

BLUEAIR PROJECT

BLUE GROWTH SMART ADRIATIC IONIAN S3

D.T.2.2.2

BLUE GROWTH EDP TOOL

Project number: 1229_BLUEAIR

Work package: WP2

Deliverable title: Blue Growth EDP Tool

Expected date: M14

Partner responsible for the deliverable: Croatian Chamber of Economy

Document Author(s): CCE Team

Dissemination level: CO - Confidential

Status: Final

Version: v1.9

Date: 30 June 2022

Summary	1
1. Introduction	3
1.1. <i>What is EDP and what is it trying to achieve?</i>	3
1.1.1. Defining EDP	3
1.1.2. EDP goals	4
1.2. <i>The policy cycle driven by EDP</i>	5
1.3. <i>Actors in EDP – The Quadruple Helix</i>	6
1.3.1. Challenges concerning EDP stakeholders	8
1.4. <i>EDP mechanisms and instruments</i>	9
1.5. <i>Organization of the EDP</i>	10
1.6. <i>Capacity building</i>	10
1.7. <i>COVID-19 influence on EDP governance</i>	11
1.8. <i>An evolution of EDP within S3 2.0.</i>	12
2. Blue Growth EDP	14
2.1. <i>Transnational perspective of the EDP</i>	14
2.2. <i>Why Blue Growth EDP?</i>	14
3. The BG-EDP Tool	16
3.1. <i>EDP-Tool Framework</i>	16
3.1.1. BG-EDP Concept	17
3.1.2. BG-EDP Focus Elements and Goals	17
3.1.3. Process flow and timeline activities	19
3.1.4. Selected BG-Areas	21
3.1.5. Partners' tasks	22
3.1.6. Survey respondents selection criteria	24
3.1.7. Sampling criteria	28
3.1.8. Sources of firm contacts	28
3.2. <i>EDP Survey Questionnaire composition</i>	29
3.2.1. Key features	29
3.2.2. Objectives	30
3.2.3. Structure	31
3.2.4. Customised thematic question groups and modules	32
3.3. <i>Operational Phase</i>	33
3.3.1. Survey Distribution Methods	33
3.3.2. Invitation letter	33
3.3.3. Governance of the Survey	33
3.3.4. Management of the survey analysis and results	34
3.3.5. Results representation	34
3.4. <i>Macro-regional Blue Growth EDP Focus Group</i>	35
3.4.1. EDP-Focus Group Framework	35

3.4.2. Steps for setting Macro-regional Blue Growth EDP Focus Group.....	36
3.4.3. Reporting phase of Macro-regional Blue Growth EDP Focus Group	37
Bibliography	39
ANNEX.....	42
<i>PART A - Template – Questionnaire Invitation letter</i>	<i>42</i>
<i>PART B – BG- EDP Survey Questionnaire</i>	<i>43</i>
Introduction to online survey	43
List of quantitative questions for the online survey	45
In-person direct interview surveys Guide	60
List of questions for the in-person direct interviews	62
<i>PART C – Checklist for the Pilot EDP survey process</i>	<i>66</i>

List of Abbreviations

ADRION (AIR)	Adriatic-Ionian (region)
BE	Blue Economy
BG	Blue Growth
BG-EDP	Blue Growth Entrepreneurial Discovery Process
BSI	Business Support Institution
EDP	Entrepreneurial Discovery Process
EDP-FG	Entrepreneurial Discovery Process Focus Group
EC	European Commission
ERDF	European Regional Development Fund
EU	European Union
EUSAIR	EU Strategy for the Adriatic and Ionian Region
HEI	Higher Education Institution
MR	Macro-region
NACE	Statistical classification of economic activities in the European Community
PPI	Public procurement of innovation
RIS3	Research and Innovation Smart Specialisation Strategy
RTO	Research and Technology Organisation
RDI	Research, Development and Innovation
S3	Smart specialization strategy
SME	Small and Medium-sized Enterprise
WP	Work Package

List of Figures

Figure 1.	Smart specialisation strategy driven by the entrepreneurial discovery process.....	5
Figure 2.	EDP Policy Cycle.....	6
Figure 3.	The Quadruple Helix (Q4 Helix) actors.....	6
Figure 4.	Level of stakeholders’ participation in the RIS3 strategy across the Europe.....	7
Figure 5.	Governances in MR Blue Growth S3 cycles.....	17
Figure 6.	BG-EDP focus elements.....	18
Figure 7.	BG-EDP timeline activities.....	19
Figure 8.	Identified Blue Growth Areas of ADRIATIC-IONIAN region.....	21
Figure 9.	Modular structure of EDP-tool survey.....	31
Figure 10.	Steps of an online EDP workshop.....	38
Figure A.	Modular structure of the online BG-EDP questionnaire.....	44

List of Tables

Table 1.	Pros and Cons of online versus in-person meetings/events.....	11
Table 2.	Reasoning of Blue Growth EDP.....	15
Table 3.	Description of BG-EDP activity steps.....	19
Table 4.	Implementing and supporting partners tasks.....	22
Table 5.	NACE code activities of main BG primary focus areas.....	25
Table 6.	NACE code activities of main BG secondary focus areas.....	26
Table 7.	NACE code activities of extended BG areas.....	27
Table 8.	Main and secondary EDP-Survey objectives.....	30

Summary

Background

The **main goal** of **BLUEAIR project** is enhancing *institutional capacities* of ADRIION countries/regions in the definition of a common approach towards the implementation of the **S3 policy on Blue Growth** at macro-regional level. Blue Growth can represent a **space of opportunities** in the broader context of the **Blue Economy** where it is possible to achieve innovative growth on the principles of **sustainability** and **protection** of the seas. “EU’s Blue Economy encompasses all sectoral and cross sectoral economic activities related to the oceans, seas and coasts, including those in the EU’s outermost regions and landlocked countries. This includes the closest direct and indirect support activities necessary for the sustainable functioning and development of these economic sectors within the single market. It comprises emerging sectors and economic value based on natural capital and non-market goods and services”¹.

Objective and Approach

Among other specific objectives, **BLUEAIR project aims to identify Blue Growth areas** of macro regional interest and exploit potentials for transnational cooperation in innovation and **Smart specialisation strategy (S3)** development on Blue Growth in the Adriatic- Ionian Sea area. The BLUEAIR project strategic framework consists of several pillars (strategies or initiatives) directly related to the Blue Growth domain: *EU Blue Economy Report, EUSAIR strategy, New Industrial Strategy for Europe, European Green Deal* and *European Data Strategy* with a clear focus on ADRIION countries/regions.

This document – Blue Growth EDP Tool, represents an instrument used to carry out a function for EDP exercise in testing countries. Implementation of EDP tool would set mobilization of innovation stakeholders to increase knowledge transfer between quadruple helix actors.

Main goal of the BG-EDP tool is development of structured qualitative survey for carrying out pilot EDP exercise on BG areas across, together with setting the “playbook” containing the concept with elements, actors, process cooperation, modules input and output documents etc. EDP tool is intended for projects’ implementing and supporting partners, facilitators and policy makers responsible for EDP implementation and development of consequent BG Innovation strategy.

Document structure

The document consist out of three main chapters and the Annex covering general and more project specific domains.

Chapter 1 – Introduction: presents and defines the entrepreneurial discovery process (EDP) and its general goals as a major policy cycles driver deriving from European countries practices. Chapter gives an overview of the actors associated with the EDP, related mechanisms and instruments, general organization and

¹ European Commission (2019). The EU Blue Economy Report. 2019. Publications Office of the European Union. Luxembourg.

capacity building necessity as a critical point to ensure the right skills and resources for the operationalisation and continuity of the EDP. Due to global pandemic caused by COVID-19, disruptive changes in EDP process governance have emerged because of physical distancing restrictions. Several solutions to this problem have been presented together with a forecast for new generation of improved and evolved EDP.

Chapter 2 – Blue Growth EDP elaborates important trans-regional dimension EDP has in creation of national Smart specialization strategies together with reasoning of the Blue Growth EDP according to the project's goals.

Finally, **Chapter 3 – The BG-EDP Tool**, as focus of the document, provides a detailed manual on how to carry out successful transnational pilot entrepreneurial discovery process with Blue Growth focus. Chapter sets a precise framework with the concept, elements, goals, processes, modules, partner's tasks, target groups etc. Along with the framework, the BG-EDP Tool presents EDP Survey questionnaire composition with key features, objectives and structure followed by operational phase process description from start to end.

Lastly, the **Annex** provides prepared sets of structured thematic groups of questions and dedicated question modules to be used in the upcoming D.T.2.2.2 - Pilot EDP project activity, including the template of Questionnaire invitation letter and the checklist supporting project partners in the pilot EDP operational activities.

1. Introduction

1.1. What is EDP and what is it trying to achieve?

1.1.1. Defining EDP

In 2009, during relatively early design process of the smart specialization concepts, **the entrepreneurial discovery process (EDP)** was conceptualised as “a learning process to discover the research and innovation domains in which a region can hope to excel”, and in which “entrepreneurial actors are likely to play leading roles in discovering promising areas of future specialisation” (Foray, David, & Hall, ‘Smart Specialisation: The Concept’, in Knowledge for Growth: Prospects for Science, Technology and Innovation, 2009).

In contrast to centralized planning in innovation policies where governments and public administrations play an important moderating role, the EDP is its clear opposition as a bottom-up process which engages more thoroughly with regional stakeholders.

Main defining features of smart specialization strategies are entrepreneurial discovery processes. The quality of RIS³ may greatly depend on an efficient understanding and implementation of EDP.

The S3 strategies are structured on a reasoning that territories should foster the investments in research and innovation as a progression towards **structural transformation** of their economies. The way to do it is through a process of entrepreneurial discovery that draws on the collective intelligence of businesses, universities, government bodies and other key territorial actors. Therefore, the EDP is the “motor of the smart specialisation methodology” that is being implemented across Europe (Periañez Forte, Marinelli, & Foray, 2016).

Based on EC’s Smart Specialization Platform² “the entrepreneurial discovery is an interactive and inclusive process in which the relevant actors identify new and potential activities and inform the government. The government assess this information and empowers those actors most capable of realising the potential. This process is what mainly distinguishes Smart Specialisation from traditional industrial and innovation policies”.

The proposal for a regulation of the European Structural funds for the programming period 2021-2027³, considers stakeholder collaboration (EDP) as one of the key elements for smart specialisation strategies and a core element of the European Regional Development Fund (ERDF) enabling condition - “Good governance of national or regional smart specialisation strategy” for the period 2021-2027.

Therefore, EDP as a central element of the smart specialisation strategies is meant to determine how regional priorities for research and innovation investment are selected and evolved over time. Thus, the EDP is an **inclusive, evidence-based process** of stakeholder engagement that produces information about the potential for new activities, thus enabling effective targeting of research and innovation policy (Foray, From

² EC’s Smart Specialization Platform <https://s3platform.jrc.ec.europa.eu/edp>, accessed 14.09.2021.

³ Proposal for a regulation of the European parliament and of the council on the European Regional Development Fund and on the Cohesion Fund for the programming period 2021-2027

smart specialisation to smart specialisation policy, 2014) (Hausmann & Rodrik, 2003). As such, EDP should be “a continuous process, beginning with the initial identification of the priorities of a smart specialisation, and extending into the implementation of the strategy where priorities are progressively refined and policies adapted (Marinelli & Perianez-Forte, 2017).

The European Commission’s implementation guide signals that EDP should be “**evidence-based**” and should pay “**attention to market dynamics**” (Gianelle, Kryiakou, Cohen, & Przeor, 2016). Recently, a more detailed working definition was proposed as “a systematic effort of public-private dialogue that draws on quantitative and qualitative evidence, includes the pooling of knowledge either multilaterally (e.g. in conferences or focus groups) or bilaterally (e.g. in interviews), focuses on prioritization and action planning, and is meant to codify an emerging regional consensus on cross-sectoral economic development” (Benner, 2020).

1.1.2. EDP goals

According to the “Beyond EDP”⁴ project, launched in 2016 with 11 partners from nine European countries, project seeks to take an overview of the experiences European regions have made with entrepreneurial discoveries. Based on analysis of the design and implementation of EDP in different regional contexts, the project has identified three distinct yet related objectives in regional self-discoveries:

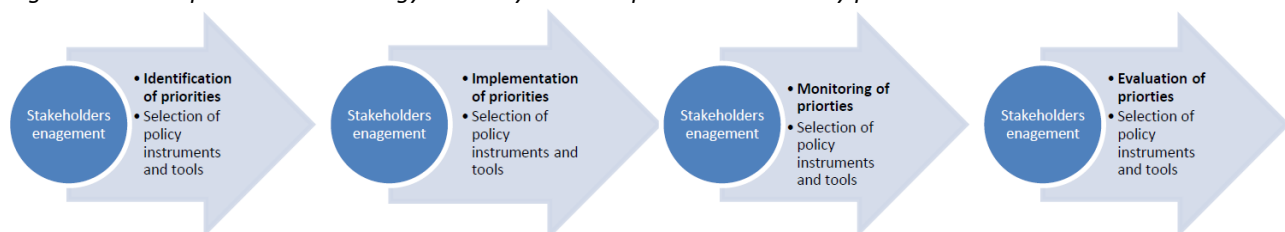
- 1) **EDP helps bolster political decisions in defining priorities of public investments** by involving much broader range of perspectives. Decisions on where to specialize in innovation will be informed by more input from more diverse sources. Involving quadruple helix actors (“Q4 Helix” - policy-makers, business, academia and civil society) into rigorous self-assessments may substantially broaden the information about region’s knowledge assets, capabilities and competences. Knowledge about science, technology and engineering will be as valuable as knowledge of economic markets and value chains in production and services (Foray & Goenaga, The goals of smart specialisation, 2013). Civil society may further enhance the legitimacy of innovation policies by including interest of relevant social groups such as societal and demographic challenges. Therefore, EDP helps in the design phase of RIS3 in making more accurate choices in defining thematic priorities and the specialization strategy more generally (Rodríguez-Pose & Wilkie, Institutions and the entrepreneurial discovery process for smart specialization, 2015).
- 2) **EDP helps to better implement and monitor RIS3.** Implementation of the new discovered regional opportunities for the regional economy have to be learned in order to be properly implemented. Regional actors follow the initial implementation experiment and contribute to the new activity by applying them to their field (Foray & Goenaga, The goals of smart specialisation, 2013). EDP facilitates such exchange and cooperation by bringing together regional stakeholders. In addition to that, EDP collects important **feedbacks from EDP formats** - such as **workshops, focus groups, platforms, surveys or community meetings** – which provide new information for an updated definition of thematic priorities that may change over time, while some new activities may evolve and some cease to be part of an RIS³ agenda.
- 3) **EDP can contribute to regional empowerment** (Rodríguez-Pose & Wilkie, Institutions and the entrepreneurial discovery process for smart specialization, 2015). Permanent interaction between involved Q4 Helix actors contribute to stronger regional networking activities. Moreover, EDP helps to bring together and lower the gap between business, academia and civil

⁴ Dotterbeck, K.(2017). *Framework Document: Based on existing EDP Analyses and Regions’ Experiences*. Beyond EDP Interreg Europe project 2017. EU European Regional Development Fund.

society. Entrepreneurial discovery processes facilitate exchange of information and cooperation and provide insights into other actors' domains. They ultimately foster the emergence of a "micro-economic environment that comes across to individual actors as a reason to have confidence in the economic process" (Rodríguez-Pose & Storper, Better rules or stronger communities? On the social foundations of institutional change and its economic effects, 2006).

The EDP, based on its goals, should be a **continuous process**, starting with the identification of the thematic priorities of a smart specialisation strategy, and guiding all stakeholders into next phases of strategy implementation with adaptation of more progressively refined policies (Marinelli & Periañez-Forte, 2017). To be able to hold stakeholders engagement during the whole S3 process, the EDP must withhold best mechanisms to support the continuous process (figure 1.).

Figure 1. Smart specialisation strategy driven by the entrepreneurial discovery process



Source: (Periañez Forte, Marinelli, & Foray, 2016)

1.2. The policy cycle driven by EDP

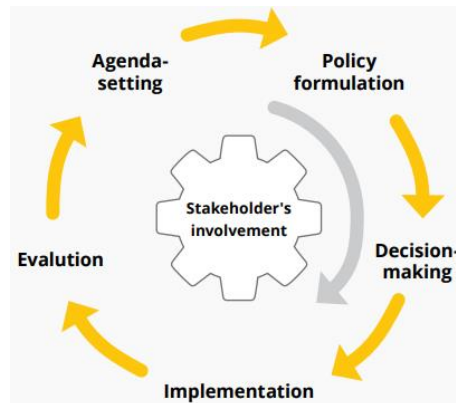
Policy process drives from agenda setting to policy formulation, decision making and implementation as well as to subsequent assessment and evaluation of chosen policy practices that should be informed by a wide array of inclusive public-private consultations.

The role of individual actors throughout the entire process may well vary across the different stages of EDP. Important factor for success is to maintain dialogue and involvement of all stakeholders over the whole process. Designing EDP governance structures thus has to ensure continuity of interaction but also flexibility in working together.

Different policy instruments have to be combined for each separate policy cycle (figure 2):

- Agenda setting phase** – evidence-based practice is vital for a rich data set informing discussions on priorities. This includes: SWOT analysis of regional capacities, studies on scientific, technological and economic trends, the mutual assessment of stakeholder competences and potentials.
- Policy formulation and decision making phases** – identifying region's core competences is crucial and done by organising stakeholders in focus groups, committees and public platforms, thus ensuring the bottom-up approach.
- Implementation phase** - realization of priorities by involvement of stakeholders in the management of project calls.
- Monitoring and evaluation phase** – use of interactive and inclusive mechanisms for a "continuous reflection on market opportunities, as well as a periodic re-assessment of the investment priorities previously identified" (Periañez Forte, Marinelli, & Foray, 2016).

Figure 2. EDP Policy Cycle



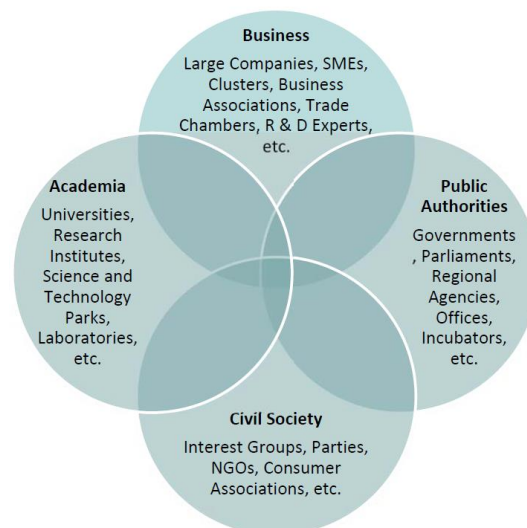
Source: Perianez-Forte, Marinelli & Foray 2016

1.3. Actors in EDP – The Quadruple Helix

There is a general consensus in the literature on the notion of an **inclusive** and **interactive bottom-up process** which is **evidence-based** and gathers the **expertise** of a wide array of **regional stakeholders** to gain new insights into regional development (Perianez-Forte & Wilson, 2021).

Inclusiveness is closely related to involvement of many different actors, most often associated with the **Quadruple Helix (Q4-Helix) concept** involving four main clusters - **policy-makers, business people, researchers and representatives of civil society** (Figure 3.). Each of these types of actors can make a substantive and distinctive contribution to EDP (Rodríguez-Pose & Wilkie, Institutions and the entrepreneurial discovery process for smart specialization, 2015).

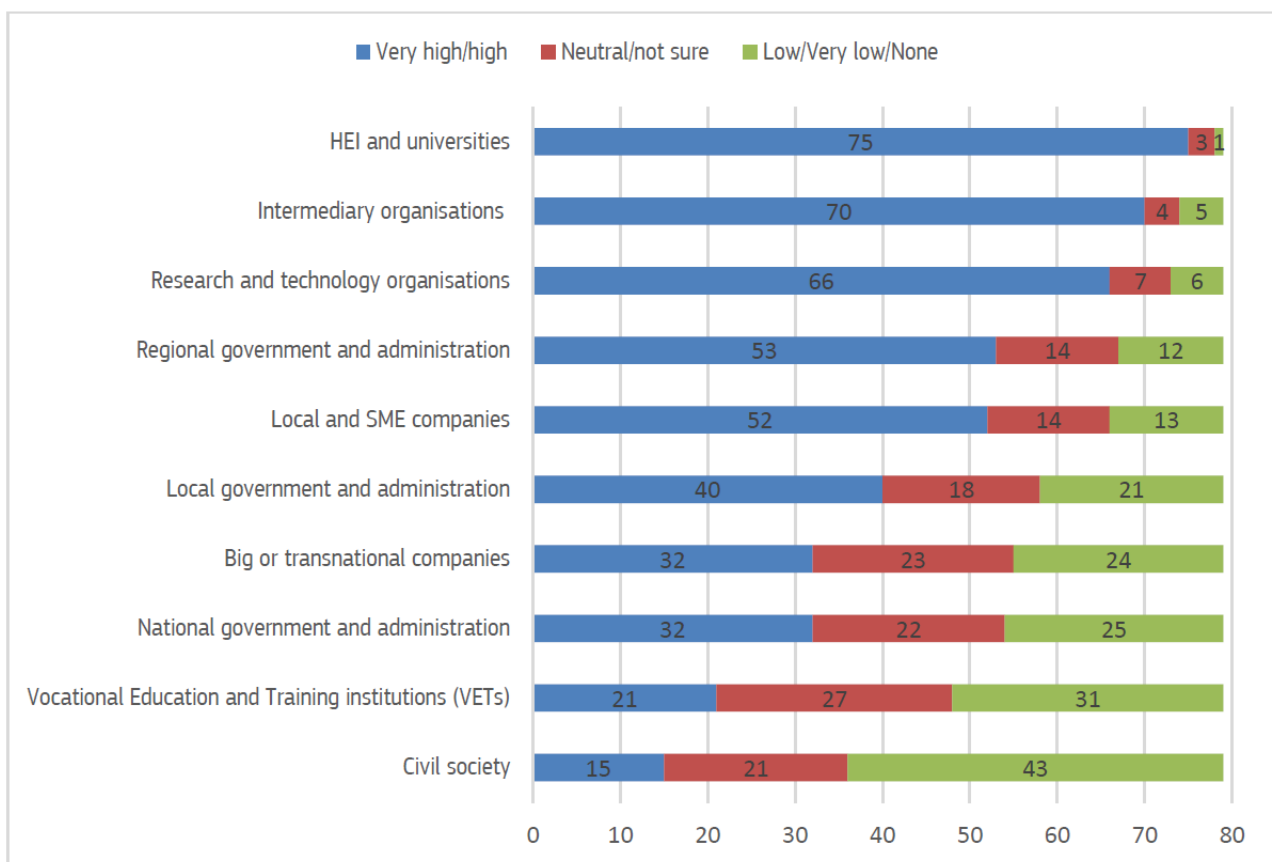
Figure 3. The Quadruple Helix (Q4 Helix) actors



Source: (Perianez-Forte & Wilson, 2021)

Based on evidence from the survey⁵, following the EDPs mobilisation and engagement of stakeholders within the initial RIS3 across Europe, three types of actors are standing out with above 80% (very high or high) participation in the smart specialization process - **higher education institutions (HEIs), intermediary organisations, and research and technology organisations (RTOs)**. According to that fact, it seems that the entrepreneurial discovery process remains mainly a triple-helix type of interaction (Marinelli & Perianez-Forte, 2017), where academia, industry and government have normally been more involved than other social actors. (Figure 4.)

Figure 4. Level of stakeholders' participation in the RIS3 strategy across the Europe



Source: Perianez-Forte I. and Wilson J. (2021)

High involvement of **intermediate organisations** (such as clusters) is consistent and reflects their efficiency in bridging the gaps between individual businesses and collective strategic processes. Along with them, HEIs and RTOs are also highly involved due to the nature of research and innovation focus of smart specialisation strategies.

⁵ Perianez-Forte I. and Wilson J. (2021): Assessing Smart Specialisation: Entrepreneurial discovery processes. JRC Science for Policy Report, JRC124405

Survey data, including 79 valid responses from people belonging to the public administration and involved in smart specialisation in 19 EU Countries (9 responses from national authorities and 70 from regional ones).

Regional government and **local and SME companies** are perceived to have high or very high participation at around 65% of respondents due to very strong role of regional government or its agencies in the entrepreneurial discovery process, together with local and SME companies.

National governments and local governments in the entrepreneurial discovery process are also consistent with analysis in many of the cases, which have highlighted the challenges of multilevel governance, although in several countries national governments lead the way in EDP instead of regional or local ones. In general, governments, parliaments and public administrations **play a very central role** in EDP (Iacobucci, 2014). They have to encourage all stakeholders to become involved in EDP, avoid selection biases and interest group capturing, and take political responsibility for RIS3. They are also important for aggregating captured information and knowledge as well as for evaluating and assessing the effectiveness of specialization. This group of actors have a **moderating role** to allow for an open and inclusive process.

Participation concerning **vocational education and training institutions** and **civil society** shows biggest participation gap. However, as pointed out by Guzzo & Perianez-Forte, those regional authorities that have experienced the involvement of civil society actors in entrepreneurial discover processes positively value their contribution. These regional authorities also recognise that they have often underestimated the interest of civil society in participating in policy-making processes and would like to promote their greater involvement in the future (Guzzo & Perianez-Forte, 2019). Civil society members, individuals (e.g. citizen committees) or group events (e.g. hearings including civil society organizations) will not only provide additional knowledge and perspectives in EDP, they will also generate democratic legitimacy by providing broader input of interests beyond business and academia.

1.3.1. Challenges concerning EDP stakeholders

In many aspects, **entrepreneurial agents** (firms and companies, R&D experts as well as higher education and research institutions) are the centre point of the process. Based on their engagement and knowledge concerning technological, economic and scientific domains, this group of agents is crucial for discovering the right specialization areas and act as **catalysts for driving the emerging transformation** of the economy (McCann & Ortega-Argilés, 2015). In addition to their recognition, there are **several challenges related to their involvement** in EDP (Martinez & Palazuelos-Martinez, 2014):

- 1) Important challenge is **initial engagement** of business and academia stakeholders and efforts to keep their active **participation** during the process. Finding the right incentives in collaborative activities is crucial. EDP may be compromised by inadequate supply of entrepreneurial knowledge in case (important) stakeholders stay away (or leave) from the process.
- 2) Dealing with the **“usual suspects” phenomenon**, in which only actors that have always been around and are closer to the regional authorities are taking part in discussions. It is important to include new participants, taking advantage to refresh and collect new knowledge and experiences which may contribute to the EDP.
- 3) It is important to **differentiate between different types of stakeholders** based on their specific needs, capacities and preferences, but in the same time, hold them together during the management of the ecosystem.

Intermediary organizations (regional/national chambers of commerce and industries or economic and social councils) may be helpful in bringing in the perspectives and needs of **SMEs** which often don't have the time and the resources to be involved in a scheme of participatory governance in public policies. Another **incentive**

which may attract and foster participation of smaller companies are policy instruments, such as **innovation vouchers**, which grant them access to technological parks and laboratories for specific projects.

Regarding **government and parliament** role in EDP, there is a **challenge to find the right balance** between steering the process and listening to an inclusive and interactive process when reaching decisions. The more political actors are involved, the more it is likely that they will stick to entrepreneurial discoveries when making their decisions. On the other hand, the bottom-up character of EDP is at risk if politicians and EDP managers are given a too large steering role.

Bringing **civil society** members into EDP in form of **debates** on regional development is a challenge in itself. It seems important therefore that citizens find their interest and needs during such debates. Another way is to involve citizens in EDP practices during the realization of local initiatives.

1.4. EDP mechanisms and instruments

Types of mechanisms used to mobilise and engage stakeholders in the entrepreneurial discovery processes, is **best observed through the case studies** conducted across several EU countries⁶ which highlight a wide range of different instruments used to facilitate the EDP.

The **importance of intermediary institutions** involvement to ensure stakeholders' participation in the entrepreneurial discovery process has to be underlined. These institutions could be in a form of **multi-stakeholder platforms** – clusters, chambers, technology districts, government-led agencies, forums with specific competencies to facilitate EDPs or even a mix of several different types. While intermediary institutions' main role is to provide stability and continuity to the process, several more **specific mechanisms facilitate the EDP** and the link to policy:

- a) Most important common instruments are **thematic groups** or specialised **workshops** used as tools for discussions, deeper interactions and exploration, along with some more specific tasks, such as focus on specific priorities and sub-priorities to generate granularity and integrate increasingly niche knowledge. The survey has identified one critical point that many EDP workshops fail to ensure – the **follow up after the events**, thereby missing the opportunity to disseminate important conclusions among the participants.
- b) **Online platforms** as an instrument for discussions and interactions appeared less popular in terms of their low effectiveness. Important fact, concerning the COVID-19 pandemic, is that users of digital online platforms have changed their perception about usage and have rapidly increased their digital skills. In this direction Laranja, Edwards, Pinto, & Foray, (2020) point out that “Digitalisation of the EDP allows for more regular interactions, even if it lacks the ‘human touch’ of meeting physically”. Another advantage is that digitalisation of the EDP allows for a potentially more inclusive process as people can join online events from wherever they are based; a particular advantage for large and remote regions.

⁶ Ibid.

18 case study reports across 7 EU countries and 18 EU territorial entities, 5 at the national level and 13 at the regional one. The case study reports were based on secondary data analysis and interviews with public officials and relevant stakeholders involved in the design, implementation and evaluation of Smart Specialisation.

- c) Use of **brochures, pamphlets, magazines, facts, numbers and figures** to inform the general public is relatively low perceived among EDP projects across the Europe. One of the reasons is that communication and dissemination of EDPs among a wider public has not been a priority.
- d) Regarding the **incentives** to engage stakeholders through these instruments, the key incentive is **privileged information about funding calls**, but natural commitment to a common cause is also mentioned.

1.5. Organization of the EDP

The EDP requires heavy time and resource demands regarding stakeholders' engagement. Some case studies have showed that besides time, commitment and effort, that financial and human resources for the organisation of the various initiatives are substantial and carrying out with the processes on a continuous basis represents a real challenge.

Establishing rules of engagement and roles of the various actors involved seems to be important, according to the survey of the European case studies. Those rules vary from more or less formal to more or less flexible which depends on the specific context. However, some overall guidelines are necessary to be able to manage the expectations of different actors and provide the effectiveness and continuity of the process.

Two common organizational elements can be identified⁷:

- a) **Intermediaries** play the key role in organising the entrepreneurial discovery process in all cases. They may differ by nature: in some cases they are multi-actor platforms (clusters, technology districts, platforms, business associations) or in other cases they are government-led agents charged with playing an intermediary role.
- b) **Funding calls** have a central role as a mechanism for adapting policy in the organisation of the entrepreneurial discovery process. Such funding calls, typically focused on projects, provide connecting links between policymakers and other stakeholders. Sometimes such funding calls are used as a tool to collect stakeholder feedback and information in a dynamic process that leads to the adaptation of the calls themselves. As such, funding calls clearly provide an important mechanism to link the emerging results of discovery processes within the priority areas with policy decision-making. It is argued that the **most important skill** for the EDPs is the **ability to listen**, and that this is developed through **knowledge exchange**. Some of the cases also identify shortcomings in terms of specific capacities, for example in terms of communication.

1.6. Capacity building

This is a critical point to ensure the right skills and resources for the operationalisation and continuity of the EDP. Promoting capacity building initiatives for all quadruple-helix actors is central for greater engagement of stakeholders. Evidence shows that capacity building is important factor, but in reality there is little direct action to reinforce it. While most EDP initiatives rely on *learning-by-doing* approach, there is evidence that stakeholders still lack some of the capacities needed to effectively engage in such processes. Such lacking capacities are mostly formed around **communication skills, using adequate tools and messages tailored to**

⁷ Ibid

the target audience to provide stakeholders with information on project results and feedback on policy implementation. **Public administrations** should promote training and supporting staff in **developing networking and operational skills**, which are essential to engaging with relevant actors and experts, effectively managing working sessions with stakeholders and designing and implementing effective policy instruments. Supporting the development of **interpersonal skills** is also central to good interaction, building trust and solving conflicts.

1.7. COVID-19 influence on EDP governance

Due to the COVID-19 pandemic, “physical distancing” has become a new reality. S3 and governance supporting the EDP process, which both have benefited from the in-person meetings, workshops and focus groups, need **new means of synchronous (real-time) communication tools** so that in-person EDP events could be adapted to online events/workshops (Laranja, Marques Santos, Edwards, & Foray, 2021).

Table 1. Pros and cons of online versus in-person meetings/events

	Pros	Cons
Online events	<ul style="list-style-type: none"> ○ Cost savings (time and money) ○ More flexible scheduling ○ From anywhere in the world 	<ul style="list-style-type: none"> ○ Highly dependent of internet and IT equipment quality ○ Loss of interpersonal relationship
In-person events	<ul style="list-style-type: none"> ○ Gains in interpersonal communication ○ Higher concentration and participation 	<ul style="list-style-type: none"> ○ Cost (money and time) to travel to the meeting place ○ Cost with event organization

Source: Laranja et al., 2021

To avoid online fatigue, online events should normally be shorter comparing to the physical events. It is therefore important to decide which facilitation techniques could be used to increase the quality of the participatory process.

Overall, despite advantages of physical meetings, digitalized support to EDP allows for more regular interactions. It also allows for a potentially more inclusive process as people can join online events from anywhere (home, office etc.).

1.8. An evolution of EDP within S3 2.0.

On the policy making side, faced with the end of the first period of the S3 agendas (2014–2020), management authorities have a double challenge in front of them:

- a) establishing clear **conclusions about the outcomes of the strategy to date**, analysing its successes and failures through a good monitoring and evaluation model, and using all that information to design an updated version of it, a S3 2.0 (as defined by the European Commission), in which they need to maintain successful points, modify what can be improved and
- b) **introduce all missing elements** which could improve and expand the results.

Additionally, the European Commission is expected to introduce two additional axis for the design of the S3 linked to the ERDF for the next programming period (Vocaskova, 2020):

- a) more features of international collaboration and
- b) other elements linked to industrial transition.

According to article “Towards Smart Specialisation 2.0” (Esparza-Masana, 2021), managing authorities face several **main challenges** when undertaking the S3 in the programming period 2021–2027:

- **Closing S3 1.0 without enough evidence – lack of evidence based** in the design and implementation of S3 throughout the first period, and the fact that decisions were made along political lines (more or less based on EDP) but with **poor empirical proof**. Measuring innovation results takes time, especially if we aim at analysing the outcomes in the long run. Without a complete overview of the reality for the period 2014–2020, it is hard to imagine that the strategy can be highly improved for the next period. (Morgan, 2015). However, there are **five elements from which conclusions can be reached** by observing implementation and for which it is possible to introduce relevant changes: (1) the governance system and the competences and interactions of its stakeholders; (2) the results of the EDP, in terms of the first results from this process; (3) the practical design and implementation management of the strategy’s instruments; (4) the smart specialisation process, in terms of the analysis of the projects in each priority domain; and (5) the usefulness of the current monitoring system (if any).
- **What to keep, what to reshape, what to remove** - Strategies to choose among these possibilities are diverse. There are choices relating to the strategic scope and those that link to the practical implementation. Strategic scope role of the EDP should be at the centre and it should be assumed that the participatory process has been—to some extent—continuously active throughout the period 2014–2020; otherwise, it should be reactivated. On the other side, practical implementation choice is related to decisions which can be made in a more informed way, by identifying what worked, what failed and what should be implemented in a more efficient manner, according to past evidence.
- **Enlarging and integrating the governance system** - If EDP is the key factor for the design of S3, stakeholders—representing the quadruple helix—must also be part of the governance of the strategy, and that includes collaborating in the definition of the **policy mix** (policy instruments and support mechanisms might be diverse, including different funding schemes, different participating stakeholders, different expected outputs, etc.) **and the continuous monitoring system**.

- **Improving the Entrepreneurial Discovery Process** – EDPs' definition and its concept was never equally understood by all territories and stakeholders (Capello & Kroll, 2016). During the period of first S3 designs, it was mostly understood as participatory bottom-up approach to identify *priorities, competitive advantages and specialization domains*. Recently, several authors (Kroll, 2015) (Kleibrink et al. (2017), suggest that EDP should also consider **evidence-based aspects** and an **additional top-down perspective**, in order to have a more complete and objective overview to make appropriate decisions. It is even suggested that EDP should be „institutionalised“ in order to achieve relevant goals. Based on experience from the first S3 period and teoretical works mentioned before, when working on the EDP for the period 2021–2027, **four main criteria** are to be considered:
 1. **Stakeholder composition**. Which agents are to participate and how based on the nature of the agents and different confronting interest they have.
 2. **Topics**. Selecting topics covered by stakeholders in order to reach appropriate conclusions.
 3. **Mechanisms**. Choosing mechanisms which would guarantee an active and wide participation in the EDP, to ensure obtaining sound conclusions.
 4. **Extending the EDP into continuous process**. Going beyond just the design of the strategy and bringing it into implementation phase, linking it to the need to design flexible adaptive innovation policies, and continuously improving stakeholder's role.

Therefore, integration of these four criteria into single EDP system represents a real challenge, ensuring that an EDP 2.0 becomes more **accessible, integrating**, and with an **always-ongoing role** which could largely improve its results for the whole process. It could also enlarge the positive externalities that come from the EDP such as outcomes from collaboration and networking leading to potential activities even outside the strategy.
- **Updating the strategic specialisation domains** - in many cases, priority domains have been defined in a largely broad way, narrowing the possibilities to generate industrial diversification that could lead to large improvements (Radošević, Assessing EU smart specialisation policy in a comparative perspective, 2017). In a mission-oriented R&I, updating the specialisation domains for S3 2.0 provides the opportunity to present them in this inclusive way, fostering the interconnectivity of the stakeholders to tackle the regional challenges (Mazzucato, 2018). Therefore, **two aspects** are to be considered. **First** one relates to reassessment of the 'sector' concept, understanding it as a transformative integrating domain which has a broad space to include emerging activities. **Second** aspect is establishing transnational collaboration for fostering cross-border connections for join cooperation and R&I results exchange.
- **Reconsidering and reshaping the policy mix** – Policy mix (set of policies/policy instruments and their interaction to reach strategic goals) can be updated to new levels considering several points. Policy mixes should be reshaped over time in order to make them more efficient. Moreover, some **new policy instruments** may be introduced to tackle new challenges (e.g. public procurement of innovation - **PPI**). Following the EDP, **priorities** related to specialization domain and other strategic aspects need to be **reshaped**. Lastly, **bureaucratically simpler policy instruments** have to be updated by offering clearer rules etc.

2. Blue Growth EDP

2.1. Transnational perspective of the EDP

The EDP has important trans-regional dimension as a general policy concept for innovation built into the Europe 2020 strategy together with the smart specialization strategy. Both have strengthened structures of multi-level governance in which European institutions, member states, regions and local stakeholders cooperate in achieving shared goals. Such trans-regional bonds have become an **important tool for joining the resources and sharing mutual experiences** in the EDP management. Goal of such collaborations between regions is to **identify innovation potentials in sharing expertise and capacities**. Important facilitator for strengthening the trans-regional dimension are **EU funds** (Periañez Forte, Marinelli, & Foray, 2016). In other words, European regions may cooperate based on **sharing similar priorities** and **finding complementary interests** in specific activities and economic sectors (Keating, 1998) (OECD, 2011).

S3 tend to be based on the region they cover and therefore lack a sound orientation towards trans-regional collaboration and may lack the understanding, interest and/or capacity to explore the possibilities of trans-regional cooperation (Radošević & Stancova, Internationalising smart specialisation: Assessment and issues in the case of EU new member states, 2018). On the other hand, cross-border collaborations are based on enlarging the synergies and positive externalities that arise from these collaborations, learning from the stakeholders and models in other territories (Uyarra, Marzocchi, & Sorvik, 2018).

According to Esparza-Marsana (Esparza-Masana, 2021) **three main challenges** are linked to these trans-regional initiatives:

- a) There is (very) **limited experience when it comes to transnational innovation initiatives**, especially at a regional level, under strategic frameworks such as S3. The support of programmes such as the European Territorial Cooperation (also known as Interreg) can be a base to foster these collaborations from a policy-making perspective, enlarging the capacities.
- b) **Limited funding**. Territories have more incentives to invest the funds locally. While 2014–2020 ERDF offered the option of devoting some funding to transnational projects, this possibility has not been much explored. The European Commission plans to allocate ERDF resources to transnational collaboration projects under common S3 priority domains (Vocaskova, 2020). It is considered that substantial measures to design and to implement these initiatives are to be initiated in the updated S3s.
- c) There is a **need for better indicators** providing clearer and more objective information on existing and future **international collaborations** and new mechanisms to assess the actual impact of transnational collaboration instruments and projects (Edler & Flanagan, 2011).

2.2. Why Blue Growth EDP?

Smart specialization strategies tend to be based on the region they cover. Therefore, main S3 characteristic is focus on specific region for recognizing, exploiting, gaining comparative advantages and raising competitiveness of its regional actors in comparison to regional and global competitors. This **regional characteristic suppresses possibilities for stronger mutual cooperation** between potential trans-regional

partners, consequently limiting Adriatic-Ionian macro-regional cooperation and competitiveness in projects' Blue Growth domain and beyond.

To encourage cooperation, support of programmes such as the European Territorial Cooperation (Interreg) is crucial to foster these collaborations from a policy-making perspective, enlarging regional actors' capacities. A common problem with Interreg projects is their short-term limited duration and limited budgets.

In order to overcome short-term transnational projects and resulting mediocre impacts, long-term sustainable macro-regional cooperation with visible impacts beyond project duration in BG areas based on aligned join macro-regional Innovation strategies towards national Smart specialization strategies may present **possible solution** to that problem.

The goal of the project's Pilot Blue Growth EDP is to validate, deepen and modify feasible identified Blue Growth areas within ADRION area, to help create lists of priorities and comparative advantages based on proposed Blue Growth areas from the initial desk-research analysis phase. Blue Growth EDP would need to exploit macro-regional economic and innovation assets diversity by finding complementarities at macro-regional value chain levels.

Feedback from the EDP task within the project would **serve as input for creating Macro-regional Blue Growth Innovation strategy** to enhance the competitive advantages and emerging market opportunities in Blue Growth of the ADRION Programme area. Through the development of an Innovation Strategy and Action Plan on BG on macro-regional level, the project aims at enhancing the institutional capacity of AIR countries/regions in the definition of a common approach to explore implementation of S3 policy on Blue Growth at transnational/macro-regional level.

Table 2. Reasoning of Blue Growth EDP

Problem	<ul style="list-style-type: none"> • Limited MR AIR competitiveness in the BG sector. • S3s tend to be based on the region they cover, and they lack a sound orientation towards transregional collaboration and may lack understanding, interest and/or capacity to explore the possibilities coming from transregional cooperation
Who?	<ul style="list-style-type: none"> • Adriatic-Ionian region
Solution?	<ul style="list-style-type: none"> • To encourage long-term sustainable macro-regional cooperation in BG areas • To find complementarities among AIR stakeholders within BG VCs as feedback for BG Innovation Strategy
Alternative?	<ul style="list-style-type: none"> • Short-term transnational projects
Goal?	<ul style="list-style-type: none"> • Exploiting complementarities • Connecting BG opportunities in macro-region with S3 capacities • Aligning R&I goals, resources & strategies
How?	<ul style="list-style-type: none"> • To exploit macro-regional economic and innovation assets diversity by finding complementarities at MR value chain levels

Source: Authors

3. The BG-EDP Tool

Blue Growth Entrepreneurial Discovery Process (**BG-EDP**) tool represents an instrument used to carry out EDP exercise in testing countries. Implementation of BG-EDP tool would mobilize innovation stakeholders to increase knowledge transfer between quadruple helix actors.

Main goal of the BG-EDP tool is development of structured modular survey for carrying out pilot EDP exercise on BG areas, together with the concept with elements, actors, process cooperation, modules, input and output documents etc. The BG-EDP tool is intended for projects' implementing and supporting partners, facilitators and national policy makers responsible for EDP implementation and finally for development of consequent BG Innovation strategy.

3.1. EDP-Tool Framework

The BG-EDP tool would provide framework for successful preparation, launch and implementation of Pilot EDP for Blue Growth (DT2.3.2.) which is focused towards improving the capacities of public innovation players to jointly define a common transnational S3 on Blue Growth. This activity requires the active involvement of public administrators and policy makers working on innovation policies (RIS3 and similar) as well as the collaboration of local quadruple helix innovation players.

The EDP Tool would present guidelines as a clear set of engagement rules and roles for various actors with the following content:

FRAMEWORK

- a) BG-EDP concept
- b) BG-EDP focus elements and goals
- c) Process flow and modules
- d) Selected BG areas
- e) Partners' tasks
- f) Selection criteria (target groups)
- g) Sampling criteria
- h) Sources of firm contacts

EDP-SURVEY QUESTIONNAIRE

- a) Key features
- b) Objectives
- c) Structure
- d) Customised thematic question groups and modules

OPERATIONAL PHASE

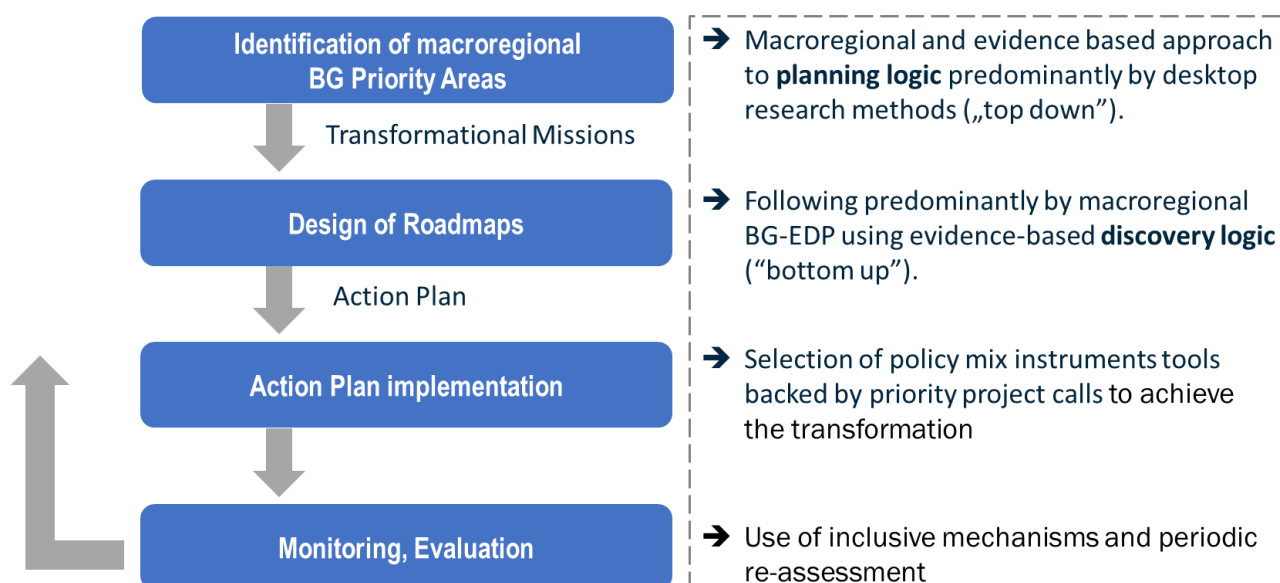
- a) Survey distribution methods
- b) Invitation letter
- c) Governance of the survey
- d) Management of the survey analysis and results
- e) Results representation

MACRO-REGIONAL BLUE GROWTH EDP FOCUS GROUP

3.1.1. BG-EDP Concept

General idea of the BG macro-regional S3 approach is **to identify several priority areas** with promising socio-economic and innovation potentials for future growth in Blue Growth areas **and to define the associated transformation goals**. Priority areas are results of comprehensive analysis seeking for concentration of available resources in macro-regional ADRION area to achieve **cumulating effects and spill-overs**. Transformation itself is not focused on existing structures but on a transformation of these structures to support and accelerate the **overall transformation**. Such a transformation takes **macro-regional capacities** into account which leads to a distinctive **strategy**. Such dedicated strategy needs an overall headlight in form of **transformational goal or mission** which highlights a concrete abstract and scope of transformation. Such transformational goals/missions are backed by **roadmaps** which highlight infrastructure, capacities, projects, trainings and higher levels of management which transformation is aspiring to reach. The roadmap is produced through the EDP involving the key quadruple-helix macro-regional stakeholders in the priority area. In order to support the execution of the roadmap a comprehensive action plan is needed for implementation of the activities (Figure 5).

Figure 5. Governances in MR Blue Growth S3 strategy development



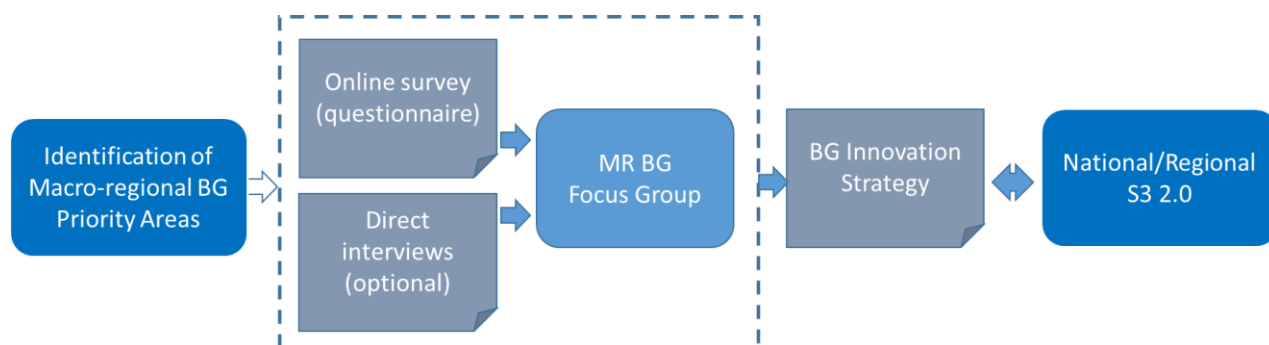
Source: Authors based on various consulted sources

3.1.2. BG-EDP Focus Elements and Goals

The EDP as such, is a continuous process particularly important for the second cycle in the strategy development process, the design of transformational roadmap. The targeted transformation will be discovered as the process unfolds. The EDP would need to address the informational problems from the highly specific nature of innovation within specific sectors.

Projects' BG-EDP is focused on second cycle following the identification of macro-regional Blue Growth Priority areas within ADRION region with the goal to provide set of inputs necessary (together with several other project's inputs) for creation of the joined Blue Growth Innovation Strategy and associated Action plan.

Figure 6. BG-EDP focus elements



Source: Authors

Three focused BG-EDP tool elements and relevant goals (Figure 6) are:

- **Online survey** – platform for conducting structured modular qualitative survey in form of online questionnaire tailored to entities in the identified relevant BG sectors and involved in various economic activities across the BG value chains. It complements the other elements of the EDP process.
 - **Goal:** Seeking feedback on priority areas for policy intervention, barriers to innovation-based growth, emerging business and technological trends or the efficiency of public support policy, available capacities (research, economic, organisational, HR) which may support the transformation. To help identify entities that could later be directly interviewed and invited to MR Focus Group.
- **Direct interviews** – optional activity where more comprehensive on-site survey takes place with identified potentially important entity. Such entity may be or may become important generator or predecessor of transformational sector change or may even represent an advanced buyer⁸ in downstream part of the value chain. Data from each interview are aggregated and analysed for policy insights.
 - **Goal:** Identification of key drivers for and constraints on SME innovation, identification of key attributes of companies that could benefit the most from public intervention, and taking snapshot of key business and technological trends, as perceived by the companies. Interview may identify and verify such company as a leading company for participation in the MR focus group. Comprehensive and more detail questions may provide better information for complementary analysis and provide inputs for BG value chain mapping.

⁸ Advanced buyers are companies, mostly in the downstream parts of the value chain, which set the scope for evolution and innovation in the industry. They are trendsetters. Understanding the purchasing criteria of these customers helps to determine the requirements for competitive participation in attractive segments in the future.

- **Macro-regional Blue Growth Focus Group** – collaboration group consisting of representatives of project partners and optionally selected identified entities with high growth and innovation potential selected through online surveys and in-person interviews, representatives of science and research and development institutions (RDIs), business support institutions, public administration and experienced business experts.
 - **Goal:** Verification of survey results with options to discuss themes about design of initial transformational roadmaps by identification of a project collection for a strong transformational push. Such process is based on several evidence-based input documents and firm surveys incl. optional interview inputs in order to explore cooperation opportunities, to find common interest, to explore possible collaborative projects and funds, to explore complementarities among AIR BG Areas and generate clear transformational missions.

3.1.3. Process flow and timeline activities

BG-EDP process is composed of several consecutive supporting and main activities.

Analysis and **BG area proposal** activities serve as initial steps preceding main activities necessary for staging BG-EDP project pilot activity (Figure 7.).

Figure 7. BG-EDP timeline activities



Source: Authors

Each of six activity steps are explained in detail together with activity/goal, comments and implementing activity partners (Table 3.)

Table 3. Description of BG-EDP activity steps

Steps	Activity/goal	Comment	Who
Activity 1	Analysis: Identification of potential Blue Growth areas of specialization for Adriatic-Ionian region based on the quantitative research, monitoring and evaluation: <ul style="list-style-type: none"> Analyses of data from the Blue Economy Report, a list of 	Broad analysis of existing data focusing on identifying most promising Blue Growth areas common to Adriatic-Ionian region and to establish common	CCE: Blue Economy analysis, S3 analysis, Position paper TPLJ: Best practices analysis AREA: Foresight tool

	<p>common established and emerging BE sectors with potential usage in AIR, analysis of common technologies and solutions related to BG areas</p> <ul style="list-style-type: none"> • S3 analysis: development potential of the national S3s in the regions • Best practices analysis • Position paper of BG key common technologies in the AIR 	understanding among project partners	Project partners: review and comment on the report.
Activity 2	<p>BG Areas proposal: list and detailed description of all proposed areas of Blue Growth applicable for ADRION region.</p>	Report in a form of a living document (possible new amendments) providing most promising identified BG Areas with inter-regional linkages for ADRION region (figure 8).	<p>CEE: report</p> <p>Project partners: review and comment on the report.</p>
Activity 3	<p>Survey/Interviews: Creation on structured online survey and optional on-site interviews meetings.</p> <p>It creates inputs for Innovation strategy and helps to align and steer strategic choices compatible with business organization point of view.</p>	Insights derived from Position paper and Macro-regional S3 analysis as well as from reports from stakeholder's roundtables.	EDP exercise will be carried out in eight regions by implementing partners supported by selected project partners (table 4).
Activity 4	<p>Results gathering and report assembly: Data gathered during surveys and interviews are analysed from different perspectives: from the firm perspective and by individual regional/national area, type of enterprises, etc.</p>	Eight regional implementing partners would coordinate pilot EDP implementation on national level by conducting online survey and optional on-site interviews. Each of them would create survey report and deliver it to central hub for final joint report assembly.	<p>Implementing partners (table 4).</p> <p>BG-EDP Hub: CCE</p>
Activity 5	<p>AIR Focus Group meeting: Special advisory board connecting interregional stakeholders validating and proposing:</p> <ul style="list-style-type: none"> • Validation of BG business areas, their economic and scientific potentials that can be boosted in development based on perspective innovation and R&D • Validation of the BG business areas based on gap analysis of BG value chains 	The Focus group consists of 4-helix representatives from ADRION region who may become drivers for potential projects oriented towards the defined transformational goal.	<p>All project partners.</p> <p>Members may include a wide variety of actors from research communities and education, start-ups, SMEs, industry, MNEs, representatives of public administrations concerned with relevant programmes or NGOs</p>

	<ul style="list-style-type: none"> • A vision for development of the BG business areas • Identification and design of Transformational Missions and the Roadmap 		
Activity 6	BG-EDP outputs and results: Creation of the report which would serve as input for recommendations for the BG Innovation strategy	Supplemental report with semi-structured inputs for the BG Innovation Strategy.	CEE

3.1.4. Selected BG-Areas

Based on the presented information, economic indicators and overview of the Blue Growth area as well as strategic determinants of both the EUSAIR strategy and the BLUEAIR project, a functional division of the BG areas is proposed for further analysis and activities within the project⁹.

Functional framework is divided into: **(figure 8)**:

1. Blue technologies
2. Fields of activities (i.e. “Blue sectors” from Blue Economy report)
3. Blue solutions

Figure 8. Identified Blue Growth Areas of ADRION region



Source: Authors

⁹ The analysis and BG-Areas proposals have been detailed elaborated in projects deliverable T2.1.1. Report on Blue Growth Areas.

Framework is based on actual (established/traditional) and identified (emerging) sectors, activities, technologies or solutions, but allows structural changes (possible new or changed initiatives or strategies) in form of insertion of additional technologies, new emerging sectors or novel solutions which make it futureproof.

Each framework area is functionally related to EUSAIR Blue Growth pillar and its three sub-topics (Blue technologies, Fisheries and Aquaculture and Maritime and marine governance and services), but expanded with wider scope of maritime related activities in line with AIR region and recent EU initiatives backed by measurable data on annual basis.

Details of each subcategory are elaborated in the deliverable T2.1.1. *Report on Blue Growth Areas*.

3.1.5. Partners' tasks

According to the arrangements made during the project proposal definition stage, under the **coordination of PP5-UNIPR, 9 implementing** partners (3 PPs and 6 APs) backed by **supporting partners** will host the **Pilot EDP for Blue Growth** with an active role in the development of the actions.

Table 4. Implementing and supporting partners tasks

IMPLEMENTING PARTNERS' TASKS	SUPPORTING PARTNERS TASKS
<ul style="list-style-type: none"> ➤ select BG areas for the EDP pilot for their regions (from the agreed list of thematic areas of common interest explained in Deliverable 2.1.1. Report on Blue Growth Areas (figure 8)) ➤ agree and approve the list of stakeholders ➤ coordinate development (content) and approve presentations ➤ provide key personnel to accompany the pilot ➤ send invitations to stakeholders on their behalf (Implementing partner will be the "owner" of the Pilot) ➤ actively participate in the formation of ideas and results as a stakeholder from public sector ➤ verify the results 	<p>They will help and assist the implementing partners in following actions:</p> <ul style="list-style-type: none"> ➤ selection of BG thematic areas that are best suited for specialization in the region they represent and pilot (from the agreed list of thematic areas of common interest explained in Deliverable 2.1.1. Report on Blue Growth Areas (figure 8)) ➤ defining a list of local stakeholders to participate in public dialogues according to the choice of area ➤ organization of dialogue / survey schedules ➤ making the necessary presentations ➤ processing of data collected during the pilot process

EDP IMPLEMENTING PARTNERS	SUPPORTING PARTNERS	Country
PP6 - Region of Central Macedonia		Greece
PP7- National Agency for Scientific Research and Innovation		Albania
AP13- Autonomous Region of Friuli Venezia Giulia,	LP- AREA Science Park	Italy
AP28- Sicilian Region - Presidency - Regional Planning Department,		
AP29- Ministry of Economy Herzegovina Neretva Canton,	PP11- Chamber of Economy of the Federation of Bosnia and Herzegovina	Bosnia and Herzegovina
AP16- Croatian Ministry of regional development and EU funds,	PP2- Croatian Chamber of Economy	Croatia
AP23- Ministry of Economy of Montenegro	PP8- Innovation and Entrepreneurship Centre- Tehnopolis PP9- Chamber of Economy of Montenegro	Montenegro
AP25- Ministry of Education, Science and Technological Development of the Republic of Serbia	PP10- University of Belgrade	Serbia
AP26- Ministry of Education, Science and Sports AP19- Ministry of Economic Development and Technology	PP3-Technology Park Ljubljana	Slovenia

Source: Partners' Endorsement to the Project (with added PP9 under supporting partners)

Details and dedicated checklists explaining roles tasks and responsibilities for coordinating, implementing and supporting partners is presented in chapter **3.3.3. Governance of the Survey** and **Annex part C - Checklist for the Pilot EDP survey process.**

3.1.6. Survey respondents selection criteria

Target groups and stakeholders eligible for BG-EDP survey are primarily SMEs involved in or connected to the **Blue economy value chain activities**, although large companies and peripheral-sector companies are also eligible. Peripheral-sector companies are companies related to other sectors or those that participate in different value chains but may share activities over peripheral links with primary companies within BG related value chains. Activities of such companies are good indicators for understanding the big picture of BG related value chain activities. Along with the business sector actors, it is recommended to include other quadruple-helix actors from research communities and education, representatives of public administration concerned with relevant programmes or NGOs involved or familiar with Blue Growth sector activities.

Along with quantitative characteristics criteria, where companies are selected within BG related activities, the selection criteria should include other qualitative characteristics in order to assess the variety of needs and the variation of the intensity among interviewed companies. This approach should enable policy makers to deliver well-defined “smart policies” and public interventions adapted to their target groups.

Selection criteria is based on NACE¹⁰ codes related to Blue Growth activities according to the *EU Blue Economy Report 2021*¹¹, defined Blue Growth and BG related industries based on the *European Cluster Observatory Cluster mapping of related sectors report*¹² and set of additional ICT supporting NACE activities related to the Blue Growth based on authors’ analysis.

NACE codes are grouped in the main and extended BG activities. Main BG activities are further divided into primary focus areas activities and secondary focus areas according to projects’ *Identification of Blue Growth Areas* project document.

Primary focus area NACE codes

Companies in the main BG activities group, belonging to **primary focus area**, represent the core of targeted groups sample in terms of qualitative characteristics.

Companies in this group belong to five previously identified BG primary focus area sectors within ADRIION region:

- **Marine living resources,**
- **Marine transport,**
- **Port activities,**
- **Bioeconomy & biotechnology and**
- **Infrastructure & maritime works sector** (Table 5.).

¹⁰ NACE rev.2 – <https://ec.europa.eu/eurostat/documents/3859598/5902521/KS-RA-07-015-EN.PDF> Accessed on 13.12.2021.

¹¹ European Commission (2021). The EU Blue Economy Report. 2021. Publications Office of the European Union. Luxembourg.

¹² European Commission (2014). The European Cluster Observatory Report. Methodology and Findings Report for a Cluster Mapping of Related Sectors. Center for Strategy and Competitiveness, Stockholm School of Economics.

Table 5. NACE code activities of main BG primary focus areas

Main BG activities		Primary focus areas	
Sector	Subsector	NACE Activity	Description
Marine living resources	Primary sector	A 03.10	Capture fisheries (EU fishing fleet, data from DCF)
		A 03.20	Aquaculture sector (onshore and offshore production, data from DCF)
	Processing of fish products	C 10.20	Processing and preserving of fish, crustaceans and molluscs
		C 10.41	Manufacture of oils and fats
		C 10.85	Prepared meals and dishes
		C 10.89	Other food product
	Distribution of fish products	G 46.38	Wholesale of other food, including fish, crustaceans and molluscs
G 47.23		Retail sale of fish, crustaceans and molluscs in specialised stores	
Maritime transport	Passenger transport	H 50.10	Sea and coastal passenger water transport (water transport)
		H 50.30	Inland passenger water transport
	Freight transport	H 50.20	Sea and coastal freight water transport (water transport)
		H 50.40	Inland freight water transport
		H 49.41	Freight transport by road
	Services for transport	N 77.34	Renting and leasing of water transport equipment
		H 52.29	Other transportation support activities
N 77.34		Renting and leasing of water transport equipment	
Port activities	Cargo and warehousing	H 52.23	Service activities incidental to air transportation
	Port and water projects	H 52.24	Cargo handling (port services)
		H 52.10	Warehousing and storage
Bioeconomy & biotechnology (Research and education)		H 52.22	Service activities incidental to water transportation
		F 42.91	Construction of water projects.
		M 72.11	Research and experimental development on biotechnology
Infrastructure and maritime works (submarine cables, robots, drones) sector		M 72.19	Other research and experimental development on natural sciences and engineering
		M 74.90	Other professional, scientific and technical activities n.e.c.
		Companies in this economic activity do not have a specific NACE code, but are part of Extended BG activities	

Source: Authors

Note

The **blue bioeconomy & biotechnology sectors** refer to research and education entities identified within three NACE code activities in relation to BG. It has to be noted that bioeconomy & biotechnology sectors' entities may be registered in other NACE activities as well.

Infrastructure and maritime works sector (incl. underwater robotics) refers to companies involved into two activity groups:

- Submarine cable networks** that are critical infrastructure ensuring data, telecommunication and power transmission connections;
- Usage of **underwater robots** for surveys, scientific research, oil and gas exploration, border surveillance, infrastructure inspection and farming. Companies in this sector do not have a specific NACE codes, but are or may be classified with other NACE activity codes mostly listed under Extended BG activities table.

Secondary focus area NACE codes

Secondary focus areas are still very much connected to the primary focus areas by technologies, interactions, connections, R&D&I activities, solutions or other common factors, which produce significant future impact on Adriatic-Ionian region. Those secondary sectors are mostly aligned to remaining EUSAIR pillars (Table 6.).

Table 6. NACE code activities of main BG secondary focus areas

Main BG activities		Secondary focus area	
Sector	Subsector	NACE Activity	Description
Shipbuilding and repair	Shipbuilding	C 30.11	Building of ships and floating structures
		C 30.12	Building of pleasure and sporting boats
		C 33.15	Repair and maintenance of ships and boats
	Equipment and machinery	C 13.92	Manufacture of made-up textile articles, except apparel
		C 13.94	Manufacture of cordage, rope, twine and netting
		C 26.51	Manufacture of instruments and appliances for measuring, testing and navigation
		C 28.11	Manufacture of engines and turbines, except motor vehicle, aircraft and cycle propulsion
		C 25.99	Manufacture of other fabricated metal products n.e.c.
		C 32.30	Manufacture of sport goods
		C 28.22	Manufacture of lifting and handling equipment
Coastal tourism	Accommodation	I 55.10	Hotels and similar accommodation
		I 55.20	Holidays and other short-stay accommodation
		I 55.30	Camping grounds, recreational vehicle parks and trailer parks
		I 55.90	Other accommodation
	Transport	G 47.30	Retail sale of automotive fuel in specialised stores
		H 49.10	Passenger rail transport, interurban
		H 49.31	Urban and suburban passenger land transport
		H 51.10	Passenger air transport
	Other expenditures	G 47.60	Retail sale of cultural and recreation goods in specialised stores
		G 47.70	Retail sale of other goods in specialised stores
		I 56.00	Food and beverage service activities
Desalination		Companies in this economic activity do not have a specific NACE code, but are part of of Extended BG activities (e.g. Water treatment)	

Source: Authors

While **shipbuilding & repair sector** will be taken into account through its research and technological contribution, it is still important to include important market actors into survey target group.

Coastal tourism and its relevant subsector activities are central part of secondary focus area due to its interactions with other sector and sub-sector activities and due to its large socio-economic impact.

Similar to infrastructure and maritime works sector belonging to primary focus area activities, **desalination** companies in this sector do not have a specific NACE codes, but are or may be classified with other NACE activity codes mostly listed under Extended BG activities table.

Extended Blue Growth activities NACE codes

Extended BG activities represent remaining established or emerging sectors or sub-sectors with more or less relevant impact to Adriatic-Ionian macro-region in terms of non-existing present activity or with low future potential (e.g. **Marine renewable energy and Marine minerals**) or their economic activities are rapidly decreasing (e.g. **Marine non-living resources**) (Table 7.)

Table 7. NACE code activities of extended BG areas

Extended BG activities			
Sector	Subsector	NACE Activity	Description
Marine living resources		G 47.11	Retail in non-specialised stores with food, beverages or tobacco predominating
Marine non-living resources (established sector)	Oil and gas	B 06.10	Extraction of crude petroleum
		B 06.20	Extraction of natural gas
		B 09.10	Support activities for petroleum and natural gas extraction
		C 19.20	Manufacture of refined petroleum products
		H 49.50	Transport via pipeline
	Other minerals	B 08.12	Operation of gravel and sand pits
		B 08.93	Extraction of salt
		B 09.90	Support activities for other mining and quarrying
Marine renewable energy (established sector)	Offshore wind	D 35.11	Production of electricity
		D 35.12	Transmission of electricity
	Other	F 42.22	Construction of utility projects for electricity and telecommunications
		F 43.21	Electrical installation
		J 61.10	Wired telecommunications activities
Shipbuilding and repair (incl. activities related to underwater robotics)		E 38.31	Dismantling of wrecks
		G 46.14	Agents involved in the sale of machinery, industrial equipment, ships and aircraft
		C 33.11	Repair of fabricated metal products
		C 25.30	Manufacture of steam generators, except central heating hot water boilers
		C 27.40	Manufacture of electric lighting equipment
		M 71.12	Engineering activities and related technical consultancy
		M 71.20	Technical testing and analysis
		N 77.32	Renting and leasing of construction and civil engineering machinery and equipment
		C 22.19	Manufacture of other rubber products
		C 22.29	Manufacture of other plastic products
		C 25.61	Treatment and coating of metals
		C 25.73	Manufacture of tools
		C 26.11	Manufacture of electronic components
		C 26.12	Manufacture of loaded electronic boards
		C 26.20	Manufacture of computers and peripheral equipment
		C 26.30	Manufacture of communication equipment
		C 26.40	Manufacture of consumer electronics
		C 26.52	Manufacture of watches and clocks
		C 26.70	Manufacture of optical instruments and photographic equipment
		C 26.80	Manufacture of magnetic and optical media
		C 27.12	Manufacture of electricity distribution and control apparatus
		C 27.90	Manufacture of other electrical equipment
		C 28.24	Manufacture of power-driven hand tools
		C 28.29	Manufacture of other general-purpose machinery n.e.c.
		C 28.99	Manufacture of other special-purpose machinery n.e.c.
Coastal Tourism		N 79.11	Travel agency activities
		N 79.12	Tour operator activities
		N 79.90	Other reservation service and related activities
		M 73.11	Advertising agencies
Water treatment		E 36.00	Water collection, treatment and supply
		E 39.00	Remediation activities and other waste management services
Insurance (BG related)		K 65.12	Non-life insurance
		K 65.20	Reinsurance
ICT activities (BG related)		J 58.29	Other software publishing
		J 61.20	Wireless telecommunications activities
		J 61.30	Satellite telecommunications activities
		J 61.90	Other telecommunications activities
		J 62.01	Computer programming activities
		J 62.02	Computer consultancy activities
		J 62.09	Other information technology and computer service activities
		J 62.03	Computer facilities management activities
		J 63.11	Data processing, hosting and related activities
		S 95.11	Repair of computers and peripheral equipment
		S 95.12	Repair of communication equipment

Source: Authors

Several sectors (e.g. **shipbuilding and repair; coastal tourism**) have been extended with additional NACE codes in order to include peripheral value chain activities into the scope of survey target group. Some NACE activities may find its use in previously mentioned Main BG activities groups in terms of their technological contribution (e.g. **underwater robotics**).

Some emerging sectors (e.g. **water treatment and BG related insurance sectors**) may have peripheral impact on BG value chain activities.

Sector of **ICT activities** has a big horizontal influence and impact on all identified main and extended BG activities, especially in the fields of technology, research and development, intelligent transport solutions, smart port activities etc. It is therefore an important factor for creation of survey target group.

In conclusion, during the process of designing the scope of survey target groups, it is essential to include complete scope of activities related to sectors within the BG value chain. This target group may be focused on main BG areas but must take into consideration actors which greatly contribute to the Blue growth activities over peripheral activities. Presented lists of NACE codes may provide good insight into potential target group with possibility to extend them with additional NACE codes if necessary.

3.1.7. Sampling criteria

- Business profile: companies involved in Blue Growth activities
- Size: companies by size:
 - Micro-enterprises
 - Small and medium-sized enterprises
 - Large enterprises
- Age: at least 10-15% of start-ups (companies with less than 5 years in operation)
- Geographical distribution: nationwide
- Technology profile: companies perceived to be innovation intensive, based on desk research (share of R&D spending, patents, technology, industry profile)
- Decision-making profile: companies with independent decision making, preferably excluding local subsidiaries of multinational companies; companies with separate financial statements.

3.1.8. Sources of firm contacts

The sources of information about initial selection of targeted companies reflecting the targeted business profile may be the following:

- Public business information databases, economic catalogues, investment profiles, yellow pages etc.
- Map of Excellence in Blue Growth (project deliverable D.T.2.1.2.)
- BSOs (e.g. Chambers of Economy)
- Ministries and central agencies (e.g. authorities for cluster policies and innovation support)
- Cluster organizations
- Incubators, accelerators and business parks, business angels
- RDIs, universities
- Winners of innovation competitions
- Referrals from the previously interviewed companies

3.2. EDP Survey Questionnaire composition

The BG EDP survey will be guided by a modular questionnaire, comprised of online survey and in-person interviews.

3.2.1. Key features

- 1) Modularly structured qualitative/quantitative questionnaire focused on entities in the Blue Growth area within the Adriatic-Ionian (ADRION) area.
 - BG survey comprised of selected relevant thematic modules. Each project partner will have the opportunity to adjust regional survey version by designing optional modules based on regional assessment needs.
- 2) Online survey platform, multi-lingual and a customized questionnaire for the implementation of the online survey process
 - An online survey platform adjusted to partner's language and customised with selected question modules
 - Objectives of the online survey: a) Reaching for entities with whom it is difficult to establish contact for conducting a direct interview, b) Including entities in the wider ADRION geographical area. Potential contacts include stakeholders directly and indirectly related to the Blue Growth value chains in the ADRION region.
 - The number of questions should be adjusted to a reasonable time of completion.
- 3) Developed methodology for data analysis
 - Data analysis should provide clear answers in accordance with the main objectives of the questionnaire.
- 4) Dedicated online portal with an interactive graphic presentation of structured survey results
 - The purpose of the interactive online graphical display is to offer a unique user experience in the presentation of survey results in terms of a web platform created for this purpose.
 - The graphic presentation will consist of thematic cards (according to the thematic units of the questionnaire) that will graphically present the collected data as well as the results of data analysis.

3.2.2. Objectives

The **main objective** of the EDP survey consist of the three main objectives: a) Identification of key drivers of innovation and growth and key barriers for entities in the ADRION area, b) identification of regional and macro-regional strengths in the Blue Growth domain and c) identification of position and complementary stakeholder activities at the macro-regional blue growth value chain level

Secondary objectives are important for validation and proof of concept of modular BG-EDP survey, identification of leading BG innovative entities in Adriatic-Ionian region and creating information base for the next project activities, namely BG Innovation strategy deliverable (Table 8.).

Table 8. Main and secondary EDP-Survey objectives

Main objectives	Secondary objectives
<ul style="list-style-type: none"> • Identification of key drivers of innovation and growth and key barriers for entities in the ADRION area • Identification of regional strengths in the Blue Growth domain: <ul style="list-style-type: none"> ○ Technological capacities ○ Research and innovation (R&I) capacities ○ Experience and knowledge on available technologies • Identification of position and complementary stakeholder activities at the value chain level in the Blue Growth domain of the ADRION area 	<ul style="list-style-type: none"> • Provide necessary inputs and conclusions for projects macro-regional innovation strategy deliverable • Test modularly structured BG-EDP-survey approach • Identification of leading innovative organizations, activities and technologies in Blue Growth areas

Source: Authors

3.2.3. Structure

Blue Growth EDP survey is **structured by using thematic modules adopted for the Blue growth domain on macro-regional level**. This kind of approach allows better focus on survey goals and additional specific regional/national topics due to modular sets of questions allowing the EDP implementer or interviewer a chance for partial customization focused on regional/national specific topics.

Structure is based on specific pool of **modules** each covering focused thematic area such as innovation drivers, innovation and technological capacities etc. (Figure 9).

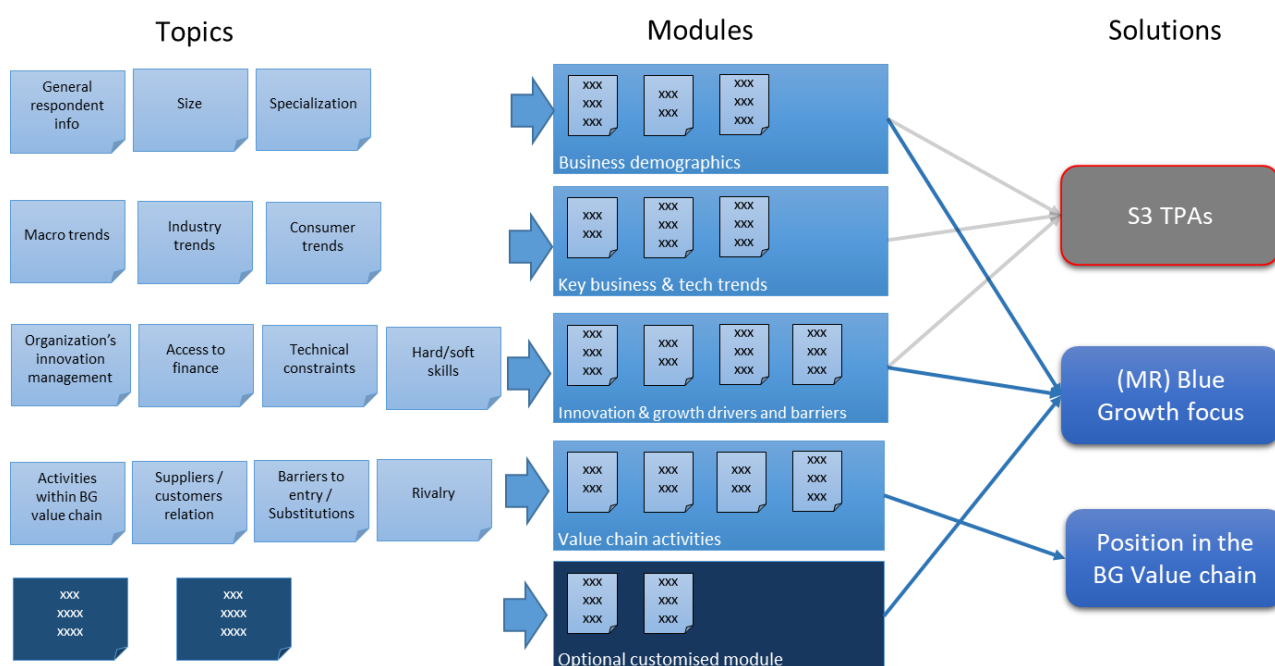
Each module comprises of specific sets of **topics**. Each topic is designed to follow designated module theme such as BG specialization, R&D expenditure, human capital, innovation behaviour etc.

Finally, based on each specific question modules, the EDP implementer can design customised and adopted survey **solution** which can serve as a complete assessment needed for Smart Specialization Strategy's EDPs or ones which can be more focused on Blue Growth assessments.

Traditional EDP surveys usually are aimed at wide S3 TPAs domain, consisting of wide array of thematic areas on socio-economic, technological and R&D&I topics. On the other hand, Macro-regional Blue Growth EDP survey intends to be narrowly focused on thematic modules specific for BG domain in macro-regional area. Additionally, macro-regional aspect is enhanced with optional customised sets of modules containing regional/country based specific sets of questions designed by regions/country implementing partner(s).

Likewise, surveys may be designed to focus on more narrowed domains such as Positioning in the value chain (included in project's BG-EDP survey), or some other goals within wide RIS3 domains.

Figure 9. Modular structure of EDP-tool survey



Source: Authors

The questionnaire consists of a set of open and closed questions aimed at entities operating in the domain of **Blue Growth within the Adriatic-Ionian (ADRION) area**.

The questionnaire has two parts:

- a) **Online survey** (mandatory) through an online platform aimed at a quadruple-helix entities. Along with default number of closed question modules, an optional customized module (one or max two) may be presented to interviewee depending on country/region implementing partner decision.
- b) Optional **direct (in-person) interviews** consisting of open and closed questions with representatives of entities (owner, top managers, CEO, CFO etc.) lasting approximately 2-2.5 hours.

Main difference between online survey and direct interviews is that the questionnaire for direct in-person interviews would consist of a set of qualitative open questions divided into thematic units aligning to online survey thematic modules. Opting for the in-person direct interview provides the interviewer a chance to deepen the information received during the **mandatory online** (quantitative) part of the survey. Therefore, **direct interviews are add-on to the online part of the survey not intended to be used alone**.

Quantitative questions make up the majority of questionnaire. **Qualitative questions** make up a smaller part of the questionnaire. These questions open space for discussion and aim to deepen the information obtained during the quantitative part. The goal is to understand “why” and “how” in the context of Blue Growth. In wider part of the survey, majority of questions have the same, normalized scale so the answers are easy to compare.

3.2.4. Customised thematic question groups and modules

Project partners have an option to create **additional adapted thematic groups** by designing **customised question modules** which may be inserted into their relevant regional survey version. Such customised modules have a purpose to assess thematic or sub-thematic domains which are **specific for the concerned area or country in any Blue Growth domain** or even other economy or scientific sector and may cover any specific topic.

It is up to partners to design customised sets of questions which fits into general survey design by covered topic, logic, goal, length and which is not in conflict or redundancy with other common modules within thematic groups of the main survey (see p. 45).

It has to be noted that such customised national/regional parts of survey have to be analysed separately in order not to obstruct integrity of the common survey.

3.3. Operational Phase

3.3.1. Survey Distribution Methods

Distribution of the survey to the potential respondents (defined in Target groups) is done by several common ways for surveys distribution:

- **Email** – distribution of the information and the link within the attached invitation letter about the survey by email, especially if an established email list is previously created.
- **Social media** – popular distribution channel but sending survey invitations via social media can sometimes attract people with shared interests that may not represent the opinion of targeted audience or the general public. Use is only as additional distribution method.

Distribution of the Survey is done by the national EDP implementing partners along with the supporting partners.

3.3.2. Invitation letter

An invitation letter needs to contain short information about the aim and importance of the survey, benefit for the survey respondent, hyperlink to the online survey platform and due date for participating in the survey and in case of the in-person direct interview a proposed date, time and place of the interview.

Proposed template of the invitation letter for online survey and optional direct survey can be found in Annex section of the document (Part A Annexes).

3.3.3. Governance of the Survey

Leading activity partner needs to prepare and coordinate operational survey implementation among all national EDP implementing partners by:

- Announcing the exact start and end date of the online survey including survey activation and deactivation on the survey platform
- Acting as central survey coordination and results collecting point
- Creating interim progress reports by stating number and names of participants who accesses the survey by each country
- Propose measures to encourage the target group to complete the questionnaire (remainders by e-mail, telephone, social networks, etc.)
- Decision on potential extension of the deadline for completing the survey

National implementing and supporting project partners tasks and activities:

- Decision about the quantitative survey goals in terms of number of sent invitations and expected number of feedbacks
- Monitoring the national survey completion process
- Acting as national assistant contact and support point for target group
- Conducting optional direct interviews with companies and collecting survey results. Transfer of collected direct interview results to the leading activity partner
- Reviewing the interim progress reports and decide about conducting the proposed encouragement measures for completing the questionnaire
- Coordinating activities with the leading activity partner

3.3.4. Management of the survey analysis and results

Leading activity partner is responsible for:

- collection of data collected from national surveys
- compilation
- data analysis
- report and results representation

After **data collection** and gathering the information from the surveys, the raw data must be **compiled** so that analysis can be performed and data can be broken up into respective parts and segments.

Data analysis and compiling also includes data cleaning activities before the further analysis is performed in order to validate the data for errors or irrelevant data. In order to retrieve desirable results, data cleaning is performed before the analysis takes place. Along with the data cleaning, process also includes determining the missing values and optionally inputting the most appropriate data values in place of the missing ones.

3.3.5. Results representation

After the process of data analysis is conducted, a **final report** must be prepared. It has to be efficient and well formatted and the matter should be clear, analytical and direct. The actual facts must be clearly shown and the results should preferably be set in graphical or tabular format which can be neatly presented and is unequivocal to understand. The report must be capable to compare related information so that conclusions can be easily derived.

For the purpose of the Pilot Blue Growth EDP project activity, a dedicated online portal is planned with an interactive graphic presentation of structured survey results (interactive web dashboard).

The graphic presentation will consist of thematic tabs (according to the thematic modules of the questionnaire) that will graphically present the collected data as well as the results of data analysis.

3.4. Macro-regional Blue Growth EDP Focus Group

3.4.1. EDP-Focus Group Framework

Macro-regional Blue Growth EDP Focus Group (EDP-FG) is collaboration group featuring project partners extended with representatives of companies with high growth and innovation potential, selected through firm surveys and interviews, representatives of science and research and development institutions (RDIs), business support institutions, public administration and experienced business experts.

NOTE: Focus group is not mentioned in the project's Application Form and therefore in optional element in EDP pilot activity.

As stated above, identification of potential target group members for the Macro-regional EDP-FG, **belonging to business sector** is ideally done after online surveys and optional in-person firm surveys. Based on collected survey information, candidates for EDP-FG can be easily identified by several characteristics:

- high growth
- high innovation potential
- entrepreneurs who can become drivers for concrete projects oriented towards new transformational goals, and may pull a “snowball effect” to involve other stakeholders towards transformational goals
- entrepreneurs who may possess available regional capacities in the Blue Growth area or opportunities for the targeted transformation
- an ideal participant should be influential (well-known in their stakeholders' group), informed (possess sound knowledge not only in their specific area but also in the regional development as well), accessible and able to act as an agent of change

Along with the business sector actors, it is recommended to include other quadruple-helix actors from research communities and education, representatives of public administration concerned with relevant programmes or NGOs involved or familiar with Blue Growth sector activities.

Project partners in charge of each regional EDP should identify institutions (organizations, bodies, legal entities) that are relevant key actors in Macro-regional EDP-FG.

A Map of Excellence stakeholders mapping (see D.T. 2.1.2. Map of Excellence in Blue Growth document and table) is to be applied in order to identify the profiles of these organizations plus business sector representatives identified through Pilot EDP survey activities.

The targeted Macro-regional EDP-FG group participants should be chosen by several criteria:

- gender and age balance – even number of men and women of all age invited
- geographical variety – each project's PP country represented by the Quadruple Helix participants
- balanced size of entities (e.g. both large and smaller companies)
- balanced mix of all segments of the quadruple helix – this criterion is important.

Although presented criteria describe ideal composition of participants, it is expected that it would be hard to achieve it in reality. But despite that, each regional implementing partner needs to try to stay close to them during selection activity.

Therefore 4 and maximum 5 participants, representatives of each quadruple helix group per Pilot-EDP implementing country should be considered for Macro-regional BG EDP Focus Group.

The main goals of the EDP-FG are:

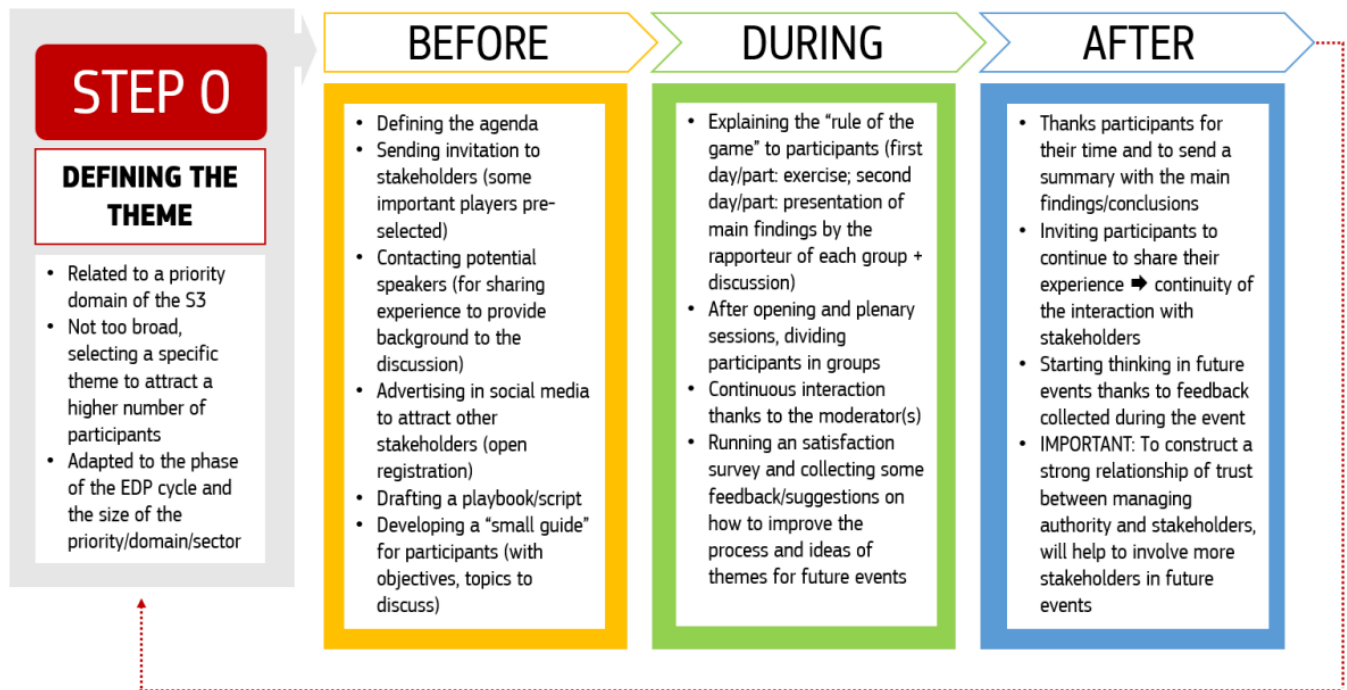
- **Common conclusions of findings and results of the macro-regional EDP-surveys analysis.** Overview and validation of initial survey reports conducted on macro-regional level.
- **Identification of unique competitive advantages and transformational goal/mission.** Agreement on competitive advantages and endorsing joined transformational goal/mission aimed at Blue Growth domain which highlights the concrete abstract and the scope of transformation.
- **Design of initial transformational roadmaps by identifying project collection for a strong transformational push.** Exploring cooperation opportunities, finding common interest, exploring possible collaborative projects and funds, exploring macro-regional complementarities in BG Areas in order to set a draft of Transformational roadmap (a set of policy drivers and enablers of a collection of related and complementary projects contributing to the previously identified transformational goal/mission).
- **List of conclusions as inputs for Blue Growth Innovation strategy document.** Macro-regional Blue Growth EDP Focus Group's conclusions need to be summarised in set of conclusions and recommendations which would act as framework and guidelines to prepare the ground for the next project activity - setting and designing of the Blue Growth Innovation Strategy document for Adriatic-Ionian region.

3.4.2. Steps for setting Macro-regional Blue Growth EDP Focus Group

Start with decision on the type of event which will take place (see Table 1). Regardless of the use of online **synchronous communication tools** for all kinds of meetings and events **or the “traditional” in-person meetings/events/workshops**, organisational structure follows the same steps (Figure 10):

- Coordinating administrative issues (venue/online platform, technical equipment, etc.);
- Setting up the agenda;
- Inviting external speakers (optional);
- Appointing a moderator with good facilitation skills (this would increase the quality of the participatory process);
- Working group sessions (optional);
- Invitations to pre-selected members (the ones who already agreed to participate prior to the FG meeting)
- Preparation of the Guide for participants (in a form of online document with the objectives of the participatory event and topics to be discusses among participants, sent by email to invited participants prior to the event taking place)
- Follow-up - sending follow-up documents (a summary with the main findings of the event) to all participants acknowledging the importance of their contributions.

Figure 10. Steps of an online EDP workshop



Source: Marques Santos, Edwards and Laranja (2020a).

The importance of thanking the participants for their effort, time and contribution during the event and asking them for their continuous participation in future interactions with other stakeholders needs to be highlighted as a main principle of the EDP process (i.e. continuity of EDP process). Also, fostering creation of strong relationships between stakeholders and policymakers and allowing the involvement of new stakeholders in the activities is a very important aspect of the EDP process.

3.4.3. Reporting phase of Macro-regional Blue Growth EDP Focus Group

Compiling a report regarding the EDP Focus Group's main findings, conclusions, transformational goals/mission, capacities and project ideas identified according to the defined goals has to be prepared by leading project partner in charge of the EDP Focus Group activity.

According to the goals (see Table 8) the report may cover:

- regional competitive advantages,
- resources and production capacities,
- research and innovation (R&I) capacities,
- experience and knowledge on available technologies,
- Involvement and position in the value chain,
- potential for excellence in sectorial or cross-sectorial level,

- roles of the quadruple helix representatives,
- overview of opportunities, needs and obstacles,
- suggestions for macro-regional collaboration,
- conclusions and recommendations.

Most essential part of the report is draft report of the Transformational Roadmap which highlights the infrastructure, capacities, projects, trainings and higher levels of management which transformation is aspiring to.

The report would act as framework and guidelines to prepare the ground for the next project activity - setting and designing of the Blue Growth Innovation Strategy document for Adriatic-Ionian region.

Bibliography

- Benner, M. (2020). Six additional questions about smart specialization: implications for regional innovation policy 4.0. *28*(8), 1667-1684.
- Capello, R., & Kroll, H. (2016). From theory to practice in smart specialization strategy: Emerging limits and possible future trajectories. *European Planning Studies*, *24*, 1393-1406.
- Corsi, P., & Neau, E. (2015). *Innovation Capability Maturity Model*. London: ISTE Ltd, John Wiley & Sons Inc.
- Detterbeck, K. (2017). *Framework Document: Based on existing EDP Analyses and Regions' Experiences*. Beyond EDP Interreg Europe project 2017, EU European Regional Development Fund.
- Edler, J., & Flanagan, K. (2011). Indicator needs for the internationalisation of science policies. *Research Evaluation*, *20*(1), 7-17.
- Esparza-Masana, R. (2021). Towards Smart Specialisation 2.0. Main Challenges When Updating Strategies. *Journal of the Knowledge Economy*. Retrieved from <https://doi.org/10.1007/s13132-021-00766-1>
- European Commission. (2021). *The EU Blue Economy Report. 2021*. Luxembourg: Publications Office of the European Union.
- Foray, D. (2014). From smart specialisation to smart specialisation policy. *17*(4), 492-507.
- Foray, D., & Goenaga, X. (2013). The goals of smart specialisation. *S3 Policy Brief Series No. 01/2013*.
- Foray, D., David, P., & Hall, B. (2009). 'Smart Specialisation: The Concept', in *Knowledge for Growth: Prospects for Science, Technology and Innovation*. Luxembourg: European Commission.
- Gianelle, C., Kryiakou, D., Cohen, C., & Przeor, M. (2016). *Implementing smart specialisation strategies: A handbook*. Luxembourg: European Commission.
- Guzzo, F., & Perianez-Forte, I. (2019). *Smart Specialisation at work: evidence from the Peer and Exchange and Learning workshops*. Luxembourg: Publications Office of the European Union, JRC118899.
- Hausmann, R., & Rodrik, D. (2003). Economic Development as a Self-Discovery. *Journal of Development Economics*, *72*(2), 603-633.
- Iacobucci, D. (2014). Designing and implementing a smart specialisation strategy at the regional level: some open questions. *Scienze Regionali*, *13*(1), 107-126.
- Keating, M. (1998). *The new regionalism in Western Europe: territorial restructuring and political change*. Cheltenham: Edward Elgar.
- Kleibrink, A., Gianelle, C., & Doussineau, M. (2016). Monitoring innovation and territorial development in Europe: Emergent strategic management. *European Planning Studies*, *24*(8), 1438-1458.
- Kleibrink, A., Larédo, P., & Philipp, S. (2017). *Promoting innovation in transition counties: A trajectory for smart specialisation*. Seville: JRC Science for Policy Report, European Commission.
- Kroll, H. (2015). Efforts to implement smart specialisation in practice: Leading unlike horses to the water. *European Planning Studies*, *23*(10), 2079-2098.

- Laranja, M., Edwards, J., Pinto, H., & Foray, D. (2020). *Implementation of Smart Specialisation Strategies in Portugal: An Assessment*. JRC Technical Report, European Commission.
- Laranja, M., Marques Santos, A., Edwards, J., & Foray, D. (2021). *Rethinking the 'Entrepreneurial Discovery Process' in times of physical distancing: Lessons from Portuguese regions*. Luxembourg: Publications Office of the European Union.
- Marinelli, E., & Perianez-Forte, I. (2017). Smart Specialisation at work: The entrepreneurial discovery as a continuous process. *S3 Working paper Series NO. 12/2017, 12/2017*.
- Martinez, D., & Palazuelos-Martinez, M. (2014). *Breaking with the past in smart specialisation: a new model of selection of business stakeholders within the entrepreneurial discovery process*. Seville: S3 Working Paper Series. Joint Research Centre of the European Commission.
- Mazzucato, M. (2018). Mission-oriented innovation policies: Challenges and opportunities. *Industrial and Corporate Change*, 27, 803-815.
- McCann, P., & Ortega-Argilés, R. (2015). Smart specialisation, regional growth and applications to EU cohesion policy. *Regional Studies*, 49(8), 1291-1302.
- Morgan, K. (2015). Smart specialisation: Opportunities and challenges for regional innovation policy. *Regional Studies*, 49(3), 480-482.
- OECD. (2011). *Regions and innovation. Policy OECD reviews of regional innovation*. Paris: Organization for Economic Co-Operation and Development.
- OIS-AIR project. (2020). *Innovation services*. Retrieved June 17, 2022, from Interreg ADRION OIS-AIR project: <https://www.oisair.net/innovation-services/index>
- Periañez Forte, I., Marinelli, E., & Foray, D. (2016). *The entrepreneurial discovery process (EDP) cycle: from priority selection to strategy implementation*. Luxembourg: European Commission.
- Perianez-Forte, I., & Wilson, J. (2021). *Assessing Smart Specialisation: Entrepreneurial discovery processes*. Luxembourg: JRC Science for Policy Report, JRC124405, Publications Office of the European Union.
- Radošević, S. (2017). *Assessing EU smart specialisation policy in a comparative perspective*. London: Academic Press.
- Radošević, S., & Stancova, K. (2018). Internationalising smart specialisation: Assessment and issues in the case of EU new member states. *Journal of Knowledge Economy*, 9(1), 263-293.
- RaspiceSME. (2016). *Innovation Audit to measure the innovation potential of high tech photonics SMEs*. Regional, National and European Support for Photonics Innovation Clusters enhancing SMEs Innovative Potential project.
- Rodríguez-Pose, A., & Storper, M. (2006). Better rules or stronger communities? On the social foundations of institutional change and its economic effects. *Economic Geography*, 82(1), 1-25.
- Rodríguez-Pose, A., & Wilkie, C. (2015). *Institutions and the entrepreneurial discovery process for smart specialization*. Urban and Regional Research Centre, Utrecht University.

- Uyarra, E., Marzocchi, C., & Sorvik, J. (2018). How outward looking is smart specialisation? Rationales, drivers and barriers. *European Planning Studies*, 26(12), 2344–2363.
- Vocaskova, J. (2020). Smart specialisation pilot actions and interregional cooperation 2021–2027. *Presentation in webinar for Interreg Central Europe SMART_Watch project 28 April 2020.*
- World Bank. (2015). *Toward an innovative Poland. The EDP and business needs analysis.* . Washington DC: World Bank.

ANNEX

PART A - Template – Questionnaire Invitation letter

Dear [title, surname],

We are honoured to invite you to be part of the European project “BLUEAIR” [\[add hyperlink\]](#), funded by the Interreg ADRIATICO-IONIAN Program. BlueAir project aims to enhance institutional capacities of ADRIATICO-IONIAN territories in the definition of a common S3 policy on Blue Growth and guarantee the alignment of local initiatives with the EUSAIR strategy.

[\[Institution name\]](#) as a project partner is coordinating the delivery of the pilot Entrepreneurial Discovery Process (EDP) in the Blue Growth domain in [country], with the main objective to identify the private sector’s innovation and growth constraints, drivers and needs in order to inform the public policy stakeholders with the intention to adjust public support accordingly.

Your experience in [\[fields - e.g. port activities, marine technology, etc.\]](#) will be a key contribution for the Pilot EDP goals and later on in the project, since you will have the opportunity to share your knowledge and vision with other stakeholders and people committed to the regional development.

(Option 1 – Online survey)

We kindly ask you to participate by filling out the survey at [\[hyperlink to survey\]](#) by [\[date\]](#).

The time required to fill out the survey is approximately 25-30 minutes and the action can be interrupted and/or started again at any time following information from the survey platform.

(Option 2 – Direct interview)

We kindly ask to meet you in person in [\[place – e.g. premises, office, company etc.\]](#) at a time that suits you best. Please confirm your participation by [\[date\]](#), to [\[name\]](#), at [\[e-mail\]](#).

In case you will not be able to join us, we would be grateful if you could suggest any colleague of yours who might be interested in attending the meeting.

Should you need more clarification regarding the focus group and the project, please don’t hesitate to contact us.

Yours sincerely,

[\[Name\]](#)

[\[Institution\]](#)

[\[E-mail, Telephone, \[Address\]\]](#)

PART B – BG- EDP Survey Questionnaire

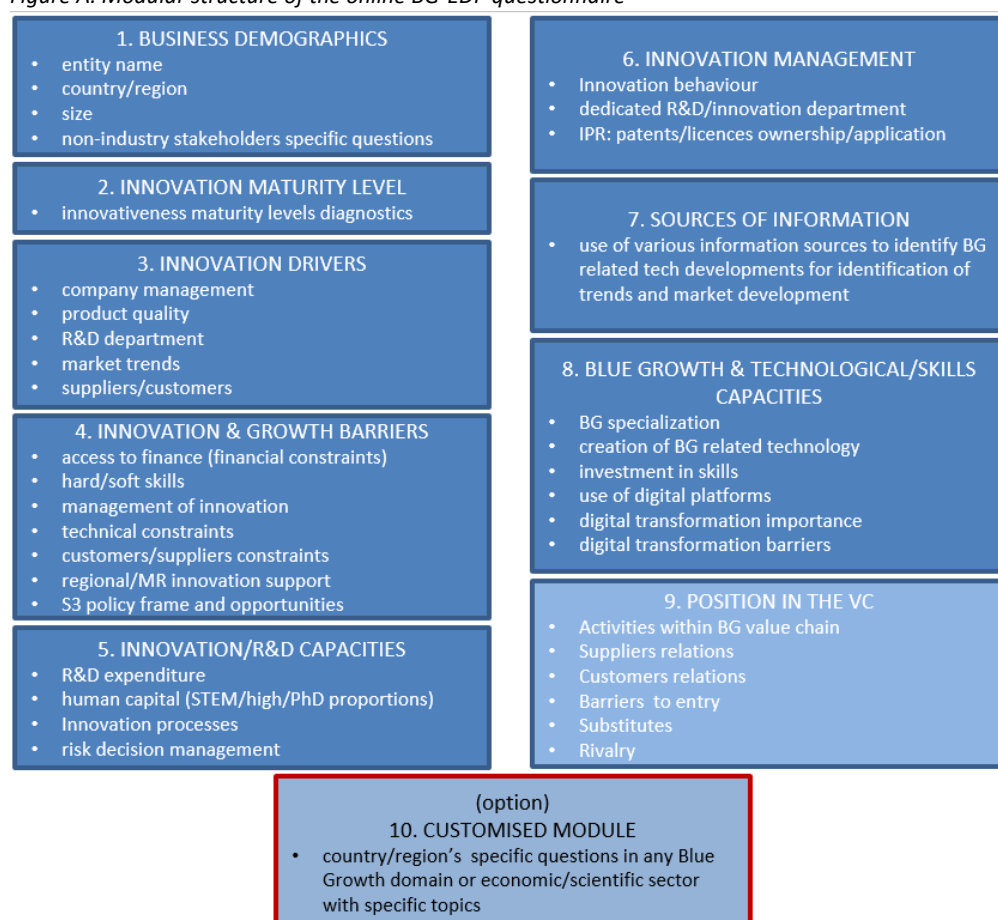
Introduction to online survey

The questionnaire was designed using the modular approach focusing towards the innovativeness capacities, drivers, barriers, processes, financial and other entity aspects related to the Blue growth domain in order to determine innovativeness and cooperation potential on macro-regional level.

The Blue growth-EDP questionnaire (BG-EDP) comprises of two types of questionnaires: online questionnaire (quantitative approach) and optional in-person direct interviews (qualitative approach). Each questionnaire type is presented in the following sub-chapters.

According to the chapter-*Structure* (see Chapter 3.2.3.) online questionnaire is structured in default 9 sets of modules, each module comprising of specific aligned question topics. First 8 modules are focused on blue growth domain, while additional module 9 is designed for acquiring information about the value chain positioning. Optional 10th Customised module is intended for assessing specific topics for the concerned region or country in any Blue Growth domain or economic or scientific sector of interest. It is up to a country/region's dedicated project partner to design customised sets of questions which fits into general survey design by covered topic, logic, goal, length and which is not in conflict or redundancy with other common modules within thematic groups of the main survey.

Figure A. Modular structure of the online BG-EDP questionnaire



Sources consulted

Integrity and quality of both online and in-person questionnaires are supported by using several trustworthy referential sources confirmed in the EDP and innovativeness domain of the various EU based projects during the last decade.

Most influential sources used for the design of survey questions were World Bank document ***Toward an innovative Poland; The EDP and business needs analysis***¹³ supported by several proved innovative audit based documents such as Corsi and Neau's ***Innovation Capability Maturity Model***¹⁴; RaspiceSME project's ***Deliverable 1.2. Innovation Audit to measure the innovation potential of high tech photonics SMEs***¹⁵; and practice proven ***Audit for innovation competitiveness***¹⁶ developed by Steinbeis Europe-Zentrum and Croatian Chamber of Economy together with ***Innovation audit*** survey elements used in Interreg ADRION OIS-AIR project¹⁷.

Survey questions used in this document were newly made and designed together with edited and adapted sets of questions from above mentioned sources to follow new innovative approach to modular structured EDP survey focused on Blue growth domain.

To be noted, module 2 - *Innovation maturity level* is focused on acquiring information about innovation capability maturity model described in detail by its authors. It aims to place the organization in its ability to innovate and implement innovation. Each level has its own way to make strategies. Starting with organizations at level 0 which does not innovate and has neither knowledge of innovation concepts nor the actions that would promote, consider or undertake it, to level 5 companies that are in constant innovation and integrating foresight to anticipate, initiate and revise changes continuously. The model provides the questionnaire tool which usefully helps in positioning of organization on the five levels of the innovation scale.

¹³ World Bank (2015), *Toward an innovative Poland; The EDP and business needs analysis*. Washington DC, World Bank.

¹⁴ Based on Corsi P., Neau E., *Innovation Capability Maturity Model*, ISTE Ltd and John Wiley & Sons, Inc. 2015.

From 0 to 6. For the time being, innovation does not seem to be a priority for the development of the firm. It may envisage launching a first development project. Organization or firm belongs to one of the *first two maturity levels*.

From 7 to 13. Organization knows the stakes of innovation and could reinforce its competitiveness by engaging in a suitable innovation approach. The organization or enterprise has probably passed the first two maturity levels and may belong to the *third level*.

From 14 to 20. Innovation is part of enterprise's culture. Organization could improve its good practices due to more rigorous organization and by implementing new methods and new tools. The organization or enterprise expresses organizational features that are *specific to higher levels, 4 or 5*.

¹⁵ RaspiceSME (2016), Deliverable 1.2. *Innovation Audit to measure the innovation potential of high tech photonics SMEs*, Regional, National and European Support for Photonics Innovation Clusters enhancing SMEs Innovative Potential project, Programme ICT-27-2015: Photonics KET

¹⁶ Steinbeis Europe-Zentrum, Croatian Chamber of Economy (2018), *Audit for innovation competitiveness*, DTC-Danube Transfer Centre project

¹⁷ Interreg ADRION Open Innovation System of the Adriatic-Ionian Region (OIS-AIR) project, *Innovation services* <https://www.oisair.net/innovation-services/index>, accessed 17.06.2022.

Notes about optional customised module

Each implementing/supporting partner from dedicated country/region has an option to design one or maximum two optional customised modules each consisting of thematic sets of questions.

Please bear in mind to follow the design, logic, goals, and length of customised questions which should not be in conflict or redundancy with default modules of the main survey.

Intention of customised modules is to insert new survey questions which are specific for your country/region.

Such customised national/regional modules would be analysed separately in order not to obstruct integrity of the common survey.

Note: Each partner would receive separate two-part **template** used for:

- 1) translation of the default online questionnaire into local language and
- 2) creation of optional customised country/regional module.

Optional customised modules have to be in English/local language format in order to allow structured data analysis together with default part of the main survey.

Such created customised modules would be technically/structurally revised by coordinating partner (UPRC and supporting partner HGK) in order to be inserted into survey platform. Since creation of optional customised modules is done on the separate two-part *template* (together with translation), coordinating activity partners would assess the structure of received module and make eventual correction in coordination with the creator.

List of quantitative questions for the online survey

The purpose of this section is to provide information and guidance to the interviewers and EDP implementers on how to understand the questions in the surveys. Every question about frequency has the similar (based on logical attribute), normalized Likert scale visible on every module so that the answers are easy to compare.

As noted in the following tables, questions in each module have its unique ID, question description, provided answers options with explanation and additional type/scoring method information.

MODULE 1: BUSINESS DEMOGRAPHICS			
Profiling the entity.			
ID	Question	Answers/Explanation	Type/ Scoring method
E1.1.	Contact	Name of the person	
E1.2.	Contact e-mail	E-mail address	
E1.3.	Name of the entity	Name of the company/organization/institution	
E1.4.	Where is the entity based?	<input type="checkbox"/> Italy/Region Friuli Venezia Giulia <input type="checkbox"/> Italy/Sicilian Region <input type="checkbox"/> Slovenia <input type="checkbox"/> Croatia <input type="checkbox"/> Bosnia and Herzegovina <input type="checkbox"/> Montenegro <input type="checkbox"/> Serbia <input type="checkbox"/> Albania <input type="checkbox"/> Greece/Region of Central Macedonia	Single answer / analytical category
E1.5.	Which stakeholder type your organisation belongs to?	<input type="checkbox"/> Higher Education Institution, Research institution <input type="checkbox"/> Industry <input type="checkbox"/> Chamber of Commerce, Trade Association, Cluster Association <input type="checkbox"/> Local/regional public authority, RIS3 policy maker <input type="checkbox"/> NGO, Civil Society, Consumer/worker Association, Student Association	Single answer / analytical category
E1.6.	What is the size of the company? (If E1.5.=Industry)	(within industry topic) <input type="checkbox"/> Micro <input type="checkbox"/> Small <input type="checkbox"/> Medium <input type="checkbox"/> Large/Enterprise	Single answer / analytical category
E1.7.	Maturity of the company (If E1.5.=Industry)	(within industry topic) <input type="checkbox"/> Startup company (companies with less than 5 years in operations) <input type="checkbox"/> Not a startup	Single answer / analytical category
E1.8.	Select the type of your organization (If E1.5. = Higher Edu. Institution, Res. Inst.)	<input type="checkbox"/> University/Faculty <input type="checkbox"/> Public research organization <input type="checkbox"/> Private research organization <input type="checkbox"/> Technology/Science park <input type="checkbox"/> Other	
E1.9.	Number of employees or members of your organization (approximate): (If E1.5. ≠ Industry)		number

E1.10.	<p>If you are familiar with the sustainable European Maritime Strategy Framework Directive (MSFD), which of the mentioned descriptors best describe the area of your research or innovation activity related to Blue Growth?</p> <p><i>(If E1.5. ≠ Industry)</i></p>	<input type="checkbox"/> Not applicable <input type="checkbox"/> Biodiversity <input type="checkbox"/> Non-indigenous species <input type="checkbox"/> Commercial fish and shellfish <input type="checkbox"/> Food webs <input type="checkbox"/> Eutrophication <input type="checkbox"/> Sea floor integrity <input type="checkbox"/> Hydrographical conditions <input type="checkbox"/> Contaminants <input type="checkbox"/> Contaminants in seafood <input type="checkbox"/> Marine litter <input type="checkbox"/> Energy (including underwater noise)	Multiple answers
E1.11.	<p>What kind of projects does your organization deal with in the field of Blue Growth?</p> <p><i>(If E1.5. ≠ Industry)</i></p>	<input type="checkbox"/> Basic research <input type="checkbox"/> Applied research <input type="checkbox"/> Technology transfer <input type="checkbox"/> Networking <input type="checkbox"/> Support to organizations <input type="checkbox"/> Education <input type="checkbox"/> Infrastructure <input type="checkbox"/> Services <input type="checkbox"/> Public-private partnerships <input type="checkbox"/> International cooperation <input type="checkbox"/> Other:	Multiple answers
E1.12.	<p>Can you name the key trends in the area of Blue Growth that will have the greatest impact on your research or innovation activities in the next few years?</p> <p><i>(If E1.5. ≠ Industry)</i></p>		Free text
E1.13.	<p>What key capacities does your organization have?</p> <p>Name up to 5 of the most important</p> <p><i>(If E1.5. ≠ Industry)</i></p>	<input type="checkbox"/> Know-how <input type="checkbox"/> Specific technologies, procedures, products <input type="checkbox"/> Research facility <input type="checkbox"/> Research infrastructure <input type="checkbox"/> Special research equipment <input type="checkbox"/> Public-private partnerships for research and development <input type="checkbox"/> Publications <input type="checkbox"/> Intellectual property rights (IPR, e.g. patents) <input type="checkbox"/> Cooperation with the industrial-research sector <input type="checkbox"/> International connections <input type="checkbox"/> Projects in progress <input type="checkbox"/> Other	Multiple choice
E1.14.	<p>Please describe the most important key capacity of your organization.</p> <p><i>(If E1.5. ≠ Industry)</i></p>		Free text

MODULE 2: INNOVATION MATURITY LEVEL

(If E1.5. = Industry; Higher Education Institution, Research institution)

This module is related to innovation self-diagnosis of organization's innovativeness regarding five innovation maturity levels (ML) (e.g. early innovativeness maturity to late sustaining mastery maturity level).

Please validate following assertions by answering:

- true (fully corresponds to my organization);
- false (does not correspond in part or in whole)

ID	Question	Answers/Explanation	Type/ Scoring method
E2.1.	Our strategy, evolution plans and objectives are clear and are understood by all employees	True/False	Number of "true" answers
E2.2.	We are progressing, despite market instability	True/False	
E2.3.	We use a quality management approach and/or are certified (e.g. ISO 9001 v2000)	True/False	
E2.4.	We hold a clear idea of the present market as well as of the reach of our products and services offer	True/False	
E2.5.	Innovation is one among our strategic axes	True/False	
E2.6.	We permanently monitor our business environment	True/False	
E2.7.	We regularly meet our clients and understand their needs	True/False	
E2.8.	Our products/services cannot be easily substituted	True/False	
E2.9.	We know our financial results by product and their distribution over their lifecycles	True/False	
E2.10.	Our organization encourages collective intelligence	True/False	
E2.11.	Our IPR strategy is operational (patents, brands, etc.)	True/False	
E2.12.	We practice functional analysis and creativity	True/False	
E2.13.	We use scoreboards/KPIs	True/False	
E2.14.	Our suppliers take part in our innovation	True/False	
E2.15.	We make use of public subsidies	True/False	
E2.16.	Our personnel is faithful to the firm	True/False	
E2.17.	We own a Knowledge Management system	True/False	
E2.18.	Most of our products and services are less than 3 years old	True/False	
E2.19.	Our organization owns patents and brands	True/False	
E2.20.	We own an organized innovation process	True/False	

MODULE 3: INNOVATION DRIVERS

This module is related to innovation drivers. Drivers are understood as incentives for the management that encourage innovation. The focus here is on a broad number of aspects that can motivate the management to innovation and the main task is to verify the intensity of each driver.

ID	Question	Answers/Explanation	Type/ Scoring method
E3.1.	How often do the stated innovation drivers help encourage innovation processes in your organization?	Scale: 0-Never 1-Very rarely (less than once per year) 2- Rarely (1-2 times per year) 3-Sometimes (3-6 times per year) 4-Often (7-12 times per year) 5-Very often (more often than once per month) 6-Not applicable 7-Don't know 8-Decline to answer	Scale 0-5 Percent by response and average score for each driver
E3.1.1.	a) Organization's Management mindset		
E3.1.2.	b) Product quality		
E3.1.3.	c) New market opportunities		
E3.1.4.	d) New product/service development		
E3.1.5.	e) Organization's growth		
E3.1.6.	f) Customers' needs and expectations		
E3.1.7.	g) Suppliers		
E3.1.8.	h) Employee initiative		
E3.1.9.	i) Market pressure from competitors		
E3.1.10.	j) R&D department		
E3.1.11.	k) Market trends		
E3.1.12.	l) Certification / Quality standardisation		
E3.1.13.	m) Other	Open / Scale 0-5	

MODULE 4: BARRIERS TO GROWTH & INNOVATION

This module has a purpose to help identify constraints encountered by the enterprise when embarking on innovation development or implementation. Also, this module helps identify internal and external growth constraints. These constraints refer strictly to organization growth and not to innovation growth.

ID	Question	Answers/Explanation	Type/ Scoring method
E4.1.	How often do the stated factors limit the innovativeness in your organisation?	Scale: 0-Never 1-Very rarely (less than once per year) 2- Rarely (1-2 times per year) 3-Sometimes (3-6 times per year) 4-Often (7-12 times per year) 5-Very often (more often than once per month) 6-Not applicable 7-Don't know 8-Decline to answer	Scale 0-5 Percent by response and average score for each attribute
E4.1.1.	a) Access to finance		
E4.1.2.	b) Hard skills (e.g. academic qualification)		
E4.1.3.	c) Soft skills (e.g. project management)		
E4.1.4.	d) Customers constraints		
E4.1.5.	e) Quality of suppliers		
E4.1.6.	f) Management of innovation		
E4.1.7.	g) Legislation / regulation		
E4.1.8.	h) Technical constraints		
E4.1.9.	i) Science based knowledge		
E4.1.10.	j) Other	Open / Scale 0-5	
E4.2.	How often do the stated factors limit the growth of your organization?	Scale: 0-Never 1-Very rarely (less than once per year) 2- Rarely (1-2 times per year) 3-Sometimes (3-6 times per year) 4-Often (7-12 times per year) 5-Very often (more often than once per month) 6-Not applicable 7-Don't know 8-Decline to answer	Scale 0-5 Percent by response and average score for each attribute
E4.2.1.	a) Access to finance		

E4.2.2.	b) Barriers to entry into new markets		
E4.2.3.	c) Hard skills (e.g. academic qualification)		
E4.2.4.	d) Soft skills (e.g. project management)		
E4.2.5.	e) Pressure from the competitors		
E4.2.6.	f) Customers demand		
E4.2.7.	g) Management		
E4.2.8.	h) Other	Open / Scale 0-5	
E4.3.	How would you rate the public innovation support in your region (country)?	1 – Very inadequate 2 – Inadequate 3 – Moderately 4 – Good 5 – Very good 6-Not applicable 7-Don't know 8-Decline to answer	Scale 1-5 Percent by response and average score for each attribute
E4.4.	How would you rate the macro-regional public innovation support?	1 – Very inadequate 2 – Inadequate 3 – Moderately 4 – Good 5 – Very good 6-Not applicable 7-Don't know 8-Decline to answer	Scale 1-5 Percent by response and average score for each attribute
E4.5.	Are you familiar with your national/regional Smart Specialization Strategy (S3)?	Yes/No	
E4.6.	How would you rate your national/regional S3?	1 – Very bad 2 – Bad 3 – Moderately 4 – Good 5 – Very good 6-Not applicable 7-Don't know 8-Decline to answer	
E4.7.	How adequate is your national/regional S3 for the activity you are involved in?	1-Not at all adequate 2-Slightly adequate 3-Adequate 4-Fairly adequate 5-Very adequate 6-Not applicable 7-Don't know 8-Decline to answer	
E4.8.	What would you change for the next upgraded national/regional version of the S3?	Open	Free text

MODULE 5: INNOVATION/R&D CAPACITIES AND PROCESSES			
This part is used for assessing the innovation and R&D capacities and processes potentials of the entity.			
ID	Question	Answers/Explanation	Type/ Scoring method
E5.1.	What was the amount of R&D spending over the past 3 years (as % of the turnover)?	Open (%)	Percentage
E5.2.	What is the proportion of dedicated employees performing R&D work?	Open (%)	Percentage
E5.3.	What is the proportion of the employees with:	Open (%)	Percentage
E5.3.1.	a) vocational STEM education (e.g. science, technology, engineering, mathematics)		
E5.3.2.	b) high education		
E5.3.3.	c) PhD degree		
E5.4.	Which elements of the innovation process your organization is undertaking?	<input type="checkbox"/> Idea generation/discovery <input type="checkbox"/> Feasibility and Business case validations <input type="checkbox"/> Design & Development <input type="checkbox"/> Testing & Validations <input type="checkbox"/> Launch/Commercialization <input type="checkbox"/> None of the above	Multiple answers
E5.5.	How many innovations (by stated type) has your organization introduced in the last 3 years?	0– None 1 – 1-2 2 – 3-5 3 – 6-10 4 – 11-30 5 – More than 30	Single answer
E5.5.1.	a) Product innovations		
E5.5.2.	b) Process innovations		
E5.5.3.	c) Marketing innovations		
E5.5.4.	d) Organizational innovations		
E5.6.	At what level are majority of your innovations new?	1 – Organization level 2 – Country/region level 3 – Europe level 4 – World level	Single answer
E5.7.	Does your management feel comfortable making risky decisions?	Scale: 1-Very uncomfortable 2- Uncomfortable 3-Somewhat 4-Comfortable 5-Very comfortable 6-Not applicable 7-Don't know 8-Decline to answer	Scale 0-5 Percent by response and average score for each attribute
E5.8.	Does your organization cooperate with industry/R&D organizations as a partner within EU projects?	Yes/no N/A; don't know; decline to answer	
E5.9.	Please provide examples of which organizations and which programs and projects you have significant cooperation with?	Open	Free text
E5.10.	In which areas or in what type pf projects in the field of the blue economy would you like to cooperate with partners from research centres or from the industry?	Open	Free text

MODULE 6: INNOVATION MANAGEMENT			
This part assesses innovation management capabilities of the entity.			
ID	Question	Answers/Explanation	Type/ Scoring method
E6.1.	In what way your organization behave to what happens on the market?	<input type="checkbox"/> Reactive (listen to the reaction of the customers and acts accordingly) <input type="checkbox"/> Proactive (anticipation of customers' needs and creating new products/services) <input type="checkbox"/> Pre-emptive (creating entirely new product/service) <input type="checkbox"/> Don't know	Single answer
E6.2.	Do you have an R&D/innovation department/staff?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> We plan to have it in the near future <input type="checkbox"/> Don't know	Single answer
E6.3.	Does your organization own patents/licenses or have applied for them?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> We plan to have it in the near future <input type="checkbox"/> Don't know	Single answer
E6.4.	If your organization is obtaining intellectual property rights (IPR), please indicate the most used type. (max. 3 answers)	<input type="checkbox"/> Copyright <input type="checkbox"/> Patents <input type="checkbox"/> Trademarks <input type="checkbox"/> Industrial design <input type="checkbox"/> Geographical indications <input type="checkbox"/> Trade secrets <input type="checkbox"/> Not applicable <input type="checkbox"/> Other	Multiple answers (max 3)

MODULE 7: SOURCES OF INFORMATION			
This page concentrates on sources of information about innovation, intensity of their use. The point is to verify whether the interviewee uses various information sources to identify current technology developments that would enhance the organization's ability to identify trends and possibly foresee market development.			
ID	Question	Answers/Explanation	Type/ Scoring method
E7.1.	How often do the stated factors serve as a source of information on innovation of your organization?	Scale: 0-Never 1-Very rarely (less than once per year) 2- Rarely (1-2 times per year) 3-Sometimes (3-6 times per year) 4-Often (7-12 times per year)	Scale 0-5 Percent by response and average score for each attribute

		5-Very often (more often than once per month) 6-Not applicable 7-Don't know 8-Decline to answer	
E7.1.1.	a) Internal organization resources		
E7.1.2.	b) Internet		
E7.1.3.	c) Exhibitions, fares		
E7.1.4.	d) Seminars, lectures		
E7.1.5.	e) Technical literature		
E7.1.6.	f) Customer's feedback		
E7.1.7.	g) Suppliers inputs		
E7.1.8.	h) Social networks		
E7.1.9.	i) Business support organizations (e.g. Chambers)		
E7.1.10.	j) Consultants		
E7.1.11.	k) Universities/research organizations		
E7.1.12.	l) Government		
E7.1.13.	m) Other	Open / Scale 0-5	

MODULE 8: BLUE GROWTH & TECHNOLOGICAL/SKILLS CAPACITIES

This part aims to assess usage and creation of the technology related to the Blue Growth areas, cooperation options, investment in new skills to master new technologies and usage of available public support tools/instruments. Are entities up to date with new digital systems that help optimize production or management processes?

ID	Question	Answers/Explanation	Type/Scoring method
E.8.1.	Please indicate your affiliation with Blue Growth activities (specialization within BG focus area)	<input type="checkbox"/> Fisheries & Aquaculture <input type="checkbox"/> Waterborne transport and port activities <input type="checkbox"/> Blue Bio-economy & biotechnology <input type="checkbox"/> Infrastructure and maritime works (submarine robots and drones) <input type="checkbox"/> Maritime surveillance <input type="checkbox"/> Public services and governance <input type="checkbox"/> Management of marine ecosystem services	Multiple answers (max 3) / analytical category

		<input type="checkbox"/> Shipbuilding and ship repair <input type="checkbox"/> Coastal tourism <input type="checkbox"/> Marine renewable energy <input type="checkbox"/> Marine non-living resources (Offshore oil & gas; minerals (salt) extraction) <input type="checkbox"/> Other (please mention)	
E8.2.	How often does your organization acquire newest technologies?	Scale: 0-Never 1-Very rarely (less than once per year) 2- Rarely (1-2 times per year) 3-Sometimes (3-6 times per year) 4-Often (7-12 times per year) 5-Very often (more often than once per month) 6-Not applicable 7-Don't know 8-Decline to answer	Scale 0-5 Percent by response and average score for each attribute
E8.3.	Do you create your own technologies?	Yes/No	Single answer
E8.4.	In which main economic activities do you create new technologies?	Open answer	
E8.5.	Who do you collaborate with to create new technology?	1- Independently (in-house) 2- Co-op with other SME(s) 3- Co-op with other scientific institution(s)	
E8.6.	Which innovative technologies related to Blue Growth does your organization create?	Scale: 0-Never 1-Very rarely (less than once per year) 2- Rarely (1-2 times per year) 3-Sometimes (3-6 times per year) 4-Often (7-12 times per year) 5-Very often (more often than once per month) 6-Not applicable 7-Don't know 8-Decline to answer	Scale 0-5 Percent by response and average score for each attribute
E8.6.1.	a) Propulsion and powering		
E8.6.2.	b) Smart ship tech		
E8.6.3.	c) Advanced modelling in shipbuilding		
E8.6.4.	d) Robotics		
E8.6.5.	e) Autonomous systems		
E8.6.6.	f) Advanced materials		
E8.6.7.	g) Sensors		
E8.6.8.	h) Sustainable energy generation		

E8.6.9.	i) Advanced manufacturing		
E8.6.10.	j) Marine biotechnology & bioprocessing		
E8.6.11.	k) Clean technologies (Cleantech)		
E8.6.12.	l) ICT solutions related to Blue Growth		
E8.6.13.	m) Other, please describe	Open	Free text
E8.7.	What kind of available public support tools/instruments have you used while creating new technologies?	Open	Free text
E8.8.	What other kind of public support tools/instruments are you missing for creating new technologies? Why?	Open	Free text
E8.9.	What is the percentage of investment spending in new skills to master new technologies over the past 3 years (as % of the turnover)?	Number (%)	
E8.10.	How do you consider the importance of digital transformation of your organization in next period of:	1-Not at all important 2-Slightly important 3-Important 4-Fairly important 5-Very important 6-Not applicable 7-Don't know 8-Decline to answer	Scale 1-5 Percent by response and average score for each attribute
E8.10.1.	a) 2 years		
E8.10.2.	b) 2-5 years		
E8.10.3.	c) 5-10 years		
E8.11.	In your opinion, which Blue Growth areas may benefit the most by gradual digital transformation?	<input type="checkbox"/> Fisheries & Aquaculture <input type="checkbox"/> Waterborne transport and port activities <input type="checkbox"/> Blue Bio-economy & biotechnology <input type="checkbox"/> Infrastructure and maritime works (submarine robots and drones) <input type="checkbox"/> Maritime surveillance <input type="checkbox"/> Public services and governance <input type="checkbox"/> Management of marine ecosystem services <input type="checkbox"/> Shipbuilding and ship repair <input type="checkbox"/> Coastal tourism <input type="checkbox"/> Marine renewable energy <input type="checkbox"/> Marine non-living resources (Offshore oil & gas; minerals (salt) extraction) Other (please mention)	Multiple answers (max 3)
E8.12.	What is the importance of the following barriers to your organization's rapid digital transformation?	Scale: 1-Not at all important 2-Slightly important	Scale 1-5

		3-Important 4-Fairly important 5-Very important 6-Not applicable 7-Don't know 8-Decline to answer	Percent by response and average score for each attribute
E8.12.1.	a) Lack of quality information		
E8.12.2.	b) Alignment of strategy and execution		
E8.12.3.	c) Lack of collaboration within organization teams		
E8.12.4.	d) Inability to experiment quickly		
E8.12.5.	e) Manual portfolio analysis		
E8.12.6.	f) Use of legacy systems and technologies		
E8.12.7.	g) Internal culture		
E8.12.8.	h) Other:	Open	

MODULE 9: POSITION IN THE VALUE CHAIN

This part aims to assess what is the place of an organization in the Global Value Chain (GVC), whether the entity knows its suppliers, customers, other parts of the Global Value Chain, or whether it has the knowledge about the part of the GVC where the most value is created.

ID	Question	Answers/Explanation	Type/ Scoring method
E9.1.	Are you familiar with the concept of (global) value chains?	Yes/no	Single answer
E9.2.	Where is your organization's activity in the value chain based?	Single answer <input type="checkbox"/> Region (local) <input type="checkbox"/> Country <input type="checkbox"/> Europe <input type="checkbox"/> World <input type="checkbox"/> Don't know	Single answer
E9.3.	Please estimate the percentage of activities your organization occupies in different parts of the value chain related to Blue Growth domain:	Percentage input on given variables (sum = 100%)	Percentage
E9.3.1.	a) Pre-production activities (e.g. R&D)	0-100%	
E9.3.2.	b) Sourcing of inputs	0-100%	
E9.3.3.	c) Manufacturing and assembly	0-100%	
E9.3.4.	d) Sales and marketing	0-100%	

E9.3.5.	e) Financial services	0-100%	
E9.3.6.	f) Operations/services (e.g. aftersales, refurbishment, customer support)	0-100%	
E9.3.7.	g) Recycling	0-100%	
E9.3.8.	h) Supporting activities (e.g. Certification, trainings/education, Business support etc.)	0-100%	
E9.4.	Does your organization purchase its inputs (raw materials, intermediates, final products) by direct contracts with suppliers or by using intermediaries?	<input type="checkbox"/> Direct means <input type="checkbox"/> Intermediaries <input type="checkbox"/> Not applicable	Single answer
E9.5.	How much would you rate your bargaining power with your suppliers? (In terms of negotiating favorable conditions for supplied inputs which may give your organization a competitive edge over your competitors)	Scale: 1-Very weak 2-Slightly Weak 3-Neutral (Neither strong nor weak) 4-Slightly strong 5-Very strong 6- Not applicable 7- Don't know 8-Decline to answer	Scale 1-5 Percent by response and average score for each attribute
E9.6.	Where are your main suppliers located?	<input type="checkbox"/> Locally <input type="checkbox"/> Nationally <input type="checkbox"/> Internationally	Single answer
E9.7.	Who are your primary customers?	<input type="checkbox"/> Intermediate customers (wholesalers that purchase goods for re-sale) <input type="checkbox"/> Final customers (final sellers to consumers) <input type="checkbox"/> Consumers (users) <input type="checkbox"/> Don't know / n.a.	Single answer
E9.8.	How much would you rate your bargaining power with your primary customers/clients? (In terms of negotiating favorable conditions for sold goods/services which may give your organization a competitive edge over your competitors)	Scale: 1-Very weak 2-Slightly Weak 3-Neutral (Neither strong nor weak) 4-Slightly strong 5-Very strong 6- Not applicable 7- Don't know 8-Decline to answer	Scale 1-5 Percent by response and average score for each attribute
E9.9.	State the number of competitors at:	Scale: 0- don't know 1- <5 2- 5-10 3- 11-30 4- 30-50 5- >50	Scale 0-5 Percent by response and average score for each attribute
E9.9.1.	a) Local level		
E9.9.2.	b) National level		
E9.9.3.	c) International level		
E9.10.	What is your organization's main competitive strategy over your competitors?	<input type="checkbox"/> Don't know <input type="checkbox"/> Cost leadership (low cost strategy)	Single answer

		<input type="checkbox"/> Best cost strategy (high quality and low price of a product/service) <input type="checkbox"/> Differentiation strategy (making a company's product/service different from the similar products/services of the competitors) <input type="checkbox"/> Focus strategy (unique product/service in the niche market)	
E9.11.	Is your organization concerned about the possible entry of new businesses into your market or field of business?	Scale: 1-Not at all concerned 2-Slightly concerned 3-Somewhat concerned 4-Moderately concerned 5-Extremely concerned 6- Not applicable 7- Don't know 8-Decline to answer	Scale 1-5 Percent by response and average score for each attribute
E9.12.	Is your organization concerned about the possibility competitors' products/services may replace your products/services?	Scale: 1-Not at all concerned 2-Slightly concerned 3-Somewhat concerned 4-Moderately concerned 5-Extremely concerned 6- Not applicable 7- Don't know 8-Decline to answer	Scale -5 Percent by response and average score for each attribute

In-person direct interview surveys Guide

Overview

The purpose of this section is to provide information and guidance to the interviewers during the **optional** in-person direct interviews on how to understand the questions and gives a proposals how to conduct the survey.

Opting for the in-person direct interview provides the interviewer a chance to deepen the information received during the quantitative part (online) of the survey. Therefore, **direct interviews are add-on to the online part of the survey.**

It is recommended to conduct an online survey before participating in the direct survey but it is not excluded that it is done on the same turn.

The ideal option is to record the interview and then **create a transcript of the respondent's answers**. This will help avoid the loss of important information acquired during the conversation. Implementing PP responsible for the interview should produce interview transcripts and forward the copies to the main coordinating team for the record.

NOTE: The qualitative part of the interview is strongly discussion-based. It is not necessary to follow the order of the questions strictly nor to receive answers an all questions. It might be more natural to mix the sequence depending on the flow of the discussion.

Drivers of transformational processes - The EDP aims at turning the priority areas into a transformational roadmap (see Chapter 3.1.1.). Such roadmap is composed of a collection of related and complementary projects contributing to the previously identified transformational goal. The collection of projects will be discovered by “entrepreneurs” – the drivers of potentially selected projects themselves

Main goal for conducting the in-person survey is to validate the presumption that chosen entity is **capable to become driver of transformational processes and transformational projects** highly dependable on the identified priority area **and to be a driver for pulling additional actors and capacities towards innovation and transformation an a macro-regional level**. This can include a wide variety of actors from research communities and education, start-ups, SMEs, industry, representatives of public administrations concerned with relevant programmes or NGOs.

Logistics

Selecting the organizations to interview

The number of interviews can vary depending on the budget, time and availability of interviewees, taking care to:

- **Explore innovation potential of the entity suitable for macro-regional cooperation.** High innovation capacity within blue economy domain with potential for macro-regional cooperation.
- **Explore financial aspects for macro-regional cooperation.** Identification of specific financial needs and barriers which may lead to more focused innovation strategy and the action plan on a macro-regional level.

- **Identify the most innovative entities.** Companies that are interested in product/processes innovation are more likely to buy-in to the approach of industrial upgrading. They are therefore more likely to engage with the initiative and so we should try to identify these players from the outset, while still keeping an open mind throughout the process.

The selection of organizations to interview should be conducted on a Blue economy focused domain.

Setting up the Interview

A standardized email note is being prepared for the interviewers (see Annex). Targeting the right people within the organizations will also be crucial. For many of the larger companies on a target list, a talk with anyone who deals with organizations' strategy is preferred. With smaller entities the functions are generally integrated within one job role (owner or director/CEO). Please use company websites to help decide who the best person to speak to would be.

Sometimes it is difficult to get a response from the companies from email and so follow up with a phone call to arrange the interviews is needed. Note that to gain their interest, you should:

- **Gain their interest and make them feel special:** say that they have been chosen because they are particularly important, or because they have been highly recommended.
- **Mention the expected outcome:** Insist that it would be useful for them to understand the project since it would affect recommendations to government bodies on how public funding is allocated within the blue economy focused entities.

Important: Thematic sets of questions have to be adjusted to the organizational type of interviewee i.e. research organizations would not be asked about production capacities, suppliers, customers or position in the value chain etc.

The interview itself

Opening script.

The following is an example of an opening script that you can begin with when interviewing the organizations.

- **Pleasantries and small talk.** Introducing team members to the interviewee.
- **Explanation:** Brief explanation of the BLUEAIR project and its goals.
- **Interview goals:** Brief explanation of what is tried to be achieved with the interview especially with the focus on:
 - Exploring innovation potential of the entity suitable for macro-regional cooperation
 - Exploring financial aspects for macro-regional cooperation.
 - Identifying the most innovative entities
- **Hook:** Brief explanation that project itself would affect recommendations to government bodies on tailoring its policy mix and how public funding is allocated within the blue economy focused entities which would benefit actors operating in these blue economy segments.

List of questions for the in-person direct interviews

1. ABOUT THE ORGANIZATION		
ID	Thematic questions	Instructions for the interviewer
En1.1.	General info about the organization	A brief history / evolution; any major turning points in its strategy; growth trajectory, employees etc.
En1.2.	Core business and/or core competencies	What are the strengths where the organization is competitive?
En1.3.	What are the biggest threats or obstacles? (regarding organization growth)	<p>Specific situation that highlights most pressing, top issue?</p> <p>[In case this question needs prompting, can suggest some of the following areas and gauge response]:</p> <ul style="list-style-type: none"> • Nature of business – size, competitiveness. • Labour: skills, availability, cost, productivity • Investment and working capital finance. • Business regulatory environment issues. • International / domestic competitor companies.
En1.4.	How can some of these threats or obstacles best be addressed?	What would help you overcome them?
En1.5.	In which blue economy area your company is operating?	Try to determine organization's involvement in areas according to project's identified blue growth focus areas

2. INNOVATION CAPACITIES AND PROCESSES		
ID	Thematic questions	Instructions for the interviewer
En2.1.	Please name the 3 biggest drivers for innovation in order of importance and tell me why are they so important to you.	<p>Please attempt to classify using the examples below</p> <ul style="list-style-type: none"> • Organization's management mind-set • Product/service quality • New market opportunities • New product/service development • Company's growth • Customers' and Suppliers' needs and expectations • Employee initiative • Market pressure from competitors • Market trends • Certification / Quality standardisation • Other
En2.2.	If your organization is obtaining intellectual property rights (IPR), please provide some examples of the use.	<p>Please attempt to classify and provide examples using the following types</p> <ul style="list-style-type: none"> • Copyright • Patents • Trademarks • Industrial design • Geographical indications

		<ul style="list-style-type: none"> • Trade secrets • Other
En2.3.	Do you have a dedicated R&D/innovation department/staff?	<p>If yes explain the processes used by the staff.</p> <p>If no, explain why not and who is conducting the processes.</p>
En2.4.	Please describe 3 greatest barriers for innovation in your organization in order of importance.	<p>Please attempt to classify using the examples below</p> <ul style="list-style-type: none"> • Lack of time, resources or staff • Short-term focus • Incentives within organization are not structured to reward innovators • Lack of systematic innovation process • Belief that innovation by itself is risky process • Other
En2.5.	Which type of innovation/technology adopters your organization belongs to?	<p>Please attempt to classify where does your organization fit</p> <ul style="list-style-type: none"> • Innovators - able to cope with a high degree of uncertainty about an innovation at the time of adoption • Early adopters - well-thought-out execution of emergent technology • Early majority - adopts an innovation just before the average person • Late majority - must see the innovation as already being successful before they adopt • Laggards - must be positively certain a new idea will not fail before they will adopt it.
En2.6.	What do you think are the key success factors for growth in the area your organization operates?	Try to determine several factors which articulates what the organization must do, and do well, to achieve the goals outlined in its strategic plan.
En2.7.	Is R&D&I a key factor?	Please ask for explanation.
En2.8.	What are most common sources for innovation financing?	<p>Try to determine which sources of financing organization is using for its innovation processes (examples):</p> <ul style="list-style-type: none"> • Own resources • Venture capital funds • Loans • Other
En2.9.	Is your organization involved or actively participating in trans-national projects?	Try to determine the organization's level of trans-national cooperation.
En2.10.	If yes, what are the motifs and benefits for such participation?	Try to determine the organization's main motifs and benefits (e.g. knowledge/technology transfer, gaining access to new technology, inputs, workforce, markets etc.)
En2.11.	Does your organization exploits the results from various EU projects?	Results and conclusions of finished EU projects are shared within the open public sources. Try to determine if organization is exploiting such results. If yes, how often.

3. INNOVATION POTENTIAL		
ID	Thematic questions	Instructions for the interviewer
En3.1.	What type of tools your organization is using to observe market developments and future trends?	Please try to evaluate level of innovation awareness (i.e. technology watch or scouting, market analysis, opportunity assessments and other techniques)
En3.2.	How does your organization maintain contacts to international partners or universities, consulting agencies etc. in the high-technology sector?	Please try to evaluate level of innovation networking. (i.e. scientific conferences, workshops, publication databases, customers, trade fairs/exhibitions, round tables, brokerage events etc.)
En3.3.	What does your organization use the networking and clusters for? Does it develop ideas via networking?	Try to evaluate organizations motifs for mutual networking.
En3.4.	Name several most useful services by business support organizations (BSO) that your organization have utilized or would like to obtain that would enable it to become more innovative.	Try to assess role of available BSO's.
En3.5.	Could you describe any formal collaboration with universities and/or R&D centres?	Try to determine how the organization has benefitted from the cooperation.
En3.6.	Is it collaboration based on a national or international level?	If collaboration has taken place, please write down the name of the organization.
En3.7.	What is the major technological trend affecting how the organization innovates?	Try to assess awareness of technological trends affecting the organization.

4. COMPETITIVE POTENTIAL (business organizations)		
ID	Thematic questions	Instructions for the interviewer
En4.1.	What is your market position in terms of market leadership?	Try to determine organization's market position as a: <ul style="list-style-type: none"> • Market follower • Mid-range actor • Uncertain • Important player • Market leader
En4.2.	Does your organization's main products/services serves a niche market?	Try to determine if organization's products/services are specifically focused at satisfying specific market needs, as well as the price range, production quality and the demographics that it is intended to target
En4.3.	What is the market position of your main product in the product cycle?	Try to determine if main product is: <ul style="list-style-type: none"> • In development • In introduction phase • Growing • Peaking • Declining

En4.4.	What is your position in relation to the strongest competitor?	Try to assess if organization's position is: <ul style="list-style-type: none"> • Very weak • Rather weak • Identical • Rather strong • Very strong
En4.5.	How important for your organization's competitiveness do you rate strategic partnerships? (e.g. with researchers, suppliers, customers etc.)	Try to determine importance for your organization: <ul style="list-style-type: none"> • Unimportant • Little important • More or less • Important • Essential
En4.6.	How are partners and objectives in your cooperations aligned?	Try to determine who is leading and setting the objectives in cooperation projects.

5. CONCLUDING INTERVIEW ASSESSMENT QUESTION

ID	Thematic questions	Instructions for the interviewer
En5.1.	If your organization was given 1 million EUR right now and it could use it only to invest in some technology/innovation or business area, what would it invest in and why?	To conclude the interview, a hypothetical question is used to assess the what-if possibility.

PART C – Checklist for the Pilot EDP survey process

Presented checklist refers to suggested checklist process and is subject to change based on decision of project partners.

LEADING COORDINATION PARTNER TEAM		
Check-box	Task	Responsibility
PREPARATION PHASE		
	Distribution of Pilot EDP Tool document with list of question modules for approval of PPs	HGK
	Distribution of questions template for translation and setup of optional customised modules to all supporting partners	HGK
	Collection of all translations + revision of customised modules	HGK/UPRC
	Entering national/regional versions into survey platform	HGK/UPRC
	Announcing the exact start and end date of the online survey including survey activation	HGK/UPRC
OPERATIVE PHASE		
	Activation of the platform and start of survey	UPRC/HGK
	Creating interim progress reports by stating number and names of participants who accesses the survey by each country	UPRC
	Proposal of possible measures (by country/region) to encourage interviewees to complete the questionnaire	UPRC
	Decision on potential extension of the deadline for completing the survey	UPRC
	Closing the survey online status	UPRC
ANALYTICAL PHASE		
	Compilation of data	UPRC/HGK
	Data analysis	UPRC/HGK
	Report	UPRC
	Results representation on online dashboard online platform	HGK

IMPLEMENTING PARTNERS (IPs) AND SUPPORTING PARTNERS (SPs)		
Check-box	Task	Responsibility
PREPARATION PHASE		
	Project partners approval of distributed Pilot EDP Tool document with a list of question modules	SPs
	Generating a list of target group stakeholders eligible for the Pilot EDP survey (see Chapter 3.1.6.)	IPs/SPs
	Translations into local language of questions modules template and setup of optional customised modules and sending it to coordinating team	SPs
	Decision about the quantitative survey goals in terms of number of sent invitations and expected number of feedbacks	IPs/SPs

	Editing of invitational letters into local language (see Annex Part A – Template for questionnaire invitation letter) and entering links to dedicated survey platform (Implementing partner will be the "owner" of the Pilot)	SPs
OPERATIVE PHASE		
	Sending invitation letters/e-mails to target group	IPs/SPs
	Monitoring the national/regional survey completion process by progress reports generated by Coordination team	SPs
	Established national/regional assistant contact and support point	SPs
OPTIONAL INTERVIEW PHASE		
	Creating list of target group for in-person interview	IPs/SPs
	Sending requests for interview (place, date, time)	IPs/SPs
	Conducting the interview by using provided list of questions (see Annex Part B, subchapter "In-person direct interview surveys Guide")	IPs/SPs
	Creating a transcript reports of the respondent's answers	IPs/SPs
	Sending a transcript reports copies to coordinating team	SPs
ANALYTICAL PHASE		
	Verifying the results	IPs/SPs