

EXECUTIVE SUMMARY

COMMON NEEDS ANALYSIS REPORT ON THE CURRENT INNOVATION POTENTIAL AND TECHNOLOGICAL DEVELOPMENT OF SMES IN THE TARGET CROSS- BORDER AREA OF BULGARIA AND MACEDONIA

Activity 3 – Research and needs analysis of the current innovation environment in the target cross-border region



Innofoster

Improving competitiveness of SMEs of the
CB region by fostering and promotion of
non-technological innovations

Association Business Information and Consulting Center - Sandanski

Sandanski, Bulgaria

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1. General summary and conclusions

1.1 General summary

The present Common report presented the results on the conducted detailed analysis of the existing innovation environment in the region of Blagoevgrad, Bulgaria and the Southeast Planning Region of the Republic of Macedonia. The report was carried out in the frame of project “Improving competitiveness of SMEs of the CB region by fostering and promotion of non-technological innovations (INNOFOSTER)”. The project is a joint initiative of Association Business Information and Consulting Center – Sandanski, Bulgaria in partnership with Centre for Development and Promotion “Promo Idea” – Strumitsa, Macedonia. The funding for the project and the present research was provided under the First call for proposals of the INTERREG IPA CBC Bulgaria – the former Yugoslav Republic of Macedonia Programme (CCI Number: 2014TC16I5CB006).

The main objective of the research was to define the main characteristics of the local environment in the region of Blagoevgrad and the innovation needs and key issues of small enterprises operating the region. The research activities were carried out according to a pre-developed and approved methodology that envisaged the following stages:

- Desk research on the current economic and innovation environment in target cross-border region of Bulgaria and Macedonia (i.e. existing policies, stakeholders, support and funding instruments).
- Quantitative research through an online survey of SMEs representatives to identify the main factors that favor or hinder the development of innovations (non-technological).
- Qualitative research through field interviews with SMEs managers, business consultants, policy makers, R&D and academia to provide a more detailed analysis of the needs of the target group, related to innovation support and training.

Innovation has been recognized by the European Community as key driver of economic growth. The European Union’s growth strategy Europe 2020 where the EU is seen to **become a smart, sustainable and inclusive economy** is built upon five ambitious objectives - on employment, **innovation**, education, social inclusion and climate/energy - to be reached by 2020. These three mutually reinforcing priorities should help the EU and the Member States deliver high levels of employment, productivity and social cohesion.

Innovation, according to the definition provided by the Oslo Manual (OECD/Eurostat, 2005), consists in “the implementation of a new or significantly improved product, a new process, a new marketing method or a new organisational method in business practices, workplace organisation or external relations. Innovation therefore goes beyond R&D and covers a broad range of activities that help firms become more productive and competitive”.

Innovation has both technological and non-technological aspects. Non-technological innovations are comprised of: (1) Marketing innovations and (2) Organisational innovations. Technological innovations are usually associated with product and process innovation. The main starting point for separating between the two types is of course the different role of technology. While technological innovations are typically characterized by developing or using new technologies, i.e. new technical knowledge and technical inventions, non-technological innovation need not necessarily involve a change in technology, or the adoption of new technology, but may solely rest on the use of new business methods, new organizational concepts or other immaterial ways of changing business activities. The commercialization of a new product often requires development of non-technological innovations. That includes sometimes new marketing methods, but also new production techniques which increase productivity only if supported by organizational changes. Marketing and organizational innovations are important activities of companies, particularly in services.

1.2 Findings and conclusions

The economy of the cross-border region of Bulgaria and Macedonia, which represents the target area of the present research and needs analysis has suffered greatly from the increasing regional disproportions in terms of economic, social and educational development. As a result, the cross-border economy has specialized in sectors and activities which require comparatively low qualification and technologies, which exports mainly low added value products. The majority of existing SMEs have low level of technological development and limited potential for applied research. SMEs do not have knowledge and lack experience with introducing of innovations, which causes potential loss of markets. SMEs lack also finances for education of their experts to introduce innovations. Another major obstacle represents the lack of understanding of factors that drive and hinder non-tech innovations in the CB region (e.g. ability of SMEs to adapt to different client demands; cost factors; R&D incentives; property rights; legislation, etc.).

Given the importance of the development of the regional economy and the need to reduce imbalances, **there is a need to increase the productivity of local SMEs by facing the contemporary challenges related to the specific mindset of local entrepreneurs (e.g. lack of vision, resilience to change, scepticism to innovation, etc.) by providing them with various solutions related to raising their awareness and improving their skills for introducing and developing innovations**

The quantitative part of the research included 64 (sixty-four) representatives of small and medium sized enterprises of the region of Blagoevgrad (Bulgaria) and the Southeast Planning Region (Macedonia) that were surveyed through an online questionnaire. The qualitative interviews were implemented with 10 (ten) SME managers, business consultants, policy makers and academia representatives which were interviewed face-to-face or online via Skype. The majority of participants in both research phases were representatives of **small and medium sized companies** that operated in the most predominant industry sectors of the cross-border region such as **tourism, services, retail trade and light industry**. The qualitative phase of the research included mostly business advisors in the age between **35 and 54 years, predominantly men – managers or CEOs** at consulting companies

that have sufficient, long-term experience in providing consulting services to SMEs on various topics, including innovation.

Local environment

According to the results of the research it can be concluded that the business environment of the cross-border region of Bulgaria and Macedonia is rather favorable and provides good conditions for business start-up and development. This has resulted from the strategic geographic location of the region (in a border region of three countries, two of which being EU member states), as well as the favorable climate conditions the common cross-border region has considerable potential for development of different business initiatives. In addition, the proximity (both in terms of logistics and distance) to the capital cities of Sofia (Bulgaria) and Skopje (Macedonia) provides good opportunities for boosting the CB economy. The level of ICT development and broadband infrastructure, especially in the Bulgarian part of the region is sufficient as the development of digital and wireless services is satisfactory. The Utilities (energy, heating, water and sewage) and transport infrastructure are also in a good condition and provide a favourable environment for doing business. However, this is mostly relevant for the Bulgarian part of the cross-border region as the transport infrastructure in Macedonia has remained in relatively poor state over the past 10 years. There is still plenty of arable (free) land for agricultural activities, mostly in the Bulgarian part. Office rents however are still quite high and there are no incubator services available (or are very poor developed). There are many organizations and companies in both target regions that provide different type of advisory services including services related to business consulting, training, financial and accounting consulting, project development and management, etc.

However, as being part of the Southwest Planning Region, Blagoevgrad District has suffered greatly from the regional imbalances which have accumulated even further in the past several years. The concentration of economic, human and financial capital in the city of Sofia has increased the economic pressure on the region. **The town of Blagoevgrad, remained an “island” of economic development in comparison to other smaller communities in the region.** In addition, smaller communities such as Sandanski, Bansko, Razlog and Gotse Delchev have developed rather well due the utilization of their tourism potential. Other municipalities such as Petrich and Simitli have developed as a result of their location – near the border or close to the main transport infrastructure (i.e. E-79 main road). The presence of two renowned universities in the region – the Southwest University and the American University which provide quality education to more than 30000 students creates additional economic benefits for the region. Population tendencies in the region are also positive.

Southeast Planning Region of Macedonia has the potential for development of SMEs and there are sufficient educational institutions with appropriate curricula in the field of business. From the other side, entrepreneurs lack sufficient capacities and finances to manage the business. **The main factors that hinder the development of Macedonian SMEs in the target region were external factors such as price changes, economic environment and shortage of labour force with appropriate qualifications and skills.**

The economy of the cross-border region has specialized in sectors and activities which required comparatively low qualification and technologies (e.g. furniture production, textile industry, food processing, etc.) and exports mainly low added value products. With a few exceptions, the majority of SMEs in the region currently have low level of technological development and limited potential for applied research. The backbone of the regional economy is represented by micro enterprises (93.3%) which are predominantly family owned enterprises with not less than 10 employees.

Awareness and perception of innovation

According to the results that were observed in both phases of the research enterprises in the cross-border region are well aware of the term “innovation” and the specifics that it implies. The majority of local companies firmly stated that they considered their company as an innovative one. However, very few companies of the region have a specific department or a person that coordinates innovation processes / projects of the company.

Every 9 in 10 companies of the cross-border region of Bulgaria and Macedonia acknowledges that their company needs innovation to grow and achieve sustainability. However, in terms of their confidence in developing and introducing innovation at their companies, the majority of local businesses state that they would consider this at a later stage of their company’s lifecycle due to the fact that they have more urgent matters to deal with at present (e.g. survival of the company, financial matters, etc.).

Still, the majority of local businesses will be interested in innovation only in particular cases (e.g. based on the demand of their business partners or clients). A rather surprising fact, that came out as a result of the research was the fact that almost a quarter of all businesses in the region declared that innovations were at the core of their company’s strategy. The same number of companies answered that they were interested in innovation but lack either the right information or the knowledge to implement it. None of the representatives of SMEs that have participated in the research has answered that their company was not interested in innovation.

We observed a difference of the opinion of SMEs and other stakeholders (e.g. business consultants, business experts and representatives of academic institutions) in terms of their attitude and perception of innovation. According to experts of business support organizations, in general local companies were aware of the term of innovation. They were interested in innovation as they would relate it mostly to the available funding of the European Structural Funds in support of SMEs and innovation. This was fully applicable to SMEs of the Bulgarian part of the cross-border region. According to the practical experience of business consultants and experts of business support organizations the majority of companies would state that they are aware of the true meaning of innovation, however the reality shows that very few are actually aware of its true meaning.

The majority of SME managers and representatives are confident in their knowledge and awareness of innovation and confirm that they were aware of the benefits of innovations – both technological and non-technological.

Business consultants and SME managers agree that the local environment in the region of Blagoevgrad and Southeast Macedonia is not favorable to innovation nor does it support or promote creativity which lies at the core of the innovation processes. Many local companies would prefer to find ways to avoid laws and taxation and not to seek methods and develop tools to improve their competitiveness and sustainability. In this regards, there should be more information and awareness raising campaigns among SMEs in order to improve their knowledge and skills in modern business practices and tools to enable and unlock their entrepreneurial potential.

When asked of their opinion on the main barriers that prevent their companies of innovating, most SMEs of the region will highlight “Financial deficiencies”, “Lack of initiatives that foster cooperation / networking among the participants in the innovation process”, as well as the “Lack of access to qualified personnel” as being major obstacles for their innovation projects or plans.

Additional barriers towards the improvement of the innovation potential of businesses in the cross-border region are related to the specifics of the local business environment (i.e. specialized in low-tech activities, as well as the low productivity and creativity of labor force). Those specifics were determined by the constant shortage of finances to invest in business development, as well as the constant deficit of qualified (and motivated) staff. Another important obstacle is the specific mindset of local entrepreneurs who are not willing to invest in improving the quality of human resources. Still, the majority of local businesses lack any strategic planning skills as most of them rely on day-to-day management and strive to ensure the survival of their company. This include the complete lack of innovation strategy, not to mention an innovation department, nor an employee to oversee the innovation processes.

Support and training needs

When analysing data of the research we observed a rather surprising tendency that still the majority of SMEs of the cross-border region of both countries were **not aware of any firms / institutions of their region that provided support and specialized consulting targeted to innovation in small businesses.** The results of the research clearly show that there is a deficiency in both available organizations and tools that were specifically tailored to the needs of the companies when innovation is concerned. Furthermore, it is clear that non-governmental, business-support and branch association should really focus on making their services more popular and accessible for SMEs of the region.

The majority of SMEs of the cross-border region have never received any support, nor have participated in any trainings or initiatives related to the improvement of their innovative potential. In addition, many companies remain indifferent to innovation as they **have never searched were interested** in obtaining information or advice related specifically to matters of business innovation.

From the companies that have received such support / advice / consultation the majority indicated that they have utilized the services of business support organizations or a private consulting company. A good few of companies of the Bulgarian part of the cross-border region have applied for

funding of European Structural Funds or other funding programme to support their innovative projects and endeavours.

A positive trend of increased interest towards receiving support and advice in terms of innovations is evident. The level of interest varies according to the different economic sectors (e.g. companies of the service sector are the least interested in innovations) based on the established traditions in the field of entrepreneurship. **Given the structure of the CB economy and the fact that almost 94% of all companies are micro enterprises their interest was focused mainly on the introduction of organizational and some basic and very common marketing innovations (e.g. online commerce, social media marketing, branding, etc.).**

Many local companies are interested in receiving more and competent information on the available funding instruments that could boost their competitiveness by modernizing their equipment, enhancing their organizational structure and boosting their marketing performance. They have also expressed their lack of trust to business consultants as they had negative experience with some consultants over the past programming period. In any case, they have also stated the fact that there are trustworthy business support organizations that they could rely on in case some information or advice is needed.

Similar to the situation with the number of companies that received support in business innovation matters, the majority of businesses of the region of Blagoevgrad and the Southeast Planning Region of Macedonia are not aware of any existing trainings or courses in innovation planning and development for small and medium sized enterprises. According to experts in the area of business consulting and provision of specialized trainings, the deficiency of such training programmes has resulted simply by the lack of demand. For example, as stated above the majority of existing SMEs have low level of technological development and limited potential for applied research. Their interest to innovation was low and therefore, the necessity of such trainings has not yet arisen. Interviewees shared that there were various courses that have been provided from different training centres but not specifically regarding innovation.

SMEs of the target cross-border region are not motivated and remain indifferent to participate in trainings and activities related to the improvement of their knowledge and skills in certain topic. Most SME owners in Bulgaria would seek advice and assistance through personal connections and contacts such as other family members, friends, relatives, business partners and even employees rather than a professional consultation on a certain topic. Nevertheless, this rather negative trend has been slowly changing over the past several years with the emergence of younger managers and changing of the ownership in many family companies of the region to younger generations. In this regards, business owners and managers of the younger generations seemed more opened to external assistance and support.

Existing organizations and financial tools

Unfortunately, based on the results of the research there were no existing support structures at regional level that dealt solely with innovation promotion in companies of both Blagoevgrad District and the Southeast Planning region in Macedonia. In the Bulgarian part of the region, there are several working non-profit organizations that are actively supporting local SMEs such as the Business Incubator in Gotse Delchev, the Chamber of Commerce and Industry in Blagoevgrad, the Association of Entrepreneurs of the Gotse Delchev Region, the Business Information and Consulting Center in Sandanski, etc. In addition, in Blagoevgrad region there has been an office of Enterprise Europe Network – one of the biggest information and consulting networks of the European Commission in support of the internationalization and innovation potential of SMEs in Europe.

In the Macedonian part there are the Business Centre for support and consulting services for SMEs in the South-East planning region is established within the Centre for development of the South-East planning region and the Regional Chamber in Strumica which provides services for its members from the municipalities of Strumica, Radovich, Vasilevo, Bosilovo, Novo Selo, and Konce. Foundation for Development of SMEs - Regional Center Strumica is part of the network of five regional business information and advisory centers for SMEs that were established in 1999 with financial and technical assistance of the EU.

On national level in both countries, there are various support mechanism and funding instruments that are available to SMEs to expand their innovation potential and to support their innovative projects. However Bulgarian SMEs have better access (however not sufficient nor tailored to their needs) than their colleagues in Macedonia. Such initiative which were highlighted by the interviewed experts included:

- **Operational Programme “Innovation and Competitiveness”** in Bulgaria – the biggest financial instrument that support innovative projects of SMEs;
- **Operational Programme “Science and Education for Sustainable Growth”** in Bulgaria – the biggest financial mechanism in support of research and development activities in Bulgaria for the period 2014 – 2020;
- **National Innovation Fund** in Bulgaria – a financial instrument that supports innovative projects of SMEs and fosters collaborations between science and business.
- **National Research Fund** in Bulgaria– a budgetary funded financial instrument in support of research activities of Bulgarian science institutions and individual researchers.
- **Fund for Innovation and Technological Development (FITD) in Macedonia** – a bank instrument provided from the World Bank to encourage and support innovation activities in micro, small and medium-size enterprises (MSMEs) in order to achieve more dynamic technological development based on knowledge transfer, development research and on innovations that contribute to job creation, and to economic growth and development, while simultaneously improving the business environment for the development of competitive capabilities of companies.

Currently there are no existing cooperation initiatives between businesses, academia and R&D community in Blagoevgrad region and Southeast Planning Region of Macedonia. There were a few cross-border cooperation projects that included different stakeholders (e.g. business and academia) which did not produce any significant results, nor were efficient in establishing real and long lasting relationships between businesses and academia.

Skills for innovation

One of the main objectives of the research was **to understand what skills and competences are preferred by SMEs representatives when it comes to innovation management and development.** In general SMEs of **Blagoevgrad region and Southeast Planning Region of Macedonia** are aware of the skills that were needed to develop and manage innovation process in a company. They highlighted that a person should have **management and organizational skills** if he or she is to successfully develop / manage innovation processes in an SMEs. An entrepreneur that has the right leadership or organizational skills should therefore support and mentor instead of giving orders. Entrepreneurs should finally realize the need of investing in their workforce, as well as to promote creative and non-standard thinking and above all team work.

Other important skills that were identified included: **“Ability to take risks”, “Identifying business related strengths and weaknesses”, and “Market knowledge”.**

An interesting fact that came out of the research was related to the increased interest of local businesses and business consultants that work with SMEs towards soft skills. According to the participants in the different phases of the research soft skills (such as critical thinking, identifying strong and weak features of a person/business, active listening, networking, leadership, etc.) were considered as more important than purely technical (hard) skills (e.g. R&D skills or legal, tax or financial skills) when innovation was concerned.

In terms of promoting a pro-innovation environment in their companies, business owners thought that creativity should be a skill that each entrepreneur should poses. Additionally, one should have an open mindset to new trends and innovations in order to motivate / inspire his/her workers to be creative and aid in establishing a better company.

Learning tools

When analyzing the most preferred learning tools to SMEs for improving their skills in innovation and management of innovation processes within their companies, business representatives of the both countries preferred training methods that included more case studies, individual coaching/mentoring, etc. A large number of enterprises recognized e-learning methods as a suitable form for improving their skills on a certain topics. This new tendency was related to the constant lack of time and constant engagement of SME managers in the working processes, especially in micro enterprises. Nevertheless, many local businesses still seem to be unaware and non-experienced in

participating in online trainings and other types of self-learning initiatives (e.g. webinars, e-learning platforms, etc.).

Another important tendency is decreasing interest of business owners towards the traditional face-to-face workshops and other traditional learning methods (e.g. formal courses, hard copy textbooks and printed materials).

Innovation training, as well as training contents should be teeming with case studies, success stories, discussions and experience sharing between participants. As the current level of awareness of businesses on the true benefits of innovation has been rather low it is important that raising the awareness on the topic should begin on a simpler level. It is important to teach business owners on the basics and benefits of innovation in order to make them more open minded towards novel technologies and innovative approaches (e.g. organizational and marketing) by showing them a lot of success stories, good practices, as well as by motivating them to share experiences and real stories.

Therefore, online training, if applied as a tool should include content that has more educational and awareness raising character (e.g. brief content, interactive, simple as possible with a lot of success stories, case studies, etc.).

However, attention should be paid to the technical aspects of organizing such events as there were many technical difficulties that in many cases would demotivate participants to follow such trainings. Interviewed consultants thought that fully online learning was not suitable and popular yet as local SME managers and staff were not experienced in such kind of learning and were never regarding it as a sound and trustworthy method of training.

The more detailed, technical and complicated aspects of innovation should be taught at another level through mentoring, coaching, formal classes, etc. Webinars were also identified as appropriate by business consultants. In addition, they were gaining popularity mostly as a basic awareness raising tool that could attract the interest of SME representatives and staff to a certain “hot” topic.

Other suggested training methods that could be provided and attractive to SMEs included personalized staff trainings combined with team building, coaching and benchmarking. Coaching was considered as a very appropriate training method which was very underdeveloped and/or was completely missing in the cross-border region.

1.3 Recommendations

The recommendation that came out of the participants at the research are applicable to the target cross-border region in both Bulgaria and Macedonia and could be summarized as follows:

- **Increase the number of awareness raising campaigns in order to “infest” local companies with the idea that innovations are modern, efficient and bring added value.** Local enterprises need to comprehend the need for becoming innovative this could start a chain reaction which will be beneficial for the entire local community. For example, an innovative company will constantly: invest in developing new products and services; foster the constant development of its human resources; promote creativity of its workers; seek for highly qualified, creative and motivated staff; provide constant social benefits for its workers and the community in

general; create a circle / chain of companies that will benefit from cooperation; attract R&D and research; etc.

- **Promote local innovation champions instead of keeping them in the dark. Innovative companies of the region should be visible and serve as a role model for other companies**, as well as a prove that innovation is possible in smaller regions and not only in bigger cities.
- **Organize more trainings and cooperation events that will broaden knowledge and skills of local SMEs in the field of new business practices and business development.** They need to learn from successful companies. They needed new practices and proven methods that were applied by their partners or competitors.
- **Introduce and develop training activities for raising the awareness of SMEs on various topics** (including innovation) based on innovative and web-based methods (e.g. online learning, mentoring and coaching, benchmarking, shadowing, webinars, etc.);
- **Promote cooperation among SMEs of the region** (including cross-border partnerships). Cooperation networks for SMEs. Creating networks of cooperation will help SMEs through the provision of key market information and market research and analysis to find new markets and will support the implementation of ideas for new products and services; activities for the creation and development of new technologies, leading to competitive advantage and increase value to local products and services.
- **Organize local trade exhibitions / fairs** to promote the regional industry / economic potential.
- **Improve the skills and competences of human resources** by investing in the constant training and enhancing the qualification of existing personnel at SMEs in order to develop and implement innovations and introduce “best practices” in different industrial sectors and economic spheres of the regional economy;
- **Introduce various incentives and instruments on regional level by regional and local authorities in order to foster the development of innovations** such as tax incentives for innovative companies, innovation vouchers, low-interest loans, entrepreneurship and innovation business contest, etc.
- **Introduce targeted investments** aimed to support and promote local sustainable entrepreneurship and innovations in economy sectors that are well developed in the region, e.g.: wine, food, beverages and tobacco, tailoring and textile industries, especially machinery for the food industry.
- **Enhance work of business organizations in order to find and promote innovative projects and innovation champions** of the region and show them to the rest of the business community.
- **Develop one-stop-shop services for innovation management.** Provide more transparency and increase the popularity, facilitate the access to the existing service tailored to individual needs of SMEs (e.g. technological audit that identifies the specific technological needs and assess the technological portfolio of the company; provide more information on **available innovation support organizations, structures and projects in the region**; connect businesses with

academia and R&D institutions, promote R&D; consult SMEs in subjects related to innovation, etc.).

- **Foster and support education in entrepreneurship and engineering majors.** Education curricula and priorities should be fully coherent to the needs of the businesses in each community. In this regards, SMEs managers should go more frequently to schools where they should present their business and educate younger generations in order to spark their interest towards entrepreneurship. In addition, SMEs should consult education and training providers on what should be the content of the training curricula.
- **Invest and develop project that will aid in bridging the gap between academia, education and businesses - the three pillars of the innovation dynamo at a local level.** An important step is to provide support for the establishment of intermediary units between research organizations and business in the form of technology transfer offices, innovation and enterprise centers, etc.