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BIOECONOMY EXCELLENCE ALLIANCE FOR
STIMULATING INNOVATIVE AND INCLUSIVE GREEN
TRANSITION

BEAMING

D3.2 – Guidelines for launching
and operating BEAMING CoPs

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This document corresponds to D3.2 and describes the Guidelines for launching and operating BEAMING (contract no. 101137131) Communities of Practice. The deliverable contains guidelines concerning CoPs: offering valuable advice on setting up communication channels, arranging consistent events, and offering assistance and resources to build a dynamic network of colleagues who are collaborating towards the shared objective of progressing bioeconomy research

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1. Executive summary

The WP3 of the BEAMING project is launching Communities of Practice (hereinafter referred as “CoPs”) to foster knowledge exchange and collaboration within the Bioeconomy sector. This document represents the D3.2: *Guidelines for launching and operating BEAMING CoPs*” detailed guidelines offering practical advice on setting up communication channels, coordinating regular events, and supplying support and resources to cultivate an active community of peers dedicated to advancing Bioeconomy research and it also includes the discussion about the macro-regional thematic and also national of CoPs discussed with the BEAMING project partners. Deliverable 3.2, *Guidelines for launching and operating BEAMING CoPs*, aligns with Deliverable 4.4, *CoP Impact Report*, by facilitating the establishment of CoPs and later evaluating their effectiveness. Deliverable 4.3, *Training and mentoring guidelines for BEAMING CoPs*, complements these by providing training frameworks essential for sustaining the CoPs.

This document describes the approach operated for the development of Communities of Practice within the BEAMING framework. It aims to raise excellence by enhancing innovation and knowledge valorisation within the Bioeconomy domain through cooperation between higher education institutions, with a particular focus on Widening countries. In this context, BEAMING entails the creation of four (4) diverse, macro-regional CoPs related to the 4 key topics of the BEAMING project, each with at least one representative from every BEAMING partner, along with external stakeholders. These CoPs will be integrated into the project's work packages, providing access to resources and support necessary to create vibrant and engaged communities. In parallel, ten (10) national CoPs of diverse stakeholders within the Bioeconomy sector will participate and support the design, development, testing, validation and roll-out guidelines in adopting Bioeconomy principles, training and upskilling. Eight (8) of these CoPs will be established by Higher Education Institutions (HEIs), while two (2) will be formed on a voluntary basis. This will lead to the creation of CoPs across different widening

countries. With our approach for the CoP framework in place, the target is to directly engage 160–200 actors in the CoPs in total, approximately 15–20 members in each national BEAMING CoP. The four international thematic CoPs will comprise in total 80–100 members.

CoPs will comprise of a broad range of Bioeconomy stakeholders (producers, consumers, academics, policy makers, NGOs, etc.) who will be engaged in key project activities throughout the project. BEAMING project shall ensure inclusiveness and engagement of all actors. Members of the CoP will be provided with the opportunity to express their interests and perspectives and shape the development of the project's training and educational framework in Bioeconomy to better serve their needs. At the same time, CoP will act as a bridge between the local and the international perspectives. To successfully establish and operate the Communities of Practice framework, BEAMING has elaborated a tailored methodology to ensure comparable but well-adjusted to local contexts results from regional CoPs.

The mission of the CoPs, as well as the expected structure and expected contribution of their members, has been defined to aid the consortium members in producing guidelines and training/mentoring frameworks in Bioeconomy sector, following a balanced participation of actors in adult learning, skill development, inclusion of bio-systems, active communities, policy makers, citizens, and researchers.

A common protocol for the identification and selection of the CoP members has been set, as a guide for consortium partners leading a CoP to efficiently establish these structures. Moreover, guidelines for inviting members and managing their inclusion as well as potential conflicts of interest that may arise during project activities, are also defined.

The rights and duties of members, their expected roles, terms of participation as well as a timeline for their participation in the CoP have been developed to promote clear communication among partners and stakeholders. The recruitment process is well underway and all

Community of Practice structures will be open for new members throughout the project.

2. Acronyms and abbreviations

BR	Bioeconomy Research
CoP	Communities of Practice
DoA	Declaration of Acceptance
ERA	European Research Area
GDPR	General Data Protection Regulation
IIC	Inclusive Innovation Culture
KPI	Key Performance Indicator
KV	Knowledge Valorisation
MoC	Memorandum of Cooperation
ML	Mutual Learning
NGO	Non-Governmental Organisation
OS	Open Science
QH	Quadruple Helix
REA	Research Executive Agency
R&I	Research and Innovation
SME	Small and medium-sized enterprises

3. Introduction

The BEAMING project aims to raise excellence by enhancing innovation and knowledge valorisation within the Bioeconomy domain through cooperation between higher education institutions, with a particular focus on Widening countries. This will be achieved through establishing effective technology and know-how transfer between Widening countries and EU14 member states with more developed Bioeconomies and R&I ecosystems, exploring and adopting structural reforms, educational priorities, and a culture of excellence. A Quadruple Helix (QH) innovation ecosystem will provide a framework for higher education institutions to work collaboratively with industry, government, and civil society. Local and regional implementation strategies and roadmaps will be developed regarding the relevant ERA Policy Agenda actions in the higher education sector, particularly in the Bioeconomy domain.

BEAMING specific objective is to foster networking, knowledge exchange, and cross-disciplinary collaboration by establishing sustainable Communities of Practice (CoPs) as vibrant and diverse groups of peers of QH Bioeconomy stakeholders, organised in a bottom-up manner, working towards advancing Bioeconomy research. This will be achieved by engaging experienced partners to mobilise local resources and stakeholders from the 10 involved widening countries, namely Hungary, Bulgaria, Croatia, Romania, Serbia, Albania, N. Macedonia, Bosnia and Herzegovina, Greece and Czech Republic. A dedicated protocol for BEAMING has been elaborated to set out the framework as well as the approach to be followed for setting up and running these Community of Practice structures, ensuring the effective engagement of stakeholders.

The structure of this Deliverable mirrors the above mentioned and, the document is structured in 5 distinct chapters:

- **Chapter 3** provides **introductory information** about the BEAMING project and the context in which this Deliverable has been elaborated.
- **Chapter 4** describes the **objectives** of BEAMING CoP approach as well as the key project targets pertaining to stakeholder engagement in the project's activities.
- **Chapter 5** sets out the **framework of the CoP**, outlines the identification and approach for members' selection.
- **Chapter 6** provides **guidelines for the engagement**, the status of member recruitment as well as the overall CoP management.
- **Chapter 7** outlines the **specific activities** in which CoP members will participate throughout the project implementation.
- **Chapter 8** concludes on the next steps of the CoP.
- **Annexes** of this report include the tools provided for engaging the CoP members:
 - Invitation letter from the CoP Leader to be used by partners when inviting prospective members to be engaged in the CoP ([Annex I](#))
 - Terms of Reference for the CoP Members ([Annex II](#))
 - Templates for the Declaration of Acceptance (DoA) used for CoP members ([Annex III](#))
 - The Memorandum of Cooperation (MoC), which is an alternative means of cooperation scheme, just in case a stakeholder is reluctant in signing a DoA ([Annex IV](#))
 - The Informed Consent Form that refers to personal data exploitation ([Annex V](#))
 - The template with the structure of the Stakeholder Matrix which partners will use, for their convenience, to monitor the engagement of stakeholders in the CoP as it evolves ([Annex VI](#))

The BEAMING project aims to involve approximately 240–300 stakeholders of the Bioeconomy sector, both in the National and Thematic CoPs, through direct stakeholder engagement and participation in its activities including designations (alternatively focus groups and co-creation workshops), co-design workshops, and policy workshops.

4. Objectives and key targets

The overarching aim of this Deliverable, as defined in the DoA, is to describe our approach to the development of the BEAMING CoP framework and establish a common protocol that will guide consortium partners through the whole process of identifying, recruiting, and engaging relevant Bioeconomy actors in the activities of the project. Specific objectives of this report are to:

- Describe the Community of Practice structures that will operate in the frame of BEAMING, along with their expected structure, mission and the “rights and obligations” of members.
- Elaborate guidelines on how partners can approach the selection, initial contact, and engagement of stakeholders to regional CoPs, as well as principles for fostering their inclusiveness.
- Define the main activities in which members of each CoP will participate along the process of identifying, assessing, and validating the BEAMING framework as well as in the process of rolling out and replicating results at a national and pan-European level in terms of policies.

5. Community of Practice framework

The Community of Practice (CoP) framework in the BEAMING project foresees the creation of a distinct structure (i.e. groups of stakeholders playing a key role in the Bioeconomy sector) based on the geographical scope and expected contribution to the project. The following sections of this chapter provide further details about the CoPs, their mission, and expected structure.

5.1 Community of Practice definition

Communities of Practice (CoP) are regional networks of stakeholders coming from across the entire value chain of the Bioeconomy sector as well as researchers in each region, policy makers, groups representing civil society, actors involved in adult learning, retraining, and skills' development, bio-system representatives (industries, SMEs), active communities, professionals' associations, but also citizen's organisations reaching a balanced participation.

The regional CoPs in the selected widening countries will have diverse profiles of Bioeconomy actors according to the selected theme and priority. They will be established by a respective widening University.

5.2 CoP Focus

The discussion about the key focus was organised immediately after the project was launched between the project coordinator and the HUB_CR to clarify the creation of the CoPs. Four options were given to the partners. One of the three had been foreseen in the project proposal.

The partners were given a short survey with a 30-day timeframe to state their position/ preference on the creation of the CoPs.

- A. 4 international CoPs along the 4 BEAMING pillars: Bioeconomy Research (BR), Open Science (OS), Knowledge Valorisation (KV), Inclusive Innovation Culture (IIC).
- B. 10 national CoPs in the 10 Widening countries represented in the consortium.
- C. Separate national CoPs along the 4 pillars in 10 countries (40 in total)
- D. 4 international thematic + 10 national CoPs in Widening countries

The results of the survey indicate a clear preference among the partners for option (D), which combines four (4) international thematic CoPs with ten (10) national CoPs in the widening countries. This option received 45.5% of the votes. Option (A), which proposed the establishment of four international CoPs aligned with the BEAMING pillars, garnered 31.8% of the votes. Option (B), which proposed the establishment of 10 national CoPs in the Widening countries, was endorsed by 18.2% of the respondents. The least preferred option, (C), which advocated for the creation of separate national CoPs along the four (4) pillars in 10 countries (totalling 40 CoPs), received only 4.5% of the votes.

The results of the survey are shown in following Figure 1.

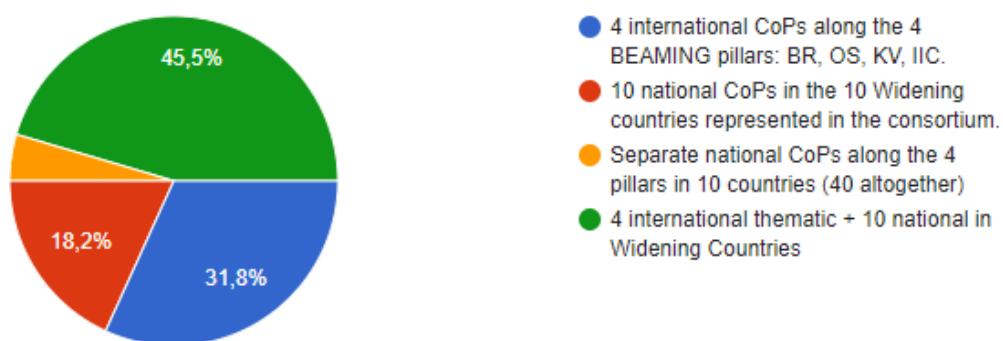


Figure 1: Survey Results on CoPs Organization

The macro-regional CoPs united by the BEAMING topic and coordinated by the topic Leader are represented in the following table:

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Table 1: The 4 International Thematic CoPs

Bioeconomy Research	Open Science	Knowledge Valorisation	Inclusive Innovation
<p>Capacity Building: CoPs are designed to build and enhance the capacity of early-career researchers and institutions in the Bioeconomy sector. They facilitate the exchange of knowledge, skills, and best practices among researchers and stakeholders, fostering a stronger research community in the Bioeconomy field.</p>	<p>Promoting of Science Practices: CoPs are integral in fostering the adoption of Open Science practices within the Bioeconomy sector. They are expected to actively engage in disseminating knowledge and best practices related to Open Science among their members and the broader community.</p>	<p>Knowledge Transfer and Valorisation: CoPs are instrumental in facilitating the transfer and valorisation of research results. They help bridge the gap between research and practical application, ensuring that the outcomes of Bioeconomy research are effectively translated into innovations that benefit the economy and society.</p>	<p>Driving Innovation in Bioeconomy: By bringing together diverse stakeholders and fostering an environment of collaboration, CoPs drive innovation in the Bioeconomy sector. They support the development of new technologies, processes, and products that contribute to the sustainable growth of the Bioeconomy.</p>
<p>Networking & Collaboration: CoPs serve as platforms for networking and collaboration across various stakeholders within the Bioeconomy. This includes higher education institutions, industry, government, and civil society, creating a</p>	<p>Implementation of Open Science Strategies: CoPs are tasked with the design and implementation of joint research and innovation strategies that emphasise Open Science. This includes ensuring that the research conducted and the knowledge generated is accessible,</p>		

<p>multidisciplinary approach to Bioeconomy research and innovation.</p>	<p>transparent, and reusable.</p>		
<p>Implementation and Design of Joint Research Strategies: CoPs are responsible for the co-creation and implementation of joint research and innovation strategies. These strategies are aimed at addressing key challenges in the Bioeconomy sector, driving innovation, and ensuring that research outcomes are relevant and applicable.</p>	<p>Capacity Building and Knowledge Sharing: Through CoPs, the BEAMING project aims to build the capacity of researchers and institutions in the participating regions to engage with Open Science. CoPs serve as platforms for knowledge sharing, helping to align research practices with Open Science principles.</p>		
<p>Supporting Research Projects: CoPs play a direct role in initiating and supporting Bioeconomy research projects. They are involved in identifying research priorities, coordinating research activities, and ensuring that the projects align</p>	<p>Evaluation and Feedback: CoPs contribute to the evaluation of Open Science practices by providing feedback and insights from their implementation. This helps in refining strategies and ensuring that they are effectively</p>		

with the broader goals of the BEAMING project and the Bioeconomy sector.	integrated into the research and innovation processes.		
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As the result of the internal survey indicated a clear preference to establish four international thematic CoPs, these guidelines were consulted in bilateral meetings with the topic leaders who approved them (the Leaders are named in the 5.4. section).

5.3 CoP principals

In both cases (National or Thematic CoPs) the principles elaborated in this subchapter will apply.

Focus on the mobilisation of local resources and stakeholders to raise excellence by enhancing innovation and knowledge valorisation within the Bioeconomy domain and to establish innovative governance models. More information on the management and operation of CoPs are provided in Section 6.5 of this report. The CoPs should gather representatives from the Quadruple Helix, formulating a network of approximately 20–25 members each. The members of each CoP will be involved in the discussion process and workshops, will share knowledge, and, lastly, will exchange experience (peer-to-peer dialogue). The member’s participation is on a voluntary basis. The goal of the CoP is to enhance the quality offer and diversify of Bioeconomy actions and processes for training and skills enhancement by bringing relevant actors in contact with each other, both virtually and face to face. Together, they form a professional network, having as a goal to fulfil BEAMING’s relevant objectives but also to:

- o Share experiences and good practices among actors coming from different sectors and regional perspectives.

- o Consult with industry and stakeholders about skills demands in the market and expected outcomes.
- o Offer their feedback on guidelines developed in the context of BEAMING and policy recommendations needed.

The combined effort of professionals working together on related goals is expected to enhance participatory decision-making, effective guidelines development, and inclusive methods of all Bioeconomy value chain stakeholders.

5.3 Mission

CoPs have the mission to aid the BEAMING consortium in producing guidelines and training/mentoring frameworks in the Bioeconomy sector. More specifically, the mission of CoP members is to:

- Provide the consortium with relevant information that will be used to create practical and easily understandable knowledge and tools, bridging the gap between practitioners and researchers based on successful case studies and good practices.
- Define regional needs and expectations, local feedstock availability and uses, and identify the need for skills required.
- Build guidelines for training for skill development.
- Facilitate the cross-fertilization among regions through the exchange of good practices.
- Contribute in general to fulfilling the related BEAMING's objectives

5.4 Leaders of Communities of Practice (CoP) in BEAMING

This section presents CoP Leaders in BEAMING; the first table outlines the leaders responsible for macro-regional thematic CoPs, while the second table provides an overview of the leaders of the National CoPs.

Table 2: Macro-Regional Thematic CoP Leaders

Thematic CoP	CoP Leader	CoP Leader's Country
BR	BME	Hungary
IIC	AUP	Bulgaria
KV	INCDSB	Romania
OS	UNSFA	Serbia

Table 3: Country and CoP Leader






National CoP	CoP Leader	Notes
Hungary	BME & UP	BME also leads International Thematic BR CoP
Albania	AUT	
Bosnia and Herzegovina	UNIBL	
Bulgaria	AUP	AUP also leads International Thematic IIC CoP
Croatia	UniOs	
North-Macedonia	UKIM	
Romania	INCDSB	INCDSB also leads International Thematic KV CoP
Serbia	IRI, EDU and UNSFA	UNSFA also leads International Thematic OS CoP
Greece	CluBe	Voluntary- To involve regional universities and other stakeholders
Czech Republic	HUB_CR	Voluntary- To involve a university (BIOEAST Uni Net members) respectively another stakeholders



5.5 Expected Structure

In each CoP, approximately **20–25 stakeholders** will be identified to recruit the respective local CoPs. The groups of actors to be invited, as

well as an indicative structure for each CoP, are presented in the following table. The aim is to achieve a balanced participation of actors.

Table 4: Stakeholder Groups, their Needs & Roles, and Indicative Membership

Stakeholder Groups		Needs & Roles & Indicative Membership	
Research and higher educational organisations		<p><u>Needs:</u> Adoption of research and educational curricula that empower Bioeconomy, better feedback loops</p> <p><u>Role:</u> Provide adequate information, guidelines and network that respond to the need of bio-systems in each region and contribute to the transition to Bioeconomy. Also provide existing training opportunities offered in the field of Bioeconomy</p>	3-4
Vocational education organisations		<p><u>Needs:</u> Adoption of adult training and mentoring programs that empower Bioeconomy, better feedback loop</p> <p><u>Role:</u> Provide transferable training guidelines based on bio-communities needs</p>	3-4
Industry		<p><u>Needs:</u> Favourable taxes and regulations, information regarding local, regional, and EU level economic potentialities and barriers, skilled employees, competitive products</p> <p><u>Role:</u> Provide adequate information about stakeholders, framework conditions, potential and barriers to the industry as well as the access to the network</p>	3-4
Businesses (SMEs)		<p><u>Needs:</u> Flexible training programs, development of skills, exploitation of new technologies, exploring new markets, economic growth, support on transition to sustainable manufacturing, skilled employees</p> <p><u>Role:</u> Develop exchanges within strategic alliances and skills leading to novel business models or novel job descriptions</p>	3-4
Policy Makers & Administrations		<p><u>Needs:</u> Identify appropriate enabling policy measures for bioeconomic transformation and minimise potential risks and conflicts</p> <p><u>Role:</u> Provide information regarding enablers for transformation, opportunities for intergovernmental, multidisciplinary cooperation and access to CoP, support stakeholder's networks towards Bioeconomy transition</p>	3-4

Stakeholder Groups		Needs & Roles & Indicative Membership	
NGOs & marginalised groups		<p><u>Needs:</u> Development of skills leading to the novel governance models and related social warranties. Need to include marginalised people in training opportunities</p> <p><u>Role:</u> Have a voice in decision making process, master their lives and face the future with confidence</p>	3-4
Citizens & Wider Society		<p><u>Needs:</u> Alternatives to switch to socially and environmentally responsible behaviour within their choices.</p> <p><u>Role:</u> Adoption of more environmentally friendly habits and increase visibility of bio-based alternatives. Choosing BioBased solutions or BioBased products in their daily life, influence more people to follow a greener behaviour.</p>	3-4

5.6 Stakeholder's Identification Process and Methods

• 5.6.1 Selection Procedure

CoP Leaders are responsible for the selection of stakeholders included in the CoP set-up within each selected topic or respective Region/Country. A common process should be followed:

Table 5: Steps and Corresponding Procedure

Steps	Procedure
1: Identify	Stakeholders for CoP are identified by partners from their professional networks and organisations.
2: Inform	Meaningful information will be gathered for each identified actor (including type of stakeholder, knowledge on key elements, function, expertise, etc.).
3: Access	Identified stakeholders will be assessed based on selection criteria.
4: Select	Assessments for all identified stakeholders will be aggregated and a final list of about thirty stakeholders to be invited in each CoP
5: Invite	Prospective members of CoP will be invited and
6: Engage	Those who accepted the invitation will provide a signed Declaration of Acceptance.

- **5.6.2 Selection criteria**

The criteria applied for selecting the members of the CoP, in line with the mission and expected structure of each CoP, capture a broad range of dimensions regarding the characteristics of individuals necessary for more meaningful participation in CoP activities. Along these lines, the following table summarises the selection criteria along with the justification for their inclusion.

Table 6: Selection Criteria and Corresponding Rationale for Inclusion

Selection criteria	Rationale for criterion inclusion
1 Interest	Individuals with high interest in the bio-economy sector will ensure that they are driven to participate and help the project produce meaningful results with significant value-added for their users.
2 Availability	Individuals that have the available time required to participate will enable partners to smoothly organise and execute project activities with higher participation rates that will result in higher probability that their targets are achieved.
3 Relevance	The relevance of stakeholders to the project's scope and objectives is necessary to keep activities of the CoP focused and will ensure that their members can effectively contribute to the production of accordingly relevant project outputs.
4 Appropriateness	The consortium will make sure that members selected to participate in the CoP are appropriate to their scope thus avoiding conflicts of interest or subjecting them in activities that may cause them unnecessary inconvenience.
5 Representativeness	A balanced representation of perspectives within and across stakeholder groups is key for the CoP to collect the representative insights required to inform design, development, and fine-tuning, thus addressing diverse needs.
6 Willingness	Motivated individuals willing to contribute their knowledge and experience will promote success of CoP activities and will be more prone to disseminate the project's tools and knowledge, facilitating exploitation and sustainability.

Selection criteria	Rationale for criterion inclusion
7 Gender	Potential stakeholders involved in each CoP should keep a gender balance to reflect the interests and needs of all genders.
8 Age	Potential stakeholders should not be overlooked based on age. The knowledge and tools produced by BEAMING will be more relevant and therefore will have more practical value if age disparities of prospective users are considered.

The following section outlines guidelines for partners to establish and maintain contact with stakeholders as well as principles for their fostering inclusion and effective engagement in CoP.

6. Guidelines for conducting the engagement

6.1 Contact guidelines

Dedicated communication materials will be prepared to facilitate the first contact of partners with CoP members. In particular, the following documents were produced by BIOEAST HUB CR as templates to facilitate communication with stakeholders. The templates that accompany these guidelines are indicative and may be adjusted by the CoP Leader, if needed:

- An official **Invitation letter** from the CoP Leader to accompany the initial communication of consortium partners with selected stakeholders. ([Annex I](#))
- **Terms of Reference**, providing meaningful information about BEAMING and the activities in which members of CoP are included, as well as their expected contribution and conditions pertaining to their membership. ([Annex II](#))
- **Declaration of Acceptance**, to be signed by the invited stakeholders evidencing the fact that they agree with the terms and conditions pertaining to their participation in the respective CoP as well as that they are, in fact, willing to be a member in this multi-actor structure. ([Annex III](#))
- **Memorandum of Cooperation (MoC)**, as an alternative means of cooperation scheme, in case a stakeholder does not want to sign a declaration. The MoC may be signed between the CoP Leader and one or more involved parties in the Bioeconomy sector to be part of the Community of Practice (CoP). ([Annex IV](#))

- **Informed Consent Form** with a detailed description of how the CoP Leader handles personal data. ([Annex V](#))
- **Stakeholder matrix**, which partners may use, for their convenience, to monitor the engagement of stakeholders in the CoP. ([Annex VI](#))

The above-mentioned material should be provided to members of the CoP following the guidelines below:

- The initial contact with prospective members of each CoP should be carried out by the respective CoP Leaders.
- All initial contacts should be accompanied by the communication material prepared to this end (Terms of Reference, official invitation letter from the CoP Leader, Declaration of Acceptance).
- Employ a language that will be easily understood by the stakeholders and ensure that they comprehend their rights and obligations implied by their participation. Along these lines, all partners are free to translate the given guidelines and templates into local language if this may serve better local communication with stakeholders.
- Further communication via e-mail or teleconference is encouraged in order to reply to any questions or provide clarifications.
- Ensure that stakeholders who accept to join the CoP, sign the Declaration of Acceptance or a MoC.

Table 7: Stage of Contact and Corresponding Contact Guidelines

Stage	Contact Guidelines
<p>Initial Contact</p>	<ul style="list-style-type: none"> • The initial contact with prospective members of each CoP should be carried out by the respective CoP Leaders. • All initial contact should be accompanied by the communication material prepared to this end (Terms of Reference, Declaration of Acceptance, official invitation letter. The project Brochure is highly recommended to accompany initial contacts, too). • Employ a language that will be easily understood by the stakeholders and ensure that they comprehend the rights and obligations implied by their participation. Along these lines, all partners are free to translate the given guidelines and templates in local language if this may better serve local communication with stakeholders. • Further communication via e-mail or teleconference is encouraged in order to reply to any questions or provide clarifications. • Stakeholders who accept to join a CoP, should sign the Declaration of Acceptance or a MoC.
<p>Subsequent Communication</p>	<ul style="list-style-type: none"> • Partners managing a CoP should handle/liaise all communications with members of these structures. • CoP members should be properly and timely informed to participate in upcoming project activities (e.g., interviews, surveys, focus groups, events). • CoP Leaders should ensure that no member is overloaded with unneeded information about any task at hand. • Prior to contacting members for a specific action, necessary material and briefings should be prepared to inform participants about the scope of the activity and their expected role.

On top of these contact guidelines, guiding principles for engagement and inclusion of stakeholders in CoP activities have also been elaborated and presented in the following sections.

As described in D11.2 Project Visual Identity, all communication materials related to the project will include the European Union disclaimer as part of the legal obligations reflected in Article 17 of the BEAMING Grant Agreement. This will also contribute to the legitimisation of the communication to the different stakeholders. To fulfil these obligations the project disclaimer with the corresponding EU flag will be included stating: The BEAMING project has been funded by the European Union under grant agreement N° 101137131. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Research Executive Agency (REA). Neither the European Union nor the granting authority can be held responsible for them.

6.2 Engagement Guidelines

An overview of key stakeholder groups, their potential interests and challenges in the engagement process, along with guiding principles for effective management.

Table 8: Stakeholder Groups, Potential Interests and Barriers During Engagement, and Principles for Managing the Engagement

Stakeholder groups	Potential interests & barriers arising during engagement	Principles for managing the engagement
Academia & Research	<ul style="list-style-type: none"> • Potential gap between educational curricula and missing training opportunities may disincentivize engagement in project activities. • Emphasis on dissemination of research outputs may pose 	<ul style="list-style-type: none"> • Showcase ways of integrating stakeholders needs in research, engagement and learning. • Emphasis on scientific contributions of the project in open access journals and

	<p>barriers to the protection of intellectual property of the BEAMING partners.</p>	<p>knowledge dissemination channels.</p> <ul style="list-style-type: none"> • Emphasis on the orientation of the project's outputs and tools towards providing practical support to users. • Focus on building trust among stakeholder groups and creating a shared vision among them.
<p>Vocational Education Organizations (VET)</p>	<ul style="list-style-type: none"> • Little knowledge on how vocational programs in Bioeconomy can pay off in the labour market. • Ageing workforces in VET institutions cannot follow contemporary trends towards Bioeconomy. • Not close collaboration and exchange between V. 	<ul style="list-style-type: none"> • Go beyond traditional forms of one-time feedback, to more multi-directional, collaborative communication strategies in order to develop trust between the CoP Initiative and the VET Organisations.
<p>Biobased Industry & Businesses (SMEs)</p>	<ul style="list-style-type: none"> • Interest for clear business benefits stemming from involvement in project activities and utilisation of the BEAMING guidelines. • Interest in the workforce with relevant skills and education. • Fear of losing possible competitive advantage in the local market due to disclosure of business information. • Interest in sustainable solutions to support local businesses, consumers and local products. 	<ul style="list-style-type: none"> • Focus on building trust among stakeholder groups and creating a shared vision among them. • Emphasis on demonstrating the business benefits of the BEAMING guidelines and value propositions.

<p>Policy Makers & Administration</p>	<ul style="list-style-type: none"> • Interest in building suitable incentives and support measures for bioeconomic transformation and minimise potential risks. • Potential bureaucratic and relatively slow decision-making processes. • Need for sufficient knowledge to make the case for preference of local Bio-based products in public procurement procedures. 	<ul style="list-style-type: none"> • Emphasis on BEAMING tools designed for training policy makers and Bio-products procurers. • Focus on the need to offer evidence-based policy recommendations pinpointing the impact of the adoption of Bio-friendly policies.
<p>NGOs</p>	<ul style="list-style-type: none"> • Potential conflict with businesses on the trade-off between prioritising business gains vs produce creative, artistic and design more expensive products. • Missing educational projects or opportunities for marginalised groups to provide career counselling. 	<ul style="list-style-type: none"> • Creative activities, including art to inspire citizens or end users. • Emphasis on evidence-based impact of the project on supporting these groups.
<p>Citizens & wider society</p>	<ul style="list-style-type: none"> • Interest in quality Biobased products with affordable prices. • Need for easy access to transparent information on product identity, production methods and origin. 	<ul style="list-style-type: none"> • Emphasis on economic, societal and environmental benefits stemming from the project's outputs and tools. • Use of simple and straightforward language understood by wider society. • Focus on building trust among society groups and creating a shared vision among them.

6.3 Guidance for Stakeholders' inclusion

The CoP protocols introduce specific principles to ensure the effective inclusion of the diverse identified stakeholder groups in the different activities of BEAMING. In particular, the principles to be followed by project partners are laid out below, with respect to the inclusion of stakeholders in the activities of BEAMING as well as regional representation and gender aspects.

Table 9: Category and Guiding Principles for Stakeholders' Inclusion

Category	Guiding Principles
Inclusion	<ul style="list-style-type: none"> • Ensure participation in project activities from the full range of potentially interested stakeholders spanning across the entire range of the key stakeholder groups identified. • Timely identify any potential barriers to the participation of the interested stakeholders in the activities of the project (such as accessibility, long geographic distances, lack of awareness). • Assess and determine effective means of surpassing potential barriers to participation (such as broad and targeted information sharing via online means and other suitable channels, etc.) • Appropriately consider the needs, interests and potential conflicts that may arise among the targeted stakeholder groups in the framework of their participation in the project activities.
Regional Representation	<ul style="list-style-type: none"> • Ensure a good representation of different regions within and among countries in regional CoP to the extent possible. • Address and engage with stakeholders within focal regions of the project but also from beyond, based on the access of partners to relevant networks and initiatives.
Gender Aspects	<ul style="list-style-type: none"> • Provide equal opportunities and access for all genders and age groups to project activities, e.g., the development and validation of BEAMING recommendations, best practices, guidelines, governance. • Maintain ethical communication standards by respecting the dignity of individuals as well as by eliminating any form of gender-related bias in communication campaigns of the project. • Engage in constructive discussions with stakeholders participating in project activities on the progress of BEAMING in implementing its commitment to gender balance.

6.4 Rights and Obligations

The following table summarises the rights and obligations of stakeholders participating in the regional CoP, as provided in the respective Terms of Reference ([Annex II](#)).

Table 10: Rights and Obligations of Stakeholders Participating in the Regional CoP

Rights	Obligations
Stakeholders participate in the CoP voluntarily and have the right to withdraw at any time or refuse participation without facing any adverse consequences.	Stakeholders agree to abide by the Terms of Reference which explain in further detail expected involvement as well as terms pertaining to their membership.
Stakeholders' have the right to preserve their anonymity during all project activities they will be involved in and in reports or publications produced.	Stakeholders participate in their individual capacity and not delegate any expected work to another person without prior written agreement.
Stakeholders have the right to request further processing and storage of their data by the consortium to be ceased without having to justify their request.	Stakeholders ensure that they are involved in project activities in complete independence and there is no conflict of interest affecting their participation.
Stakeholders have the right to access project results ahead of their public release in order to provide input for fine-tuning them in alignment with the needs of their users.	Stakeholders must not disclose any information provided to them in the frame of BEAMING activities and fully respect all confidentiality requirements.

6.5 Performance Strategy

In this section, the management process in the frame of CoP is described, as well as the procedure for monitoring the operation of CoP and tracking progress in relation to project KPIs and targets for stakeholder engagement along with tools designed to facilitate the process.

The BEAMING CoPs are set up and operated to share knowledge, expertise, and feedback with the consortium of the project in key implementation stages. The role of CoP in the context of the project may be summed up as follows:

- Provide relevant information to the consortium by participating (based on a voluntary basis) in project co-creation events/workshops, getting involved in related discussions, sharing knowledge, exchange experience (peer-to-peer dialog) on good practices, the results of which will procure a basis for the fine-tuning, roll-out, and replication of the project's framework.
- Support the network for bio-based stakeholders in the transition towards Bioeconomy uptake. Contribute to identifying key elements.
- Provide case studies by participating in discussions about relevant topics and retraining availability in the region by identifying the skills gaps and policies' limitations.

To fulfil this role, it is envisaged that local CoPs, during the project, will operate through physical and digital means in the project activities. The main outcome of CoPs is to offer a feedback loop from the society to the policy makers using inclusive methods as designations (or alternatively focus groups and co-creation workshops), co-design events, policy workshops, and best practice guidelines for local operators and innovation developers giving them the opportunity to interact, if necessary, in multi stakeholders' consultation.

In each country/region a CoP has been established by a consortium partner who is responsible for setting up and managing the local CoP. The role of each CoP Leader foresees the following:

- I. to identify, select, and recruit members during the set-up phase of their CoP;
- II. to undertake all communications with stakeholders and provide all necessary information to members about the project activities involving the CoP;
- III. to organise and carry out the project activities in their country/region, including interviews, workshops, and events, among others (more specific information on activities involving CoP is provided in Chapter 4);
- IV. to collect feedback and produce valuable outputs in the frame of these activities.

6.6 Performance Monitoring and Tracking of the Results

In order to keep track of the project activities in which members of the CoP participate, a dedicated methodological tool has been designed and will be employed, namely the Stakeholder Matrix ([Annex VI](#)). In particular, the Stakeholder Matrix captures the identified stakeholder groups of BEAMING along with the expected role of each one for the relevant activities foreseen throughout the project, with a view to guiding project partners in the process of selecting the most suitable types to engage. It is also designed to keep track of stakeholder inclusion, regional representativeness, and gender aspects. This will enable project partners to monitor the results of stakeholder engagement, as well as timely, assess and perform any needed corrective actions to better align them to the project's objectives.

With the above in mind, the Stakeholder Matrix follows a clear and simple structure:

- Stakeholder groups: The first column of the matrix lists the different stakeholder groups included in the CoP as identified in this report
- Demographics: The following four columns aim at collecting anonymised data for quantifying the results of stakeholder engagement with respect to organisation type, region/nation, and gender.
- Activities: The rest of the columns are designed to collect information with respect to the participation of the stakeholder groups in the project activities.

Annex VI provides an illustrative overview of the template to be used by partners responsible for each CoP to elaborate, maintain, and update their own version of the Stakeholder Matrix. In this framework, the monitoring process to be followed is outlined below:

- The internal Stakeholder Matrix will be kept within the context of CoP Leader who has received the Informed Consent form of CoP members participating in the local CoP. CoP Leaders will set up their own internal Stakeholder Matrix, ensuring the confidentiality of the data included (GDPR). In this respect, the Stakeholder matrix will include data about key stakeholder groups and individual stakeholders. These will be classified by organisation name, contact person (incl. gender, region/nation), and contact details.
- The CoP Leaders will be asked to send an anonymised Stakeholder Matrix (only organisation type, gender and region/country) to WP3 Leader (BioEast Hub CR) for aggregating the data. A trimester update of the anonymised Stakeholder Matrix for each local CoP may be asked by the WP3 Leader to better monitor the evolution of work, the stakeholders' continuous

engagement, and the participation of respective stakeholders in different project activities.

By using the Stakeholder Matrix, the WP3 Leader will coordinate the delivery mechanism of CoPs under Task 3.3 and, in cooperation with the Dissemination and Communication Manager, will monitor the participation rates in various activities and related KPIs, reporting them in future updates of the Dissemination, Communication, and Exploitation Plan.

7. Activities of the CoPs and related Methodologies

This Chapter describes the different activities, events, and workshops in which the stakeholders will be invited to participate. It also contains useful methodological tools for organising the different events, including objectives, baseline agenda, and expected outcomes for each type of event. The tools provided below can be modified to meet the respective event topic. Stakeholders participating in local CoPs will be involved in discussions, share knowledge, and exchange experience (peer-to-peer dialogue) in the frame of BEAMING. As stated before, their participation is on a voluntary basis. Members of CoPs will contribute to these actions by engaging in interviews, co-creation and co-design workshops, focus groups, and project events. The following table summarises the provisional set of project activities foreseen for members of all CoPs.

7.1 Activities

The following table displays an indicative timeline for CoPs.

Table 11: Activities of the CoPs

Activity	WP
Identifying, developing and validating relevant and suitable best practices and highlight success stories.	WP10
Collection of inputs from Stakeholders (Regional data & specificities).	WP5-9
Assessment of regional data & specificities.	WP5-10
Detection of Regional challenges.	WP5-9
Participation in European Thematic workshops.	WP5-9

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Participation in policy workshops (National / EU).	WP10
Participation in Co-Design Workshops (National / EU).	WP5-10
Participation in mutual learning workshops (National / EU).	WO5-9
Participation in Co-Creation workshops (National / EU).	WP6-10
Communication of activities, dissemination of results between CoP members to maximise the impact of the project.	WP11-12

7.2 Events

As part of the Dissemination and Communication strategy, the CoP Leaders will be provided with agenda templates, poster templates, and the project leaflet to be used throughout the CoP activities, starting from the member’s recruitment to the workshop organisation. These templates will be used during both online and offline communication to engage with CoP members. The most suitable will be used depending on the purpose of the interaction. A series of national and/or regional participatory workshops to co-create, access, and collect feedback on the progress of training guidelines development will be organised in each country.

In the table below suggested (indicative) events (including nature and dates) are presented. During the CoP events, the stakeholders will be asked to provide insights into the related activities.

Short description and explanation of the nature of each kind of the event is following:

Table 12: Description and Explanation of the Nature of Each Type of Event

Event Nature	Date	Activity	Purpose
Focus Group(s)	?	CoPs validate the concepts/topics identified during regional desk-research.	Analysing knowledge gaps, barriers, and facilitators, identify actors and offers in the bio-based educational and research ecosystem.
Co-Creation Workshop(s)	?	Training and skills development opportunities and needs for each region from CoP point of view.	Identify good practices and highlight success stories (case studies) and support the employment in bio-based sector.
Co-Design Workshop(s)	?	Validate concepts/tools.	Establish consultation mechanisms for the preparation of guidelines.
Policy Workshop(s)	?	Policy topics.	Provide recommendations to national Bioeconomy policy, regarding the governance model and in relation to education-related and research strategies.

7.3 Methodologies

This chapter outlines the methodology used for the research, detailing the approaches and techniques employed to gather, analyse, and interpret data. It includes a description of the research design, data collection methods, and analytical procedures.

- **7.3.1 Designation**

Table 13: Description, Objectives, and Baseline Agenda for Designation

Description	<p>A Designation is an event where stakeholders come together to work collaboratively and solve a specific design challenge within a set timeframe, working on a broadly defined challenge for social good. This approach has proven especially effective when there is no clear vision or just a rough idea for an entirely new solution. The aim is to tackle the regional challenges regarding the feedstock, technology, social inclusion, the role of novel technologies, in Bioeconomy, training and skills development. Designations usually end with a hands-on product or solution.</p>
Objectives	<p>Designation is a collaborative and intensive event that brings together different Bioeconomy stakeholders to tackle complex problems and create innovative solutions. The objectives of Designation are to:</p> <ul style="list-style-type: none"> ● Foster Creativity and Innovation. ● Solve Real-world Problems and challenges. ● Promotes cross-functional Collaboration. ● Provides an intensive learning experience for participants. ● Provides an opportunity for participants to network and build relationships with other professionals in their field.
Baseline Agenda	<p>A Designation is an intensive event that typically lasts anywhere from 24 to 48 hours. During this time, participants work collaboratively to address a specific challenge or problem. Here is a baseline agenda for a Designation:</p> <ul style="list-style-type: none"> ● Registration ● Team Formulation ● Problem Definition ● Prototyping Session and Testing ● Mentorship sessions ● Finalization and Presentation of solutions

- **7.3.2 Focus Groups**

Table 14: Description and Baseline Agenda for Focus Groups

Description	<p>A focus group follows a simple yet impactful methodology to implement. It is a qualitative research method that brings together a small group of people (8-10 persons) to answer questions in a moderated setting. The group meets to explore and discuss a predefined topic and answers questions designed to shed light on a topic of interest. The group shares its feedback, opinions, knowledge, and insights about the topic at hand. Participants openly share opinions and are free to convince other participants of their ideas over discussion. The mediator/organiser takes notes on the discussion and opinions of group members. The right group members affect the results of the research, so it's vital that participants are selected members on the field under study.</p>
Baseline Agenda	<p>A baseline agenda for the focus groups could be the following:</p> <ul style="list-style-type: none"> ● Welcome and overview. Presentation of participants. ● 3-4 predetermined questions by the host. ● Discussing and merging the answers. ● Further engagement of the participants.

- 7.3.3 Co-Creation Workshop

Table 15: Co-Creation Workshop Stages

Description	The methodology of co-creation emerges from transformative processes in the entrepreneurial world and aims at generating new products and services. This approach has been taken up by other fields also, such as education. In the context of BEAMING, the co-creation workshops following the focus groups in each Region, are expected to capture and further expand the initial thoughts and needs of the local stakeholders.
Baseline Agenda	<p>A baseline agenda for a co-creation workshop could be the following:</p> <ul style="list-style-type: none"> • Welcome and introduction. • Project overview, objectives and outputs. • Scope of the workshop and previous results. • Brief presentation of the results of surveys and feedback from participants. • Discussion through interactive platform. • Conclusions and final remarks.
Methodologies	<p>The following indicative methodologies can be used from the CoP leader during a co-creation workshop. The methodologies encourage interaction, and exchange in a collaborative and creative way, bringing together people from different backgrounds to intentionally connect multiple ideas and perspectives on a topic by engaging participants in several rounds of conversation.</p> <ul style="list-style-type: none"> • World Cafe Method • Scenario Based Method
Outputs	The outcome of a co-creation activity can vary depending on the nature of the challenge and the goals of the event. Typically, co-creation activities aim to produce ideas and innovative solutions to real-world problems. The outcomes of a co-creation can include prototypes, designs, and ideas that have the potential to make a positive impact on society. The outcomes can be of different nature depending on the chosen aims and creative techniques. They can include videos, art, written texts as well as practical solutions or innovative ideas. Co-creation workshops will produce both creative and research outputs. Co-creation activities are considered a valuable means to foster collaboration and networking among participants,

which can lead to new professional opportunities and partnerships. Participants stakeholders can learn from each other's skills, experiences, and perspectives, which can enhance their own practices and broaden their horizons. In summary, the outcomes of co-creation workshops can include ideas, practical and innovative solutions to real-world problems, collaboration and networking opportunities, and the promotion of innovation.

- **7.3.4 Co-Design Workshop**

Table 16: Co-Design Workshop Stages

Description	<p>Co-design workshops are a space for “creative collaboration”. It is rooted in participatory procedures and aims to involve stakeholders in the early phases of the design process often referred to as “fuzzy front end”. The level of involvement can vary from informing the project to having the role ‘user-as-a-partner’ in designing, based on the idea that everyone can be creative. The emphasis is more on designing with the people rather than designing for the people. It is a tool for discovery and exploring opportunities rather than producing final solutions. The aim of regional co-design workshops in the BEAMING project is to define the key drivers for national Bioeconomy and provide the respective input and validation.</p>
Objectives	<p>Co-design workshops are collaborative sessions where stakeholders work together to design and develop solutions to complex problems. The objectives of co-design workshops are multi-faceted, and they go beyond merely designing a solution. Some of the primary objectives of co-design workshops are:</p> <ul style="list-style-type: none"> ● To promote collaboration and co-creation among stakeholders. ● To provide opportunity for stakeholders to voice their opinions and contribute to the design process. ● To drive better design outcomes as they bring together diverse perspectives, ideas, and skills. ● To help reduce the risk of failure by early identifying potential problems in the design process. ● Overall, the objectives of co-design workshops are to promote collaboration, empower stakeholders, improve design quality, increase buy-in, and reduce risk. <p>By achieving these objectives, co-design workshops can lead to better design outcomes and ultimately, more effective solutions to complex problems.</p>
Baseline Agenda	<p>A baseline agenda for the Co-design workshops could be the following:</p> <ul style="list-style-type: none"> ● Introduction: Introduce the workshop, its goals and explain the concept of Bioeconomy. ● Keynote speakers ● Group discussions ● Sharing ideas and perspectives ● Refinement and prioritisation ● Roadmap creation

Methodologies

- Conclusion

All the methodologies are indicative and partners may choose as they wish. When organising co-design workshops, there are several tools available to facilitate collaboration and creativity among participants. These tools can be combined and customised based on the specific needs and goals, ensuring a productive and collaborative environment for all participants.

- Appetiser Method
- Content Workshop Method

Outputs

Co-design workshops are a collaborative process that brings together stakeholders, designers, and end-users to co-create solutions for complex problems. The outputs of co-design workshops can vary depending on the goals of the workshop and the needs of the participants. Some possible outputs could be:

- A wealth of new ideas and concepts that address the problem at hand.
- Production of physical or digital prototypes and models that help stakeholders visualise and test potential solutions.
- Better understanding of their end-users by creating user personas and journey maps.
- Production of design principles and guidelines that help guide the design process.
- Delivery of action plans that outline the steps needed to implement the solutions generated during the workshop.

- 7.3.5 Policy Workshop

Table 17: Policy Workshop Stages

Description	<p>Policy workshops are structured meetings that are organised gatherings where policymakers, experts, stakeholders, and other interested parties come together to discuss, analyse, and develop policies related to a specific issue or topic. The workshop aims to identify the key policy issues, generate new ideas and solutions, develop consensus among participants, and inform policy development and implementation. Policy workshops typically involve a series of presentations, discussions, and interactive activities that allow participants to share their perspectives, knowledge, and experiences. The outcomes of policy workshops can include reports, policy briefs, and other materials that summarise the discussions and recommendations made during the workshop. These outcomes can be used to inform policy development, advocacy efforts, and other related activities. Policy workshops can be an important mechanism for engaging stakeholders and experts in the policy development process and promoting informed and evidence-based decision-making.</p>
Objectives	<p>The primary objectives of policy workshops include:</p> <ul style="list-style-type: none"> • Identify and define key policy issues related to a specific topic. • Provide a platform for participants to brainstorm and generate new ideas and solutions to address the identified policy issues. • Develop consensus among stakeholders and experts on the policy issues and solutions. • Engage Stakeholders: <p>In summary, the objectives of policy workshops include identifying and defining policy issues, generating ideas and solutions, developing consensus, informing policy development, and engaging stakeholders.</p>
Baseline Agenda	<p>A policy workshop is a gathering of policymakers, experts, stakeholders, and interested parties to discuss and develop policy proposals. The purpose of a policy workshop is to bring together diverse perspectives and knowledge to develop a shared understanding of a problem and potential solutions. A baseline agenda for a policy workshop could include the following:</p> <ul style="list-style-type: none"> • Introduction and Overview • Problem Identification • Bioeconomy Stakeholder Analysis • Brainstorming • Feasibility Assessment

	<ul style="list-style-type: none"> • Prioritisation • Action Planning <p>By following this baseline agenda, a policy workshop can provide a structured and collaborative approach to policy development that leverages the expertise and knowledge of diverse stakeholders.</p>
Methodologies	<p>The Case Method:</p> <ul style="list-style-type: none"> • Choose an appropriate case • Develop effective questions • Prepare participants groups • Set ground rules for the groups • Discuss and extract the conclusions
Outputs	<p>The outputs of a policy workshop are critical for translating the ideas and discussions generated during the workshop into actionable policy proposals. Some common outputs of a policy workshop:</p> <ul style="list-style-type: none"> • The most important output of a policy workshop is a set of policy recommendations that are developed based on the ideas generated during the workshop. These recommendations should be actionable, evidence-based, and feasible. • An action plan is a practical roadmap for implementing the policy recommendations and should outline the necessary steps, timelines, responsible parties, and resources needed to implement the policy proposals. • Policy briefs are concise documents that summarise the policy recommendations, providing background information, evidence, and arguments for why the recommendations are necessary and feasible. • A summary report is a comprehensive document that captures the key insights, findings, and recommendations from the policy workshop that can be used to inform future policymaking, research, and advocacy efforts. • Network and Partnership Building: Policy workshops provide an opportunity for stakeholders and experts to build relationships, identify areas of mutual interest, and explore potential partnerships that can support the implementation of the policy recommendations. <p>The outputs of a policy workshop should be actionable, evidence-based, and communicated in a way that engages policymakers, stakeholders, and the public. These outputs are critical for turning the ideas generated during the workshop into tangible policy solutions that can make a positive impact on society</p>

- **7.3.6 Mutual Learning**

Table 18: Description, Methodologies, and Outputs for Mutual Learning

Description	Mutual Learning (ML) events are a means of ensuring the engagement of all relevant groups and aim to tackle research and innovation related challenges by creating partnerships with a variety of perspectives, knowledge, and experience.
Methodologies	<p>Setting up the infrastructure and logistics for the ML event is a key part of the overall event design, especially in terms of resources used. The set-up comprises of nine key steps:</p> <ul style="list-style-type: none"> ● Draft a quality programme. Containing at least: <ul style="list-style-type: none"> ○ A small paragraph regarding the objectives of the project ○ A small paragraph outlining the issue/challenges to be addressed in the event ○ An outline of the objectives of the ML event ○ The key guiding questions ○ An agenda, including information on the venue and the catering if applicable ● Develop invitations and communicate with invitees ● Select at least two appropriate facilitators ● Find a functional venue ● Ensure facilitation and engagement tools are in place and work ● Regarding all outreach material and encouragements
Outputs	<p>Bioeconomy Mutual Learning is a great way to gather stakeholders from different sectors to discuss and share their ideas about how to create a sustainable economy based on the principles of Biotechnology, ecology, and circularity. During these workshops, participants often identify feedback loops that can help to strengthen the Bioeconomy and create more sustainable systems. Here are some of the feedback loops that have been identified in Bioeconomy CoPs workshops:</p> <ol style="list-style-type: none"> 1. The circularity feedbacks 2. The innovation feedbacks 3. The stakeholder feedbacks 4. The policy feedbacks 5. The ecosystem feedbacks <p>Feedback loops are critical for the success of the Bioeconomy, as they help to create a dynamic and adaptable system that can respond to the needs of stakeholders, policy makers, and the natural environment.</p>

When the organiser wants to collect feedback on the event in general and gather more detailed comments from participants, it is advisable to conduct the survey after the event.

Surveys to gather feedback from participants can take various forms, with responses being public or private, in the shape of a form or a note. Basic steps for a successful feedback loop are the following:

1. Collect data preferably by digital tools
2. Find a survey solution
3. Set the goals beforehand
4. Create different surveys for different audience segments
5. Design the feedback questionnaire

To deliver a successful feedback loop methodology and designing a feedback questionnaire, some tips should be remembered:

- Make the survey/questionnaire clear and simple to complete.
- Keep the survey as short as possible to achieve your objectives.
- Keep the questions as concise and clear as possible.
- Avoid non-essential questions.
- Alternate between closed and open questions.
- Ask questions about things you can do something about.

The present report has outlined a protocol for establishing the BEAMING structures, namely the Community of Practice (CoP) in the selected focal countries and regions of the project across Europe with a pan-European focus and engaging their members to provide the consortium with feedback and information to produce demand-driven results. More specifically, in the frame of the CoP protocol, the definition, the mission, and expected structure of CoP have been defined along with a selection process based on selection criteria to be followed by partners during the set-up phase of these structures. Moreover, guidelines and supporting documents have been elaborated for contacting and engaging stakeholders in project activities as well as principles for ensuring their effective inclusion. Additionally, the rights and duties of members, guidelines for CoP management, along with a list of activities in which the CoP members will be involved have been defined to ensure the smooth operation of CoP throughout the project. Methodologies and specific tools to organise events involving CoPs and receive feedback have been presented in this report to ease partners'

work and to set the common ground for activities' evolution. By using this guide, BEAMING partners are expected to start engaging the stakeholders in their regional CoP.

If the resulting activities are conducted online, each CoP will record the sessions in order to create a repository to compile the different activities carried out. The recordings can be used for dissemination purposes during the project lifetime in order to maximise and spread out the project outputs. CoPs leaders will be in contact with SIE to upload the recordings to the corresponding social media channels.

8. Time Plan for CoP activities

The time plan that needs to be followed by every partner for setting up a CoPs are presented below, with the duration of each step, to help CoP-Leaders throughout the action:

- All partners will receive from HUB_CR the templates of Terms of reference and Guidelines that help them to identify and select the stakeholders that would like to participate in the local CoP. They will also receive, by the first half of November 2024, all the necessary templates so as to invite the stakeholders.
- From November to December 2024, each partner should identify and select the stakeholders that would like to be part of the regional CoP, following the next steps:
- **Invite** stakeholders to join the CoP, by sending them the **Terms of Reference** and the **Declaration of Acceptance document**.
- **Finalise CoPs members invitations**, collect and engage the **signed Declarations of Acceptance** from each member **one month before the CoP kick-off**.
- SIE and HUB_CR will design a new page within the BEAMING website to explain the work, objectives, benefits, and goals of the CoP in order to provide general guidance to the users as well as

to engage with potential stakeholders that are interested in collaborating with the different CoP activities.

Workshops activities will begin by December 2024 (M11), and they'll be held in regular intervals until July 2025 (M30). Every stakeholder will receive, from the CoP Leader an invitation email at least two weeks before the beginning of each activity to inform them about the agenda and the workshop details.

Annexes

Annex I – Official Invitation Letter addressed to potential CoP Members

Subject: Invitation to join the Local Community of Practice of the EU-funded project BEAMING

Dear Stakeholder,

[Partner Name] as CoP Leader would like to invite you to join the BEAMING Community of Practice (CoP) that is set up in [your country] under the framework of the EU-funded BEAMING aims strategically to support the establishment of innovative governance models in the Bioeconomy to achieve better-informed decision-making processes, social engagement of all actors, and uptake of sustainable innovations in the Bioeconomy.

The Project will set up [xx] local Communities of Practice, in [xx] different countries/regions [List Countries] that bring together various local stakeholders: research and higher education organisations, industry and SMEs, policy makers and public administration but also citizens, NGOs & other societal groups. BEAMING applies a multistakeholder approach by bringing together different stakeholder groups, and strengthening already existing networks and initiatives with pioneers in the field. Therefore, the inclusion of bio-systems (industries, SMEs, researchers), active communities but also citizen's organisations, policy makers, and researcher's communities is one of the core activities of the project.

[Partner Name] is currently inviting selected key actors actively involved in the Bioeconomy sector from [country/region] to form the Community of Practice, to be actively involved in the project. You have been

identified and selected as an important member of the Bioeconomy stakeholder system within your [country/region] and we would be delighted to have you on board! In order to get a better overview of the project and your expected involvement as a member of the Community of Practice, you can find further information in the attached Terms of Reference.

Please let us know if you are interested in becoming a member of the BEAMING Community of Practice in [country/region], by replying to this email by [dd.mm.yyyy] and by sending us back a signed Declaration of Acceptance- using the attached template.

Should you have any further questions about the project or the Community of Practice, please do not hesitate to contact us.

We are looking forward to hearing from you!

Yours Sincerely,

[Full Name]

CoP Leader

Annex II – Terms of Reference for the CoP

Introduction

You have been invited to the **BEAMING Community of Practice (CoP)** in [country/region]. The current document outlines the Terms of Reference that will help you understand what this involves before you decide to participate. Please take the time to carefully read this document and ask for any clarifications you may require. Questions may be sent to [Mr/Mrs/Dr] [Name] [(email address)], responsible person and leader of the CoP.

The Community of Practice (CoP) is a regional network of stakeholders coming from across the entire value chain of the Bioeconomy sector as well as researchers, policy makers groups representing civil society, development, and inclusion of bio-systems (industries, SMEs) reaching a balanced participation.

[National CoP] will engage various stakeholders in relevant workshops (to be organised by the consortium partners in their respective countries/regions from [dd.mm.yyyy] to [dd.mm.yyyy], to record their feedback and knowledge as well as their suggestions. The CoP Members will actively participate in the project, identifying needs, skill gaps, and possibilities in the Bioeconomy sector as a vehicle to raise awareness and engage people in Bioeconomy.

BEAMING in a nutshell

BEAMING is a four-year project (January 2024 to December 2028) funded by the Horizon Europe program, composed of 17 experienced partners that will operationalize the project's activities in 9 EU countries: (Hungary, Czech Republic, Bulgaria, Greece, Croatia, Romania, Germany, Austria, Spain) and 4 non-EU countries: (Serbia, Bosnia & Herzegovina, N. Macedonia, Albania). Ten (10) out of those 13 countries are widening countries.

The Bioeconomy is expected to be a motor for sustainability and a solution to a number of ecological and social challenges, including climate change, mitigation, cleaner production processes, economic growth, and new employment opportunities. However, despite all the efforts, the transition toward a sustainable Bioeconomy is progressing too slowly, and there is a need to establish the means for exploring new paths to govern the transition process.

BEAMING will contribute to detecting the potential in widening countries and to establishing innovative governance models in the Bioeconomy, providing an inclusive training and mentoring framework, aiming to build a bridge between knowledge and skills in the Bioeconomy, secured by an effective governance.

Among the main activities of the BEAMING project, we highlight:

- Identify existing actions of good practices in the selected regions.
- Assess the regions' specificities, such as economic characteristics, regulatory/political barriers, educational/training availabilities, skills, and jobs in demand in the Bioeconomy, in order to develop governance and training resources tailored to the regions.
- Bring together – key actors from research and higher education organisations, industry, businesses (SMEs), policy makers and administrations, NGOs, active communities, and citizens and wider society into the selected regional Communities of Practice that will operate in their region.

You can find out more information about BEAMING and the consortium by visiting <https://beamingproject.eu/>

Role

The BEAMING CoP are set-up and operated to share knowledge, expertise, and feedback with the consortium of the project in key implementation stages. The role of CoP in the context of the project may be summed up as follows:

- **Provide relevant information to the BEAMING consortium** by participating (based on voluntary) in training events/workshops of the project, involve on related discussions, share knowledge, exchange experience (peer to peer dialog) on good practices, the results of which will procure a basis for the fine-tuning, roll-out and replication of the BEAMING framework.
- **Support the network for bio-based stakeholders** in the transition towards Bioeconomy and identifying key elements.
- **Provide case studies** by participating in discussions on selected relevant topics, and retraining availabilities in the region, by identifying the skills gaps and policies' limitations.

To fulfil this role, it is envisaged that local CoPs, during the project, will operate through physical and digital means in the project activities. The main outcome of CoPs is to offer feedback loop from the society to the policy makers using the inclusive methods as designations, co-design, policy bio-based workshops, and best practice guidelines for local operators and innovation developers and interact, if necessary, in multi stakeholders' consultation.

Benefits

The project provides several benefits to its CoP's members, such as Networking opportunities and possibilities for new collaborations arising from the participation in project events and workshops:

- First-hand access to meaningful insights, knowledge and practical tools generated exclusively within the context of the project and its activities.
- Unique opportunity to align the services offered by the BEAMING guidelines and training framework with the needs of their stakeholders to ensure that they make the most out of its value propositions.
- Wider understanding of biosystems and key enablers in Bioeconomy as balanced local potentials and innovation within the framework of

local development and investment as well as national sustainability-driven policy.

- Gain adequate information and guidelines that respond to the need of bio-systems in each region and contribute to the transition to Bioeconomy.
- Develop exchanges within strategic alliances and skills leading to novel business models or novel job descriptions.

Terms of membership

CoPs shall be composed of individuals coming from diverse backgrounds to offer a blend of expertise and perspectives that represent various stakeholder groups from the Bioeconomy sector (such as higher educational organisations and researchers, vocational educational organisations, biosystems stakeholders, SMEs, public authorities, policy makers, NGOs etc.). These individuals will provide BEAMING with valuable knowledge and feedback to support the project's vision of training guidelines and the implementation of collaboratively developed results. Along these lines, at the beginning of the project, approximately 20-25 members in each country/local CoP will be selected to draw from additional expertise and increase the outreach of BEAMING. New members could be appointed to the CoP when necessary and as the project evolves.

Although members of the CoP may be selected because of their affiliations with key organisations, they serve on the CoP in their individual capacity to represent the interests and views of their stakeholder communities. Members of the CoP are appointed for the entire duration of the project's CoP. If, for any reason, a CoP member wants to step back from his/her role, the CoP Leader should be informed, and – if possible – another expert may be suggested as a replacement to carry out the role expected.

Participation in the CoP is entirely voluntary. There will be no adverse consequences if a CoP member decides not to participate or to withdraw at any stage. In fact, CoP members may withdraw their

participation at any time by informing the Cop Leader, in terms of good communication and mutual positive attitude. They may also request their data to be withdrawn without giving a reason and without prejudice. Anonymous data already collected may be used because this information cannot be traced back to a specific person, but no further data or input will be collected, nor will any other procedure be carried out in relation to the specific member.

Management

Each local CoP is managed by the CoP Leader who handles communications and interactions with the CoP. The Leader will also ensure that for each task requiring input from the CoP, an action plan and all necessary briefings and materials have been prepared beforehand.

Contact point

Any enquiry, complaint, or concern about any aspect of the experience as a member of the Community of Practices can be addressed to the CoP Leader who oversees the set up and manages the [country/region] Community of Practice. The contact details of the Regional CoP Leader are provided below:

CoP Leader: [person or organization serving as CoP leader]

Contact person: [name]

Phone: [phone number]

Email: [email address]

Annex III – Declaration of Acceptance for CoP Members

Declaration of Acceptance

(For individuals appointed as members of the BEAMING [country] Community of Practice in their individual capacity)

I, the undersigned, [name] certify that I have read and agree to abide by the BEAMING Community of Practice Terms of Reference.

I agree to participate in the BEAMING Community of Practice in [country/region] in my individual capacity, and as such, I may not delegate another person to carry out the work. If, for any reason, I may want to step back from my role, the CoP Leader should be informed, and – if possible – another expert may be suggested as a replacement to carry out the role expected.

I certify that no conflict of interests exists that could be considered as prejudicial to my independence in acting as a member of the BEAMING Community of Practice in [country/region].

I undertake not to divulge any information given in the context of the work of the [country/region] Community of Practice unless the BEAMING consortium agrees to release me from this obligation and to respect the confidentiality requirements.

I declare that I accept my appointment as a BEAMING Community of Practice member entirely and with no reservations as described in the Terms of Reference.

I consent that any input or contribution I provide as a member of the BEAMING Community of Practice may be used by the BEAMING consortium for reporting purposes or to align the services and tools offered by BEAMING with the needs of final users to ensure that they make the most out of its value propositions.

I consent to the processing of my personal data needed for my participation in the BEAMING Community of Practice. A detailed description of how BEAMING handles personal data is presented in the project's Privacy Policy, available through the project's web page at <https://beamingproject.eu/>

[Place], 4 November 2024

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[name]

CoP Member

Annex IV – Memorandum of Cooperation

MEMORANDUM OF COOPERATION

Between

[name of CoP Leader], as CoP Leader in [country/region].

And

[name of CoP member], as a Member of CoP on Community of Practice (CoP), BEAMING project.

BEAMING Community of Practice (CoP) is conceived as a setup of [xx] local Communities of Practice (in [xx] different countries/regions) that bring together various local stakeholders: research and education organisations, policy and decision makers, industries and businesses, citizens, NGOs, etc.

BEAMING applies a multi-stakeholder approach by bringing together the different stakeholder groups, by strengthening already existing networks and initiatives with pioneers in the field.

Subject of the Memorandum

The subject of this memorandum is the commitment of the involved parties to be part of the [country/region] Community of Practice (CoP) of the BEAMING project, as an important member of the Bioeconomy stakeholder system and local resources within each country, selected to support better-informed decision-making processes, social engagement between actors and sustainable innovations in Bioeconomy.

Rights and obligations of the involved parties

1. A member of the [country/region] Community of Practice (CoP) has the right to be presented on the website of the BEAMING, which is managed by the BEAMING Dissemination and Communication team. The scope of the data published on the website of Community of Practice (CoP) is determined by the Member of the [country/region]

Community of Practice (CoP), who, by signing this Memorandum expresses his consent to their publication.

2. A member of the Community of Practice (CoP) has the right to a presentation within the database of stakeholders created in the context of the BEAMING project. The scope of data and consent to publication is regulated separately in the context of a signed Informed Consent Form.
3. A member of the [country/region] Community of Practice (CoP) has the right to use the logo of BEAMING and other elements of the project identity. Member of the Community of Practice (CoP) has an obligation to comply with the rules set out in the BEAMING Dissemination and Communication Plan, in particular not to use the logo in situations leading to the dishonour of BEAMING and/or activities that contradict the principles of the Bioeconomy.

Final Provisions

1. The involved parties undertake to develop activities related to the achievement of the purpose of this memorandum and bear full responsibility for the implementation of activities and the fulfilment of the resulting obligations from I. and II. this contract.
2. Each of the involved parties is obliged to refrain from any activity that could make it impossible or difficult to achieve the purpose of this memorandum. Furthermore, each of the involved parties is obliged to refrain from any actions that could endanger the interests of other involved parties in connection with the achievement of the purpose of this memorandum.
3. The involved parties are obliged to act ethically, correctly, and transparently during the implementation of the Project and in accordance with good manners.
4. The signatories of this memorandum express their willingness to cooperate with each other in the areas defined herein by the memorandum in the forms indicated here.
5. The memorandum is an expression of the free will of its signatories.

6. This memorandum can only be changed and supplemented by accepted written amendments and signed by all signatories.
7. The memorandum is drawn up in two copies, with each signatory receiving one copy. This memorandum of cooperation is entered into force

[Place], 4 November 2024

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CoP Leader

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CoP Member

Annex V – Informed Consent Form for CoP members

Informed Consent Form

BEAMING Consortium:

Budapest University of Technology and Economics (BME) coordinates the BEAMING project funded by the European Union under the Horizon Europe Framework Program for Research and Innovation. A detailed description of how the project handles personal data is presented in the project's Privacy Policy that accompanies this Consent Form, also available through the project's website <https://beamingproject.eu/>. Apart from this, [name of partner] has issued its own Privacy Policy available here [please insert a link if exists].

Project: BEAMING – *Bioeconomy excellence alliance for stimulating innovative and inclusive green transition*. (GA Number 101137131).

CoP Partner: [Organization name and contact details]

Table V_1: Responsible Persons

#	Role	Name	Email
1	BEAMING Project Manager	[xxx]	[xxx]
2	CoP Leader	[xxx]	[xxx]
3	Data Protection Officer	[xxx]	[xxx]
4	Contact Person	[xxx]	[xxx]

We need you to participate in the BEAMING Community of Practice (CoP) with a view to participating in project activities, including events, workshops, focus groups, interviews, and provide your views and feedback to validate guidelines for setting up the regional Bioeconomy context. To effectively carry out the activities of the Community of Practice, we need to process some of your personal data:

- Your contact details (full name, email, phone number)
- Some basic demographics (age, gender)
- Your professional info (organisation, job position, field of expertise)
- Your education info (level of education, domain, specialisation)
- Your opinions on the subject matter(s) of relevant events.

We need your data to contact you in order to plan and carry out activities related to the CoP and to resolve any ambiguities, questions, and other issues that may arise after and as a result of your participation in such activities. We will keep your data to keep track of the implementation of the activities. The project's deliverables that will be derived from activities in which you participate will not include your personal data or any other information that could identify you.

We are obliged and may grant access to your data to:

- EU officials, such as our Project Officer, for purposes related to the project's evaluation.
- EU agencies and other authorities are responsible for the project's auditing purposes.

We would also be very happy if you gave us your consent to contact you in the future to ask you to participate in other project activities (e.g., surveys, interviews, project events, etc.) and also to inform you about the project's progress (e.g. by sending you a newsletter or similar messages).

Furthermore, as we consider you to be a key stakeholder in the Bioeconomy sector, we would like to form a stronger bond with you, so we ask for your consent to contact you to participate in similar projects that we may undertake in the future.

You should know that you can withdraw your consent at any time by communicating either on the phone or by email with the responsible persons listed above. With regards to the informational messages and newsletters, you can always opt out by simply clicking the link

"Unsubscribe" or similar, which is included at the end of all the relevant messages.

I hereby give my consent to the processing of my personal data needed for:

(Please, tick the boxes below to confirm that you give us your consent for the respective subject. Any boxes left unticked mean that you do not consent to the relevant subject.)

Table V_2. Consent details

#	Consent Subject	Tick Box
1	My participation in the CoP and its related activities with a view to support research activities of the project, as well as the development and validation of Bioeconomy actions and mentoring BEAMING guidelines.	
2	My participation in regional Innovation Group. (Innovation Groups connect the most influential players in transition to Bioeconomy)	
3	My participation in future activities of BEAMING	
4	Receiving newsletters and messages regarding the BEAMING activities	
5	My participation in similar projects that name of partner may undertake in the future	

[Place], 4 November 2024

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CoP Partner

Annex VI – Stakeholder Matrix Template

Table VI_1. Internal Stakeholder Matrix – Demographic Data

Internal Stakeholder Matrix – Demographic Data								
#	Organisation Name	Type	Address Country	Contact Person	Age	Gender	Email Address	Phone Number
1								
2								
3								

Table VI_2. Internal Stakeholder Matrix – Project Activities I

Internal Stakeholder Matrix – Project Activities I								
#	Inter-views	Designation Workshops	Focus Groups	Co- Creation Workshops	Co-Design Workshops	Policy Networks	Mutual Learning	EU Frame Workshops
1								
2								
3								

Table VI_3. Internal Stakeholder Matrix – Project Activities II

Internal Stakeholder Matrix – Project Activities II					
#	Date	Brief Description	Partner(s) Involved	Total Attendees	Link to recording (if applicable)
1					
2					
3					