph presents the LinkedIn account followers' progress. It becomes evident that as soon as the first post about the kick-off meeting was published, many followers were gained, and in the following month, the number of followers slowly increased.

## Follower highlights

143  
Total followers

143  
New followers in the last 163 days  
● 0%

## Follower metrics



**Figure 2. CARINA's LinkedIn Followers Analytics**

Additionally, in the beginning of 2023, another peaks can be observed, which could be attributed to the introduction of the hashtag #carinaconsortium and a series of posts aiming to showcase each of the consortium partners. The contribution of the partners to this progress is noteworthy as they have also invited their connections to follow the account and reposted the account's posts, increasing the visibility of the account's content and gaining new followers.

**Facebook:** The CARINA Facebook page, established in M2, will be utilised to promote the project's progress and share news about relevant topics within sustainable agriculture. Posts will include both text and video content, and followers will be invited to events organised by the project. To monitor the performance of the CARINA page, Facebook Analytics will be used. Overall, the page will serve as:

- A hub for news and discussion of issues related to bioeconomy and sustainable agriculture;
- A platform for sharing updates on the project's developments and achievements (e.g., published reports, scientific publications, key events, activities, important achievements);
- A connection to other relevant groups and pages.



**Figure 3. CARINA's Facebook Homepage**

**Twitter:** The CARINA Twitter account, launched in M2, is a valuable tool for the project to disseminate information and engage stakeholders. By using hashtags, the project's messages can reach a wider audience, and the platform's concise format allows for effective communication with stakeholders. In addition to staying informed about industry news and the results of related projects, the Twitter account also allows CARINA to establish new partnerships and promote events. In this context, the Twitter account will:

- Disseminate the project's key messages and provide links to other project-related resources and will also keep users updated on the project's development and upcoming events;
- Collect and update news from other relevant projects, initiatives and organisations;
- Engage and create a community of followers interested in the project's topic and overall, in sustainable and diversified agriculture.

The project partners are expected to engage with the Twitter account on a regular basis by sharing its content through their personal accounts and suggesting relevant content. The account's performance will be tracked using Twitter analytics. A snapshot of the account is included below.





Figure 4. CARINA's Twitter Homepage

**YouTube:** YouTube account will be used as an online video repository for all videos produced by the project and recorded by partners during project activities (e.g. field visits, field demonstrations etc.).

Partners will select the most suitable channels operated by them to share content from the project website and social media pages such as project results, relevant insights from public deliverables, fact sheets/ brochures, possible events etc. Social media profile and cover images and banners were produced by PEDAL accordingly to fit the project's graphical identity.

PEDAL will be responsible for the management of CARINA's SMAs, while all partners are expected to contribute by:

- Becoming a follower (like or follow the page/profile);
- Promoting the accounts in their networks;
- Suggesting relevant profiles that CARINA should connect with;
- Sharing interesting articles and news;
- Promoting posts and news through the SMAs of their own organizations.

To establish a firm online footprint, CARINA will also produce 1 news article per month during the duration of project published on the website.

## 4.4.4 Press releases

Press releases with news and info about the project activities, events and outputs available will be sent to specific media national online and offline media outlets. Stakeholders will be informed as well. 3-4 press releases, associated with the major milestones in the project are intended to be published over the project duration.

## 4.4.5 Promotional video

We expect the CARINA promotional video to firstly introduce the project in a nutshell and secondly call to action to contact us and subscribe the newsletter. The envisaged length would be approximately 3 minutes.

The definition of contents, core messages, target audience will be supported by WP6 activities and may evolve as the project progresses.

In order to deliver professional-quality videos, PEDAL will follow the steps below in close contact with all Consortium members:

- 1) Conceptualisation: creation and development of the strategy and concept idea;
- 2) Pre-Production: development of the final version of the script, preparation of the technical script, and creation of a storyboard and a mood board;
- 3) Production – turning the script into interactive material using Filming & Digital Cinematography, Production - Video & Audio editing, Production - Graphics / 2D / 3D Animation;
- 4) Post Production – joining all elements created in the different production areas, including VFX Production and “Colour Correction”.
- 5) Marketing & Distribution support - development of different multimedia outputs for content strategy support and the on-site and online promotion campaigns in order to start the distribution.

## 4.4.6 Promotional materials

At the beginning of the project, the promotional material for CARINA was developed. PEDAL was in charge of the graphic design and content, while consortium partners provided feedback throughout the process. The material will be made accessible to the public through the project's website and will be used at physical events to attract and engage relevant stakeholders, as well as to provide more information about the project's mission and objectives. Each partner is responsible for printing and using the material as required.

## Project's logo

The project's logo and visual identity were developed at the start of the project. All promotional and communication materials, including leaflets, posters, templates, websites, and publications, adhere to the project's official identity. The final logo is depicted below:



Boosting  
sustainable  
diversification in  
farming systems

**Figure 5. CARINA's Logo without claim on the left and with claim on the right**

The CARINA logo features a flower that represents the crops involved in the project forming the face of a woman. This feminine representation symbolizes the root of the word CARINA, accompanied by the project's short name.

In all communication materials (deliverables, presentations, etc.) produced during the project, the EU flag and funding statement must be displayed alongside the CARINA logo.



**Figure 6. EU Flag and funding statement**

## Leaflet poster and roll-up

Leaflets, posters and roll-ups are effective tools for disseminating and communicating information about the CARINA project. The poster and roll-up were created to draw the attention of stakeholders and provide brief information about the project. These materials were already used by partners at physical events and activities and will also be available on the project's website.

The leaflet provides the reader with information about the project's content and objectives, expected outcomes, and contact information. The poster includes graphical elements to draw the attention of stakeholders and provides basic information about the project and key stakeholder groups.

Both promotional products include information about the project's partners, including contact information and websites, and acknowledge the funding provided by the Horizon Europe program.



This project has received funding from the European Union's Horizon Europe research and innovation program under grant agreement No 101018183.

[www.carina-project.eu](http://www.carina-project.eu)

Figure 7. CARINA poster

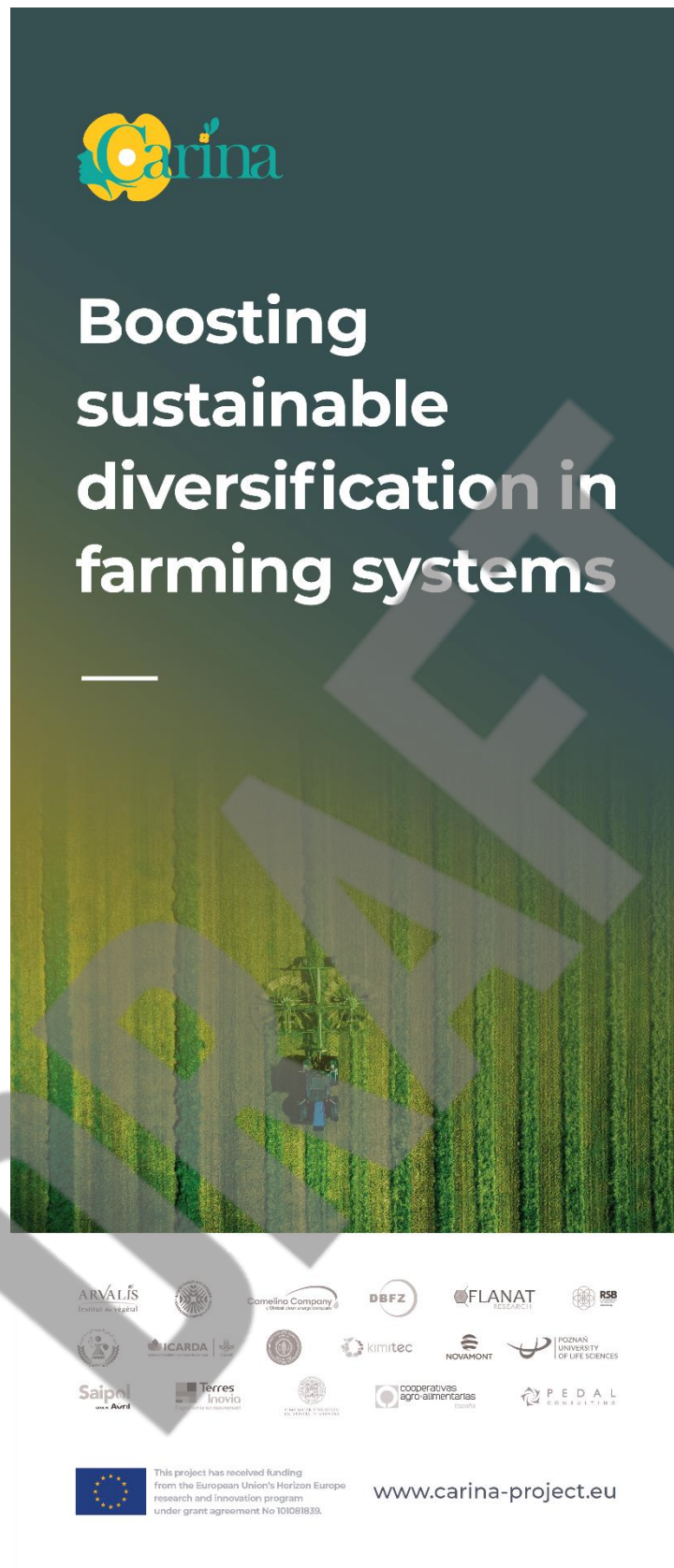


Figure 8. CARINA roll-up



## Templates

In addition to the poster, roll-up and leaflet, templates have been created for the project that adhere to the graphical identity and aesthetic characteristics of the CARINA logo. These templates include a presentation template to be used by consortium partners during events and meetings, a reports template for project deliverables and other publications, and letterheads for official invitations to events.



Figure 11. CARINA Presentation template-front slide

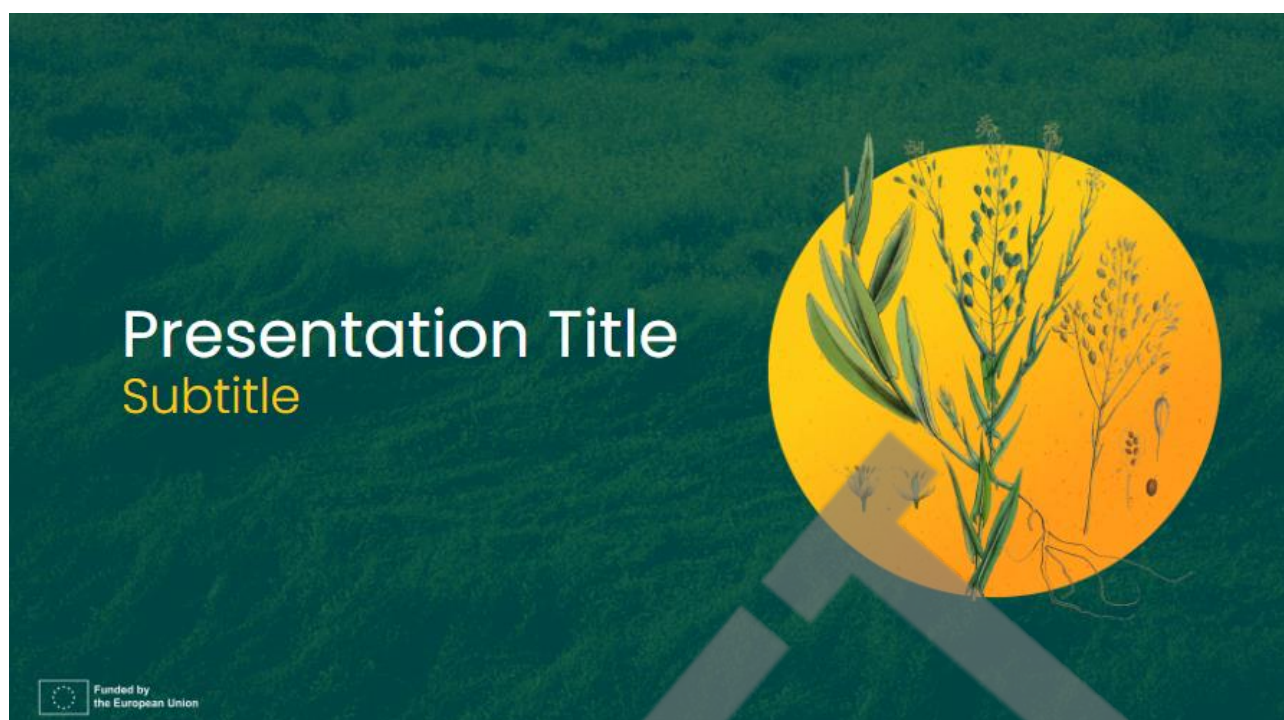


Figure12. CARINA Presentation template- presentation slide

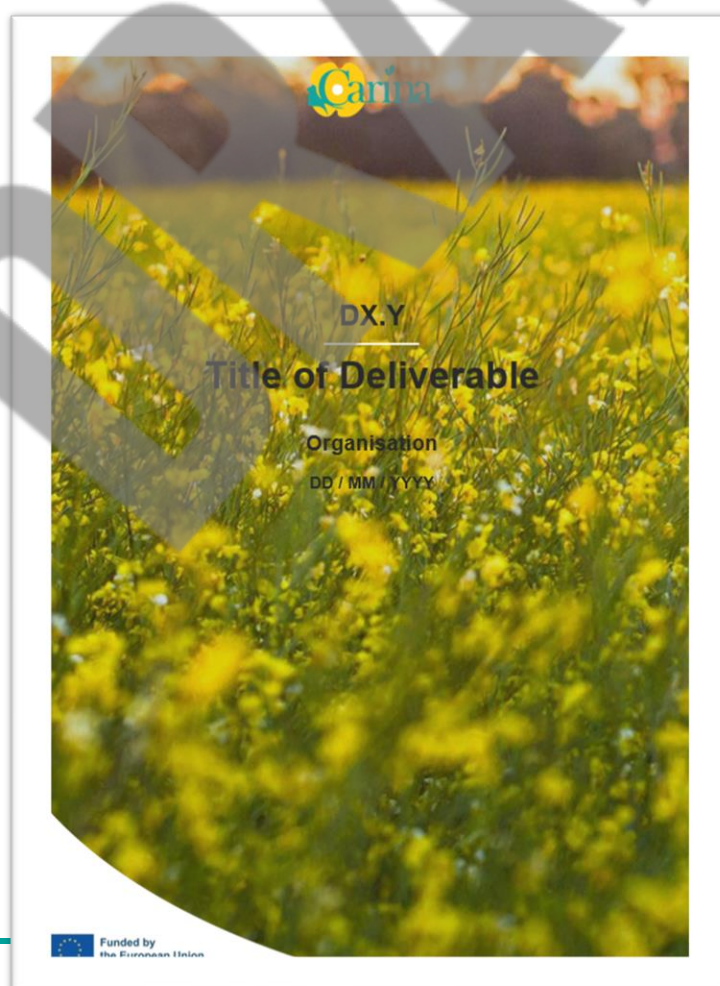


Figure 13. CARINA Deliverables Cover Page Template

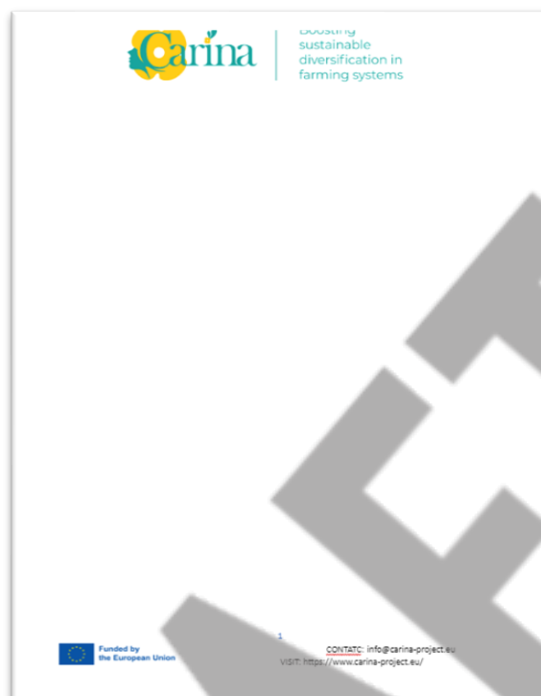


Figure 14. CARINA letterhead

## 4.5 Tools and channels per targets

The following table showcases how each CARINA target audience will be approached by type of tool/channel.

TARGET GROUP	DISSEMINATION TOOLS AND CHANNELS					
	Website	Newsletters	Social media/ blogging	Press releases	Events	Video
<u>FARMERS</u>						
<u>EU BIOBASED INDUSTRIE</u>						
<u>BUSINESSES</u>						
<u>POLICY</u>						
<u>EDUCATION AND ACADEMIA</u>						
<u>CIVIL SOCIETY</u>						

Table 2. Tools and channels per target

## 4.6 Events

### 4.6.1 External Events

The participation in third party conferences/events will allow CARINA to directly liaise with key stakeholders to provide them with constant updates on project progress.

CARINA will organise and participate several events, conferences and presentations during the project. More specifically, the consortium already identified the following events, listed non-exhaustively, where the participation of the project may be considered (considering the COVID-19 pandemic constraints towards face-to-face events):

Title	Venue	Type of event
4th National Agricultural Field Days	Sielinko, POLAND	Workshop
Green Agenda for Western Balkans	Belgrade, SERBIA	Conference
31 <sup>st</sup> International Congress of Soil Science Society of Poland	Poznan, POLAND	Conference
19 <sup>th</sup> Euro Fed Lipid Congress and Expo	Poznan, POLAND	Conference
RETASTE: Rethink Food Resources, Losses and Waste	Athens, GREECE	Conference
IRC International Rapeseed Congress	Sidney, Australia	Conference
European Biomass Conference and Exhibition	Bologna, ITALY	Conference and Exhibition

**Table 3. List of external events**

During these events, the partners will also:

- Present the project (concept, objectives, approach, etc.);
- Promote the project's findings;
- Promote CARINA actions and events;
- Expand the project's synergies and contacts network with relevant projects and initiatives;
- Engage relevant stakeholders in project's activities;
- Promote the project's dissemination channels (website, SMAs etc.).

In order to maintain the project's visual identity at external events, the partners should use the official promotional materials (leaflets, posters, PowerPoint templates, etc.). In case a partner intends to present CARINA at an external event, they must inform PEDAL, as Dissemination Manager, in advance in order to disseminate the information appropriately through the project's dissemination channels. After the event, the partners should complete the Event Reporting template (Annex I) and the CARINA Dissemination and Communication activity tracker (Figure 11) and inform PEDAL.



Additionally, partners should send their final presentation to PEDAL in case it can be uploaded to the project's website for dissemination purposes.

## 4.6.2 CARINA Events

The CARINA partners will organise a number of events in order to promote the project's outcomes and expand its impact on the sector. These events, which are organised as part of the CARINA project, aim to raise awareness about the concept of the project, promote the project's results, and facilitate the engagement of key stakeholders who will support the project's activities and provide feedback on the produced outcomes. The extended networks of the partners, our social media followers, as well as key assets of the project such as the Stakeholder Database will be utilised to attract participants to our events.

The following types of events are scheduled as part of the project's plan:

Event	WP, Task, responsible partners	Type of event	Estimated date
20 online evens	WP6, T6.2 All partners	Online workshops and webinars	M1-M48
3 Multiplication events	WP6, T6.2 All partners	Online and offline workshops	M1-M48
2 Brokerage events	WP6, T6.2 All partners	Online/Physical meetings	M1-M48
Joint meetings with relevant projects	WP6, T6.2	Online meetings	M1-M48
CARINA trainings and workshops	All partners	Physical trainings and workshops	M24-M48
Final CARINA Event	WP6, T6.1 PEDAL	Physical info day	M48

**Table 4. CARINA Events**

## 4.7 Collaboration with other projects

By communicating with other projects and initiatives on similar themes at the local, national, and EU levels, the consortium can shape cooperation conditions and benefit from the experience and knowledge of these initiatives. This can lead to the strengthening of the project's impact activities through additional networking and awareness of potential joint activities and ways for mutual benefit collaborations, ultimately enhancing the common wider objectives of CARINA and similar initiatives.

Joint dissemination activities, particularly with EU-funded projects, will also be sought. These collaborations could take various forms:

- Reference of mutual projects on their respective websites;
- Support each other through social media accounts;



- Sharing news, invitations to external events, press releases, and other dissemination actions through social media communication channels;
- Attending events hosted by similar projects;
- Exploration of the possibility of co-organising an event;
- Inviting participation in events organised by the CARINA consortium.

Table provide a basic overview of relevant key European projects and initiatives. It is possible that these lists will be expanded upon as additional joint efforts may emerge during the course of the CARINA project. The updated tables will be included in the next version of this document (M36).

Project/Initiative	Brief description	Start	Countries involved
4CE-MED Horizon 2020	The CE-MED project aims to develop innovative and resilient farming systems in the Mediterranean region that do not compete for land with the food chain. The project will follow a participatory approach to identify smallholder needs and monitor and evaluate project actions. The project involves modified conventional farming systems that incorporate camelina, an oilseed crop, as a cash cover crop to increase revenue for farmers while promoting soil and water conservation. The project fulfils the three principles of Conservation Agriculture and investigates three cropping systems that involve growing camelina as a cover crop or double crop to increase organic soil cover and diversify crop rotations.	May 2020	France, Spain, Italy, Greece, Morocco, Algeria, Tunis

**Table 5. Indicative list of relevant European initiatives**

Table provide a basic overview of relevant key European projects and initiatives. It is possible that these lists will be expanded upon as additional joint efforts may emerge during the course of the CARINA project. The updated tables will be included in the next version of this document (M36).

CARINA consortium has already made a collaboration agreement with 4CE-MED project (<https://www.4cemed.eu/>) in the form of:

- Inclusion of the CARINA project in the COMMUNITY section of the 4CE-MED website;
- Presentation of CARINA project in the courses and conferences organized within the framework of 4CE-MED;
- Organisation of multilateral meetings between the projects for the presentation of results and analysis of present and future joint collaboration channels.
- Dissemination of CARINA events in the agenda section of the 4CE-MED website;
- Publication of CARINA news in the corresponding section of the 4CE-MED website;
- Possibility of making technical visits to the demonstration fields of CARINA project by 4CE-MED stakeholders.

## 4.8 Timeline and Implementation Plan

Promotional material and templates were developed at the beginning of the project as part of the dissemination and communication activities. Throughout the project, CARINA will deploy a range of online and offline dissemination activities and promote its results. Additionally, the project's findings will continue to be promoted even after the project ends. The actions were divided into four phases to ensure the effective timing of dissemination, communication, and stakeholder engagement. The four stages are described thoroughly within the next paragraphs:

1. Early in the project: The Dissemination & Communication Plan is designed with the identification of targeted stakeholder groups and key messages of the project. Suitable metrics for monitoring the successful implementation of the DC strategy are also selected. The consortium partners are informed about their responsibilities and required contributions in regards to dissemination efforts.

This phase is primarily focused on the general promotion of the project, with a particular emphasis on raising awareness to ensure widespread communication. During the first four months, the logo and visual identity are created along with the project's website. The project's social media accounts are also launched and dissemination material (leaflets, posters, templates, letterhead) is produced. The promotional package will be later supplemented with evidence and success stories from the project to communicate its benefits. By M6, all project tools and channels are in place. Additionally, some initial synergies with other relevant projects/initiatives will be established. Finally, the project will also be disseminated at networking events that partners will participate in.

2. During the project: Our focus in this phase will be on ensuring that information about the project's results and milestones reaches our target audiences. For that, we will work on clustering and cooperating with complementary projects and initiatives related to sustainable farming systems and bioeconomy. We will also establish and engage an active community interested in the CARINA project through the project's social media accounts and website, where we will share the project's results. Bi-annual newsletters will be released and promotional videos and infographics will be produced.

This phase will include a range of dissemination events, including co-creation and capacity building workshops, webinars, networking events, and awareness raising campaigns. Practice-based evidence from real success stories will be collected and disseminated. The consortium partners will support dissemination efforts by participating in external events and conferences, and leveraging existing platforms, networks, and initiatives.

3. At the end of the project: During the final phase of the project, we will focus on promoting the key results and developing recommendations and tools based on the project's major findings. The project's social media accounts will remain active to ensure that the project's outcomes continue to be disseminated.

On top of that, some workshops are planned to take place with the aim of sharing experiences gained throughout the project and exchanging relevant knowledge and information. The project will end with the presentation of its results and findings at a final dissemination event, preceded by workshops.

4. Beyond the end of the project: The project's legacy will be preserved through ongoing promotion and exploitation efforts by consortium partners, including future activities and new projects in which various relevant stakeholders will be involved.

The implementation plan for the communication, awareness raising, and dissemination tools is outlined in Table 12 until M36 when this document will be updated in D6.3.

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Table 6. GANTT chart of CARINA D&amp;C activities

Activity	Project month	M1	M2	M3	M4	M5	M6	M7	M8	M9	M10	M11	M12	M13	M14	M15	M16	M17	M18	M19	M20	M21	M22	M23	M24	M25	M26	M27	M28	M29	M30	M31	M32	M33	M34	M35	M36
<b>Planning stage</b>																																					
Dissemination, Communication and Exploitation Plan																																					
<b>Promotional material</b>																																					
Logo																																					
Poster																																					
Presentations																																					
Leaflet																																					
Templates																																					
<b>Digital Presence</b>																																					
Website																																					
Newsletter																																					
Promotional video																																					
Social Media (Twitter, Facebook, LinkedIn, Youtube)																																					
<b>Events</b>																																					
Online events, workshops																																					
CARINA Trainings																																					
Brokerage events																																					
Multiplication Events																																					
Final Event																																					
External events																																					
<b>Synergies</b>																																					
<b>Monitoring &amp; Reporting</b>																																					
D&C activities reporting																																					
Internal events reporting																																					
External events reporting																																					

## 4.9 Monitoring, Evaluating and Reporting

### 4.9.1 Monitoring and evaluation

A monitoring process has been established at the beginning of the project in order to secure the successful implementation of the D&C strategy and ensure that its goals are met. This process will allow us to identify any potential gaps or problems, special needs of relevant stakeholders, and good practices that we can adopt. If necessary, the D&C plan will be updated to reflect any modifications or changes identified through the monitoring process. This is intended to ensure the effective dissemination of the outcomes to key stakeholders and the general public.

To evaluate the impact of the D&C activities, a set of KPIs has been chosen. The metric targets and needs will be modified based on the project's results and included in the updated deliverable D6.3 (M36). The dissemination manager, with the support of the consortium partners, will monitor the quantitative metrics during the reporting periods. The partners will also request qualitative feedback after the implementation of events (using CARINA Event Feedback Questionary Annex II.) to more effectively evaluate the strategy and make any necessary modifications.

The key indicators for our dissemination and communication activities are presented in the following table.

**Table 7. CARINA Key Performance Indicators**

Assessed element	Metric	Target
<i>Unique visits to CARINA's website</i>	Nr of visits (total)	> 3,000
<i>Website views</i>	Nr of views (total)	>10,000
<i>LinkedIn</i>	Nr of respondents invited	> 500
<i>News article/blog post</i>	Nr. Of articles	48
<i>Newsletter</i>	Nr. of published Newsletters	8
<i>Promotional material developed during co-creation events</i>	Nr. of items developed	50
<i>Participation in external events/conferences</i>	Nr. of events	20
<i>Promotional video</i>	Nr. of video	1

### 4.9.2 Reporting

To ensure the project's success, it is necessary to keep track of the dissemination, communication, and engagement activities carried out by all partners. Therefore, the reporting and documentation for the D&C plan is crucial. Throughout the project, all consortium partners should report their dissemination and communication activities on a monthly basis by completing the CARINA

Dissemination and Communication Activity Tracker provided by PEDAL (available online in the project's repository).

[illegible]

### Figure 9. CARINA Dissemination and communication activity tracker

These actions may include organizing events, participating in events, informal meetings, interviews, communication campaigns (such as sharing newsletters or promotional materials), social media posts, articles, etc. and publications. In addition, partners may also be asked to complete the CARINA Event's Reporting template (Annex I) for any events they organized or participated in during the semester, detailing the main dissemination actions that took place. The dissemination monitoring tools and their specified reporting frequency are listed in the following table.

### Table 8. CARINA Reporting tools and frequency

Reporting Document	Reporting Content	Reporting Frequency
CARINA Dissemination and Communication Activity tracker.xlsx	Dissemination reporting template	Monthly
CARINA past events reporting tab	Each single event organized by the partners or where the partners participated.	Within 30 days after the event takes place.
CARINA past events reporting tab	Any external event/conference that is relevant to our project and with potential benefit from attending it	Every time a partner identifies/participates in a conference or an event that could be relevant to the project.

**CARINA Dissemination and Communication Activity Tracker:** This template will document all dissemination and communication activities of the project. All partners should update it on a monthly



basis. By keeping track of the activities, any issues or gaps will be noticed early and measures can be taken to address them.

**CARINA Past Events Reporting Tab:** All partners should fill out this template whenever they organize or participate in an event (e.g., workshop, conference, meeting, etc.). The template should be updated no later than 30 days after the event. Additionally, partners should always inform PEDAL of upcoming events in advance for promotional purposes.

If any risks are identified that could impact communication and dissemination activities, or if issues arise during the implementation of publicity actions, each project partner should immediately contact PEDAL.

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## 5. Exploitation, IPR Management and Sustainability

### 5.1 IPR Management Overview

#### 5.1.1 Objectives

CARINA's IPR management objectives reflect the need to protect all project's assets with a view of managing efficiently all the outcomes that will stem from the project's activities and ensuring the wider availability to all relevant stakeholders. Also to identify where relevant, the commercial rollout of CARINA's exploitable results after the project's completion. To this end, the main objectives of this part are the following:

- **Define** and **agree** on the CARINA IPR management methodology to be followed within the context of the project.
- **Identify** the assets that will emerge from the activities foreseen within the lifecycle of CARINA thus, determining an assets' portfolio from the early stages of the project.
- **Develop** a common understanding among CARINA partners, concerning terms and issues of the Background (BG) and Foreground (FG) IP and respective access rights.
- **Conceptualize** a preliminary frame of the IP protection that will be employed in each identified exploitable result of CARINA.
- **Prevent** and, if not possible to prevent in all cases, define and eventually dissolve any possible conflicts in IP within the consortium and beyond.
- **Establish** common guiding routes and actions within the consortium so as to safeguard the smooth operation of the IPR strategies to be implemented.

The Exploitation, IPR Management and Sustainability chapter is setting out how the following elements related to IP in CARINA are to be managed within the project's context, with a view on creating a path for post-project exploitation of the relevant assets:

- Background IP
- Foreground IP
- Exploitable Results
- Access Rights
- Protection of Results
- Dissemination

The above-mentioned key concepts are normally considered for designing the Exploitation, IPR Management and Sustainability Plan of Horizon Europe projects. Definitions of these concepts are provided in the definition section below and have been communicated to all CARINA partners.

#### 5.1.2 Definitions

##### 5.2.2.1 Background IP

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 assets.**<sup>1</sup> The background needed for carrying out the project activities or exploiting the underlying results must be accessible to the other project

<sup>1</sup> See Article 16 of the CARINA Grant Agreement

partners **on a royalty-free basis**. Under this frame, all project partners must identify the background as pertinent for the project actions and grant access rights to this IP. 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 the 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 align with the underlying background rules and obligations set by the EC in order to ensure the smooth implementation of the project.

### 5.2.2.2 Foreground IP

Foreground refers to **the results and assets that are generated through the implementation of project activities**, including pieces of information, materials, and knowledge.<sup>2</sup> 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 results 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.

CARINA’s Grant Agreement establishes that results of the project are owned by the project partner who generates them.<sup>3</sup> 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 embedded in the CARINA Grant Agreement,<sup>4</sup> 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 joint-owned results unless otherwise agreed in the CA or the joint ownership agreement.

### 5.2.2.3 Exploitable Results

Exploitation of project’s results means the utilisation of results in further research activities other than those covered by the action concerned (e.g. in other research activities; or in developing, creating and marketing a product or process; or in creating and providing a service, or in standardisation activities).<sup>5</sup> Under this scheme, an **exploitable result** is defined as a project result (expected or achieved) that meets the following two conditions:

<sup>2</sup> For a detailed definition of the Foreground see: <https://iprhelphdesk.eu/glossary/foreground>. Last accessed: 3/1/2023.

<sup>3</sup> See article 16 of the CARINA Grant Agreement, Annex 5, p.4.

<sup>4</sup> See article 14 of the CARINA Grant Agreement, Annex 5, p.4.

<sup>5</sup> European Commission, Glossary, Available at: <https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/support/glossary>, Last accessed: 6/3/2023.

- Has commercial/social/academic relevance;
- Can be commercialised/exploited as a standalone result (e.g. product, process, service, etc.).<sup>6</sup>

Therefore, exploitable results can be a combination or part of a foreground result(s). Not all foreground items may meet the above conditions.<sup>7</sup> Furthermore, exploitable results are not necessary market ready; they may require further R&D, engineering and validation before becoming commercially exploitable.

## 5.2.2.4 Access Rights

Access rights refer to one partner's rights for requesting access to another project partner's background and foreground to implement its activities under the project or to use its own results. Additionally, access rights can be used as long as they are needed for exploiting the project's results. The provisions governing access rights within a collaborative Horizon Europe project follow specific rules pre-defined in the Grant Agreement and the Consortium Agreement. Access rights within CARINA are presented in the table below:

Purpose of access	Access to Background	Access to Results
Project implementation	<ul style="list-style-type: none"> <li>• Royalty free</li> <li>• Unless otherwise agreed by participants</li> </ul>	Royalty free
Exploitation of Own results	<ul style="list-style-type: none"> <li>• Subject on individual agreement</li> <li>• Granted under fair and reasonable conditions</li> </ul>	

**Table 9. Access Rights**

## 5.2.2.5 Protection of Results

It should be noted that when considering IP protection, IP assets can be protected by several types of IPR, and therefore, 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. Under the frame of CARINA, meaningful IP protection instruments that can be used are the following:

- Trade and service marks;
- Patents;
- Utility models;
- Copyrights;
- Trade secrets;
- Confidentiality agreements.

<sup>6</sup> A patent for licensing is also an exploitable result.

<sup>7</sup> European Commission, Communication, Dissemination And Exploitation Why They All Matter And What Is The Difference?, Available at: [https://ec.europa.eu/research/participants/docs/h2020-funding-guide/imgs/quick-guide\\_diss-expl\\_en.pdf](https://ec.europa.eu/research/participants/docs/h2020-funding-guide/imgs/quick-guide_diss-expl_en.pdf), Last accessed: 6/3/2023.

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

## Trademarks and service marks

### Trade Marks

A trade mark constitutes an exclusive right over the use of a sign in relation to the goods and services for which it is registered.<sup>8</sup> Trade marks consist of signs capable of distinguishing the products (either goods or services) of a trader from those of others. The main function of a trade mark is to identify the commercial origin of a product. This does not mean that it should 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 consumers can trust in a given enterprise, not necessarily known to them, 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 international scale. There is therefore a need for signs that enable consumers to distinguish between 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 which are very similar in nature to trademarks, the same criteria could be applied. Thus, service mark protection has sometimes been introduced by a very short amendment to the existing trademark law or simply by providing for protection of service marks under of the provisions of the trademark law.<sup>9</sup>

### Patents

A patent is an exclusive right granted for the protection of inventions (products or processes) that offers a new technical solution or facilitates a new way of doing something. The patent holder has the exclusive right to prevent third parties from commercially exploiting their invention for a limited period. In return, the patent holder must disclose the invention to the public in the patent application.<sup>10</sup>

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. Additionally, the patent owner may give permission to other parties, or permit 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 (e.g. European), and may also be used in non-patented territories (although in such case they would not enjoy the patent protection). Once a patent expires, the protection ends, and the invention becomes part of the public domain, meaning

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<sup>8</sup> For the definition of trademark in Europe, see: <https://iprhelppdesk.eu/sites/default/files/2018-12/european-ipr-helpdesk-your-guide-to-ip-in-europe.pdf>, Last Accessed: 6/3/2023.

<sup>9</sup> See WIPO Intellectual Property Handbook 2008: Policy, Law, and Use. Chapter 2: Fields of Intellectual Property Protection, p. 68f.

<sup>10</sup> Definition of patents in the European context retrieved from: <https://iprhelppdesk.eu/sites/default/files/2018-12/european-ipr-helpdesk-your-guide-to-ip-in-europe.pdf>, Last accessed: 6/3/2023.



that owners do not hold exclusive rights any longer. Therefore, it becomes available for commercial exploitation, free of charge, by others.<sup>11</sup>

## 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 period.<sup>12</sup> 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 individuals.<sup>13</sup>

## Copyrights

Copyright (or author's right) is the term used to describe the economic and moral rights that creators have over their literary, scientific and artistic works. 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 original.<sup>14</sup> 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 an international level:<sup>15</sup>

- Literary works such as novels, poems, plays, newspaper articles;
- Computer programmes, databases;
- Films, musical compositions, and choreographies;
- Artistic works such as paintings, drawings, etc; 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 original.<sup>16</sup>

## Trade Secrets

Any confidential business information that provides a competitive advantage to an enterprise can be considered a trade secret. The type of information that could be protected as a trade secret is

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<sup>11</sup> See WIPO Intellectual Property Handbook 2008: Policy, Law and Use. Chapter 2: Fields of Intellectual Property Protection, p. 17.

<sup>12</sup> Definition of utility models in the European context retrieved from: <https://iprhelpdesk.eu/sites/default/files/2018-12/european-ipr-helpdesk-your-guide-to-ip-in-europe.pdf>, Last accessed: 6/3/2023.

<sup>13</sup> See WIPO Intellectual Property Handbook 2008: Policy, Law and Use. Chapter 2: Fields of Intellectual Property Protection, p. 40.

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

<sup>15</sup> Definition of copyrights in the European context retrieved from <https://iprhelpdesk.eu/sites/default/files/2018-12/european-ipr-helpdesk-your-guide-to-ip-in-europe.pdf>, Last accessed: 6/3/2023.

<sup>16</sup> See WIPO Intellectual Property Handbook 2008: Policy, Law and Use. Chapter 2: Fields of Intellectual Property Protection, p. 40.

therefore highly diverse. It could 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 processes.<sup>17</sup>

## Confidentiality Agreements

Confidentiality is an extremely important issue for participants in innovation projects, from the setting-up stage 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 to safely exchange information, facilitate the project development and ensure the non-disclosure of sensitive technology, business or commercially confidential information. Confidentiality agreements provide protection and security to an organization that is about to share or make available information to another organization 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. Therefore, the signature of a confidentiality agreement could be a very important step to keep confidential information secret in order to maintain a competitive edge.

There are specific criteria to determine a confidentiality agreement as legally enforceable:

- The information must be secret, i.e. not readily accessible to people that normally deal with this kind of information;
- It must have commercial value;
- The owner must have taken reasonable steps to protect it.

## 5.2 Approach

Throughout the CARINA project, key IP and exploitation and sustainability management will build on the pillars of identifying 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 CARINA DCE plan applies on a comprehensive framework which separates the IP management processes of the project in the following stages:

1. Grant Agreement preparation stage;
2. Project implementation stage;
3. Post-project stage.

In this respect, the following figure illustrates the IPR management stages, as considered within CARINA.

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<sup>17</sup> Definition of trade secrets in the European context retrieved from <https://iprhelpdesk.eu/sites/default/files/2018-12/european-ipr-helpdesk-your-guide-to-ip-in-europe.pdf>. Last accessed: 6/3/2023.

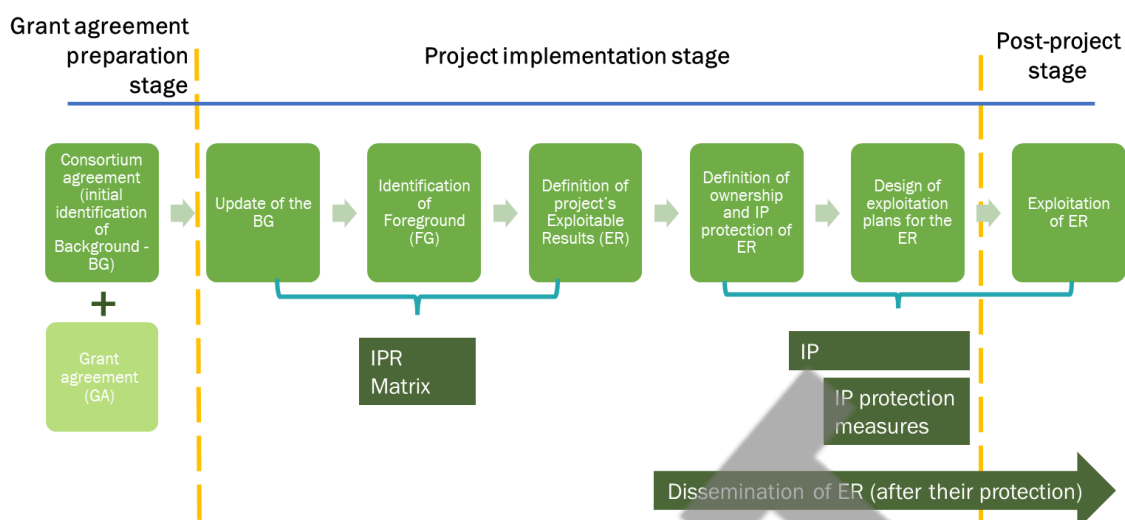


Figure 16 – IPR Management stages

## 5.2.1 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. Thus, **any further advancements regarding IPR actions to put in place by project partners will be facilitated under the underlying provisions.**

### 5.3.1.1 Grant Agreement

The Grant Agreement constitutes a contract which sets out the key rules and conditions of the project. It is signed between the EC and the CARINA partners and represents the main contractual basis for CARINA while its main points and sections which refer to IPR are included in article 16 “Intellectual property rights (IPR) — background and results —access rights and rights of use” . Under this scheme, the management of the CARINA IP is regulated, whereas access rights and obligations related to the background are set. In addition, the Grant Agreement defines issues concerning the ownership and protection of the project's generated results, as well as their exploitation and dissemination outcomes. Lastly, the CARINA GA defines transferability and access rights to results.

### 5.3.1.2 Consortium Agreement

The Consortium Agreement constitutes a contract among the partners of the CARINA consortium which aims to define rights and obligations during the partnership for the purposes of carrying out the project's foreseen actions and activities.<sup>18</sup> The Consortium Agreement minimises the probability of later disputes as it provides rules and responsibilities during the project and defines the access rights to be granted to the partners concerning the project. In addition, it outlines rights and responsibilities among the consortium members concerning issues of the IP.

The CARINA Consortium Agreement main points and sections referring to IPR are included in:

<sup>18</sup> See IPR helpdesk for the definition of Consortium Agreement.

- **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.
- **Attachment 1 “Background included”** that presents the initial list of usable background.

## 5.2.2 Implementation Stage

During the implementation stage of CARINA, IP handling procedures are foreseen to be applied among the CARINA partners to organise the results/assets management of the project. As the project continues, the focus will be on foreground identification, assets’ ownership, access rights, and protection, as well as on the exploitation and commercialisation of the project’s results. The CARINA IPR management emphasises on establishing robust handling procedures of the IPR issues that are of strategic importance to the project in order to facilitate the 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 to protect, disseminate and exploit the project’s assets.

In this respect, key IP related issues in the CARINA implementation phase include:

### 5.3.2.1 Background Identification

During the first stages of CARINA is vital to identify the relevant knowledge, know-how and partners’ data, that constitute the background of the project. Under this framework, the underlying background could be attached to the generated assets of the project, which, eventually, will help the determination of access rights, ownership issues and IPR.

### 5.3.2.2 Foreground Identification

A core process of the CARINA IP management is the project assets’ identification to create a concrete mapping of the projects’ assets and enhance the CARINA IP portfolio. Therefore, all IP valuable assets within the project must be identified, listed, named, described and analysed in a systematic way.

### 5.3.2.3 Results’ ownership

Partners have been asked (through the CARINA IPR Matrix) to elaborate further on the provisions of the Consortium Agreement regarding the results’ ownership. Special attention will be paid on **handling joint ownership issues**.

### 5.3.2.4 Protection of results

Effective exploitation of the innovative concepts and assets developed under the frame of CARINA depends on the protection of the project’s results. In particular, the project’s results must adequately be protected if:<sup>19</sup>

- The project’s results can reasonably be expected to be commercially exploited and;

<sup>19</sup> See: <https://cms.eurice.eu/storage/uploads/news/files/ip-management-in-collab-horizon-projects.pdf>, Last accessed: 6/3/2023.

- Protecting them is possible, reasonable and justified (given the circumstances).

On this note, **when considering IP protection, CARINA partners must consider their own interests along with the interests of the consortium.** Project partners should safeguard the identified exploitable CARINA results with adequate protection schemes, which will offer protection period within a suitable geographical territory. The geographical territory should be agreed by the parties in advance, based on where the IP will be used. By default, Europe is considered to be the suitable territory in which the identified exploitable CARINA results will be safeguarded, but it remains at the discretion of the interested parties to collectively reach an agreement regarding this matter.

The table that follows, illustrates an indicative list of different protection instruments. The ones most applicable to the CARINA project are marked, as considering the nature of the project, it is not expected to employ all the instruments in the list. Furthermore, additional protection instruments can be used when deemed suitable as the project activities progress.

Subject Matter	Patent	Utility	Copyright	Trademark	Confidential Information
Invention	X	X			X
Software <sup>20</sup>	X	X	X		X
Scientific Article			X		
Technology Design			X	X	
Name of Technology				X	
Know How	X	X			X
Website			X	X	

**Table 10. Indicative list of protection instruments**

IP protection constitutes a tool to create value through the licensing, sale or commercialization of IP in the form of products and services. IP utilization is vital for a prospective commercial or industrial exploitation as it could contribute to support the branding of products and services both to customers and investors. It should be noted that the IP protection of an asset is not always mandatory.

### 5.3.2.5 Exploitation of results

The identified exploitable results and assets of CARINA will be effectively exploited for commercial or any other relevant use as foreseen during the CARINA project. In particular, the CARINA consortium will seek exploitation opportunities of the project's results in:

- Further research activities;
- Developing, creating or marketing a product or process;
- Creating and providing a service;

<sup>20</sup> Software patentability is still a debated issue given its exclusion as subject matter as by Article 52(2)(c) and (3) of the European Patent Convention (EPC). Source: IPR Helpdesk.



### 5.3.2.6 Dissemination of results

CARINA partners are set to select the appropriate means for the dissemination of the project's results (e.g. scientific publications, publication on web sites, conferences, open access, etc.), based on the conditions set forth in the CA<sup>21</sup> and in other specific confidentiality agreements. All partners should be aware that they should first ensure the protection of a project's exploitable result and then proceed to dissemination actions of the underlying result.

## 5.2.3 Post project Stage

At the project's formal conclusion in M48, the D6.2 CARINA Final Exploitation Plan will be submitted. It will include the final outline of the use which the CARINA consortium intends to make its exploitable foreground (including its final description and sector of application) and the related plans and time frame for their exploitation.

D6.2 will describe further the activities that will be developed to deploy the dissemination and exploitation of the project's achievements and the activities that aim to ensure the sustainability of the project's results. Additionally, D6.2 will include the final findings regarding IP issues and the final update of the IPR Matrix presenting in detail the applied and registered intellectual property rights.

The aforementioned deliverable will present the final advanced strategy for the exploitation and management of IPR and the sustainability after the project ends, including also the concrete chosen commercialisation streams.

## 5.2.4 Role of the Exploitation Manager

The Exploitation Manager (EM) is responsible for defining the CARINA's Exploitation Plan. The tasks include preparing the respective reports and ensuring that innovative ideas which come up during the project will be thoroughly examined and assessed for potential exploitation, while at the same time all project's BG and FG IPs are properly managed. To this end, the Exploitation Manager (PEDAL) will be in close communication with the Project Coordinator (UNIBO) and the Steering Committee to ensure the optimal management of all IP assets.

**The Exploitation Manager and the Project Coordinator will be responsible for the organization and management issues of CARINA's IPR strategy implementation. With that said, it is considered as a good practice for a partner to inform and consult the Exploitation Manager and the Project Coordinator accordingly before deciding whether to protect the results stemming from its underlying activities or not – particularly if the partner is considering a potential joint IP scheme.**

Lastly, the Exploitation Manager has also a mediation role in case of IP conflicts (see Section 5.2.6), monitors project activities and feeds the development of the subsequent versions of this report in the context of CARINA.

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<sup>21</sup> See Section 8.4 of the CARINA Consortium Agreement.

## 5.2.5 Knowledge Management of the project

The management of the IP constitutes an integral part of the overall CARINA project management structure and thus it is important to establish a permanent IP monitoring during the project. In this respect, an efficient IPR management methodology should define, from the early stages of the project, the procedures under which newly generated/identified results will be handled during the CARINA's lifecycle.

Efficient management of IP in CARINA 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. In case WP Leaders identify a new asset that will be generated under their respective WP activities, the Exploitation Manager should be informed accordingly.

The CARINA Exploitation Manager and the Project Coordinator, together with the partners producing the newly identified asset, constitute the parties that will handle the screening and the managing of any newly identified assets and their corresponding IP issues. The Exploitation Manager will direct the consortium partners to establish the most adequate and efficient IPR strategy based on the nature of the newly identified asset and the purposes of the CARINA consortium.

To facilitate this process, the CARINA Exploitation plan foresees to create and update a living IPR Matrix to be revised and extended with new pieces of assets and project results (FG).

## 5.2.6 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. In this respect, project partners will identify their IPR assets, formulate their ownership and exploitation claims and if deemed necessary, transfer any relevant results to CARINA's exploitable results according to the principle rights and obligations defined in the CA of the project.<sup>22</sup>

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 case of IP conflict, the Exploitation Manager will encourage conflicting parties to get in contact and pro-actively find solutions and sign written agreements whenever necessary. In**

<sup>22</sup> See Section 8 of the CARINA Consortium Agreement.

case no agreement is achieved, an internal mediation process will be kicked off following the provisions of the CARINA's CA. In case the IP issues remain unresolved after this first mediation procedure, a further mediation process in accordance with the WIPO Mediation Rules will be applied.<sup>23</sup>

## 5.3 IPR Matrix Methodology

The IPR Matrix will be used in the framework of the project to define the main IPR issues related to the Exploitation and sustainability strategy. This approach will facilitate the consortium partners to identify the background, foreground, and exploitable results. In addition, the IP protection measures, and the necessary agreements will be defined to ensure the successful exploitation of the project outcomes even after the completion of the project.

The IPR methodology follows four (4) interconnected steps:

1. **Identification of the Background IP** and definition of the access rights of the consortium partners
2. Preliminary **identification of the foreground IP** that will be produced in the framework of the project's activities.
3. Initial **identification of the exploitable assets/results** that will be produced in the framework of the project and the interest for their commercialisation.
4. **Definition of the IPR protection** of the identified exploitable assets/results that can be potentially commercially exploited by the consortium partners.

At this early stage of the project, the objective of the Exploitation plan of CARINA is to define the main assets on the one hand and identify, to the extent possible, the FG and BG 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 need also to be considered. Finally, validation of the IPR needs to be meticulously employed. 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.

Background (BG)	Foreground (FG)	Exploitable results (ER)
<ul style="list-style-type: none"> <li>BG#</li> <li>Partner's Background</li> <li>Contributing Partner</li> <li>Short Description of BG</li> <li>Type of Protection</li> <li>How will it be utilised within CARINA?</li> <li>Conditions to Use within CARINA</li> <li>Conditions to use outside of CARINA</li> <li>Interest in further exploitation through of CARINA results</li> </ul>	<ul style="list-style-type: none"> <li>FG#</li> <li>Project Outcome /Achievement/Result</li> <li>Related WP</li> <li>Contributing Partners</li> <li>Short Description of FG</li> <li>Related BG# (BG owner)</li> <li>Type of Protection</li> <li>Conditions to Use within CARINA</li> <li>Interest in Further Commercialisation of Project Results</li> <li>Conditions to Use after the end of the Project</li> </ul>	<ul style="list-style-type: none"> <li>ER#</li> <li>Exploitable result</li> <li>Main partner</li> <li>Further contributing partner(s)</li> <li>Related FG#</li> <li>Related project task/deliverable (if applicable)</li> <li>Related BG# (BG owner)</li> <li>Proposition for the ER- owner</li> <li>Short description of the ER</li> <li>Relevance for IP Protection</li> </ul>

<sup>23</sup> See Section 11.8 of the CARINA Consortium Agreement.

Table 11. Structure of the IPR Matrix

### 5.3.1 Identification of Background IP

During the first stage of the IPR Matrix the Background that will be used during the implementation of the project were identified.

#	Relevant Background (the name of the Background)	Contributing Partner	BG identifier	Short description of BG	Type of protection (e.g., patent, copyright, TM, Utility model)	Conditions to use within CARINA (free to use, licence fee, restrictions, NDA...)	Conditions to use outside CARINA (e.g. is it confidential? Can it be shared with external? Is it currently shared with external? If yes on what conditions?)	Interest in further exploitation through CARINA's results (Yes/ No)	Remarks
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Figure 10. IPR Matrix Background Template

Multiple information regarding the Background IP is recorded in the respective template. In the second column of the table a short name of the Background is given. Then, the responsible partner is mentioned, and a number is assigned related to the Work package and the number of assets. In the 5<sup>th</sup> column of the table a short more detailed description regarding the BG is offered. Furthermore, the partners define the Type of protection in terms of patents, utility models, copyrights, trade and service marks, trade secrets, creative commons licenses, confidentiality agreements, among others. In column seven (7), the partners define how this BG will be used in the framework of the project, and then in columns eight (8) and nine (9) describe the conditions under which the consortium partners and the stakeholders outside the consortium respectively can use the BG. Finally, the partners should state their interest for further exploitation of the BG in the framework of the project through the produced results.

### 5.3.2 Identification of Foreground IP

In the second stage of the IPR Matrix the partners have identified the Foreground that will be produced during the project's activities.

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 (e.g., patent, copyright, TM, Utility model, CC licence)	Conditions to use within CARINA (free to use, licence fee, restrictions, NDA...)	Interest in Further Commercialisation of Project Results (Yes/ No)	Conditions to use after the end of project (free to use, licence fee, restrictions, NDA...)
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Figure 11. IPR Matrix Foreground Template

The above template is used by the consortium partners to identify the foreground IP. In the first four columns the CARINA project achievements are listed along with the respective WP. Then, the main contributing partner is mentioned. Usually, if an FG comes as a direct result of a Task, then the main partner is the Task leader. In addition, the rest of the contributing partners are also mentioned. Similarly, the contributing partners are usually the partners contributing to the Task that the FG emerges from. In the 7<sup>th</sup> column the number of the related Background IP is mentioned while in column eight (8) is given a short description of the FG. Furthermore, a Foreground number is assigned to the respective FG. Similarly, to the background identification template, the partners also define the type of protection, the conditions under which the FG can be used by the consortium partners and the interest for the commercialization through the project results. 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.

### 5.3.3 Identification of exploitable results

In the third stage and based on the identified FG the consortium partners will define the exploitable results and the IPR management procedures:

- Protection
- Definition of access rights
- Exploitation pathways

The main aim of this third stage of the IPR Matrix where the exploitable results and the main contributors will be defined will be:

- To identify IP ownership and exploitation claims, as well as pro-actively indicate possible conflicts for each exploitable result; and
- To support decisions on issues pertaining to IP protection, in order to timely make the needed steps in this regard, including any potential IP agreements (e.g. for joint ownership, providing access rights or even an NDA for confidentiality).

The next table will be used throughout the whole duration of the project in order to deploy the third stage of the IPR Matrix and identify the exploitable results.

ER#	Exploitable Result	Short description of ER	Main partner	Contributing	Related FG	Related BG	ER Owner(s)	Potential IP protection	M	U	L	S	O	Most promising	Intended users	Benefits
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**Figure 12. IPR Matrix Exploitable Results Template**

In the first three columns, the number, a short name and a brief description of the exploitable results will be mentioned. In the next two columns the main responsible partner and the rest contributing partners will be listed. In column 6<sup>th</sup> and 7<sup>th</sup>, the number of the related FG and BG will be indicated. In addition, in the next column the proposed owner of the exploitable result will be defined, while in column nine (9) the relevance for IP protection will be indicated by the responsible partner. The next five (5) columns indicate the five (5) different categories of the exploitation claims.

- **M:** Making a product and selling it.
- **U:** Using the project result internally for further development, for instance:
  - To develop something else for sale; or
  - For R&D departments (public or private) to use the results in new research projects.
- **L:** Licensing the project result to third parties.
- **S:** Providing a Service, such as consultancy, etc.
- **O:** Others

The partner responsible for the exploitable results with the support of the contributing partners, the coordinator and the exploitation manager shall choose which exploitation claims best fit the ER. In the final column the most promising exploitation claim shall be indicated.



## 5.4 Overview of CARINA's assets, background and foreground IP

### 5.4.1 Identified Assets of CARINA

The table below presents the identified assets and their short description as were defined by the consortium partners during these early stages of the project. Here the term "asset" is used interchangeably with the term "exploitation results" (ER).

No.	Asset	Description
1	Annual CARINA Lighthouse and regional Workshops	One national lighthouse a year and different regional workshops will be organised including along with field visits in order to share results, success factors and technical constraints with the local stakeholders. From T1.1
2	Quarterly Thematic forums	These forums will provide a platform to discuss threats, risks and opportunities from the introduction of new species into local farming systems. They will take place online via the CARINA forums page on the website and will take place in accordance with WP5 and WP6, they will be also used to share success stories to inspire. From T1.1
3	CARINA System Guidelines for Farmers	These will be the outcome from the on farm demonstration trials on the different cropping systems demonstrated in T1.2-1.4
4	Carinata and Camelina seed full characterization	As an output of the seed quality assessment and processing done in T2.1 the Pooled seed samples will be analysed by PULS for basic composition (water, fat, ash, protein), fatty acid composition, carotenoids, phenolic, volatile and other bioactive compounds, and amino acids and sterol.
5	Ingredients for the development, through formulation, of a bio stimulant that provides resistance against abiotic stresses, such as, salinity, heat, cold or drought to different vegetable species	Ingredients with bio stimulant activity based in peptides and amino acids, by protein hydrolyzation. Ingredients with bio stimulant activity based on secondary metabolites produced by fermentation of the crop's by-products (camelina and carinata by-products). Ingredients with bio stimulant activity produced by a pyrolytic treatment of the crop's by-products (camelina and carinata by-products).
6	Development of new food supplement line	At least four different food supplements based on camelina cake mucilage will be developed. Camelina cake will be exploited as stabilizer agent to replace synthetic ones and fulfil European requirements towards a more sustainable food system.
7	The partner (FLANAT) will exploit these PROJECT by exploring the potential applications of camelina derived food ingredients	The potential application of camelina oil in food market will be investigate. This product will be marketed both as a functional food, rich in omega 3-fatty acids, and as food-stuffs ingredients.
8	Mulch films, pots, clips, pheromone supports, bioherbicide	Biodegradable in soil products for agricultural applications reducing the impact of microplastic dispersion.

9	Economic sustainability, environmental, social and Integrated sustainability assessments	Indicators on economic, environmental and social sustainability of the CARINA systems derived from WP3.
10	WP4 Co-creation activities (including; assessment of current policy landscapes, Policy innovation labs, certification monitoring, reporting and verification)	These activities will foster collaboration with the lighthouses and all stakeholders from national living labs aimed at fostering co-creation and involving them in a participatory decision-making process.
11	WP5 Co-creation activities (including; integrated research and innovation process within a PPP partnership, knowledge transfer activities at local level with primary producers, definition and cocreation of challenges and social innovation solutions and biobased market prospection)	These activities will raise awareness of the primary producers and other stakeholders on the derived environmental and economic benefits from diversified cropping systems including camelina and carinata and the current and potential associated risks. They will take place by way of organising of national living labs with various stakeholder groups, joint sessions organized with market national boards, field visits in each participating country, local challenge workshops.
12	Market opportunities for camelina and carinata	CARINA as good practice example of participatory innovation between agriculture, research and industry, helping farmers to maintain good crop yields through sustainable agronomic solutions to share among farmers and primary producers in whole Europe and associated countries.
13	Low ILUC certification	The project might exploit these outcomes by the way of publishing the tailored recommendations on what aspects are to be included in a certification for low ILUC feedstocks.
14	Registration of Pelargonic acid on camelina and possibly carinata	A joint field study will be conducted by NVMT on UNIBO fields to determine the efficacy, and dosage of perlargonic acid to accelerate camelina maturity. NVMT will patent these results.

**Table 12. Identified Assets**

## 5.4.2 Background IP

The project partners preliminary identified the background IP to be used to achieve the objectives of CARINA. The Background IP is presented in the table below:

No.	Relevant BG	Contributing Partner	BG Number	Short Description of BG	Type of Protection	Conditions to Use within CARINA	Conditions to use outside CARINA	Interest in further exploitation through CARINA results
1	<b>Systerre – associated indicators &amp; databases</b>	ARVALIS	BG1	The method and software belong to Arvalis – Institut du Végétal, Terres Inovia, Institut Technique de la Betterave & ACTA – Trademark at Agence de Protection des Programmes (IDDN.FR.001.190043.R.P.2011.000.30100). Property and use are governed by a use agreement (CG177500178). Access right to Background at the discretion of the owner.	General Conditions of Use, Trademark, Use agreement	Free to use, in compliance with the General conditions of Use	It can be envisaged indeed to deposit some data output from Systerre in a trusted repository, with the owner's consent. It is not excluded that the terms of use of Systerre will be revised to address issues of commercial exploitation in the future.	To be investigated

No.	Relevant BG	Contributing Partner	BG Number	Short Description of BG	Type of Protection	Conditions to Use within CARINA	Conditions to use outside CARINA	Interest in further exploitation through CARINA results
2	Sypre – associated data	ARVALIS	BG2	The data fully belong to Arvalis – Institut du Végétal, Terres Inovia, Institut Technique de la Betterave. Access Right to Background is only granted to the extent that it is needed for implementation of the action	Trademark, Use Agreement	Free to use, upon approval of the owner	Get Arvalis' approval prior any use outside CARINA	No
3	Arvalis's soil database	ARVALIS	BG3	The data fully belong to Arvalis – Institut du Végétal. Access Right to Background is only granted to the extent that it is needed for implementation of the action	Use Agreement	Free to use, upon approval of the owner	Get Arvalis' approval prior any use outside CARINA	No
4	Arvalis's weather database	ARVALIS	BG4	The data belong to Arvalis – Institut du Végétal and Météo France. Access Right to Background is only granted to the extent that it is needed for implementation of the action	Use Agreement	Free to use, upon approval of the owner	Get Arvalis' approval prior any use outside CARINA	No
5	Camelina sativa	CAMELINA Company	BG5	CCE's background is any data, know-how or other information as it relates to Camelina sativa including but not limited to planting seed, growing conditions, fertilization requirements, harvest requirements, transport, crushing and processing knowledge, chemistry conversion/derivative of any camelina in situ molecules or extractions, carbon accounting, soil carbon accumulation potential, economic sustainability, environmental, social and integrated sustainability related to camelina, camelina feed registration and food protein, oils, or supplements.	Depending on the type of background, it can include trade secret or use agreement.	Restrictions/conditions as outlined per the Material Transfer Agreement (MTA). In addition to the data, know-how or other information, the materials provided for the project, camelina seeds, are protected under CPVO and the intellectual property rights belong to CCE.	Get CCEs' approval prior any use outside CARINA	To be investigated
6	Camelina sativa cultivation practices	FLANAT	BG6	Background includes and is not limited to all data and knowledge relating to cultural practices applied to the cultivation of Camelina sativa in Italy such as seed density	Trade secrets	Access rights to background, only if needed for implementing the	FLANATs' approval prior any	YES

No.	Relevant BG	Contributing Partner	BG Number	Short Description of BG	Type of Protection	Conditions to Use within CARINA	Conditions to use outside CARINA	Interest in further exploitation through CARINA results
				and sowing techniques; fertilization, requirements and formulation; collection techniques and technologies; seed cleaning techniques and technologies; seed storage and transportation; seed crushing and oil extraction; preservation and conservation of the cake. The background is extended to the environmental life cycle assessment of Camelina sativa production in Northern Italy.		project will be granted on a royalty-free basis on signing an NDA until final publication will be released. However, in case of a Defaulting Party, Access Rights granted to it shall cease and its right to request Access Rights shall end immediately at the moment of decision of the Consortium Body to	use outside CARINA.	
7	<b>Camelina polysaccharides extraction and formulation</b>	FLANAT	BG7	Background includes and is not limited to all data, know-how and information related to the application of camelina polysaccharides as a carrier to improve the stability and bio-accessibility of natural polyphenols to be used in cosmetics, food, feed and supplements. The background is extended to extraction, separation, filtration and drying techniques and methodologies.	Patent pending	access rights to background, only if needed for implementing the project at WP2/task 2.4, will be granted on a royalty-free basis. However, in case of a Defaulting Party, Access Rights granted to it shall cease and its right to request Access Rights shall end immediately at the moment of decision of the Consortium Body to	Get FLANATs' approval prior any use outside CARINA	YES on further formulations



No.	Relevant BG	Contributing Partner	BG Number	Short Description of BG	Type of Protection	Conditions to Use within CARINA	Conditions to use outside CARINA	Interest in further exploitation through CARINA results
8	<b>Camelina oil composition in food and dietary applications</b>	FLANAT	BG8	Background includes and is not limited to all data, know-how and all information related to the monitoring and evaluation of the composition of camelina oil in any potential food and dietary application, before and after any transformation process, through the proprietary validated HPLC method.	USE AGREEMENT	access rights to background, only if needed for implementing the project in WP5/Task5.5, will be granted on a royalty-free basis on signing an NDA until final publication will be released. However, in case of a Defaulting Party, Access Rights granted to it shall cease and its right to request Access Rights shall end immediately at the moment of decision decision of the Consortium Body to terminate the Defaulting Party's participation in the Consortium.	FLANATs' approval prior any use outside CARINA.	YES on further applications
9	<b>Oilseeds crushing and by-products valorisation</b>	SAIPOL	BG9	Saipol's (and Saipol's sister companies through the Avril Group) background is any data, know-how, trade secrets or other information as it relates to oilseeds crushing and their by-products valorisation and commercialization, including but not limited to carinata and camelina crushing, solvent extraction, oil neutralization, refining, esterification, carbon accounting, economic sustainability, oilseeds protein meal feed and food markets, feed & food formulation and	Know-how, trade secrets, confidentiality agreements, patents and trademarks	Restricted use: Restrictions/conditions as outlined per the Material Transfer Agreement (MTA) or any Confidentiality Agreement or licenses if appropriate.	Restricted use: Get Saipol's approval prior any use outside CARINA.	Yes

No.	Relevant BG	Contributing Partner	BG Number	Short Description of BG	Type of Protection	Conditions to Use within CARINA	Conditions to use outside CARINA	Interest in further exploitation through CARINA results
				product manufacturing, vegetable oil food markets, biodiesel manufacturing and markets.				
10	<b>Biotechnological processes for secondary conversion of raw materials</b>	KIMITEC	BG10	Background includes and is not limited to all data, know-how and all information.	Trade Secret under directive 2016/943	Access rights to background, only if needed for implementing the project will be granted on a royalty-free basis on signing an NDA until final publication will be released. However, in case of a Defaulting Party, Access Rights granted to it shall cease and its right to request Access Rights shall end immediately at the moment of decision of the Consortium Body to terminate the Defaulting Party's participation in the Consortium.	License	Yes
11	<b>Process for chemical characterization of active ingredients</b>	KIMITEC	BG11	Chemical characterization will be performed at Kimitec's facilities. Chemical characterization will be adapted to the active ingredient nature (protein hydrolysate, pyroligneous acid, botanicals, etc.) and includes and is not limited to HPLC-MS, GC-MS, etc.	Trade secret	Access rights to background, only if needed for implementing the project will be granted on a royalty-free basis on signing an NDA until final publication will be released.	License	Yes

No.	Relevant BG	Contributing Partner	BG Number	Short Description of BG	Type of Protection	Conditions to Use within CARINA	Conditions to use outside CARINA	Interest in further exploitation through CARINA results
						However, in case of a Defaulting Party, Access Rights granted to it shall cease and its right to request Access Rights shall end immediately at the moment of decision of the Consortium Body to terminate the Defaulting Party's participation in the Consortium.		
12	Process for manufacturing and formulation of bio stimulants/biopesticides prototypes	KIMITEC	BG12	Manufacturing and formulation will be adapted to the active ingredient nature (oil or water phase), including mixing, encapsulation, emulsions, concentrated suspension, etc.	Trade secret	Access rights to background, only if needed for implementing the project it will be granted on a royalty-free basis on signing an NDA until final publication will be released. However, in case of a Defaulting Party, Access Rights granted to it shall cease and its right to request Access Rights shall end immediately at the moment of decision of the Consortium Body to	License	Yes

No.	Relevant BG	Contributing Partner	BG Number	Short Description of BG	Type of Protection	Conditions to Use within CARINA	Conditions to use outside CARINA	Interest in further exploitation through CARINA results
						terminate the Defaulting Party's		
13	Kimitec candidates of natural extracts with demonstrated biopesticide activity.	KIMITEC	BG13	Kimitec will provide active principles with biopesticide activity from its collection.	Trade Secret	Access to this Background is subject to legal restrictions or limits.	Can not be used outside of CARINA project.	Kimitec is interested in exploiting commercially the BG.
14	<b>RSB standard module for Low ILUC feedstock (wp4)</b>	RBS	BG14	It is a voluntary addition to other RSB Certification types that enables operators to make additional claims that an RSB feedstock or product is at minimal risk of causing indirect land use change. The data used for the assessment will come from WP1 and WP2 trials and WP4.	Use agreement.	Disclosed only by permission and after acceptance and signature of a disclaimer	Get RSB approval prior any use outside CARINA.	Yes
15	<b>GHG tool (wp3)</b>	RBS	BG15	GHG calculator needed to perform the environmental assessment. The data used for the assessment will come from WP1 and WP2 trials	Use agreement	Disclosed only by permission and after acceptance and signature of a disclaimer.	Get RSB approval prior any use outside CARINA.	No
16	<b>RSB Standard for advanced Products (wp3)</b>	RBS	BG16	RSB Standard for Advanced Product. It is based in 12 Principles and Criteria that consider environmental, social and economic sustainability of the production of bio-based product. This Standard is for use by producers of non-energy products.	Use agreement	Free of charge to all beneficiaries, any use must be correctly referenced and cited	Get RSB approval prior any use outside CARINA.	No
17	<b>Data, know-how and other information</b>	NUSEED	BG17	Nuseed's background is any data, know-how or other information as it relates to Brassica carinata including but not limited to planting seed, growing conditions, fertilization requirements, harvest requirements, transport, crushing and processing	Depending on type of background, all listed categories except	Restrictions/conditions as outlined per the Material Transfer Agreement (MTA).	No use without additional consent or license	To be determined.

No.	Relevant BG	Contributing Partner	BG Number	Short Description of BG	Type of Protection	Conditions to Use within CARINA	Conditions to use outside CARINA	Interest in further exploitation through CARINA results
				knowledge, chemistry conversion/derivative of any carinata in situ molecules or extractions, carbon accounting, soil carbon accumulation potential, economic sustainability, environmental, social and integrated sustainability related to carinata, carinata feed registration and food protein, oils, or supplements.	copyrights and utility models, including but not limited to issued patents, patents pending, trademarks, service marks, trade secrets, confidentiality agreements and other restrictive use agreements.	Joint ownership of any results, and further restrictions as asserted by Nuseed on a case by case basis.	from Nuseed.	
18	Any data, know-how cadastre and other information	INRAT	BG18	INRAT's background is any data, cadastre, know how and other information concerning trial's regions, INRAT's experimental stations, farmers fields, climate and soil conditions	Use agreement	Free to use with owner's consent	It can be shared upon approval of INRAT	Yes
19	Stakeholder data base and fact sheets, data of value chain and business networks	DBFZ	BG19	DBFZ will collect data of market environments, stakeholder data, business networks, regulatory framework	Data protection and privacy policy	Publication only with data owners consent, published data are anonymized	Published data will be open access, no restriction for data use and distribution if cited correctly	Yes



No.	Relevant BG	Contributing Partner	BG Number	Short Description of BG	Type of Protection	Conditions to Use within CARINA	Conditions to use outside CARINA	Interest in further exploitation through CARINA results
20	Knowledge on camelina and carinata agronomic management	UNIBO	BG20	UNIBO owns extensive background knowledge on camelina and carinata crop management and ecophysiology	Use agreement	Free to use	Published data will be open access, no restriction for data use and distribution if cited correctly	Yes
21	Knowledge on Life Cycle Thinking (LCT) methodological framework, on the design of sustainable business plans and on systemic approaches to policy analysis	UNIBO	BG21	UNIBO owns knowledge on the design and application of LCT methodological frameworks for various value chains and products, on the definition of sustainable business plans to implement innovative solutions and on evidence-based policy analysis and design.	Use agreement	Free to use	Published data will be open access, no restriction for data use and distribution if cited correctly	Yes
22	Knowledge on best cropping practices for camelina regrouped in Terres Inovia's published "Guide de culture Cameline", and underlying data	TI	BG22	TI owns knowledge synthesized from internal and publicly available information on camelina cropping.	Copyright for the "Guide de culture" document ; use agreement for underlying data	Free to use upon agreement	Published data will be open access, no restriction for data use and distribution if cited correctly	Yes
23	Knowledge on managing glucosinolates and other secondary	TI	BG23	TI owns extensive knowledge on processing and analysing gluconisolates in the crushing process of diverse oilseeds	Trade secret	Upon agreement	Through consulting agreement	Yes

No .	Relevant BG	Contributing Partner	BG Number	Short Description of BG	Type of Protection	Conditions to Use within CARINA	Conditions to use outside CARINA	Interest in further exploitation through CARINA results
	metabolites in oilseeds processing							

Table 13. CARINA's Identified IP BG

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## 5.4.3 Foreground IP

A preliminary identification of the Foreground IP took place during the initial stages of the project and can be found in the table below. Additional updates or modifications are expected in the Final Exploitation Plan D6.2, which will correspond to the progress of the project and the produced results and knowhow.

WP	PR number	Project Result (PR) /Achievement	Specific Project Result	Main Contributing Partner(s)	Further Contributing Partner(s)	Related Background Number	Short Description of FG	Foreground Number	Type of Protection	Conditions to Use within CARINA	Interest in Further Commercialisation of CARINA Results	Conditions to Use after the end of the Project
1	1.1	D1.1 Description of CARINA Lighthouses	-	ARVALIS	ARVALIS, UNIBO, CEE, TI, CRES, INRAT, ICARDA, IFVNCS, NUSEED, PULS, AUP, NUSEED, NVMT, FACA, FAECA, URCACYL, UCAMAN, FCAC	None	This deliverable describes the methodology and organisation of the CARINA lighthouses in the different countries (France, Italy, Spain, Greece, Serbia, Morocco, Poland, Bulgaria and Tunisia).	FG1	None	Free to use	No	Free to use
1	1.2	D1.4 Technical guidelines for the implementation of CARINA farming systems	-	ARVALIS	ARVALIS, AUP, IFVNCS, FLANAT, TI, CRES, NUSEED, CCE, INRAT, ICARDA, PULS, NVMT	None	This deliverable puts together the success factors for the cultivation of camelina and carinata. These factors come from the analysis of demo trials and discussion in lighthouses. These recommendations are delivered in an easy-to-use way for farmers and practitioners.	FG2	None	Free to use	No	Free to use
1	1.2-1.4	D 1.3 & D1.4	Optimized agronomic	UNIBO	-	None	These deliverables contain the main results and guidances for growing carinata and camelina to	FG3	Published data protection	Free to use	No	Free to use

WP	PR number	Project Result (PR) /Achievement	Specific Project Result	Main Contributing Partner(s)	Further Contributing Partner(s)	Related Background Number	Short Description of FG	Foregro und Number	Type of Protection	Conditions to Use within CARINA	Interest in Further Commercialisation of CARINA Results	Condition s to Use after the end of the Project
			management for carinata and camelin a				source low ILUC feedstock in Italy		according to the FAIR regulation			
4	4.2	D4.2 Overview and recommendations for monitoring, reporting and verification	-	RSB	DBFZ, UNIBO, Spanish Coops	None	This deliverable will contain an overview of available certification schemes for CARINA production systems. It will address requirements for carbon farming and sustainable carbon cycles and define low ILUC criteria for feedstocks based on CARINA system	FG4	None	Free to use	No	Free to use
5	5.1	D5.1. National living labs reports	-	SPAHIS Co-ops	All involved in T5.1 & T5.5	None	This deliverable contains the outcomes of the CARINA national living labs organized in France, Italy, and Spain. The deliverable contains a summary report of the main outcomes with the localization of the living labs and analysis of the results presented. This deliverable is linked to Task 5.1.	FG5	None	Free to use	No	Free to use
5	5.2	D5.2. Factsheets about local challenges and field visits	-	TI	All involved in T5.2	None	This deliverable contains the main challenges gathered from local discussion with stakeholders and the main outcomes of the organized field visit.	FG6	None	Free to use	No	Free to use

WP	PR number	Project Result (PR) /Achievement	Specific Project Result	Main Contributing Partner(s)	Further Contributing Partner(s)	Related Background Number	Short Description of FG	Foregrou und Number	Type of Protection	Conditions to Use within CARINA	Interest in Further Commercialisation of CARINA Results	Conditions to Use after the end of the Project
5	5.3	D5.3 Social innovation solutions at local level (Challenges definition for carina value chain implementation)	-	DBFZ	All involved in T5.1 & T5.3	None	The deliverable will depict the challenges and possible solutions identified in literature and it will report the outcomes of key stakeholders engagement at local level as well the lessons learnt and inspiring examples of social innovation identified in the interviews and workshops.	FG7	None	Free to use	No	Free to use
5	5.4	D5.4. National roadmap and business plan reports (Country-specific roadmaps and business plans for the camelina and carinata value chains)	-	UNIBO	All involved in T5.1, T5.3 & T5.4	None	The deliverable will report roadmaps for key actors to implement social innovation solutions at national level and business plans analysing the market requirements and business opportunities for target countries and engaged stakeholders.	FG8	None	Free to use	No	Free to use
5	5.5	D5.5. Market opportunities for camelina and carinata in the bioeconomy (Bio-based market information)	-	NUSEED	All involved in T5.1 & T5.5	None	This deliverable contains the main outcomes derived from the market analysis carried out within CARINA for all the biobased products derived (i.e., oil, cake, food supplements, biopesticides, etc.).	FG9	None	Free to use	No	Free to use



WP	PR number	Project Result (PR) /Achievement	Specific Project Result	Main Contributing Partner(s)	Further Contributing Partner(s)	Related Background Number	Short Description of FG	Foreground Number	Type of Protection	Conditions to Use within CARINA	Interest in Further Commercialisation of CARINA Results	Conditions to Use after the end of the Project
		on camelina & carinata)										

Table 14. CARINA's Identified IP FG

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## 5.5 Individual Exploitation Plans

This section summarises, in tabular format, the assets of the CARINA project that each partner is currently interested in exploiting the most, as well as how they intend to proceed to this end.

<b>UNIBO</b>	<b>Results of major interest:</b> Definition of camelina and carinata low iLUC agronomic management for Italy; suitability of camelina and carinata under marginal land; demonstration of circularity by using pelargonic acid derived from carinata oil to accelerate camelina and carinata maturity (WP1); evaluation of social and economic sustainability of selected CARINA concepts (WP3), to be exploited in science-based policy innovation (WP4) and in defining business plans for the different actors involved in the Carinata and Camelina value chains (WP5).
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Future research and innovation project proposals will be based on the results obtained from CARINA, and the lesson learnt from camelina and carinata will be applied to other cash cover crops and possibly implemented in research projects dealing with different types of farming systems, i.e. conservation agriculture, organic farming, etc.

<b>ARVALIS</b>	<b>Results of major interest:</b> System Guidelines for farmers, trials results and collaboration with farmers evaluation of social and economic sustainability of selected CARINA concepts (WP3)
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CARINA results are expected to provide guidance for farmers and agrifood value chain actors and their members in France to implement sustainable and multiperformant crop alternatives to diversify their rotations and introduce resilient crops oriented to the new bioeconomy markets. These results can be exploited notably through targeted dissemination activities or specific trainings.

<b>CCE</b>	<b>Results of major interest:</b> CARINA System Guidelines for Farmers, Innovative camelina ingredients developed in the project, including (biostimulants, camelina cake mucilage, as well as other camelina products including mulch films, pots, clips, pheromone supports, bioherbicide) as well as the recommendations in the Low ILUC certification.
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Our research and innovation team will coordinate with our commercial and value chain team in order to increase the overall value generated by camelina cultivation, incorporating camelina innovative products developed within CARINA. Additionally, our agronomic team -in contact with our camelina farmers- will coordinate with our sustainability team to implement Low ILUC recommendations during the cultivation phase, in order to maximize the Green House Gas emission reduction for camelina as a fully sustainable feedstock.

<b>DBFZ</b>	<b>Results of major interest:</b>
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Results on new biomass valorisation pathways and their impacts on sustainability are interesting for the expansion of our research focus. Besides, the methodological approach for the complex assessments is of our interest, as well as learning about stakeholders and their perspectives.

<b>FLANAT</b>	<b>Results of major interest:</b> WP1: System guidelines and low iLUC agronomic management for farmers to implement Camelina cultivation in Italy, specifically as catch crop with the tomato and feeding corn stalks, for dairy farms ; WP2: Camelina cake polysaccharide industrial extraction and development of new concept supplements.
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Future research will be focused on innovative supplements and functional food development, exploiting camelina oil and cake co-products. Polysaccharide extraction will be then implemented as functional carrier to increase bio-accessibility in supplements, feed, food and nutricosmetics. Our research and innovation team will also explore the potential application of camelina derived food ingredients.

<b>INRAT</b>	<b>Results of major interest:</b> Suitability of camelina and carinata to be introduced in crops rotation systems mainly in degraded areas in Tunisia, innovative product generated from CARINA project (bioherbicides, camelina and carinata cakes, bio stimulants)
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CARINA results are expected to provide alternatives to diversify crops rotations in Tunisia especially in marginal land. Additionally, camelina and carinata will be introduced as new profitable crops for oil and cake production.

<b>PEDAL</b>	<b>Results of major interest:</b> Economic sustainability, environmental, social and Integrated sustainability assessments; WP4 Co-creation activities; WP5 Co-creation activities
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Our innovation and policy advisors will integrate results / assets in their existing advisory practices to enhance their service portfolio and better support clients in the private and public sector, while also extending their client base leveraging the novel collaborations developed during the project

<b>SAIPOL</b>	<b>Results of major interest:</b> WP1 trials results and definition of agronomic management for camelina and carinata as cover crops, especially for France; WP2 biomass valorisation with a circular economy approach and especially animal feed valorization and glucosinolate detoxification & extraction; 3 evaluation of social and economic sustainability of selected carina concepts
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Our innovation team will coordinate with our commercial and value chain team in order to source camelina and carinata seeds from upstream stakeholders, crush the seeds at our industrial sites and commercialise their oil and protein meals by-products. Additionally, our innovation team will evaluate the feasibility to scale-up at the industrial level the glucosinolate detoxification / extraction processes.

<b>SPANISH Co-Op's</b>	<b>Results of major interest:</b> WP1 Trials results and collaboration with farmers; WP4 Policy recommendations for the adoption of agri-food bioeconomy systems; WP5 Value chain solutions for upscaling potential bio-based agricultural production systems
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CARINA results are expected to provide a roadmap for our agri-food cooperatives and their members in Spain to find sustainable crop alternatives to diversify their rotations and introduce resilient crops oriented to the new bioeconomy markets.

<b>TI</b>	<b>Results of major interest:</b>
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New knowledge on best cropping practices and on multicriteria evaluation of camelina in cropping systems will be exploited for dissemination to growers, advisors and grain collectors, through the diversity of TI communication tools. Knowledge on processing techniques in oilseeds crushing to manage and value glucosinolates will be exploited for further R&D, including on other Brassica crops.

<b>KIMITEC</b>	<b>Results of major interest:</b> Development of new biopesticides, bioherbicides and biostimulants (WP2) for camelina and carinata crops (inter-crops), as well as for the main crops of the same field (circularity).
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CARINA results are expected to contribute to the development of new bioproducts based on camelina and carinata subproducts, including oil, cake, straws, barns, etc.

Implement the knowledge generated in the course of CARINA project to apply in further research projects dealing with different types of farming systems.

<b>RSB</b>	<b>Results of major interest:</b> WP3 environmental assessment of CARINA value chain and recommendations for low ILUC feedstock standard.
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CARINA results are expected to provide insights on the development of carbon farming and sustainable carbon cycles certification procedure. It will assess the environmental sustainability of the CARINA value chain with camelina and carinata as main feedstock.

It is also expected to contribute to the implementation of a certification standard to produce low iLUC feedstock for biobased material starting from a bottom-up approach with the direct engagement of stakeholder and civil society.

**Table 15. Individual exploitation plans per partner**

## 6. Conclusion and way forward

The Dissemination and Communication plan outlined in this document has been designed to assist project partners in executing the dissemination and communication activities throughout the CARINA project and effectively convey the key messages to the target audiences. This report includes a comprehensive list of all the communication activities planned throughout the project's duration, the communication channels to be utilized for dissemination, and the key messages to be communicated.

Each partner will be responsible for communication of project results through its own networks, while PEDAL will coordinate extensive use of the abovementioned online tools and channels to guarantee the maximum exposure at EU level.

The dynamic nature of the project necessitates that the DCP will be reviewed and updated continuously in line with the needs and views of stakeholders to ensure that the project's promotion has the maximum impact on the targeted stakeholders, as well as, the European community as a whole.

This Exploitation, IPR management and sustainability plan has presented the main elements of the IPR approach, the methodology employed in this respect as well as provided an overview of the project's assets, background and foreground IP. To facilitate the identification and the management of CARINA's assets, a dedicated tool has been elaborated under the supervision of the Exploitation Manager, the IPR Matrix.

The Exploitation Manager is responsible for keeping the Exploitation and Sustainability Plan updated. The Exploitation Manager: a) will monitor the project's activities as they evolve; b) will timely capture innovation opportunities that may go unnoticed; c) will identify any potential conflicts of interest and facilitate their resolution before the end of the project. Thus, a proactive smooth post-project exploitation of CARINA results will be fostered.

The DCE Plan will be updated in M36 of the project (D6.3), depicting the latest status in terms of project results' identification, type of protection, ownership and access rights definition, with the support of all partners. D6.3 will provide more details on the exploitable assets of the project and the framework of their exploitation, to support the sustainability and continuation of CARINA's outcomes.



## 7. Annexes

### Annex I –CARINA Event Reporting template

#### Events -Report Template

Description of your CARINA event

<b>CARINA representative</b> (name and organization)	
<b>Event venue</b>	
<b>Date</b>	
<b>Event organized in partnership with</b>	
Key organizational contact	
Website	
<b>Work package</b>	WP6
<b>Task number</b>	T6.2

<b>Title</b> (original language / English)	
<b>Sector/s</b>	
<b>Stakeholders attending</b>	
<b>Total number of participants, out of which</b>	
Scientific community	
Policy Makers	
Farmers, landowners, cooperatives	

Civil society	
Biobased industries	
Potential investors	
Traders, animal feeding plants	
<b>Total number of participants:</b>	
<b>Countries addressed/involved</b>	
<b>Material created for the event (link to the internal repository)</b>	

**2. Summary of the event:** Please, provide a one page of qualitative data or description of the event. (Purpose, main objectives, outcomes, takeaways and any other comments, own perspective, pictures).

**3. Attendance Form** – please scan and insert your signed attendance form here (if it is available)

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#### **4. Feedback questionnaire (optional)**

<https://docs.google.com/document/d/1BReQc8VNrv4E7vRKVdIXNwMZqYIKl6a/edit>



## Annex II – CARINA Event Feedback Questionnaire

### Feedback Questionnaire

Name of the Event:

Venue:

Date:

Your name:

Your position:

Your organisation:

Email:

Tel. No:

Which stakeholder group do you belong to?  
*Tick more than one if applicable*

- |  |   |   |  |
|--|---|---|--|
| <input type="checkbox"/> Civil Society industries      | <input type="checkbox"/> Scientific community           | <input type="checkbox"/> Policy/public sector | <input type="checkbox"/> Biobased industries |
| <input type="checkbox"/> Farmers, landowners investors | <input type="checkbox"/> Traders, animal feeding plants | <input type="checkbox"/> Potential investors  |  |
| <input type="checkbox"/> Other – please specify        |   |   |  |

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#### Instructions

Please answer all questions as fully as you can and add comments in the free space as appropriate.

Where a numerical rating is requested, please rate aspects of your experience of the CARINA event on a 1 to 5 scale as explained below:

1 = "Strongly disagree," or the lowest, most negative impression

3 = "Neither agree nor disagree," or an adequate impression

5 = "Strongly agree," or the highest, most positive impression

Choose or state N/A if the item is not appropriate for you or not applicable to the event you attended.



## Section 1: Summary

	1	2	3	4	5	N/A
Overall quality of the event	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Role of CARINA facilitating team	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Value of information available/presented in plenary	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Value of discussions & interaction	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Usefulness of CARINA event for you/your organisation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Venue & Logistics	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Please use this space for any further overall comments.

## Section 2: What content / views did you hear / learn about at the event that contribute to the views of your organisation and you? *Contribute to all/any sections that are appropriate.*

2.1 Common challenges

2.2 Policy/public sector landscape

2.3 Industry

2.4 Research

2.5 Civil society

2.6 Potential solutions
2.7 Other

<b>Section 3: What connections did you make at the event of interest to you/your organisation &amp; why are they of interest?</b>
3.1 from Industry
3.2 from Policy/public sector
3.3 from Research
3.4 from Civil Society
3.5 Other ....

<b>Section 4: What follow-up are you considering / or planning after the event?</b>
4.1 Arranging meetings (with whom/why)
4.2 Further information gathering (on what/why)
4.3 Review of your organisations content/document (what/why)
4.4 Other

<b>Section 5: Do you have any suggestions as to how future CARINA Workshops could be more effective?</b>
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5.1 Agenda / focus?

5.2 Participants?

5.3 Information?

5.4 Follow-up?

5.5 Other

**Section 6: Please use this space for your free comments on overall value of / interest in the event.**

If you would like to participate in a short interview to provide further feedback on your experience of the CARINA events you attended please tick here:

You will be contacted by the CARINA partner to arrange a suitable time.

Thank you very much indeed for taking the time to complete this feedback form. Your additional input is much appreciated.

## **Annex III – CARINA brand manual**

The Carina Brand manual can be found [here](#).

## **Annex IV – CARINA Leaflet**

The CARINA leaflet can be found [here](#).

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