



PGI05786 - IMPROVE

Improving Structural Funds for better delivery of R&D&i policies

Regional State of the Art Report

Gabrovo, Bulgaria

20.05.2020







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1. Introduction

The State of the Art is the first activity to be performed by the IMPROVE project's partners within the Exchange of Experiences work package. The objective of the State-of-the-Art report is to clarify the current situation in terms of management and implementation of Structural Funds, with a special focus on the policy instruments selected by each partner.

As a part of IMPROVE Project, Municipality of Gabrovo (P4), will work on development of a new funding mechanism recruiting new investment funds and private capital, based on public-private partnerships (PPPs) for better efficient implementation of the Municipal plan for development of Gabrovo municipality 2014-2020 (MDP), Strategic goal 1: Stimulation of economic growth and enhancement of competitiveness of local business in Gabrovo municipality.

2. Regional profile

2.1. Geography¹

Gabrovo municipality is situated in the North Central region of Republic of Bulgaria on a territory of 555.579 km² with population of 67 691 people. The municipality consists of 133 villages and the city of Gabrovo, located along the Yantra River in the northern suburbs of the Balkan. The city is part of trans-European transport corridor № 9 (Helsinki - Istanbul) and the most important road links pass through Gabrovo. The strategic location and the proximity to the geographic centre of the country define its significance as an important transport intersection. A bypass road of Gabrovo and a tunnel under the Balkan are under construction, which will considerably facilitate the southward city access.



Figure 2.1 Location of Gabrovo municipality in Europe.

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¹www.gabrovo.bg





2.2. Demography and society

After a rapid deterioration of the demographic situation in recent years Gabrovo became the district with the highest age replacement ratio (the ratio of people aged 65+ to those aged 0 to 14). In 2019, it reached 248% vs. the national average of 150%. The natural growth rate in 2019 fell to -12.7%, which is almost twice lower than the national average of -6.7% (NSI).

2015	2016	2017	2018	2019
114 272	112 334	110 254	108 404	106 598

Table 2.1 Population of Gabrovo District over the years according to NSI.

Gabrovo is also among the districts with the lowest net migration rate: in 2019 it reached –4.2‰. The majority of the population is concentrated in towns: 81.9% compared to the national average of 73.7%. However, population density in the district is still lower than the national average.

2.3. Economy and labour

Gabrovo ranks second in Bulgaria in both economic and social development after Sofia (the capital city) according to the Regional profiles presented by the Institute for market economics². It ranks fifth in GDP per capita, incomes in the district are higher than the national average, and salaries have been rising at a stable rate – above 10% in 2018 and 2019. Gabrovo has one of the highest amounts of EU funds absorption per capita in the country. It is rated as a district with active electronic government, administrative one-stop shop services and administrative transparency. Education and healthcare indicators are good, cultural life – intensive.

According to Eurostat the numbers for total R&D personnel and researchers by sectors of performance, sex and NUTS 2 region North central, BG are as follows:

2013	2014	2015	2016	2017
872	1 316	1 390	1 192	1 312

Table 2.2

Because of the rapid deterioration of the demographic situation in the district, GDP per capita rose steadily after 2010, and in 2018 Gabrovo is on the fifth place in the country with a GDP per capita of 12 363 BGN. In 2018, Average annual income per household member is 6 973 BGN. The relative share of population living in material deprivation

²https://www.regionalprofiles.bg/en/regions/gabrovo/





and the relative share of people living below the country's poverty line have been maintaining stable low levels since 2013 onwards.

The unemployment rate of the population aged 15-64 is traditionally low -4,5% in 2019, and has been kept in such limits in the last decade.

Key indicators for Gabrovo:

Population (people in district Gabrovo, 2019)	107 000
Workforce with higher education (data for Gabrovo district, 2018)	28%
Students in Technical university Gabrovo (data for Gabrovo district, 2019)	3 669
GDP per capita (data in BGN for Gabrovo district, 2018)	BGN 13 510
Produced products in enterprises (data for Gabrovo district, 2018)	BGN 2,5 mlrd.
Direct foreign investments with accumulation (data for Gabrovo district, 2018)	BGN 662 mln.
Employment (15-64 years) (data for Gabrovo district, 2019)	70%
Average salary in industry (data for Gabrovo municipality, 2019)	BGN 1 036
Wage growth (data for Gabrovo municipality, 2018/2019)	>10%

The above listed regional characteristics predetermine the development of the region as an industrial centre based on innovation and modern engineering solutions. Having a main priority innovation-based economic development and stimulation of smart specialization sectors, Gabrovo Municipality initiated the creation of a new SMEs support system. A need is registered for: improvement of companies R&D capacity, fostering innovations, attracting "smart ideas" youth, development innovative projects with market potential – thus the brain drain/depopulation would be revered and entrepreneurial potential boosted.

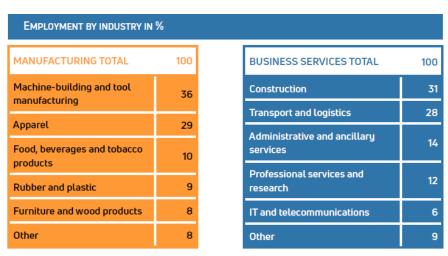
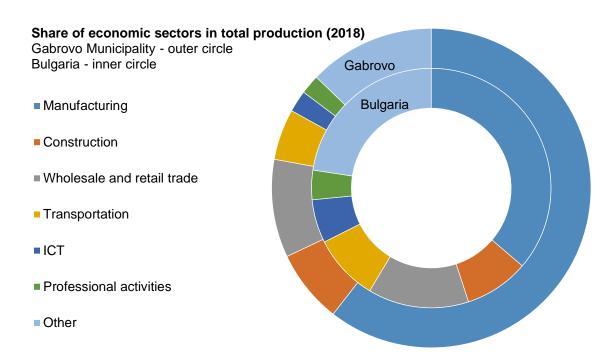






Figure 2.2 Distribution of employment in manufacturing and business.3

2.4 Sectoral structure



An Investment profile of Gabrovo was developed in 2017. More information can be found on: https://www.discover.gabrovo.bg/

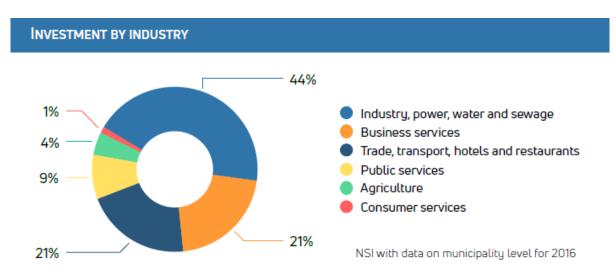


Figure 2.3 Distribution of investment by type of industry.

³https://www.discover.gabrovo.bg/en/





Now Gabrovo Municipality is developing and refreshing the investment profile of the region.

2.5 Enterprise characteristics

Gabrovo is one of the most important economic centres in Bulgaria with long traditions in industry, a stable group of SMEs, developed educational system, high level of concentration of a qualified and high skilled labour force, availability of constructed facilities and VET establishments at secondary and tertiary level. In the last 20 years, Gabrovo has been undergoing dynamic regeneration regarding its industrial development. The leading economic sectors are still being developed based on the educational traditions and owing to the qualified workforce.

Main sectors of economy are machine building industries and production of tool equipment, mechatronics, electronics, robotics, plastic manufacturing, textile, etc. The investments in the companies are mainly focused on innovations, technical modernization resource and energy efficiency.

According to the National Statistics official data 3,568 companies operate in the municipality of Gabrovo in 2018, 463 of which are in manufacturing. 2668 companies have an annual turnover more than 5000 EUR, divided by size:

- √ 2404 micro enterprises (less than 10 employees)
- √ 212 small enterprises (less than 50 employees)
- √ 44 medium size enterprises (less than 250 employees)
- √ 8 big enterprises (more than 250 employees)

Manufacturing is the leading sector in the local economy, contributing almost 50% of the added value and workplaces in Gabrovo manufacturing companies. The largest share of investments, made for acquisition of fixed tangible assets, is in manufacturing – almost 44% of the total investments in the municipality.

The structure of the local economy indicates presence of a well-developed network of local suppliers. The leading sub-sectors are machine building, tool manufacturing and plastics.

More than 80% of the manufacturing companies are export-oriented. There is a large number of foreign investors in the region with factories being active for more than 20 years.





Large enterprises in industry Enterprises with over 50 employees in the leading 5 sectors	Companies by number of employees	
Metals and metal products Steel casting; metalworking; production of tools; production of components for hunting and sporting weapons	3 companies (250+ employees) 3 companies (101-250 employees) 2 (51-100 employees)	
Machinery, equipment and facilities Manufacture of lifting and handling equipment; specialized machines; electrical equipment	2 companies (101-250 employees) 4 companies (51-100 employees)	
Rubber and plastic products Manufacture of sheets, plates, tubes and profiles; plastic packaging	2 companies (101-250 employees) 4 companies (51-100 employees)	
Clothing and textiles Fabric production; underwear and outerwear	1 company (250+ employees) 3 companies (101-250 employees)	
Food Manufacture of food spices; milk and milk products; bread and confectionery products; potato processing	2 companies (101-250 employees) 4 companies (51-100 employees)	

Foreign direct investment (FDI) accumulated in Gabrovo reached BGN 662 million in 2018. Foreign capital is concentrated in the municipality of Gabrovo - BGN 153 million and the municipality of Sevlievo - BGN 504 million. Over 90% of foreign investments in both municipalities are in the industry. Foreign capital enters the district as a result of established relationships with local suppliers and producers.

In 2018, the costs for acquisition of tangible fixed assets (FTA) of enterprises in the municipality of Gabrovo exceed BGN 100 million, and at least BGN 40 million are directed to the purchase of machinery, equipment and apparatus. The total investment costs of the companies in the processing industry amount to BGN 50 million. In the last 4-5 years between 10-20% of the investments are in the research and development activity.

Gabrovo is well-known as an entrepreneurial region. Gabrovo's long-term vision is "Gabrovo Municipality – Green, Innovative and Effective".

The active work of the Municipality of Gabrovo, the good coordination between the Technical University - Gabrovo and large manufacturing enterprises, as well as the accumulation of investments in R&D, determine the path to intelligent specialization of Gabrovo industry and development of high technology park in the city.

The study of the innovative potential of Gabrovo in the field of industry (2017) shows that the city is preferred because of the access to engineering talent and traditional cluster connections in mechanical engineering. Gabrovo has established itself as a hub for engineering solutions, as most of the companies offer complex solutions - from engineering to a finished, finished product.





In regional terms, the development of Gabrovo is in several directions. At the level of Gabrovo district it deepens its connection with Sevlievo, as the newest industrial zone of Gabrovo is being built between the two industrial cities. The new zone is an opportunity for expansion and entry of new large productions in the region.

The cooperation of the Municipality of Gabrovo with Trakia Economic - Zone around Plovdiv, which is the most dynamically developing industrial zone in Bulgaria, is already a fact. Gabrovo enters the large area as a destination for innovation precisely because of the strong engineering and the opportunity for the development of the technology park around the Technical University - Gabrovo.

The third ray of development of Gabrovo is in the direction of Veliko Tarnovo and Ruse, as these are the three major university centers in the North Central region of Bulgaria. These three cities share the challenges of attracting talent and foreign capital in transforming the north into the new most dynamic economic zone in Bulgaria.

The development of the transport connections of Gabrovo is further supported by large infrastructure projects and the opportunity to unlock the potential of North-central Bulgaria. In the next few years, the completion of the Hemus highway from Sofia to Varna is expected, as well as the construction of the Ruse-Veliko Tarnovo highway. The connection with Southern Bulgaria is provided through the bypass of the town of Gabrovo and the future tunnel under Shipka Peak. All these projects give a huge impetus to the development of the North Central region.

Gabrovo Municipality is well-prepared, pro-active and demonstrates capacity to support innovations. The Technical University of Gabrovo is ready to participate in joint project for innovations. The R&D activities of the University are being conducted in compliance with the priority directions of the National S3. The University is a part of the national road map in mechatronics, eco- and energy saving technologies. It is coordinating a big project for establishment of "Eco- and Energy-Saving Technologies" Centre of Competence.

The existing group of SMEs is stable and innovative.

Gabrovo Municipality participates in many European projects for interregional cooperation, supporting the innovations: KNOW-HUB, Interreg IVC; ESSPO, Interreg Europe; SPP Region, Horizon 2020; RIS3 in lagging regions and HESS, JRC-Seville and others.

Gabrovo demonstrates a stable growth of the economic indicators. Currently, the most innovative businesses are with a partial foreign ownership, manufacture high-tech products and are mainly export oriented.





2.6 Innovation eco-system in Gabrovo municipality

Gabrovo Municipality animates the local innovation eco-system to support innovations. Its long-term vision is "Gabrovo Municipality – Green, Innovative and Effective".

One of the strengths of Gabrovo Municipality is the proactive local self-government with multiple successes and pilot initiatives. Gabrovo has also a high capacity and expertise to attract EU funding and other donor's financing, but still need involvement of additional funds to support local policy and development of effective PPP mechanisms.

As one of the most important economic centres in Bulgaria with long traditions in industry, Gabrovo has a stable group of SMEs, well established and developed educational system with a Technical University, high level of concentration of a qualified and high skilled labour force. The investments in the companies are mainly focused on development and implementation of new innovative products and technologies based on the main principles of the circular economy and Industry 4.0. Technical University of Gabrovo is the second important in the country. The University is implementing now one of the largest projects for establishment of a Centre of competence with focus on eco- and energy-saving technologies.

In order to play its important role Gabrovo Municipality involves different stakeholders from business community, NGOs and educational system in the local innovation ecosystem, encouraging the collaboration between business and education, in order to improve business environment and to stimulate innovations in the territory. A new Regional Innovation Center "Ambitious Gabrovo" was established in 2019 to foster innovations in the region with focus on four main directions: Incubator for talents, Devices for automation, Materials and Technologies and Circular economy. Gabrovo Municipality is a member of the Regional Innovation Center together with the Technical University-Gabrovo, Gabrovo Chamber of Commerce and Industry and 6 medium and large innovative companies in machine building, mechatronics and plastics.





3. The policy instrument

The objective of this State-of-the-Art report is to clarify the current situation in terms of management and implementation of Structural Funds, with a special focus on the policy instrument selected by Gabrovo Municipality, which is the Municipal plan for development of Gabrovo municipality (MDP) 2014-2020, Strategic goal 1: Stimulation of economic growth and enhancement of competitiveness of local business in Gabrovo municipality.

The implementation of Gabrovo MDP is supported by different funding sources (ESF, national budget, municipal budget etc.). The municipal budget is very limited to support economic growth through support of innovations in the local companies, most of which are in the priority S3 sectors.

Through participation in this project Gabrovo Municipality addresses the real needs of the local authorities to:

- Define the right policy mix
- Deploy the most effective instruments
- Create synergies
- Coordinate the delivery of SF with other available funds at regional level
- Boost the use of the available EU funds
- Develop good governance in regional policy
- Engage at multiple levels and with actors from both public & private sector.

3.1. Overall description of the policy instrument

Gabrovo Municipality is responsible for local economic development and innovations in its territory. The main strategic goal of MDP of Gabrovo is to stimulate the economic growth and to enhance the competitiveness of business.

The main priorities relate to innovations are:

Priority 1: Stimulating development of innovations and creation of conditions for partnerships.

Innovations and partnerships are the main factors for stimulation of the economic growth and business competitiveness improvement. According to the analysis of the economic and social development, Gabrovo municipality is an important industrial center with a stable group of small and medium enterprises (SMEs), mainly in processing industry. Leading sectors in the economy of the municipality are export





oriented. The separate industrial zones with built main infrastructure are a strong advantage of Gabrovo municipality. Among the advantages is the existence of the Technical University (TU-Gabrovo), which has been training students in the field of mechanical engineering, communication and computer techniques, electrical engineering and electronics for 50 years, and in the last 25 years in the field of economics, social activities, administration and management. All this presupposes a favourable environment for business development. On the other hand, according to the Information System for management and monitoring of EU structural instruments in Bulgaria, the share of the companies in Gabrovo that have implemented projects for technological renovation or others measures to increase the energy efficiency of enterprises such as the introduction of innovations or innovation activities is very limited. That is why this priority is focused on innovation and partnerships, as another very strong factor in both the development of innovative solutions and for the implementation of such. The priority includes two specific objectives.

Specific goal 1.1. Enhancement of knowledge and provision of information for development of innovations in priority economic sectors. Main challenges to be overcome and actions included in the specific objective are related to provision of information campaigns on the possibilities for implementation of innovations in all economic activities, incl. agriculture. They anticipate conferences and forums; eplatforms and trainings for their use, incl. by places offering the most up-to-date information on funding opportunities, technologies etc. "Good practices" from the country and abroad, etc. The activities should be implemented periodically within the programming period 2014-2020.

Expected impact: Increased awareness and knowledge about the development of innovations among the business operating in the priority for the economy of the municipality of Gabrovo economically activities. Growth of implemented innovations.

Specific goal 1.2. Development of business infrastructure and related networks to stimulate innovations with active participation of Technical University of Gabrovo.

Another important aspect of innovation promotion policy and partnerships is the development of the business infrastructure to mediate and support the exchange of knowledge and skills, the implementation of development activities, the implementation of innovative ones decisions, etc.

Main challenges to be overcome and actions included in the specific objective are:

- Study of the specific needs of the companies;
- Analysis of the potential for innovations, new technologies and business relationships based on the research profile of TU-Gabrovo;
- Creation of a dispersed technology park (flexible spaces for development activity, logistics, jobs for SMEs, representative meeting places and it





encourages investment in R & D, including in partnership with research organizations and other enterprises and supports the development of infrastructure for innovation and research); support for development of high-tech and creative industries with high added value and innovation and research infrastructure; providing consulting support for start-ups and / or start-ups in priority areas sectors.

Expected impact: Developed business infrastructure and related networks. Sustainable partnerships implemented. Expected impact also is growth of implemented innovations and growth of net sales revenue.

The planned activities for this specific purpose are expected to be implemented with the active business participation and through public-private partnerships. This approach further strengthens cooperation processes and increases the possibility of reaping benefits from it.

Priority 2: Enlargement of the economic profile of Gabrovo municipality through encouragement of traditional and development of new economic activities.

In Gabrovo municipality as a developed industrial centre were established certain leading industries. Although it retains its place as an industrial centre, on one hand, the municipality is affected by the restructuring processes of economy, which leads to a reduction in the number of developing industries. From another hand, in times of crisis there is a decline in the development of established economic sectors, especially in export-oriented ones, as well as a shortage of funds for technological modernization. At the same time, there are many undeveloped potentials that are typical for Gabrovo and are a prerequisite and opportunity for expanding its economic profile. An example of this is the unique combination of rich natural and cultural heritage, favourable microclimate and diverse landscape. In addition, despite the complex terrain, the built road network reaches all settlements and landmarks in the area. This creates conditions for the development of different forms of tourism, but implies finding comprehensive measures to ensure coordinated efforts to develop, offer and promote a complex tourist product. Another example of potential is the one derived in the Analysis of economic and social development favourable environment for the development of cultural and creative industries, which with the appropriate support and knowledge can become factor for diversification of the local economy. There are also large areas occupied by forests, relatively detached agricultural land and absence of polluting enterprises and environmental factors. This gives opportunity for development of agriculture, including certified organic farming and animal husbandry. The expansion of the economic profile of the municipality in the directions described above and the promotion of traditional and development of new economic activities, combined with the introduction of innovation, will contribute greatly to achieve sustainable economic growth and increasing the competitiveness of the Gabrovo business.





Specific goal 2.1. Creation of appropriate conditions to recruit investments and to promote the opportunities and advantages of the municipality as a good place for business.

Main challenges to be overcome and actions included in the specific objective:

- Conducting a series of studies and analyses of business opportunities in Gabrovo municipality and its competitive advantages, which are tied to the results and upgrade the KNOW-HUB project funded by Interreg IVC and ESSPO project funded by Interreg Europe.
- Development and establishment of Gabrovo municipality as a place for business and culture branding. Creating and implementing a marketing strategy - sample activities: creation of a trademark (logo) and message (motto, slogan), advertising platform, participation in and conducting exhibitions, conferences, seminars, exchanges, forums, partner networks (PR and networking activities).

Expected impact: Established competitive advantages, application and validation of Gabrovo municipality as an attractive place for business and living. Attracted by strangers and own investments.

3.2. Design of the policy instrument

The state of play of the issue addressed by the policy instrument is to stimulate innovations in the region, through development and integration of a new innovative funding mechanism for better financial management of MDP through larger engagement of private capital and public-private partnership.

The involvement of private sector and inclusion of private capital into the actions will allow more open innovations to be developed and implemented in Gabrovo region. For the achievement of this goal, Gabrovo Municipality is planning to work pro-actively with all the partners into the project, involving already established stakeholders' group for innovations, and including the representatives of the MA of OPs, Fund of funds, bank sector and other relevant actors.

The interregional cooperation within this project will also influence the way in which the policy instrument is managed. New approaches will be adopted thanks to the lessons learnt in other regions. A managing authority or any other relevant body can also improve the way how the calls are funded and the way how projects are selected with extra points for additional private investments. The environmental issues will be also taken in mind for improvement of the policy instrument. The lessons learned will also be used for better planning for the new programming period.

According to the National S3, the Plan for innovations is the local S3 and it is equal to Strategic goal 1 of Gabrovo MDP. The main actions are focused on stimulation of R&D and innovation activities in companies and coordination of the existing network for innovations among sub-regional innovation stakeholders.

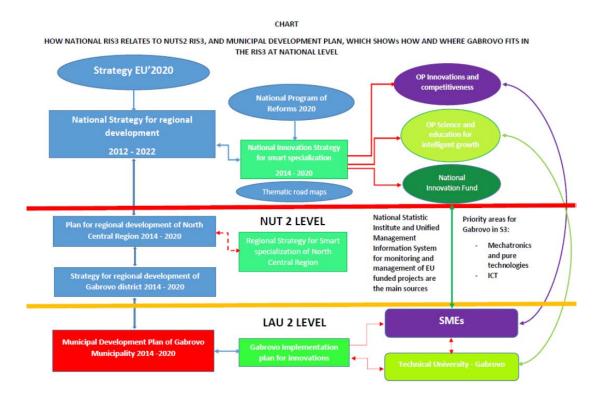




3.3. Policy mix ingredients

Gabrovo Municipality has developed an Implementation plan for innovations on local level to stimulate R&D and implementation of innovations in local businesses, based on S3. It is a part of Gabrovo MDP 2014-2020. Its main goal is to stimulate R&D and innovation activities in companies with proactive participation of Technical University of Gabrovo. The target group includes companies; Technical University of Gabrovo; Chambers of commerce and industry; regional innovation stakeholders and NGOs.

3.4. Map of the policy mix



3.5. Implementation methods

The existing traditional industrial sectors need to be transformed according to the new realities of INDUSTRY 4.0. A creation of a new demand-oriented SMEs support system is under implementation according to the approved Action plan in ESSPO project. The scope of the System will cover the territory of Gabrovo municipality. The main goal is to increase the capacity and competitiveness of SMEs trough provision of expert support for development and implementation of projects in the manufacturing sectors of smart specialization. The competencies on specific products and technologies of the Technical University of Gabrovo, know-how of the innovative companies, business supporting NGOs and other important stakeholders in Gabrovo innovation eco-system, including suppliers in the whole production chain, will be used to increase innovation potential and capacity of SMEs. Enhanced innovation capacity of companies in development and implementation of innovative projects will increase the opportunities for internationalization and larger market share of Gabrovo industry.





The main elements of the SMEs support system are:

❖ New support measures for better communication with local companies through development of a new digital business platform for innovations, including branding of local economy and organization of a campaign for its promotion abroad (participation in trade fairs, advertisement in worldwide famous economic media, participation in innovative pro-EU networks and business platforms).

Analysis shows that local companies have low and limited capacity in development and implementation of innovative products and projects. The existing national policy is very centralized with limited funding provided mainly by the Operative Program "Innovations and competitiveness" 2014- 2020, NIF and some other programs. There is no local fund to support SMEs and to provide funding of business projects. There isn't an ability to release a municipal fund for this purpose because of the legislation. The link between educational institutions, NGOs and business is weak.

In 2017 Gabrovo Municipality established a stakeholders' group for innovation. Stakeholders' group worked on the development of an online survey on innovation capacity and needs of SMEs. According to the results it the need of development and implementation of a new business platform for innovations InnovaGab was approved. The platform will support the companies to find appropriate experts for development of their innovative projects. It will also provide information for funding opportunities, successful projects, business information and available training courses. The platform will connect companies with experts and scientists through an open register. Every company and expert can register creating an account into the platform. That will also foster B2B connections. Companies can present their profiles to different experts, business organizations and academia. The concept of the platform is based on three pillars – business, experts and science (PhDs, students and scientists). The different modules will be entirely business oriented and use the already developed economic GIS Layer created during Know-HUB project, funded by Interreg IVC. Using the database, acquired by the National Statistics Institute (NSI), a separate profile will be created for each company on the territory of Gabrovo municipality.

❖ Establishment of a Regional Innovation Centre based on public-private partnership with broad participation of all interested stakeholders in Gabrovo innovation eco-system (local companies, experts, Technical University of Gabrovo, Chamber of Commerce and Industry, Gradishte Foundation, District Information Centre, local and district governments etc.)

The Centre will support the economic development of the region as an investment, hitech and innovative destination. The organization is functioning as a structure based on networking between public and private sectors. It is combining the activities of an





accelerator, an incubator and co-working space. That will provide new opportunities to brand and internationalize the region, as a technology centre.

Creation of co-working space for young entrepreneurs and start-ups based on good practices from EU.

A physical space will be designed to create a co-working space for young people - a place where they will be free to experiment and develop their own ideas. Gabrovo Municipality has begun the preparation of a space for the realization of a co-working space, which will be a part of the new innovation centre.

As one of the main stakeholders in entrepreneurial ecosystem, Technical University-Gabrovo has been occupying a prominent position for years in the industrial transformation of the city, in the process of scientific research and innovative inventions in the sector of technologies and industry-related solutions. The university is an active agent in the community development of the region with the new perspectives of innovative technologically-focused regional development.

Technical University-Gabrovo has initiated wide-scope partnership EU-financed projects by which two different types of centres will be established to support the ecosystem - https://www.tugab.bg.

National Centre of Excellence in Mechatronics and Pure technologies will be the country's leader in the scientific domain "Mechatronics and pure technologies". The establishment of three research campuses is planned, with modern equipment allowing high-quality researches; realization of a long-term plan in the domain and achievement of an effective technological transfer.

Centre of Competence "Intelligent Mechatronics, Eco and energy-saving systems and technologies". Within the project a reconstruction will be done of building premises and provision of hi-tech equipment. Laboratories, educative halls, working spaces will be organized as parts of a Centre of Competence. Leading researchers form the country and abroad will be attracted in the Centre to work together and exchange ideas and scientific research experience.

3.6. Budget

The municipal budget is limited to support innovations in the companies. National OPs do not support municipalities in local economic development. The implementation of the Municipal plan related to innovations is insufficient. A new funding mechanism and involvement of new actors is needed.

Gabrovo Municipality participates in several important international projects (ESSPO, TeRRitoria, IMPROVE, iPlace, Oasis, etc.) to promote and internationalize the local economy. Within these projects, many stakeholder meetings were organized with a





main focus on supporting innovation, attracting talent, supporting start-ups, developing creative industries and crafts.

Gabrovo Municipality organizes numerous business events with the active participation of local companies and business support organizations in order to promote its industrial profile and to involve different important stakeholders in local economic development. This is the main reason why Gabrovo is famous as the technological centre of Bulgaria.

On February 21, 2019 in Gabrovo was held the only for Bulgaria - European Industry Day on the topic: "Intelligent, innovative and sustainable industry" within the framework of the European Commission initiative "European Industry Week". The European Day of Industry - Gabrovo'2019 focuses on presenting the challenges of industrial transformation and the need to build a culture of innovation in the face of a new digital environment. Several Gabrovian companies were visited during the event, demonstrating an innovative approach and the ability to develop smart solutions in order to remain market leaders in their field. Leading experts presented good experience and solutions in the field of innovation and digitalisation policy. The conference created conditions for open discussion with all interested parties on the topic of the role of innovation centres in Bulgaria, how to stimulate the transfer of talent between universities and business, how the market for innovation of the future will change, why digitalization is a success factor, how to support innovation and digitalisation policies and more.

In regard to climate adaption and circular economy an international conference was organized in Gabrovo on April 24, 2019 in partnership with the Government of the Navarra Region, Spain. This event was under the framework of the Science meets Regions Initiative supported by Joint Research Center (JRC), EC. Participants discussed sustainable energy efficiency and climate adaptation policies, as well as the benefits of municipal energy management during the conference. Successful waste reduction practices were shared and specialized training on green procurement was conducted.

An international seminar on "Industry 4.0 and the New Programming Period" was held on September 17 and 18, 2019 in the Technical University of Gabrovo. The initiative was supported by the European Commission's Directorate-General for Research and Innovation and the European Committee of the Regions. The main goal was to promote the exchange of information and best practices between the European Commission and the EU regions. Experts discussed the future development of R&D and to optimize the coordination of the various EU funding programs and schemes in order to make progress at local and regional level. The aim of the European Commission is to gather information on the needs of companies and regions in terms of R&D and the obstacles that may arise in their path to investing in Industry 4.0. Representatives of EURADA also participated in the event and presented projects funded by Horizon 2020 for





Industries of the future. On the second day were visited several local companies which implement research and innovation projects.

Gabrovo Municipality works in cooperation with the Technical University – Gabrovo to development of business infrastructure and related services. The latest and biggest project is related to the development of a new Technology Park providing flexible spaces, logistics, SME jobs, meeting and conference facilities. It promotes investment in R&D, including in partnership with research organizations and other enterprises, and supports the development of innovation and research infrastructures.

The Technical University of Gabrovo / TU-Gabrovo / implements 7 projects funded by the Operational Program "Science and Education for Intelligent Growth" 2014-2020 and Operational Program Innovation and Competitiveness 2014-2020.

4 projects are funded by Operational Program "Science and Education for Smart Growth"under Priority Axis 1 "Research and Technological Development", procedure "Establishment and Development of Competence Centres" in smart specialization area: **Mechatronics and Clean Technology**, including:

Project BG05M2OP001-1.002-0023 Competence Center "Intelligent Mechatronics, Eco and Energy Saving Systems and Technologies" with budget BGN 23 569 719, beginning March 30, 2018 - end November 31, 2023. The project aims to conduct market-oriented research by leading researchers and their teams in two directions: "Intelligent Mechatronics Systems and Technologies" and "Energy Saving Systems and Clean Technologies". The project envisages, as a first stage, the reconstruction and modernization of buildings or parts of them, together with the purchase, installation and commissioning of high-tech equipment, specialized software, tools and furnishings, which will help to establish and operate them in laboratories, training rooms and workrooms. At the same time, activities are being carried out to attract leading researchers and specialists from Bulgaria and abroad to work together, to exchange ideas and experience in research and in the training of future generations of researchers. 14 laboratories will be built in TU-Gabrovo, in which high-tech equipment will be installed, including a laboratory to provide the appropriate facilities for scientific research. For this purpose, 3 existing massive structures have been identified: Building 2, Lab 1013 in Study Building 1 and Hall 1 of Study Building 5, which are subject to major renovation and reconstruction to meet the requirements (technical and functional) of the scientific infrastructure envisaged by the project.

The scientific program provided for in the project is open to business, governmental and non-governmental organizations and institutions. It is envisaged that 20% of the equipment load will be for commercial purposes. The existing scientific infrastructure will encourage the development of applied science and innovation in the field of





mechatronics and clean technologies to create economic growth, quality jobs and help address national, European and global challenges to society.

Other important projects under S3 priority area: Informatics and ICT:

Project BG05M2OP001-1.002-0006 Center for Competence "Quantum Communication, Intelligent Security Systems and Risk Management" (Quasar), budget BGN 13 500 000, beginning 01.06.2018 - end 01.06.2023.

Project BG05M2OP001-1.002-0002 Center for Competence "Digitizing the Economy in a Big Data Environment", budget: BGN 13 333 869, beginning March 30, 2018 - end November 31, 2023.

TU-Gabrovo is a partner in 3 projects funded by Operational Program Innovation and Competitiveness 2014-2020:

- 1. Project BG16RFOP002-1.005-0307-C01 "Development of an innovative high performance textile applicator for the collection of electrophysiological data for the purposes of telemedicine diagnostics, monitoring and emergency medical response". Beneficiary company "Bulgaria Tex" AD, Kazanluk.
- 2. Project BG16RFOP002-1.005-0371-C01 "Enhancing innovation activity at OSAM" AD, through the development of production innovation technology for the production of complex castings of high quality cast iron with mechanical characteristics exceeding the standards established in BDS EN 1563 2012.
- 3. BG16RFOP002-1.005-0171-C001 "Development of an innovative linear optical smoke detector using the blue light spectrum".

Through above mentioned projects, TU-Gabrovo will create a scientific complex at the highest level, in which research, technological development and innovation are fully integrated, in accordance with the best world standards and practices. The new Technology Park of the University will focus on integrating research with the development of new and emerging technologies, creating the opportunity to integrate research results and develop innovative activities; establish links and interactions between R&D centres, colleges and businesses; building networks and clusters.

The Municipality of Gabrovo works very proactively on the creation of a new business support system, which is based on the new established Regional Innovation Center "Ambitious Gabrovo" on September 30, 2019. The Association consists of 9 members: Municipality of Gabrovo, Technical University of Gabrovo, Gabrovo Chamber of Commerce and Industry and 6 companies: Mechatronics JSC, Elna LTD, Impulse JSC, Technoles LTD, Ecoproject LTD and STS Electronics LTD. The main objective is





through the tripartite cooperation of business - scientific organization - local authority to develop a modern research and innovation infrastructure for conducting open - type applied research. The goals of the association are mentioned in the Articles of Association published in the Commercial Register. The Association has 1 appointed employee of an employment contract from 25.11.2019 on 4 hours working day. In 2019 the Association received donations on the condition of BGN 5 thousand and donations without conditions on the value of BGN 25 000. In 2019 the Association performed only non-profit activities. Donations were received on the condition of 5 thousand BGN, donations on condition 25 000 BGN, and the proceeds from membership fees were 2 000 BGN. The total value of the cash flow from non-profit activity is 32 000 BGN for services. For the short period of its existence, the Association has been actively promoting its goals among businesses in the city and young people. Internship students are encouraged by paying scholarships. A children's science and technology camp is being prepared for the summer' 2020. Other activities are also planned, such as hosting a national robotics competition in the fall of 2020, hosted by the Technical University of Gabrovo. The aim is also to promote the engineering specialty with the active participation of the Technical University of Gabrovo by shooting a film for the University and for the graduates of the University young people and successfully realized in a company from Gabrovo. The film was aired on Bulgarian National Television (BNT). Getting to know each other is increased through visits and conversations in the local businesses.

Gabrovo District Information Center held numerous events to inform business about the existing funding opportunities from ESIF. The procedures for admission of project proposals of Operational Program Innovation and Competitiveness 2014-2020 were of great interest for the local companies. So far during the 2014-2020 programming period, the total value of Gabrovo business projects funded by ESIF exceeded 20 million EUR.

Under OP "Innovation and Competitiveness" 47 contracts for financing of 40 beneficiaries on the territory of Gabrovo Municipality were concluded for a total value of 38 838 196.06 BGN. Under Priority Axis 3 "Energy and Resource Efficiency" for Gabrovo 16 contracts were concluded for 16 766 697.98 BGN with 16 beneficiaries. Under Priority Axis 2 "Entrepreneurship and SME Growth Capacity" for Gabrovo were concluded 27 contracts for BGN 19 724 803.96 with 27 beneficiaries. Under Priority Axis 1 "Technological Development and Innovation" 4 contracts were concluded for 3 beneficiaries for a total of BGN 2 346 694.12.

Under the OP "Human Resources Development", priority axis 1 "Improving access to employment and quality of jobs", in Gabrovo were financed 16 projects for 15 beneficiaries on a total value of BGN 2 478 663.70.





13 information meetings and 2 meetings with local media, attended by 566 participants were organized. Around 400 visitors are informed about the possibilities for the implementation of project ideas with the support of different procedures under operational, European, national and other donor programs in Gabrovo District Information Center.

On January 10, 2020 the Mayor of Gabrovo Tanya Hristova and the Chairman of the Trakia Economic Zone - eng. Plamen Panchev signed a Memorandum of Cooperation. Both organizations will work together to achieve strategic goals: attract large-scale investors in Gabrovo; creation of modern business infrastructure in the territory of the existing industrial zones, as well as construction of new industrial zones; assistance in the development of high-tech companies; creating an environment conducive to innovation; supporting the development of Common Spatial Plans providing for the infrastructural development of industrial and industrial areas; providing staff for the needs of the industry through the implementation of joint projects in the field of higher and secondary vocational education and early career guidance; promotion of the region and internationalization.

Gabrovo Municipality and the Cluster Trakia Economic Zone will work together to support Bulgarian and foreign investors, raise funds for analysis, research and design, actively participate in interagency working groups, domestic and international economic forums. The partners will also strive to create a mechanism for preventing unfair competition between the different regions by attracting investors and creating opportunities for real and informed choice when locating the investment site.

Gabrovo Municipality also works to improve the conditions and basic infrastructure to and in industrial zones, production areas and terrains. This includes the following activities: specific feasibility study and needs assessment (analysis of owners' attitudes, legal and financial-economic analysis of business model based on financial instruments), preparation of brown sites redevelopment scheme, structural and technical preparation and coordination and implementation of an investment program, preparation of a management mechanism, preparation and implementation of a business plan and marketing strategy with an action plan for the redevelopment of brown sites based on public-private partnerships.

At the end of 2019, an analysis of the status of the existing industrial zones was carried out and preparations began for the construction of a new industrial zone Gabrovo – Sevlievo.

According to the midterm monitoring report of Gabrovo MDP 2014-2020, the use of ESF and other financial sources for achievement of Strategic goal 1 is very low. The main reason is in the centralized Bulgarian planning system, which is based on the national operational programmes. They don't provide funding to the local authorities





for local economic development and implementation of RIS3. However, the implementation of the National Plan of Development and RIS3 is effected through the implementation of MDPs. A new funding mechanism and involvement of new actors are needed.

Although the analysis of the degree of achievement of the individual goals shows that the municipal administration works actively for project development and management, it is very important to include NGOs, representatives of private business and youth organizations in the activities envisaged in the Municipal development plan (MDP).

In order to implement more efficiently the measures described in Strategic Goal 1 of Gabrovo MDP 2014 - 2020, it is necessary to deeper analyse and better utilize the existing opportunities from the national operational and other donor programs, to discover and investigate the potential PPPs and to find a mechanism to combine the public with private funding sources.

The following shall be taken into account:

In order to achieve optimal results in the technical and financial implementation of Gabrovo MDP, analysis of the pre-set projects, which at this stage have not started or are at an initial stage of implementation, have to be done and some of that projects have to be oriented to the funding opportunities that have emerged since 2014. That should correspond to all developed, approved and entered into force municipal sectorial strategic documents.

The potential of the new established Regional Innovation Centre "Ambitious Gabrovo" has to be used through involvement of new companies for development and implementation of joint innovative projects, which will bring additional benefit to the local economy.

A feasibility study on the existing economic zones and research for establishment of new industrial park have to be done, to show the gaps in business infrastructure and environment. That will support the recruitment of investments in priority sectors of S3.

A dialog with Fund of funds and banks with a high companies' involvement will present the real possibilities and potential areas of cooperation, discovering new business models for future investments.

A new monitoring and evaluation system with a well-defined set of indicators has to be developed for the new programing period based on the results and experience from the present MDP implementation. The indicators must be measurable and easily verifiable by all stakeholders, that means to be practically oriented. This new system will be created with wide participation of stakeholders.





3.7. Governance

Improved governance of Gabrovo MDP in Strategic goal 1 should be done through development and implementation of new funding mechanism based on PPP. There is no ERDF and national funding for local economic development and innovations in Bulgarian municipalities. OP "Regions in growth" 2014 – 2020 didn't open calls for business infrastructure and economic zones redevelopment. OP "Innovations and competitiveness" 2014 – 2020 has provided a limited budget to support innovations in companies and a small number of SMEs applied.

In the beginning of 2017 during the implementation of ESSPO Project Phase I, Gabrovo Municipality established a stakeholders group for innovations with the participation of more than 80% from local business community, Chamber of Commerce and Industry and Technical University of Gabrovo. The group developed an action plan to support innovations. The activities in the action plan are related to creation of more efficient environment for local companies, development of a new business platform or innovations, branding and internationalisation of local economy, and establishment of a new regional structure for innovations based on public-private principle. A co-working space for young entrepreneurs and start-ups is also included.

Main stakeholders who are involved in IMROVE project include some of the representatives of the existing working group for innovations - leading innovative companies in the region; the Technical University of Gabrovo; Chambers of commerce and industry, but also some organizations of national importance like Funds of funds, Institute for market research, Trakia Economic Zone, Bank sector and other business consultants. The involvement of the companies will provide important recommendation and solutions how business can be motivated to co-finance and invest in innovative projects. They have ideas and capacity to innovate, and they present readiness to participate in joint R&D projects. The Technical University of Gabrovo will also provide expertise in development of the new financial mechanism and will share its experience from the implementation of the project for the Centre of competences.

The Chamber of commerce and industry will communicate with all the companies to engage them into the process and it will play a supportive role in the process.

The associated stakeholders (Ministries, Fund of funds and bank sector) will consult and will take important lessons for the preparation of better schemes for the new programming period.

The improvement of implementation of the policy instrument from one side will foster innovations in the region, and from the other side will support the preparation of the new programming period, both for the Municipality, and for the Managing Authorities of OPs.





The stakeholders group will revise the implementation of MDP and will recommend measures for recruitment of funding and the development of the new funding mechanism.

Some representatives from the stakeholders' group will take part in the project meeting to present their reflections from the project work and to provide ideas, and share experience with the other partners. That will foster the internationalization of companies in addition.

Finding the most appropriate funding mechanism based on PPP will improve the implementation of MDP. For that purpose the experience and best practices from the other partners will be used.

3.8. Monitoring, assessment, evaluation

The system of indicators for monitoring and evaluation of Municipal Development Plan (MDP) of Gabrovo Municipality is designed to meet the methodological guidelines of the Ministry of Regional Development and Public Works and the best world practices. It is based on the experience and methodological formulations used by World Bank, best practices of Eurostat and International Statistics institute.

Successful development and management of the territory are based on clear definition and following of strategic guidelines related to the effective preparation and implementation of the overall policy for sustainable integrated development. Municipalities have a key role in achieving concrete results by mobilizing local potential and actively assisting in the implementation of the principles and rules for the implementation of structural documents in the field of regional policy and in accordance with the requirements of strategic guidelines and EU legislation. In this regard, the Municipal Development Plans, as one of the main components of this process, set goals and priorities for improving the living standards of the local population, reducing economic, social and territorial imbalances, optimizing the management of spatial planning and protection of the environment.

In order to achieve efficiency and effectiveness of strategic planning, management and resource provision, the Regional Development Act (RDA) provides for activities related to the monitoring and evaluation of Municipal Development Plans (MDPs). They are carried out under the conditions and in the order determined by the regulations for application of the law. The system of mechanisms for monitoring, evaluation and control of the planning documents includes three types of evaluations (Preliminary, Interim and Ex-post), as well as the annual reports prepared by the municipal administrations for monitoring the implementation of MDP. The scope of the Preliminary Assessment includes the socio-economic impact of MDP, as well as environmental assessment under the Environmental Protection Act. In the middle of the validity period, the MDP is subject to an Interim Evaluation. It aims to identify progress on the set goals and priorities, to assess the initial results, to define possible problems and to make recommendations for its more efficient and effective future





implementation. The ex-post evaluation shall be carried out no later than one year after the expiry of the activities defined in the ODA and shall assess the degree of achievement of the objectives, the sustainability of the results, the overall impact of the measures, the efficiency and effectiveness of the resources used.

The Mid-Term Evaluation of the MDP implementation is an integral part of the cycle of local (municipal) strategic planning, in which, based on a comparative analysis between the objectives and priorities set in the MDP and the results achieved during its implementation, the impact is taken into account on the indicators of the socioeconomic, territorial, ecological and cultural environment.

Gabrovo MDP is the fundamental strategic document for sustainable integrated local development, created in accordance with the Law for regional development. It sets medium-term goals and priorities for the development of the municipality and it covers a 7-year period. The results from its implementation will be taken in mind during the preparation of the new Integrated plan for development of Gabrovo municipality 2021 – 2027. It means that Improve project will influence directly the local programing phase and the all conclusions from the implementation of Gabrovo MDP will be introduced in stakeholders decisions for the future economic goals and priorities to support innovations and all related business development issues.





4. SWOT analysis of the policy mix

Strengths

Industrialized region with developed infrastructure and industrial zones

Good business climate with low taxes

Stable business community with a lot of foreign investments

Well-developed educational system and a Technical University

Human capital with high entrepreneurial spirit

Entrepreneurial courses and trainings at all levels of education

Proactive and prepared administration with political commitment and clear vision how to support innovations and business

Established Innovation ecosystem

Busy Calendar of entrepreneurial events

Good international relations and membership in international networks

More than 30% among the young people plan to stay and live in Gabrovo

More than 30% among the young people plan to open their own business in the future

Established Regional Innovation Centre with business plan in 4 thematic areas in accordance with the priorities of S3

A new Centre of competences under development in the Technical University of Gabrovo

Plenty of international projects with focus on R&I and S3

Existing companies with good world marketing position in R&I

Weaknesses

Limited municipal budget for supporting local economic development and innovations

Lack of local regulations and instruments for encouraging PPPs in innovations

Insufficient local incentives for business

High percentage of brown sights in the industrial zones

Lack of financial resources for redeveloping the infrastructure in industrial zones

Identified need for improvement of capacity in R&D

Lack of local monitoring system for innovations

Limited start-ups and spin-off processes

Insufficient interest of young people in R&D

Lack of capacity and knowledge about available financial markets and how to combine public and private sources to support innovations

Low level of cooperation with private sector (banks, private capital investment institutions etc.)





Opportunities

Well known Gabrovo's entrepreneurial image

Good relations with Bulgarian science academy and many techno parks in Europe

Participation of Gabrovo in international networks and partnerships

Identified best practices from partners and exchange of experience

Recruitment of external financial resources for innovations

Access to European expertise

Interest of foreign investors and existing foreign companies in the municipality

Good international economic positioning

Acceleration of business dynamics in knowledgebased sectors

Threats

Centralized innovation support policy on national level

Limited financial resources for companies for innovations in the national OPs

Demographic decrease

Ageing population - lack of qualified workforce

Migration of youth - brain drain

Bureaucracy

Limited power of municipalities for local development of innovations

COVID-19





5. Main conclusions and areas of improvement

- ➤ Although the analysis of the degree of achievement of the individual goals, as a result of the interim evaluation of Gabrovo MDP 2014-2020, shows that the municipal administration works actively for project development and management, it is also important to involve better in this process business supporting NGOs, representatives of private sector and youth organizations. More proactive public engagement will reflect the better implementation of MDP.
- A deeper analysis on the 3-years municipal budget forecast should be done to investigate the real possibilities of Gabrovo Municipality to participate in joint projects for innovations and to provide local incentives for the companies.
- New local regulations for business incentives and PPPs have to be developed and integrated into the municipal policy.
- > Deeper analyse and better utilize the existing funding opportunities in:
 - Operational and other donor programs,
 - Partnership and other sources of funding.
 - Financial consultations with private funds and banks for development of joint projects with companies.
- A new financial mechanism based on PPPs has to be developed including joint funding.
- ➤ In regard to the present MDP and the planning of the new programing period the following conclusions should be taken into account:
 - In order to achieve optimal results in the technical and financial implementation of the plan by the end of 2020, analysis of the pre-set projects, which at this stage have not started or are at an initial stage of implementation, have to be done and some of that projects have to be oriented to the funding opportunities that have emerged since 2014. That should correspond to all developed, approved and entered into force municipal sectorial strategic documents.
 - The potential of the new established Regional Innovation Centre "Ambitious Gabrovo" has to be better used through involvement of new companies for development and implementation of joint innovative projects, which will bring additional benefit to the local economy.
 - A feasibility study on the existing economic zones and research for establishment of new industrial park have to be done, to show the gaps in business infrastructure and environment. That will support the recruitment of investments in priority sectors of S3.





- A dialog with Fund of funds and banks with a high companies' involvement will present the real possibilities and potential areas of cooperation, discovering new business models for future investments.
- A new monitoring and evaluation system with a well-defined set of indicators has to be developed for the new programing period based on the results and experience from the present MDP implementation. The indicators must be measurable and easily verifiable by all stakeholders, that means to be practically oriented. This new system will be created with a wide participation of stakeholders.

Gabrovo Municipality has experience in consolidation and involvement of stakeholders. This model will be shared among the partners, as well as the new funding mechanism. It will be also shared with the MA of national OPs to improve the way how the calls are funded and how the projects are selected, through a new model for evaluation of projects with additional private investments. All lessons learned during the project will be shared among the partners for better planning of the new period.

It should be borne in mind that all the analyses and findings made above have been developed on the basis of the previous economic situation (before the emergence and spread of the Covid-19 pandemic)

The spread of the Covid-19 creates uncertainty, market volatility and uncertainty about what happens next. Pro-active SMEs have already begun initiating their contingency plans. A key first step is to assess the potential impact of Covid-19 on the operation.

At a time when thousands of businesses are already affected by the Covid-19 pandemic, innovative approaches are needed to help them cope with the difficulties.