National Recovery and Resilience Plan
OF THE REPUBLIC OF BULGARIA

October 2020
The recovery plan turns the immense challenge we face into an opportunity, not only by supporting the recovery but also by investing in our future: the European Green Deal and digitalization will boost jobs and growth, the resilience of our societies and the health of our environment. This is Europe's moment. Our willingness to act must live up to the challenges we are all facing.

Ursula von der Leyen, President of the European Commission
Under conditions of high degree of uncertainty caused by the COVID-19 pandemic, limiting and controlling its spread, as well as dealing with its extraordinary consequences are the main tasks of the Government. The current situation requires targeted measures, and their timely and effective implementation is the key to preserving the economic potential and competitiveness of the economy in the subsequent recovery. In the short term, the Government policy is aimed at increasing the resilience of the national health system and mitigating the socio-economic consequences. This is made possible through measures to support enterprises and employment and to ensure appropriate safe working conditions with a view to resuming economic activity by making full use of the various tools available.

In the medium term, the country’s recovery strategy is based on the National Development Programme: BULGARIA 2030. The document, covering the national decisions for growth and development, defines three strategic goals (accelerated economic development, demographic recovery and reduction of inequalities), for which the Government groups its intentions in five areas of development and raises 13 national priorities. Although BULGARIA 2030 was adopted by the Government in early 2020, just before the outbreak of the pandemic and the accompanying economic challenges, the strategic choice of goals and priorities not only remains relevant, but it is further justified by the revealed vulnerabilities and difficulties in the functioning of socio-economic systems. At the same time, the severity of some of the emerging problems necessitates both the search for additional short-term solutions and the frontloading of some of the planned interventions.

The Recovery and Resilience Plan presents the views of the Government and the society on how structural problems in the economy should be addressed, through an internally coherent and consistent combination of reforms and investments. In this regard, the intentions submitted should not be considered in isolation, but in combination with the parallel planned actions within the EU Cohesion Policy – both in terms of additional funding for the Programming period 2014-2020 (REACT EU) and in the package of strategic documents (Partnership Agreement and its programmes) for the
next programming period. The additional efforts to make a transition to a climate-neutral economy, in the context of the ambitious goals of the European Green Deal to be funded through the Just Transition Mechanism based on just transition plans should also be taken into account.

**OBJECTIVE:** The ultimate objective of the Recovery and Resilience Plan is to facilitate economic and social recovery from the crisis caused by the COVID-19 pandemic. In pursuit of this goal, the Government has grouped a set of measures and reforms that will not only restore the potential for economic growth, but will also develop it by ensuring the resilience to negative external factors. This will allow, in the long run, achieving the strategic goal of the Government for convergence of the economy and incomes to the EU-average ones. At the same time, the Plan lays the foundations for a green and digital transformation of the economy, in the context of the ambitious goals of the Green Deal.
The plan is structured in four pillars:

- **Innovative Bulgaria** – aiming at increasing the competitiveness of the economy and its transformation into an economy based on knowledge and smart growth - 20% of the resources under the Plan;

- **Green Bulgaria** – with a focus on sustainable management of natural resources, allowing to meet the current needs of the economy and society, while maintaining environmental sustainability, so that these needs can continue to be met in the long run - 37% of the resources of the Plan;

- **Connected Bulgaria** – focusing on providing prerequisites for increasing the competitiveness and sustainable development of the country’s regions, such as improving transport and digital connectivity, as well as promoting local development, based on the specific local potential - 22% of the resources of the Plan;

- **Fair Bulgaria** - with a special focus on disadvantaged groups and individuals to achieve a more inclusive and sustainable growth and shared prosperity for all, as well as with an emphasis on building effective and responsible public institutions responsive to the needs of business and the needs of the citizens - 21% of the resources of the Plan.

---

1 The allocation of the financial resources by pillars of the Plan is elaborated on the basis of a specific methodology, consistent with the requirements of the draft regulation on thematic concentration in the areas of green and digital transition, the Country Specific Recommendations of the Council addressed to the country in 2019-2020, the reform intentions and the assessment of the necessary financial resources made by the departments within the process of elaboration of BULGARIA 2030.
PILLAR 1: INNOVATIVE BULGARIA – TOTAL PLANNED EXPENDITURE BGN 2,431.9 MILLION

Within this pillar, the Government’s intentions are grouped into the following key areas:

<table>
<thead>
<tr>
<th>Policy areas</th>
<th>Reforms</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Education and skills</td>
<td>Comprehensive educational reform for updating curricula, disseminating innovations, expanding the scope, upgrading successful practices and skills for distance learning, STEM orientation and development of cognitive skills; Reform in higher education, aimed at modernizing higher education and creating conditions for active research, transfer and commercialization of knowledge and technology; Reform introducing skills related to digital transformation and Industry 4.0 and validation of acquired skills; Reform in the field of innovation and research; Reindustrialization reform (industrial parks).</td>
</tr>
<tr>
<td>- Research and innovation</td>
<td></td>
</tr>
<tr>
<td>- Smart industry</td>
<td></td>
</tr>
</tbody>
</table>

**Education and skills**

(a) Main challenges

The COVID-19 pandemic and the measures taken to limit its spread posed a serious challenge to the country’s education system. In a state of emergency and with restrictions on mobility and social contacts, school education had to move to distance mode in the spring of 2020. All schools introduced distance learning through cloud platforms or other means of interaction, combining synchronous and asynchronous learning. A national digital library has been set up to help teachers share lessons and teaching materials. To adapt the learning process to the new reality, laptops, internet access devices and prepaid internet packages were purchased and made
available for use. According to estimates by the Ministry of Education and Science, however, over 10% of the pupils in the country were not covered by distance learning, as they did not have devices that would allow them to be fully involved in the learning process. Following the easing of the restrictive measures taken, the 2020/2021 school year began with pupils attending school in person, but the dynamics of the spread of the infection in October presupposes a re-transition on a systemic level to distance learning. This requires taking adequate measures to ensure the right to education of every child and young person.

In addition to the difficulties encountered in the crisis, the education system in the country also faces some structural challenges, the addressing of which over the years has not yet led to their full resolution. The level of educational characteristics of the population is a key prerequisite for the quality of human resources, as well as for the ability of the economy to quickly adapt and recover from crisis situations and shocks. Despite ongoing efforts to modernize the education and training system, improving its quality, labour market applicability and inclusiveness remains a challenge in Bulgaria, limiting the country’s ability to rapidly converge to the EU’s economic and social situation. In recent years there has been an improvement in the educational structure of the population, with an increase in the share of higher education graduates and a decrease in the number of people with basic and lower education, but the achieved share of higher education graduates among people aged 30-34 remains still below the national target for the Europe 2020 strategy of 36% (32.5% for 2019). The average results of students in Bulgaria in reading, mathematics and science (PISA) remain significantly below the average for the EU, with the country having one of the highest shares of pupils with poor results in the three areas. In 2019, the percentage of early school leavers is 13.9%, which is still above the national target of Bulgaria under the Europe 2020 strategy of 11% and the EU average level of 10.6%. The share of early school leavers is particularly high in rural areas and among the Roma. The general level of digital skills of the population is low, including among young people. The challenges of modernizing, internationalizing and adapting universities in the context of digital and industrial transformation remain.

(b) Objectives

The aim of the policy is to raise the quality and scope of education and training with an emphasis on acquiring analytical skills and developing
creative thinking, increasing the ability of people to timely adapt to technological transformation and the resulting changes in the labour market. Accelerated modernization and digitization of educational approaches, methods and practices.

(c) planned reforms and investments

To improve the quality and applicability of education, a comprehensive and multifaceted educational reform is being implemented, strengthening the focus on building skills and key competencies from an early age. To increase the scope of the education system, compulsory pre-school education is introduced for children over 4 years of age, given the fact that early coverage of pre-school children is key to their development, as more time spent in the kindergarten contributes to more successful dealing subsequently with the material at school and reducing dropouts from the education system. At the same time, conditions are created for additional training in school subjects for pupils who are absent for more than 10 days or for compensation of students who study asynchronously from a distance in an electronic environment. For children with special educational needs opportunities are created for activities to support personal development (including individual and group therapeutic work, pedagogical support and counselling, as well as activities of interest) from a distance in an electronic environment from the centres for special educational support. As an element of innovation in terms of the organization related to improving quality and improving learning outcomes, in innovative schools it is allowed to combine in-school training for pupils from V to XII grade with synchronous distance learning in an electronic environment for up to 20% of school hours. An important aspect of the ongoing reform is the focus on the areas of STEM (science, technology, engineering and mathematics), which creates the preconditions for successful further realization of young people in the professions of the future, while also encouraging the introduction of new teaching methods, the qualification of the pedagogical specialists and creation of new educational content in the direction of integration of the subject areas of STEM. Through a model of integration of a new generation learning environment in Bulgarian schools, educational innovations in teaching and learning will be encouraged and supported. The educational innovations that will be created and validated will focus on creativity, the use of research methods and interdisciplinarity. The reform efforts in higher education also refer specifically to the development of a critical mass of human and material resources in key areas in order to support the
competitiveness of the Bulgarian economy, but also the widespread dissemination of innovations and conditions for entrepreneurship throughout the country. A national map will be prepared to support the connection of resources and programmes of higher education institutions, which will allow further quality specialization, according to regional characteristics and accumulated capacity, while providing the necessary basis for the development of research and identification of priority units.

Another part of the reform intentions in the education system, which is also related to the effectiveness of active labour market measures, concerns the focus on skills related to the digital transformation and Industry 4.0, and the validation of knowledge, skills and competencies acquired within the educational system or outside it – within training events, training and retraining courses or through informal education.

- **Building an educational STEM environment**

  The project aims to ensure the possibility and quality of e-learning and access to modern information and communication technologies, creation of virtual classrooms, implementation of digital technologies and introduction of digital and innovative methods of teaching and learning. The project will create a fund of technological devices and will provide digital resources for frontal training in each classroom. STEM cabinets will be equipped in 1,680 schools that are not intended for funding from the national budget or programmes/projects funded by the European Union. The project will contribute to the promotion of digital skills and equal access to education. The total planned resource is BGN 650.0 million with an implementation period of 2020-2023.

- **Establishment of centres for personal development of pupils and youth**

  The measure will support the formation, development and realization of pupils and young people by building multifunctional centres that provide both modern facilities and the application of innovative approaches in working with these age groups. The model for construction of youth centres in the cities of Plovdiv, Stara Zagora, Dobrich and Vratsa will be followed and upgraded with the support of the Financial Mechanism of the European Economic Area. Maintaining the interest of students and young people in
education and the acquisition of new skills, participation in joint initiatives and sharing common values with their peers, including participation in national and international initiatives will not only help the integration and socialization of young people from vulnerable groups, but will allow the formation of a positive attitude among young people for development and realization in Bulgaria. In addition, this programme would have a real effect on the creation of new jobs in the municipalities, with 200 in total for the entire project. The total planned resource is BGN 70.0 million with an implementation period of 2021-2023.

- **Modernization of educational institutions for a more attractive and quality environment for learning and innovation**

In order to ensure a complete renewed appearance of the educational institutions and to create more attractive conditions for learning, activities of interest, sports and recreation of children, pupils and students, activities will be carried out for repair, reconstruction, rehabilitation, construction of installations, for use of alternative energy sources, heating, ventilation and cooling of the building stock. The project will primarily cover about 750 schools and 450 kindergartens in which no external repairs have been carried out. Priority will be given to the implementation of complete repairs and construction of student dormitories and campuses to provide living and learning conditions. The total planned resource is BGN 711.9 million with an implementation period of 2020-2026.

(d) Complementarity and demarcation with the Cohesion Policy instruments

The projects are complemented in the short term with the support for the construction of STEM classrooms in 300 Bulgarian schools, under REACT-EU, which in addition to preparing students to develop STEM skills will also perform the functions of distance learning centres in an electronic environment. To have a lasting impact on the education reform, they will be combined with the activities envisaged in the Education Programme 2021-2027 for digital transformation of education and promotion of educational innovations in pre-school and school education.
More broadly, the projects complement the targeted efforts under the Education Programme 2021-2027 for Early Childhood Development and expanding the scope of the education system while ensuring equal access, modernizing curricula and content, supporting the professional development of teachers. Efforts are aimed at increasing the applicability of school education to achieve professional realization and to also support reforms in vocational and higher education in order to strengthen the links between them, science and the dynamic needs of the labour market and facilitate the transition from education to employment.

**Research and Innovation**

(a) Main challenges

The potential of research and innovation to support productivity remains underutilized. Bulgaria needs to close the significant gap with the EU average in terms of R&D spending and the ability to retain and attract talent. Public funding is insufficient, and private investment in research and development is a monopoly of large multinational companies and is concentrated in the region of the capital city. The high fragmentation of the R&D and innovation system and the depreciated infrastructure and equipment do not allow R&D investment to contribute to productivity and growth. The country still ranks in the group of "modest innovators", and the main contribution to the weak relative performance of Bulgaria is made by the quality of research in the country, including publishing and patent activity, the relationship between private and public research, offering high-tech and innovative products from the Bulgarian business and - last but not least - the low efficiency of the coordination efforts between the separate structures of the executive power, engaged in the development and implementation of policies in the separate aspects of the problem.

(b) Objectives

The main goal is to provide a favourable environment for the realization of new products and processes and the development of innovative enterprises, as a necessary prerequisite for creating a high-tech industrial base that will lead the economy to a new and higher growth trajectory. The priority is to strengthen and stimulate scientific activity in higher education research, as well as the overall improvement of the research infrastructure and capacity
to develop critical mass and knowledge to deal with the double transition and prepare the regions for accelerated development.

(c) planned reforms and investments

The reform in the field of research and innovation is ongoing. The establishment of the new State Agency for Research and Innovation marks the beginning of a new policy in the country, which links the two areas in a common strategy, priorities and goals with a clear focus on the development of society and the economy. The transfer of functions and responsibilities from the Ministry of Economy and the Ministry of Education and Science to the new structure creates preconditions for increasing the effectiveness of the policy. It facilitates the pursuit of priorities in national and Community strategy papers, as well as the management and monitoring of material support measures for economic operators and institutions developing research, innovation or technology transfer. The Agency is expected to play a key role in the national policy of interaction between research and innovation and the development of the national research and innovation ecosystem. It will coordinate, complement and differentiate investments under the various instruments (European and national) at the level of planning and implementation in order to focus efforts and resources and make full use, load, development and renewal of the infrastructure already built and under construction.

Supporting this reform is the opportunity created by the change in the Higher Education Act to promote research, transfer and commercialization of new knowledge and technologies in universities. The implementation of the National Strategy for Development of Scientific Research in the Republic of Bulgaria 2017-2030 continues with an emphasis on improving monitoring and evaluation of research, accompanied by increasing and prioritizing public investment based on objective indicators of scientific results.

- Programme for accelerating economic recovery and transformation through science and innovation

The project envisages the creation of a mechanism to encourage public and private investment in research and innovation through the coordination of government efforts and policies to optimize and strengthen the transfer of research results and technologies. Opportunities are provided for support and internationalization of
innovative SMEs and start-ups throughout the country. The planned investments are in three main pillars:

First pillar: Creating a network of research universities. The ambition is to turn universities into centres and units for active exchange of knowledge and technology between scientific units and industry throughout the country, thus stimulating the development of a local economy with higher added value and development. The project envisages the creation of a comprehensive system – a campus for the development and transfer of knowledge, including a university, start-up innovative companies, and spin offs and spin outs with a clear commitment of the partners. The construction of the system is connected with clearly expressed incentives for the development of practically oriented and related to the needs of business PhD programmes, with a career focus and with a direct focus on the commercialization of the results of research and development. The aim is to create a flexible environment for exchange of knowledge and technology, based on industry demand around the universities. This will contribute to the development of the respective regional innovation ecosystems and the strengthening of the link between the academic and private sectors, incl. regarding the movement of human resources (highly qualified specialists, young scientists, doctoral students, and post-doctoral students) between these sectors.

The support will be provided in two stages: the first one, starting in 2021, will support the most prepared units already structured as research universities, and the second one will fund the next ones according to their readiness. The readiness assessment will be performed on the basis of internationally recognized standards in this field, including the involvement of external evaluators. The financing and implementation of the projects, part of the programme, will be based on a business plan and a programme with set and regularly reported measurable indicators for results and progress.

The second pillar includes support for expanding Bulgaria’s participation in the Horizon Europe Framework Programme 2021-

---

2 The investment will be based on an in-depth analysis of the potential and the workload of the already built and under construction research and innovation infrastructure both in and around higher education institutions and the needs of industries in key areas of local and national development identified in the Innovation Strategy for smart specialization.
2027 through synergies with initiatives at the national level. The first initiative consists of providing national co-financing for Bulgarian participation in European research and innovation partnerships in the fields of health, digital technologies, industry, climate, energy, mobility, food, bio-economy, agriculture, environment, horizontal partnerships and other priority fields (for instance Key Enabling Technologies, Clean Energy, EuroHPC, etc. The second initiative consists of the implementation of the “Seal of Excellence” mechanism for Bulgarian beneficiaries under the European Innovation Council within its two instruments - "Pathfinder" and "Accelerator". In this way, the implementation of both high-risk avant-garde projects aimed to develop radical innovations and new market opportunities, as well as innovations creating new markets will be supported. Beneficiaries will be SMEs, start-ups and innovation teams. The third initiative consists in implementing the "Seal of Excellence" principle for Horizon Europe’s "Enlarging and Strengthening the European Research Area” component, and in particular the "Twinning" and ERA Chairs measures. The initiative can be extended to programmes related to reintegrating and/or attracting start-up and experienced researchers. This will encourage both the modernization and internationalization of the respective higher education institutions and research organizations, and will also lead to structural changes in the organizations themselves and will encourage their subsequent participation in other Horizon Europe programmes and instruments.

Pillar 3: Supporting the process of creating digital innovation hubs on a regional basis
The project will provide support for the creation of a regional network of digital innovation hubs. In the first half of 2021, the country will participate in the selection of the EC for the creation of European digital hubs under the Digital Europe Programme. Bulgaria’s participation in the Programme will be preceded by a national selection of digital innovation hubs, covering clearly defined criteria at European level. The funding provided for the country at the moment allows co-financing with 50% of the resources of two to three national hubs. The purpose of the support in this direction is our country to provide funding for those of the national projects that have received a seal of excellence from the
EC, but there is not enough funding for them, and at the same time they are assessed as necessary for the development of the regions and the country. The idea is to support mature projects according to the needs of the country, mainly at the regional level, which will complement the country’s efforts in innovative development and the transition to Industry 4.0. The total planned resource is BGN 410 million with an implementation period of 2021-2026.

(d) Complementarity and demarcation with the Cohesion Policy instruments

The projects will complement efforts to develop innovation and research as a crucial factor in overcoming crises, economic recovery and the transition to a circular and green economy. The targeted efforts will seek to overcome the fragmentation in the development of research and innovation by strengthening the interaction between the two areas and reducing regional disparities by building and upgrading a national research and innovation ecosystem, contributing to the emergence and development of full-fledged research partnerships, organizations and universities with industry and enterprises throughout the country. Investment will be made in capacity building and human resources development, support for the creation of start-ups in knowledge-intensive sectors, promotion of the internationalization of enterprises and the Bulgarian research and innovation ecosystem.

**Smart industry**

(a) Main challenges

Restrictive measures taken to control the pandemic have led to a contraction in economic activity in most sectors of the economy. In the second quarter of 2020, when the most restrictive measures were in force, investment in the economy reported a 28.3% decline compared to a year earlier. GDP contracted by 8.5% on an annual basis, with the construction sector declining by 7.4% and industry losing 10.6% of value added compared to a year earlier.

To address the liquidity difficulties of the business in the conditions of the pandemic, the Government increased the capital of the state-owned
Bulgarian Development Bank by BGN 700 million, by providing BGN 500 million for portfolio guarantees of commercial banks for granting corporate loans and BGN 200 million for interest-free loans to employees on unpaid leave. Through reprogramming the resource from the European Structural and Investment Funds, BGN 350 million were provided for direct grant support to SMEs affected by the crisis, as well as over BGN 1 billion for additional business lending through the Fund Manager of the Financial Instruments in Bulgaria (Fund of Funds).

The development of the pandemic situation and the great uncertainty for subsequent waves of the infection necessitate the continuation of liquidity support for the business. At the same time, however, in the medium term, the Government should focus its support for economic recovery on overcoming the existing structural challenges for small and medium-sized enterprises. The implementation of the legislative act on small business (Small Business Act) shows that the country is lagging behind the EU, especially in the areas of "entrepreneurship" and "skills and innovation". Bulgarian companies find it difficult to take full advantage of the opportunities offered by new digital technologies – only 6% of SMEs sell online (the EU average is 17%), 3% of SMEs sell abroad and only 2% of their turnover comes from trade online.

(b) Objectives

The component aims to support the industrial sector in the double transition and to provide a favourable environment for the realization of new investment. The expected effects of the interventions envisage an increase in the productivity of Bulgarian enterprises, which will be reflected in a higher rate of economic growth, higher employment and labour incomes.

(c) planned reforms and investment

The main reform effort is related to the construction of a more sustainable and flexible mechanism for attracting industrial investment, respectively for the development of industrial ecosystems. The goals in the field are several – introduction of institutional conditions for faster realization of investment in the industry; more favourable conditions for the development of industrial ecosystems; more opportunities for industrial investors to partner with local authorities, with educational, scientific, research and social organizations. The regulatory framework for this effort is the draft
Industrial Parks Act, which provides for an ambitious reduction in the necessary procedures for industrial investment and minimum necessary standards for work in industrial ecosystems to benefit from state support. To the extent that this regulatory instrument does not directly affect the possibility of public support for industrial parks and areas, the country will seek to pursue a policy of support where it would not displace an already evolving private initiative. In addition, the state views its industrial policy through the prism of the balanced development of the regions. Interventions to support industry in lagging regions will be part of the tools of the state and municipalities to combat economic imbalances by region.

- **Programme for public support for development of industrial parks and improvement of their infrastructural connectivity**

  Conditions will be created to encourage investment through the construction of industrial parks. The programme consists of two components. The first component "Infrastructure construction" includes the construction of leading, specialized and social infrastructure, for which purpose the following activities are envisaged: formulation of criteria for determining industrial parks of strategic importance, for financing activities; identification of key industrial parks, according to the Industrial Parks Act; valuation and financing of elements of the technical infrastructure. The programme also envisages financing activities for attracting and retaining strategic investors in the industrial parks, through a separate second component "Shortening the supply chains and reindustrialization". In addition to the expected positive effects in terms of investment activity in the country and the modernization of the industrial sector, the implementation of the project will allow reducing regional disparities in the country. The total planned resource is BGN 490 million with an implementation period of 2021-2026.

- **Programme to support the process of transition to a circular economy in enterprises**

  The project envisages taking real steps to transform the economy from linear to circular, fulfilling the country’s commitments to achieve the goals set in European legislation for a climate-neutral economy. The main goal of the initiative is to support large
enterprises for the transition to a circular economy along the introduction of recycling technologies, standardization in the field of environment and promotion of eco-innovation and industrial symbioses between enterprises. The project includes analysis of waste streams and surveys of enterprises to implement industrial symbioses, supporting enterprises to introduce environmental standards, supporting the introduction of eco-innovation in enterprises, reducing environmental pollution and more efficient use of resources, development of demonstration projects for clean technologies and providing start-up capital to encourage the development of new businesses in the circular economy. The programme will be implemented with financial instruments. The total planned resource is BGN 100 million with an implementation period of 2021-2025.

(d) Complementarity and demarcation with the Cohesion Policy instruments

Interventions under two programmes in the next programming period will also support the construction and sustainable development of industrial parks, as part of the efforts to build modern industrial infrastructure throughout the country in order to overcome territorial imbalances in investment activity – support for partnerships between municipalities and investors for the construction and development of industrial parks (Regional Development Programme) and measures to support enterprises in the areas (Enterprise and Innovation for Competitiveness Programme).

Significant support will be directed to the development of Industry 4.0 in Bulgaria through the introduction of digital technologies and solutions, promoting the introduction of technologies from Industry 4.0 in enterprises and building the necessary human, scientific and institutional capacity.

To achieve sustainable use and management of resources as a condition for transforming the economy from linear to circular and to reduce resource and energy intensity, enterprises will receive support for the introduction of low-carbon, resource and energy efficient technologies, promoting efficient use of resources during the entire life cycle of the products, as well as the development and implementation of innovations in the field of circular economy according to the Innovation Strategy for Smart Specialization 2021-2027. By targeting large enterprises the project proposal
under the Plan complements these interventions, while the Cohesion Policy interventions target small and medium-sized enterprises.
PILLAR 2: GREEN BULGARIA – TOTAL PLANNED EXPENDITURE BGN 4,499.0 MILLION

The Government’s intentions are grouped under this pillar in the following key areas:

<table>
<thead>
<tr>
<th>Policy areas</th>
<th>Reforms</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Circular and low carbon economy</td>
<td>Liberalization of the wholesale electricity market.</td>
</tr>
<tr>
<td>- Biodiversity</td>
<td></td>
</tr>
<tr>
<td>- Sustainable agriculture</td>
<td></td>
</tr>
</tbody>
</table>

Circular and low carbon economy

(a) Main challenges

The Bulgarian economy is one of the most resource-intensive in the EU, lagging behind the Member States of the Community in terms of applying the principle of circular economy and implementing eco-innovation activities. The economy spends on average 3.6 times more energy resources per unit of GDP than the average energy consumption in the EU. In the industrial sector there is stagnation in the norm of energy efficiency, and the reasons for this include the lack of significant changes in the industrial structure, as well as the lack of significant improvement in terms of technologies used and production processes. As a result, the energy intensity of Bulgarian industry remains the highest in the EU, almost three times higher than the EU average. To a large extent, the same applies to the services sector, where, however, the gap with the EU is lower (2.5 times).

Over the last ten years, there has been a doubling of the share of energy from renewable sources in gross final energy consumption, reaching 20.5% in 2018. According to this indicator, the country continues to perform better than the EU (the average for the EU in 2018 amounts to 18.0%), and the level
of the indicator remains significantly above the national target under the Europe 2020 strategy (16% in 2020).

Greenhouse gas emissions per capita decreased from 9.1 tons of CO2-eq. in 2007 to 8.3 tons of CO2-eq. in 2018, with the value for the country being lower than the EU average (8.6 tons of CO2-eq.). However, Bulgaria remains the most carbon-intensive EU Member State, with the intensity of greenhouse gas emissions in the Bulgarian economy being more than 4 times higher than the EU average, with a positive but modest trend of shortening the gap in this regard in recent years.

(b) Objectives

The main objective of this component is to reduce the energy intensity of the economy and promote the green transition by taking measures to increase the energy efficiency of residential, industrial and public buildings. The modernization of the activities for planning, management and maintenance of the country’s electricity transmission network, as well as the completion of the ongoing reform in the electricity market in the direction of full trade liberalization will be of key importance.

(c) planned reforms and investment

The liberalization of the electricity market will be fundamental for the efficient implementation of investment and the achievement of the objectives of this component. It aims not only to enrich the options for purchasing electricity for the end user, but also to remove barriers to market entry for electricity suppliers and producers. This will increase the efficiency of the energy market by introducing competitive supply of electricity from suppliers to end users. Liberalization of the energy market is also a key prerequisite for sustainable energy development in the country, supporting the decentralized generation and storage of electricity. In this way, the reform will also contribute to building energy efficiency measures, increasing the added value of local energy production and storage installations in residential, industrial, office and public buildings. The reform is part of the process of lowering the overall resource intensity of the economy, complementing measures related to the implementation of the principles of the circular economy in production processes and sustainable use of natural resources.
• **Energy efficiency programme**

The programme envisages the implementation of four components to increase energy efficiency. The first component envisages financing measures to increase energy efficiency in the country's housing stock. The renovation of residential buildings will be implemented in accordance with the objectives of the Long-Term National Strategy to support the renovation of the national building stock of residential and non-residential buildings (with a horizon until 2050), and the energy efficiency measures envisaged in it will be financed, aiming at achieving a minimum class B of energy consumption. Priority will be given to sites/buildings that have been approved but not funded due to exhaustion of financial resources under the National Programme for Energy Efficiency of Multifamily Residential Buildings and the Operational Programme "Regions in Growth" 2014-2020. In addition, the scope of the component includes single-family residential buildings. Indicative resource for Component 1: BGN 1,728 million. The second component provides for financing measures for energy renovation of state and municipal buildings, incl. administrative (70%), cultural (15%) and sports (15%) infrastructure. Indicative resource for Component 2: BGN 417.5 million. The third component envisages financing of measures for energy renovation of industrial buildings with an indicative resource of BGN 282.2 million. The fourth component envisages financing of measures for energy efficiency of systems for outdoor artificial lighting with an indicative resource of BGN 452.3 million.

Within the Programme, eligible costs will be allowed for organization and management of the programme, as well as for organization and management of projects by the beneficiaries. Energy efficiency is considered a priority, given its importance for improving the country's energy security by reducing dependence on energy imports, reducing energy costs for businesses, households and administration, creating more jobs, improving the quality of energy, air and reducing greenhouse gas emissions and improving the quality of life of citizens. Improving the energy efficiency of the building stock will have a positive impact in terms of economic growth and job creation, and saving energy will also save financial resources. Saving energy is one of the fastest and most cost-effective
ways to achieve the strategic goals of combating climate change, ensuring energy security and achieving sustainable economic and social development. The total planned resource is BGN 3,000 million with an implementation period of 2021-2026.

- **Establishment of a national decarbonisation fund**

  The establishment of a national decarbonisation fund aims to support investment in low-carbon development through sustainable and targeted financing of a wide group of beneficiaries – end users of energy – in order to maximize the goals of decarbonisation of the Bulgarian economy. The structuring of the fund will be supported by an ongoing project for technical assistance from the European Commission's Structural Reform Support Service, expected to be completed by the end of 2021. Possible sources of the initial capitalization of the fund are the Recovery and Resilience Mechanism, the Structural and Cohesion Funds and the respective programmes, as well as the Just Transition Fund and InvestEU, funds from the national budget and from international financial institutions. The fund will be used to offer grants, financial and technical assistance, combined with financial instruments including credit lines and guarantees and/or a combination thereof. The fund envisages the creation of a single point for the technical assistance of the candidates by servicing one-stop shops or similar mechanisms. The participation of local banks/financial institutions in this financial scheme will be a key element for the success of the Fund, as in their role of financial intermediary, their participation will not only contribute to providing a "leverage" of investments in the form of co-financing, but it should also significantly simplify the project financing process.

- **Digital transformation and development of information systems and real-time systems of the Electricity System Operator in the conditions of low-carbon energy sector**

  The aim of the project is complete modernization of the activities for planning, management and maintenance of the electricity transmission network of the country through the introduction of modern digital tools and methods to ensure the necessary
manoeuvrability, security, reliability and speed in managing the power system in low carbon production, increasing penetration of renewable sources and distributed generation, increasing the flexibility of operational management and monitoring of the electricity system. The project includes a comprehensive programme for complete digital transformation of systems and processes in the Electricity System Operator and includes the following subprojects: system for automated control of substations, modernization of SCADA in a support post with introduction of remote reservation, expansion and modernization of telecommunications network with new devices for remote control of substations, complete cyber security system, supplementation of functionalities in the reserve centre for power system management, display walls, construction of virtual working environment, modernization of the system for administration of the electricity market and the balancing market, system for dynamic monitoring of transmission capabilities. The total planned resource is BGN 511.0 million with an implementation period of 2021-2026.

(d) Complementarity and demarcation with the Cohesion Policy instruments

The projects of the Plan are complemented by the interventions of the Cohesion Policy for sustainable management and use of natural resources, allowing meeting the needs of the economy while maintaining environmental sustainability. The introduction of low-carbon, resource-efficient and energy-efficient technologies in enterprises, development and implementation of innovations in the field of circular economy, energy efficiency measures, use of energy from renewable sources for own consumption in enterprises will be supported.

Energy efficiency measures are envisaged in residential and public buildings on the territory of urban municipalities in the country in accordance with the Long-term strategy for renovation of the building stock in the Republic of Bulgaria with a horizon of 2050. These measures will be combined with interventions, primarily in energy efficient buildings, for replacement of individual heating devices on solid fuel with environmentally friendly and energy efficient appliances/systems as the focus will be in the municipalities with impaired air quality. Electromobility and the use of environmentally friendly vehicles will be encouraged, and charging stations for electric
vehicles will be built. These measures have a direct contribution both to increasing the energy efficiency of households and to reducing greenhouse gas emissions.

**Biodiversity**

(a) Main challenges

The main risks to biodiversity in Bulgaria are related to habitat loss as a result of urban development and infrastructure, unsustainable agriculture and the exploitation of species of economic importance. Bulgaria has not yet fulfilled its obligations to classify special conservation areas, to define area-specific conservation objectives, and to determine the necessary conservation measures in them in order to preserve/restore species and habitats of Community interest to achieving a favourable conservation status. In this regard, establishing an effective governance structure for Natura 2000 and strengthening the capacity of the administration and other bodies involved in this network remains a challenge.

(b) Objectives

The purpose of the component is to ensure effective management of the National Ecological Network and protection of natural habitats and species of European and national importance to stop the loss of biological diversity.

(c) planned reforms and investment

- **Integration of the ecosystem approach and implementation of nature-based solutions in the protection of Natura 2000 protected areas**

The following groups of activities are planned: providing up-to-date information on the state of ecosystems, ecosystem services and green infrastructure on the territory of the Natura 2000 network; determining the specific objectives and protection measures for protected areas of the Natura 2000 network; involving stakeholders in the decision-making process. The total planned resource is BGN 38.0 million with an implementation period of 2021-2025.
(d) Complementarity and demarcation with the Cohesion Policy instruments

The activities planned under this component complement the interventions from the National Framework for Priority Actions for Natura 2000 (2021-2027), for which financial support is provided within the framework of the Common Agricultural Policy and the Cohesion Policy. The necessary measures, the implementation of which will cumulatively lead to the preservation or restoration of natural habitats and populations of wild animal and plant species, are related to the establishment and subsequent strengthening of the management bodies of the National Ecological Network; raising awareness and capacity of stakeholders; conservation and restoration measures to improve and maintain the conservation status and biodiversity.

**Sustainable agriculture**

(a) Main challenges

The more rapid development of the agricultural sector is hampered by the low level of penetration of modern digital technologies for precision agriculture, the lack of information of farmers about the nature and benefits of their introduction, the lack of digital skills, etc. Another significant challenge for the sector is related to the fact that the existing hydro-ameliorative infrastructure in the country, including engineering systems related to irrigation, drainage and protection from the harmful effects of water, remains in critical physical condition and deteriorated functionality, leading to significant losses of irrigation water in the linear infrastructure and respectively to its high price. The utilization rate of existing irrigation systems over the last decade is extremely low, ranging from 4% to 8%. These statistics are indicative of the inefficient use of water resources in the agricultural sector, which is a significant obstacle to the intensive development of the sector and to sustainable water management in this sector.

(b) Objectives

The component aims to increase the competitiveness of the agricultural sector and the sustainable management and use of water by means of
measures to improve hydro-ameliorative infrastructure, improving the resilience of the economy to climate change and playing an important role in preserving environmental characteristics.

(c) planned reforms and investments

- **Digital agriculture**

A complete electronic information system in agriculture will be built, through which to achieve: electronic information flows from and to the administrative activities; electronization of the services provided to the farmers, their centralization and their use by the business in the course of fulfilment of the obligations and requirements depending on the type of agricultural activity; integration of the information systems of the administration and the software for management of the agricultural holdings in a Unified platform for automated data exchange between the administration and the farmers. The platform will ensure a single flow of data to and from the administration and farmers and avoid the manual transfer of information and support for redundant document formats. The system will contain modules for: the use of plant protection products and fertilizers by digitizing the logs for their use; recording and tracing of imports, production, trade and storage of veterinary medicinal products and medicated feeding stuffs, as well as their application to animals; "farm to table" tracking – from primary production to final consumption on the principle of a unique identification code in order to inform consumers and stimulate the production of quality and affordable food; measuring food losses and waste, allowing analysis, assessment and monitoring of the food waste situation in the country and monitoring the results in real time in relation to the generated waste throughout the food chain; online training, incl. content of training modules and consultations of farmers, while maintaining information related to modern technological and environmental solutions for growing major groups of crops and farm animals in a conventional and biological way in accordance with the requirements for sustainable use of natural resources and adaptation to climate change. The project also envisages digitalization of agricultural holdings by providing vouchers for the implementation of precision farming systems and smart ear-tags, as
well as building a network for communication of sensors and a data management module, which will enable the Bulgarian farmer to have access to the most important information concerning the development of the crops in view of the optimal planning of the agro-technical measures and making managerial decisions. The total planned resource is BGN 102.0 million with an implementation period of 2021-2023.

• Improving the condition and modernization of the hydro-ameliorative infrastructure
Activities for reconstruction, restoration (design and construction), modernization of irrigation canals, irrigation fields, derivations, pumping stations, pressure pipelines, equalizers, water intakes, dams and drainage sites – drainage pumping stations, canals and dikes are envisaged. The implementation of the project will lead to a significant reduction of water losses while increasing irrigated areas, improving the efficiency of irrigation processes, protecting agricultural land from the harmful effects of water, preventing the risk of disasters and adapting agriculture to climate change. The expected increased competitiveness of the sector will also contribute to the reduction of interregional and intra-regional disparities on the urban-rural axis. The total planned resource is BGN 848.0 million with an implementation period of 2021-2023.

(d) Complementarity and demarcation with the instruments of the Common Agricultural Policy
Continuing the policy pursued so far for the restoration of the main hydro-ameliorative infrastructure as a prerequisite for competitive and sustainable development of agriculture, through the Strategic Plan for the CAP investments will be financed in reconstruction/rehabilitation and modernization of hydro-ameliorative infrastructure used for agricultural purposes. Effective irrigation of agricultural land will provide completeness and a good basis for the development of the agricultural sector while adapting to climate change.

To strengthen market orientation and increase competitiveness, the National Strategic Plan for agricultural and rural development will invest in technological modernization, innovation and digitalisation in sustainable economies by promoting links between producers and science. The main
support measures under the European Agricultural Fund for Rural Development will be aimed at supporting the production and increasing the competitiveness of farms in the sectors of production of vegetables, fruits, milk and meat derived from ruminants, which are important for the country's economy, improving the productivity and the yields of small and medium-sized farms in the agricultural sectors, providing products with higher added value, as well as investments to accelerate the modernization and technological renewal of small and medium-sized farms.
PILLAR 3: CONNECTED BULGARIA – TOTAL AMOUNT OF PLANNED EXPENDITURE BGN 2,675.1 MILLION

Within this pillar the Government intentions are grouped in the following key fields:

<table>
<thead>
<tr>
<th>Policy fields</th>
<th>Reforms</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Digital connectivity</td>
<td>“New regional approach” with direct inclusion of the local communities in the management of the European Funds and instruments.</td>
</tr>
<tr>
<td>- Transport connectivity</td>
<td></td>
</tr>
<tr>
<td>- Local development</td>
<td></td>
</tr>
</tbody>
</table>

Digital connectivity

(a) Main challenges

One of the main reasons for the delayed digitalization in Bulgaria (along with the low level of digital skills and the shortage of ICT experts) is insufficient investment in digital infrastructure. The Digital Economy and Society Index (DESI) ranks Bulgaria 26th among the EU member states under the “Connectivity” indicator. Only 58% of the households have access to broadband internet subscription (versus 78% EU average) and the spread of fixed broadband internet access at minimum speed of 100 Mbps is just 11% (26% EU average). There is the need to intensify the efforts to improve and accelerate the spread of broadband internet taken the core role of modern broadband infrastructure in achieving the so-called digital growth.

(b) Objectives

This component aims at building modern and safe digital infrastructure and overcoming the territorial imbalances related to the spread of broadband access. This will also favour the utilization of the economic and social benefits of information and communication technologies, related to
overcoming the impediments of distance and development, especially in the regions lagging behind.

(c) Planned reforms and investments

- **Large scale deployment of infrastructure**

The purpose of this project is the construction of symmetrical gigabyte access networks across the country. The sustainable optical network combined with a universally accessible mobile network will allow every citizen, every business and every public institution use the opportunities created by digitalization on equal terms throughout the country. The main road network will be covered by safe broadband mobile connectivity that will guarantee high-speed coverage of the main roads included in the TEN-T – the Trakia, Hemus, and Struma motorways and the connections to Romania and Turkey. The digital divide will be overcome to the maximum through broadening the digital connectivity in remote and sparsely populated areas and increasing the digital competences of the population. Conditions will be created for improving the digitalization processes and enlarging the accessibility to administrative, health and social public services in the country. The envisaged activities include provision of high-speed mobile connectivity along key transport corridors; improving the connectivity in the populated areas with a focus on peripheral, sparsely populated and rural areas; development of the state support network through optic connectivity to the municipalities and increasing its transmission capacity; “green” connectivity and promoting consumption. The total planned resource is BGN 805.9 million with an implementation period 2021 – 2025.

(d) Complementarity and demarcation with the Cohesion Policy instruments

The investments under this pillar of the Plan will enable the prioritization of digitalization as a horizontal priority contributing not only to the competitiveness of the enterprises and higher education institutions but also to the social integration and the development and use of the electronic government services. The improved data transfer environment and the digital connectivity and solid protection of the public institutions, administration and users will allow the adequate implementation of the
measures envisaged in the Cohesion Policy for accelerated digitalization in the public sector and high-level cyber security.

**Transport connectivity**

(a) Main challenges

The rail infrastructure in the country is well constructed and electrified (despite certain territorial imbalances) but its condition remains problematic, which – together with the high amortization of the rolling stock – leads to withdrawal of users of this service in the passenger segment. The liberalization of the railway cargo market results in the emergence of private railway companies and growth of the relative share of the railway sector in the segment, expropriating market share from the road cargo transport, which still preserves its dominant position however. In the context of decarbonisation of the economy efforts there is the need to intensify the investments in sustainable transport in order to reduce the sector’s carbon footprint. In the regional perspective the interventions should be focused in the infrastructurally less developed Northern Bulgaria, which in addition to the expected positive effects on the environment and the green transition will create conditions for reducing the interregional differences in the country.

(b) Objectives

The main objective of this component is to reduce the carbon footprint of the transport sector through investments in modernization and digitalization of the railway segment. The expected effects of the interventions are contributions to the green and digital transition, increased safety, and better territorial growth balance.

(c) Planned reforms and investments

- Digitalization of railway transport through modernization of the safety and energy efficiency systems along the railway tracks from the core and the extended TEN-T network

The measure aims to improve the railway transport services through control of the exploitation parameters and increased safety, reliability, and security of transport operations. A
Monitoring and Control System of the train parameters will be operationally integrated, solar/photovoltaic energy plants will be constructed in railway station areas to serve the needs of the National Railway Infrastructure Company, energy-saving LED lighting will be installed in 120 railway stations and stops, optical cable network and digital telecommunication apparatus will be provided in the Sofia-Karlovo-Filipovo section. A set of solutions will be ensured for cyber security, contributing to the achievement of cyber-safe and secure infrastructure. An automated single hub will be designed and constructed for information management at the National Railway Infrastructure Company. The total planned resource is BGN 267.7 million with implementation period 2021 – 2026.

- **Restructuring and rehabilitation of key station complexes and building of an intermodal terminal at Gorna Oryahovitsa**

  The project envisages construction, restructuring and rehabilitation of key station complexes (Mezdra, Cherven Bryag, Iliyantsi, Vratsa, Levski, Gorna Ortyahovitsa, Varna and Filipovo), located along the core and the extended TEN-T network, as well as construction of a modern intermodal terminal at the largest railway junction in Northern Bulgaria in Gorna Oryahovitsa. The project implementation will improve the quality of the railway infrastructure in the country and will allow an increase of the railway transport share in the cargo and passenger transportation structure at the expense of road transport with expected positive effects on the components and factors of the environment. At the same time, the growth will strengthen the growth potential of the regions where the included individual sites are located. Those are mostly station complexes in the infrastructurally less developed Northern Bulgaria, with the exception of the Filipovo railway station (South Central Region). In this way conditions will be created to reduce the interregional disparities in the country. The total planned resource is BGN 188.0 million with implementation period 2021 – 2025.

- **Modernization of traction substations and section posts along the core and the extended TEN-T network with**
construction of SCADA tele-management and tele-signalling system

Full modernization is envisaged of 20 traction substations, modernization of 51 section posts and building of a system that unites the tele-management and tele-signalling systems SCADA. The quality of the infrastructure will improve from the perspectives of safety, security, efficiency, climatic sustainability, quality of the services and uninterrupted transport flows. The integration and distribution of telematic applications and promotion of the development of innovation technologies will have a direct impact on the sustainable economic development and will at the same time contribute to the green and digital transition. The project implementation will consolidate the growth capacity of the less developed regions in Northern Bulgaria where most of the sites included in the project are located. The total planned resource is BGN 273.2 million with implementation period 2021-2026.

- Provision of sustainable transport connectivity and service through purchase of energy efficient and comfortable rolling stock

Twenty electric trains will be purchased for medium and long distances in order to improve the railway transport competitiveness versus other modes of transport and create conditions for transfer of passengers from the road to the railway transport that will result in lower greenhouse gas emissions, meaning reduced general negative impact of transport on the environment. Some 20% national co-financing is envisaged that will be secured with a loan. The total planned resource is 320 million (BGN 256 million from the Recovery and Resilience Facility) with implementation period 2021-2024.

(d) Complementarity and demarcation with the Cohesion Policy instruments

In order to improve the railway infrastructure along the “main” Trans-European Transport Network and develop the connectivity with the neighbouring countries, the Transport Connectivity programme 2021-2027 has planned to complete the modernization of the Elin Pelin – Kostenets railway section and modernize the Sofia – Pernik – Radomir railway section,
as well as construct a railway connection between Bulgaria and the Republic of Northern Macedonia. The implementation of these projects will contribute to the development of corridor Orient/Eastern Mediterranean going through the Republic of Bulgaria, thus improving the transport connectivity, and securing operational compatibility. Railway connections will be built to the Plovdiv Airport and Burgas airport to increase the connectivity between railway and air transport and boost their efficiency. It is envisaged to complete the facilities and systems along the Karnobat – Sindel railway of the extended Trans-European Transport Network to add to the transportation safety. The railway junctions at Gorna Oryahovitsa, Ruse and Varna will be developed, and their construction and modernization will proceed, as well as the integration of ERTMS.

**Local Development**

(a) Main challenges

During the years after the country’s EU accession the regional development disparities increased. The dominating Southwest region managed to catch up significantly with the EU regions, while in the remaining regions progress is slow. The Northwest region keeps lagging behind the remaining regions of the country in nearly all the monitored socio-economic areas. The substantial internal regional imbalances persist, just as those along the urban-rural line.

(b) Objectives

The main objective is to ensure conditions for increasing the competitiveness and sustainable development of the country’s regions and promote the local development.

(c) Planned reforms and investments

A large-scale reform is being implemented to overcome regional imbalances, aiming at maximum utilization of the identified local development potential while solving the local problems and challenges. The reform has two components:

1. On the one hand, in the framework of the so-called “new regional approach” the local communities in the country regions will be
directly involved in the management of the European funds and instruments, which will increase their sense of ownership of the implemented projects and at the same time take advantage of the a priori higher policy efficiency in view of addressing specific needs and potentials recognised locally where decisions are better informed. The approach lays focus on integrated territorial investments in the search of synergy effects from the realization of their individual sector components;

2. At the same time the new Industrial Parks Act, in addition to being a tool for catalysing the country’s re-industrialization will be directly linked to the regional development so far as the policy has the explicit goal of attracting and stimulating investments for balanced social and economic development of the regions and municipalities. The achievement of this goal will be based on the implementation of the state and municipal policy for the industrial parks by the State and the municipalities.

• **Programme for construction/further construction/reconstruction of water and sewerage systems and wastewater treatment plants for the agglomerations between 2,000 and 10,000 equivalent residents**

This project envisages activities for construction, reconstruction, rehabilitation and modernization of the sewerage and water supply systems, waste and tap water treatment plants for agglomerations between 2,000 and 10,000 equivalent residents with a priority on agglomerations between 5,000 and 10,000 equivalent residents and in case of sufficient resources also for those between 2,000 and 5,000 equivalent residents, as well as delivery of equipment/mechanisation/transport vehicles/consumables, including the use of automatic and remote monitoring and control systems of the treated wastewater from industrial sites and the sewerage systems of the settlements. The total planned resource is BGN 575 million with an implementation period of 2021-2026.

• **Digitalization for complex management, control, and efficient use of waters**

The measure aims to establish control over the utilized water quantities nationally, improve the management of waters in
quantitative perspective and their efficient use, including control to set minimum admissible outflow to the rivers through complex management digitalization of the use of water resources. The total planned resource is BGN 158.6 million with implementation period 2021-2024.

- **Construction, development, and optimization of the digital TETRA system and radio relay network managed by the Ministry of Interior**

The construction of the Ministry of Interior TETRA system is envisaged as a single radio communication system to ensure a management communication environment, interaction and coordination of the state structures, including all the components of the Unified Rescue System at all levels while preserving the public order, countering crime, alarming and protecting the population in case of disasters and accidents related to the Disaster and Accident Protection Act; its use as a communication environment for the management of the National Early Warning System components, and announcing and unleashing the system capacity through the integration of organisational and technical solutions. The project implementation will allow effective operational interaction at national and regional level in case of emerged crises and circumstances for the purpose of consolidating the resources and optimizing the financial means for building and maintenance of radio communications for the needs of the responsible national institutions. The total planned resource is BGN 150.6 million with implementation period 2021-2024.

d) Complementarity and demarcation with the Cohesion Policy instruments

The measures of the Plan will be completed with the Cohesion Policy instruments for integrated territorial approach by financing measures on the territory of all urban municipalities in the country. The measures to be supported are related on the one hand to the implementation of the national sector priorities based on needs mapping prepared by the respective national institutions in charge of the policies. On the other hand, measures will be financed that were identified through the “bottom-up” approach, i.e. project ideas and initiatives of local stakeholders in
implementation of priorities and goals of the regional and municipal territorial development strategies.

In the framework of the *Development of the Regions Programme* the implementation of infrastructure measures for improvement and enhancement of health and social services, education, vocational training, culture, sport, tourism, sustainable urban mobility, digital and safe transport connectivity, circular economy, energy efficiency, access to adequate housing, access to good quality public services, measure for improved quality of the environment (including green infrastructure), measures for promoting the economic activity (including investments in technical infrastructure for development of industrial zones and other economic activity development infrastructure and support of innovations and SME development) will be supported.

The *Environment Programme* will support investments in W&S infrastructure based on regional pre-investment studies of designated territories served by a consolidated W&S operator, where the focus will be on agglomerations with over 10,000 equivalent residents. In the case of remaining funds they can be used for agglomerations between 2,000 and 10,000 equivalent residents with strict demarcations and subsidiarity of the investments provided by the construction/further construction/reconstruction of W&S systems and wastewater treatment plants, planned so far under this component for agglomerations between 2,000 and 10,000 equivalent residents. Interventions will also be financed that target the impact of climate change on the water resources, for research and development of a draught risk assessment system, aiming at upgrading the planned interventions through the use of smart technologies and digitalization for efficient water use.

Another focus of the Cohesion Policy interventions will be the management of the disaster risk where one of the main fields will be the prior forecasting, modelling, and warning in view of improved prevention of the extreme phenomena risk. To this end, the scope of the National Early Warning System and alarming the population will be enlarged on district level for the country territory. The National System will use the TETRA system resource, guaranteeing in this way its operational capacity and securing in turn synergy of the implemented investments.
PILLAR 4: FAIR BULGARIA – TOTAL AMOUNT OF THE PLANNED EXPENDITURE BGN 2,553.5 MILLION

This pillar has grouped the Government intentions in the following key areas:

<table>
<thead>
<tr>
<th>Policy fields</th>
<th>Reforms</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Business environment</td>
<td>Reform for introduction of e-justice and increasing the insolvency framework efficiency; register reform for utilizing the electronic government potential for improved business environment; reform in the field of social services.</td>
</tr>
<tr>
<td>- Social inclusion</td>
<td></td>
</tr>
<tr>
<td>- Healthcare</td>
<td></td>
</tr>
</tbody>
</table>

Business environment

(a) Main challenges

In the period post the country’s EU accession the government efforts for improving the business environment have been lagging behind versus comparable economies and, as a result, Bulgaria is losing positions globally. There is the need for continuous effort to increase the effectiveness of the judiciary system and the systematic efforts in this respect have the potential to increase the international competitiveness of the economy and intensify the long-term investment commitments of the companies. In the context of economic shocks resulting by the COVID-19 pandemic, the reform of the insolvency framework is getting even more pending. The business, which faces solvency challenges, is unable to restructure its financial liabilities to creditors outside the clumsy formal insolvency procedure. A more effective arrangement would help the insolvent companies with financial difficulties to terminate their activity and in this way avoid the keeping of resources and the deterioration of the bank assets.

The coercive physical distancing that the spread of COVID-19 forced emphasized the importance of building an information society actively using the opportunities that the digital technologies provide by focusing on
the need for accelerated and completed digitalization of the public services. At the same time, the effective utilization of the advantages of electronic government and the use of digital administrative services by the population requires accelerated introduction of a national electronic identification system.

(b) Objectives

The main purpose of this component is the effective strengthening of the potential for sustainable growth and increased resilience of the Bulgarian economy by addressing the impediments in the business environment and unleashing the potential of the electronic government for its improvement.

(c) Planned reforms and investments

A complex reform for introduction of electronic justice and increased effectiveness of the insolvency framework targeting accelerated judicial and administrative proceedings and increasing their transparency and effectiveness is in progress. This reform will have a considerable positive effect on improving the business and investment climate in the country, allowing for electronic exchange of documents in judicial and extrajudicial proceedings, as well as reducing the administrative burden of the insolvency procedure, reducing in this way the uncertainty, the time and financial resources for the business in this procedure. Not only this will have a positive effect on the legal services for citizens but it will also create conditions for limiting the opportunities for corrupt practices by eliminating the human factor in many of the procedures and increasing the transparency of the processes.

A register reform is being implemented to strengthen the electronic government and unveil its potential for improving the business environment, which relates to unification, centralization and digitalization of the information bases (registers) of the central and local administrations and ensuring an inter-register information exchange. In this way the steps, time, and financial resources that the citizens and the business need in their communication with the administration will be optimized. The realization of the reform intentions will enable increased transparency of the administrative services and reducing the human factor in them, thus limiting the opportunities for corrupt practices, and strengthening the principle of rule of law. The register reform will also assist the process of planning and implementation of policies, improving the possibilities for
analytical and automated checks and integration of artificial intelligence systems in the public sector.

- **Digitalization of key court proceedings in the system of administrative justice**

  Main activities envisaged: development and installation of an information system for digitalization of the files in administrative proceedings and exchange of information between individual administrative courts, as well as between them and the Supreme Administrative Court with electronic modules for summoning of the parties in the administrative proceedings, remote closed-door meetings of court panels, remote public court proceedings. The project implementation will ensure faster and more transparent justice. The total planned resource is BGN 23 million with implementation period 2021 – 2025.

- **Upgrading of the information systems of the courts for access of citizens and legal entities to e-services and e-justice**

  The existing system will be upgraded in order to improve basic activities: making electronic certification statements, performing electronic proceedings, serving of notices and subpoenas electronically. The upgrading of the Unified Electronic Justice Portal will provide all persons who are parties in judicial proceedings the opportunity to exercise their procedural rights electronically. The total planned resource is BGN 1.5 million with implementation period 2021 – 2023.

- **Consolidation, upgrading and further development of the Unified Information System of the Courts**

  Main activities envisaged: creation of a UISC module for centralized distribution and electronic processing of the order cases; upgrading of the existing functionality and creating new ones in view of development of the legislation; modifications in the internal administrative and management structure of the courts, integration with new systems, new electronic services etc., provision of the necessary computers; upgrading of the Supreme Judicial Council data centres. The creation of a UISC module for the order cases will achieve a holistic reform in the order proceedings and create
conditions for addressing the uneven distribution of burden among the regional courts in the country with direct effect on the efficiency of the judicial system. The total planned resource is BGN 53 million with implementation period of 2021 – 2026.

- **Improving the quality and sustainability of the policies in the field of security and countering corruption**

  The project aims to improve the business environment by creating conditions for increased public security and countering of corruption. Activities are envisaged for the building of a National Smart Security System for prevention and analysis of the information in the field of public safety, and upgrading the system for prevention and countering of corruption among the Ministry of Interior officers, and increasing the transparency in the service provision to citizens. The total planned resource is BGN 168.9 million with implementation period of 2021-2023.

- **Digitalization of information arrays containing registered data in the administration**

  The measure envisages digitalization of paper arrays and improving the business processes of priority administrations – Registry Agency (Property Register), Geodesy, Cartography and Cadastre Agency, General Directorate “Civil registration and Administrative Services” with the Ministry of Regional Development and Public Works (including the civil status acts register and the population register kept by the municipal administrations), Ministry of Health, National Health Insurance Fund, National Social Security Institute and digitalization of other administrations’ arrays – all district and municipal administrations (except for the civil status acts registers and the population registers) and administrations whose services are less often used by the Bulgarian citizens. This project implementation is of key importance for the implementation of the register reform. The total planned resource is BGN150 million with implementation period 2021-2025.

- **National electronic identification scheme**

  The building of a system of electronic identification is envisaged, along with its personification in the Bulgarian personal identity
documents. This project implementation will enable the population to effectively utilize the public electronic services provided by the administration. The total planned resource is BGN 192 million with implementation period 2020-2023.

(d) Complementarity and demarcation with the Cohesion Policy instruments

The Cohesion Policy investments will support the transition to data potential-based government. The focus will be to enlarge the volume of open data, generated and processed by the state institutions and the business, and facilitating their sharing. To achieve the maximum effect, the measures will be integrated, and synergies will be sought with investments in connectivity through high-capacity networks, financed as a part of the Plan.

In order for the digital transformation in the public sector to produce maximum benefits for the society, the provision of reliable, functional and accessible shared infrastructure and cloud services will be supported, as well as centralized and horizontal e-government solutions. The deepening digitalization of the public sector brings to the fore the necessity to ensure high-level cyber security. The development and improvement of centralized mechanisms and tools for solid protection of the data and public services will be supported with application of the highest cyber security standards.

Social Inclusion

(a) Main challenges

The main focus in the government’s response to the social and economic consequences of the pandemic was the preservation of jobs. One of the key measures was to cover 60% of the labour costs (salaries and social security contributions) in sectors affected by the crisis (the so-called “60/40 measure”). The government also secured wage subsidies for the hiring of unemployed people and for job preservation in the tourism and transport sectors and provided support for self-employed persons (such as freelancers in the culture sector). The measures in support of the most vulnerable groups included continued and enlarged “hot lunch” initiative, support of families with children up to the age of 14 when the parents are
unable to work from home and cannot use a paid leave, payment of monthly supplements to pensions, etc.

The COVID-19 pandemic showed that the resilience of various systems in the country is insufficient to fully guarantee adequate and timely support and assistance for certain societal groups, especially the vulnerable groups. At the same time problems related to the applicability of education to labour market realization, the low participation of the adult population in qualification and requalification training, the unsatisfactory level of digital skills of the workforce etc. impede the ability of the economy to promptly adapt to the new conditions imposed by the crisis and to guarantee speedy recovery of the economy. The demographic trends and the increasing shortage of skills mean that Bulgaria needs to invest more in the qualification of its present and future workforce. The need for increased qualification and requalification of the adult population is huge but the participation in training is low (2.0% for 2019, which is significantly below the EU average of 11.3%).

(b) Objectives

The component aims to increase the workforce qualification and skills for achieving better correspondence with the labour market development, promotion of social inclusion of vulnerable groups (people with disabilities, older people and children, persons and families in disadvantaged position, etc.) and increased quality and enlarged scope of the provided social services, introduction of integrated approaches in the social service provision, and development of integrated services.

(c) Planned reforms and investments

The reform in the field of social services aims at an overall improvement of the quality and effectiveness of the social services, and ensuring access to social services for all persons in need of support for prevention and/or overcoming the social exclusion, exercise of rights or improved quality of life. The key activity of this reform is the preparation of a National Map of Social Services financed by the state budget. The map will be elaborated based on analysis of the local needs with application of objective, normatively set criteria depending on the size of the population and its demographic profile. In this way the state will engage in the building of a complete network of social services in the entire country in the long-term perspective. This will also contribute to an improved access to social and
integrated health-social services for elderly people and people with disabilities by offering enhanced support at home and in the community to elderly people and people with disabilities who are dependent on care provision, as well as increasing the effectiveness of the long-term care system; deinstitutionalization of child care, care for the elderly and people with disabilities and provision of home-based services, specialized environment services and mobile services; provision of adequate socio-economic support and condition for social inclusion of people with disabilities in the community.

- **Continuous support of the deinstitutionalization of the care for the elderly and people with disabilities**

The project supports the continuation of the reform in the long-term care social service system. It envisages the building and equipment of new social and integrated health-social services for resident care and accompanying specialized and consultancy social services for people with disabilities, construction activities and delivery of equipment and furniture for the purpose of reforming the existing institutions for the elderly. The project has a designated component for increased energy efficiency of the social infrastructure. The total planned resource is BGN 755 million with implementation period 2021 – 2024.

- **Personal mobility and accessibility for people with lasting disabilities**

The project purpose is to encourage personal mobility provision activities and accessibility for people with lasting disabilities in view of their social inclusion, accounting of their specific needs. It envisages provision of technical aids, specialized software programmes, electronic technical tools that compensate sensory deficits, adapted motor vehicles, technical and medical appliances, other similar tools and appliances according to the specific needs and provision of training of users how to use the technical aids and/or specialized programmes. The total planned resource is BGN 150 million with implementation period of 2021 – 2024.

- **Support of the social economy**
Support will be provided to starting and existing social enterprises and to social economy agents through creation of focal points for promotion, stimulating, consulting and assisting the launching and development of social entrepreneurship, support of the digitalization of the (production) processes of the agents of the solidary and social economy, including in the field of green economy. The total planned resource is BGN 21.5 million with implementation period of 2021 – 2024.

- **National adult training programme**

The measure targets increased quality and employability of the workforce through improved access and provision of more and better opportunities for good quality training with the use of the digital technology capacity. The planned main activities include: building a cloud environment and creation, maintenance and administration of a virtual adult training platform (age 16 plus) in an electronic environment, building a network of digital clubs and provision of modern equipment of computers and other technology and access to internet where the persons will be able to use the technology assisted by mentors to be able to participate in electronic and distance learning. Digital clubs will be provided locally at the local *chitalishte* (cultural-education centres) upon submission of an application form. Furthermore, trainings are envisaged for the use of the virtual platform, development of training curricula for organization of electronic and distance trainings for professions and key competences, for which this is possible; development of electronic training resources (electronic training materials, electronic training aids, interactive lessons, electronic tests, assignments etc.), development of online tools for evaluation and self-evaluation of knowledge and skills and certification. A unified information database will be created for online training courses and the platform will be integrated in the information system for evaluation of competences My Competence, the training providers’ platform of the Employment Agency, the electronic register of vocational training centres of the National Agency for Vocational Education and Training, etc. The development of the so-called “silver economy” will also be promoted through encouraging prolonged presence on the labour market of
elderly people by adapting the new training system to their real needs. The total planned resource is BGN 80 million with implementation period of 2021 – 2024.

- **Access to European cultural exchange and content**

  The project mediates social inclusion and rapprochement through access to European cultural content. The total planned resource is BGN 60 million with implementation period of 2021 – 2024.

- **Digitalization of museum and library funds**

  Part of the funds kept in the museum and library national network will be digitalized and a unified system for access to the digitalized content will be built, which will provide the general public with easy access to cultural heritage samples; it will also contribute to achieving increased interest in culture and education and increased awareness level nationwide. The total planned resource is BGN 120 million with implementation period of 2021 – 2026.

  (d) **Complementarity and demarcation with the Cohesion Policy instruments**

  During the next programme period the ESF+ interventions will be targeted at human capital quality generation and increasing as the main production factor through employment and social inclusion. The labour market success and the active inclusion in employment of vulnerable groups will be supported by increasing their abilities to start work, by improving their skills, qualification and requalification, stimulating their socio-economic integration, improving their access to good quality social services, job placement mediation services and integrated services. The efforts will also be focused on increased effectiveness and sustainability of the social inclusion policy as a means of reducing the social disparities. Equal access to specialized health and long-term care will be supported, along with increased quality and enlarged scope of the provided social services. The reform in the long-term care social services that was launched in 2014 will enter its core phase and it is envisaged that approximately 60% of the remaining specialized institutions for people with disabilities will be closed down and all the existing institutions for elderly people are being reformed in accordance with the new quality criteria. The activities included in the Recovery and Resilience Plan foresee the accomplishment the main
construction works and investments in equipment and furnishing necessary for the tentatively named “second stage” of the long-term care social service reform. The funding of energy efficiency, sanitation and renewal of equipment and furniture activities in the existing community-based social services, state delegated activities, and the implementation of the anti-epidemic measures aim at increasing the quality of the social services provided to the users. Those basic investments will be supplemented with activities under the Development of the Regions Programme 2021-2027 and the “soft measures” will be financed by the Human Resource Development Programme 2021-2027.

Healthcare

(a) Main challenges

The COVID-19 pandemic brought about unprecedented global changes, putting the social systems to a serious test. In Bulgaria, as well as all over the world, the system that was most directly affected was the healthcare system where urgent actions had to be taken to ensure treatment for the infected and limitation of the spread of the virus. Taking into account the level of community threat, the government offered free access to primary health care related to testing for and treatment of COVID-19 to all citizens irrespective of their social security status. Specific hospitals were entrusted with the treatment and monitoring of COVID-19 patients and each hospital designated specific structures for the admission of patients including infectious wards, internal wards, paediatrics, pneumology and phthisiology, cardiology, etc. This however created serious challenges to the healthcare systems and to the hospital treatment of patients with other infectious and non-infectious diseases, not infected with coronavirus. In parallel to determining the places where the treatment and monitoring of carriers of the virus had to be done, medical consumables and hospital equipment were ensured including the vitally important personal protective equipment for the medical personnel. The capacity of the laboratory network in the country to detect and confirm COVID-19 was strengthened and the capabilities for everyday diagnostics and reducing the time for obtaining results from the tests were increased although the country still cannot reach the average European levels of tests per million citizens.

In addition to the action undertaken for timely diagnosis and treatment of people affected by the pandemic, the support of the healthcare system also
included measures to boost the motivation of the personnel, charged with the pandemic confinement activities and the consequences of COVID-19, as well as capacity-building measures for the medical institutions with infectious disease structures to be able to respond to the spread of infectious diseases. The pandemic outlined and sharpened certain structural challenges to the country’s healthcare system related to its sustainability, accessibility, and capacity. Actions are needed to renew the outdated material and technical basis, to handle the shortage of health specialists and their uneven geographical distribution, and the difficulties of providing timely and good quality health services throughout the country.

(b) Objectives

The main objective of this component is to increase the healthcare system resilience to shocks alongside increased access of the population to good quality and timely healthcare.

(c) Planned reforms and investment

- **Modernization of the material facilities of state and municipal medical institutions and integration of innovative technologies for treatment of the population**

The project aims capacity building of the hospital care medical institutions that are crucial for the country’s healthcare system. The envisaged measures for modernization and renewal of the material and technical facilities will lead to considerable savings due to the increased energy efficiency and reduced costs of equipment maintenance. This will lead to cost optimization in the state hospitals and will improve the level of health services they provide to the patients. Furthermore, in addition to enabling the provision of highly specialized medical services to the population of the entire country territory, securing the latest medical equipment for diagnostic and treatment, it will contribute to increased satisfaction of the medical staff with its job performance, which is a key factor of managing the processes of doctors and nurses leaving the country to work abroad. The total planned resource is BGN 607.1 million with implementation period of 2021-2024.

- **Creating a training and development interventional neuroradiology centre**
The measure aims to strengthen the capacity of the medical institutions for hospitalization through increased knowledge and skills of the medical specialists. The higher qualification of the staff will increase the quality of the provided medical services to the citizens nationwide. In this way the mortality rate will be reduced, as well as the lasting employment incapacity of the population. The total planned resource is BGN 75.1 million with implementation period of 2021-2024.

- **Strengthening the capacity of the Ministry of Interior Medical Institute**

  The envisaged activities include: digitalization and improvement of the management activities performed by the Ministry of Interior Medical Institute, restructuring and modernization of the central clinical basis of the Medical Institute and the long-term treatment hospital, building a designated structure for diagnostics and treatment of infectious diseases and a surgery block, renewal and modernization of the existing medical equipment and supply of contemporary high-tech equipment. The total planned resource is BGN 73.7 million with implementation period of 2021-2024.

- **Modernization and development of psychiatric aid**

  The project aims to improve the material and technical facilities of the structures in the psychiatric aid system for provision of good quality health service, provision of modern patient treatment and rehabilitation capabilities and development of the opportunities for their integration in the society. The total planned resource is BGN 33.6 million with implementation period of 2021-2024.

- **Development of the national emergency aid system with uniform European number 112**

  The measure aims to ensure a good quality European service for providing aid to citizens in need of assistance and increasing the scope of the delivered service in accordance with the technological progress and development through the building of a developing unified communication and information platform.
that will be a guarantee of security and citizens’ trust in the uniform European number 112. Reception centres for emergency calls of a new generation will be built (Next Generation 112), linked to the electronic communication network with Packet Switching PS, broadband information exchange in the unified European number 112 (video, data and voice) and upgrading of the systems with new and modern services. The total planned resource is BGN 56.7 million with implementation period of 2021-2023.

(d) Complementarity and demarcation with the Cohesion Policy instruments

The continuing reform efforts in the healthcare sector will be supported in the framework of the Programme for Development of the Regions 2021-2027 through investments in outpatient and inpatient care for ensuring equal opportunities of the population of all the regions for access to both prophylactic and prevention, and to timely and good quality hospital treatment with the implementation of measures for infrastructure, equipment, mobile assets, digitalization and electronic health services and applications. The interventions will be based on mapping of the health needs that will forecast the dimensions of the necessary changes for satisfying society’s health needs. Through measures financed by ESF+ the efforts to improve the health characteristics of the population and the workforce will be continued, with a focus on health promotion and prevention. The support of the healthcare personnel will continue and targeted interventions are envisaged to increase the skills of the highly specialized staff in all the key areas of the health system and for the staff providing medical and healthcare in extra-hospital care and long-term care.
### ANNEX: LIST OF INDICATORS OF BULGARIA 2030

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Source</th>
<th>Current Value</th>
<th>Target Value</th>
<th>Average EU Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Objective 1</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GDP per capita in PPP versus the EU average in %</td>
<td>Eurostat</td>
<td>51.2</td>
<td>75.0</td>
<td>100</td>
</tr>
<tr>
<td>Digital Economy and Society Index (DESI)</td>
<td>EC</td>
<td>36.2</td>
<td>Reaching the average EU level</td>
<td>52.5</td>
</tr>
<tr>
<td>Resource productivity, euro/kg</td>
<td>Eurostat</td>
<td>0.4</td>
<td>1.5</td>
<td>2.2</td>
</tr>
<tr>
<td><strong>Objective 2</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rate of natural increase, %</td>
<td>Eurostat</td>
<td>-6.6</td>
<td>-5.0</td>
<td>-0.7</td>
</tr>
<tr>
<td>Net migration rate, %</td>
<td>Eurostat</td>
<td>-0.5</td>
<td>0.0</td>
<td>2.8</td>
</tr>
<tr>
<td>Age dependency rate, %</td>
<td>Eurostat</td>
<td>32.5</td>
<td>36.5</td>
<td>30.5</td>
</tr>
<tr>
<td><strong>Objective 3</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GINI coefficient, %</td>
<td>Eurostat</td>
<td>39.6</td>
<td>33.0</td>
<td>30.9</td>
</tr>
<tr>
<td>Population in risk of poverty, %</td>
<td>Eurostat</td>
<td>22.0</td>
<td>18.0</td>
<td>17.1</td>
</tr>
<tr>
<td>GDP variation per capita (in PPS) by regions, %</td>
<td>Eurostat</td>
<td>37.5 (2017)</td>
<td>34.0 (2017)</td>
<td>30.1 (2017)</td>
</tr>
<tr>
<td><strong>I1</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Share of early drop-outs from education and training, %</td>
<td>Eurostat</td>
<td>12.7</td>
<td>7.0</td>
<td>10.6</td>
</tr>
<tr>
<td>Population (25-64), involved in education and training, %</td>
<td>Eurostat</td>
<td>2.5</td>
<td>7.0</td>
<td>11.1</td>
</tr>
<tr>
<td>Share of students whose results are below the critical (median of the three areas of the study) in the Programme for International Student Assessment (PISA), %</td>
<td>OECD</td>
<td>46.0</td>
<td>25.0</td>
<td>23.6</td>
</tr>
<tr>
<td><strong>I2</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R&amp;D expenses, % of GDP</td>
<td>Eurostat</td>
<td>0.8</td>
<td>2.5</td>
<td>2.1</td>
</tr>
<tr>
<td>Proportion of research publications in the 10% world most cited, European Innovation Scoreboard, %</td>
<td>EC</td>
<td>2.7</td>
<td>Reaching the EU average level</td>
<td>11.5</td>
</tr>
<tr>
<td>European Innovation Scoreboard (EIS)</td>
<td>EC</td>
<td>Timid innovator</td>
<td>Moderate innovator</td>
<td>-</td>
</tr>
<tr>
<td><strong>I3</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Global Competitiveness Report (GCR), place in the rank</td>
<td>WEF</td>
<td>25th in the EU</td>
<td>20th in the EU</td>
<td>-</td>
</tr>
<tr>
<td>Digital technology penetration, DESI, %</td>
<td>EC</td>
<td>18.1</td>
<td>50.0</td>
<td>41.1</td>
</tr>
<tr>
<td>Indicator</td>
<td>Source</td>
<td>2017 Value</td>
<td>2016 Value</td>
<td>2015 Value</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------</td>
<td>-----------------------------</td>
<td>------------</td>
<td>------------</td>
<td>------------</td>
</tr>
<tr>
<td>Share of high-tech export from total export, %</td>
<td>Eurostat (2017)</td>
<td>5.9</td>
<td>15.0</td>
<td>17.9</td>
</tr>
<tr>
<td>Renewable energy in the gross final energy consumption, %</td>
<td>Eurostat (2017)</td>
<td>18.7</td>
<td>27.0</td>
<td>17.5</td>
</tr>
<tr>
<td>Recycling of municipal waste, %</td>
<td>Eurostat (2017)</td>
<td>36.0</td>
<td>55.0</td>
<td>47.0</td>
</tr>
<tr>
<td>Changes in the greenhouse gas levels outside the scope of EETS versus 2005, %</td>
<td>European Environment Agency</td>
<td>3.1</td>
<td>0.0</td>
<td>-10.2</td>
</tr>
<tr>
<td>Biocapacity deficit, global ha per capita</td>
<td>European Environment Agency (2014)</td>
<td>0.01</td>
<td>Below the EU average</td>
<td>2.51</td>
</tr>
<tr>
<td>Population living in FDP pollution levels above the admissible norms, %</td>
<td>Eurostat (2017)</td>
<td>77.6</td>
<td>0.0</td>
<td>17.0</td>
</tr>
<tr>
<td>Labour productivity in the agricultural sector, % of economy’s total</td>
<td>Eurostat (2017)</td>
<td>21.9</td>
<td>30.0</td>
<td>38.9</td>
</tr>
<tr>
<td>Share of processed agricultural products of the total export of products of agricultural origin, %</td>
<td>NSI</td>
<td>53.3</td>
<td>57.0</td>
<td>-</td>
</tr>
<tr>
<td>Share of land with organic production, %</td>
<td>Eurostat (2017)</td>
<td>2.7</td>
<td>Reaching the EU average level</td>
<td>7.0</td>
</tr>
<tr>
<td>Quality of the railway transport service, GCR</td>
<td>WEF</td>
<td>3.1</td>
<td>3.7</td>
<td>4.3</td>
</tr>
<tr>
<td>Completion of the main TEN-T road network, %</td>
<td>EC (2016)</td>
<td>50.0</td>
<td>100.0</td>
<td>72.9</td>
</tr>
<tr>
<td>Mortality rate in road accidents per 100 000 residents</td>
<td>Eurostat (2017)</td>
<td>9.6</td>
<td>Reaching the EU average level</td>
<td>4.9</td>
</tr>
<tr>
<td>Connectivity Pillar, DESI</td>
<td>EC</td>
<td>51.6</td>
<td>Reaching the EU average level</td>
<td>59.3</td>
</tr>
<tr>
<td>Coverage of access to ultra-highspeed broadband internet, DESI, %</td>
<td>EC</td>
<td>9.7</td>
<td>40.0</td>
<td>22.3</td>
</tr>
<tr>
<td>Readiness level for introduction of 5G, DESI, %</td>
<td>EC</td>
<td>0.0</td>
<td>80.0</td>
<td>14.2</td>
</tr>
<tr>
<td>European Regions Competitiveness Index (RCI), median</td>
<td>EC</td>
<td>19.6</td>
<td>20.0</td>
<td>52.6</td>
</tr>
<tr>
<td>Indicator</td>
<td>Source</td>
<td>Value 1</td>
<td>Value 2</td>
<td>Value 3</td>
</tr>
<tr>
<td>--------------------------------------------------------------------------</td>
<td>-------------</td>
<td>------------------</td>
<td>------------------</td>
<td>------------------</td>
</tr>
<tr>
<td>Employment rate variations per region, %</td>
<td>Eurostat</td>
<td>6.1</td>
<td>5.3</td>
<td></td>
</tr>
<tr>
<td>Population with at least secondary wastewater treatment, %</td>
<td>Eurostat</td>
<td>63.2 (2017)</td>
<td>78.0</td>
<td>73.9 (2017)</td>
</tr>
<tr>
<td>Institutions Pillar, GCR, place in the rank WEF 26th in the EU</td>
<td>WEF</td>
<td>26th in the EU</td>
<td>20th in the EU</td>
<td></td>
</tr>
<tr>
<td>Good governance indicators, World Bank WB 59.9</td>
<td>WB</td>
<td>59.9</td>
<td>75.0</td>
<td>79.9</td>
</tr>
<tr>
<td>Online Service Index Pillar, E-government Development Index, UN (EGDI)</td>
<td>UN</td>
<td>0.76</td>
<td>Reaching the EU average level 0.85</td>
<td></td>
</tr>
<tr>
<td>The poorest and richest 20% of households’ ratio</td>
<td>Eurostat</td>
<td>7.7</td>
<td>5.5</td>
<td>5.2</td>
</tr>
<tr>
<td>Population in risk of poverty or social exclusion, %</td>
<td>Eurostat</td>
<td>32.8</td>
<td>25.0</td>
<td>21.9</td>
</tr>
<tr>
<td>Life expectancy in good health, years</td>
<td>Eurostat</td>
<td>66.2 (ж)</td>
<td>67.5 (ж)</td>
<td>64.0 (ж)</td>
</tr>
<tr>
<td>Unsatisfied medical care needs, %</td>
<td>Eurostat</td>
<td>1.9</td>
<td>Reaching the EU average level 2.0</td>
<td></td>
</tr>
<tr>
<td>Share of the population attending cultural events at least once a year, %</td>
<td>Eurostat</td>
<td>28.6 (2015)</td>
<td>40.0</td>
<td>63.8 (2015)</td>
</tr>
</tbody>
</table>