ENTREPRENEURSHIP

INTRODUCTION

Bulgaria has undergone a significant transformation over the past three decades. It has changed from a highly centralized, planned economy to an open, market-based, upper-middle-income economy securely anchored in the European Union (EU).

In its initial transition, the country went through a decade of slow economic restructuring and growth, high indebtedness, and a loss of savings.

However, the advancement of structural reforms starting in the late 1990s, the introduction of the currency board, and expectations of EU accession unleashed a decade of exceptionally high economic growth and improved living standards.

Yet, a number of legacies from that early period, the global economic crisis of 2008, and a period of political instability in 2013–14 undid some of those gains. Now, in its pursuit of boosting growth and shared prosperity, Bulgaria is moving to address these issues.

Today Bulgaria faces the two inter-related challenges of raising productivity and addressing the country's rapid demographic change. Higher productivity growth is critical to accelerating convergence as Bulgaria's income per capita is still the lowest in the EU.

Productivity will need to grow by at least 4 percent per year over the next 25 years if Bulgaria is to catch up to average EU income levels and boost shared prosperity.

After posting higher-than-projected growth of 3.5 percent year-on-year (y-o-y) in the first quarter of 2019, GDP expansion slowed to 3.3 percent in the second quarter. The slowdown was widely expected on the back of negative signals from the Eurozone and particularly from Bulgaria's major markets - Germany and Italy. On the demand side, the deceleration in the second quarter was due to slower growth in both exports and consumption.

The employment rate reached a 16-year high of 54.7 percent in the second quarter of 2019, while the jobless rate fell to a low of 4.2 percent. Strong labor demand fed into rapid nominal wage growth, reaching 11–13 percent y-o-y in the first half of the year. The 10 percent rise in the minimum wage and 20 percent salary hike for public school teachers in January contributed to this increase.

Higher inflation likely drove the slowdown of real consumption growth in the first half of 2019. Average annual consumer price index inflation in January-July reached 3.3 percent y-o-y, primarily on the back of rising fuel, food, and regulated utility prices.

Yet, inflation apparently supported fiscal performance. After posting only a marginal surplus of 0.2 percent in 2018, in January-July 2019, the general government budget showed a surplus of 2.8 percent of the official GDP projection.

Strong labor market conditions, including decreasing unemployment rates among the uneducated and high real wage growth among low-productivity sectors, supported a continued improvement in poverty reduction.

Poverty is projected to have declined from 8.5 percent in 2015 to 7.1 percent in 2018 (at the US$5.5 per day line). However, income inequality in Bulgaria has been increasing and is the highest in the EU, with the Gini coefficient reaching 39.6 in 2018.

Growth is expected to remain above the EU average in the medium term. Following a relatively strong first half of 2019, the Bulgarian economy is expected to slow down in the second half of the year and further in 2020.

Growth for all of 2019 is projected at 3.2 percent, with final consumption expected to act as a growth driver in the second half of the year while exports wane.

Consumption will be supported by public sector wage and pension increases, as well as a strong rise in employment and salaries in the real sector. Investment growth is likely to pick up in the second half of 2019 as local elections approach in October and the acquisition of military aircraft is accounted for.

Going forward, investment remains largely dependent on EU funds, which are to pick up as the end of the current program period approaches.

The current account balance is projected to remain in positive territory in the medium term but shrink in 2019 compared to 2018, as exports of goods and services underperform in the second half of the year, not least due to a weaker summer tourist season. After a deterioration of the fiscal balance in 2019 due to unplanned expenditure, the fiscal position is expected to improve in 2020.

Poverty reduction is expected to continue at a modest pace in the near term. Sustained improvements in employment and wages and recent increases in pensions should support real incomes and therefore further reductions in poverty.

Poverty is projected to fall to 6.8 percent in 2019 (as measured at US$5.5 a day in 2011 purchasing power parity), to 6.4 percent in 2020, and further to 6.0 percent by 2021.

Bulgaria as part of the EU is facing serious economic challenges that require the implementation of an ambitious economic policy. By the Innovation Strategy for Smart Specialisation (IS3, ISSS, the Strategy) Bulgaria declares its vision for a policy change and overcoming of the existing socio-economic challenges:

- Low labour productivity;
- Low share of high-tech production;
- Demographic crisis – aging of population;

- Providing high quality and healthy life;

The development and implementation of the Strategy should be understood as a dynamic process of adopting the most appropriate areas to focus intervention on.

An effective partnership is needed to implement the Vision and objectives of the Strategy. The central and local government, industry and academia, NGOs and all stakeholders need to be involved in an on-going dialogue to reach a common understanding on the ways and means of achieving economic growth. This version of IS3 is part of a process that will continue during the years of the new budgetary period of the Operational Programmes. The strategy includes conclusions, views, and proposals, experience – positive and not only positive – from the implementation of past measures and actions; it is a summary of good examples of successful policies of other countries to determine the focus of the policy in the next programming period. Based on tradition, industrial and research capacity and potential, based on the competitive advantages it is necessary to plan and implement measures to address the major challenges facing the society. The Strategy should be implemented by means of a well-functioning monitoring and evaluation mechanism, and in partnership with all stakeholders, realising effectively the "process of entrepreneurial discovery" and if necessary changing the interventions for implementing the Strategy. It is necessary to ensure a relationship between smart specialisation and the objective of strengthening the orientation of public funds towards the results as a whole.

General macroeconomic overview

The Republic of Bulgaria became a Member State of the European Union in 2007 and ranked 12th in area, 16th in population and 22nd place in GDP in 2012 and 2013. The country is under a currency board regime (binding national currency to the euro) and is characterized by industrialized, free market economy, medium developed private sector and a relatively small domestic market.

In the latest edition of the Global Competitiveness Report of the World Economic Forum, Bulgaria is ranked 57th, 5 places up compared to the previous report. The country's improved competitiveness is the result of the combined effect of activities in the areas that are used to assess the Global Competitiveness Index. In terms of technology readiness Bulgaria has moved eight places up and occupies 44th position.

The country has a remarkable result in access to high-speed internet, broadband internet access and the number of Internet users. However, Bulgaria has dropped down in the higher education and training index (69th position, 6 places down) and labour market (61st position, 12 places down). Performance is poor in the innovations index (2.97) and institutions index (3.38).

(Rating Scale with a maximum 7). In order to improve its competitiveness, Bulgaria needs to focus its efforts on improving the quality of the labour force (increasing investment in education, with the introduction of mechanisms to accommodate the needs of industry) and on stimulating the vigour in the demand and introduction of new technologies, promoting the absorption of innovations by the market, building capacity to absorb and adapt foreign technologies and knowledge.

After the financial and economic crisis, Bulgarian economy is on a path of slow recovery due to relatively low demand. In 2010-2011 the engine of growth was the external demand, while in 2012-2013 the focus was on the domestic demand. GDP growth in Bulgaria in 2012 and 2013 amounted to 0.8% and 0.9%. The state of economic activity in the EU has a direct impact on the country's exports, and indirectly on consumption and FDI, therefore it can have a mixed impact on future GDP growth. In comparative terms, GDP per capita in 2012 was 47% of the average for ES28, which is the lowest level among the Member States. In turn, this position is directly related to the level of productivity of the Bulgarian economy.

Reaching the average level of income in the EU requires catching up in productivity, which in the medium term is not possible without technological modernization and changes to the business model of corporate governance. Bulgaria needs an active integration policy for FDI and innovation policy at the sectoral level, to build capacity in the labour force for the absorption and adaptation of modern technologies and knowledge.

The slow recovery of the Bulgarian economy has an impact on the unemployment rate, which, albeit slowly, has gradually increased from 9.47 % in 2010; reaching 11.3% in 2013. Youth unemployment is a major problem for the existence of a competitive economy and active social inclusion. Businesses still do not give priority to the quality of the workforce, which can be seen in the limited investment in continued vocational training. Linking education with the needs of the labour market, especially private business and high-tech industries, is a "bottleneck" in the sustainable economic development of Bulgaria. It is necessary to link admission in Bulgarian universities to the needs of professionals in these areas and increase the share of engineering graduates and science and education initiatives in the utilization of new knowledge.

The current education structure is not conducive to transition to innovation-based growth. Bad demographics (higher proportion of people over working age than those of working age) will intensify workforce problems. Therefore, Bulgaria should focus its efforts on reducing the dropout from the education system by encouraging work habits formation and educating staff (secondary and tertiary) in accordance with the needs of industry.

The Currency Board allows the maintenance of price stability by ensuring the stability of the national currency.

It is expected over the period to 2016 for the budget deficit to gradually decrease - from - 1.5% of GDP in 2014 to - 0.7% of GDP in 2016 There is progress in the provision of electronic services by the tax and customs administrations and the introduction of other facilities for citizens and businesses, and this has had a positive impact on tax collection - a key aspect of macroeconomic development.

Grey economy remains a major obstacle to the achievement of sustainable economic growth. Along with moonlighting work, it negatively affects the achievement of macroeconomic objectives, quality and productivity at work and social cohesion, reducing tax revenues and directly affecting the underfunding of social systems.

Business support policy

Government policy in support of enterprises is based on two complementary approaches:

• Creating a favorable overall environment for business and

• Improving access to finance, both for start-ups and emerging businesses.

The main objective of the first approach is the implementation of a policy to reduce the administrative and legal burden, reduce obstacles for trade, privatization and de-monopolization and improving taxation, establishing e-government, as well as creating a positive public attitude and entrepreneurial culture.

The second approach is realized through the implementation of diverse programs to support entrepreneurs in dealing with specific problems - preparation for starting a business, financing and investment, company growth, quality management, export activity, staff training and development etc., all implemented by national and European programs and funds.

Bulgaria is the Member State with the lowest income tax on individuals (10%) and with the lowest corporate income tax (10%) and is among the top countries with the lowest rates of VAT (20%). Such a business environment is oriented to actively attract FDI and entrepreneurial development. However, low corporate tax and low cost of labour are not sufficient to stimulate economic development. They are not sufficient conditions for an export-oriented enterprise, seeking FDI-based technology. The strength of the Bulgarian entrepreneurship is the result of relatively favourable business environment in terms of access to credit, investors' protection and starting a business. However, Bulgaria has serious weaknesses related to the performance of contracts, addressing issues in bankruptcy, cross-border trade, obtaining building and production permits, obtaining access to electricity4, which hinders the effective development of entrepreneurship.

The role of the state is to create and develop a sustainable environment and favourable conditions for business. An independent and expeditious legal system must be in place. The business sector needs the administrative burden to be reduced and the development of e-government, which will not only accelerate the absorption of EU funds but will also lead to better coordination and monitoring of national and local policies.

Simplifying and facilitating licensing and permits regimes is a priority for the Bulgarian government. Work on the implementation of the already adopted packages to reduce the regulatory burden on Bulgarian companies will continue and new packages will be included. Measures will be taken to reduce to a maximum of 3 months the time required to obtain licenses and permits to undertake and carry out a specific activity by an enterprise. By the end of 2015 the Bulgarian government (in the Strategy for administration development) will continue employing the rule that the introduction of a new license or registration will be balanced by the removal of another such regime. Acceleration of bankruptcy procedures will be introduced providing a second chance for honest entrepreneurs.

Bulgaria's place in relation to the global technological frontier and leading economies points to the adoption of new technologies as a major area of innovation policy. This requires knowledge, skills and the workforce capacity to absorb new technologies and accelerated especially in the areas of their specialization. Bulgaria has the potential to develop the education of the younger population, but at the same time much is to be desired as the transition to a higher stage of technological development requires skills to adapt and develop in many new technology areas. Given the low levels of performance and technology, the national policy needs to address not only the expansion of education, but even more to focus on improving its quality; targeting the areas of current and future demand, i.e. coordination of policies in innovation, education, training and the labour market is needed.

Another important factor which will support the development of the innovative and high-tech potential of Bulgarian business is ensuring its access to additional markets and sources of projects, grants and commercial financing through the national membership of Bulgaria in the European organizations and initiatives with activities in high technology. For example, by strategy and membership of Bulgaria in CERN (European Organization for Nuclear Research), ESA (European Space Agency), in European publicprivate partnerships for research and innovation. European public-private partnerships aim at developing new technologies, products and services that provide the European industry with a leading role on world markets. They are financed by public funds from "Horizon 2020" research and innovation and private investment by leading industry companies for implementation and commercialization. SME’s

can also participate. Joint enterprises/Joint undertakings/are entities that are created for Joint Technology Initiatives (JTIs.). Bulgaria has taken steps to join the SP "Biotechnology" (BBI), SP "Fuel cells and hydrogen-2" (FCH-2) and SP "ECSEL" - Electronic components and systems for European leadership.

Bulgaria also participates in other programs: "AAL" - to improve the quality of life of older people, "EMPIR" - metrology solutions to social challenges such as energy, environment and health, which are funded jointly by the "Horizon 2020" and the member country and the program Eurostars-2.

Each of these corresponds to the technology areas for smart specialization in Bulgaria identified below. State support for the development of entrepreneurship and entrepreneurial culture - SBA events and awards. Bulgaria participates in the competition for European awards for promoting entrepreneurship.

There is a preliminary selection of candidates at national level under the leadership of the Ministry of Economy and Energy and the selected candidates take part in the European competition. The aim is to identify and grant recognition to those who most successfully promote entrepreneurship in Bulgaria and serve as an example in the implementation of policies and practices in this area, by drawing attention to the importance of entrepreneurship, encouraging and inspiring future entrepreneurs. The following projects have been realized: Brandiko, Th13teen Arts and TECHNOSTART.

In the implementation of this strategy other participations of the country in joint European partnerships can be seen and supported according to the specific conditions.

Sectoral specialization in manufacturing and services

The analysis of the GDP structure after Bulgaria becoming an EU member shows relative stability and emphasizes the importance of the industry and services sector in the economic development of the country:

• Agricultural Sector - 5%;

• Industry - 25% (mining and quarrying, manufacturing, production and distribution of electricity, heat and gas, water supply, sewerage, waste management and remediation activities)

• Construction - 6.0%;

• Service sector - 64%.

In terms of the dynamics of the added value generated in the period 2007-2013, it is most increased in the services sector (38.0%), followed by the industrial sector (33.0%), agricultural sector (18.0%) with construction experiencing a negative change (9.0%).

Manufacturing is a leading sector, providing almost 80% of the production output. The share of added value in production is highest in high technology activities:

• High-tech activities - 35%

• On average, high-tech activities - 23%

• On average, low-tech activities - 11%

• Low-tech activities - 24%

Leading among medium and high-tech economic activities are medicinal products, computer and communication equipment, machinery and metal products, where the share of value added in manufactured products is between 30-35%.

Services sector creates 64% of total value added in the country, accounting for nearly 40% of the value of services provided. Share of value added in the provision of services is greatest in high-tech knowledgeintensive services:

• Knowledge-intensive market services - 34%

• Knowledge-intensive high-tech services - 51%

• Less knowledge-intensive services - 32%

• Other less knowledge-intensive market services - 40%

Within the high-tech services those that stand out are information technology (58%), telecommunications (52%), information services (51%). The share of value added in providing knowledge-intensive market services is greatest in legal and accounting services (61%) and in less knowledge-intensive market services, particularly in trade, the share fluctuating between 43-49% Employment in industry is estimated at 617 000, with 525 000 in manufacturing only. Services employ about 1 million, i.e. twice as many employees as in the manufacturing industry.

In terms of technological intensity of economic activities, employment is concentrated in medium-low and low-tech activities (82%), as well as providing less knowledge-intensive services (81%), i.e. in high technology sectors of production and services provision 18-19% of employees are employed in the manufacturing and services sectors.

To establish the comparative competitive advantages and production and export specialization of Bulgarian products, the Balassa methodology6 was used. Comparative competitive advantages (production and export specialization) were found for 85 product groups covering 79.5% of Bulgarian exports in 2012 and 76% in 2011.

The share of high-tech exports was 5.6% (2012). This is owed equally to the production of computer, electronic and optical products and manufacture of medicinal substances and products.

The exports of medium and low-tech products (71%) are predominant, with 65.3% the result of production and export specialization, which provides competitive advantages of Bulgarian products in international markets. It is owed most to products as monofilament plastic fibres, metal salts, energy producing facilities, fertilizers, electrical cables and conductors, machinery for agriculture and forestry, household appliances, bearings (ball or roller), printed circuit boards, resistors, apparatus for the management and distribution of electricity, bicycles, perfumery, cosmetics and essential oils, forklift trucks, electric transformers and pumps in the group of medium-high technology activities; ores of precious metals, lead, copper, zinc, packaging, household glass, sanitary articles, vegetable fats and oils, ceramics, minerals and steel products from the group of medium-low technological activities, and wheat, barley, corn, tobacco, clothing, oil seeds and oleaginous fruits, preserves and more from the group of lowtech activities.

In seven product groups Bulgaria is a leader among EU member states and the Balkans in comparative competitive advantages (Monofilament plastic fibres, metal salts, ores of precious metals, lead, copper, oil seeds and extraction of "soft" oils, women's clothing).

In terms of technological intensity sectors (economic activities), the following conclusions could be made:

- Most businesses and most employees are concentrated in low-tech activities and they generate the majority of added value;
- In high-tech activities, labour productivity is above the national average;
- 82% of the employees are engaged in low-tech activities and they create 75% of value added in technological activities;
- Medicinal substances and products are characterized by a minimum number of employed and maximum labour productivity;
- Production of clothing is characterized by maximum number of employed, high export orientation and minimum labour productivity.

In terms of sustainable economic development, the solution is increased productivity and added value rather than the supply of goods and services at low prices.

Two emerging areas stand out, which were identified during the stakeholders consultation. They cannot be captured through the international standard classifications.

Creative Industries

Dynamics in the development of creative industries in Bulgaria stands out significantly amid slowed growth for the entire economy.

Growth in the number of enterprises, employment and added value is at times higher than other sectors. This is mostly due to the contribution of information technology, information services and the production of movies, TV shows and recordings. At the same time, there is a significant delay in architectural and advertising activities. But there is obvious overall progress in the creative industries.

For the period 2008-2012, the number of enterprises in Bulgarian creative industries increased by 23.5% against 10.6% for the whole economy. Value added also grew 23.5%, while growth in enterprises from all sectors was only 0.7%. Most significant is the difference in employment growth. As businesses in the creative industries employment for the period increased by 13.7%, there was an overall decrease by - 9.6% in other sectors.

Creative industries in Bulgaria cover 21,812 enterprises (7.1% of all businesses in 2012, the share in 2008 was 6.3%). Creative industries employ 88,700 people, or 5 percent of the labour force, while in 2008 their share was 3.9%. Added value of businesses in the creative industries was equal to 1,340mn.

Euro or 7.6% of the added value created by all enterprises. Its share in 2008 was 6.2%. It is obvious those creative industries are gaining a stronger position in Bulgarian economy and that their contribution is growing dynamically. These shares can grow further as they still lag behind by 1-2% compared to the EU average.

European trends in the field of creative industries stand in a similar way, albeit with a slightly less pronounced pace compared to European economy. The number of businesses in the creative industries in the EU for the period 2008-2012 increased by 3.8%, while for all sectors it was only 0.5%. Employment in creative industries increased by 1.6%, while overall employment fell by 1.5%. Added value of creative industries has a minimal growth of 0.9%, which seems optimistic amid a 3% decline in the value added in European companies in all sectors.

Compared to the EU sector of creative industries, in Bulgaria the sector is developing dynamically and as stated above, it has more potential for growth. While the number of businesses in the creative industries in the EU for the period 2008-2012 increased by 3.8%, in Bulgaria it increased by 23.5%. Employment growth in the EU was 1.6% and 13.7% in Bulgaria. The added value of creative enterprises in Bulgaria increased by 23.5% and that of the EU by 0.9%.

10 facts about creative industries in Bulgaria

1. In the period 2008-2012 only four sectors showed growth in both the number of enterprises, employment and value added. Three of them were from the creative industries: film industry,

information technology and research and development, if it attributable to creative industries

2. IT is the second highest labour productivity sector in Bulgaria following companies from research and development.

3. In the top 10 most productive sectors in Bulgaria there are 5 sectors of the creative industries: information technology; Film industry; Architectural activities; Advertising; Research and Development.

4. Value added per employee in IT in Bulgaria was equal to two employed in the automotive industry and in the manufacture of metal products.

5. In the film industry for the past four years the number of companies increased by 50%, the value added by 40% and employment by 25%.

6. The four highest grossing feature films produced in Bulgaria for the last three years have brought to its producers worldwide revenues of 900 million dollars.

7. Information technologies employ half the number of employed in construction; however their productivity is three times higher.

8. The profit per employee in the film industry is equal the profit of three employees in the clothing industry, courier services and retail combined.

9. Creative industries in Bulgaria employ about 88,700 people. This is equivalent to the entire population of the district centres of Razgrad and Lovech together.

Companies from the creative industries in Bulgaria have a total annual turnover of 6.2 billion lev. This is equal to the budget expenditures of all municipalities in Bulgaria.

Organic Products (Bio Products)

In Bulgaria, the number of organic food producers is over 1 000 and according to preliminary data, the number of organic producers, processors and traders has increased significantly - from 2,016 in 2012 they have reached 3,157 in 2013. The upward trend was also observed in the area in the control system, which in 2013 were 79,709 ha, and in 2012 they were 40,378 ha. Driven by global trends, Bulgarian producers seek to increase their areas and products. The dynamic development of the market for organic products is creating a shortage of raw materials for the production of bio products. This is to the apparent benefit of Bulgarian organic producers who export more than 90% of their produce, mostly to Germany. Exports are mainly from farmers' organizations such as the cooperative "Bio Bulgaria - Oil" (production and export of organic essential oils and derivatives - lavender oil, rose oil, peppermint oil and others with a market; rose water and lavender water, dried organic herbs, some cultivated, like mint and lavender and some wild like lime, nettle and chamomile; organic plants – roses, lavender and mint).

The produce of the Cooperative "Bio Oil Bulgaria" is certified by the Swiss organization IMO, which is represented in Bulgaria by "Balkan Biocert "LTD.

At present there are already manufacturers in the Bulgarian market that offer quality and wholesome children's foods (for children aged 1 to 3 years). One of them is the organic food company for children's meals KIC Group Co. Ltd.

Bulgaria has a long tradition in agriculture and many reserved areas rich in biodiversity, important prerequisites for the development of organic farming. Therefore, it is a major policy priority for the Ministry of Agriculture and Food in the new programming period 2014-2020. The new CAP will introduce the component "Green payments" as part of the direct payments to Bulgarian farmers. The overall resource for the farmers amounts to 240 million. Euros per year. The Programme for Rural Development provides for the establishment of a separate instrument "Organic Farming" with financial resources of 110 million. Euros. The ambition of the MAF is organic products to be included in the menu of all Bulgarians - an achievable goal due to the constantly growing number of manufacturers switching from conventional to organic farming.

Under OPIC 2007-2013 the project "Cluster for development and promotion of organic foods and their consumption in Bulgaria", which is being implemented until April 2015, on the territory of Southwest and South Central Bulgaria, the establishment of an administrative body is planned as well as participation and organization of conferences, round tables, seminars on the problems of organic products and many others. Disbursements are currently 246 thousand lev (126 thousand Euros), which is about 50% of the total budget of the project.

Bulgaria's membership in the EU has led to the orientation of trade towards Europe. Trade with member states now accounts for about 60% of the turnover of the country. Over the period 2008-2013, Bulgaria’s trade increased from 40.3 to 48.1 billion. Euros (19.3% growth), including exports reaching 22.2 billion.

Euros (up by 46.2%), while imports reached 25.9 billion. Euros (up by 3.0%). Despite the rapid growth of exports, the trade balance continues to be negative.

The fastest growing export sector is in agricultural products (almost 2-fold increase), food (almost 2-fold increase), machinery (up by 50%), etc. High-tech exports amounted to 6%, but there is significant growth in the exports of computer, electronic and optical products which have increased by 37%, while that of medicinal substances and products almost 3 times. Imports of food products mark the biggest increase (by 42%), followed by chemicals (30%), while import of machineries has shrunk by 14%.

High-tech products are increasingly dominating exports (computers and communication equipment, electronic and optical products, medicinal substances and products) resulting from the existing and increasing capacity, which is the basis for sectoral specialization of the country. Organic products (mainly in the sector of agriculture and food) have a direct contribution to the significant increase in exports of these product groups. Traditions in manufacturing and export of various products in the field of machine building, cosmetics, textiles and clothing, etc. are the required field for nanotechnology development.

Regional specialization

Bulgaria is traditionally a highly centralized country. After study of the state structure and governance of regions NUTS-2 it was adopted instead of the concept "Regional specialization" to be used the concept "Geographical specialization". During the past programming period all regions in Bulgaria have developed Regional Innovation Strategies (RIS) under the auspices of the European Commission initiative "Innovative Regions in Europe." A limited part of the measures provided for in these strategies have been implemented due to the high centralization of decision-making and management. All measures related to innovation and support programs are coordinated centrally.

The number of employed in Bulgaria is just less than 3 million. Around one third of them are engaged in various economic activities in the territory of the South-West Region, where the capital is located. Another third of all employed are concentrated in two other southern regions of the country - the south-central and southeast and the rest in the three northern regions. Therefore, one third of all employed are in the three northern regions and the other two thirds are in the territory of Southern Bulgaria.

From the analysis of economic activities that generate maximum employment in the areas of planning it can be concluded that with the exception of the North West and North Central regions in all other areas the potential for specialization is a fact. With the exception of architectural, engineering, and activities in the field of information technologies that are among the leading innovative activities, specialisation in low-innovation activities prevails: food industry and related activities, as well as the production of clothing and furniture.

The analysis of the leading innovative economic activities shows that specialization is concentrated in the Southwest region, but there is potential for specialization in other regions too - production of medicines (NWR), production of medicinal products (NCR) and information services (SER). Regional potential for innovation specialization is observed in the production of pesticides (SCR), production of measuring equipment (NWR, NER SCR), aircraft and spacecraft (SCR, SER), chemicals, cosmetics and toiletries (NER, SCR), electronic

components and printed circuits (NCR, SCR), production of general purpose machinery (NWR, NCR, SER) and others.

Employment in activities in the field of information technology and architectural and engineering activities stands out. Scientific research in technical sciences combined with production of software, production of computers and equipment for measurement, electronics, optical equipment, telecommunications, consultancy in the field of management and others are the basis of the development of information and communication technologies and mechatronics. Despite the concentration of these activities in The South West Region (mainly in Sofia), there is a potential for future regional specialization.

Another innovative area that concentrates employment is the manufacturing of medicinal products. Along with research in medicinal science it forms the existing and future potential for regional specialization in the field of pharmacy. Last but not least we can reference engineering and in particular the potential for specialization in electric car production.

From geographical point of view, the existing potential for regional specialization in leading innovation is located diagonally from Southwest Bulgaria through central Bulgaria to Northeast Bulgaria Here is how the regional specialization12 of the leading innovative activity, namely research in the natural, medical and technical sciences, looks like. Estimates show that 73% of employment in this economic activity is concentrated in Sofia, but the map shows that the is potential for specialization in other areas and cities. Thus, the potential of Plovdiv and Stara Zagora is approximately equal to that in Pleven and Varna, followed by Burgas and Ruse. Regional concentration of companies, meaning institutes and research centres, is similar.

High-tech industries and knowledge-intensive services.

The group of high-tech industries and high-tech knowledge-intensive services includes production of medicinal substances and products, the production of computers, electronics and optics, services in the production of movies and TV shows, sound recording and music publishing, radio and television activities, telecommunications , information technology, information services and research and development.

This group employs a total of more than 120 000. All activities of the group are characterized by a high degree of specialization in regional cities. Except for the production of medicinal substances and products, all other activities are characterized by medium and high share of SMEs. Activities are highly concentrated in Sofia with more than 80% of employees in industry and services operating in the capital. Specialization of the workforce combined with the density of enterprises is a prerequisite for the implementation of a cluster policy.

Medium-high and medium-low tech industries and market services

The group of medium-high and medium-low technology industries13 covers economic activities from C19 to C30 under the Classification of Economic Activities (KID-2008) - refined petroleum products, chemicals, machinery, vehicles, rubber and plastics, metals and others and knowledge-intensive market services - legal, accounting, managerial, technical testing and analysis, market research, providing manpower and others.

This group employs nearly 230 000, almost equally divided between manufacturing and services. With the exception of Sofia, the highest concentration of medium-tech production and market services is located in the central regions of the country - the regions of Plovdiv, Stara Zagora, Gabrovo and Veliko Tarnovo, as well as in the East of the country - Varna, Bourgas, Rouse and Shumen.

Low-Tech industries and less knowledge-intensive market services

The Low-Tech group includes economic activities related to the production of food, beverages, tobacco, textiles, clothing, leather, wood, furniture, and services such as retail, transportation, hotels, restaurants, real estate, leasing, tour operators, reservations, computer repairs and others.

The group employs around 1.5 million, approximately 350 thousand in production and just over 1 million in services. This is the group of economic activities and services that generates maximum employment and is characterized by a relatively good regional specialization in the food industry, wood processing, furniture, textiles and clothing.

In addition to the analytical material developed by the team of the Ministry of Economy, during the period from December 2014 to July 2015 were held series of meetings and discussions. In the period December 2014 and February 2015 there were meetings with stakeholders in the six regions. The purpose of these meetings has been to reveal regional capacity RIS3 in identified thematic areas of ISSS. Furthermore, through the regional partnership network and the regional development councils was organized the obtaining of analytical materials from all six regions (including review of the 28 areas) in which thematic areas are sorted by relevance in terms of available regional capacity. This approach enabled the thematic areas to be focused on regions, where projects under the first two thematic areas will be underpinned by bonus points when applying under priority axis 1 of the operational program “Innovation and competiveness” and the priority axis 1 of the operational program “Science and education for smart growth”, specific objective 2: Improve the territorial and thematic distribution of research infrastructures in order to develop regional smart specialization. The bonus system aims to introduce a methodology that is based not on the exclusion but on the possibilities of gradual prioritization

by means of the ESIF.

Innovation Strategy for Smart Specialisation 2014-2020

- North-Western Region

The region includes the districts of Vidin, Vratsa, Montana, Lovetch and Pleven. According to a deliberate policy of the government to support the development of the North-West region (with the lowest GDP/capita in the whole EU) will be encouraged RISs3 capacity in the three thematic areas of ISSS: Mechatronics and CleanTech, New Technologies in the Creative and Recreative Industries, Industry for Healthy lifestyle and BioTech

- North Central region,

Veliko Turnovo. Given the specificity, the existing infrastructure, types and forms of scientific and business development, personnel and administrative capacity, smart specialization in Veliko Tarnovo should evolve priority in the thematic areas “Informatics and ICT” and “Industry for Healthy lifestyle and BioTech”.

Gabrovo. The RIS3 Capacity of Gabrovo is concentrated in the thematic area “Informatics and ICT” and “Mechatronics and clean technologies”. The area is an established industrial center with a stable group of SMEs. Industry development enablers are traditions, constructed facilities, availability of professional technical colleges, technical university. The university plans the creation of innovative Center of competence “Eco and energy-saving technologies”, with the following directions: Electro mobiles, laser technologies, systems for environment and material recognition, power electronics design in engineering, photovoltaic systems, energy-efficient lighting systems.

Razgrad. Industrial strengths of the area are in the field of pharmaceuticals, biotechnology, and manufacturing of preparations for veterinary medicine and in ceramics. There is a thriving foodprocessing industry; resources; the leading companies actively implement new products and technologies.

Vocational education corresponds to the specialization of the economy, the well-functioning Branch of Ruse University — has 3 specialties, chemical technology, food technology and biotechnology. There are cultural objects from regional and national importance (including archaeological reserve ‘Sborjanovo” under the protection of UNESCO). These strengths address available RIS3 capacity on the areas “Industry for Healthy lifestyle and BioTech” and “New Technologies in the Creative and Recreative Industries”.

Rousse. The sectorial composition of the area is relatively stable and is driven primarily by

economic activities in the metallurgy, engineering and metal processing — river and sea ships, hydraulic equipment, agricultural machines, units and components. Chemical industry has emerged in the production of motor and industrial oils, paints and varnishes, foiled plastic products, products of expanded polystyrene insulation materials. Textiles and clothing are among the most relevant for industrial development. Among the food and beverage products are mainly produced and processed meat and fish, canned vegetables, vegetable and animal fats, dairy products, milling products, prepared animal feeds, bakery products, food preparations, sugar, coffee, tea, pastry and drinks. Ruse region occupies a special position in the Bulgarian national history and has a rich cultural and historical heritage, including monuments of global importance as the Ivanovo rock churches. The area has unique landscapes such as the Danube coast, the natural park "Ruse Lom", etc. In close proximity are favoured reserve "Srebarna", included in the list of the UNESCO World Heritage, Thrace tomb near the town of Isperih, also an UNESCO object, Veliko Tarnovo and Arbanasi. Based on landscapes, traditions and strengths of the area, the capacity for smart specialization should be directed to the thematic areas of ISSS "Informatics and ICT" and "New Technologies in the Creative and Recreative Industries".

Silistra. There is capacity in the development of food-processing, clothing, mechanical engineering and metal processing industries, forest-based industries, construction, construction materials, less developed are electronics and alternative sources of electrical energy. Clean technologies are at the heart of regional development. As a whole, the capacity for smart specialization is in "Mechatronics and clean technologies" and "Industry for Healthy lifestyle and BioTech".

- North-Eastern Region

Varna. The economic structure of the area is varied. This relates primarily to port operations, shipping, shipbuilding, ship repair, tourism, chemical industry, engineering, textile production, food processing, furniture manufacturing, construction and agriculture. The available scientific potential for innovation is focused on the maritime industry, information technology, tourism, services and energy. It is in these economic activities are developed new high-tech industries creating high added value, attracting investments in IP-intensive production activities. At the territory of the area operates 'Maritime Cluster'.

This available innovation capacity directs the smart specialization in the area to two of the thematic areas of ISSS — "Industry for Healthy lifestyle and BioTech" and "New Technologies in the Creative and Recreative Industries".

Dobrich. The available capacity for RIS3 leads to the thematic area "Industry for Healthy lifestyle and BioTech" and "New Technologies in the Creative and Recreative Industries"— Dobrudja Agricultural Institute, producing conventional seeds for cereals, valued high in many countries (lavender for the purposes of pharmaceutical and cosmetics), an international college, which prepares high skilled personnel for tourism, etc.

Targovishte. The summarized opinion of stakeholders on the available capacity for RIS3 determines the thematic area "Mechatronics and clean technologies" and "Industry for Healthy lifestyle and BioTech". Furthermore, there is available capacity and in other thematic areas, primarily in the field of alternative tourism, cultural tourism, wine tourism, spa, etc.

Shumen. The summarized opinion of stakeholders on the available capacity for RIS3 determines the thematic area 'Industry for Healthy lifestyle and BioTech" and "New Technologies in the Creative and Recreative Industries — capacity for alternative sport and tourism, rich biodiversity, all levels of education, scientific institutes in the field of agro-business, cultural heritage, etc.

- South Western Region

Blagoevgrad. The industry is a highly polarized in municipalities. For example, in the municipality of Blagoevgrad are concentrated over 50 % of manufacturing industry leaded by engineering and electronics. The textile, knitwear and clothing industry has traditionally been one of the main and most relevant sectors for industrial development with export orientation. Food processing industry is highly developed, including activities relating to the production and processing of meat, processing and preserving of fruit and vegetables, producing of vegetable and animal fats, dairy products, milling products, prepared animal feeds, bakery products, food preparations, pasta, soft drinks and alcohol. In the Municipality of Gotse Delchev local economy is specialized in the manufacturing industry (manufacture of textile, underwear, shoes), the food processing industry and construction. Municipality of Bansko and Sandanski have highly developed tourism and construction sectors. The favourable climatic conditions determine the development of agriculture.

In the county center — Blagoevgrad are operating two higher education institutions of national importance: South-west university "Neofit Rilski" — Blagoevgrad and the American University in Bulgaria -Blagoevgrad. The universities emit high skilled labour force in the fields of social sciences and humanities, law, economics and business administration. There are also several Colleges — Medical College in the structure of Medical University — Sofia as a separate legal entity, Technical College in the structure of South-west university "Neofit Rilski" without legal entity separation and the private College of Tourism — Blagoevgrad.

This capacity directs smart specialization of the area to two of the thematic areas of ISSS, namely “Informatics and ICT” and “New Technologies in the Creative and Recreative Industries”.

Kyustendil. The RIS3 Capacity of the area is concentrated in the thematic area “Industry for Healthy lifestyle and BioTech” (availability of resources and capacity for the development of organic farming, processing industry, bio products, including forestry, development of SPA & wellness) and “New Technologies in the Creative and Recreative Industries’ (exclusive intensity of historical and cultural monuments, traditions in arts and music school, eminent artists, cultural institutions, creative unions of architect, artists, writers, inventors, etc.).

transport arteries to two external markets. There is a developed industrial center, deposits of minerals, resources for RES, well-developed heritage infrastructure, active sport clubs. 2010 opened the European Institute of Technology. The academic profile of the university bachelor’s and Master’s courses is in advanced informatics and computer science, communication and computer networks and systems architecture and urban management, civil engineering and innovative entrepreneurship. This training in all disciplines is provided in the Bulgarian and English language. These characteristics define the thematic areas of ISSS — i.e. “Informatics and ICT” and “New Technologies in the Creative and Recreative Industries.

Sofia. In the capital the RIS3 capacity covers all thematic areas of ISSS. Therefore, the choice of two of them complies with capacity of the other areas of the South-West region. Such additional support will receive the thematic areas “Information technology and ICT” and “New Technologies in the Creative and Recreative Industries.” In addition, Sofia city is in the process of finalising its own strategy for smart specialization.

Sofia District. The proximity to the capital leads to a steady trend of relocation of industrial production and defines the great diversity in its structure. At the same time, proximity allows the use of science and innovation infrastructure of the capital. At the territory of the area operates actively cluster “Srednogorie med industrial cluster” — which includes companies from the extraction and processing of copper and copper concentrate, gold ores, high-tech companies, optical and optoelectronic devices and systems, research and educational organizations. The RIS3 capacity is concentrated in the thematic area “informatics and ICT” and “Mechatronics and clean technologies”

- South Central Region

Kardzhali. RIS3 capacity is linked to the thematic areas “Industry for Healthy lifestyle and BioTech” and “New Technologies in the Creative and Recreative Industries, production and processing of herbs, bio food, cultural — historical heritage, natural phenomena. The

subsidiary of University of mining and geology "St. Ivan Rilski" prepares qualified staff both in the field of clean technology and ICT related to the three thematic areas of ISSS.

Plovdiv. The RIS3 capacity of the area is concentrated in the thematic area “Informatics and ICT” and “Industry for Healthy lifestyle and BioTech”. Crucial to the development of the area are the food industries, which have extensive production specialization (fresh meat, milk processing, flour-milling, confectionery, drinks, etc.). Under fast pace development is the industry for a healthy life and biotechnology in the field of plant science. For example approved is a project “PlantaSyst” under Horizon 2020 with the coordinator: Institute of Molecular Biology and Biotechnology — Plovdiv. Through the integration of molecular biology, functional genomics, metabolomics, bioinformatics and agricultural sciences with a long-standing expertise in practical plant genetics and selections, such center and other developments of similar thematics would put Plovdiv Region at the forefront of this field. Highly developed is the processing industry for aromatics and spices raw materials. The cluster ‘Information and Communication Technologies’ is constantly expanding. The area has rich heritage features (Plovdiv was chosen as European Capital of Culture for the year 2019), which can be developed rapidly based on ICT.

Pazardjik. The summarized opinion of the stakeholders is indicating available RIS3 capacity in the thematic area “Mechatronics and clean technologies” and “Industry for Healthy lifestyle and BioTech”.

There is presence of traditions and long-standing experience in integrating mechanics and electronics with a focus on design and manufacturing of high-tech products, automotive equipment, parts, components, systems. Experience in the production of medicinal products and food supplements for veterinary and human medicine and natural features and conditions for organic agriculture and stockbreeding puts focus on medicinal products and pharmaceutical forms, medical and spa tourism, clean manufacturing processes, storage and processing of Bulgarian specific food and cosmetics.

Smolyan. The RIS3 capacity of the Smolyan region is concentrated in the thematic area “Industry for Healthy lifestyle and BioTech” and “Mechatronics and clean technologies”. Larger companies have research and development units that develop and deploy new products and technologies. In the area of light industry capacity is in the field of cosmetic, clothing, food, textile industry. Educational structure offers all level skill levels. In the area operates the National Astronomic Observatory (the largest in the Balkans), which has a rich cultural and historical heritage.

Haskovo. In the regional economy has the highest relative share of services, followed by industry and the agricultural sector that is second higher than that for the country. Tourism has a great potential.

Improving the quality of life in the area is linked with the support of the strengths of the area of deployment of innovations, the balanced development of towns and rural areas, environmental protection. The capacity of the area concerning development of bio-agriculture, and alternative tourism remains unused. The above points towards smart specialization in the areas: "Industry for Healthy lifestyle and BioTech" and "New Technologies in the Creative and Recreative Industries".

- South East Region

Bourgas. RIS3 capacity of the region is in product and technology niches such as tourism (environmental, health, cultural, etc.) and wellness; Chemical products and technologies; Information and communication technologies, services and telecommunications; Marine biology, aquaculture and fish farming; Biotechnology, organic food and bio-based products; Manufacture of motor vehicles and electric cars; Energetic technologies and biofuels; Processing and light industries. The Office for transfer of innovative technologies in businesses of South-Eastern region assists to improving innovation infrastructure, industrial capacity, export profile and competitiveness of enterprises in the south-eastern region of Bulgaria, supporting them in search process and introduction of new services and innovative solutions in the field of information technologies and their applications. Priorities are information technologies, environmental and energy-saving technologies and economic analyses and assessments. As an University and Research Center interests are focused on ICT, materials and material sciences, environmental protection and water, RES, biomedicine, molecular modeling linked to eco- toxicology. As a result, the priority thematic areas for RIS3 are "Mechatronics and clean technologies" and "Industry for Healthy lifestyle and BioTech".

Sliven. The available RIS3 capacity is concentrated in the thematic area "Mechatronics and clean technologies" (capacity in the field of automotive — prototypes with electrical and hybrid propulsion, network and innovative technology for an accelerated battery charging with electricity, availability of critical mass for development of design center focusing transportation, textiles and design and Cluster Mechatronics and clean technologies", developed ICT sector fostering mechanical engineering) and "New Technologies in the Creative and Recreative Industries (focus on developing smartphone apps and digital guides for advertising and visits to objects related to cultural, historical and alternative tourism in the region, electronic platforms for advertising and promotion of alternative tourism in the region).

Stara Zagora. The analysis of strengths addressed the available RIS3 capacity of the area to the thematic area “Mechatronics and clean technologies” (“Research and Development” in engineering and technology, medical sciences, agricultural sciences — mechanics, electronics, nanotechnologies, management systems, software to clean technologies (eco mobility) storage and energy saving; Architectural and engineering activities; Consultancy in the field of management; Manufacture of instruments and appliances for measuring, testing and navigation, Manufacture of radio, television and communication equipment and appliances) and “Industry for Healthy lifestyle and BioTech” (“R & D on clean manufacturing processes, technologies at the service of medicine, medical and spa tourism; Business practices for clean production, storage and processing of specific food and cosmetics (bio-) products, medicines, substances and products and competitive bio-based products with curative medical effects, organic farming, production of food and non-food bio-based products, including for therapeutic and cosmetic properties (hip, rose etc.), export orientation of biological and pharmaceutical products, certification and development laboratories.

Yambol. Yambol Region has the potential to attract investors in the manufacturing industry and particularly in the processing of fruit and vegetables. The territory of the area has the potential for exploitation of energy from air currents. Favourable geographic location, high proportion of arable agricultural land and green clean environment are a prerequisite for the development of a prosperous farming. The existence of large cultivated agricultural areas, traditional cereal production, vegetable and animal husbandry outline potential which should be exploited. The development of efficient agriculture is one of the main possibilities for improving the labour market, supporting and encouraging businesses and enhancing investment. It is these circumstances justify the choice for the thematic areas “Industry for a healthy life and biotechnology and “new technologies in creative and recreational industries.

The existence of regional specialization and the density of enterprises is the basis for the implementation of a cluster policy in the various economic activities.

In the programming period 2014-2020, the European Union emphasizes its Territorial Agenda, which focuses on the territorial dimension of European cohesion policy and strategy "Europe 2020". The following challenges and threats for regions are identified:

• Increasing globalization: structural changes after the global economic crisis;

• Changes to the integration of the European Union and growing interdependencies between regions;

• The demographic situation in different areas. Challenges and social isolation of vulnerable groups;

• Climate change and risks to the environment: the effects in the various geographical areas;
• The increasing energy challenges that threaten regional competitiveness;
• Loss of biodiversity, endangered species, risks to the landscape and cultural heritage.

The National Concept for Spatial Development 2025 takes into account these challenges and emphasizes the role of urban centres as a key factor for sustainable economic growth. Integrated plans for urban regeneration and development have been developed, with identified areas for economic development. The idea is that in the future these areas would become an attractive feature for foreign investors in industrial development and for clusters and innovation cooperation. Some of these cities have the potential to become "smart cities", including in the European Innovation Partnership on Smart Cities and Communities (EIP-SCC).

Objectives and development of Bulgaria

Scientific research is most useful as a source of new knowledge provided to industrial sectors, many of which can also be low-tech, which is the main source of added value, exports and employment creation.

Analysis and in-depth discussions with entrepreneurs and other business representatives suggest that the criteria for smart specialization and a comprehensive approach focused only on research-based on growth will not be efficient enough for Bulgaria. Scientific research is rarely a direct source of growth. The share of sectors based on research or high-tech industries in the economy is usually quite small.

The main driver of productivity in Bulgaria is the so called production capacity or ability to produce on the basis of leading international quality standards with widely available, i.e. standard technologies. This does not mean that investments in scientific research are not important. The scope of necessary activities exceeds stimulating research only and should include the promotion of investment in the development of human capacity and promoting technological development and modernization of enterprises in order to improve the ability for technological change and innovation (R.Sollow theory). Support for scientific research in specific areas, ignoring the needs of industry (analysis and public consensus show so) would result in biased policies. Stimulation of innovation activity in certain areas of technology should lead to a reduction in resources used to increase productivity, will ensure consistent quality of production and achieve introduction and development of software and engineering activities to attract foreign investment from leading companies as well as strengthen cooperation and internationalization of the industry.

Focusing the Strategy on scientific research only as a direct source of growth will ignore major drivers of growth in the Bulgarian economy - now and in the near future, which will limit the

effect of this strategy The conventional approach would be to support scientific research within the thematic areas, ignoring processes of constantly catching up by sectors and companies. Analysis and public consensus suggests that this will lead to distorted policies that do not relate to the areas of real demand for technological support in the local economy and society.

Bulgaria should focus on industrial and technological modernization, with a complementary focus on research- based growth. Industry is a term used broadly to refer to the entire industry, including the cross-cutting services sector. Also, the term "technology" does not refer only to equipment but covers a wider range of options, many of which are intangible in nature and which are necessary for the production of competitive products and services and to respond to other socio-economic challenges. Industrial modernization is best described as a process specific to the sector. Modernization processes are diverse and cannot easily be covered by common factors. However, it is possible to select a combination of common and sector-specific criteria. The final result cannot be a not so elegant matrix on the basis of readily available statistical data, but the aim is mainly applicability, not accuracy and inapplicability.

Industrial and technological modernization cannot be an isolated sole process, i.e. based only on internal resources, without the participation of foreign partners and participants. Catching up done by Bulgaria to reach average levels of income in the EU requires catching up in terms of productivity, which in the medium term is not possible without ICT solutions, both innovative for the country and resource-efficient.

This modernization occurs largely through improvements in production potential and on the basis of imported equipment and raw materials rather than through scientific research. To become competitive, Bulgaria must build capacity to absorb and adapt foreign technologies and knowledge. This will require innovative policies, or rather there is a need to make a mix of technologies and introduce elements such as non-waste technology and ICT approaches in traditional industries.

Measures for the implementation of the Innovative smart-growth strategy will be provided and implemented mainly by the Operational Program „Innovation and Competitiveness" and the Operational Programme "Science and Education for Smart Growth."

Mechatronics and clean technologies

Mechatronics is registered as Trade Mark by Yaskawa Electric Corporation in Japan under Reg. No. "46-32714" in 1971. Afterwards the company releases on the market the right for using the term worldwide. In the EU countries exists French standard NF E 01-010 for mechatronics, which gives the following definition: "approach, aiming synergic integration of

mechanics, electronics and electro technics, theory (systems) of management, as computer sciences in planning and production, in order to improve and/or optimizing functionality".

Mechatronics is a strong side of Bulgaria, in compliance with the world trends in development of the most perspective and innovative areas of the engineering sciences, combining expertise and traditions with concrete European and international interest. The thematic area enables the country to directly join the global value chains. Projecting, production and using of mechatronic systems requires new engineering approach due to the common functioning of components of mechanics, optics, opticelectronics, electro technics and electronics. Mechatronics is not simply a combination of comprising key components, but it is mutual penetration and/or merging of mechanical, electronic and computer structures for realizing of a total, functionally of full value product, named “mechatronic product” or “mechatronic fabric”. It is not less important, that Bulgaria has a specific capacity as regards robotics, artificial intellect and intelligent devices and contemporary/intelligent production systems. Bulgaria could also specialize in limited series with high added value.

The automatized machines and systems for automation in the country are typical examples for mechatronic approach with proved potential in the country.

The sustainable mobility is of key importance for the development of low carbon and resource effective economy and for the implementation of “Europe 2020” strategy. As a result of the discussion within the High Level Group CARS 21 the vision on the automobile branch development was consolidated. On this base was elaborated an Action plan for competitive and sustainable automobile sector, that together with other EU strategic documents in the package “climate-energy” defines trends and priorities in the future development. At the same time Europe urgently needs decarbonizing and invasion of alternative fuels in transport in order to decrease its dependency on petrol. At present this dependency amounts to 94%, within 84% of the petrol is imported, and this is connected with a huge financial resource and increase in expenditures for environment. On this base the package was adopted: Clean energy for transport. In the frame of this process Bulgaria is one of the nine EU members, that have supported the priority development of electro mobility with a common declaration. The technology is innovative and will give impetus in development in other sectors, that bring higher added value to the economy of the country. At the same time the electric mobility will contribute to achieving the objectives in the area of energy efficiency and renewable energy sources and will have positive influence on work and management of the energy system. From another side prerequisites are established for sustainable future of the transport, decreasing it’s dependency on petrol and substantial decrease of greenhouse emissions, a great part of them

due to this sector, as well as to improve air quality in inhabited places and thus the health risks quality of life for the future generations. As a relatively new industry, that will develop in Europe and worldwide, there is potential for new subjects on the market. Bulgaria posses expertise and traditions in this area, and thus opportunities to find it's deserving place in this process.

Within the frame in the thematic area "Mechatronics and CleanTech" the following priority directions were identified:

- Production of basic elements, details, components and supply, part or wholly constituting mechatronic aggregate
- Maching building and appliance building, incl. parts, components and systems, with focus on transport and energy sector
- Engineering, re-engineering and prolongation of the life-cycle of industrial machines, appliances and systems
- Robotics and process automation
- Design and construction of hi-tech products and/or participation in supra-national production chain, incl. in aero-space industry
- Bio-mechtronics
- Intelligent systems and appliances, intelligent homes – intelligent -cities
- CleanTech with focus on transport and energy sector (storing, saving, effective distribution of energy, electric vehicles and eco-mobility, hydrogen-based models and technologies, no-pollution technologies, technologies and methods for inclusion of waste products and materials in other production)

The following challenges were discussed with the participants at the thematic meetings:

- Incentives for cooperation and establishment of cooperation along the whole value chain, as well as creating completed and complex products;
- Need of additional cooperation science-business, cluster support, support for TTO's and other good practices of EU;
- Shortage of technical and engineering human resources;
- Adequate support to guarantee the quality;
- Internationalization, modern marketing methods, advertising and attracting investors, incl. additional development of management capacity and business models.

The following models for financing were defined as eventually applicable:

- Grant schemes/vouchers for cooperation science-business;

- Support for educational institutions in the field of technical sciences, for example vouchers for attracting specialists and/or online and distance education;
- Grant schemes, incl. specialized/and instrument/ to improve access to bridge financing;
- Scheme/instrument for covering short term trade risks, investment risk and risk for issuing bank guarantees under and for implementation of projects;
- Support for clusters and Technology Transfer Offices;
- Support for establishment of certified laboratories;
- Support for marketing and export activities.

Bulgaria is well known as an ICT oriented country Some of the activities and facts that characterize the past of the industry in the country are: the first electronic digital device Atanasoff - Berry; the largest production of personal computers (Pravets, IMCO) in Eastern Europe; the production of IBM compatible mainframe computers; design and prototype of the first digital watch and the first digital calculator; highly educated and qualified human resources and others. Until 1990, Bulgaria has specialized in manufacturing computer hardware and software development and production within the Council for Mutual Economic Assistance. Over the past two decades, ICT activities in Bulgaria are mainly oriented towards the development of software and information systems. Bulgaria is still one of the major ICT outsourcing destinations. (Hewlett Packard, IBM, VMware, SAP NetWeaver, Software AG Development Centre Bulgaria, Coca-Cola Hellenic Centre for IT services in Sofia, Johnson Control Technology Centre Sofia.) Other ICT leaders present in Bulgaria with development activities and services are Microsoft, Cisco, EMC, Experian, Xerox, Ericsson and others.

This trend helps to increase and diversify the international skills to develop software and build international recognition. Moreover, the trend of outsourcing should support the development of Bulgarian software production. Telecommunications companies operating on Bulgarian territory introduce new voice and image convergence technologies as well as data transmission technologies via mobile devices.

New and emerging trends in ICT- cloud computing, mobile computing, social computing etc., are introduced in Bulgaria quickly but carefully. The attitude of the participants in this process is positive, with a critical assessment of the positive and negative sides, but generally open for acceptance. Data centres appear - both independent (with open access) and private or specialized. Social networks are widely used by public institutions, private companies, and the media and by a considerable part of the citizens with warnings about security. Internet banking is gaining acceptance. The success of ELEVEN AND LAUNCHUB (financed by JEREMIE Bulgaria) turned Bulgaria into a regional leader.

A major challenge for ICT is effective implementation of public-private partnership. The possibility of public-private partnership is inherently important incentive to attract investments to provide specialized services to the population.

Many Bulgarian professional associations are active in the field of ICT: Bulgarian Association of Information Technologies, Bulgarian Association of Software Companies, Bulgarian Web Association, Bulgarian ICT Cluster, Bulgarian Branch Association of Electronic Industry and Informatics, Telecommunications Association, Internet Society Bulgaria, Project Management Institute – Bulgaria Chapter, International Institute of Business Analysis, Sofia, Bulgaria Chapter, and others. These organizations are actively involved in a dialogue with the institutions for improving the sector.

Regional Software Engineering Excellence Centre of the European Software Institute - ESI Centre Bulgaria (ESI Centre Eastern Europe) implemented large-scale projects at national and regional level in more than 12 countries. The Centre implemented leading strategic methodologies in the area of management and software engineering to increase the maturity of the sector in Eastern Europe.

National Centre for Supercomputing Applications (NCSA)1 is an important element of research infrastructure in the field of ICT in Bulgaria and the region. NCSA is a member of PRACE (Partnership for Advanced Computing in Europe), a research infrastructure with its own supercomputing resources (IBM Blue Gene / P supercomputer). Strong Bulgarian companies in the ICT sector exist mainly in the area of development and integration of software products, but also in communications, embedded systems and microelectronics with highly qualified specialists. Some of these companies are represented internationally on several continents. The success of these companies is also a result of good management and implementation of international standards.

Bulgaria attracted funding under a special initiative of the Bill and Melinda Gates Foundation (for libraries and community centres) as well as for the Support of the e-Government Initiative based on free and open source software (FOSS) at local (municipal) level in Southeast Europe : the first e-government project in the region that uses free software and open source software (FOSS) to improve transparency in governance and public access to municipal services; Entrepreneurship Support (Job Opportunities through Business Support - Project JOBS): In Bulgaria, 43 business centres and business incubators support the development of micro and small businesses. However, the sector is facing many difficulties and challenges.

The following priority directions were identified within the framework of the thematic area “Informatics and ICT”:

• production, especially Fabless and new approaches for design and/or assembling;
• ICT approaches in machine-building, medicine and cultural industries (in relation to the other three thematic areas), incl. digitalization of the cultural and historical heritage, entertaining and educational games;
• 3D digitalization, vizualization and prototyping;
• Big Data, Grid and Cloud Technologies;
• wireless sensor networks and wireless communication/management;
• linguistic technologies;
• web-, hybrid and "native" applications, web-based applications for creating and commercializing of new services and products;
• exploiting new possibilities in relation to outsourcing and ICT-based services and systems

The following challenges were mentioned among the participants at the thematic area meetings:

- Necessity of establishment of lasting and sustainable relations between science – education - business;
- Shortage of qualified HR, that limits the growth even available interest and FDI flow;
- Relatively adequate infrastructure with the exception of laboratories for testing and certifying, etc.;
- Creating and development of data base or a network scientific elaborations, waiting for market realization, as well as dissemination results of scientific projects;
- Internationalization, modern methods for marketing, advertisement and attracting of investors, including additional development of management capacity and business models;
- Development of PPP in Bulgaria and EU;
- Additional capacity of Patent Office, which has to accelerate the time for patent registration.

The following models of financing were identified as eventually applicable:

- Grant schemes for collaboration science - business;
- Financial instruments, incl. Venture capital funds;
- Support for educational institutions in ICT area, for instance vouchers for attracting specialists and/or online and distance education;
- Support for governance and entrepreneurial capacity, for instance vouchers for participation in internationally recognizable accelarators;
- Support for certifying and other laboratories

HEALTH LIFE AND BIOTECHNOLOGY INDUSTRIES

IS3 promotes innovative methods for clean production, preservation and processing, incl. packaging and accessibility of these products with focus on production applications:

- Technology of the fermenting food products – shaping, optimization and management of fermentation process. Beer production, as a major substance are used grown barley seeds (barley malt), and as biological agents to accelerate alcohol fermentation – yeast cultures of the family Saccharomyces.
- Bio-technology of the enzymes – production and use of leaven. In production of bread – adding of enzymes, increasing its durability.
- Production of yoghurts. Sour milk bacteria are used in these productions and enzymes for production of nutritive products like yoghurt and different types of cheese. Technologies on the base of biological processes in cheese production, for example, production of the needed yeastenzymes from bacteria cultures, instead of traditional methods for their extraction from animal's stomach.
- Production of wine and high alcoholic concentrates. Products containing carbohydrates are used as substance, that with the help of high productive cultures of the family Saccharomyces are transforming into alcohol.
- Production of vinegar. This production is based on the use of alcohol-containing substance, on which selected sour vinegar bacteria are activated.
- Production of natural aromatic products – etheric oils, natural distillated waters (rose, lavender, chamomile, balm, sage, etc.) and extraction products.

- Medicines, substance and products

Personalized medicine can offer a lot of opportunities for better treatment. For instance, if we give a patient the proper medicines, they would cause less side effects. This will diminish the suffering, as well as expenditure of resources. In other words – it will secure diagnostic and treatment of the proper patient in the proper time. Modern methods for treatment combine achievements in treatment of diseases, where informed decision for therapy is undertaken, taking into consideration individual characteristics of every separate patient. The target is to create a technology for better access of patients to treatment. There is a conceptual difference between mass used approach choosing the treatment and the approach, adopted by the personalized medicine: „The proper treatment for the proper patient in the proper time". The advantages are focus on the right diagnosis, more effective and safe treatment, shorter time, needed for choosing the proper treatment, and at the end more rational use of financial resources.

Choosing this type of treatment needed medicines are diminished, due to the more precise prescription of doses, side reactions are less, and the opportunities to diagnose earlier the disease. As a major contribution on the side of the personalized medicine is the opportunity to focus on the prevention instead on the treatment and thus to increase the effectiveness of the health system as a whole, as well as to improve the quality and the access to the treatment.

A telling example for personalization in the medicine is the so called "pursuing diagnosis", that has the aim to „select" patients, who could benefit from a given treatment. In most cases this diagnosis explores the DNA of the patient after taking a test piece from the damaged tissue.

In the world practice the more popular are practices, allowing the decoding of the whole genom of the patient, i.e. the full genetic information of every individual human being. This information enables a lot of diseases to be guessed, whose mechanism and reasons up to this moment had been unknown (for example, neuro-degenerative diseases, Alzheimer disease), as well as to identify new, unknown up today pathologic conditions.

- Nano-technologies in favor of medicine

The nanotechnology is a set of technologies that enable manipulation, exploration or using of very small (usually less than 100 nanometer) structures and systems. Nano-sciences and nano-technological achievements have potential to influence practically all areas of economic activities and aspects of everyday life, but IS3 is focused on innovation (new materials, devices and products) to improve health and long life.

- Medical and healing tourism

The Strategy for sustainable development of the tourism in Bulgaria 2014-2030 enables development of re-creative, medical and healing tourism, as a tourism type with specific characteristics and good results in Bulgaria and as an additional element to thematic area „Industry for healthy life-style and biotechnologies". Bulgarian territory is rich in (geo-) thermal and mineral waters with temperature between 20oC up to 100oC. Water temperature does not exceed 50oC in about 72% of the sources in public property, and their capacity varies between 1 и 20 l/s for 75% of them. Their total dynamic resource amounts at about 4600 l/s. Bulgaria is one of the most rich countries in Europe in mineral waters, enabling different, mainly healing application.

The offered products in medical and healing tourism activity are not mass and unified. There are possibilities for their personalization in accordance with the needs of every separate tourist. According to the available sources by regions, there is an option to address

different needs (mud baths, types of mineral water). Orientation could be directed in accordance with the available medical centers, in order to cover medical standards for physiotherapy and rehabilitation, i.e. a complex service to be offered. This type of tourism is of special importance, taking into consideration the aging of the population in EU and the expected demand on similar activities in Europe.

- Bio-technologies

Bio-technologies offer science and technology application on live beings, biological systems or their derivatives for creation or modifying with a defined aim of products, services or processes. The focus of IS3 is on the aim healthy life-style (healing aims, healthy eating, natural cosmetics).

List-based definition:

- Proteins and other molecules: synthesis /engineering of proteins and peptids (incl. big molecules hormones); improved methods for delivery of big molecules medicines, isolation of protein and purifying, signal, identification of cell receptors.

- Technological bio-technological methods: fermentation with the help of bio-reactors, Bioprocessing, bio-pulping, bio-bleaching, bio-desulphurization, bioremediation, bio-filtration, phytoremediation.

- Bio-informatics: Creating data bases of genoms, protein consistencies, shaping of sophisticated bio-logical processes, incl. biology of systems.

- Nano-biotechnology: it concerns the instruments and processes of nano- / micro-production for building of devices for learning of the bio-systems and applications in delivery of healing and medicines, diagnostics, etc.

- Bio-photonics: new contactless methods for diagnostics of diseases (for instance, oncological), laser methods, photodynamic therapy, production of medical instruments.

In the frame of thematic area „Industry for healthy life-style and bio-technologies" the following priority directions were identified:

- Methods for clean production, conservation and reaching the final consumer of specific Bulgarian products and elements (yogurt, honey, breads, milk products, etheric oils, herbal products, biocosmetics and bio-products)
- Production of specialized food and drink (baby, children, “astronaut”)
- Production of instruments, equipment and consumables for medical and dental diagnostics and treatment and therapy and/or participation in supra-national production chain
- Personal medicine, diagnostics and individual therapy, healing forms and substances
- Medical and healing tourism with accent on personalization possibilities (personal tourism)

- Nano-technologies in medicine
- Bio-technolgies serving the needs of healthy life and aging “blue” technolgies and application of new methods and technologies in sustainable use of sea and river resources
- Production plants for the extraction of clean electricity and industrial water

It has to be taken into consideration that innovations are a horizontal priority within Rural Development Programme 2014-2020. Concerning the food industry RDP 2014-2020 encompasses a larger spectrum of possibilities for financing, i.e. in all RDP chosen sectors (1. Milk and dairy products, including bird eggs; 2. Meat and meat products; 3. Friut and vegetables, including mushrooms; 4. Bee honey; 5. Grain, flour and farina products; 6. Plant and animal oils and butter; 7. Technical and medical crops, incl. rose and herbs; 8. Ready-made food for agricultural animals; 9. Grape must, wine and vinegar; 10. Production of energy through the use of plant and animal products with the exception of bio-mass from fish products.)

How To Register A Company In Bulgaria?

Many expats come to Bulgaria with the idea to start a new business or move the one that they have in their home country and take advantage of the favorable tax (10% corporate tax) and business climate for a Bulgarian company formation.

Bulgaria has a simplified process of registering companies for foreign businesses. Note that you can register a company here from another country without necessarily coming to Bulgaria. This can be done through the power of attorney.

Company formation in Bulgaria

It's important to note that foreigners face legal restrictions on buying land in Bulgaria. However, these restrictions do not apply to foreign firms. On the contrary, foreign firms can buy and own land in Bulgaria without any legal restrictions. With respect to company operations, the firm does not incur any cost after its registration unless it is operational.

Before you start the registration procedure you will need to think about these requirements:

Your company must have an address in Bulgaria;

Your company needs to have initial company capital which has to be deposited in a local bank;

You must choose a name and scope of activity for your company.

Very important: Choose your Legal Business Form

There are several options that can be chosen as the most common of them are, this decision will affect the way you do business, and how you can operate your company, your company liability:

- "Single person Limited Liability Company " (EOOD) – an entity with one single owner with limited responsibility
- "Private Limited Liability Company" (OOD)– owned by two or more partners with limited responsibility
- "Sole Owner" (ET) – a simplified entity form which is appropriate for very small ventures (full owner's responsibility)
- "Freelance" – a personalized individual registration
- "Public Limited Company" (AD) – joint-stock company – a commercial company with share capital owned by its members
- "Branch in Bulgaria" – Foreign legal entities registered abroad can register a branch in Bulgaria

Step 1: Name of the Company

You must pick a name of the company which will identify your venture on the market as well as before government institutions. Certain name parameters must be taken into account. The name itself could be chosen and occupied prior to the entire registration process (the latter is not compulsory but could represent a useful move in some cases).

Step 2: Escrow Bank Account Registration

You will be required to register a special escrow account in some Bulgarian bank for the purposes of the entity's equity and legal registration. The initial bank account registration is a mandatory step according to the Bulgarian rules and regulations.

Step 3: Business Address Registration

The address registration is the next mandatory step in the process of your company's setup. Your company will need to have a Bulgarian address.

Step 4: Registration in the Government Official Register

According to Bulgarian laws, every new business venture must be registered in the publicly available Official Commercial Register.

Step 5: Stamp Registration

Each newly registered business venture need an official stamp that can be used for endorsement of its formal activities. Despite being an additional after-registration step, the stamp registration has basically an obligatory function for the business set up in Bulgaria.

The procedure for registration of a company in Bulgaria does not differ when local or foreign persons are part or owners of the company. Under Bulgarian law there are no restrictions as to the size of the foreign participation in the capital of a Bulgarian company and, therefore, up to 100% of the registered capital of a local company can be held by foreign persons.

The minimum capital to register a limited liability company in Bulgaria is 2 BGN (1 EUR), and it usually takes up to 2 weeks only to register the company.

It is essential to note that Bulgarian corporate laws do not discriminate against foreign firms. In line with this, a foreigner who registers a company Bulgaria enjoys the same privileges and is subjected to the same corporate terms as that of locally-owned companies.

How to get Bulgarian Citizenship by Naturalization?

Bulgarian citizenship can be acquired by birth, by descent, by naturalization, for extraordinary contribution to Bulgarian State, and on some other grounds. and this is regulated in the LAW FOR THE FOREIGNERS IN THE REPUBLIC OF BULGARIA.

If you have been living long enough in Bulgaria, typically five years since you become permanent resident in the country, then you will have the right to apply for citizenship, the application has to be presented in the Bulgarian Ministry of Justice.

What conditions are required for a foreigner to apply for the Bulgarian citizenship by naturalization:

- Has reached the age of majority (18 years old);
- Has acquired a permit for permanent or long-term residence in the Republic of Bulgaria at least five years ago;
- Has never been convicted for any intentional indictable offenses by a Bulgarian court and there are no criminal law procedures initiated against him/her for an offense of that sort, unless if he/she has been rehabilitated.
- Possesses an income or performs an activity, which allows him/her to support himself/herself financially in the Republic of Bulgaria. also
- Has command of the Bulgarian language, subject to verification by a procedure established by order of the Minister of Education and Culture.
- Has been, for at least three years, and still is, legally married to a Bulgarian citizen;
- has been EU Blue card worker in Bulgaria for a period longer than 5 years.
- The person needs to submit a written application together with all necessary documents, in Bulgarian or accompanied by an official translation.

The next step is a crucial one, and one that many people are afraid of: to pass the interview test from the Ministry of Culture, the foreigner that want to become citizens of Bulgaria needs to pass the test that includes knowledge of Bulgarian history, culture, state structure. This is required for the candidate to show their commitment to this country.

Exams in Bulgarian for citizenship

The test is performed at the offices of the Център за оценяване в предучилищното и училищното образование, (Assessment Center in Preschool and school education) The exam is in the form of a test containing 20 questions and takes place within one astronomical

hour. The exam is successfully passed if the candidate has correctly answered at least 12 test assignments.

Example of the test measuring proficiency in the Bulgarian language for citizenship

More samples can be found at http://copuo.bg/page.php?c=24&d=19&page=1

The examination is free of charge for all applicants. Those who have not passed the exam have the right to apply again not earlier than 3 months after their previous appearance.

Also part of the process is an oral interview. The interviewer registers his impression on the candidate's knowledge of Bulgarian language. The questions in the questionnaire are predominantly personal. They mainly concern the candidate himself, and the answers are open.

The applications are registered and processed by the Bulgarian Citizenship Directorate at the Ministry of Justice of the Republic of Bulgaria.

The application is addressed to the Minister of Justice. The Citizenship Council, established at the Ministry of Justice, provides its opinion on the applications and makes further proposals following the written statements of the Ministry of Interior and the State Agency for National Security.

The Minister of Justice, on the grounds of the opinion of the Citizenship Council, makes a proposal to the President of the Republic of Bulgaria for the issuance of a decree (if all documents are accepted, and the test interview approved, and check have favorable results) for the acquisition, of Bulgarian citizenship. The Minister of Justice proposes the issuance of the decree within 18 months, and 12 months if it is naturalization for persons of Bulgarian origin.

How to buy or sell a used car in Bulgaria?

For the sale of a used car between two private individuals to be considered legal, both the seller and the buyer must sign a vehicle purchase contract in front of a Notary Public.

You can pay for the car in cash if the amount of up to BGN 9 999 (approximately EUR 5 111. Beyond that limit, payments should be made via a bank transfer).

The contract must be signed by both parties or their legal representative(s) before it can be declared valid by the Notary. (If the car is owned by a company it is not necessary to sign at a Notary Public.) The signed contract is needed for the new owner to register the car in their name at the local Traffic Police Office.

The seller provides the following documents:

1- Vehicle registration document

2- The roadworthiness stamp and certificate,

3- A receipt proving payment of the annual Vehicle Tax – the owner of a car receives this after paying the yearly Vehicle Tax at the Local Taxes and Fees Office

4- Proof of identity

5- Proof of third-party insurance

The buyer will need to provide the following:

1- Proof of identity

2- Payment

3- Registering the Vehicle

Within 14 days the new owner must go to the local Traffic Police Office to register the vehicle. The vehicle must be registered at the Traffic Police Office in the town of the new owner's permanent address in Bulgaria.

Local Traffic Police require the following documents for the registration:

buying a car in Bulgaria

1- Registration application form (provided by the local Traffic Police Office in Bulgarian)

2- The original vehicle purchase contract and a copy

3- Proof of payment of the Vehicle Tax

4- A valid third-party insurance policy, compulsory for all vehicles

5- Proof of identity

6- Proof of address registration obtained from the local Address Registration Office, usually in the corresponding City Hall
7- The vehicle's previous registration document

We suggest you find someone to help you with the paperwork at KAT office (Traffic Police) and to deal with all vehicle registration. It's quite a hassle even for Bulgarians. And keep in mind that first arrives first serve, then you need to get there as early as possible in the morning.
Within two months upon the date of registering the vehicle with the Traffic Police, the new owner has to inform the municipality where they live (if the vehicle has been registered on the name of a person).
Or where the company is located (if the car has been registered with the name of a company or a representative office) ("Local Taxes and Charges" Department).
When submitting the declaration, you will be given a reference number, with which you can follow your liabilities and pay the annual tax for your vehicle.
If you decide to buy a car in Bulgaria, follow our advice, be careful and check the car documents meticulously, and the car condition (take it to a respectful car shop for check).
Tha the car shines doesn't mean working correctly, and that's my advice I learned the hard way, making the mistake of being rushed by the car dealer and finished buying a car with lots of problems.

Starting up a business – discussing a model

1. Introduction

The first thing we are going to do is make the model before writing any project report or business plan explaining all the sections that make up the business model. It is critical to sketch and perform an analysis to develop the business model in a way quick and simple

• The model is very simple, a very intuitive and fun. Print it in XL size and work with post-its and coloured markers.

• Allows you to work as a team: hang the model on the wall and make the model visible to everyone. Remove the tables and work in groups in a very interactive and dynamic way.

• Visual: It allows you to see all the important aspects that make up your business model in a global way. I recommend that you leave the model exposed once the analysis is finished, so that all members have a clear overview of the company at a glance.

How the model is filled and what is it for?

It is divided into nine modules; the right part is the one that refers to the external aspects of the company, the market, the environment. The right part of the business model consists of the following blocks: market segment, value proposition, channels, relationship with customers and sources of income.

What aspects should be considered to develop an entrepreneurship project?

An enterprise is understood as a type of company whose task is the satisfaction of, environmental or other needs of the community in which it operates.

Seen in this way, enterprises apply market methods to achieve objectives.

This includes both non-profit organizations, as well as companies with commercial purposes but commitment.

The objectives of this type of company are often referred to as the "triple bottom line", since they imply success in three integrated areas:

- financial objectives,
- objectives
- environmental objectives.

This means that all entrepreneurship aspires in some way to balance these three aspects of its fundamental role:

- economic success,
- responsibility
- environmental responsibility.

Although there are different types of entrepreneurship, it is important to highlight the local, which is based on solving the problems of a specific community, which is the one they know, and on which they can design and implement those actions that can best affect the problem detected.

These are the points where a business plan is broken down and which will be developed later:

I. Project summary
II. Presentation of the project
1. Personal dates of the promoter team
2. Motivations
III. Description of the business project
IV. Analysis of the market and commercial strategy
V. Marketing plan
1. Product
2. Prices
3. Publicity
4. Distribution channels
VI. Production plan
1. Service provision
2. Resources needed
3. Technological plan
4. Stock management
5. Quality management
6. Safety of hygiene
VII. Organization plan
1. Organizational structure
2. Human resources
VIII. Legal plan – fiscal
1. Legal form and the reason / Licenses and permits
2. Taxes
3. Security
4. Coverage of responsibilities
5. Trademarks and patents

IX. Economic and financial plan

2. Model template or Business model and How to use it.

WHAT IS THE BUSINESS MODEL?

If you're already familiar, you can skip to the next section, 'How do I get started?'.

The Business Model gives you the structure of a business plan without the overhead and the improvisation of a 'back of the napkin' sketch, without the fuzziness (and coffee rings).

The model has nine elements. Together these elements provide a pretty coherent view of a business' key drivers:

1. Customer Segments: Who are the customers? What do they think? See? Feel? Do?
2. Value Propositions: What's compelling about the proposition? Why do customers buy, use?
3. Channels: How are these propositions promoted, sold and delivered? Why? Is it working?
4. Customer Relationships: How do you interact with the customer through their 'journey'?
5. Revenue Streams: How does the business earn revenue from the value propositions?
6. Key Activities: What uniquely strategic things does the business do to deliver its proposition?
7. Key Resources: What unique strategic assets must the business have to compete?
8. Key Partnerships: What can the company not do so it can focus on its Key Activities?
9. Cost Structure: What are the business' major cost drivers? How are they linked to revenue?

Let's start:

Leave the folios, computers, worktables ... and print the model in size XL (see annex 1) and paste it on a wall, which is visible to all. Grab post-its and coloured markers. Use a post it to reflect an idea, a concept or a characteristic. This way of working will allow you to modify EVERYTHING you want, move post-its, remove, add, or change as you progress in your analysis.

The Business Model has a work order. It should not be filled without rhyme or reason.

Below I list the order in which the blocks (modules) of the are completed, following the methodology.
To make a model, first fill the modules on the right side. These blocks refer to the external part of the company, to the market. The fact that this part is filled in initially is not chance, the reason why you work in this way is that you must first know and analyse the environment in which your company operates or will operate, initially identifying your customer segment, what is it what you are going to offer them, how are you going to get to them, what relationship are you going to maintain with them and finally how are they going to pay you.

Grab post -its and coloured markers and get to work! In this case I will explain the using the example of a model developed by example of one entrepreneur.
The market:
Focus on the right side of the business model and reflect on customer segment to determine your market niche, ask yourself to whom you create value! To analyse this block, there are specific work es that we will explain in other posts such as the value proposition, the person or the well-known
Value Proposal:
To define your value proposal, it is critical to know what problem you are helping to solve your clients.
Channels:
Identify what will be the means by which you will make your value proposal reach your target customer segment. Sometimes your online Marketing strategy will be key in this section and others less.

Relationship with clients:
Reflect on what your relationship with customers will be. Where does this relationship start and end? Also, your strategy in Networks and Online Marketing will be key in your relationship with customers.
Flow:
You must be clear about how you are going to make money. At the beginning put all the options that you can think of and later test how and how much your target customer is willing to pay (sale of assets, subscription, advertising ...)

Analyse your own company internally on the model:

Once you know the environment of your company, adapt the internal pieces (blocks) to provide the "value proposal" detected in the best possible way; create alliances with the necessary agents, focus on the core activities of your business and think about what you need and what the cost structure is. That is, analyse:

Key Resources:
What do you need to carry out the activity of your company? The resources can be physical, economic, human or intellectual.

Key Activities:
What are the nuclear activities for your company? It is important to be clear about this block because it is what your company will do, the rest, which brings less value, you can outsource it.

Key Partnerships:
List the agents you need to work with to make the business model work (strategic alliances, suppliers ...)

Cost Structure:
After analyzing the key activities, key resources and key associations, reflect on the costs that your company has.

Business Plan
A business plan is a work tool for all those people or groups that want to develop a business initiative. In a Business Plan the different factors and objectives of each of the areas involved in the start-up of a business are collected.
The utility of the business plan is double. Internally, it helps the promoters of the project to start their business venture with a minimum of coherence, rigor, effectiveness and possibilities of success, and contributes in a relevant way to minimize the risks inherent in the generation of a business project. Externally, it is a letter of presentation of the project to third parties, which can be used to seek financial support, seek new partners, contact suppliers or apply for grants.

Project summary

This section is written at the end of the business plan and includes a brief description of the activity and the place where it is carried out, commercial name if there is one and if it is a new creation, a transfer, a new line of business, etc.

In the case that funding is requested, a summary table and detail of what is being requested must be included.

INITIAL INVESTMENT

Own resources (41%)2.500 €

Credit (advanced money from the incubator) (59%) 3.642 €

TOTAL FINANCING 6.142 €

FORECAST OF BENEFITS / LOSSES

First year 18.238 €

Second year 23.267 €

Third year 26.335 €

Presentation of the Project

Description of the activity that will be carried out as well as the profile of the promoters that makes up the project and the origin of the idea.

Personal data of the promoter team

• Name and surname

• ID Card

• Birthdate

• Address

• Phone number

• Curriculum vitae

Motivations and origin of the idea

Explain the evolution of the idea:

- How did the idea of creating the company come about?
- Who promoted it?
- What people have influenced when creating the company?
- Will they support you once the company is created?

Explain the motivations to develop the idea:

- Why do you want to move this project forward?
- Strengths and weaknesses related to the project (SWOT analysis)

Description of the business project

Description of the project that will be completed:

Here we should emphasize the added value of the product or service we offer, because the product or service we offer must be bought for a specific reason; what are the differential factors in a positive relation to the others.

Analysis of the Market and Commercial Strategy

The objective of this section is to define the market to which we want to address. In addition, we will analyse the demand well, that is, our customers, and also those who are offering the same as us, our competitors.

Characteristics and trends of the market:

- Description of the situation, evolution and trend in which the activity sector of the company is located. Issues to consider: sector in the birth phase, growth, mature, decline / recession; expected evolution, regulations / regulations that may affect the sector's trend, entry or exit barriers, concentrated supply or demand ..
- Description of the geographical area to which you will direct the product and service (neighbourhood, municipality, city, county, province ...). If it is a direct sales service to the client, describe the location and environment of your activity. Attached photocopy of the location of the activity (municipality / neighbourhood).
- Description of the main socio-demographic and economic characteristics of the target area of your product or service: number of inhabitants, age structure, level of income in the area, level of employment and unemployment, cultural level. Economic structure of the area: main activities.

Analysis of the demand: definition of the profile of the clients to whom the product or service is directed:

- Characteristics of clients:

Individuals: Describe according to sex, age, income level, cultural level, profession, customs, group, among others.

Once identified the characteristics of our client and knowing if this is our final buyer or an intermediary of the final buyer, it will be necessary to quantify their number to calculate the approximate consumption of our product or service provision. If it is an intermediate product or service (that is, not consumed or used by a final consumer) it is necessary to describe the characteristics of the companies for which we will work.

Companies: sector of activity to which they belong, size of the company, geographical location, among others.

- Analysis of the purchasing process and consumer habits of the customers: who decides the purchase, how the purchase is made (reflexively or impulsively), frequency (daily, weekly, monthly, annual purchase ...), channels (traditional shop, large area, catalog, Internet ...)
- Quantification of potential customers. Depending on the characteristics identified, determine what number of people / companies make up the potential market.
- Contacts already established and / or list of clients. Also indicate the expected frequency of purchase.
- Collection system foreseen.

Analysis of the competition:
Description of those companies, that offers our same products:

- Analysis of the main competitors: if you can identify them, make a list with the name of the company, product or service, price, quality, volume of business, location and type of client to which they are directed.
- Competitive strategy that uses competition. Explain the means used by the competition to attract customers, if through cost or differentiation of the product.
- Strengths and weaknesses of the competition.
- Strengths and weaknesses of your project in relation to the competition.

Marketing plan
It will help us defend the product before the customer. You have to specify how the customer will get to know the product or service, how you will convince him to choose what you offer and how you will get to your business. In this section we will describe the product, its price and the communication and distribution strategy that we will use.
Product

- Description of the activity to be developed. Attach a list of services or products.
- List the differentiating and innovative features of your product or service with respect to other products on the market.
- Needs that are intended to be covered. It is very important to analyse the needs of the consumer, since our point of view may not coincide with the needs of our client. The strategies directed to cover the maximum of needs or in a better way will be those that will make us more

competitive. We must go beyond our offer of products and services. We have to think about what specific needs we satisfy and what benefits we bring to our clients.

Prices

• Criteria for determining prices. List the criteria that have been used to determine prices, depending on the prices of the competition, the costs, the price willing to pay for our client and the expected benefit. Our product will be in a market and it is important to determine what price level we will apply. The price will influence sales, the image and, more importantly, the profitability of the company.

• Price list: Indicate the sale price of each of the products or the hourly price of the service you offer. Also put the purchase price (in some cases it can be difficult but the effort is worth it) and the resulting margin. Calculation of the margin = (PV-PC)/PV x 100

Promotion and publicity

- Define how the new company will be announced, if there are promotions or initial discounts, and the cost of each one of the shares.
- If we have different types of target customers, determine the advertising and promotional system of each one.
- EXAMPLE: The launch campaign conducted by a hairdresser consisted of the following:
- The first week services at 6 euros.
- In addition, a lottery takes part in the raffle of cosmetics valued at 300 euros (excuse to create a customer database).
- The customer card was also created, which consists of a card in which every 4 services of the same type has a free one, and in the same card it is said that if you bring to the hairdresser a person not registered as a client, you will be entitled to a discount of 20% for both and in all services.
-

Distribution channels

What channels will be used to get our product or service to customers? Direct points of sale, wholesale, retail, ...

Production plan

In this section we will detail the manufacturing process of the product or what is the process to provide the service. We will detail the resources necessary to develop our activity and how we will manage our suppliers.

Manufacturing process or service provision

- Detail the manufacturing process of the product or service, identifying those processes that will be carried out within the company and which will be subcontracted.

Resources needed: facilities, infrastructure, equipment and labour

- Detailed description of the premises if there is one (photographs if necessary).
- Description of the elements to carry out our activity and its cost.

Technological plan

- Type of technology used and its main characteristics.
- State in which the market of the employed technologies and expected future forecasts are located.

Stock management: Procurement and storage

A good calculation of the stock forecast will help us adjust the costs that correspond to the purchase and storage and not overvalue our needs.

It is necessary to detail the raw materials and the necessary goods to start working, besides detailing the type of merchandise by supplier.

It is essential to make a careful selection of our suppliers of goods and essential goods for the development and proper functioning of our activity. We must name them and specify what payment and supply conditions we will have.

We also have to determine what financing possibilities we will have from the suppliers.

Quality management.

How will quality be measured? How will it be controlled?

Actions related to the product / service, the client or the results of the company.

Safety and hygiene, and environmental management

Measures related to safety and hygiene to be adopted. How will the occupational risk prevention plan be made? Who will do it, the entrepreneur himself or will the service be outsourced?

Organization plan

Organizational structure:

- List of workplaces, specifying the tasks and functions of each one and the most appropriate profile:

- Administration:

- Commercial:
- Production:
- Address:
- Innovation:
- Computing:
- Others:

Human resources needed:

- Profile of workers.
- Forms of personnel hiring and cost of each place of work.
- Indicate if any external contract will be necessary.
- How the distribution of benefits will be made between the partners, if this is the case.

NOTE: if you plan to expand the workforce in the medium term, include it as an objective in the last section of the business plan.

Legal plan – fiscal

Licenses, permits and procedures to constitute the activity:

- PROCESSING PLACE COST
- Opening communication or
- Environmental City Council License
- Census declaration - Model 036 Treasury Delegation
- High self-employed / general scheme General Treasury Security

Economic and financial plan

The objective of this section is to establish the economic and financial aspects of the activity and must conclude with the analysis of the economic and financial feasibility of the project. Determine the initial investment and sources of financing: it reflects the amount of money needed to start the activity and the sources of financing to obtain that amount of money. Emphasize that the difference between investment and financing must be zero.

This plan should deal with these basic points:

- Three-year treasury table: forecast of payments and collections over three years.
- Three-year income statement: Reflects all income and expenses of the company in the first three years. In this section we will find the point of equilibrium.

- Loan repayment schedule: In case of requesting a loan from a financial institution, it is necessary to foresee the monthly instalments to be paid.
- Inventory tables (with and without VAT).
- Price scan with the unit cost of the products and their margin.
- Forecast of income per day per day or week (in the financial plan it will be monthly) that justifies the amount of product used and reasoning the seasonality and progression that we normally reflect in the financial plan.