

# Interreg

## Greece-Bulgaria

### Co-Working

European Regional Development Fund



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#### *D3.2.2*

#### *<Action Plan on c-b Pre-incubation Strategy >*

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#### **Project Beneficiary 2**

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## Preamble

The objective of establishing a business incubator is to reduce the “loneliness factor” among early-stage entrepreneurs while helping them develop professionally, accelerate business growth and success, and decrease the likelihood of failure. This in turn creates new jobs, diversifies the industrial base, and enhances quality of life in the community.

According to the Small Business Administration, only about half of all businesses survive five years or longer. For this reason, the public and private sectors have increasingly recognized the importance of supporting startup businesses in these critical early years of growth. One such business support mechanism that has gained popularity as an economic development tool is *business incubation*. According to the National Business Incubation Association (NBIA), business incubation is defined as “a business support process that accelerates the successful development of start-up and fledgling companies by providing entrepreneurs with an array of targeted resources and services.”

Startup businesses are also important contributors to the economy. According to the Kauffman Foundation:

- ⇒ New businesses account for nearly all net new job creation and almost 20 percent of gross job creation.
- ⇒ Companies less than one year old created an average of 1.5 million jobs per year over the past three decades.
- ⇒ Many young firms exhibit an “up or out” dynamic, in which innovative and successful firms grow rapidly and become a wellspring of job and economic growth, or quickly fail and exit the market, allowing capital to be put to more productive uses.
- ⇒ Young firms were hit hard during the Great Recession. Even still, from 2006 to 2009, young and small firms (fewer than five years old and twenty employees) remained a positive source of net employment growth (8.6 percent), whereas older and larger firms shed more jobs than they created.

The concept of business incubation dates to the late 1950s, when the first business incubator was pioneered. The concept of providing shared space and professional services to early-stage companies did not emerge until the late 1970s, and most early examples were isolated in the industrial northeast. By 2012, there were 1,250 incubators in the US, and today, NBIA estimates there are over 7,000 incubators globally.

Business incubators help advance the successful development of entrepreneurial companies through a variety of business support resources and services, mainly through low cost shared space, resources, and professional services. A business incubator’s main goal is to accelerate the development of promising businesses that will graduate from the program and be longstanding contributors to the local or regional economy.

## Introduction

This action plan places great emphasis on creating a culture of innovation and entrepreneurship with regard to entrepreneurship, education, research and dissemination. This action plan also presents measures to strengthen the position of c-b area as an area that favors innovation and pioneer business ideas.

The Action Plan aims to:

- ⇒ Promote entrepreneurial culture and the creation of new businesses, including the use of business incubators and the strengthening of the network of advanced incubators, not only for the management of new ideas, but also for the consolidation of business plans.
- ⇒ Provide integrated support services to entrepreneurs up to the consolidation of business initiatives, promoting and improving the use of existing infrastructures in urban areas, such as business incubators, and increasing the number and quality of advanced services to entrepreneurs.
- ⇒ Promote business cooperation under a multisectoral model (SMEs, self-employed, technology centres, universities, etc.) to strengthen company interaction, innovation and technology transfer, the concentration of companies in business incubators and the strengthening of business associations, including multisectoral associations and the cooperation linked to new business activities.

More specifically, the Action Plan aspires to:

- ⇒ Reinforce the instruments of collaboration, coordination and promotion of cooperation among the key agents of the entrepreneurial ecosystem.
- ⇒ Complete the deployment of instruments to support entrepreneurship, in cooperation with the key actors of the region, strengthen their activity and develop specific programmes to support spin-offs and the transfer of technology from the University and technology and research centres to the market, facilitating communication and collaboration between them and companies.
- ⇒ Enhance the support provided by the pre-incubation to enterprises, particularly to those with higher growth potential, through better tailored and higher added-value services and through the sector-specialization.

## The Co-Working project

The project with the acronym "Co Working" is financed by the Interreg V-A program "Greece - Bulgaria 2014-2020", which constitutes a bilateral territorial cooperation program, approved by the European Commission on 13/12/2016 with C (2016) 8708, decision.

The general objective of the CO-WORKING project is to encourage the creation of businesses by creating an innovative ecosystem in the cross-border area, based on the establishment of two supportive business pre-incubation mechanisms in Greece and Bulgaria respectively. Unlike a common business incubator, the pre-incubator will only support business ideas/projects and not already operating businesses.

The project aims to accelerate early-stage teams to develop a business idea under real-world conditions, before taking entrepreneurial risk with the aim of transforming initial ideas into viable propositions that overcome the so-called "valley of death".

The specific objectives of the project are:

- The development of a pre-incubation strategy in the cross-border area based on consultation with local stakeholders and empirical fieldwork, leveraging existing international methodologies.
- The installation and equipment of two incubators.
- The development of a Business Idea Diagnostic Tool associated with a pre-incubation Toolkit. On this basis, early-stage teams can develop their own Business Model Canvas (BMC) and validate their business ideas against a business diagnostic methodology.
- The organization of learning weeks with the aim of providing first-stage groups with the basic principles of entrepreneurship, culminating in events.
- The launch of a holistic acceleration mechanism, including personalized education, mentoring and training support, and business missions.
- Consultation with key stakeholders, policy recommendations and capitalization.
- The creation of a mobile network of consultants and a consulting unit between the two areas of the project and beyond the end of the project. The entire support mechanism is expected to interface with the Career Offices of the Universities and any other organization related to innovation and entrepreneurship in the cross-border area.

The Project Partners are:

- Alexander Innovation Zone SA (Lead Partner)
- Aristotle University of Thessaloniki Research Funds Special Account (Partner 2)
- University Of National and World Economy (Partner 3)
- National Company Industrial Zones PLC (Partner 4)



The project is structured in five individual Work Packages, each of which is composed of individual deliverables, for the implementation of which the project partners cooperate with each other. The Work Packages are:

- Work Package 1 (WP1): Management and coordination of the project
- Work package 2 (WP2): Communication and dissemination
- Work package 3 (WP3): Co Working Strategy, spaces and tools
- Work Package 4 (PE4): Co Working Bootcamps
- Work package 5 (PE5): Co Working Acceleration

The total budget of the project amounts to €585,712.30 and is co-financed by the European Union and national resources of Greece and Bulgaria.

## Bulgaria & Greece profile on innovation and entrepreneurship

### SME's Performance

#### Bulgaria

Based on the European Commission's 2017 SBA Fact Sheet for Bulgaria, SMEs play a particularly important role in Bulgaria. They account for three quarters of the country's employment and two thirds of total value added. In both cases, this is about 9 percentage points above the EU average. The positive trend in SME value added is expected to continue, with an average annual growth rate of over 5 %. The outlook for SME employment is also positive, with a total increase of 2.4 %, which corresponds to the creation of about 34 700 new jobs.

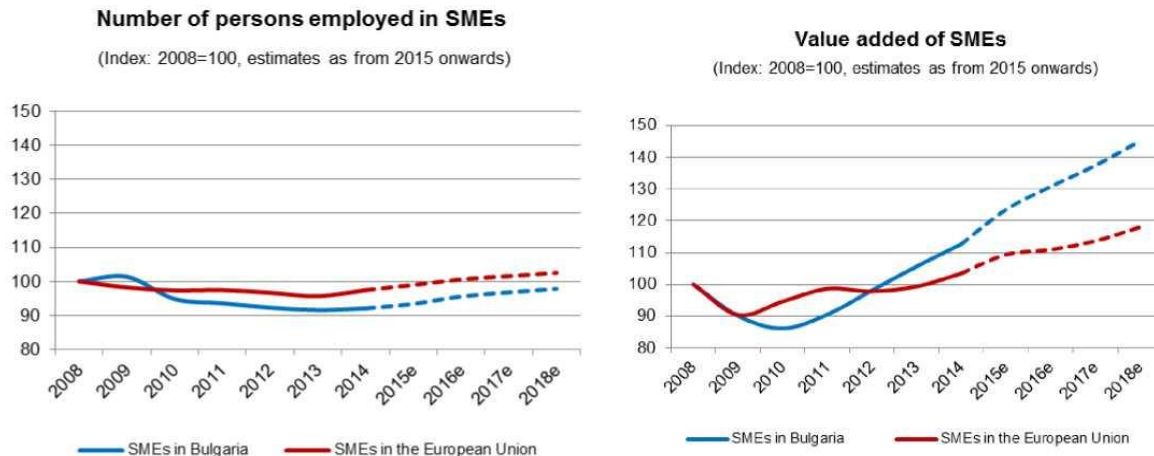
#### Greece

Similarly, according to the European Commission's 2018 for Greece, SBA Fact Sheet for SMEs play an important role in the Greek 'non-financial business economy'. They generate 63,6% of value added and 85.2 % of employment, exceeding the EU average of 56.8 % and 66.4 % respectively. Micro firms are the backbone of the Greek economy providing a remarkable almost 6 out of 10 jobs, compared with the EU average of 3 out of 10 jobs. It is predicted that the growth in SME employment that began in 2015 will continue, with an expected rise of more than 6 % per year. SME growth in value added is also expected to accelerate, increasing by more than 8 % per year.

### Small Business Act for Europe (SBA)

#### Bulgaria

Bulgaria's SBA profile shows weak results in nearly half of the SBA areas, and particularly in entrepreneurship and in skills & innovation. The country performs above the EU average only in the area of 'second chance.' Progress has been made on access to finance and skills & innovation, but the latter remains among the key challenges. Bulgaria implemented measures in response to most of the SBA recommendations, but they have not yet delivered the expected results. It is clear that the legal framework needs to become more stable, including by consistent application of the regulatory impact assessment and SME test. Improving the skills of workers and the innovative capacity of SMEs should be another high priority for Bulgaria.



Source: EC 2017 SBA Fact Sheet-Bulgaria

## Greece

Greece's performance has been broadly below the EU average for many years. Only state aid & public procurement is above the EU average, while 'responsive administration' is in line with the EU average. Greece is among the weakest performing countries in access to finance, 'second chance', environment, and internationalisation. During 2017 and the first quarter of 2018, Greece adopted many new policy measures covering seven out of the 10 SBA principles. Due to the financial crisis of the past decade, many SMEs continue to face obstacles when looking for financing. Access to finance remains the most problematic area in Greece. Recent policy efforts in this area, together with the economic recovery, are expected to have a significant impact, but these efforts need to be continued. Additional measures should be taken in parallel to improve the business environment in Greece, such as simplifying the complex and burdensome administrative procedures focusing particularly on insolvency legislation. The systematic application of the SME test should also be strengthened. Furthermore, as the Greek economy is relatively small, specific policy measures should encourage SMEs to increase exports and engage in more internationalisation activities. Additional policy efforts are also necessary to support digitalisation and SMEs' research and innovation activities to become more productive and competitive.

## Common challenges to be tackled.

### Difficulties in obtaining business finance.

For SMEs in both sides of the c-b area, the conditions for financing are inferior to that of large enterprises due to:

- High transaction costs. To issue loans for SMEs means high costs, which serves as a barrier for banks offering loans for SMEs.
- Information asymmetry. The information asymmetry and incomplete information cause the credit rationing in credit market.

- SMEs are at an inferior position in credit filtration. As banks face the adverse selection issue, the active strategy is to put forward certain non-prince condition. (4) SMEs face greater risks in operation. SMEs usually operate in a short period. The probability of exiting from the market is high, which increases the risks of banks objectively.

**Greece** scores below the EU average in access to finance overall and well below the EU average for the majority of indicators. Due to the financial crisis of the past decade, many SMEs continue to face obstacles when looking for financing. Access to finance is the country's weakest performing area. For instance, it takes around 65 days for a company to get its invoices paid, 29 more than the EU average and one of the highest payment delays in the EU. Bank lending to SMEs remains a significant barrier due to the high average interest rates on small loans. There is also lack of available 'business angel' funding, venture capital and equity financing or alternative sources of financing such as crowdfunding. However, banks are currently much more willing to lend than they were in the middle of economic crisis and access to public financial support has significantly improved.

**Bulgaria's** performance on access to finance has been improved, and the country performs broadly in line with the EU average. The share of SME loan applications rejected or with conditions deemed unacceptable declined. Similarly, the share of SMEs indicating deterioration in banks' willingness to provide loans dropped. Access to equity financing has also improved over the past year, while the share of SMEs reporting deterioration in public financial support declined. Nevertheless, venture capital remains underdeveloped, with investments having fallen, thus Bulgaria is one of the worst performing Member States.

### Limited access of entrepreneurs to business know-how

Access of entrepreneurs to business know-how represents a very important resource for the development of every SME and one of the most important sources of competitive advantage. Three very important types of limited access to know-how can be identified in the c-b area:

- Know-how about management and development of existing business or newly established company.
- Know-how about processes of products and services development and production.
- Know-how about market, where the new company will operate.

### Limited access to general information and contacts

The c-b area is characterized by weak formal and informal links of entrepreneurs and SMEs with other individuals and organizations, through which they make economic transactions. Entrepreneurial networking - an important form of non-financial support, since those networks can provide access to important knowledge and improve the visibility and reputation of a new business venture.

## Lack of support services for developing competitive products-services

The sources of various forms of SMEs support services in the c-b area consist of: Supply chain participants, banks, agencies (accountants, lawyers and consultants), business associations, government organizations, media, family, friends and others. The removal or reduction of administrative barriers in both sides of the c-b area, would allow entrepreneurs to focus on daily operations and find new business opportunities in their environment. High levels of bureaucracy and administrative barriers have a negative impact on new business ventures development. Moreover, the lack of tax incentives (e.g. reduction of tax rates and respite in tax payment) focused on SMEs represents an important barrier for developing competitive products-services.

## Lack of access/know-how regarding cost saving technologies

Technology transfer is very important for the development of the enterprises. A lack of support measures such as Technology transfer agencies and offices for this process can be identified in both sides of the borders.

## Inadequate human development and skills

**Greece's** performance in skills & innovation is below the EU average and has gone down since last year. This is partly due to the fact that the proportion of SMEs purchasing online, the lowest in the EU, has gone down. By contrast, the share of SMEs selling online has slightly increased, but is still low compared to other EU countries. The turnover from e-commerce has also decreased compared to the previous reference period and was the second lowest in the EU in 2017. Skills training has become a serious challenge. The proportion of SMEs providing ICT training to their employees has decreased from 14.0 % in 2016 to 10.7 % in 2017, which is affecting the ICT skills of the Greek workforce. In addition, general training that companies provide to their employees decreased from 27.8 % in 2010 to 21.7 % in 2015. Policy measures to promote skills & innovation over the last decade have increased business spending on research and innovation<sup>27</sup>. However, policy efforts are also needed to adapt the education system and vocational training to the needs of the current labour market.

**Bulgaria** continues to trail the EU average by a wide margin in the skills & innovation area. The country is the second worst EU performer in this area. Bulgaria's performance even slightly declined from 5.5 % in 2014 to 5.2 % in 2016 for SMEs selling online. Non-food retail on-line purchases (excluding automotive fuels and lubricants) - by mail, telephone or the Internet - increased by 27.8% in July 2019 compared to the same month in 2018! Online trade in Bulgaria accounts for only 5% of the total turnover of local companies, while in other European markets it reaches about 17% of the total turnover, according to Eurostat data. 2016. From a policy perspective, the progress made since 2008 in both skills and innovation is insufficient. It is clear that the improvement of skills in SMEs and all forms of support for innovation should be a high priority for Bulgarian policymakers. During 2016 and the first quarter of 2017, efforts have been made to promote innovation developed and/or introduced by SMEs. Public funds supported the acquisition of entrepreneurial skills for innovation. A new Pre-school and School Law and amendments to the Law on VET entered into force in 2016. They will help to provide businesses with highly-qualified

workers. There are also special measures in the Entrepreneurship Plan Bulgaria 2020 to address the lack of a qualified workforce. A 'MyCompetence' platform has also been developed in order to address the issue. In 2016 dual education was introduced.

## Internationalization as a common challenge

**Greece's** performance in internationalization is still one of the weakest in the EU, with most indicators below the EU average. Although the information available to SMEs has slightly improved compared to the previous reference period, Greece's performance for this indicator is one of the weakest in the EU. The indicator on formalities (automation, which mainly focuses on electronic exchange of data, automated border procedures, and use of risk management), has further decreased since last year. However, progress has been reported for some indicators. For example, Greek formality procedures have significantly improved since last year and the positive trend in the involvement-of-the-trade-community indicator continues, although further policy action is needed. Although the depressed domestic market resulting from the economic crisis pushed SMEs to increase their exports, it is currently estimated that less than 10 % of Greek SME's are exporting their products. Improvements to transport infrastructures, particularly ports and railroads together with the implementation of the recently developed logistics and transport plan, should help ease exports. During the current reference period, a significant new measure was adopted to support international exports by SMEs, the main objective is to strengthen and support the export orientation of SMEs in the manufacturing sector.

**Bulgaria** performs in line with the EU average for this principle. The country reports one of the best performances in terms of advance rulings (i.e. binding decisions by the customs authorities on details related to intended imports or exports of goods), which facilitate the declaration, release and clearance processes. The share of SMEs with extra-EU exports and imports of goods increased. Policy measures implemented include increasing the role of the Bulgarian SME Promotion Agency. No significant policy measures were adopted in this area. Progress made has been primarily through the BSMEPA's projects to support SME participation in international exhibitions, fairs and forums. The services provided by the Bulgarian Export Insurance Agency should be made more visible to SMEs. This problem is expected to be addressed by the implementation of the policy measure for a national network of local centres and incubators for business development.

## The regional profile on innovation and entrepreneurship in Central Macedonia

The Region of Central Macedonia is second largest and most populated almost 1.9 million (Census 2011). It is the largest Greek region in size and the second largest in population. It is comprised of 7 regional units.

The Region's strategy is focusing on:

- ⇒ Supporting competitiveness, extroversion, internationalization of business efforts and linking the Region's innovative efforts with global markets.
- ⇒ Creating an effective innovation ecosystem.
- ⇒ Producing new knowledge in the most dynamic sectors of the economy.
- ⇒ Promoting networking of organizations, development of synergies and effective exploitation of the knowledge generated by the economy of the Region and the international economy.
- ⇒ Maintaining and strengthening the Human Capital of the Region.

This vision has led the Region of Central Macedonia to be awarded the 'European Entrepreneurial Region for 2018' by the European Committee of the Regions.

In Macroeconomic view, the Region bears a diminishing GDP per capita in the last years, keeping in mind that the whole country is going through economic crisis with severe effects on entrepreneurial sector. The backbone of the regional economy is mainly based on SMEs, but they are mainly deriving from traditional sectors with low levels of productivity, innovation and competitiveness.

Because of the economic crisis, the structural problems of SMEs have grown, such as difficulties in raising external capital. Establishing new businesses on new basis, ideas and reorientation is considered necessary to tackle the recession and also to change the productive model of the region. A new productive model for the region should be based on four (4) sectors as they are highlighted in RIS3 Strategy. The 4 specialized sectors participate decisively in the GDP of the region, employing a significant number of workers, maintain critical mass and exhibiting intrinsic dynamics and extroversion.

The sectors designated as 'Champion Sectors' areQ

- ⇒ Agrofood
- ⇒ Construction Materials
- ⇒ Textile & Clothing
- ⇒ Tourism

Respectively, another 4 technological sectors have been identified, with particularly decisive role in the activation of the economic advantages towards innovation, competitiveness and extroversion. These technological sectors are:

- ⇒ Information & Communication Technologies
- ⇒ Energy Technologies

- ⇒ Environmental Technologies
- ⇒ Transport & Logistics Technologies

In the region there are 4 significant Incubators in total Thermi S.A, i4G (Incubation for Growth) S.A. - Euroconsultants Group of Companies, Technopolis Thessaloniki's S.A. - High Technology Business Park, Thessaloniki Technology Park.

At the regional level, the RIS3 Strategy of the Region of Central Macedonia, which is endorsed and approved by a large number of stakeholders, may offer a basis for defining vision and objectives. Central Macedonia should aspire and promote an open and innovative region, characterised by:

- ⇒ Excellence and extroversion: the pursuit of excellence and targeting exports of products and services are the cornerstones of any initiative and investment.
- ⇒ Exploitation of comparative advantages through specialisation: moving from horizontal initiatives and investments towards initiatives and investments that support selected technologies and developmental options.
- ⇒ Exploiting the capabilities of human resources and the high concentration of research and technology in academic and research centres.

## The Territorial context of Central Macedonia

The Region of Central Macedonia (RCM), one of the thirteen regions of Greece, is situated in Northern Greece, in the South – Eastern part of Europe. It has a population of 1.874.590 inhabitants, representing 17% of the country population and 17% of the GDP (National Statistics Service, 2011 census) covering a total land area of 18.811 km<sup>2</sup>.

The Region of Central Macedonia is a traditional gateway for trade between Greece, the Balkans and south-eastern Europe. Between mid-90s and 2008, the time of onset of the current economic crisis, the region experienced high economic growth rates. Despite this fact, unemployment rates remained relatively high compared to the EU and the national average. With regards to the economic activity, the primary sector, despite its decline, remains quite significant for the local economy, with high productivity above the national average. It is important to note the high proportion of arable and irrigated areas, the above national average production of cereals, industrial and aromatic plants, the improved structure of agricultural holdings compared to the national average and the relatively high degree of mechanisation and organisation of animal farming. Nevertheless, the primary sector remains vulnerable because of its dependence on agricultural subsidies and the replacement of products by imports.

The secondary (manufacturing) sector remains highly specialized in certain medium to low technology and labour-intensive sectors. It accounts for a significant part of regional employment and thus it is a factor of social cohesion and the key component of economic activity due to the intense and interactive relationship with other productive activities in all three sectors of the economy. However recent negative trends in investment have been noted, accompanied by relatively lower labour productivity and growth. The rates of setting up new and modern manufacturing enterprises remain low and far from



internationally competitive manufacturing standards. The difficulties in attracting Foreign Direct Investments are indicative of the fact.

The Region of Central Macedonia is considered to be a “European paradox”, due to the fact that while there is a high level of research activity and knowledge production by a number of entities and initiatives, the performance of RCM in the field of innovation remains low (Georgiou et. al. 2012). In RCM a relatively small proportion (12%) of firms operate in industries characterized by the OECD as medium - intensive technology. RCM and its capital Thessaloniki appear as “consumer” rather than “producer” of innovation. The Region is characterized as being of “moderate - low level” of innovation, despite the fact that within its geographical boundaries there is quite a good level of public funding for research (Regional Innovation Scoreboard-RIS, 2009). RCM shows a limited performance in the field of innovation, despite the existence of a high concentration of components of a successful local / regional innovation system, such as research centers, universities, business incubators, active business associations and chambers, dynamic and extroverted companies. This reality reinforces and substantiates the meaning of “paradox” mentioned above. However, while the overall innovation performance of RCM is very low at the EU level, the Region ranks among the top three regions in Greece in terms of innovative performance. Athens and Thessaloniki maintain their top positions because of the ongoing presence of industry and technology-intensive services within their geographical boundaries (Georgiou et. al. 2012).

## The Metropolitan Innovation Ecosystem

### Universities

- Aristotle University of Thessaloniki
- University of Macedonia
- International Hellenic University
- Alexander Technological Educational Institute of Thessaloniki

### Research Institutes

- Centre for Research and Technology Hellas
- Chemical Process & Energy Resources Institute
- Information Technologies Institute
- Hellenic Institute of Transport
- Institute of Applied Biosciences
- Institute for Research and Technology Thessaly

### National Agricultural Research Foundation

- Plant Breeding and Genetic Resources Institute
- Forest Research Institute
- Industrial and Veterinary Plants Institute
- Institute of Olive Tree, Subtropical Plants and Viticulture
- Institute of Animal Production Science
- Institute of Mediterranean Forest Ecosystems
- Land and Water Resources Institute
- Institute of Agricultural Products Technology
- Fisheries Research Institute

Veterinary Research Institute

Agriculture Economics and Policy Research Institute

#### Incubators

i4G-Incubator 4 Growth

Thermi-Group

Technopolis Thessaloniki ICT Business Park

Thessaloniki Technology Park

#### Pre- incubators

Ok!thess

#### Co-working spaces

Coho

Lamdaspace

#### Prototyping

Make

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# Eco-innovation environment in Bulgaria

## The general picture

Despite the efforts made in recent years by the Bulgarian government to improve the legislative framework and to promote innovation and eco-innovation, Bulgaria still lags behind in these areas. The administrative procedures for launching patents are still slow and clumsy. The legislation in the field could be further improved to encourage more investment in the sector. Economic, financial, administrative and socio-cultural barriers slow the advancement of eco-innovation in the country. Important barriers include limited investment and funding opportunities, high energy prices and inefficient energy infrastructure.

Nonetheless, several significant drivers were also identified; the most significant were a rise in awareness from business, citizens and government on the benefits of green products and technologies, high skilled human resource and knowledge capital and Bulgaria's leading regional position in the information and communications technology (ICT) sector. Despite the growing demand for environmentally friendly products and services, stakeholders remain reluctant to invest in these areas. To meet the objectives of promoting energy efficiency, renewable energy sources, waste management and green transport, local stakeholders are taking advantage of funding options set up by the National, European funded Programmes and initiatives.

## Support Structures

### - Accessibility

The access to support mechanisms for eco-innovations in Bulgaria is not easy, as there is information available on the websites of the different responsible agencies and Programme management authorities. However, a specific research needs to be done for the particular measures and mechanisms focused at supporting eco-innovations. Usually, the applicants use the services of consultancy organizations or NGOs working in the sphere, in order to obtain the information relevant to their needs. It can be concluded that there is a need of a unified portal/platform, which provides specific information for the eco-innovation financing opportunities.

### - Frequency

The calls for proposals under the National and Transnational programmes are usually launched on regular basis (for example once or twice a year within the programming period). However, because of administrative delays, as well as delays in the evaluation process, very often the calls for proposals are postponed, or several programmes launch their calls simultaneously. This creates conditions for difficulties in the process of preparation due to inability for proper planning. Also, in the context of innovation, quick actions are needed, because the innovative effect easily gets old in time.

### - Stability

The support structures in the current programme period are logical continuation of the initiatives from the previous programme period. Also, the trend of the financing mechanisms follows the tendencies for development of the country. There are specific measures in the programmes for motivation of projects, taking place in the most underdeveloped region in Bulgaria – the North-Western Region, thus contributing to the overall stability in the county area.

### - Impact

The available supporting mechanisms follow the strategic goal of Innovation Strategy for Smart Specialisation 2014 – 2020 of Bulgaria, which is by 2020 Bulgaria to move from the group of “modest innovators” into the group of “moderate innovators”. Currently, there plenty of projects in the field of eco innovations, technological modernization, energy efficiency, effective resource managements, etc. which got financing and are in a process of implementation. However still a lot needs to done, especially in the sphere of good interaction between research, education and innovation (business).

### - Replicability

Adaptation and replicability of a project depends on the smooth and timely work of the support structure. Still, the procedures under some programme take a lot of time for approval, and when it comes to implementation, the innovations may not be actual any more. Another problem may arise from the potential financial penalties that may be caused to the beneficiaries in the process of implementation. However, the public awareness measures within the projects should be broad enough, so that they reach the wide public and inform about the existing innovation.

## Government support

In support of innovations, including eco-innovations, the Bulgarian Government has issued the following strategic documents:

### ⇒ Innovation Strategy for Smart Specialisation 2014 – 2020

Its strategic goal of the Strategy is by 2020 Bulgaria to move from the group of “modest innovators” into the group of “moderate innovators” by implementing the following objectives:

**Objective 1:** Focus the investment for the development of innovation potential in the smart thematic areas (for creation and development of new technologies leading to competitive advantages and increase in the added value of domestic products and services).

**Objective 2:** Support for accelerated implementation of technologies, methods, etc. which improve resource efficiency and application of ICT in the enterprises in all industries.

### ⇒ National Strategy for Scientific Research 2020,

It is consistent with the objectives of the Innovation Strategy for Smart Specialisation and its implementation measures for increasing the competitiveness of Bulgarian enterprises by strengthening the scientific capacity, providing joint financial instruments for support of science and innovation, and building centers of competence in priority areas in economy.

⇒ **National Roadmap for Research Infrastructure 2017-2023**

The National Roadmap for development of research infrastructure is the key instruments for implementing the national research strategy.

⇒ **National Strategy for the Promotion of Small and Medium Enterprises 2014-2020, also known as Small Business Act (SBA)**

The SBA supports the small and medium-sized enterprises (SMEs) as the engine of any economy in the European Union and worldwide.

⇒ **National Waste Management Plan 2014-2020**

The Plan includes objectives to be reached for the transition from waste management to the efficient use of waste as a resource and to sustainable development by preventing waste as far as possible.

⇒ **National Energy Effectiveness Plan 2014-2020**

The document is setting the targets contributing to achieving the energy effectiveness goals of Bulgaria by 2020.

⇒ **Public Procurement Law – in the section Green Public Procurements**

The Green Public Procurements are already a part of the Procurement Law in Bulgaria. It is a measure to stimulate businesses to develop environmentally friendly technologies which produce products and services with a beneficial effect on the environment and on the economy as a whole.

The government support is also provided by the master and bachelor's degrees programmes in the field of eco-innovations which can be obtained in the state universities in Bulgaria. Some of them are listed below:

**1. University of Economics Varna**

- 1.1. Eco-economics, Bachelor's Degree
- 1.2. Environmental Business and Regional Security, Bachelor's Degree

**2. Sofia University "St. Kliment Ohridski"**

- 2.1. Bio-management and Sustainable Development, Bachelor's Degree Programme
- 2.2. Ecological Biotechnology, Master's Degree Programme

**3. University of National and World Economy**

- 3.1. Eco-economics, Bachelor's Degree
- 3.2. Eco-economics, Master's Degree
- 3.3. Eco-economics and business, Master's Degree

**4. Technical university of Gabrovo**

Environment Protection Equipment and Technology, Bachelor's and Master's degree

**5. University of chemical technology and metallurgy**

Engineering ecology and environmental protection, Bachelor's Degree

**6. Technical university of Sofia**

"Engineering Ecology", Master's degree

**7. University of architecture, Civil engineering and Geodesy**

Environmental Engineering, Master's degree

## 8. Technical University of Varna

"Engineering Ecology", Bachelor and Master's degree

### Domestic support funds

#### ⇒ **National Innovation Fund (NIF)**

NIF is one of the tools for implementing the Innovation Strategy. It is administered by the Bulgarian Small and Medium Enterprises Promotion Agency (BSMEPA). The main goal of NIF is to support scientific projects, R&D projects and projects for technical feasibility with the aim of acquiring new or improved products, processes or services designed to raise the economic efficiency, improve the innovative potential and technological level of enterprises, increase private investment and enhance the dynamics of innovative processes.

#### ⇒ **The National Science Fund (NSF)**

The National Science Fund (NSF) aims to support science and research projects and activities, consistent with the ratified EU Framework Programmes and with the **National Strategy for Scientific Research 2020** in Bulgaria. NSF promotes research by means of:

- supporting scientific organizations and higher education institutions on the basis of project and program funding;
- funding projects, developments and demonstration projects in the scientific fields designated by the Fund;
- funding projects, developments and demonstration projects of young scientists.

#### ⇒ **The National Trust Eco Fund (NTEF)**

The Fund manages assets from the state budget, including under the Debt-for-Environment and the Debt-for-Nature swaps. Funds are also generated via the Assigned Amount Units (AAUs) international trade deal(s), the sale of greenhouse gas emissions quotas for aviation activities, as well as funds, provided by other environmental protection agreements between the Republic of Bulgaria and international or local financing sources.

### Business incubators

Under Operational Programme Competitiveness 2017 – 2013 were supported the following incubators:

- ⇒ High technology incubator "Green High Tech", Pernik
- ⇒ Business incubator, Razgrad
- ⇒ Centres for support of start-ups in Kyustendil and Dupnitsa
- ⇒ Regional business incubator, Vratsa
- ⇒ Business incubator, Plovdiv
- ⇒ Business incubator, Targovishte
- ⇒ Business incubator „Sirma“, Sofia
- ⇒ Business incubator, Burgas
- ⇒ Business incubator - Varna

- ⇒ Business incubator, Dimitrovgrad
- ⇒ „Eurobuilding incubator”, Gorna Oryahovitsa
- ⇒ Business incubator, Montana
- ⇒ Business incubator, Vidin
- ⇒ Business incubator, Lovech
- ⇒ Business incubator, Smolyan
- ⇒ Business incubator, Kazanlak
- ⇒ Business incubator, Kardzhali
- ⇒ Sofia Tech Park - Technology and Innovation Network (T+IN) or "Sofia Tech Park" is the first science and technology park in Bulgaria designed and created to act as a platform for the exchange of knowledge and ideas between academia, business, government and society.

## APPENDIXES

Further information is provided in the section of Appendixes as follows:

1. Concept of Incubating - APPENDIX 1.
2. Start-ups - APPENDIX 2.
3. The role of Infrastructure - APPENDIX 3.
4. Risks of the pre-incubation endeavor - APPENDIX 4.
5. Pre-incubation Strategy and Services - APPENDIX 5.



### STRENGTHS

- Thessaloniki has state-of-art infrastructure
- A sizable pool of experienced faculty and energetic students
- Considerable Research, Innovation and Entrepreneurial eco system
- Industry driven Institute.
- Interaction with National and International Institutions.
- The C-B area and the Metropolitan city of Thessaloniki in particular, have a recognised strategic geographical position, which it to develop as an important European and Balkan business centre, logistics node, etc.
- The area consecrates a broad range of economical activities covering all sectors which provide the region with plenty of growth opportunities. RCM has high regional diversification in terms of natural resources, culture and structure of economy.
- Strong tradition of the region in food & beverage, textiles, chemicals and metals sectors.
- Exports contribute a high percentage of the GDP in the c-b area and therefore form a potential source for growth particularly for the food, chemicals and metals sector.
- Thessaloniki is the clear regional champion concentrating 65% of regional GDP and many other qualitative elements for growth.
- Thessaloniki continuously attracts population from other local areas and regions, has one of the biggest universities in the country and a very high ratio of higher education graduates per capita.
- The area has a high concentration of R&D organisations and innovative entrepreneurship activities (critical mass exists).
- Innovation support establishments (Alexander Innovation Zone, Technopolis, Thermi Link) and four business incubators have been established in the area (mainly in the city of Thessaloniki), which makes the capital of RCM a unique case of potentially “innovation city” in Greece and Balkans.
- Attractive location for international business
- High potential for the development of environment friendly economic activities such as tourism, organic agriculture
- Diversified economic structure of the local economy
- Strong Tourist industry
- Good quality of infrastructure (energy, telecommunication, transport)
- Strong economic base in trade and services
- High quality human capital
- Strong scientific base
- Fast growing small business
- Effective regional administration
- Experience of local authorities in implementing joint cross border projects

- Great Cultural industry (museums, theaters)
- Powerful economic base in labor-intensive industry
- Promising business climate
- Solid economic base in capital-intensive industry
- Robust presence of foreign firms
- Strong economic base in high-tech industry
- A strategic geographical location with specific importance in South-East Europe
- Considerable primary sector
- Strong food and drinks sector, as well as clothing, textile and building material industry
- Strong tourist destinations worldwide
- Significant infrastructures, transportation, and energy networks
- Outward-looking actions from regional enterprises
- Educational services to students from all-over South-East Europe
- A dynamic network of enterprises based in Thessaloniki (e.g. science parks, incubators)
- A large scope of active scientific fields
- Outstanding scientific dynamic in the region (e.g. AUTH, CERTH etc.)
- Substantial performance in research and technological development
- Thessaloniki acts as an intersection of science influencing neighboring regions
- Numerous new enterprises in the field of Information & Communication Technologies have been established.
- Thessaloniki has all the characteristics of a metropolitan area

## WEAKNESSES

- Weak business synergies and collaborations.
- Weak awareness within community on entrepreneurial and Innovation culture.
- Weak willingness on the need for taking risk.
- The relatively high unemployment rate compared to EU average
- Strong trends of brain-drain
- The R&D although developed in terms of figures, is highly fragmented
- Public sector take over in the regional R&D activities, lacking the required flexibility for exploitation of research outputs.
- R&D activities are mainly administered and planned by central government.
- Lack of a regional culture to plan innovation policy in local terms taking into account local needs and institutions.
- Lack of a common agreed image for innovation profile in the region.
- A high number of small SMEs, lack R&D potential
- R&D bodies are mainly concentrated in the Thessaloniki area.
- SMEs of the c-b region put emphasis on innovation related to expanding their products or services rather than to increasing quality.
- Low competitiveness of local enterprises due to insufficient knowledge of modern technologies and limited access to innovation
- Scarce managerial and entrepreneurial skills and lack of skilled workers
- Weak network and culture of collaboration among business support organizations in the area
- Different legal frameworks hinder cross border business cooperation.
- Insufficient regional administration on innovation and entrepreneurship
- Weak internationalization and low added value of exported businesses
- Poor c-b interactions between cross border regions
- Downfall of industry due to economic crisis.
- Limited capacity in project identification, preparation and project implementation.
- Lack of experience in project proposal development and project implementation
- Significant inequalities among Thessaloniki and the other regional units of the region
- According to the RCI report, the regional economy is not competitive at the European level
- The performance in tourism is still low.
- Insufficient brand name in the agricultural sector
- Low performance in technology transfer (according to European standards)
- Lack of clear scientific policies for scientific research and technology transfer
- Limited scientific cooperation with institutions of worldwide esteem
- Relatively, few investments in the field of Information & Communication Technologies
- Weak presence in the field of telecommunications
- Lack of strong broadband infrastructures

## OPPORTUNITIES

- Anticipated Upswing in the economy post Covid
- Superb Industrial Climate that create positive expectations.
- Critical need for green and sustainable technologies and production model
- Strategic geographical position of the region of Central Macedonia based on upgrading of transport infrastructures.
- Many opportunities for other B2B services due to area's proximity with Balkan markets.
- New knowledge intensive sectors (e.g. Biotechnology, medicines, ICT etc.) seems promising since require low investment.
- New types of innovation funding mechanisms create a new market for innovation.
- Region's economy seem to be mature and integrated exposing to many foreign markets.
- On-going cross border cooperation actions
- Set up improved ties with the other metropolitan areas in the Balkan
- Investments to add value to some agricultural products (i.e. wine)
- Designing and developing integrated tourism products including mountain, coastal and lake areas
- Regional branding of some local products
- Forming new instruments that will contribute to development of the business environment
- Attract FDI in industrial sectors seeking low-cost areas.
- Export high quality products to international markets
- Powerful export potential of agricultural products
- Optimistic acts towards the development of tourism in Greece
- Continuous search for new, specialized forms of tourism and corresponding products
- The Common Agricultural Policy is striving to promote the agricultural growth.
- Positive tendencies towards the increase of exports in South-East Europe
- Possibilities to restructure the textile and clothing industries by incorporating the latest technological innovations.
- Building materials act in response to the environmental and energy requirements
- Energy saving emerged as sensitive topic by citizens and industry
- Development of the "green" market and strengthening of an environmental-friendly ethics
- Rise in young people's mobility in southeast Europe for studies.
- Potentials for constant funding of the research team, through research programs (e.g Horizon 2020)
- Smart Specialization Strategy (S3), based on the needs of the regional economy
- Information & Communication Technologies proved to be resilient

## THREATS

- Worldwide competition from low quality products.
- Identified short-term ambiguities.
- Complex legislation and tax national system regulating innovation and other business issues (instability and frequent changes).
- Innovation is considered more a project-based performance and effort than a uninterrupted culture.
- Neighbouring Balkan regions have far lower labour costs threatening labour intensive sectors.
- The country's brain drain phenomenon affects also the region.
- Long terms delays for important development projects and infrastructures, like Thessaloniki's metro, airport and port modernisation, can strongly and negatively affect main axes of local and regional growth.
- Lack of national funds for capital investments in infrastructure development
- Failure of economic policies and a new recession
- Lack of favourable legislation for establishing CB cooperation
- Inability to attract FDI.
- Low recognition of natural resources' potential for economic development
- Lack of investments causing persistence of obsolete technologies and increasing barriers to access innovation.
- A new wave of emigrants (skilled, young and educated) leave the area
- Persistence of an incomplete legal framework to support market economy.
- Reluctance to cooperate with Cross Border areas.
- Shortage of technological know-how and labour skills necessary to respond to the market demand for high-quality services and products.
- Cooperation barriers due to linguistic and cultural differences
- Inability to 'learn' and adjust to the new conditions as fast as necessary.
- Instability in the financial sector, inflicts weak demand and a weak private consumption.
- Additional decline of subsidies at the primary sector due to the new Common Agricultural Policy
- Legislation, bureaucracy, taxation, access to cheap funding create a negative environment for promoting entrepreneurship.
- The macro-economic environment puts at risk the state funding of research.
- Abandonment of the workforce, due to the high rates of unemployment among young people
- Competition with other European regions having the same or similar characteristics.
- Low public funding of R&I actions could decrease private investments.
- Competition from neighboring countries

# The Proposed Action Plan

The proposed Action Plan is articulated upon the following two (2) pillars:

- (1) Business Environment
- (2) Supporting Entrepreneurship and access to finance

The two Pillars with the respective Thematic Priorities, Specific Objectives and Indicative Actions are presented in the analysis that follows.

## PILLAR 1 BUSINESS ENVIRONMENT

### Thematic Priority 1.1 Starting Up & Establishment of a Business

<b>Specific Objective 1.1.1</b>	More flexible procedural requirements and removal of the restrictions on new start-ups
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#### Justification /Expected Results

Creation of new more flexible form of company bearing minimum capital, operational freedom and minimum procedural requirements for capital increase and entry of new shareholders, will enhance entrepreneurship in the cross-border area and improve the business environment.

#### Indicative Actions

<b>Action 1.1.1.1</b>	Simplification of licensing procedures via the one stop shops in both sides
<b>Action 1.1.1.2</b>	Interconnection of registering procedures with the Chamber's information systems
<b>Action 1.1.1.3</b>	Training of the staff of Chambers, use of electronic signature and further development of web services
<b>Action 1.1.1.4</b>	Development of business demography statistics through the National Business Observatories
<b>Action 1.1.1.5</b>	Simplification of publicity requirements
<b>Action 1.1.1.6</b>	Pre-investment Pilot Projects for cross border agricultural supply management management & SMEs development

<b>Specific Objective</b> <b>1.1.2</b>	Amendment of the Strategic Framework for Spatial Planning, geo-info policy and simplifications
<b>Justification /Expected Results</b>	
Amendments of the Strategic Framework for Spatial Planning, establishment of national geo-information policy and placing emphasis on simplification and acceleration of the required procedures, will enhance business environment. Within the same line the particular actions aim to insert flexibility, acceleration and simplification in planning and land-use legislation to facilitate business development and investment.	
<b>Indicative Actions</b>	
<b>Action 1.1.2.1</b>	Amendment of the Strategic Framework for Tourism Spatial Planning defining and classifying land use
<b>Action 1.1.2.2</b>	Establishment of a cross border geo-information policy and geo-spatial data based on an interoperability framework
<b>Action 1.1.2.3</b>	Clear definition of the substantive content of each environmental permit and of the matters falling under the control of the licensing authority
<b>Action 1.1.2.4</b>	Reducing the stock and flow of planning and development-control regulations and the multiplicity of planning levels and planning tools
<b>Action 1.1.2.5</b>	Simplifying and speeding-up legal procedures for making and revising spatial and land-use plans
<b>Action 1.1.2.6</b>	Fewer rules and regulations by state – creating scope for private and/or local initiatives. Abolishing unnecessary regulations and tightening the remaining rules.
<b>Action 1.1.2.7</b>	Integration of the permit for managing hazardous and non-hazardous waste as well sewage disposal permit and creation of a one-stop shop for the environmental permits
<b>Action 1.1.2.8</b>	Simplification of the procedures for issuing construction permits and updating of the procedure for supervising construction, which will include all housing and business activities.
<b>Action 1.1.2.9</b>	Simplification and acceleration of the demarcation procedure for watercourses and Mining Code
<b>Action 1.1.2.10</b>	Preparation of a manual for entrepreneurs on the licensing framework
<b>Action 1.1.2.11</b>	Planning of electronic permit management services through a centralised electronic system for submitting and managing Environmental Impact Assessments

<b>Specific Objective 1.1.3</b>	Transaction with the Public Sector and development projects
<b>Justification /Expected Results</b>	
It is identified complicated procedure for participation of companies in public procurement and disproportionately long period between the notice for the competition and the execution and payment of public contracts. Regional development programmes are frequently adopted without consultations with local entrepreneurs. As a consequence, they fail to properly respond to the actual needs of entrepreneurs in the region. On the one hand officials responsible for these programmes do not encourage entrepreneurs to become involved in their development. On the other, business people often do not want to do it, as they do not believe that their actions may bring desired results. Regional development programmes should be designed and implemented in cooperation with entrepreneurs.	
<b>Indicative Actions</b>	
<b>Action 1.1.3.1</b>	Exploration of the means and the method necessary to create and implement a Public Suppliers' Registry, with the view to develop an Identity Profile of Tenderers participating in award procedures for public goods.
<b>Action 1.1.3.2</b>	Assignment of the project for the standardisation of technical specifications for specific categories of goods and creation of a mechanism which, following a specific methodology, will constitute a database containing standard specifications, which can be updated and adapted to international changes.
<b>Action 1.1.3.3</b>	Introduction of obligatory public consultations and dialogue during creation and implementation of regional development programmes.
<b>Action 1.1.3.4</b>	Development of an incentive system that would encourage entrepreneurs to active involvement in creation and implementation of the programmes.
<b>Specific Objective 1.1.4</b>	Simplification and information on labour & insurance matters
<b>Justification /Expected Results</b>	
The particular actions aim to tackle (a) the requirement to provide public departments with the same information more than once Time (b) the delay in processing applications for refunds from social security funds, (c) the complicated staff recruitment procedure and (d) the consuming/complicated procedures for highly qualified employees invited from third countries.	
<b>Indicative Actions</b>	
<b>Action 1.1.4.1</b>	Storing information concerning work terms, working time, social security contributions etc. electronically via the Internet.
<b>Action 1.1.4.2</b>	Introduction of a fast-track procedure for the recruitment of highly qualified employees from third countries
<b>Action 1.1.4.3</b>	A fast track procedure for entry and issuing of residence permit for third country nationals who enter the country for the purpose of participation in high importance investment projects.
<b>Action 1.1.4.4</b>	Offsetting company payment obligations to social security funds by due payment returns of the same social security funds to the company.



<b>Specific Objective 1.2.1</b>	Development of cooperation between R&D institutions and SMEs
<b>Justification /Expected Results</b>	
<p>Scientific and education activities of universities and R&amp;D institutions are often dissociated from the business reality. Therefore, numerous innovative ideas that are developed by research workers and students as a part of their dissertations face limited possibilities for commercialization. The problem of limited propagation of research results occurs in most EU countries and in the particular cross border area as well. Despite the fact that research establishments implement a large number of research projects in innovations, efficient cooperation models are lacking. Moreover, due to the limited and uncoordinated flow of information among universities and industry, many of these solutions do not stand chances for commercialization. There is a need for definition of the most effective cooperation models for research institutions and business constitutes one of the key success factors for development of innovation culture in economy.</p>	
<b>Indicative Actions</b>	
<b>Action 1.2.1.1</b>	System support for implementation of research conducted as a part of dissertations (in particular at the PhD level) into activities of companies and clusters.
<b>Action 1.2.1.2</b>	Development of a cooperation platform for dissertation supervisors, cluster managers and cluster members in order to establish rules for identification of clusters' research needs and cooperation during the research and its commercialization.
<b>Action 1.2.1.3</b>	Introducing a possibility of education ordered by an employer or in cooperation with an employer.
<b>Action 1.2.1.4</b>	Development of programmes that will enable universities, R&D and SMEs to apply together for funding for joint R&D projects.
<b>Action 1.2.1.5</b>	Development of regional, national and international education programmes during which entrepreneurs and representatives of academic and research establishments will work together on innovative ideas for respective companies and on defining a cooperation framework between business and research actors.
<b>Action 1.2.1.6</b>	Endorse successful mechanisms of university-driven business creation (spin-offs etc.) and emerging university-business ecosystems around key societal challenges.
<b>Action 1.2.1.7</b>	Promote the recognition and validation of entrepreneurial learning in an informal or non-formal learning environment.

<b>Specific Objective 1.2.2</b>	Increasing the scope of research and development cooperation between enterprises and higher education establishments/R&D institutions.
<b>Justification /Expected Results</b>	
Investments in cooperation with higher education and R&D institutions should bring clear benefits for companies. In the particular region current cooperation between these stakeholders results only from the profit and loss balance for enterprises. Regional and state policies lack clear incentives for such cooperation. Bureaucratic procedures applied by universities and R&D institutions as well as bureaucracy at the national stage frequently discourage entrepreneurs from cooperation with academic and research institutions. Science and Technological Parks should gather innovation centres, business and technology incubators, technology transfer centres, start-ups and spin-offs. Their development should be among the priorities of regional authorities. This type of cooperation between research and business partners constitutes the most efficient form of technology transfer to SMEs.	
<b>Indicative Actions</b>	
<b>Action 1.2.2.1</b>	Development of a system of incentives for entrepreneurs encouraging to conducting R&D activities or to widening their scope in cooperation with higher education establishments and R&D institutions, e.g. tax deductions
<b>Action 1.2.2.2</b>	Simplification of bureaucratic procedures in state academic and research institutions.
<b>Action 1.2.2.3</b>	Promotion of entrepreneurship and commercialization of research results should be included in development strategies of higher education establishments that obtain state funding.
<b>Action 1.2.2.4</b>	Development of an incentive system for companies that create jobs in science technological parks, including tax deductions, tax exemptions and preferential tax rates.
<b>Action 1.2.2.5</b>	Establishment of earmarked funds aimed at long term investments in science technological parks on the basis of EU programmes as well as national and regional funds.

<b>Specific Objective 1.2.3</b>	Establishment of a support system for talented students and research workers
<b>Justification /Expected Results</b>	
Large corporations and concerns have developed effective solutions to identify and recruit the most talented students already at the early stages of their education. This leads to brain drain, leaving local SMEs without valuable and innovative employees. As a result, their market position becomes further weakened when competing with large companies.	
<b>Indicative Actions</b>	
<b>Action 1.2.3.1</b>	Establishment of scholarship funds for talented students who want to develop professionally in local companies.
<b>Action 1.2.3.2</b>	Presenting science technological parks as attractive places that enable professional development and as a good place to start one's professional career.
<b>Action 1.2.3.3</b>	Incentives for the establishment of spin-offs or joint ventures/clusters of companies with research bodies
<b>Specific Objective 1.2.4</b>	Connecting entrepreneurship with education
<b>Justification /Expected Results</b>	
Taking into consideration that authors of innovative solutions frequently lack sufficient business skills, there is a need to connect entrepreneurship with education system and training. Among the expected results of such strategy is the streamlining commercialization of innovative solutions developed in higher education establishments and R&D centres.	
<b>Indicative Actions</b>	
<b>Action 1.2.4.1</b>	Introduction of classes in business management, lead or co-lead by people with practical experience in these areas, to the curricula of higher education units.
<b>Action 1.2.4.2</b>	Support for entrepreneurship development at higher education establishments.
<b>Action 1.2.4.3</b>	Organization and financing of a business management training and support system targeted at students and graduates.
<b>Action 1.2.4.4</b>	Joint post graduate programmes and academic exchange between academic institutions in both sides

**Specific Objective  
1.3.1**

Mechanisms for attracting foreign companies

**Justification /Expected Results**

One of the most important challenges relate to development of a system of incentives and reliefs aimed not only at attracting investors but also at fostering close cooperation between investors, local higher education establishments and R&D centers. In the particular cross border area there is insufficient cooperation between local authorities and entrepreneurs that operate in the region or originate from it. Such cooperation frequently results in solutions contributing to the region's economic development. Expected results involve among other: - Attracting domestic and foreign investors interested in doing business in close cooperation with local higher education institutions and R&D centers. - Development of the region's image as a business-friendly place. - Ensuring jobs in the region for talented graduates of local higher education units. - Development of business-related services. - Fostering business community focused on enhancing regional development.- Smaller companies form unions/associations in order to increase their effectiveness in gaining new customers and to become more competitive in comparison with other regions.

**Indicative Actions**

- |                       |                                                                                                                                                                                                                                                                        |
|-----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Action 1.3.1.1</b> | Regional authorities should intensify their activities by preparing models and good examples in transfer of technologies to the business sector.                                                                                                                       |
| <b>Action 1.3.1.2</b> | Involvement of regional business leaders, entrepreneurs' associations, chambers of commerce and industry as well as politicians from the region in promoting the region as an investor-friendly place                                                                  |
| <b>Action 1.3.1.3</b> | Networking between regional authorities and local entrepreneurs.                                                                                                                                                                                                       |
| <b>Action 1.3.1.4</b> | Promotion of the association concept among smaller entrepreneurs offering similar services by presenting good practices, providing ready-made business models, developing a system of reliefs, preferences and incentives for subjects that manage these associations. |
| <b>Action 1.3.1.5</b> | Introduction of a long term system for monitoring economic trends in the region.                                                                                                                                                                                       |

**Specific Objective  
1.3.2****Enhancement of Multi-Stakeholder Collaboration****Justification /Expected Results**

The promotion of cross border entrepreneurship requires multi-stakeholder coordination, clear goals and refined business action plan that will ensure the active participation of key actors from both sides of the border. Even though some initiatives have been taken place in the past, cross-border business and development cooperation is still in early stages with limited coordination between stakeholders and limited benefits for both sides of borders. The two sides of the borders have not been able to develop strong and long-term linkages and interactions with each other based on mutual proximity, existing specializations and comparative advantages and common objectives that would generate benefits to the regional economies counterbalancing the unfavorable effects of structure and geography. The expected outputs involve among others: - Advocate for the inclusion of cross-border issues in national, regional and local agencies strategic and business plans. - Enhance awareness of cross-border issues within stakeholders through considering cross- regular and targeted communication. - Develop and implement systems to better identify, analyse and resolve cross-border issues. - Provide advice on complex and / or sensitive issues.

**Indicative Actions****Action 1.3.2.1**

Assist in the development and implementation of cross border MoUs between neighbouring Stakeholders

**Action 1.3.2.2**

Enhance Regional Leadership, senior management and local government agencies networks and groups to consider and resolve appropriate local and regional cross-border issues.

**Action 1.3.2.3**

Develop and coordinate (with other agencies) mechanisms for information flow between jurisdictions to business and communities.

**Action 1.3.2.4**

Provide recommendations to regional governments about resolution of prioritised cross-border optimise service issues.

**Action 1.3.2.5**

Advocate for the attraction, development, and retention of a skilled workforce in cross-border communities.

<b>Specific Objective 1.3.3</b>	More resilient cross-border communities
<b>Justification /Expected Results</b>	
There is a need to engage and consult with cross-border residents, businesses and communities, and local and regional authorities as well as with government agencies, to identify priority cross-border anomalies that most disadvantage, divide or restrict cross-border communities and business. Inclusive border communities should advocate for ‘whole of Region’ involvement in the analysis of cross-border issues.	
<b>Indicative Actions</b>	
<b>Action 1.3.3.1</b>	Provide enhanced opportunities for cross-border communities to participate in decision making by ensuring community involvement in the development of relevant proposals and reforms.
<b>Action 1.3.3.2</b>	Develop and implement programmes and tools to facilitate effective communication with stakeholders and the wider community.
<b>Action 1.3.3.3</b>	Leverage Local and Regional networks for the identification, analysis and consideration of cross-border issues, including working with Business Chambers to establish a Border Business Advisory Committee.
<b>Action 1.3.3.4</b>	Implement policies enabling women to achieve an adequate work-life balance, by establishing appropriate and affordable care for children and elderly dependents, notably by taking full advantage of support options under the EAFRD, ERDF and ESF.
<b>Action 1.3.3.5</b>	Propose policy initiatives to attract migrant entrepreneurs and to facilitate entrepreneurship among migrants
<b>Action 1.3.3.6</b>	Facilitate access to information and networking for migrant entrepreneurs and prospective migrant entrepreneurs

<b>Specific Objective</b> <b>1.3.4</b>	<b>SME Network and Cooperation Management</b>
<b>Justification /Expected Results</b>	
<p>Focus on investing in development of these branches of production and services that already display a high level of market competitiveness. It is identified an unwillingness to search for new market niches and to develop products and services that will create new consumer needs. It is recorded also an insufficient utilisation of the region's potential and its characteristic, unique values in development of product and service offer. All in all there is a low innovativeness in organisation of production and sales as well as management and promotion of products and services in the sectors perceived as traditions, e.g. agriculture. Based on the above it is expected an increasing regional competitiveness by exploiting the region's potential lying in its unique resources.</p>	
<b>Indicative Actions</b>	
<b>Action 1.3.4.1</b>	Promoting the concept of searching for competitive advantages in regional resources and using them to create unique products that cannot be copied in other regions or countries due to exploiting unique regional values, e.g. natural values, tradition, history, culture, philosophy or economic and scientific achievements.
<b>Action 1.3.4.2</b>	Utilisation of modern business techniques for production and sales organisation as well as management and promotion of products and services in the areas considered as traditional, e.g. agriculture.

## Thematic Priority 2.1

Promotion of the innovation culture and development

**Specific Objective 2.1.1** Promotion of values referring to the idea of innovativeness**Justification /Expected Results**

Many entrepreneurs in the cross-border area still remain unfamiliar with the idea of innovativeness. There is a lack of socially widespread models of innovation culture that would translate into higher innovativeness in the local economy. Another addressed is the fact that entrepreneurs sometimes consider investments in innovations as unaffordable and do not perceive them as profitable. One of the reasons behind the limited interest among entrepreneurs from many regions in innovativeness is that innovations are frequently associated with highly advanced technologies. As a consequence, investments in innovations are seen as inappropriate for their companies or sectors.

**Indicative Actions**

- |                       |                                                                                                                                                                     |
|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Action 2.1.1.1</b> | Enhancing entrepreneurs' awareness of the assumptions and directions of the pro-innovation policy.                                                                  |
| <b>Action 2.1.1.2</b> | Organisation of conferences, seminars and study visits for entrepreneurs based on innovation and smart specialization                                               |
| <b>Action 2.1.1.3</b> | Organisation of competitions for best innovative solutions, involving mass media in the topic of innovativeness                                                     |
| <b>Action 2.1.1.4</b> | Widening the scope of innovativeness so that it takes into account the operation realities of companies from various sectors.                                       |
| <b>Action 2.1.1.5</b> | Promote information among entrepreneurs and business institutions.                                                                                                  |
| <b>Action 2.1.1.6</b> | Effectively publicise business transfer platforms and marketplaces and launch campaigns to raise awareness among potential sellers and buyers of viable businesses. |



**Specific Objective 2.1.2**      Development of a cross border regional innovation support system**Justification /Expected Results**

Lack of access to capital markets and difficult access to potential investors remain among the main barriers limiting entrepreneurs that develop innovative products. The chain of institutions involved in regional innovation support systems frequently does not include a platform for exchanging information between entrepreneurs/originators and potential investors in the particular area. This platform could prove helpful in defining the needs and objectives of both sides. It should include an independent team of experts that would conduct objective supervision of the dialogue between entrepreneurs and investors in order to protect the interests of both sides and ensure high quality of the initiated investment process. Entrepreneurs frequently do not know which institution they should turn to in order to obtain support in assessing the innovation potential of their solutions. They may also be distrustful and unwilling to present their ideas to a wider number of commercial investors. There is lack of coordination between measures implemented in the cross-border region under various projects aimed at entrepreneurship enhancement and a lack of a cohesive system for aggregation of conclusions from their results. A knowledge transfer platform will aggregate knowledge on the most efficient solutions and promote this information among entrepreneurs and business environment institutions. Within their projects companies focus on short-term objectives. They are reluctant to become involved in long-term projects, where tangible results appear only in a more distant perspective. Results of completed projects are not utilised in subsequent projects. Values developed within projects often vanish once projects are completed.

**Indicative Actions**

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|-----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Action 2.1.2.1</b> | Establishment of a platform with results of projects implemented in the cross-border region providing information and project databases                                                                                                                                                                                                                                                                                                       |
| <b>Action 2.1.2.2</b> | Set up "one-stop-shops for entrepreneurs" to bring together all business support services including mentoring, facilitation and advice on access to conventional and non-conventional finance, access to 'incubators' and 'business accelerators' and support for early internationalisation of young enterprises. All relevant stakeholders should be involved to ensure a partnership approach, including education and training providers. |
| <b>Action 2.1.2.3</b> | Matching entrepreneurs with innovative solutions and potential investors.                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Action 2.1.2.4</b> | Establishment of expert teams for independent assessment of innovative ideas and consulting of projects at the implementation stage.                                                                                                                                                                                                                                                                                                          |
| <b>Action 2.1.2.5</b> | Facilitate networking to sparkle and support new business ideas, such as: the creation of a Mentors Network for training, advice and hands-on coaching on how to do business in the digital age, and match-making events among stakeholders to explore new partnerships.                                                                                                                                                                      |
| <b>Action 2.1.2.6</b> | Development of an incentive system to encourage enterprises to utilize the results of completed projects in subsequent long-term projects                                                                                                                                                                                                                                                                                                     |
| <b>Action 2.1.2.7</b> | The creation of a network of experts in pre-incubation, innovation and entrepreneurship education for the transfer of knowledge and experience among the partnering institutions utilizing shared facilities, such ICT infrastructure, meeting room access, laboratory access etc                                                                                                                                                             |

**Thematic Priority 2.2**

Increasing SMEs' access to foreign markets & enhancing entrepreneurs' qualifications

**Specific Objective 2.2.1**

Enhancing entrepreneurs' qualifications, knowledge and skills in the area of modern corporate management and development

**Justification /Expected Results**

It is identified an insufficient managerial skill of entrepreneurs, in particular with regard to sales, marketing and strategic corporate development planning, constitute another significant barrier for successful development and operation of SMEs. In small enterprises, those operating on rural areas or in traditional sectors, utilisation of modern communication forms is very limited. Many entrepreneurs are unaware of the benefits to be derived from modern communication solutions. This results from limited skills in the area and insufficient access to good examples. Moreover, fierce competition between companies operating on the same markets and offering identical products and services constitutes one of the main factors discouraging enterprises from forming associations.

**Indicative Actions****Action 2.2.1.1**

Increasing SMEs' access to training in corporate and financial management, development planning as well as sales and marketing strategies.

**Action 2.2.1.2**

Involvement of entrepreneur associations in promotion of modern IT solutions (including social networking media) among businesspeople.

**Action 2.2.1.3**

Promotion of offer diversification by seeking market niches and utilising diversified product innovation strategies.

**Action 2.2.1.4**

Mapping of global value chain opportunities for SMEs and training programs and workshops on SMEs' participation in global value chains, building capacities for agricultural competitiveness in particular

**Action 2.2.1.5**

Enhancement of the ability of local producers to apply new methods and practices through effective access to information and knowledge, entrepreneurial tools, procedures and infrastructure

**Action 2.2.1.6**

Supporting potential entrepreneurs in their start-up phase, and providing education and training to existing entrepreneurs in modern scientific management of their operations.

<b>Specific Objective 2.2.2</b>	Encouraging local entrepreneurs to foster business relations between regional SMEs and foreign partners or clients
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#### **Justification /Expected Results**

It is known that there is a lack of wider relations with foreign companies in the particular area often restricts SMEs' possibilities in accessing modern technologies and know-how. The ability to function in an international context considerably increases the chances that a particular company will implement innovations. Closure on local markets constitutes one of the main reasons behind limited possibilities for developing long-term solutions. Currently entrepreneurs have limited access to up-to-date information about changes in market trends and market expectations. They rarely modify their products and services in response to changes in market trends. This makes them more vulnerable to the impacts of the economic crisis.

#### **Indicative Actions**

<b>Action 2.2.2.1</b>	Participation of local entrepreneurs in international fairs, conferences and seminars and active promotion and support for networking activities with foreign partners
<b>Action 2.2.2.2</b>	Utilisation of research on changes in customer preferences and expectations and to monitor the current market situation.
<b>Action 2.2.2.3</b>	Pilot studies for facilitating trade along border-crossing points
<b>Action 2.2.2.4</b>	Demand and supply analysis of key agricultural products and cross-border agriculture resource and market information system

**Specific Objective 2.3.1** Enhancing cooperation between companies and increasing SMEs' potential to establish cluster cooperation models.

#### **Justification /Expected Results**

In the cross border area the concept of cooperation between companies operating on similar markets in order to achieve common objectives is completely unknown or it is treated even as a threat due to compromising protection of intellectual property, markets and tools that enterprise have developed in order to safeguard and strengthen their market position. Companies operating on highly competitive markets want to protect their know-how, fearing unfair behavior of their competitors. This strong competitiveness of enterprises results from cultural factors and the level of economic development in the region. Local companies should be acquainted with the idea of clusters by means of measures that take into account local conditions. EU cluster promotion projects often present good practices from other countries, utilise information in English or refer to models that do not have their counterparts in the local economy, which frequently fails to sufficiently motivate local entrepreneurs. It is identified a Lack of models for successful development and implementation of innovative solutions in cooperation with other players and the resulting low ability of companies to absorb such solutions. There is also a lack of dialogue between respective subjects that are potentially interested in development of clusters constitutes one of the key barriers in promotion of cluster cooperation

#### **Indicative Actions**

- |                       |                                                                                                                                                                                                                  |
|-----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Action 2.3.1.1</b> | Promotion of entrepreneurs' associations in order to minimize the concerns about cooperation with other companies and information sharing when pursuing common goals.                                            |
| <b>Action 2.3.1.2</b> | Development of good regional practices which more closely correspond to the conditions faced by local entrepreneurs and their application in promotion of clusters.                                              |
| <b>Action 2.3.1.3</b> | Promotion of cluster processes as a measure for increasing SMEs' competitiveness through easier absorption of technological and organizational innovations.                                                      |
| <b>Action 2.3.1.4</b> | Development of an incentive system targeted at companies and R&D institutions that will motivate to participation in clusters.                                                                                   |
| <b>Action 2.3.1.5</b> | Establishment of an internet platform that will serve as a forum for exchanging experiences, needs and expectations of respective actors and stakeholders with regard to their involvement in cluster processes. |
| <b>Action 2.3.1.6</b> | Development of a system of regular meetings, e.g. seminars, conferences, workshops, which will engage all stakeholders.                                                                                          |

<b>Specific Objective 2.3.2</b>	Establishment of a support system to ensure cluster development stability at early stages
<b>Justification /Expected Results</b>	
<p>Due to strong competition in many sectors and lack of willingness to start cooperation, companies are not motivated to form associations or to invest in cluster development. Therefore, initiation of cluster process often requires that business environment institutions provide ready-made solutions, i.e. cooperation models and a list of benefits derived from clustering. The first stage of cluster establishment, i.e. preparation of its development strategy, requires multifaceted analytical work. Cluster participants frequently do not pay sufficient attention to these measures, which may have serious consequences for the cluster's functioning in the future.</p>	
<b>Indicative Actions</b>	
<b>Action 2.3.2.1</b>	Mapping and identification of companies and trades that can become involved in clustering.
<b>Action 2.3.2.2</b>	Preparation of management tools, manuals and roadmaps in the area of cluster processes and support for newly-established clusters.
<b>Action 2.3.2.3</b>	Enhancement networking with the already operating clusters and people responsible for cluster management.
<b>Action 2.3.2.4</b>	Increasing access of companies involved in cluster development to high-quality consulting services in order to ensure support during the initial stage of cluster establishment.
<b>Action 2.3.2.5</b>	Identification of objectives, development of implementation paths, preparation of an action plan, specification of an organisational structure, performance of market research and analyses.

<b>Specific Objective 2.3.3</b>	Support for the existing clusters and entrepreneurs' networks
<b>Justification /Expected Results</b>	
Regional authorities frequently do not pay sufficient attention to supporting clusters that operate in their area of jurisdiction. There is a lack of programmes targeted at promotion in the country and abroad as well as a lack of dedicated financial tools supporting development of already existing clusters. It is found low involvement of local clusters or other associations of entrepreneurs in contacts with clusters from other countries plus low engagement in international cooperation. There is also an underestimation of the benefits from cooperation with experienced partners from more developed regions. Due to the limited dialogue and information sharing between the representatives of regional and national clusters there is a lack of coordinated measures and lobbying initiatives for strengthening the role of entrepreneurs' groups in the state economy.	
<b>Indicative Actions</b>	
<b>Action 2.3.3.1</b>	Support and promotion of existing networks and clusters in order to help them in gaining a stable market position in the region.
<b>Action 2.3.3.2</b>	Fostering closer relations between clusters and regional development policy makers so that regional policies to a greater extent refer to cluster development issues.
<b>Action 2.3.3.3</b>	Inclusion of measures fostering growth of existing clusters in the regional development policy and ensuring funding for their implementation.
<b>Action 2.3.3.4</b>	Fostering the development of communication platforms for clusters from different countries.
<b>Action 2.3.3.5</b>	Promotion of the Open Innovation concept, which defines models for cooperation which allows the involvement of all beneficial.
<b>Action 2.3.3.6</b>	Development of a cluster cooperation network in order to exchange information and good practices in new technological areas, technology transfer and innovations.

**Specific Objective  
2.4.1**

Tourism

**Justification /Expected Results**

Due to tourist potentials of the Region and the development of infrastructure, there has been a notable growth on demands and capacity over the recent years. Actually, the incomes from this sector are still a minor contribution. Improvements within the touristic sector will affect on a substantial increase in local income.

**Indicative Actions**

**Action 2.4.1.1**

Action Plan for the development and promotion of gastronomic tourism and exchange information and good practices in the field of thematic tourism

**Action 2.4.1.2**

Local Branding Strategy: Establishment of the Brand Name of the cross border area as a unified and recognizable thematic tourist destination with concrete features & quality standards

**Action 2.4.1.3**

Development of networking and cooperation networks among the existing companies and institutions in the tourist sector for the exchange of know-how and the shaping of common tourist destinations and products in the field of alternative tourism

**Action 2.4.1.4**

Utilization of cultural heritage in the sense of a developmental perspective & promotion of the alternative forms of tourism with cultural interest

**Action 2.4.1.5**

Development of lake and river ecotourism and promotion of economic and cultural resources in protected areas

**Action 2.4.1.6**

Connect the cultural heritage of the area with the tourism development through the development of a cultural guide and a cultural calendar for the presentation of the cultural activities taking place in the region on an annual basis

**Action 2.4.1.7**

Promotion of Mountainous Traditional Village in the Cross Border area of Greece - Albania

**Action 2.4.1.8**

New Media Oriented Branding Tourism Destination Strategies for the cross border area Based on Food and Beverage Local Products

**Action 2.4.1.9**

Development of boat trips activities for tourism and transport; major interregional empowerment and diffusion of eco-tourism; use of lakes as a waterway; safety, ease and efficiency to fishermen, coast guard police and environmental scientists and observers.

**Action 2.4.1.10**

Operation of Destination Management System (DMS) at cross border regional level

**Specific Objective  
2.4.2****Agriculture****Justification /Expected Results**

The Primary sector, although important for the Regional economy, demonstrates a rather low productivity. Taking into consideration the importance of the agriculture sector—including both agriculture and livestock, development of strategies with the participation of all actors including governmental structures, private sector organizations, and local and international non-governmental organizations is indispensable for the development of this sector. Coordination of actions and projects should aim at increasing the capacities necessary to improve the quality of agricultural and livestock products and introduction of bio-products that are in demand. Agriculture and animal husbandry: represents a significant portion of the regional economic activity, with sizable growth potential, if combined with modern ICT tools. The Region could focus on distinct products that exhibit proven demand from international markets. The related business units should be encouraged to become more efficient by accommodating modern control, administration, and monitoring, marketing, and logistics tools. Added value bio-agricultural and alternative agriculture producers can benefit from internet-based marketplace participation, to widen their distribution channels and optimise branding, procurement, packaging etc. Farmers and livestock unit owners could also be supported to optimise their production activity, by employing modern control and monitoring tools, especially in reducing the cost of energy by using alternative methods, like geothermal resources or biogas.

**Indicative Actions**

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|-----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Action 2.4.2.1</b> | Creation of a highly collaborative network of complementary scientific groups in the cross-border area                                                                                                      |
| <b>Action 2.4.2.2</b> | Development of an online MED-HERB database containing polymorphic information on the plants, bioactive compounds, toxicity data, mode of action, spectroscopic and chromatographic fingerprints             |
| <b>Action 2.4.2.3</b> | Development of a quality assurance protocols                                                                                                                                                                |
| <b>Action 2.4.2.4</b> | Systematic botanical mapping of aromatic and medicinal herbs in the cross-border region                                                                                                                     |
| <b>Action 2.4.2.5</b> | Research, at European and international level, to find best practices for the development of new agricultural products and plants that can be cultivated in the border area                                 |
| <b>Action 2.4.2.6</b> | Marketing plan to promote local agricultural products and training for entrepreneurs and farmers who want to develop business and development of an online shop for the promotion of agricultural products. |
| <b>Action 2.4.2.7</b> | Regional Structure of Certification of Quality of the Local Products in both sides of the borders                                                                                                           |
| <b>Action 2.4.2.8</b> | Cross border Vortal for Agricultural Awareness                                                                                                                                                              |



<b>Specific Objective 2.4.3</b>	<b>Culture</b>
<b>Justification /Expected Results</b>	
<p>Although tourism represents a small portion of the current economic activity, it should be underpinned, since the Region has numerous areas of natural beauty and unexploited archaeological and religious sites, capable of attracting a significant number of visitors. SMEs should be motivated to exploit modern technology and synergies to maximize the outreach of the Region, minimize management and advertising costs, and thus create more and better jobs. The cross border region has very interesting cultural heritage and a variety of monuments. Archaeological sites in different areas and from different ages, plenty of churches mainly from the Byzantine times and traditional settlements with specific characteristics of the architecture in Macedonia, configure significant poles of interest. Combining the natural with historical and cultural heritage the region is an attractive area for visitors and tourists, by promoting and exploitation its sources.</p>	
<b>Indicative Actions</b>	
<b>Action 2.4.3.1</b>	Protection, promotion & preservation of the traditional heritage (folkloric and religious elements, traditional music, dances, etc);
<b>Action 2.4.3.2</b>	Enhancement of cross-border population's, mainly young peoples'-access to activities & resources allowing them to develop art and cultural activities, promote their cultural identity & actively participate in the social and cultural life of the CB area
<b>Action 2.4.3.3</b>	Enhancement & institutionalization of cultural & art cooperation in the CB area and encouragement of mobility and cultural exchange and reinforcement of CB networking with multiplier benefits at cultural level for both areas
<b>Action 2.4.3.4</b>	Operation of a permanent structure of co-operation & exchange of information & expertise between the two areas.
<b>Action 2.4.3.5</b>	Promote the cultural heritage of the interregional area through the development of ICT tools
<b>Action 2.4.3.6</b>	Transfer and spread the knowledge of the regional culture through the implementation of visibility actions that include the production of informative material and motivate the communities to act more thoroughly and participate to the traditional events
<b>Action 2.4.3.7</b>	Exploit the new technologies for the benefit of the regional culture through acts of digitalization and the development of e-applications that increase the availability and visibility of the cultural information

Specific Objective 2.4.4	Energy
Justification /Expected Results	
<p>It is very important to create a network of renewable energy groups, consisting of companies, research institutions, non-governmental organisations and public authorities in order to offer complete services such as advising, recommending, and specialized services. For this reason, it is absolutely necessary to involve other stakeholders in the network in order to create the necessary critical mass. The Region produces a high portion of the national electricity demand, particularly in the Greek side. This huge industry requires several support and maintenance services, offered by SMEs, to cover specialised needs of the production sites. The Region would provide incentives to attract the ICT related SMEs, able to improve the employment profile of the Region.</p>	
Indicative Actions	
<b>Action 2.4.4.1</b>	Joint actions to protect the environment using energy potential through valorization of the biomass sources of the two regions and find ways for the construction of plants, in the most efficient and productive way, in terms of energy (both electrical and thermal)
<b>Action 2.4.4.2</b>	Determination of accurate energy balances for selected types and mixtures of wastes and biomass, and encouraging a renewable energy culture based on biomass valorization and accelerate the development and use of biomass in the cross-border area.
<b>Action 2.4.4.3</b>	Identify good practices for sustainable use of wild resources, exchange experiences by transferring the knowledge gained from best practices and transfer best practices in mainstream programmes and raise awareness on the economic value derived from the sustainable use of wild resources
<b>Action 2.4.4.4</b>	Enhancement the reduction of energy consumption in public buildings by adopting eco-friendly management systems which allow economic development
<b>Action 2.4.4.5</b>	Development of Energy Collaborative Platform for the Renewable Sources of Energy
<b>Action 2.4.4.6</b>	Development of soil maps and promote precise agriculture practices in both sides of the borders
<b>Action 2.4.4.7</b>	Development of pilot local district heating systems based on biomass

**Specific Objective  
2.5.1**

Development of an efficient financing system supporting innovative solutions

**Justification /Expected Results**

Many innovative ideas are not implemented due to insufficient capital already at the stage of conceptual work. Knowledge about availability of various forms of financing for innovative projects is not widespread and is usually restricted to a narrow group of specialists.

**Indicative Actions**

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|-----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Action 2.5.1.1</b> | Finance programmes aimed at developing a market for microfinance, through initiatives as Progress Microfinance and the Joint Action to Support Microfinance Institutions (JASMINE) initiative and make resources for micro-financing available to border regions via the European Social Fund or the European Regional Development Fund. |
| <b>Action 2.5.1.2</b> | Facilitate the direct access of SMEs to the capital market through the development of an EU regime for venues specialised in the trading of shares and bonds issued by SMEs ("SMEs growth markets"), in the context of the review of the Market in Financial Instruments Directive (MiFID)                                               |
| <b>Action 2.5.1.3</b> | Utilise the full potential under the Agricultural Fund for Rural Development EAFRD to ensure access to financing of entrepreneurship, in particular at an early stage of the business in agriculture (such as setting up of young farmers) and in rural areas in general, also by means of financial instruments.                        |
| <b>Action 2.5.1.4</b> | Unlock the full potential of the Digital Single Market for SMEs by tackling existing barriers to cross-border online business.                                                                                                                                                                                                           |
| <b>Action 2.5.1.5</b> | Transfer of available support from companies that function within stable, mature sectors to areas that exhibit significant development potential.                                                                                                                                                                                        |
| <b>Action 2.5.1.6</b> | Support for institutions that provide consultancy services for entrepreneurs                                                                                                                                                                                                                                                             |
| <b>Action 2.5.1.7</b> | Establishment of institutions that on a commercial basis fulfil the public mission of financial and organisational support for innovative business investments at the initial stage of project implementation.                                                                                                                           |

<b>Specific Objective 2.5.2</b>		Increasing SMEs' access to information on the available forms and rules of financing for development processes and innovative projects.
<b>Justification /Expected Results</b>		
In the cross border area SMEs finance their development projects mainly from their own resources. Utilisation of external funds is usually hindered by entrepreneurs' limited knowledge on the forms and rules of such funding and possible benefits to be derived from it.		
<b>Indicative Actions</b>		
<b>Action 2.5.2.1</b>	Support SMEs' access to information on the available financing and development processes about innovative projects.	
<b>Action 2.5.2.2</b>	Providing entrepreneurs with good practices in order to increase their willingness to use external forms of financing.	
<b>Action 2.5.2.3</b>	Encouraging entrepreneurs to form associations as this enables easier access to external funding, both subsidies as well as commercial funds.	
<b>Action 2.5.2.4</b>	Ensuring financial support at the initial stage of cluster development from the EU funds, state funds and regional programmes.	
<b>Action 2.5.2.5</b>	Financial support for promotion of regional clusters on the international level.	

<b>Specific 2.5.3</b>	<b>Objective</b>	Coordination of activities undertaken by various institutions and increasing professional qualifications
<b>Justification /Expected Results</b>		
Cooperation between institutions offering financial support, e.g. seed capital funds, venture capital funds and technology transfer institutions, remains insufficient, which leads to a lack of a uniform information system that would clearly define the possibilities, rules and procedures in financing of commercial projects. Moreover, evidence shows insufficient qualifications of people responsible for providing advisory services for entrepreneurs in such areas as: professional knowledge, strategic thinking and interpersonal competence. This makes these services less professional, which in turn, has a significant impact on the functioning of the whole support system.		
<b>Indicative Actions</b>		
<b>Action 2.5.3.1</b>	Development of a cooperation platform between respective actors offering financial support in order to create an integrated offer and an effective and cohesive information system for entrepreneurs.	
<b>Action 2.5.3.2</b>	Development of a programme and a training methodology for improving the working skills of the people employed in seed funds and technology transfer institutions, based on the skills gap analysis.	
<b>Action 2.5.3.3</b>	Fostering cooperation of regional business support institutions and capital funds with their counterparts from other EU countries.	
<b>Action 2.5.3.4</b>	Leverage the available financial resources to promote opportunities for investment in the cross border areas.	
<b>Action 2.5.3.5</b>	Support the creation of business angel networks, meeting professional standards, and co-investment funds	

<b>Specific Objective 2.5.4</b>	Long-term financing for innovative projects implemented jointly by research and business stakeholders
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#### **Justification /Expected Results**

Considering the long time necessary for concept development, research, prototype testing, modification and commercialization, innovative initiatives can be implemented only in a very long time frame. This significantly reduces the availability of commercial financing, as the results are distant in time and face a significant risk. The Lisbon Strategy, currently named Europe 2020, defines the desirable level of expenditures for R&D at 3% of GDP. In Greece and Albania the actual expenses are much lower.

#### **Indicative Actions**

<b>Action 2.5.4.1</b>	Establishment of guarantee funds that reduce the risk of investing in long term innovative projects.
<b>Action 2.5.4.2</b>	Increasing state expenses for R&D through co-financing of R&D work conducted by companies (shifting the focus from purchase of tangible assets).
<b>Action 2.5.4.3</b>	Adopt the necessary measures to support the commercialisation of innovation, research and development projects taking into account the special challenges of newly established firms.
<b>Action 2.5.4.4</b>	Reinforce regional support for digital and web start-ups and foster alternative financing for early-stage technology start-ups, such as ICT innovation voucher schemes.
<b>Action 2.5.4.5</b>	Use existing European funds according to their applicable rules and priorities to support transfers of small and medium-sized businesses to entrepreneurs intending to continue running the business.
<b>Action 2.5.4.6</b>	Provide advisory services to bankrupt entrepreneurs to manage debt and to facilitate economic and social inclusion and develop programmes for 'second starters' for mentoring, training and business networking.

## Consistency Analysis in relation to three major Strategies

The consistency analysis took into account the three following strategies:

- (1) The Regional Operation Programme 2021-2027 of Central Macedonia
- (2) The Regional Innovation Strategy of Central Macedonia
- (3) The Integrated Sustainable Urban Development of Thessaloniki

### The Regional Operation Programme 2021-2027 of Central Macedonia

The relevant analysis assessed Policy Objectives and Specific Objectives that are directly related with entrepreneurship and innovation. In more detail, it is evaluated the consistency of the proposed action plan against the following Policy Objectives and Specific Objectives.

#### 1<sup>st</sup> Policy Objective

A more competitive and smarter Europe by promoting innovative and smart economic transformation and regional ICT connectivity.

##### Specific objectives

RSO1.1. Developing and enhancing research and innovation capacities and the uptake of advanced technologies.

RSO1.2. Reaping the benefits of digitisation for citizens, companies, research organizations and public authorities.

RSO1.3. Enhancing sustainable growth and competitiveness of SMEs and job creation in SMEs, including by productive investments.

#### 4<sup>th</sup> Policy Objective

A more social and inclusive Europe implementing the European Pillar of Social Rights

##### Specific objectives

ESO4.3. Promoting a gender-balanced labour market participation, equal working conditions, and a better work-life balance including through access to affordable childcare, and care for dependent persons.

ESO4.8. Fostering active inclusion with a view to promoting equal opportunities, non-discrimination and active participation, and improving employability, in particular for disadvantaged groups.

## The Regional Innovation Strategy of Central Macedonia

The analysis of this major strategic document is based upon the two following groups of sectors:

### **1<sup>st</sup> The ‘Champion Sectors’**

- C.1 Agrofood
- C.2 Construction Materials
- C.3 Textile & Clothing
- C.4 Tourism

### **2<sup>nd</sup> The Horizontal Technological sectors:**

- T.1 Information & Communication Technologies
- T.2 Energy Technologies
- T.3 Environmental Technologies
- T.4 Transport & Logistics Technologies

## The Integrated Sustainable Urban Development of Thessaloniki

The relevant analysis took into consideration the following four Strategic Axes:

1. Thessaloniki competitive and innovative
2. Thessaloniki coherent
3. Green and resilient Thessaloniki
4. Thessaloniki efficient

## Methodological approach

To assess the degree of consistency with the proposed action plan, the research team recommended a panel of five (5) experts who had accumulated experience in the issues of entrepreneurship, innovation and development strategy. All experts were informed in detail about the findings of the empirical research and the rationale of the Co-Working project. The results of each individual assessment were discussed within a focus group meeting aiming to achieve the necessary consensus and convergence of opinions.

The following section presents the Consistency Table of the planned Pre-incubator services with the Research & Innovation Entrepreneurship Strategies. The degree of relevance is plotted on a scale of 1 to 10 with 1 indicating no relevance at all and 10 maximum relevance.



# CONSISTENCY ANALYSIS AGAINST THE REGIONAL OPERATION PROGRAMME 2021-2027 IN CENTRAL MACEDONIA

## PILLAR 1: Business Environment

Consistency of the Action Plan with the Regional Operation Programme 2021-2027, CENTRAL MACEDONIA		Policy Objective 1			Policy Objective 4		FINAL AGGREGATION
		Developing and enhancing research and innovation capacities	Reaping the benefits of digitisation	Enhancing sustainable growth and competitiveness of SMEs and job creation	Promoting a gender-balanced labour market participation, equal working conditions	Fostering active inclusion, promoting equal opportunities & non-discrimination	
		RSO1.1	RSO1.2	RSO1.3	ESO4.3	ESO4.8	
PILLAR 1	BUSINESS ENVIRONMENT						
T. P. 1.1	Starting Up & Establishment of a Business						
S. O. 1.1.1	More flexible procedural requirements and removal of the restrictions on new start-ups	7	6	7	3	4	5.40
S. O. 1.1.2	Amendment of the Strategic Framework for Spatial Planning, geo-info policy and simplifications	9	9	6	2	4	6.00
S. O. 1.1.3	Transaction with the Public Sector and development projects	8	7	6	3	4	5.60
S. O. 1.1.4	Simplification and information on labour & insurance matters	7	9	7	2	3	5.60

Consistency of the Action Plan with the Regional Operation Programme 2021-2027, CENTRAL MACEDONIA		Policy Objective 1			Policy Objective 4		FINAL AGGREGATION
		Developing and enhancing research and innovation capacities	Reaping the benefits of digitisation	Enhancing sustainable growth and competitiveness of SMEs and job creation	Promoting a gender-balanced labour market participation, equal working conditions	Fostering active inclusion, promoting equal opportunities & non-discrimination	
		RSO1.1	RSO1.2	RSO1.3	ESO4.3	ESO4.8	
PILLAR 1	BUSINESS ENVIRONMENT						
T. P. 1.2	Cooperation between research and academic institutions and SMEs						
S. O. 1.2.1	Development of cooperation between R&D institutions and SMEs	9	6	8	6	6	7.00
S. O. 1.2.2	Increasing the scope of research and development cooperation between enterprises and higher education establishments/R&D institutions.	9	7	8	6	7	7.40
S. O. 1.2.3	Establishment of a support system for talented students and research workers	10	6	7	7	6	7.20
S. O. 1.2.4	Connecting entrepreneurship with education	8	6	8	7	7	7.20

Consistency of the Action Plan with the Regional Operation Programme 2021-2027, CENTRAL MACEDONIA		Policy Objective 1			Policy Objective 4		FINAL AGGREGATION
		Developing and enhancing research and innovation capacities	Reaping the benefits of digitisation	Enhancing sustainable growth and competitiveness of SMEs and job creation	Promoting a gender-balanced labour market participation, equal working conditions	Fostering active inclusion, promoting equal opportunities & non-discrimination	
		RSO1.1	RSO1.2	RSO1.3	ESO4.3	ESO4.8	
PILLAR 1	BUSINESS ENVIRONMENT						
T. P. 1.3	Attracting FDI and accelerating growth process						
S. O. 1.3.1	Mechanisms for attracting foreign companies	6	4	9	3	4	5.2
S. O. 1.3.2	Enhancement of Multi-Stakeholder Collaboration	7	3	7	3	4	4.8
S. O. 1.3.3	More resilient cross-border communities	6	3	4	6	8	5.4
S. O. 1.3.4	SME Network and Cooperation Management	7	4	6	5	6	5.6

## PILLAR 2: Supporting Entrepreneurship and Access to Finance

Consistency of the Action Plan with the Regional Operation Programme 2021-2027, CENTRAL MACEDONIA			Policy Objective 1			Policy Objective 4		FINAL AGGREGATION
			Developing and enhancing research and innovation capacities	Reaping the benefits of digitisation	Enhancing sustainable growth and competitiveness of SMEs and job creation	Promoting a gender-balanced labour market participation, equal working conditions	Fostering active inclusion, promoting equal opportunities & non-discrimination	
			RSO1.1	RSO1.2	RSO1.3	ESO4.3	ESO4.8	
PILLAR 2	SUPPORTING ENTREPRENEURSHIP & ACCESS TO FINANCE							
T. P. 2.1	Promotion of the innovation culture and development							
S. O. 2.1.1	Promotion of values referring to the idea of innovativeness	7	9	7	7	8	7.6	
S. O. 2.1.2	Development of a cross border regional innovation support system	6	4	5	2	5	4.4	
T. P. 2.2	Increasing SMEs’ access to foreign markets & enhancing entrepreneurs’ qualifications							
S. O. 2.2.1	Enhancing entrepreneurs’ qualifications, knowledge and skills in the area of modern corporate management	8	7	8	7	7	7.40	
S. O. 2.2.2	Encouraging local entrepreneurs to foster business relations between regional SMEs and foreign partners or clients	6	7	8	7	7	7.00	

Consistency of the Action Plan with the Regional Operation Programme 2021-2027, CENTRAL MACEDONIA		Policy Objective 1			Policy Objective 4		FINAL AGGREGATION
		Developing and enhancing research and innovation capacities	Reaping the benefits of digitisation	Enhancing sustainable growth and competitiveness of SMEs and job creation	Promoting a gender-balanced labour market participation, equal working conditions	Fostering active inclusion, promoting equal opportunities & non-discrimination	
		RSO1.1	RSO1.2	RSO1.3	ESO4.3	ESO4.8	
PILLAR 2	SUPPORTING ENTREPRENEURSHIP & ACCESS TO FINANCE						
T. P. 2.3	Promotion of the clustering and cooperation concept						
S. O. 2.3.1	Enhancing cooperation between companies and increasing SMEs’ potential to establish cluster cooperation models.	5	6	9	6	7	6.60
S. O. 2.3.2	Establishment of a support system to ensure cluster development stability at early stages	7	7	9	7	7	7.40
S. O. 2.3.3	Support for the existing clusters and entrepreneurs’ networks	6	7	8	7	7	7.00

Consistency of the Action Plan with the Regional Operation Programme 2021-2027, CENTRAL MACEDONIA		Policy Objective 1			Policy Objective 4		FINAL AGGREGATION
		Developing and enhancing research and innovation capacities	Reaping the benefits of digitisation	Enhancing sustainable growth and competitiveness of SMEs and job creation	Promoting a gender-balanced labour market participation, equal working conditions	Fostering active inclusion, promoting equal opportunities & non-discrimination	
		RSO1.1	RSO1.2	RSO1.3	ESO4.3	ESO4.8	
PILLAR 2	SUPPORTING ENTREPRENEURSHIP & ACCESS TO FINANCE						
T. P. 2.4	Supporting Entrepreneurship in key sectors						
S. O. 2.4.1	Tourism	6	8	7	7	7	7.00
S. O. 2.4.2	Agriculture	6	8	7	7	7	7.00
S. O. 2.4.3	Culture	6	8	7	7	7	7.00
S. O. 2.4.4	Energy	6	8	7	7	7	7.00

Consistency of the Action Plan with the Regional Operation Programme 2021-2027, CENTRAL MACEDONIA		Policy Objective 1			Policy Objective 4		FINAL AGGREGATION
		Developing and enhancing research and innovation capacities	Reaping the benefits of digitisation	Enhancing sustainable growth and competitiveness of SMEs and job creation	Promoting a gender-balanced labour market participation, equal working conditions	Fostering active inclusion, promoting equal opportunities & non-discrimination	
		RSO1.1	RSO1.2	RSO1.3	ESO4.3	ESO4.8	
PILLAR 2	SUPPORTING ENTREPRENEURSHIP & ACCESS TO FINANCE						
T. P. 2.5	Access to Finance						
S. O. 2.5.1	Development of an efficient financing system supporting innovative solutions	7	7	8	7	8	7.4
S. O. 2.5.2	Increasing SMEs’ access to information on the available forms and rules of financing for development processes and innovative projects.	8	8	8	6	6	7.2
S. O. 2.5.3	Coordination of activities undertaken by various institutions and increasing professional qualifications	9	8	7	7	8	7.8
S. O. 2.5.4	Long term financing for innovative projects implemented jointly by research and business stakeholders	8	8	7	7	7	7.4

## CONSISTENCY ANALYSIS AGAINST THE REGIONAL INNOVATION STRATEGY IN CENTRAL MACEDONIA

### PILLAR 1: Business Environment

Consistency of the Action Plan with the Regional Innovation Strategy of CENTRAL MACEDONIA		Chambions' Sectors				Horizontal Sectors				FINAL AGGREGATION
		Agrofood	Construction Materials	Textile & Clothing	Tourism	Information & Communication Technologies	Energy Technologies	Environmental Technologies	Promoting sustainable employment and mobility	
		C.1	C.2	C.3	C.4	T.1	T.2	T.3	T.4	
PILLAR 1	BUSINESS ENVIRONMENT									
T. P. 1.1	Starting Up & Establishment of a Business									
S. O. 1.1.1	More flexible procedural requirements and removal of the restrictions on new start-ups	7	7	6	8	8	7	7	8	7.25
S. O. 1.1.2	Amendment of the Strategic Framework for Spatial Planning, geo-info policy and simplifications	6	7	7	7	7	8	8	9	7.38
S. O. 1.1.3	Transaction with the Public Sector and development projects	6	5	5	7	6	7	6	7	6.13
S. O. 1.1.4	Simplification and information on labour & insurance matters	7	6	7	8	7	8	7	7	7.13



Consistency of the Action Plan with the Regional Innovation Strategy of CENTRAL MACEDONIA		Chambions' Sectors				Horizontal Sectors				FINAL AGGREGATION
		Agrofood	Construction Materials	Textile & Clothing	Tourism	Information & Communication Technologies	Energy Technologies	Environmental Technologies	Promoting sustainable employment and mobility	
		C.1	C.2	C.3	C.4	T.1	T.2	T.3	T.4	
PILLAR 1	BUSINESS ENVIRONMENT									
T. P. 1.2	Cooperation between research and academic institutions and SMEs									
S. O. 1.2.1	Development of cooperation between R&D institutions and SMEs	8	8	7	8	8	8	7	8	7.75
S. O. 1.2.2	Increasing the scope of research and development cooperation between enterprises and higher education establishments/R&D institutions.	8	7	7	7	8	8	8	8	7.63
S. O. 1.2.3	Establishment of a support system for talented students and research workers	7	7	6	8	9	7	7	7	7.25
S. O. 1.2.4	Connecting entrepreneurship with education	7	5	5	8	7	6	7	7	6.50

Consistency of the Action Plan with the Regional Innovation Strategy of CENTRAL MACEDONIA		Chambions' Sectors				Horizontal Sectors				FINAL AGGREGATION
		Agrofood	Construction Materials	Textile & Clothing	Tourism	Information & Communication Technologies	Energy Technologies	Environmental Technologies	Promoting sustainable employment and mobility	
		C.1	C.2	C.3	C.4	T.1	T.2	T.3	T.4	
PILLAR 1	BUSINESS ENVIRONMENT									
T. P. 1.3	Attracting FDI and accelerating growth process									
S. O. 1.3.1	Mechanisms for attracting foreign companies	8	8	7	9	9	9	9	7	8.25
S. O. 1.3.2	Enhancement of Multi-Stakeholder Collaboration	7	7	7	8	6	7	6	6	6.75
S. O. 1.3.3	More resilient cross-border communities	6	4	5	8	7	6	8	8	6.50
S. O. 1.3.4	SME Network and Cooperation Management	8	6	6	8	9	8	7	6	7.25

## PILLAR 2: Supporting Entrepreneurship and Access to Finance

Consistency of the Action Plan with the Regional Innovation Strategy of CENTRAL MACEDONIA		Chambions' Sectors				Horizontal Sectors				FINAL AGGREGATION
		Agrofood	Construction Materials	Textile & Clothing	Tourism	Information & Communication Technologies	Energy Technologies	Environmental Technologies	Promoting sustainable employment and mobility	
		C.1	C.2	C.3	C.4	T.1	T.2	T.3	T.4	
PILLAR 2	SUPPORTING ENTREPRENEURSHIP & ACCESS TO FINANCE									
T. P. 2.1	Promotion of the innovation culture and development									
S. O. 2.1.1	Promotion of values referring to the idea of innovativeness	8	7	6	9	8	7	7	6	7.25
S. O. 2.1.2	Development of a cross border regional innovation support system	3	2	3	7	6	5	5	5	4.50
T. P. 2.2	Increasing SMEs’ access to foreign markets & enhancing entrepreneurs’ qualifications									
S. O. 2.2.1	Enhancing entrepreneurs’ qualifications, knowledge and skills in the area of modern corporate management	7	5	5	8	7	6	6	5	6.13
S. O. 2.2.2	Encouraging local entrepreneurs to foster business relations between regional SMEs and foreign partners or clients	8	6	6	8	6	6	5	4	6.13

Consistency of the Action Plan with the Regional Innovation Strategy of CENTRAL MACEDONIA		Chambions' Sectors				Horizontal Sectors				FINAL AGGREGATION
		Agrofood	Construction Materials	Textile & Clothing	Tourism	Information & Communication Technologies	Energy Technologies	Environmental Technologies	Promoting sustainable employment and mobility	
		C.1	C.2	C.3	C.4	T.1	T.2	T.3	T.4	
PILLAR 2	SUPPORTING ENTREPRENEURSHIP & ACCESS TO FINANCE									
T. P. 2.3	Promotion of the clustering and cooperation concept									
S. O. 2.3.1	Enhancing cooperation between companies and increasing SMEs’ potential to establish cluster cooperation models.	9	7	7	8	8	7	6	5	7.13
S. O. 2.3.2	Establishment of a support system to ensure cluster development stability at early stages	8	7	7	8	8	8	7	5	7.25
S. O. 2.3.3	Support for the existing clusters and entrepreneurs’ networks	8	7	7	9	9	7	7	4	7.25

Consistency of the Action Plan with the Regional Innovation Strategy of CENTRAL MACEDONIA		Chambions' Sectors				Horizontal Sectors				FINAL AGGREGATION
		Agrofood	Construction Materials	Textile & Clothing	Tourism	Information & Communication Technologies	Energy Technologies	Environmental Technologies	Promoting sustainable employment and mobility	
		C.1	C.2	C.3	C.4	T.1	T.2	T.3	T.4	
PILLAR 2	SUPPORTING ENTREPRENEURSHIP & ACCESS TO FINANCE									
T. P. 2.4	Supporting Entrepreneurship in key sectors									
S. O. 2.4.1	Tourism	8	5	2	10	7	4	6	8	6.25
S. O. 2.4.2	Agriculture	8	4	3	8	6	4	6	8	5.88
S. O. 2.4.3	Culture	8	2	2	8	7	3	4	7	5.13
S. O. 2.4.4	Energy	4	7	2	7	6	10	10	9	6.88

Consistency of the Action Plan with the Regional Innovation Strategy of CENTRAL MACEDONIA		Chambions' Sectors				Horizontal Sectors				FINAL AGGREGATION
		Agrofood	Construction Materials	Textile & Clothing	Tourism	Information & Communication Technologies	Energy Technologies	Environmental Technologies	Promoting sustainable employment and mobility	
		C.1	C.2	C.3	C.4	T.1	T.2	T.3	T.4	
PILLAR 2	SUPPORTING ENTREPRENEURSHIP & ACCESS TO FINANCE									
T. P. 2.5	Access to Finance									
S. O. 2.5.1	Development of an efficient financing system supporting innovative solutions	7	7	6	8	9	7	7	6	7.13
S. O. 2.5.2	Increasing SMEs’ access to information on the available forms and rules of financing for development processes and innovative projects.	7	6	6	9	7	7	7	7	7.00
S. O. 2.5.3	Coordination of activities undertaken by various institutions and increasing professional qualifications	6	6	6	7	8	6	6	5	6.25
S. O. 2.5.4	Long term financing for innovative projects implemented jointly by research and business stakeholders	7	6	7	7	7	6	6	5	6.38

## CONSISTENCY ANALYSIS AGAINST THE INTEGRATED SUSTAINABLE URBAN DEVELOPMENT OF THESSALONIKI

### PILLAR 1: Business Environment

Consistency of the Action Plan with the Integrated Sustainable Urban Development of THESSALONIKI		Strategic Axes				FINAL AGGREGATION
		Thessaloniki Competitive & Innovative	Thessaloniki Coherent	Thessaloniki Green & Resilient	Thessaloniki Efficient	
		SA.1	SA.2	SA.3	SA.4	
PILLAR 1	BUSINESS ENVIRONMENT					
T. P. 1.1	Starting Up & Establishment of a Business					
S. O. 1.1.1	More flexible procedural requirements and removal of the restrictions on new start-ups	8	4	7	8	6.75
S. O. 1.1.2	Amendment of the Strategic Framework for Spatial Planning, geo-info policy and simplifications	7	6	7		6.67
S. O. 1.1.3	Transaction with the Public Sector and development projects	8	8	7		7.67
S. O. 1.1.4	Simplification and information on labour & insurance matters	3	5	6		4.67

Consistency of the Action Plan with the Integrated Sustainable Urban Development of THESSALONIKI		Strategic Axes				FINAL AGGREGATION
		Thessaloniki Competitive & Innovative	Thessaloniki Coherent	Thessaloniki Green & Resilient	Thessaloniki Efficient	
		SA.1	SA.2	SA.3	SA.4	
PILLAR 1	BUSINESS ENVIRONMENT					
T. P. 1.2	Cooperation between research and academic institutions and SMEs					
S. O. 1.2.1	Development of cooperation between R&D institutions and SMEs	8	6	7	8	7.25
S. O. 1.2.2	Increasing the scope of research and development cooperation between enterprises and higher education establishments/R&D institutions.	7	5	6	8	6.50
S. O. 1.2.3	Establishment of a support system for talented students and research workers	6	8	8	7	7.25
S. O. 1.2.4	Connecting entrepreneurship with education	6	7	8	8	7.25



Consistency of the Action Plan with the Integrated Sustainable Urban Development of THESSALONIKI		Strategic Axes				FINAL AGGREGATION
		Thessaloniki Competitive & Innovative	Thessaloniki Coherent	Thessaloniki Green & Resilient	Thessaloniki Efficient	
		SA.1	SA.2	SA.3	SA.4	
PILLAR 1	BUSINESS ENVIRONMENT					
T. P. 1.3	Attracting FDI and accelerating growth process					
S. O. 1.3.1	Mechanisms for attracting foreign companies	6	5	6	8	6.25
S. O. 1.3.2	Enhancement of Multi-Stakeholder Collaboration	8	6	7	8	7.25
S. O. 1.3.3	More resilient cross-border communities	5	8	9	7	7.25
S. O. 1.3.4	SME Network and Cooperation Management	7	6	7	8	7.00

## PILLAR 2: Supporting Entrepreneurship and Access to Finance

Consistency of the Action Plan with the Integrated Sustainable Urban Development of THESSALONIKI		Strategic Axes				FINAL AGGREGATION
		Thessaloniki Competitive & Innovative	Thessaloniki Coherent	Thessaloniki Green & Resilient	Thessaloniki Efficient	
		SA.1	SA.2	SA.3	SA.4	
PILLAR 2	SUPPORTING ENTREPRENEURSHIP & ACCESS TO FINANCE					
T. P. 2.1	Promotion of the innovation culture and development					
S. O. 2.1.1	Promotion of values referring to the idea of innovativeness	9	7	8	8	8.00
S. O. 2.1.2	Development of a cross border regional innovation support system	6	7	8	8	7.25

Consistency of the Action Plan with the Integrated Sustainable Urban Development of THESSALONIKI		Strategic Axes				FINAL AGGREGATION
		Thessaloniki Competitive & Innovative	Thessaloniki Coherent	Thessaloniki Green & Resilient	Thessaloniki Efficient	
		SA.1	SA.2	SA.3	SA.4	
PILLAR 2	SUPPORTING ENTREPRENEURSHIP & ACCESS TO FINANCE					
T. P. 2.2	Increasing SMEs’ access to foreign markets & enhancing entrepreneurs’ qualifications					
S. O. 2.2.1	Enhancing entrepreneurs’ qualifications, knowledge and skills in the area of modern corporate management	6	5	6	8	6.25
S. O. 2.2.2	Encouraging local entrepreneurs to foster business relations between regional SMEs and foreign partners or clients	6	6	7	7	6.50

Consistency of the Action Plan with the Integrated Sustainable Urban Development of THESSALONIKI		Strategic Axes				FINAL AGGREGATION
		Thessaloniki Competitive & Innovative	Thessaloniki Coherent	Thessaloniki Green & Resilient	Thessaloniki Efficient	
		SA.1	SA.2	SA.3	SA.4	
PILLAR 2	SUPPORTING ENTREPRENEURSHIP & ACCESS TO FINANCE					
T. P. 2.3	Promotion of the clustering and cooperation concept					
S. O. 2.3.1	Enhancing cooperation between companies and increasing SMEs’ potential to establish cluster cooperation models.	8	6	7	8	7.25
S. O. 2.3.2	Establishment of a support system to ensure cluster development stability at early stages	8	7	8	8	7.75
S. O. 2.3.3	Support for the existing clusters and entrepreneurs’ networks	8	7	8	8	7.75

Consistency of the Action Plan with the Integrated Sustainable Urban Development of THESSALONIKI		Strategic Axes				FINAL AGGREGATION
		Thessaloniki Competitive & Innovative	Thessaloniki Coherent	Thessaloniki Green & Resilient	Thessaloniki Efficient	
		SA.1	SA.2	SA.3	SA.4	
PILLAR 2	SUPPORTING ENTREPRENEURSHIP & ACCESS TO FINANCE					
T. P. 2.4	Supporting Entrepreneurship in key sectors					
S. O. 2.4.1	Tourism	9	8	9	7	8.25
S. O. 2.4.2	Agriculture	7	7	8	7	7.25
S. O. 2.4.3	Culture	9	9	9	7	8.50
S. O. 2.4.4	Energy	9	8	9	7	8.25

Consistency of the Action Plan with the Integrated Sustainable Urban Development of THESSALONIKI		Strategic Axes				FINAL AGGREGATION
		Thessaloniki Competitive & Innovative	Thessaloniki Coherent	Thessaloniki Green & Resilient	Thessaloniki Efficient	
		SA.1	SA.2	SA.3	SA.4	
PILLAR 2	SUPPORTING ENTREPRENEURSHIP & ACCESS TO FINANCE					
T. P. 2.5	Access to Finance					
S. O. 2.5.1	Development of an efficient financing system supporting innovative solutions	7	8	8	8	7.75
S. O. 2.5.2	Increasing SMEs’ access to information on the available forms and rules of financing for development processes and innovative projects.	8	7	8	8	7.75
S. O. 2.5.3	Coordination of activities undertaken by various institutions and increasing professional qualifications	7	7	8	8	7.50
S. O. 2.5.4	Long term financing for innovative projects implemented jointly by research and business stakeholders	6	7	8	8	7.25

## Website & Online References

### **A Manual on Establishing a Business Incubator**

<https://www.iku.edu.tr/sites/default/files/inline-files/A%20Manual%20on%20Establishing%20a%20Business%20Incubator.pdf>

### **THESS INTEC | ΚΕΝΤΡΟ ΚΑΙΝΟΤΟΜΙΑΣ ΚΑΙ ΤΕΧΝΟΛΟΓΙΑΣ ΘΕΣΣΑΛΟΝΙΚΗΣ**

<https://www.thessinnozone.gr/thessintec-2/>

Innovation, Incubation and Startup Policy for Students, Faculty and staff

[https://api.mic.gov.in/uploads/images/announcements/10431\\_download.pdf](https://api.mic.gov.in/uploads/images/announcements/10431_download.pdf)

### **RELOCAL: Resituating the Local in Cohesion and Territorial Development. Case Study Report The Establishment of the Alexander Innovation Zone in the Metropolitan Area of Thessaloniki Greece**

[https://relocal.eu/wp-content/uploads/2019/05/04\\_EL\\_Case3\\_Alexander-Innovation-Zone\\_UTH.pdf](https://relocal.eu/wp-content/uploads/2019/05/04_EL_Case3_Alexander-Innovation-Zone_UTH.pdf)

### **KPR Incubation Centre - Detailed Business Plan**

<https://kpriet.ac.in/asset/frontend/pdf/ciied/Brochure.pdf>

### **ACTION PLAN FOR INNOVATION AND ENTREPRENEURSHIP**

[https://ekstern.filer.uib.no/formidling/Handlingsplaner/FIA\\_Handlplan\\_innov\\_entrepreneur\\_2019-22\\_web\\_ENG.pdf](https://ekstern.filer.uib.no/formidling/Handlingsplaner/FIA_Handlplan_innov_entrepreneur_2019-22_web_ENG.pdf)

### **REGIONAL ACTION PLAN for the REGION OF CENTRAL MACEDONIA –GREECE In the context of PURE COSMOS Project**

[https://projects2014-](https://projects2014-2020.interregeurope.eu/fileadmin/user_upload/tx_tevprojects/library/file_1569232026.pdf)

[2020.interregeurope.eu/fileadmin/user\\_upload/tx\\_tevprojects/library/file\\_1569232026.pdf](https://projects2014-2020.interregeurope.eu/fileadmin/user_upload/tx_tevprojects/library/file_1569232026.pdf)

### **ACTION PLAN Brandenburg Cámara de Comercio de Sevilla**

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### **Incubators for innovation and technological transfer in the Mediterranean**

<https://www.enicbcmmed.eu/projects/intecmed>

### **BUSINESS INCUBATION STRATEGY DEVELOPMENT**

<http://cedr.gatech.edu/wp-content/uploads/2012/05/Incubator-Cut-Sheet.pdf>

**NATIONAL REPORT ON EXISTING STRUCTURES FOR SUPPORT OF ECOINNOVATION – BULGARIA**

[https://www.interreg-danube.eu/uploads/media/approved\\_project\\_output/0001/21/be8d912d95aa10af8925cdf7a9d45d72757241d0.pdf](https://www.interreg-danube.eu/uploads/media/approved_project_output/0001/21/be8d912d95aa10af8925cdf7a9d45d72757241d0.pdf)

**INCUBATOR BUSINESS PLAN CITY OF AUBURN, WA**

<https://www.ipzauburn.com/wp-content/uploads/2020/01/IPZ-Incubator-Business-Plan.pdf>

**TeRRitoria: Deliverable No. 2.3. Deliverable Title: Map of the state of the art of R&I ecosystem in 5 territorial areas**

[http://territoriaproject.eu/wp-content/uploads/2021/04/TeRRitoria\\_D2-3\\_Map\\_of\\_SoA\\_of\\_R\\_amp\\_I\\_ecosystem\\_in\\_5\\_TAs.pdf](http://territoriaproject.eu/wp-content/uploads/2021/04/TeRRitoria_D2-3_Map_of_SoA_of_R_amp_I_ecosystem_in_5_TAs.pdf)

**Regional Innovation Strategies in Central Macedonia**

[https://www.urenio.org/lithuania/files/Lithuania\\_launch\\_URENIO.pdf](https://www.urenio.org/lithuania/files/Lithuania_launch_URENIO.pdf)

**CLUSTER FY: ACTION PLAN REGION OF CENTRAL MACEDONIA 2020–2023**

[https://projects2014-2020.interregeurope.eu/fileadmin/user\\_upload/tx\\_tevprojects/library/file\\_1584954332.PDF](https://projects2014-2020.interregeurope.eu/fileadmin/user_upload/tx_tevprojects/library/file_1584954332.PDF)

**Integrated sustainable URBAN DEVELOPMENT STRATEGY in Thessaloniki**

<https://thma.gov.gr/?lang=en>



## APPENDIX 1: The concept of incubating

### What it is?

Business incubators are organizations geared toward speeding up the growth and success of startup and early-stage companies. They're often a good path to capital from angel investors, state governments, economic-development coalitions and other investors. Technology incubators, a variant of more traditional business incubation schemes, assist technology-oriented entrepreneurs in the startup and early development stage of their firms by providing workspace (on preferential and flexible terms), shared facilities and a range of business support services.

Incubators are structures that aim to promote the creation of businesses as well as ensuring their proper development during their first years of life. One of the main characteristics of the incubation process is that the project takes place inside a physical structure. But, with the spread of the pandemic Covid-19 incubators were forced to review their strategy due to the severe impact of this health crisis on the continuation of support programs. That's why adaptation support form was imposed because the Covid-19 pandemic has a severe impact on countries' economies.

In this context of high uncertainty, the future of start-ups has seen promise but also fragility. To better participate in the collective effort and face these obstacles, many incubators, in the all countries, have moved to hosting their programs, and exchanges with entrepreneurs are now done with tools such as Zoom, Go To Webinar, Facebook Live, etc. Now we learn to work together and at a distance this proves that incubation does not need to have a physical structure as we once thought.

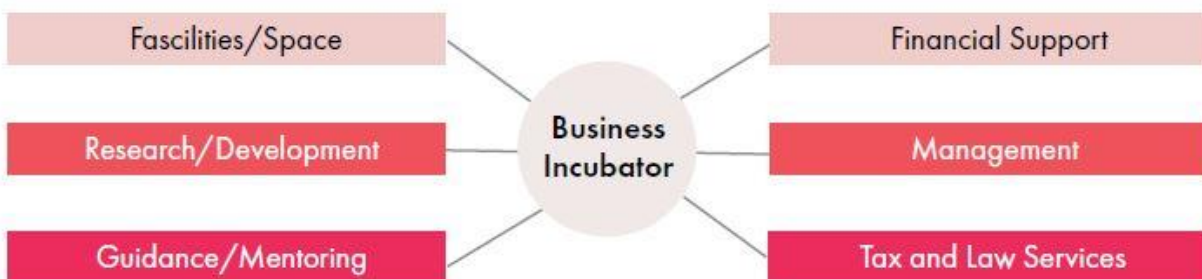
### What are the types of incubators?

The concept of an incubator is broad and this type of structure exists in different forms. There is, however, no consensus concerning existing incubator models. This is explained by a classification of incubators based on variables that differ from study to other.

- ⇒ Regional incubators (also called "innovation centers"),
- ⇒ University incubators,
- ⇒ Independent private incubators
- ⇒ Private business-owned incubators
- ⇒ Generalist incubators: Cover sectors which do not require the establishment of high-intensity research and development programs.
- ⇒ Technology incubators: Specialized in supporting companies whose business is largely based on research and innovation.

## How it works?

Incubators vary in their strategies. Some are located in an actual physical space meant to foster networking among entrepreneurs and their coaches. Others operate on a virtual basis. Incubators sometimes call themselves accelerators instead, often when they're geared toward jumpstarting businesses that are more developed. Many have potential capital to invest, or links to potential funding sources. There's access to services such as accountants and lawyers -- not to mention invaluable coaching and networking connections through the staff and other entrepreneurs at the incubator. Technology incubators represent today an increasing share of existing business incubation programmes. The specific target of technology incubators varies, depending on the single programmes. So, university incubators can either specifically target their own faculty and students or also reach out to people out of the university system who are nevertheless interested in the commercialisation of university research. Similarly, incubation programmes can have a narrow industry focus or can welcome firms from different industries, as long as they are technology-driven or exploit certain technologies.



The purpose of traditional business incubation schemes has been in the past as different as increasing firm survival rates; combating unemployment; contributing to the regeneration of distressed areas; encouraging ethnic-minority entrepreneurship, etc.

## The value chain

Creating an innovative start-up has a major societal impact, especially when it comes to promote scientific and / or technological heritage, in the service of the society well-being. It is the culmination of an iterative and collective strategy and process aimed at bringing together the constitutional elements of the company, capable of developing an economic model allowing it to fit into a market and produce value for money "in a sustainable way". The meeting between the idea and the project leader develops along a value chain, which allows the creation of innovative start-up, if all conditions for success are met. Because of its economic and social role, public policies put on special attention to these companies. Devices and incentives capable of industrializing this process are embedded in the process of creating innovative start-ups, which results in successive stages in the transformation of the project into industry. It remains an

uncertain trajectory, fraught with risk and challenges, which only a limited number of successful companies will experience. This trajectory can be summed up in 3 great moments in the innovative start-up life, namely: initiation, launch and development.

## Practice

Ideally, the area chosen should provide access for tenant firms to markets for goods and services, a degree of business expertise in the surrounding community, and financial resources of both debt and equity nature. These ideal conditions point to the importance for an incubator to develop strong linkages with the local business environment. Indeed, incubators are not required to develop and offer internally all services that new firms need in the start-up and early development phases. Drawing on the external network of existing business development service (BDS) organisations has at least 3 positive effects: i) it reduces overhead costs for the public sector; ii) it prevents the potential displacement of existing private BDS providers; iii) it fosters the development of a private market for BDS organisations.

Key operational issues to consider in the management of a technology incubator include, but are not limited to:

- **Incubator management and staff.** The expertise and commitment of incubator managers is critical to success. Good managers are essential in selecting suitable tenant firms, in providing business and managerial advice to these firms, and in creating links to investors and the wider business community. When incubators make a direct investment in the hosted firm, financially skilled managers are also important. The effectiveness of management can be strengthened through networks of business incubators in which industry best-practices are disseminated.
- **Progression and tenant firm.** As a rule, incubated firms should not be allowed to overstay the agreed period of incubation so as to enable other firms to benefit from the same support. In practice, many technology and non-technology incubators find it difficult to implement a stringent exit policy because young enterprises, after the typical one or two years of the programme, are hardly ready to be fully exposed to open market conditions. In this case, an option can be to require tenant firms to leave the premises of the incubator after the agreed deadline, but still let them benefit for a longer timeframe from the subsidised services of the incubator. Another option is to use increasing rental fees over time to promote the graduation of the incubated firms.
- **Rental and other sources of income.** The previous point suggests that incubators can partly raise their own sources of income by renting out space and facilities or by selling at market prices their support services to external firms. However, this raises a tension between the role of an incubator as a financially self-sustaining venture and as a pure public policy tool.
- **Linkages with higher education institutions.** In the case of technology incubators, links with universities and research organisations are obviously of key importance. Incubator management will have to get over existing institutional constraints to the involvement of academic staff in enterprise support programmes and to tackle through the right set of incentives the classic dilemma opposing basic to applied research and academic career to industry engagement.

- **Range of support services.** As mentioned, incubators do not need to provide all support services internally; this should rather depend on the availability of equivalent services elsewhere in the proximity of the incubator. Some of the most typical services that can be offered in a technology incubator are listed below:
- Training workshops aimed at specific business skills such as strategy planning, finance, intellectual property, marketing, raising debt and equity finance, etc.
  - Individual mentoring sessions with experienced businessmen
  - Finance clinics aimed at raising investment finance
  - Market research clinics and marketing advice
  - Technical consultancy on issues related to intellectual property, patenting, and licensing
  - Business plan evaluation done at different stages of the incubation programme
  - Scientific support through direct linkages with academic departments and faculty who do work relevant to the business
  - Provision of loans, grants or, in some instances, participation in the equity of tenant firms
  - Provision of a small salary, which can be offered to promising participants to sooth the uncertainty related to the move from wage employment to self-employment.

## Offered Services

In concrete terms, incubators offer to their clients a range of services:

- ⇒ Administrative services (photocopying, accounting, etc.),
- ⇒ Advice (coaching, tutoring, training),
- ⇒ Technical services (technical advice, access to expensive equipment),
- ⇒ Fundraising,
- ⇒ Networking.

In order to help businesses overcome particular challenges in certain contexts, incubators may offer other services, such as support for processing paperwork or access to venture capital funds or loans. The high cost of incubators relative to other business supports is generally justified as an “investment in success” as it generates higher survival and growth rates.

Also, Incubators have become eligible according to their location (rural, urban), purpose, objectives (creating employment, profit), configuration (residential, virtual), business model (cooperative, non-profit), main donors, promoters (public, corporate, academic), dominant activity, target clientele type (mixed, industrial, technological,) and obviously a combination of all these criteria.

## Pre-incubation

Pre-incubation usually involves two main activities: a pre-admission program and the selection of entrepreneurs. Pre-admission programs help potential entrepreneurs develop their business idea, business model and business plan so that they have clearly articulated ideas when they start the

incubation program. This phase also often includes an initial assessment of the business idea, entrepreneurship training and individual coaching.

Pre-incubation relates to the overall activities needed to support the potential entrepreneur in developing his business idea, business model and business plan, to boost the chances to arrive to an effective start-up creation. It usually implies a first assessment of the idea, training, and direct one- to-one assistance necessary to put the client in the conditions to write a fully complete business plan. University-affiliated incubators are usually pre-incubators. (Publications Office of the European Union 2010)

## APPENDIX 2: Start-Ups

A startup incubator is a collaborative program designed to help new startups succeed. Incubators help entrepreneurs solve some of the problems commonly associated with running a startup by providing workspace, seed funding, mentoring, and training (see list below for a more extensive list of common incubator services). The sole purpose of a startup incubator is to help entrepreneurs grow their business. Startup incubators are usually non-profit organizations, which are usually run by both public and private entities. Incubators are often associated with universities, and some business schools allow their students and alumni to take part in these programs. There are several other incubators, however, that are formed by governments, civic groups, startup organizations or successful entrepreneurs. While most of the media emphasis focuses on tech startups, incubators aren't just limited to one industry. In fact, the focus of incubators varies by region. There are also all-purpose incubators that consider all kinds of startups, regardless of industry.

### The Most Common Startup Incubator Services

Here is a list of the most common services provided by business incubators:

- Help with business basics
- Networking opportunities
- Marketing assistance
- High-speed Internet access
- Accounting/financial management assistance
- Access to bank loans, loan funds and guarantee programs
- Help with presentation skills
- Connections to higher education resources
- Connections to strategic partners
- Access to angel investors or venture capital
- Comprehensive business training programs
- Advisory boards and mentors
- Management team identification
- Help with business etiquette
- Technology commercialization assistance
- Help with regulatory compliance
- Intellectual property management and legal counsel

### Social Impact

Their societal effects are visible primarily as businesses performance. Relevant parameters that could be taken into consideration for enterprises located in incubators compared to enterprises in the region as a whole:

- Turn-over
- Growth in turn-over
- Growth in profits
- Growth in number of employees
- Start-up rate
- Survival rate

Business incubators can serve as a business enabling environment within the community by helping their incubatees overcome obstacles and become successful, as well as by positively influencing stakeholder groups and policy makers who can bring about appropriate changes to the business environment. The following are some of the ways incubators can establish an enabling environment that assists incubatees, as well as relevant stakeholder groups and policy makers.

## APPENDIX 3: Infrastructure

Infrastructure is another key element to build and sustain a successful technology incubator. The infrastructure of technology business incubator refers to all the facilities such as building, reception, clerical services, meeting rooms, conference rooms, car parking, laboratories, testing facilities, internet services, 24-hours access etc. All the possible opportunities, challenges and problems related to infrastructure development should be analyzed during the process of feasibility studies and detail recommendations should be specified in the business plan. Basically, the process of analyzing the infrastructure of business incubator must reflect a deep understanding of the environment in which it will operate as well as the opportunities and threats inherent to that environment. The building can be built in different types of premises such as new-developed building or restored building.

Infrastructural support provided by the pre-incubation will include Meeting / Discussion Room (s), Conference Room for use of clients, Co-Working Space with furniture, Individual working space with furniture, Cafeteria & other amenities, Space for makers' lab and analytical equipment, Fabrication of Lab Equipment, Internet, Networking and other communication facilities, Computers and Printers, IP support and uninterrupted power and water supply. These facilities can be augmented to meet specific client's needs. The lease package will be flexible to include or exclude certain facilities depending upon the requirement of the client.

The proposed pre-incubation is envisioned to be multi thematic and hence will require different types of workspaces to house IT equipment, fabrication space, analytical equipment etc. In the ear marked space of 9815 square feet the following infrastructure is planned to be created in a phased manner:

- Office for the Centre Head
- Meeting / Discussion Room (s)
- Conference Room for use of clients
- Co-Working Space with furniture
- Individual Working space with furniture
- Cafeteria & other amenities
- Space for makers lab and analytical equipment
- Fabrication Lab Equipment
- Internet, Networking and other communication facilities
- Computers and Printers
- IP support
- Uninterrupted supply of power and water

### Building

To establish technology business incubators, generally old buildings are used for restoration in order to avoid the huge expenses on building a new one. There are upsides and downsides in preferring to adjust



a building to the needs of the incubator or constructing a building. Renovating an existing building might be lower than the cost of a new building construction but it is not always the case. This process requires detailed engineering work to address the condition of structures, utilities, and waste disposal system. To construct a new building specifically for the technology business incubator might be more expensive, but it may have lower maintenance and operating costs. Here, it is important to underline that both choosing the location and the building should be based on the aims and objectives of incubators and targets, not according to the financial structure that will sustain its success. Important considerations for the selection of existing buildings, and for developing a new facility for the incubator, including the following:

- **Gross floor space** of about 2,000 m<sup>2</sup>, capable of future expansion: Experience suggests that this is the optimum floor space necessary for the start of a new incubator with about 20 to 25 companies, otherwise rental incomes would be inadequate. It may be possible to begin with less area, provided that prospect of more space is assured when needed.
- **Prompt transfer** of land or of a vacant building to the incubator entity: In order to minimize delays in start-up, it is crucial that legal title to the premises can be passed promptly, and without encumbrances, to the incubator sponsors.
- **Flexible layout:** It should be possible to easily and quickly change the layout to adapt to changing tenant needs and to expand the TBI in the future. The following should be avoided: many entrances, wide corridors, high ceilings and high energy costs for heating and cooling. The layout should provide technology-related features such as fast, reliable internet-connectivity, common office facilities, effluent disposal, and shared equipment – in the case of a biotech facility. The need for a warehouse, parking and laboratory facilities must be kept in mind.
- **Interaction among clients:** The layout has a direct impact on internal traffic to promote interaction between clients. People-flow has to be designed to give opportunities for clients to meet each other and to encounter the management team as often as possible.
- **Good security:** The interior layout should provide good security through a single entry point. A common office area should be adjacent to the entrance for easy access by both clients and their customers. Interior spaces should provide access to a central office area while ensuring confidentiality and security for individual businesses. The premises should also be environmentally safe and sustainable.
- **A good general condition of building:** A vacant building should require minimal capital investment for renovation, to ensure that resources dedicated to the TBI reach the clients and are not dissipated on the facility itself.

## ICT Infrastructure

The need for accessing the communication and computing facilities, such as telephone, internet and fax subscriptions, desktop and laptop systems, printers, etc. is common to all client companies. Information and telecommunication (IT) systems are a prerequisite to having adequate internet and telecom access, crucial to any businesses. One type of infrastructure that is required by an incubator is a secure IT network in which companies can store their data. Computers, phones, copy machines, fax machines are necessary to carry out professional work and make the most out of the IT system's set up that is why before

establishing the technology business incubator, developers should be secure about all of these facilities in the potential location.

## Laboratories

For the activities of technology business incubator such as product development and analyses laboratories are crucial, but it is not necessary for all the business incubators to have laboratories as this depends on the specific nature of the incubator. Laboratories might require additional investment if the building doesn't have them, in this case, to reduce the expenses it would be better to have working agreements with local universities and research centers to utilize their facilities as an alternative.

## Meeting Rooms

For internal meetings and appointments of incubatees, meeting rooms are the necessary elements of the infrastructure. Depending on the available space, the best option is to install smaller rooms instead of large meeting room to use the physical space more efficiently. The meeting rooms should have some essential pieces of equipment such as internet, computer network, whiteboard for notes, a microcomputer, data show projection system to be able to present ideas/products and support them visually.

## Reception

To leave a good impression on clients, incubatees have to control the access to the building because the main entrance has an essential importance. To be able to identify people entering and leaving the building and provide assistance when it is necessary, the main entrance should lead to the reception area. This area of the building should be equipped with clear indications of the different areas of the building, a bulletin board, data on its locations and the areas of activity of the resident companies and finally, basic information on the incubator and its partners, together with seating for clients.

## Facilities for Handicapped

The entire building should be designed with due consideration for handicapped people and to ensure that their access and comfort both inside and outside of the incubator is maintained. In addition, a parking area should be provided for the handicapped.

## APPENDIX 4: The risks of the pre-incubation endeavor

Despite all best efforts and strategic planning, business incubator planning and operations in developing countries have problems which constitute risks in its successful operation because of the variety of factors.

Feasibility process is often skipped, or not promptly implemented due to political constraints and lack of clarity on incubator strategy. Universities might see the role of the business incubator as a training tool and business support policy might see as a generator of high potential start-ups. These conflict does not help them to establish a successful technology business incubator that is why these approaches need to be reconciled, bearing in mind that a business incubation program that has a purely educational function is questionable and likely to produce poor value for money, through training and mentoring do play an important role in this policy. Initiators, Supporters, Planners / Developers and most important governmental institutions must know and understand the subject and the system of business incubation.

Also, there might be conflicts when one part of the business incubator developers involve more than others or vice versa. During all the process involvement of all the parties equally is essential to not lead to poorly designed and insufficiently funded business incubators. The incubators which are established in the campuses might give the wrong message about the contents of the programme is transmitted to potentially interested participants. It is essential to make it clear that training and teaching for tenant firms are of practical rather than academic nature by the management team of incubators.

The manager is often a state or university official with poor communication skills, absence of networking and business experience, who has low salary. The team requires intensive training, at home and abroad, with continuous access to books, journals, videos. To provide qualified services and reduce risks it might cause, the management team of the technology business incubator should be of high-quality and consist of professional with business expertise and past work experience in the private sector.

Location or building may be chosen for political or financial considerations. Many empty building spaces seem to be available, but with poor layouts and difficult acquisition process. In the process of choosing the location, the strategic goals/objectives and needs of the business incubator should be firstly considered. Minimal renovation, easy maintenance and low operational cost should be considered after.

### Legal aspects

The legal part is one of the essential parts which should be considered during the establishment of the business incubator. Entrepreneurship, the business incubator, technology business incubators, technoparks and others are the new topics in business area so the law applicable to them also considerably new and be adaptable in the last few years according to the entrepreneurship ecosystem of the country. The countries have adopted different law according to their ecosystem, but the main idea behind of it is almost the same in every country. The aims to reach with all the adapted laws are:

- Develop entrepreneur friendly regulatory framework
- Support Innovative entrepreneurship
- Develop and apply sustainable support system for priority thematic areas and general areas such as Women's entrepreneurship, young entrepreneurs, Eco entrepreneurship, Social entrepreneurship and Global entrepreneurship and ensure execution
- Develop the culture of entrepreneurship
- Generalize entrepreneurship training at the level of formal and mass education basis and develop
- consultancy system entrepreneurs oriented
- Facilitate entrepreneurs access to the finance
- Eliminate the barriers and bureaucracy
- Access to microcredits and seed capital
- Development of Economy through entrepreneurship
- Entrepreneurship training Technology Transfer Network development services

## APPENDIX 5: Pre-incubation Strategy and Services

### Vision

Accelerate economic growth along the cross-border area through the stimulation of entrepreneurship and active participation and cooperation of key actors, based on exploitation of competitive advantages and indigenous resources. To create an ambience to help young entrepreneurs with potential to initiate and grow in business that involves innovation, sustainable and socially relevant technologies.

We help emerging companies gain access to mentors, training, shared space, professional assistance, capital, and other services that will move them onto the fast track to success. By fulfilling our mission, we contribute to job creation and enhanced economic health in the region.

### Mission

- Provide Business Development Assistance, Networking and relationship support
- Inculcate sound entrepreneurial and start up culture among students
- Create appropriate Infrastructure for startups
- Mentoring, counseling and training in the domains of research, product development, technology, finance and marketing.

### Values

#### INTEGRITY

- ⇒ Consider people equally without prejudice or favour.
- ⇒ Act professionally with honesty, consistency and impartiality.
- ⇒ Take responsibility for situations, showing leadership and courage.
- ⇒ Place the public interest over personal interest.

#### TRUST

- ⇒ Appreciate difference and welcome learning from others.
- ⇒ Build relationships based on mutual respect.
- ⇒ Uphold the law, institutions of government and democratic principles.
- ⇒ Communicate intentions clearly and invite teamwork and collaboration.
- ⇒ Provide non-partisan advice.

#### SERVICE

- ⇒ Provide services fairly with a focus on citizens and entrepreneurs needs.
- ⇒ Provide flexible, innovative and reliable in service delivery.
- ⇒ Engage with the not-for-profit and business sectors to develop and implement service solutions.
- ⇒ Focus on quality while maximising service delivery.

#### ACCOUNTABILITY

- ⇒ Recruit and promote staff on merit.

- ⇒ Take responsibility for decisions and actions.
- ⇒ Provide transparency to enable public scrutiny.
- ⇒ Fiscally responsible and focus on efficient, effective and prudent use of resources.

## Pre-Incubator Services & Programs

Incubator services and programs are meant to improve the probability of the successful development and growth of the client's business venture. Services offered by the pre-incubation can be broadly listed as below:

- Business Development Assistance
- Networking and relationship support
- Curricular and co-curricular engagements and educational programs
- Infrastructural support

**Business Development Assistance** is the direct support provided to the incubates from the time of enrollment till they separate after successfully establishing the business. The pre-incubation will provide or facilitate access to resources needed for starting the venture, evaluating the client's ideas, plans, resources and expertise required and developing a work plan will be an integral part of the pre-incubation's responsibility. This will be done periodically and the centre will advise the client on any change of plan.

**Networking** and relationship support is the active involvement of the pre-incubation in developing connections to resources that the clients might not have access. Mentoring through the developed pool of experts who have the requisite experience and expertise in the client's area will also be done by the centre. The centre will ensure feedback mechanisms to ensure that the mentors are adding value to the client.

The pre-incubation should develop a **team of quality professionals** having technical and business expertise to support client businesses. The pre-incubation shall ensure that the experts are properly screened and selected. Such team of professionals comprising technologists, financial and marketing experts shall be integrated into an Advisory board. The pre-incubation will also develop capital and financing network of banks, venture capitalists, and corporate equity investors.

**Curricular and co-curricular engagements** and educational programs will be facilitated by the pre-incubation. The strength of pre-incubation will be leveraged and access to academic experts will be provided. The clients will have full access to all the knowledge sharing platforms of the institution such as conferences, seminars and webinars and industry internships. Educational programs will also include the institute hosted, on site seminars of interest to the client, start-ups and entrepreneurship camps.

The pre-incubation will host an **annual seminar** for experts and clients to update them about the challenges and rewards of the incubator. This seminar will be a networking platform for the clients,

potential incubates and domain experts. A data centre and Library will be developed and clients will have full access.

## Marketing Strategies

- Press releases in local dailies highlighting the incubator and its services and benefits.
- Informational webinars, sessions, Ideathons and workshops
- Advertising about the incubator space in appropriate forums
- Meetings with relevant local organizations and associations
- Personal communication with potential clients and small entrepreneurs
- Newsletter on the progress of the incubator
- Attractive, informative Web page
- Participating in Trade shows, Exhibitions and meets

## Financial Sustainability

The pre-incubation will be lean and focus on delivering value to clients and stakeholders and the community. The intent of the sustainability model of the proposed pre-incubation is to create long-term sustainable operation that creates wealth and value for the local economy.

The sustainability model has three key stakeholders i) innovators ii) the facility and iii) the investors. An incubation agreement would be drawn up between the stakeholders which include the following:

- Income from client enterprises towards payment for facilities and services –The pre-incubation will charge the incubatee companies for infrastructure and services.
- Returns through equity – sharing client's success by rising value of equity or royalty agreements on gross sales. An agreed portion of company shares will be in favour of pre-incubation. Likewise an agreed portion of equity will be in favour of the mentor. It will be made mandatory for the start-ups to select one faculty member from the institute who shall act as a mentor and guide the company on product development. However, they can also opt for an industry mentor from the centre's database.
- Consultancy services through in-house accelerator
- Revenue from educational programmes such as Seminars, Workshops, Conferences etc.

## Three types of revenue models.

The first method is rental methods where the business incubators finance itself with revenue from rental income from tenants and also other services provided by incubators such as consulting and other services. In this method, mostly public grants are provided to the business incubators but in some situations, funds regarding the rent also can be given to directly to the entrepreneurs /clients in the incubator to support their efforts on developing a competitive advantage within the market. This model can be beneficial

because of the reason that making a progressively growing contribution towards the financial sustainability of the incubator, financially being self-sufficient, given free-buildings, having minimum economic of scale.

The second model is that success sharing with incubated business. Basically, Incubator has the potential to generate revenues from sharing in client success by small equity stake as a condition of incubation (up to 5%), own funds invested, royalty arrangements on gross sales for a period – 2% to 5%, brokerage fees for capital raised or gross sales. This method, however, requires substantial initial investment and a great deal of patience, as it may take up to 10 years to generate revenues.

The third method is ongoing government or donor funding, such as the University, government at the federal / state / local levels, of private foundation or industry support. In this method, being integrated with government policies, having long-term reliable funding and being self-sufficient with the government as the market are beneficial for business incubator not only for financing but also for sustainability.

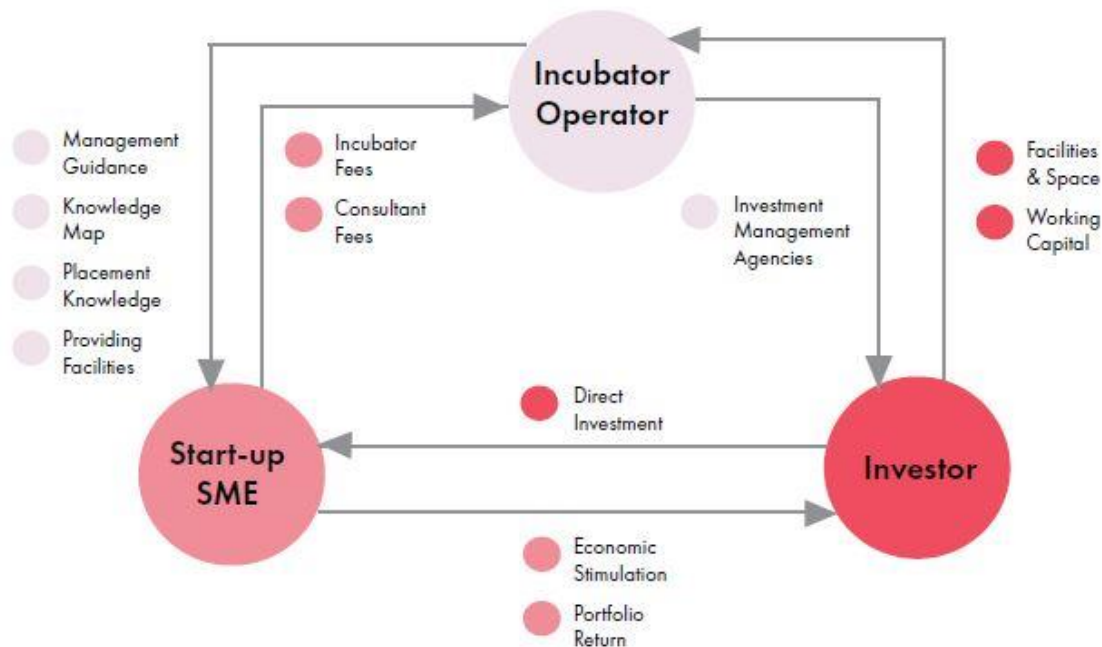
Other sources of revenue:

- Consultancy Assignments
- Funding Advisory/Funds Facilitation Fee
- Marketing Facilitation Fee
- Capacity Building& Training
- Handholding and mentoring
- Events (Seminars, conferences, exhibitions etc.)



## Operational Structure

The Incubator operating system is basically the model with a focus on the components of the process and the goals and strategies. A basic model can be described in two dimensions with three basic elements: the incubator, enterprise, and the investor. The relationship between those elements is described in the chart below.



The operators of the business incubators receive financial support from investors into the business incubators. Business incubator operation provides the necessary services to start-ups and enterprises and gets some fees based on facilities. The enterprises and start-ups get investment from the investor. In the end, thanks to the successful combination of the operating process, the start-up, and small enterprises are the companies that can contribute to regional or national economic development and bring innovation to the community. To be successful and sustainable technology business incubator, incubator developers should pay special attention to the operating framework such as admission and exit criteria, client monitoring and role of the management team. Admission of enterprise which shows a great deal of growth and supporting them with highly skilled management team will increase the growth, value, and sustainability of operating framework in the technology business incubator.