METHODOLOGY FOR ASSESSMENT OF E-BIO-BUSINESS SUPPORTERS

eRural Resilience – Interreg Baltic Sea Region

Contents

1. INTRODUCTION

1.1. The Programme: Interreg Baltic Sea Region

INTERREG BALTIC SEA REGION is a European Union funding programme that supports transnational cooperation.

Interreg Baltic Sea Region covers nine countries, eight of them EU Member States (Denmark, Estonia, Finland, Germany, Latvia, Lithuania, Poland and Sweden) and one third country (Norway). The European Commission has suspended the participation of the Russian Federation and the Republic of Belarus in the cooperation programme "(Interreg VI-B) Baltic Sea region" 2021-2027 following Russia's unprovoked and unjustified military invasion of Ukraine, and Belarus involvement, and in light of the European Council Conclusions of 24 February 2022.

The Programme covers an area of around 2.9 million km² with a population of 80 million inhabitants. It stretches from central parts of Europe up to its northernmost periphery. The programme area comprises European metropolitan areas such as Berlin, Copenhagen, Helsinki, Oslo, Stockholm and Warsaw. Still, major parts of the programme area are counted as rural. Settlement structures in the south are denser. Most rural areas are in close proximity to a city. In the northern, and to some degree also in the eastern part of the region, often, rural regions are characterised as remote. The Arctic regions in the northernmost part of the programme area represent specific challenges and opportunities in respect of remoteness, geographic and climate conditions.

The Baltic Sea region is characterised by regional differences. At the same time, the countries and regions share joint challenges. In the past two decades, many of them have successfully been addressed through transnational cooperation. A wide range of networks at national, regional and local level as well as between business, the academic sector, and civil society have long been established. They contribute effectively to the territorial development in the region. Since 2009, the EU Strategy for the Baltic Sea Region (EUSBSR) has framed cooperation in the area. The policy areas and activities are defined in the accompanying action plan.

The EUSBSR and its Action Plan provide the central reference to the Programme identifying the main joint challenges and cooperation needs in the region. In addition, the Programme draws upon a large number of existing analyses, visions and strategies pointing out the cooperation needs for the region. The Programme is built on vast experience gained from previous programme periods as well as on the know-how of experienced pan-Baltic stakeholders and networks. In 2019, a review of strategic priorities in the BSR was carried out. Relevant pan-Baltic and national documents were systematically screened and analysed. The main findings regarding potential priorities for the Programme 2021-2027 were filtered out. Following the review, a Joint Programming Committee (JPC) was set up. Supported by the Managing Authority and the Joint Secretariat, the JPC selected the priorities for the Programme.

1.2. The Project: eRural Resilience: Creating resilient rural communities in BSR based on the opportunities of digital bio business

The attractiveness of living in the countryside with a great quality of life may have grown over the past few years (specially pushed by COVID crisis), but rural areas still battle with problems that prevent people from staying there, so the divide between urban and rural areas is growing, and BSR needs to enhance the focus on rural areas (Interreg BSR final evaluation report).

Local authorities, business support centres, SME associations, NGOs… they work daily in the implementation of solutions for the promoting of rural business, but they need to overcome barriers of the rurality itself (limited local market, high cost of utilities or transport, deficit of skills, etc.).

In this framework, many promising solutions come from the combination of the digital transition and green transition. A better use of renewable biological resources in the rural communities, and their conversion into food, livestock feed or bio-based higher valued products, can be a success if the rural producers can find a proper market to place these high value products.

Thus, communities need to build up full digital capacities of business (e-business), while they create bio-products that reflect rural value yet are globally acceptable (bio-business), converting the current SMEs into e-bio-business.

However, there are clear challenges to be solved by local actors:
- They don't have the technical knowledge to support the conversion of classical natural resources into higher valued products, nor the knowledge required for specific benchmarking of bio-business plans.
- Even if the staff have general knowledge about the topic, they need to reinforce their capacities to support SMEs about the emerging selling platforms for bio-products, the rightness of each selling channel per product, the general logistic and packaging system, etc.

The project aims to provide the target groups, rural local authorities and business promotion centres, with a holistic solution to support the creation of e-bio-businesses in rural areas.

2. NEEDS OF THE SECTOR

The increasing recognition of the need to mitigate the effects of population growth, wealth increase and human consumption is currently leading several international organisations, such as the European Union, the Organisation for Economic Cooperation and Development and the United Nations, to consensually highlight the need for a significant change in our economic system, in order to respect the planetary boundaries. In this context, Circular Economy has emerged as a key approach to support sustainability transition and enhance industry competitiveness, towards sustainable growth.

The allure of rural living has increased in recent years, particularly accelerated by the impact of COVID-19. Even businesses are drawn to the prospect of combining green initiatives with digital transition, particularly with the rise of telework. Nonetheless, despite these promising trends, BSR rural areas still battle with challenges that prevent residents from staying there, perpetuating the widening gap between urban and rural communities.

Rural areas typically have smaller populations and markets compared to urban areas. This limited customer base can pose challenges for businesses, especially those operating in niche markets or offering specialized products or services. Rural companies may need to adapt their business models to explore ways to reach broader markets beyond their immediate communities.

Furthermore, in an increasingly interconnected world, digitalization has become a pivotal force driving economic growth, innovation, and social transformation. However, while urban centers thrive in the digital age, rural areas often lag behind, facing significant challenges in accessing and leveraging digital technologies.

The need for the combination of the digital transition and green transition will lead to significant changes in the way of conceiving production along the entire value chain ultimately requiring companies to adapt existing business strategies and models. In this context, Business Support Organizations (BSOs) need to be updated and help small rural businesses into this transition.

The emergence of such trends will require BSOs to tackle various challenges such as rethinking production processes and dynamics along the entire supply chains, increasing their digitalization level as well as redefining the production of bio-products. Small- and medium-sized enterprises (SMEs) will be particularly challenged to adapt their current business strategies to digitalization, involving higher levels of industrial automation and information technologies, and BSOs will need the right competences in order to boost these rural SMEs.

In fact, while several large companies have already anticipated the potential and risks of digitization and initiated innovation processes, on the other hand, SMEs are facing difficulties to adopt these solutions. SME specific challenges concern limited knowledge of bio and digital potential, benchmarking of bio-products, thematic selling platforms, marketing channels, logistic, packaging, etc. All of it is seen as a complex combination, which is usually not covered by the current competences of local business centres. Also, the changing e-market channels options, product labelling, logistic, etc. will require an upgrading of local actors' capacities.

Rural authorities, and business promotion bodies in BSR, are promoting local businesses that can convert renewable biological resources into higher valued products, but the limited local market is not big enough in clients, so this new bio-businesses promotion has to be linked to digitalization, with the focus of covering urban or international markets.

SME associations, Chambers of Commerce, clusters and business support units, especially those specialized in bio or digitalization, are linked to the day-to-day work of SMEs, entrepreneurs and businesses, which are key for testing the project solutions. This Methodology will help them assess their capacity to support e-bio- business, identify their gaps and cover the gaps with capacity building and external expertise.

3. SYSTEM FOR THE EVALUATION OF INSTITUTIONS

3.1. Introduction to self-assessment

A **self-assessment** is a continuing process through which managers at all levels evaluate the effectiveness of their performance in all areas of responsibility, and determine what improvements are required.

Self-assessing involves examining ourselves, our company or our daily actions with the main goal of providing the stakeholders with an output where strengths and weaknesses are identified. If properly designed, the self-assessment system can provide the necessary level of completeness and reliability of the information presented in it, considering the requirements for the level of corporate transparency and disclosure.

Once conducted the assessment, knowing the core competencies of the organization as well as the debilities, a performance improvement process in line with the organization strategy through action plans can be carried out.

Since one is not usually objective of its everyday performance evaluation, self-assessing is often conducted by external consultants or using available self-assessing tools. This way, the user will get the best of the assessing process since most valuable information about the organization's processes, results and structure will be extracted.

Self-assessing the company helps the senior leadership team understanding where is the company in terms of performance. Another valuable output of a self-assessment process is the benchmarking analysis that can be conducted. Since data from several companies are gathered during the self-assessment process, necessary information is obtained in order not just to measure the company performance but to compare it with selected competitor results. Benchmarking is defined as the process of comparing and measuring your organization against others, anywhere in the world, to gain information on philosophies, practices, and measures that will help your organization take action to improve its performance.

3.2. Self-assessment system for e-bio-business supporters

The primary goal of the process is to identify strengths and weaknesses of BSOs in order to prioritize improvement efforts, this should be carried out measuring the organization performance.

Along a self-assessment process, there is a section, after data analysis where performance improvement suggestions are provided. Due to this competitive environment where organizations stand nowadays, the key to survive is to be flexible and agile. Flexible business support organizations able to respond quickly to demand will be able to adapt their responses to actual e-bio-business's needs.

Once the improvement efforts have been prioritized and an alternative to achieve this improvement selected, is time to transfer the plan to the employees' everyday actions. Implementation is as important as ideas generations since ideas which are not developed will not provide the organization with any benefit.

The step between ideas generation and start working towards their achievement is called action plan. The term "action plan" refers to specific actions that respond to short- and longer-term strategic objectives. Action plans include details of resource commitments and time horizons for

accomplishment. Action plan development represents the critical stage in planning when strategic objectives and goals are made specific so that effective, organization-wide understanding and deployment are possible. Deployment also might require specialized training for some employees or recruitment of personnel.

Data will be collected using different methods, including questionnaires, video-interviews, audits, tests, financial reports, etc.

The BSO will be asked to provide information about its organization regarding 4 Sections divided into 15 subsections, which are the 15 main competencies described in "ANNEX 1. Competency Profile". In the expanded form, the self-assessment system will contain a set of questionnaires with 4-5 choices of answer. Their filling will be carried out by different structural organizational units.

In order to gather all information, a **Likert scale** will be useful. A Likert scale is a rating scale used to measure opinions, attitudes, or behaviours. It consists of a statement or a question, followed by a series of five or seven answer statements. Respondents choose the option that best corresponds with how they feel about the statement or question.

STEP 1: Questionnaires to Managing Directors

In the initial stage of the self-assessment process, the principal director of the BSO will be tasked with responding to a structured questionnaire designed to evaluate various competencies essential for effective e-bio-business support within rural SMEs.

Drawing upon an extensive review of relevant literature, five foundational competencies pertinent to e-bio-business support were identified. These competencies encompass Business and Management, Digital Know-how, Understanding of Biological Production and Sustainability principles, and Proficiency in Networking. The questionnaire will incorporate inquiries into the knowledge, skills, and attitudes requisite for proficient e-bio-business support, as described in "ANNEX 1. Competency Profile".

Utilizing a 5-point Likert scale, respondents will indicate the extent of their agreement with each statement presented:
1- Strongly disagree
2- Disagree
3- Neither agree or disagree
4- Agree
5- Strongly agree

The questionnaire aims to furnish a comprehensive assessment of managing directors' capabilities in strategic management, digital awareness, comprehension of biological processes and sustainability imperatives, as well as networking proficiency. This evaluative feature is particularly salient for large organizations characterized by diverse responsibilities across disparate business units.

Validation Workshop – TPM Schwerin

In the Validation Workshop that was held in Schwerin, Germany, on 16-17 May 2024, partners evaluated the questionnaires for Managing Directors and agreed on new questions. Partners were sorted into 5 groups, and had to agree on 4 questions, one per competency category

(Business and Management, Digital Know-How, Biological Production and Sustainability and Networking).

Questions were thoroughly decided and agreed among all partners in the group, and cover the topics that partners believe are the most challenging when supporting the transition of SMEs into e-bio-businesses. At the end of the Validation Workshop, 20 new questions were agreed on by all consortium.

Here is the final questionnaire for Managing Directors agreed on the Validation workshop:

Business and Management

1. Our organization effectively aligns its strategic goals with its day-to-day operations.
- 1: Strongly disagree
- 2: Disagree
- 3: Neither agree nor disagree
- 4: Agree
- 5: Strongly agree
2. Our organization's strategy includes our role in the support of bioeconomy and digitalization.
- 1: Strongly disagree
- 2: Disagree
- 3: Neither agree nor disagree
- 4: Agree
- 5: Strongly agree
3. Strategy goals are communicated internally and externally.
- 1: Strongly disagree
- 2: Disagree
- 3: Neither agree nor disagree
- 4: Agree
- 5: Strongly agree
4. We have initiatives or efforts currently in place to advance our bioeconomy and digitalization objectives.
- 1: Strongly disagree
- 2: Disagree
- 3: Neither agree nor disagree
- 4: Agree
- 5: Strongly agree
5. We have performance metrics on track to measure our efficiency in bioeconomy and digitalization-related operations.
- 1: Strongly disagree
- 2: Disagree
- 3: Neither agree nor disagree
- 4: Agree
- 5: Strongly agree
6. We are competent to support our customers in developing their business and management.
- 1: Strongly disagree
- 2: Disagree
- 3: Neither agree nor disagree

| - 4: Agree |
| - 5: Strongly agree |

Table 1. Questionnaire for Managing Directors in the Business and Management field.

Digital Know-how

| 1. We stay informed about trends and developments in the digitalization sector. |
| - 1: Strongly disagree |
| - 2: Disagree |
| - 3: Neither agree nor disagree |
| - 4: Agree |
| - 5: Strongly agree |
| 2. We have knowledge about the current digitalization level of SMEs in our region. |
| - 1: Strongly disagree |
| - 2: Disagree |
| - 3: Neither agree nor disagree |
| - 4: Agree |
| - 5: Strongly agree |
| 3. We are aware of the digitalization needs of SMEs. |
| - 1: Strongly disagree |
| - 2: Disagree |
| - 3: Neither agree nor disagree |
| - 4: Agree |
| - 5: Strongly agree |
| 4. We have sufficient internal or external staff/workforce resources available competent in digitalization. |
| - 1: Strongly disagree |
| - 2: Disagree |
| - 3: Neither agree nor disagree |
| - 4: Agree |
| - 5: Strongly agree |
| 5. In our consultation process digitalization play a crucial role. |
| - 1: Strongly disagree |
| - 2: Disagree |
| - 3: Neither agree nor disagree |
| - 4: Agree |
| - 5: Strongly agree |

Table 2. Questionnaire for Managing Directors in the Digital Know-how field.

Biological Production and Sustainability

| 1. We stay informed about trends and developments in the bioeconomy sector. |
| - 1: Strongly disagree |
| - 2: Disagree |
| - 3: Neither agree nor disagree |

- 4: Agree
- 5: Strongly agree
2. We have access to current data related to the bioeconomy in our region.
- 1: Strongly disagree
- 2: Disagree
- 3: Neither agree nor disagree
- 4: Agree
- 5: Strongly agree
3. We have sufficient internal or external staff/workforce resources available competent in bioeconomy.
- 1: Strongly disagree
- 2: Disagree
- 3: Neither agree nor disagree
- 4: Agree
- 5: Strongly agree
4. Our team has received training in the latest sustainable agricultural techniques.
- 1: Strongly disagree
- 2: Disagree
- 3: Neither agree nor disagree
- 4: Agree
- 5: Strongly agree
5. We provide clients with information on the benefits of adopting sustainable practices.
- 1: Strongly disagree
- 2: Disagree
- 3: Neither agree nor disagree
- 4: Agree
- 5: Strongly agree

Table 3. Questionnaire for Managing Directors in the Biological Production and Sustainability field.

Networking

1. We know of and engage with other key stakeholders in our region/internationally in the bioeconomy and digitalization.
- 1 - Strongly disagree
- 2 - Disagree
- 3 - Neither agree nor disagree
- 4 - Agree
- 5 - Strongly agree
2. We have partnerships or collaborations in place to support developments in bioeconomy.
- 1 - Strongly disagree
- 2 - Disagree
- 3 - Neither agree nor disagree
- 4 - Agree
- 5 - Strongly agree

3. We have partnerships or collaborations in place to support digitalization initiatives.
- 1 - Strongly disagree
- 2 - Disagree
- 3 - Neither agree nor disagree
- 4 - Agree
- 5 - Strongly agree
4. We actively communicate our bioeconomy and digitalization efforts and achievements to stakeholders and the general public.
- 1: Strongly disagree
- 2: Disagree
- 3: Neither agree nor disagree
- 4: Agree
- 5: Strongly agree
5. Our organisation is confident in the workers' ability to represent the organization positively and build rapport with key stakeholders during networking events.
- 1: Strongly disagree
- 2: Disagree
- 3: Neither agree nor disagree
- 4: Agree
- 5: Strongly agree
6. Our organisation actively creates opportunities for rural companies to network.
- 1: Strongly disagree
- 2: Disagree
- 3: Neither agree nor disagree
- 4: Agree
- 5: Strongly agree

Table 4. Questionnaire for Managing Directors in the Networking field.

STEP 2: Questionnaires to Employees

In the second stage of the self-assessment process, a group of approximately 10-30 % of the employees from within the BSO will be invited to participate in a structured questionnaire aimed at gauging their perceived proficiency levels across various competencies essential for effective functioning within an e-bio-business support framework.

The proficiency levels are expounded upon in detail in "ANNEX 1. Competency Profile", delineating 15 distinct competencies crucial for organizational success. These proficiency levels span from Fundamental to Expert, with each level corresponding to differing degrees of mastery within a given competency.

The questionnaire will employ a 4-point Likert scale to capture the respondents' self-assessment:

1- Fundamental (basic knowledge): to have common knowledge or an understanding of basic techniques and concepts.
2- Intermediate (practical application): to have applied the competency to situations occasionally while needing minimal guidance to perform successfully.
3- Advanced (applied theory): to be capable of coaching others in the application of the competency.
4- Expert (recognized authority): to create new applications for and/or lead the development of reference and resource materials for this competency.

These questions serve the dual purpose of fostering company-wide assessment while facilitating cross-functional collaboration. By engaging colleagues from diverse functions, the questionnaire ensures a comprehensive evaluation of the organization's competencies, thereby mitigating the risk of bias inherent in relying solely on a single representative from the BSO. This approach fosters a more holistic understanding of the company's capabilities and promotes collaboration across functional boundaries.

Example of a questionnaire for employees of e-bio-business supporters:

		Fundamental	Intermediate	Advanced	Expert
Level of proficiency		(Basic knowledge)	(Practical application)	(Applied theory)	(Recognized authority)
Business and Management	**1.1. Strategy and Planning**	I have limited understanding and awareness of strategic planning concepts.	I can analyze basic market trends and competitive landscapes, but with some guidance.	I can develop strategic plans with moderate complexity and alignment to goals.	I have successfully led strategic planning initiatives and driven significant organizational transformation.
	1.2. Financial Management	I have limited familiarity with basic financial concepts.	I can create and manage budgets with some guidance and supervision.	I can conduct financial analysis and forecasting independently.	I have successfully optimized financial performance and mitigated risks through strategic financial management.
	1.3. Marketing and Sales	I have limited understanding of marketing	I can develop basic marketing	I can execute marketing campaigns and	I have successfully driven

		and sales concepts.	strategies and sales plans with some guidance.	sales initiatives independently.	significant growth through strategic marketing and sales efforts.
	1.4. Leader and people Management	I have limited familiarity with basic leadership and people management concepts.	I can effectively communicate and motivate team members with some guidance.	I can effectively manage performance, coach, and mentor team members independently.	I have successfully inspired and empowered teams to achieve exceptional results.
	1.5. Operational Management	I have limited understanding of basic operational management principles.	I can identify and implement process improvements with some guidance.	I can manage complex operational processes and optimize resource allocation independently.	I have successfully streamlined operations and driven continuous improvement across the organization.
Digital know how	**2.1. Digital Strategy Development**	I have limited familiarity with basic digital strategy concepts.	I can analyze market trends and competitive landscapes with some guidance.	I can develop comprehensive digital strategies independently.	I have successfully led digital transformation initiatives and driven organizational change.
	2.2. E-commerce Enablement	I have limited familiarity with basic e-commerce concepts.	I can set up and manage basic e-commerce platforms with some guidance.	I can scale and optimize e-commerce operations independently.	I have successfully led e-commerce initiatives and driven significant revenue growth.
	2.3. Cybersecurity Awareness	I have limited familiarity with basic cybersecurity threats and measures.	I can identify and mitigate common cybersecurity risks with some guidance.	I can implement cybersecurity best practices independently.	I have successfully developed and implemented comprehensive cybersecurity strategies.
	2.4. Legal and Regulatory Knowledge	I have limited familiarity with basic legal and regulatory requirements.	I can navigate and ensure compliance with relevant legal and regulatory	I can develop and implement legal and regulatory compliance	I have successfully anticipated and addressed legal and regulatory

		frameworks with some guidance.	strategies independently.	challenges proactively.
Biological production	**3.1. Biological production processes**	I have limited familiarity with biological production processes.	I can explain the key components and stages with some guidance.	I can design and implement biological production processes independently.	I have successfully optimized biological production processes to achieve exceptional results.
	3.2. Sustainability	I have limited understanding of sustainability concepts.	I can identify sustainable practices and initiatives with some guidance.	I can develop and implement sustainability strategies independently.	I have successfully led sustainability initiatives and driven significant positive impact.
	3.3. Organic certification	I have limited familiarity with organic certification requirements.	I can explain the process and steps with some guidance.	I can assist organizations in obtaining organic certification independently.	I have successfully navigated complex organic certification processes and ensured compliance.
Networking	**4.1. Contact Management**	I have limited familiarity with basic contact management systems.	I can organize and maintain contact lists using contact management software with some guidance.	I can segment contacts, track interactions, and manage follow-ups independently using advanced features.	I have successfully leveraged contact management tools to nurture relationships and drive significant business growth.
	4.2. Communication	I have limited familiarity with basic communication skills.	I can communicate ideas and information clearly and concisely with some guidance.	I can adapt my communication style to different audiences and situations independently.	I have successfully influenced and persuaded others through effective communication.

4.3. Building Relationships	I have limited familiarity with basic relationship-building concepts.	I can initiate and maintain professional relationships with some guidance.	I can network, cultivate partnerships, and nurture relationships independently.	I have successfully fostered strong, mutually beneficial relationships that have driven significant business success.

Table 5. Questionnaire for employees in e-bio-business supporters to evaluate their proficiency levels.

STEP 3: External assessment

Step 3 of the self-assessment methodology involves an external evaluation of the organization's overall performance and achievements. This external assessment is directed to big organizations, as SMEs will not have enough information for the evaluation.

This phase aims to provide the company with external validation, recognition, and actionable insights for improvement. Upon completion, the organization will receive a rating of 3, 4, or 5 stars, along with a comprehensive understanding of its strategic direction, challenges, and opportunities for growth in the BSR framework.

The external assessment process entails conducting interviews with key representatives of the e-bio-business supporter. These interviews are conducted by an external evaluator and are recorded in video format for subsequent thorough analysis of the responses.

During the interviews, the external evaluator will pose a series of questions aimed at gaining insights into various aspects of the organization, including its strategic direction, leadership effectiveness, stakeholder engagement, and potential areas for improvement. By capturing responses on video, the evaluation process enables a thorough analysis of the organization's strengths and weaknesses.

Following the interviews, the external evaluator will carefully analyse the responses and take detailed notes to inform the final assessment of the BSO's overall performance. This external assessment serves multiple purposes, including ensuring compliance with regulatory requirements, identifying and mitigating risks, evaluating performance against industry benchmarks, and fostering a culture of continuous improvement.

Ultimately, the external assessment contributes to the organizational resilience, stakeholder confidence, and long-term sustainability of the BSO. By leveraging external expertise and perspectives, the organization gains valuable insights and actionable recommendations for enhancing its performance and achieving its strategic objectives.

Validation Workshop – TPM Schwerin

In the Validation Workshop that was held in Schwerin, Germany, on 16-17 May 2024, partners proposed a series of questions for the external assessment. Partners were sorted into 5 groups, and had to create and agree on 4 questions, one per competency category (Business and Management, Digital Know-How, Biological Production and Sustainability and Networking).

Questions were thoroughly decided and agreed among all partners in the group, and cover the topics that partners believe are the most challenging when supporting the transition of SMEs into e-bio-businesses. At the end of the Validation Workshop, 10 questions were agreed on by all consortium.

An Excel sheet is available in the project's Drive folder. In this sheet, groups wrote their 4 questions, and then assessed the questions decided by other groups. Each group scored the questions from 1-10, and the best ones were selected for the external assessment interviews.

Here is the final external assessment interview for Managing Directors agreed on the Validation workshop:

QUESTION 1: Does your organisation have enough capacity to support companies to develop their businesses?
QUESTION 2: How does your organisation support local companies in developing biological production and sustainability?
QUESTION 3: Does your organisation have the knowledge of digital tools?
QUESTION 4: How do you make sure that your employees are equipped and prepared to support e-bio businesses?
QUESTION 5: How can your organisation support local companies in developing in the digitalization sector?
QUESTION 6: How can you help new companies to get into existing networks?
QUESTION 7: Is your institution ready to implement changes when the opportunity is identified?
QUESTION 8: How do you ensure that your network supports the e-bio business?
QUESTION 9: How do you monitor your employee's skills in the digital sector?
QUESTION 10: Do you specifically pay attention to establish thematic networks (food, tourism, bioproduction etc) that include local and regional participants?

Table 6: Test for external assessment of Managing Directors.

Step 4: Evaluation tests and certifications

While the initial questionnaire provided valuable insights, it's recognized that subjective biases may inadvertently influence employee responses. Therefore, to ensure a more objective assessment of employee performance, a competency test is deemed necessary.

In the culminating phase of the self-assessment process, a comprehensive test will be formulated for employees in the BSO. This test aims to evaluate their proficiency in tasks integral to daily operations. Employees will take a test that will demonstrate their knowledge about strategic management and planning, digital analytics, cybersecurity awareness, biological and sustainable production processes, and communication skills.

Upon completion, responses will undergo meticulous analysis utilizing scoring rubrics or predetermined criteria. This approach facilitates an objective evaluation, enabling the assignment of scores or ratings to each test taker based on their performance. Subsequently, a certification will be generated to formally recognize employees' demonstrated knowledge and competencies.

This test not only ensures a standardized assessment across the organization but also serves as a mechanism to validate and augment the insights gathered from preceding stages. By leveraging this multifaceted approach, the e-bio-business supporter endeavours to foster a culture of continuous learning and development while reinforcing the alignment of individual competencies with organizational objectives.

Example of a knowledge test for employees of e-bio-business supporters:

1. Strategic Management and Planning: Which of the following is NOT a component of the SWOT analysis?
A) Strengths
B) Weaknesses
C) Opportunities
D) Threats
E) Tactics
2. Digital Analytics: What is the primary purpose of using Google Analytics?
A) To manage social media accounts
B) To analyze website traffic and user behavior
C) To create digital marketing campaigns
D) To develop mobile applications
E) To monitor cybersecurity threats
3. Cybersecurity Awareness: Which of the following is an example of a strong password?
A) Password123
B) ABCDEF
C) 123456
D) P@ssw0rd!
E) MyDog'sName
4. Biological and Sustainable Production Processes: Which of the following is a key principle of sustainable agriculture?
A) Maximizing chemical pesticide use
B) Promoting monoculture farming
C) Minimizing water conservation efforts
D) Enhancing soil health and biodiversity

E) Disregarding animal welfare
5. Communication Skills: What is active listening?
A) Only speaking and not listening to others
B) Listening attentively and responding appropriately
C) Interrupting others while they speak
D) Ignoring non-verbal cues
E) Being passive and not engaging in conversation

Table 7: Test for employees of e-bio-business supporters to evaluate their overall knowledge.

Validation Workshop – TPM Schwerin

In the Validation Workshop that was held in Schwerin, Germany, on 16-17 May 2024, partners proposed a series of open questions for the evaluation of employees. Partners were sorted into 5 groups, and had to create and agree on 4 questions, one per competency category (Business and Management, Digital Know-How, Biological Production and Sustainability and Networking).

Questions were thoroughly decided and agreed among all partners in the group, and cover the topics that partners believe are the most challenging when supporting the transition of SMEs into e-bio-businesses. At the end of the Validation Workshop, 16 questions were agreed on by all consortium.

Hereby is the open questionnaire for employees agreed on the Validation workshop:

Module 1: Business and Management
Are you involved in the management process?
What do you want to change to improve in the company strategy?
Can you follow your company strategy in your daily work?
Are you aware of the management strategy of your business?
Do you know where to find additional expertise if you need it?
Module 2: Digital Know-How
As the digital world is very fast growing, do you take regular training?
What kind of upscaling opportunities do you need regarding digitalization?
Do you utilise digital tools while advising companies?
Do you know how to post about your business on social media?
Are you using knowledge you get from training in the digital area in your practice?
Module 3: Biological Production and Sustainability
Do you have basic knowledge what is bio-business, bio-economy?
What kind of upscaling opportunities do you need regarding biological production and sustainability?
Do you evaluate sustainability aspects while advising companies?
Can you name the bio-certifications that exist in your area?
Can you name the most popular bio-business in your area?
Module 4: Networking
Do you have social skills to be part of networking?
Are you involved in any networking activities?
Do you see the value of networking in your work?
Are you proactive about seeking new contacts?
How are your maintaining and expanding your network?

Table 8: Test created by consortium for employees of e-bio-business supporters.

3.3. Essential facilities and equipment for e-bio-business supporters

To support e-bio-businesses in rural areas as part of the eRural Resilience project, e-bio-business supporters must be equipped with specialized facilities and tools that align with the unique requirements of these businesses and foster their sustainability and digital transformation.

1. Space for business incubators
A critical function of a BSO is to support startups and new businesses through incubation programs. This requires dedicated physical spaces equipped to foster creativity, innovation, and collaboration.

- **Facilities**: A well-designed incubator space should include individual offices, shared desks, and brainstorming zones.
- **Technology access**: High-speed internet, printers, scanners, and technical tools (like 3D printers or prototyping kits) should be readily available for entrepreneurs working on product development or innovation.
- **Support infrastructure**: Amenities such as a cafeteria, breakout rooms, and relaxation zones can enhance productivity and attract more startups.

2. Meeting spaces for businesses
BSOs act as facilitators for businesses to connect with stakeholders, clients, and collaborators. Having professional meeting spaces is essential.

- **Boardrooms and conference rooms**: These should be equipped with large tables, comfortable chairs, and audio-visual tools like projectors, screens, and sound systems.
- **Booking system**: An online system to schedule and reserve meeting spaces ensures accessibility and efficient use of resources.
- **Privacy features**: Meeting spaces should include soundproofing and secure access for confidential discussions.

3. Coworking spaces

Coworking spaces provide flexibility for businesses, freelancers, and startups to work in a shared environment. They are especially useful for smaller companies that may not yet have permanent offices.

- **Furniture**: Ergonomic desks and chairs are a must to ensure comfort for long working hours.
- **Zones**: Spaces can be divided into quiet zones for focused work, collaborative zones for teamwork, and social areas for networking.
- **Shared resources**: Access to printers, photocopiers, coffee machines, and lockers enhances the experience for users.
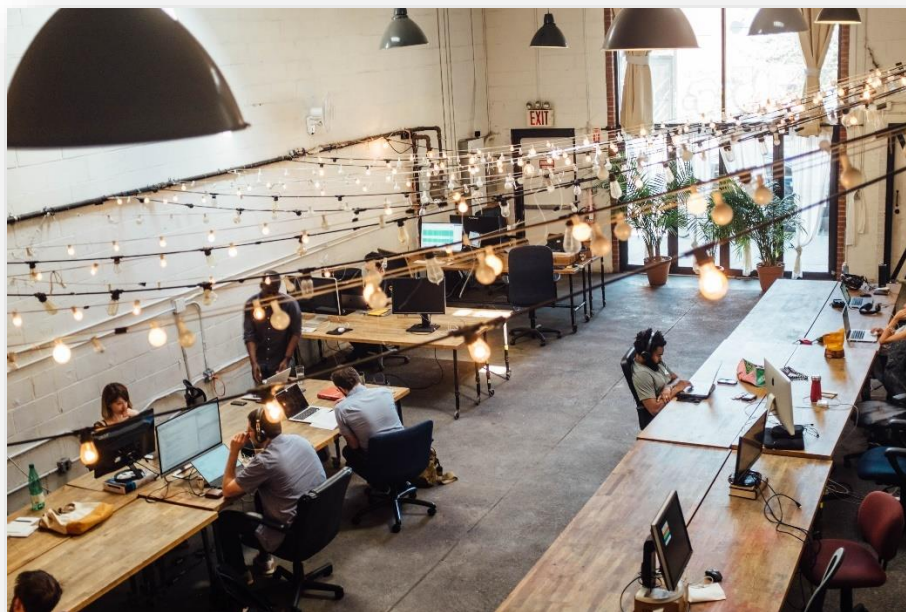
4. Videoconferencing room

A dedicated room for videoconferences is essential in today's hybrid work environment, where remote meetings are a norm.

- **Equipment**: High-quality cameras, microphones, and speakers should be installed to ensure clear audio-visual communication.
- **Lighting and acoustics**: Proper lighting and soundproofing are crucial for professional video calls.
- **Seating arrangements**: The room should accommodate a range of participants, from small team meetings to larger conference calls.

5. Videoconferencing software

To complement the physical setup, reliable software is equally important.

- **Options**: Tools like Zoom, Microsoft Teams, or Google Meet should be licensed and integrated for use by all BSO staff and clients.
- **Customization**: The software should allow branding (logos, backgrounds) to maintain professionalism.
- **Training**: Staff and users should be trained to use the software effectively.

6. Projector and screen

Projectors and screens are critical for presentations, training sessions, and collaborative discussions.

- **Specifications**: High-resolution projectors paired with large screens or smartboards enhance visibility and engagement.
- **Connectivity**: Ensure compatibility with multiple devices (laptops, tablets) and wireless connectivity options for ease of use.
- **Maintenance**: Regularly update and service equipment to avoid interruptions during critical events.

By focusing on these core areas, e-bio-businesses can create an environment that empowers businesses, encourages innovation, and fosters collaboration, ensuring maximum impact on the companies it supports.

After completing the 4 steps, Managing Directors and Employees within the BSO will answer to the following questionnaire to assess the BSO's effectiveness in meeting the needs of its clients, the adequacy of its facilities, and the quality of the services provided. This feedback will be crucial for identifying areas of improvement and ensuring alignment with organizational goals.

Utilizing a 5-point Likert scale, respondents will indicate the extent of their agreement with each statement presented:

1. Strongly disagree
2. Disagree
3. Neither agree nor disagree
4. Agree
5. Strongly agree

Section 1: Facilities and infrastructure
1. Our organization provides adequate incubator spaces tailored to the needs of bio-businesses.
2. Meeting rooms are well-equipped with necessary technology (e.g., projectors, screens, soundproofing).
3. Co-working spaces meet the ergonomic and functional requirements of users.
4. Videoconferencing facilities are reliable and easy to use.
5. Our organization's infrastructure promotes sustainable and green practices (e.g., renewable energy, waste management).
Section 2: Digital and technological support
6. High-speed internet connectivity is consistently available across all BSO facilities.
7. Our organization offers access to digital tools such as data analytics and learning platforms.
8. Digital training programs are comprehensive and relevant to bio-business needs.

9. Remote collaboration tools are accessible and widely used by BSO staff and clients.
10. Our organization provides sufficient resources for hybrid events and virtual collaboration.
Section 3: Knowledge sharing and advisory services
11. Workshops and webinars hosted by Our organization address key challenges faced by bio-businesses.
12. Our organization's e-libraries and digital archives are up-to-date and relevant.
13. One-on-one advisory services are effective in addressing the specific needs of bio-business clients.
14. Collaboration hubs facilitate meaningful partnerships and innovation among stakeholders.
15. Our organization effectively connects clients with funding opportunities and market insights.
Section 4: Overall performance
16. Our organization's services are aligned with the strategic goals of the eRural Resilience project.
17. Our organization's facilities and tools enhance the resilience of bio-businesses in rural areas.
18. Feedback mechanisms are in place to continuously improve the quality of BSO services.
19. Our organization staff are knowledgeable and supportive in guiding bio-businesses.
20. Overall, our organization provides exceptional value to bio-businesses and the wider community.

Table 9. Questionnaire for assessing the adequacy of equipment and facilities in e-bio-business supporters.

4. ONLINE SELF-ASSESSMENT TOOL

In order to carry out all questionnaires and gather data, it is necessary to develop an online self-assessment tool.

The resulting online self-assessment tool, from the research, assessment, prototyping and co-development process, is a stand-alone tool that will help e-bio-business supporters to carry out a self-assessment of its competency to converting the current SMEs into e-bio-business.

All BSOs will have to register and create a company's profile in the online tool. The tool will ask BSOs to provide basic details of the BSO, such as a company name, size, country, etc. All individuals selected, from employees to Managing Directors, will register anonymously in their company's profile as "Worker 1", "Worker 2", etc., in order to comply with GDPR regulation.

The user then answers the questionnaire, across the four main competencies described previously, using the readiness scale designed according to the Likert system, with descriptors that enable a uniform answer from each respondent.

The analysis of the consolidated results for the selected scope is performed after all questionnaires are responded. To provide an overview to the user, of how much the score can be trusted, five indicators are included in the results view of the self-assessment tool.

- 'Total e-bio-business supporter competency score': is a count of the aggregated readiness score of 75, considering that there are 15 aspects (questions) with a maximum possible score of '5' per aspect.
- 'Assessments' provides a count of the number of assessments carried out for a particular BSO (i.e. number of different users submitting an assessment).
- 'Agreement' is a measure (low-medium-high) of the agreement level of the responses to the assessment for the particular BSO, calculated by measuring the standard deviation between them.
- 'Skill coverage' shows the level of coverage of the four above-mentioned expertise areas (Fundamental, Intermediate, Advanced and Expert).
- Finally, 'Robustness' is a measure of how much the user can trust the results on a given e-bio-business supporter assessment, which is the product of the number of assessments, standard deviation between the assessments and skill coverage.

Finally, the results enable companies to benchmark the results internally and/or externally (e.g. BSOs from the same size, sector, region or business type). The tool provides a list of comparative strengths and gaps and creates a report for the user to download (example in Figure 1).
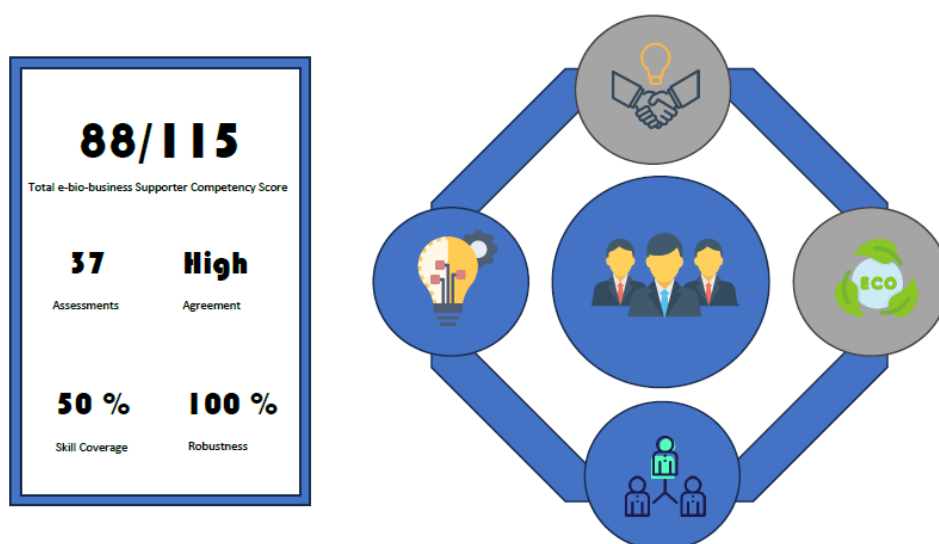
Figure 1. Example of an e-bio-business supporter profile, with an indication of key strengths (represented in blue) and improvement opportunities (represented in grey).

In a proactive measure, all BSOs will undergo a self-assessment to comprehensively grasp their strengths and weaknesses. Through this process, strengths will be fortified, while weaknesses will be meticulously examined to enhance the capacity of local actors in supporting SMEs transitioning into e-bio-businesses. By addressing both strengths and weaknesses, BSOs aim to bolster their efficacy in facilitating the transition and fostering sustainable growth within the e-bio-business sector.

ANNEX 1. COMPETENCY PROFILE

1. What is a Competency Profile

A **Competency Profile** is a description of competencies that are necessary for a profession or a particular job role. Competencies are defined as a combination of the knowledge, skills, and attitudes necessary for adequate functioning on the profession or role, where:

- **Knowledge** is understood as the concepts, facts, and figures, ideas and theories which are already established, and support the understanding of a certain area or subject.
- **Skills** are defined as the ability to carry out processes and use the existing knowledge to achieve results.
- **Attitudes** describe the disposition and mindset to act or react to ideas, person or situations.

Competency Profiles are essentially the collection of competencies, including their associated behaviours, needed to be successful in a role.

The **eRural Resilience Competency Profile** has been created to help describe competencies which define expectations for e-bio-business supporters. Local authorities and business support organizations need to assess their capacity to support e-bio-business, identify their gaps and cover the gaps with capacity building and external expertise.

Competencies are the focal point of e-bio-business supporters' underlying skills and knowledge.

- **Activities** can be collectively described as the "functional" elements of a competence. These elements are the drivers of actual tasks performed by e-bio-business supporters as they move through the assessing and promotion process.
- **Skills and technical knowledge** can be collectively described as the "foundational" elements of a competence.

By defining competencies in this way, we recognise the importance of the underlying elements while acknowledging that a e-bio-business supporter must combine these elements effectively in order to apply a particular competency in practice.

Competencies represent a dynamic combination of knowledge, understanding, skills and abilities. Competencies can be distinguished in subject specific and generic ones. Although the authors acknowledge to the full the importance of building-up and developing subject specific knowledge and skills as the basis for specific jobs, it should be highlighted the fact that time and attention should also be devoted to the development of generic competencies or transferable skills. This last component is becoming more and more relevant in terms of business promotion.

The **eRural Resilience Competency Profile** will describe the required skills and competencies that the institutions have to gather in order to cover the required knowledge to support the businesses in their transition to bio-businesses and e-businesses.

2. The e-bio-business context

The **eRural Resilience Competency Profile** responds to the growing awareness among many European Member States that business promotion bodies and local authorities need a set of competencies specific to their profession in order to be able to promote the transformation of bio-businesses into e-bio-businesses.

The eRural Resilience Competency Profile aims to capture and describe these e-bio-business supporters' specific competencies by proposing 15 elementary competencies organised in 4 sections:

- <u>Section 1: Business and Management</u> is directed at the broader professional environment, implementing strategic plans for e-bio-business supporters, encompassing goal setting, market analysis, and formulation of strategies.
- <u>Section 2: Digital know-how</u> looks at the competencies needed to be effectively updated on the latest digital technologies, and elevate the digital proficiency of the workforce.
- <u>Section 3: Biological Production and Sustainability</u> is dedicated to the integration of sustainability and biological principles into the e-bio-businesses' operations, supply chains, and marketing strategies to enhance their environmental and social responsibility.
- <u>Section 4: Networking</u> addresses the importance of networking competencies to effectively assist clients.

3. Competency profile for e-bio-business supporters

Section 1: Business and Management Skills

Business and management skills are indispensable assets for the effective functioning of e-bio-business supporters. These skills enable them to develop and execute strategic plans tailored to meet the diverse needs of businesses they serve.

1.1. Business Strategy and Planning

The Business Strategy and Planning skill is the ability to develop, articulate, and implement a strategic plan for a business. Including clear goals setting, understanding the competitive landscape, analysing market trends, and formulating strategies is crucial to achieve business objectives.
Professionals with this skill are adept at long-term planning, risk assessment, and decision-making to guide a business towards sustainable growth and success.

1.2. Financial Management

Financial Management consist in efficient and effective management of money (funds) in such a manner as to accomplish the objectives of the organization. Budgeting and forecasting include the ability to guide and create realistic, detailed budgets and forecasts that guide the organization's financial decision-making.
Cash flow management guidance ensures that the organization maintains adequate liquidity to meet its short-term obligations and invest in growth opportunities.
Financial Management fosters the planning, organizing, directing, and controlling of financial activities such as procurement and utilization of funds. It also refers to the ability to analyse financial data to identify trends, challenges, and opportunities, and reporting.
Understanding that financial management is integral to the health and efficiency of a business, ensuring that the company's financial resources are used effectively and strategically to achieve its objectives and increase its value.

1.3. Marketing and Sales

Both Marketing and Sales are essential for attracting and retaining customers, increasing revenue, and ensuring the long-term success of businesses. Effective integration of these

competencies can lead to better market penetration, customer satisfaction, and business growth.

Marketing and Sales in the context of e-bio-business supporters involve strategies and activities aimed at promoting products or services and converting prospects into customers. This field is crucial for driving rural business growth, creating brand awareness, and establishing a competitive market position.

Understanding the needs and trends of the local business community and researching the market helps to identify opportunities, understanding what entrepreneurs and businesses need, and tailoring services to meet these needs.

1.4. Leadership and People Management

Leadership and People Management is a crucial skill that includes vision-setting, decision-making, and motivating staff to innovate and excel in a dynamic, often fast-paced environment. Strategic thinking, adaptability, and a deep understanding of market trends and customer needs. Effective administration and coordination of team members helps to optimize their performance and contribution to the company's objectives.

1.5. Operational Management

Operational Management focuses on the efficient conversion of materials and labour into goods and services as effectively as possible to maximize profit and minimize waste. It's a balancing act of managing people, processes, and technology in an ever-changing business environment.

Competence	Knowledge	Skills	Attitudes
1.1 Strategy and Planning	- Understanding of market dynamics and trends	- Strategic analysis and planning	- Open-mindedness towards new ideas and perspectives
	- Knowledge of industry regulations and standards	- Scenario planning and risk assessment	- Willingness to adapt plans based on changing conditions
	- Awareness of competitive landscape	- Aligning strategies with organizational objectives	- Confidence in decision-making and problem-solving
1.2 Financial Management	- Understanding of financial statements and ratios	- Budgeting and forecasting	- Attention to detail and accuracy
	- Knowledge of taxation and financial regulations	- Financial analysis and reporting	- Ethical and responsible financial practices
	- Familiarity with cash flow management	- Resource allocation and cost control	- Ability to prioritize financial goals
1.3 Marketing and Sales	- Understanding of consumer behaviour and market research	- Strategic marketing planning	- Customer-centric mindset
	- Knowledge of marketing channels and tools	- Brand management and promotion	- Adaptability to changing market trends
	- Familiarity with product positioning and pricing	- Sales forecasting and target setting	- Effective communication and persuasion skills
1.4 Leadership and People Management	- Understanding of motivational theories and team dynamics	- Effective communication and interpersonal skills	- Empathy and respect towards team members
	- Knowledge of leadership styles and strategies	- Conflict resolution and team building	- Openness to feedback and continuous self-improvement
	- Familiarity with performance management systems	- Delegation and empowerment	- Integrity and fairness in decision-making
1.5 Operational Management	- Understanding of supply chain and logistics	- Process optimization and efficiency improvement	- Attention to detail and quality assurance
	- Knowledge of inventory management techniques	- Resource allocation and capacity planning	- Problem-solving and troubleshooting skills
	- Familiarity with project management methodologies	- Risk management and contingency planning	- Adaptability to changing operational requirements
	- Awareness of regulatory compliance	- Performance measurement and KPI tracking	- Commitment to continuous improvement

Table 10. Main knowledge, skills and attitudes needed for the Business and Management Competency.

Section 2: Digital know-how

By possessing these digital competencies, e-bio-business supporters can effectively guide companies through the digitalization process, enabling them to stay competitive and thrive in the digital era.

2.1. Digital Strategy Development

A comprehensive Digital Strategy Development involves grasping business models and industries, aiding companies in crafting digital strategies harmonized with their objectives. Additionally, it entails evaluating the existing digital maturity of businesses and formulating tailored roadmaps for digital transformation. This process demands a nuanced understanding of market dynamics and technological trends to ensure strategic alignment.

2.2. E-commerce Enablement

Providing support in both setting up and fine-tuning e-commerce platforms is crucial. Additionally, offering guidance on digital payment systems, cybersecurity, and optimizing online customer experience ensures seamless operations.
By addressing these aspects comprehensively, businesses can enhance their online presence and maximize customer satisfaction. Ultimately, this proactive approach fosters trust and loyalty while driving growth in the digital marketplace.

2.3. Cybersecurity Awareness

Having a solid grasp of cybersecurity threats and protective measures is paramount. Furthermore, offering aid in formulating cybersecurity policies and executing industry best practices is crucial. By addressing these concerns comprehensively, businesses can fortify their digital infrastructure and mitigate potential risks effectively. Ultimately, this proactive approach bolsters trust and safeguards valuable digital assets from evolving cyber threats.

2.4. Legal and Regulatory Knowledge

Remaining updated on digital laws, regulations, and compliance is imperative. Providing guidance to businesses on legal matters concerning digital transactions, data privacy, and intellectual property ensures adherence to regulatory frameworks.
By navigating these complexities effectively, businesses can mitigate legal risks and safeguard their interests in the digital realm.

Competence	Knowledge	Skills	Attitudes
2.1 Digital Strategy Development	- Understanding of business models and market trends	- Strategic planning and analysis	- Open-mindedness to innovative approaches
	- Knowledge of market trends and technological advancements	- Scenario planning and risk assessment	- Proactive and forward-thinking
	- Familiarity with digital transformation frameworks	- Setting measurable digital objectives	- Commitment to continuous learning and adaptation
2.2 E-commerce Enablement	- Understanding of e-commerce platforms and technologies	- Setting up and optimizing e-commerce platforms	- Customer-focused approach to e-commerce
	- Familiarity with online marketing strategies	- Managing inventory and order fulfilment	- Attention to detail and quality
	- Awareness of consumer behaviour and e-commerce laws	- Analyzing e-commerce metrics and KPIs	- Commitment to providing excellent customer service
2.3 Cybersecurity Awareness	- Understanding of cybersecurity threats and risks	- Implementing cybersecurity measures and protocols	- Vigilance and proactivity in identifying security risks
	- Familiarity with cybersecurity tools and technologies	- Responding to security incidents effectively	- Proactive in staying updated with security trends
	- Awareness of best practices for secure digital environments	- Educating others on cybersecurity practices	- Responsibility in maintaining secure systems
2.4 Legal and Regulatory Knowledge	- Understanding of digital laws and regulations	- Providing legal advice and compliance guidance	- Integrity and ethical conduct in legal matters
	- Knowledge of data privacy and intellectual property laws	- Conducting legal audits and assessments	- Integrity in business practices
	- Familiarity with industry-specific regulations	- Drafting and reviewing digital contracts and policies	- Attention to detail in legal documentation

Table 11. Main knowledge, skills and attitudes needed for the Digital Know-how Competency.

Section 3: Biological Production and Sustainability

Demonstrated expertise in the intersection of biological production and sustainability, including the utilization of biological systems for resource-efficient and environmentally friendly practices.

3.1. Biological production processes

Biological production processes refer to the methods used to cultivate, extract, or manufacture products derived from living organisms or natural materials. This includes techniques such as organic farming, fermentation, biotechnology, and extraction processes that aim to produce goods while minimizing environmental impact and promoting sustainability.

Advising companies on biological production processes involves guiding them on how to optimize these methods to ensure product quality and safety.

3.2. Sustainability

Sustainability refers to the practice of conducting business operations in a manner that meets present needs without compromising the ability of future generations to meet their own needs. This includes considering environmental, social, and economic factors throughout the product lifecycle, from sourcing raw materials to manufacturing, distribution, and disposal. Sustainable practices aim to minimize environmental impact, conserve natural resources, promote biodiversity, support local communities, ensure fair labour practices, and contribute to long-term business viability.

Advising companies on sustainability involves helping them integrate these principles into their operations, supply chains, and marketing strategies to enhance their environmental and social responsibility and meet the growing demand for sustainable products from consumers.

3.3. Organic certification

Organic certification by the EU refers to the process of verifying that agricultural products or processed foods comply with organic standards set by the European Union regulatory bodies. This certification confirms that the products have been produced using organic farming practices, which typically exclude the use of synthetic pesticides, fertilizers, genetically modified organisms (GMOs), and irradiation. Organic certification involves rigorous inspection and verification of production methods, inputs, and practices to ensure compliance with EU organic regulations.

Advising companies on EU organic certification involves guiding them through the certification process, helping them understand and implement organic farming practices according to EU standards, maintaining records, and ensuring compliance to gain consumer trust and access EU organic markets.

Competence	Knowledge	Skills	Attitudes
3.1 Biological production processes	- Understanding of biological principles and production methods	- Implementing biological production techniques	- Respect for natural ecosystems and biodiversity
	- Knowledge of microbial cultures and fermentation processes	- Monitoring and optimizing production parameters	- Commitment to sustainable and eco-friendly practices
	- Familiarity with bioreactor systems and bioengineering	- Troubleshooting and problem-solving in production	- Openness to innovation in biological production methods
3.2 Sustainability	- Understanding of sustainability principles and frameworks	- Developing and implementing sustainable practices	- Awareness of environmental and social impacts
	- Knowledge of sustainable resource management and circular economy	- Evaluating sustainability performance	- Willingness to promote and advocate for sustainability
	- Familiarity with green technologies and renewable energy sources	- Conducting sustainability assessments	- Commitment to continuous improvement in sustainability
3.3 Organic certification	- Understanding of organic farming principles and regulations	- Applying for and maintaining organic certification	- Respect for organic farming standards and practices
	- Knowledge of organic certification processes and requirements	- Ensuring compliance with organic standards	- Commitment to transparency and integrity in certification
	- Familiarity with organic labelling and marketing regulations	- Documenting and tracking organic production	- Dedication to promoting consumer trust in organic products

Table 12. Main knowledge, skills and attitudes needed for the Biological Production and Sustainability Competency.

Section 4: Networking Skills

Organizations supporting businesses in networking must possess diverse competencies to effectively assist their clients. Here are several key competencies that are essential in this area:

4.1. Contact Management

Contact management refers to the ability to systematically organize, maintain, and leverage relationships with individuals and entities within a network. This involves capturing, categorizing, and managing contact information, as well as tracking interactions and communications to foster meaningful connections. Effective contact management enables individuals to build and sustain their network, streamline communication, and maximize opportunities for collaboration and mutual support.

4.2. Communication

Communication refers to the ability to effectively exchange information, build and maintain relationships, and engage with various stakeholders within a network. This competency includes skills such as clear articulation, active listening, providing and receiving feedback, conflict resolution, and empathetic understanding of others' needs and perspectives.
Strong communication enables network members to strengthen relationships, build trust, and achieve shared goals more effectively.

4.3. Building Relationships

Building relationships involves the ability to establish, nurture, and maintain meaningful connections with individuals and organizations within a professional network. This includes initiating conversations, demonstrating genuine interest, cultivating trust, and fostering mutual respect and understanding.
The goal of relationship building is to develop strong, long-lasting connections that can lead to collaboration, support, and opportunities for professional growth and advancement within the network.

Competence	Knowledge	Skills	Attitudes
4.1 Contact Management	- Understanding of contact management systems and tools	- Organizing and categorizing contacts efficiently	- Value for maintaining organized and updated contact lists
	- Knowledge of data privacy regulations and best practices	- Updating contact information regularly	- Respect for individuals' privacy and consent
	- Familiarity with networking events and platforms	- Utilizing contact management software effectively	- Commitment to building and maintaining professional networks
4.2 Communication	- Understanding of communication principles and techniques	- Active listening and clear articulation of ideas	- Openness to feedback and constructive criticism
	- Knowledge of various communication channels and tools	- Effective written and verbal communication skills	- Empathy and understanding in interpersonal interactions
	- Familiarity with cultural differences in communication	- Adaptability in communication style to different contexts	- Confidence in expressing thoughts and ideas
4.3 Building Relationships	- Understanding of the importance of relationship-building	- Building rapport and trust with contacts	- Genuine interest in getting to know others personally
	- Knowledge of networking strategies and best practices	- Maintaining regular communication with contacts	- Willingness to offer help and support to others
	- Familiarity with social etiquette and networking norms	- Nurturing professional relationships over time	- Integrity and honesty in all interactions

Table 13. Main knowledge, skills and attitudes needed for the Networking Competency.

4. Competency profile progression model

The progression from Fundamental to Expert represents a journey from basic understanding and application to strategic expertise and thought leadership in each area.

Level of proficiency		Fundamental	Intermediate	Advanced	Expert
		(Basic knowledge)	(Practical application)	(Applied theory)	(Recognized authority)
Area	Competency	To have common knowledge or an understanding of basic techniques and concepts	To have applied this competency to situations occasionally while needing minimal guidance to perform successfully	To be capable of coaching others in the application of this competency	To create new applications for and/or lead the development of reference and resource materials for this competency
Business and Management	1.1. Strategy and Planning	Basic understanding of business models and strategies.	Proficient in strategic planning and business model development.	Proficient in strategic planning and business model development.	Thought leader in innovative business strategies.
	1.2. Financial Management	Basic understanding of financial statements and budgeting.	Proficient in financial analysis and reporting.	Expert in financial strategy and capital structure optimization.	Authority on financial modelling and economic theory.
	1.3. Marketing and Sales	Basic knowledge of marketing principles and sales techniques.	Proficient in developing marketing strategies and sales plans.	Expert in integrated marketing campaigns and sales channel development	Pioneer in innovative marketing and sales methodologies.

	1.4. Leader and people Management	Basic understanding of leadership styles and team dynamics.	Proficient in team building and conflict resolution.	Expert in leadership during change and organizational transformation.	Authority on executive leadership and organizational psychology.
	1.5. operational Management	Basic understanding of operational processes and efficiency.	Proficient in process optimization and supply chain management.	Expert in lean management and continuous improvement strategies.	Pioneer in operational innovation and futuristic business solutions.
Digital know how	**2.1. Digital Strategy Development**	Understanding of basic digital concepts	Ability to analyze digital trends and market dynamics	Proficiency in strategic planning and alignment	Mastery in developing transformative strategies
	2.2. E-commerce Enablement	Basic awareness of e-commerce fundamentals	Ability to set up and manage basic e-commerce platforms	Proficiency in scaling and optimizing e-commerce operations	Mastery in driving e-commerce growth and innovation
	2.3. Cybersecurity Awareness	Basic knowledge of cybersecurity threats and measures	Understanding of cybersecurity best practices and protocols	Ability to implement cybersecurity measures effectively	Expertise in developing comprehensive cybersecurity strategies
	2.4. Legal and Regulatory Knowledge	Awareness of basic digital laws and regulations	Understanding of industry-specific legal requirements	Proficiency in navigating complex legal and regulatory frameworks	Expertise in developing and implementing compliance strategies
Biological production	**3.1. Biological production processes**	Basic understanding of biological production principles	Familiarity with common biological processes	Proficiency in implementing advanced production techniques	Mastery in optimizing biological processes
	3.2. Sustainability	Awareness of basic sustainability concepts	Understanding of sustainability frameworks	Proficiency in integrating sustainability practices	Mastery in driving sustainable initiatives

	3.3. Organic certification	Basic knowledge of organic certification standards	Familiarity with certification processes	Proficiency in obtaining and maintaining organic certification	Expertise in developing organic certification strategies
Networking	**4.1. Contact Management**	Basic understanding of contact management systems	Ability to use contact management tools effectively	Proficiency in organizing and segmenting contacts	Mastery in optimizing contact management processes
	4.2. Communication	Basic verbal and written communication skills	Competency in clear and effective communication	Proficiency in adapting communication styles	Mastery in influencing and persuasive communication
	4.3. Building Relationships	Awareness of the importance of relationship-building	Ability to initiate and maintain professional relationships	Proficiency in networking and rapport-building	Mastery in cultivating strategic partnerships and alliances

Table 14. Competency profile progression model.

ANNEX 2. PROPOSAL OF CONCLUSIONS DRAWN FROM ANSWERS TO QUESTIONNAIRES

Upon completing the questionnaire, each participant will receive personalized feedback through the platform, offering targeted insights into their current competencies. This tailored feedback will highlight the participant's strengths, identifying areas where they excel, and outline any gaps that may require further attention. In addition to acknowledging these strengths and areas for growth, the feedback will provide recommendations for skill improvement, helping participants better align with the desired competencies.

To further support their learning journey, the feedback will include suggestions for relevant video resources from the comprehensive VideoKnowledge Database, created in collaboration with the eRural Resilience partners. These videos are created to offer practical knowledge and detailed instruction, ensuring that participants can directly access the most appropriate training materials based on their individual needs.

Through these personalized conclusions, participants are empowered to take meaningful steps toward improving their professional skills and competencies in alignment with the evolving demands of bioeconomy, digitalization, and rural resilience.

FEEDBACK FOR STEP 1. QUESTIONNAIRES TO MANAGING DIRECTORS.

The following table provides a proposed set of conclusions for each module (Business and Management, Digital Know-How, Biological Production and Sustainability and Networking) based on the final score:

- Strongly disagree: 1 point
- Disagree: 2 points
- Neither agree nor disagree: 3 points
- Agree: 4 points
- Strongly agree: 5 points

For each score, tailored feedback or conclusions will be provided to the respondent. This approach ensures that participants receive immediate, actionable insights after the questionnaire is finalised, allowing them to understand the next steps for enhancing their knowledge or improving their skills.

Module	Max. Score	Received score	Feedback	Recommended videos
Business and Management	**30 pts**	0-10 pts	**Significant Improvement Needed:** Your current score indicates a need to enhance your business and management skills. Focus on areas like strategy, planning, and financial management. You are encouraged to access the video database to build your competencies. Additionally, consider enrolling in relevant courses or seeking mentoring to strengthen your abilities in these key areas. Active learning will help improve your business impact.	**...**
		11-20 pts	**Room for Growth:** While you show some understanding of business and management principles, there are gaps that need attention. To increase your score, focus on sharpening your decision-making skills, improving people management, and becoming more proficient in strategic planning. Engaging in case studies, simulations, or attending workshops can provide practical insights to help close these gaps. Regular review of key concepts is also recommended.	...
		21-30 pts	**Strong Competence:** You have a solid grasp of business and management practices. This module is well covered, but there is always room for refinement. To stay ahead, consider exploring advanced topics such as digital transformation, innovation management, and leadership in rapidly changing markets. Keep up with the latest industry trends and continue applying best practices to maintain your competitive edge. Sharing your expertise with peers could further reinforce your leadership position.	**...**

Digital Know-How	20 pts	0-6 pts	**Significant Improvement Needed:** Your score shows that you need to enhance your digital skills. You should review the available video database on key digital topics, such as basic digital tools, cybersecurity fundamentals, and data analytics. Focusing on areas like digital strategy development, e-commerce enablement, and cybersecurity awareness can help build your competency. It's crucial to participate in digital training sessions and stay updated on new technological trends to boost your proficiency in this area.	…
		7-13 pts	**Moderate Proficiency:** Your score suggests that you have some foundational digital skills but can further develop your knowledge. To improve, explore additional resources in the video library about advanced digital marketing, e-commerce strategies, and data-driven decision-making. Engaging in workshops on topics like digital transformation and attending webinars on industry-specific digital innovations could help you grow your competencies. Consider creating a digital roadmap for your organization to solidify your learning.	…
		14-20 pts	**Strong Digital Competency:** You demonstrate solid digital know-how, and this module is covered. You are already competent in key areas such as digital strategy, data analytics, and cybersecurity. To maintain and advance your expertise, focus on emerging technologies like artificial intelligence, blockchain, or advanced data analytics tools. Sharing your knowledge by mentoring colleagues or participating in digital transformation projects within your organization can further solidify your standing as a digital leader.	…

Biological Production and Sustainability	20 pts	0-6 pts	**Substantial Improvement Required:** Your score indicates a limited understanding of biological production and sustainability. You should access the available video database to deepen your knowledge in topics like sustainable agricultural practices, bio-based product development, and waste management. Focus on gaining practical skills in areas such as sustainable resource use and environmental impact reduction. Participating in relevant workshops and certifications will help improve your competency in this vital area.	...
		7-13 pts	**Developing Competency:** You have a basic awareness of biological production and sustainability, but there is room for growth. To strengthen your understanding, consider expanding your knowledge by reviewing the video library on topics like renewable energy integration, sustainable supply chain management, and the circular economy. Engaging with case studies of successful bio-business transformations can offer practical insights. Incorporating sustainability goals into your organization's strategy would also be beneficial.	...
		14-20 pts	**Advanced Competency Achieved:** This module is covered, and you demonstrate strong expertise in biological production and sustainability. You are likely well-versed in sustainable methods and their practical applications. To further enhance your impact, you could focus on cutting-edge trends such as regenerative agriculture or biotechnological innovations. Collaborating with sustainability-focused networks and leading initiatives in your organization can solidify your role as a sustainability leader.	...

Networking	**30 pts**	0-10 pts	**Immediate Action Required:** Your score suggests that networking is an area where significant improvement is needed. You should explore the video database for resources that teach effective networking techniques, including how to build professional relationships, approach collaborations, and engage with industry stakeholders. Additionally, attending networking workshops or joining professional associations can give you practical experience in expanding your professional circle. Focus on improving communication and relationship-building skills.	…
		11-20 pts	**Developing Proficiency:** You have some basic networking skills, but there is room to improve your approach. To increase your effectiveness, work on building deeper connections with key stakeholders, improving your follow-up practices, and creating mutually beneficial partnerships. Consider attending industry-specific events, practicing your elevator pitch, and using LinkedIn or other platforms more strategically. Exploring mentorship opportunities could also help enhance your networking capabilities.	…
		21-30 pts	**Strong Networking Skills:** You demonstrate a strong understanding and ability in networking. This module is well covered, and you are effectively building and maintaining relationships. To maintain your momentum, continue leveraging your network for opportunities and collaborations, and stay active in professional communities. Consider taking your networking skills to the next level by becoming a thought leader or mentor within your field. Sharing best practices with others and expanding your international network may also be beneficial.	…

Table 15. Proposal of conclusions for Managing Directors's questionnaire.

FEEDBACK FOR STEP 2. QUESTIONNAIRES TO EMPLOYEES.

The following table provides a proposed set of conclusions for each module based on the average selected response. Answers are categorized into four groups:

- Fundamental
- Intermediate
- Advanced
- Expert

For each average response, tailored feedback or conclusions will be provided to the respondent. This approach ensures that participants receive immediate, actionable insights after the questionnaire is finalised, allowing them to understand the next steps for enhancing their knowledge or improving their skills.

Module	Proficiency level	Feedback	Recommended videos
Business and Management	Fundamental	You should explore the video database to build your foundational knowledge in strategic management, financial planning, and operations. Focus on strengthening core business principles.	…
	Intermediate	You are gaining a good understanding but should still access the video database for more advanced topics like leadership development, advanced financial analysis, and strategic execution. Consider enhancing practical skills through case studies.	…

	Advanced	You have a strong understanding of business and management principles. Continue applying these competencies in complex projects and explore industry trends to stay updated. Engage in mentorship roles to solidify your expertise.	…
	Expert	Your expertise in business management is excellent. Focus on mentoring others, staying up to date with the latest business innovations, and exploring leadership roles in larger, more complex projects.	…
Digital Know-How	**Fundamental**	You should access the video database to improve your understanding of key digital concepts like digital transformation, e-commerce, and basic cybersecurity. Start by learning about digital tools and their practical applications.	…
	Intermediate	You have a basic understanding, but there's room to grow. Explore the video database to advance your skills in data analytics, digital marketing strategies, and digital tools. Focus on applying your knowledge in practical scenarios.	…
	Advanced	Your proficiency in digital know-how is strong. Continue applying your expertise to lead digital projects and stay updated on emerging technologies. Collaborating on innovation-driven projects would enhance your skills further.	…
	Expert	You have mastered digital strategy and technology integration. Focus on providing thought leadership, creating innovative solutions, and mentoring others in digital competencies. Keep track of evolving digital trends.	…

Biological Production and Sustainability	**Fundamental**	You should access the video database to develop a stronger foundation in sustainable practices and biological production. Focus on learning about the bioeconomy, sustainable agriculture, and environmental management.	…
	Intermediate	You have some knowledge but should continue exploring the video database to advance in sustainable technologies and practices. Focus on improving your understanding of resource management, eco-friendly methods, and environmental regulations.	…
	Advanced	You demonstrate a strong grasp of biological production and sustainability. Continue refining your skills by leading sustainability projects, staying updated on sustainable technologies, and exploring collaborative opportunities in bioeconomy.	…
	Expert	Your expertise in sustainability is well-developed. Focus on creating large-scale, sustainable solutions, guiding organizations on their sustainability journey, and keeping up with emerging technologies in this field.	…
Networking	**Fundamental**	You should access the video database to strengthen your networking and relationship-building skills. Focus on learning effective communication strategies, stakeholder engagement, and collaboration techniques.	…
	Intermediate	You have some networking skills, but accessing the video database could enhance your abilities in forming partnerships, negotiating collaborations, and building long-term professional relationships.	…
	Advanced	You are proficient at networking and building valuable relationships. Continue to leverage your network to create more strategic collaborations and consider taking on a leadership role in organizing networking events.	…

	Expert	Your networking skills are excellent. Focus on fostering larger, cross-industry collaborations, mentoring others in the art of relationship-building, and staying active in high-level networking circles.	...

Table 16. Proposal of conclusions for Employees' questionnaire.

FEEDBACK FOR STEP 5. EQUIPMENT AND FACILITIES' QUESTIONNAIRE

The following table provides a proposed set of conclusions for each section (Facilities and infrastructure, Digital and technological support, Knowledge sharing and advisory services and Overall performance) based on the final score:

- Strongly disagree: 1 point
- Disagree: 2 points
- Neither agree nor disagree: 3 points
- Agree: 4 points
- Strongly agree: 5 points

For each score, tailored feedback or conclusions will be provided to the respondent. This approach ensures that participants receive immediate, actionable insights after the questionnaire is finalised, allowing them to understand the next steps for enhancing their knowledge or improving their skills.

Section	Max. Score	Received Score	Feedback	Recommended Actions
Section 1: Facilities and Infrastructure	25 pts	0-5 pts	Significant Improvement Needed: Your current score suggests that facilities and infrastructure are a major area for improvement. The current setup may be limiting the effectiveness of operations and services.	Assess the current infrastructure and identify critical gaps. Prioritize improvements in basic facilities, such as workspace organization, equipment, and access to resources. Consider investing in upgrades to enhance productivity.
		6-12 pts	Room for Improvement: While you have some basic infrastructure in place, there are areas that still need attention.	Focus on optimizing your facilities to better support daily operations. Engage with experts to review the layout and equipment to enhance efficiency. Consider regular maintenance schedules and possible expansions to address needs.

		13-25 pts	Strong Infrastructure: Your facilities are largely effective, but there is always room for further improvement.	Explore cutting-edge technologies or design innovations to further optimize your infrastructure. Look into sustainable practices for building management, such as energy-efficient upgrades, and expand capacity where necessary.
Section 2: Digital and Technological Support	25 pts	0-5 pts	Significant Improvement Needed: The score indicates a lack of adequate digital and technological support. Key systems may not be in place or functioning effectively.	Review the current technological tools and infrastructure. Focus on foundational technologies such as IT support, software systems, and cybersecurity. Invest in training for staff to enhance digital skills and ensure smooth operations.
		6-12 pts	Moderate Digital Proficiency: There are digital tools in place, but further development is needed.	Upgrade current technologies and focus on aligning tools with business needs. Training programs for staff should be a priority to ensure better usage of digital tools. Explore cloud solutions, data management systems, and automation tools to improve efficiency.
		13-25 pts	Strong Technological Support: You demonstrate strong digital capabilities, but continuous upgrades are necessary to stay competitive.	Explore emerging technologies like AI, machine learning, and automation to enhance business processes. Stay up to date on the latest technological trends and continually assess how new technologies can improve operations.

Section 3: Knowledge Sharing and Advisory Services	25 pts	0-5 pts	Significant Improvement Needed: Your score indicates that knowledge sharing and advisory services are lacking. There may be insufficient channels for exchanging expertise or offering advisory support.	Establish clear communication channels for knowledge sharing. Consider creating knowledge hubs, online platforms, or internal workshops to facilitate the exchange of expertise. Explore external partnerships for advisory services to strengthen your organization's knowledge base.
		6-12 pts	Developing Competency: You have some knowledge-sharing structures in place but need to enhance them further.	Strengthen existing knowledge-sharing practices by implementing formal advisory programs, mentoring, and peer-to-peer learning. Encourage cross-functional collaboration and introduce regular knowledge-sharing sessions.
		13-25 pts	Strong Knowledge Sharing: Your organization is adept at knowledge exchange, but you could refine certain aspects.	Create specialized advisory services, both internal and external, to address industry-specific challenges. Foster a culture of continuous learning and encourage employees to actively engage in cross-functional and external advisory projects.
Section 4: Overall Performance	25 pts	0-5 pts	Significant Improvement Needed: Overall performance indicates several areas of weakness. Comprehensive improvements across different sections are necessary.	Take a holistic approach to assessing and improving performance across all sectors. Prioritize areas such as facilities, digital tools, and knowledge sharing. Consider conducting internal reviews and engaging with external consultants to address performance gaps.

	6-12 pts	Room for Growth: While performance shows potential, there are clear gaps that need attention.	Focus on optimizing key processes and ensuring that each section is functioning at its full potential. Engage in performance reviews regularly and set measurable improvement goals for each area. Consider bringing in external expertise to boost overall performance.
	13-25 pts	Strong Performance: The organization is performing well, but continuous improvements will ensure long-term success.	Regularly assess your operations and stay aligned with industry standards. Continue refining processes and pushing for optimization in all sections. Encourage leadership initiatives that foster continuous improvement and keep the organization at the forefront of industry trends.

Table 17. Proposal of conclusions for Equipment and Facilities' questionnaire.

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