

National Recovery and Resilience Plan

OF THE REPUBLIC OF BULGARIA

February 2021





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



In a situation 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 preserve the economic potential and competitiveness of the economy in the subsequent recovery. In short term, the Government policy is aimed at increasing the resilience of the national health system and mitigating the socio-economic consequences 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 instruments available.

In medium term, the country's recovery strategy is based on the National Development Programme: BULGARIA 2030. The document covers the national decisions for growth and development and defines three strategic goals (accelerated economic development, demographic recovery and reduction of inequalities under which the Government outlines 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 discovering additional short-term solutions and frontloading 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 for transition to a climateneutral economy, in the context of the ambitious goals of the European Green Deal, through the Just Transition Mechanism based on just transition plans should also be taken into account.







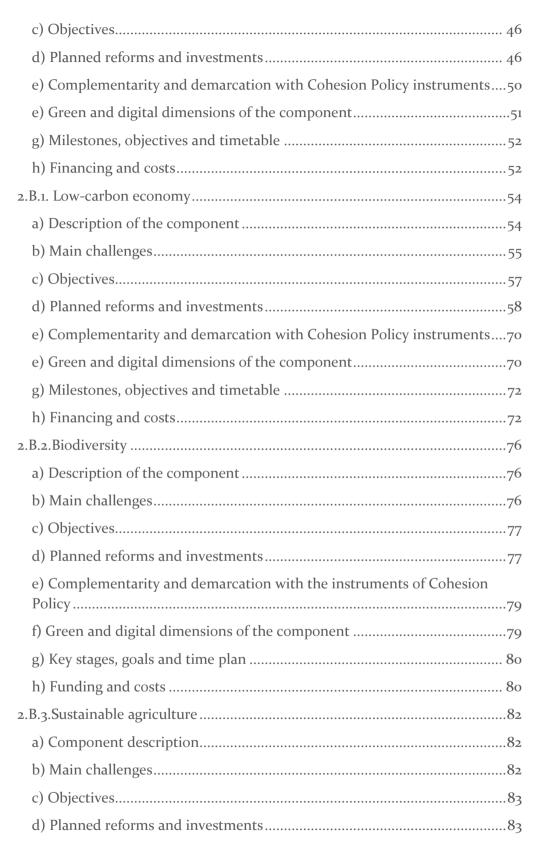
OBJECTIVE: The ultimate objective of the Recovery and Resilience Plan is to facilitate economic and social recovery from the crisis caused by the COVID-19 pandemic. In pursuit of this goal, the Government has grouped a set of measures and reforms that will not only restore the potential for economic growth, but will also develop it, which will allow, in the long run, achieving the strategic goal of the Government for convergence of the economy and incomes to the EU-average. 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.



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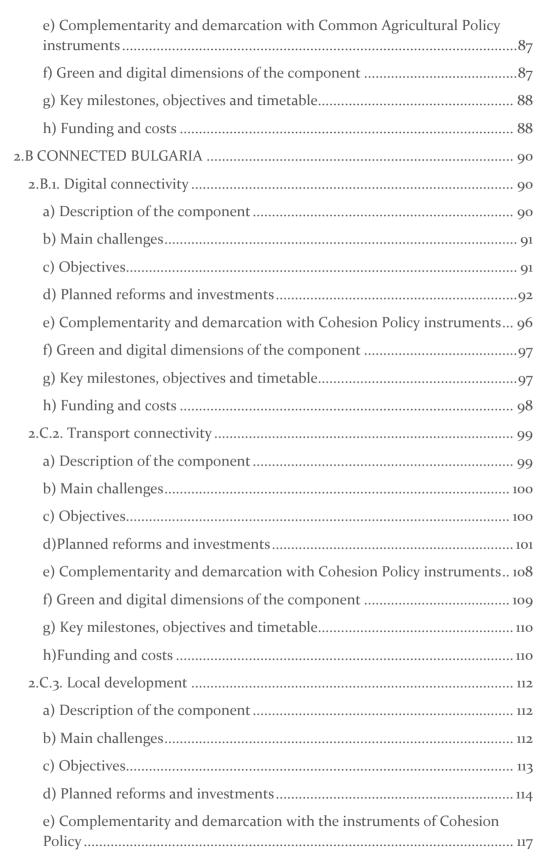
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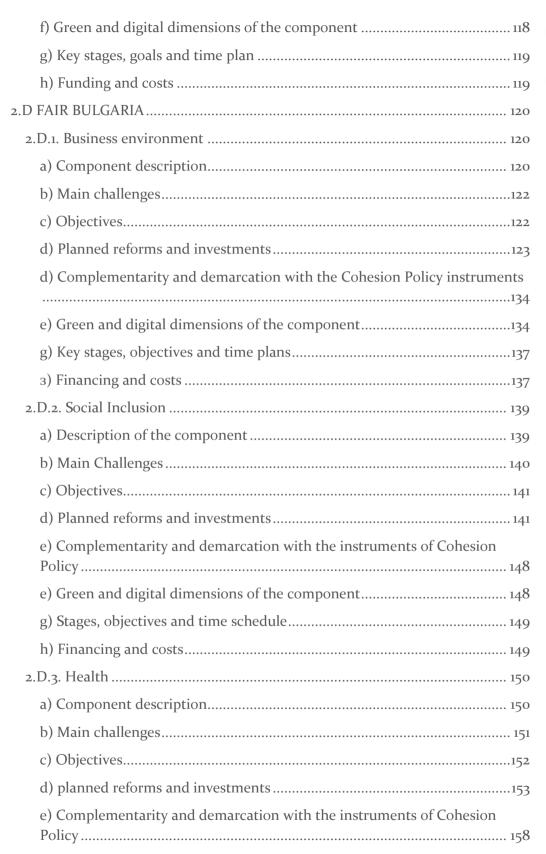




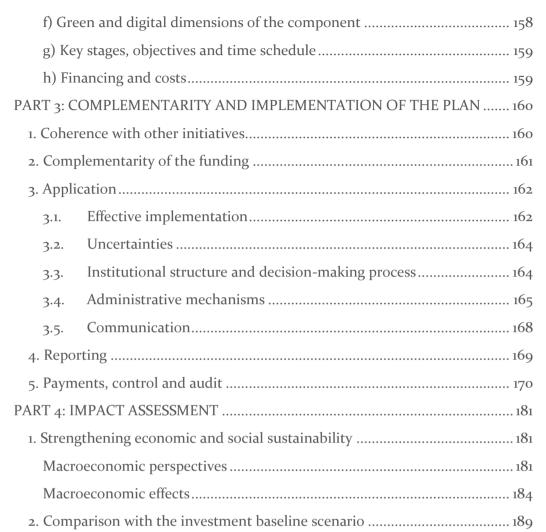














PART 1: GENERAL OBJECTIVES AND COHERENCE OF THE PLAN

1. General objective / Summary

1.1: General objectives of the plan and justification (facts and figures)

The COVID-19 pandemic led to a deep recession around the world. The decisive, coordinated and timely reaction of the Bulgarian government has softened the adverse economic consequences in the country, with the latest macroeconomic forecasts pointing out that in 2020 the Bulgarian economy shrunk by between 3 and 5%¹ compared to 7.4%² for the whole EU. The expected unemployment rate for the year is 5.6% (7.7% in the EU), corresponding to a 2.6% annual decrease in employment. The measures taken to support employment saved around 240,000³ jobs between March and December 2020 and prevented less favourable developments on the labour market. However, projections under unchanged policies suggest that the economy will not recover its lost positions before the second half of 2022, while employment will reach its pre-crisis levels only in 2023.

Against this background, 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 groups together a set of measures and reforms that not only restore the growth potential of the economy, but also develop and enhance it, allowing in the long term the achievement of the government's strategic goal of convergence of the economy and incomes to the EU-average levels. At the same time, the Plan lays the basis for the Green and Digital transformation of the economy, in the context of the ambitious Green Deal objectives.

Goal: Cumulative GDP growth in 2021-2025 period - 21.7%

⁴ While setting the targets' ambition level, two limiting factors should be taken into consideration: on the one hand, at least a medium-term horizon is needed for the full manifestation of the expected effects of both reform intentions and investment projects. At the same time, the design of the Recovery and Resilience Mechanism is such that the achievement of the targets must be statistically secured by mid-2026, implying reporting of results observed at best towards the end of 2025. These limiting factors mean that the





¹ https://www.minfin.bg/upload/46660/MacroForecasting Oct 2020bg.pdf

² https://ec.europa.eu/info/sites/info/files/economy-finance/ipi36 en 2.pdf

³ Ministry of Finance estimate

Goal: GDP per capita in PPS (2025) – 62% of the EU-average

Goal: Unemployment rate (2025) – 3.5%

The **Green Transition** is at the forefront of the Recovery and Resilience Plan, concentrating almost half (47%) of the total costs foreseen. This way, Bulgaria contributes to the implementation of the common EU objectives for gradual decarbonisation. In doing so, efforts are focused on three main pillars: (i) creating the conditions for accelerated deployment of renewable energy sources and hydrogen; (ii) enhanced actions to increase the energy efficiency of the economy; (iii) sustainable mobility.

The share of renewable energy in gross final energy consumption stood at 21.6% in 2019, and Bulgaria continues to perform better than the EU (18.9 EU-average in 2019), as well as well above the national target under Europe 2020 (16% for 2020). However, the drive to achieve climate neutrality by 2050 implies significant additional efforts to increase the share of renewable energy in gross final energy consumption.

Parallel efforts to increase energy efficiency are just as necessary given the high levels of energy intensity of the economy, exceeding 3.5 times the energy cost of producing a unit of GDP on average in the EU, as well as given the extremely adverse energy performance of the building stock in the country with prevailing energy consumption classes E, F and G. Efforts to renovate the building stock will be essential to support economic recovery by creating jobs in the construction sector, energy savings, healthier living conditions and reducing energy poverty.

The carbon intensity of the transport sector in the country is 3.5 times higher than the EU average, reaching 2.8 kg of greenhouse gases per EUR 1 gross value added in 2019. Therefore, in the context of the decarbonisation efforts, there is a need to intensify investment in sustainable transport to reduce the sector's carbon footprint.

In addition to efforts to decarbonise the economy, in the context of the objectives of the Green Deal, water management efforts and biodiversity conservation and restoration will also be key.

set targets significantly underestimate the full effects of the proposed measures to be observed in the medium and long term.





Goal: Share of energy from renewable sources in gross final energy consumption (2024) – 24%

Goal: Cumulative decline in the energy intensity of the economy for the period 2021-2024 z. – 10%

Goal: Cumulative reduction in the carbon intensity of the economy for the period 2021-2024 – 10%

The Recovery and Resilience Plan also places a high level of ambition on the **Digital transition**, concentrating more than 1/4 (28%) of the total costs foreseen. In doing so, efforts are focused on four main strands: (i) the deployment of broadband infrastructure; (ii) enhancing the digital skills of the population; (iii) accelerating the deployment of digital technologies in enterprises; (iv) the deployment of e-Government and e-services.

The deployment of very high capacity networks to ensure that no part of the country or group in society is left without adequate digital connectivity is at the heart of the development of a dynamic and innovative economy and ensures better access for businesses to diverse, high-quality and innovative digital services. By 2020, only 58% of households have a broadband subscription (as compared with 78% EU-average), and the spread of fixed broadband at a speed of at least 100 Mbps is only 11% (26% for the EU). In addition, the country lags behind in terms of the 5G entry readiness indicator, distributing only 14% of the spectrum for wireless broadband, according to DESI 2020.

One of the main reasons for the slowdown in digitisation in Bulgaria (along with insufficient investment in digital infrastructure and the shortage of ICT professionals) is the low level of digital skills among the population. Only 11% possess skills above basic skills, and more than 2/3 do not even have basic digital skills. The plan foresees significant, including reformist, efforts in basic and higher education systems, lifelong learning, and active labour market measures to address this structural challenge, given the key role of this aspect in the Digital transition.

Special efforts will be made to support Bulgarian business in the process of Digital transformation. Companies are struggling 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 online trading.





The forced physical distance resulting from the spread of COVID-19 underlined the importance of building an information society actively taking advantage of the opportunities that digital technologies provide, highlighting the need to accelerate and finalise the digitisation of public services. At the same time, the effective reaping of the benefits of e-Government and the benefit of the population from digital administrative services requires the accelerated introduction of a national electronic identification scheme. Transforming public administration, including the digitisation of justice systems, through the use of new generations of digital tools will improve administrative processes and facilitate online interaction with citizens and businesses.



Goal: Share of the population with gigabit connectivity (DESI, 2025) - 98%

Goal: Share of the population with at least basic digital skills (DESI, 2025) – 50%

Goal: Deployment of digital technologies in enterprises (DESI, 2025) – 35%

Subsection 1.2: Flagship initiatives

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2. Link with the European Semester

Table xxx below illustrates the link of the different elements of the Plan with the Council's Specific Recommendations in the past two cycles of the European Semester.

Table xxx: Council's Specific Recommendations (2019-2020) and the Recovery and Resilience Plan

Council's Specific Recommend ations	Part of Specific Recommendation	Recovery and Resilience Plan	Other mechanisms national budget,)	(PA,
2019				



Council's Specific Recommend ations	Part of Specific Recommendation	Recovery and Resilience Plan	Other mechanisms (PA, national budget,)
1. Improve tax collection through targeted measures in areas such as fuel and labour taxes. Upgrade the state-	Improve tax collection through targeted measures in areas such as fuel and labour taxes.	-	Further information will be provided
owned enterprise corporate governance by adopting and putting into effect the forthcoming legislation.	Upgrade the state- owned enterprise corporate governance by adopting and putting into effect the forthcoming legislation.	-	Further information will be provided
2. Ensure the stability of the banking sector by reinforcing supervision,	Ensure the stability of the banking sector by reinforcing supervision	-	Further information will be provided
promoting adequate valuation of assets, including bank collateral and	promoting adequate valuation of assets, including bank collateral	-	Further information will be provided
promoting a functioning secondary market for non-performing loans. Ensure effective	promoting a functioning secondary market for non- performing loans	-	Further information will be provided
supervision and the enforcement of the Anti-Money Laundering framework. Strengthen the non-banking financial sector by effectively enforcing risk- based supervision, the recently	Ensure effective supervision and the enforcement of the Anti-Money Laundering framework	-	Further information will be provided
	Strengthen the non- banking financial sector by effectively enforcing risk-based supervision	-	Further information will be provided
adopted valuation guidelines and group-level supervision.	enforcing the recently adopted valuation guidelines	-	Further information will be provided



Council's Specific Recommend ations	Part of Specific Recommendation	Recovery and Resilience Plan	Other mechanisms (PA, national budget,)
Implement the forthcoming roadmap tackling the	enforcing group-level supervision	-	Further information will be provided
gaps identified in the insolvency framework. Foster the stability of the car insurance	Implement the forthcoming roadmap tackling the gaps identified in the insolvency framework	Component 10: Business environment, REFORM 4: Improving the effectiveness of the insolvency framework and stabilisation	
sector, by addressing market challenges and remaining structural weaknesses.	Foster the stability of the car insurance sector, by addressing market challenges and remaining structural weaknesses	-	Further information will be provided
3. Focus investment-related	Focus investment- related economic policy on research and innovation	Component 2: Research and innovation	
economic policy on research and innovation,	transport, notably on its sustainability	Component 8: Transport connectivity	
transport, notably on its sustainability, water, waste and energy infrastructure and energy efficiency, taking into account regional disparities, and improving the business	water, waste and energy infrastructure and energy efficiency, taking into account regional disparities	Component 4: Low-carbon economy; Component 6: Sustainable agriculture, INVESTMENT 1: Reconstruction, recovery and modernisation of the hydro melioration fund in the Republic of Bulgaria towards sustainable water management and adapting to climate changes; Component 9: Local development	
environment.	improving the business environment	Component 10: Business environment	
4. Strengthen the employability by reinforcing skills, including digital skills. Improve the quality, labour market relevance, and	Strengthen the employability by reinforcing skills, including digital skills	Component 1: Education and skills; Component 6: Sustainable agriculture, INVESTMENT 2: Digitalising the from farm to fork processes; Component 11: Social inclusion, INVESTMENT 2: Personal mobility and accessibility for persons with permanent disabilities, INVESTMENT 3: Developing regional administrative capacity for modernising social and solidarity economy enterprises and implementing individualised solutions	



Council's Specific Recommend ations	Part of Specific Recommendation	Recovery and Resilience Plan	Other mechanisms (PA, national budget,)
inclusiveness of education and training, in particular for Roma and other disadvantaged groups.Address social inclusion through improved access to	Improve the quality, labour market relevance, and inclusiveness of education and training, in particular for Roma and other disadvantaged groups	Component 1: Education and skills;	
integrated employment and social services and more effective minimum income	Address social inclusion through improved access to integrated employment and social services	Component 11: Social inclusion	
support. Improve access to health services, including by reducing out-of-pocket payments and addressing shortages of health professionals.	more effective minimum income support	Component 11: Social inclusion, REFORM 1: Improving the overall social support system by approving a Code of Social Support and regulations	
	Improve access to health services, including by reducing out-of-pocket payments and addressing shortages of health professionals	Component 12: Healthcare	
2020			
1. In line with the general escape clause, take all necessary measures to effectively address the pandemic, sustain the economy and support the ensuing recovery. When	In line with the general escape clause, take all necessary measures to effectively address the pandemic, sustain the economy and support the ensuing recovery.	All components	Further information will be provided



Council's		Recovery and Resilience Plan	Other mechanisms (PA,
Specific Recommend ations	Part of Specific Recommendation	Recovery and Resilience I tan	national budget,)
economic conditions allow, pursue fiscal policies aimed at achieving prudent medium-term fiscal positions and ensuring debt sustainability, while enhancing investment. Mobilise adequate financial resources to	When economic conditions allow, pursue fiscal policies aimed at achieving prudent medium-term fiscal positions and ensuring debt sustainability, while enhancing investment	All investments	Further information will be provided
strengthen the resilience, accessibility and capacity of the health system, and ensure a balanced geographical distribution of health workers.	Mobilise adequate financial resources to strengthen the resilience, accessibility and capacity of the health system, and ensure a balanced geographical distribution of health workers	Component 12: Healthcare	Further information will be provided
2. Ensure adequate social protection and essential services for all	Ensure adequate social protection and essential services for all	Component 11: Social inclusion	Further information will be provided
and strengthen active labour market policies. Improve access to distance working and promote digital skills and equal	strengthen active labour market policies	Component 1: Education and skills, INVESTMENT 3: Trainings for digital skills and building a national online platform for adult training	
access to education. Address the shortcomings in the adequacy of the minimum	Improve access to distance working	Component 7: Digital connectivity	Further information will be provided



Council's Specific Recommend ations	Part of Specific Recommendation	Recovery and Resilience Plan	Other mechanisms (PA, national budget,)
income scheme.	Promote digital skills	Component 1: Education and skills	
	Promote equal access to education	Component 1: Education and skills	
	Address the shortcomings in the adequacy of the minimum income scheme	Component 11: Social inclusion, REFORM 1: Improve the overall social support scheme by adopting a Code of Social Support and regulations	
3. Streamline and accelerate the procedures to provide effective support to small and medium-sized	Streamline and accelerate the procedures to provide effective support to small and mediumsized enterprises and self-employed	Component 3: Smart industry, INVESTMENT 2: Economic transformation program	
enterprises and self-employed, also ensuring their continued access to finance and flexible payment	access to finance and flexible payment arrangements	-	Further information will be provided
arrangements. Front-load mature public investment projects and promote private investment to	Front-load mature public investment projects and promote private investment to foster the economic recovery.	All investments	Further information will be provided
foster the economic recovery. Focus investment on the green and digital transition, in particular on clean and efficient production and use of energy and resources, environmental	Focus investment on green and digital transition, in particular on clean and efficient production	Component 2: Research and innovation, INVESTMENT 2: Enhancing the innovation capacity of the Bulgarian Academy of Sciences (BAS) in the field of green and digital technologies; Component 4: Low-carbon economy, REFORM 1: Establishing a National Decarbonisation Fund, REFORM 3: Mechanism to finance energy efficiency and RES projects together with electricity bills, REFORM 5: Support producers of energy from RES. Develop, facilitate and accelerate international trade in guarantees of origin, INVESTMENT 4: Digital transformation and development of information systems and real-time systems of the Energy System Operator in a low-carbon economy, REFORM 6: Preparing and adopting a National roadmap to improve the	



Council's Specific Recommend ations	Part of Specific Recommendation	Recovery and Resilience Plan	Other mechanisms (PA, national budget,)
infrastructure and sustainable transport, contributing to a progressive decarbonisatio n of the economy,		conditions for unleashing the potential of hydrogen technologies and mechanisms for production and supply of hydrogen, INVESTMENT 5: Design, build and commission infrastructure adequate for transmission of hydrogen and low-carbon gaseous fuels, INVESTMENT 6: Scheme to support pilot projects for production of green hydrogen and biogas	
including in the coal regions.	efficient production and use of energy and resources	Component 2: Research and innovation, INVESTMENT 2: Enhancing the innovation capacity of the Bulgarian Academy of Sciences (BAS) in the field of green and digital technologies; Component 3: Smart infrastructure, INVESTMENT 2: Economic transformation program; Component4: Low-carbon economy, REFORM 1: Establishing a National Decarbonisation Fund, REFORM 2: Develop a definition of "energy poverty" for households in the Energy Efficiency Act for the purposes of financing energy efficiency projects, INVESTMENT 1: Energy efficiency in buildings, INVESTMENT 2: Programme to finance single energy efficiency measures in one-dwelling buildings and multi-dwelling buildings that are not connected to heat and gas transmission networks INVESTMENT 3: Energy efficient municipal systems for outdoor artificial illumination, REFORM 3: Mechanism to finance energy efficiency and RES projects together with electricity bills, REFORM 4: One-stop-shop; Component 5: Biodiversity; Component 6: Sustainable agriculture;	
	Investment in environmental infrastructure	Component 9: Local development	
	Investment in sustainable transport	Component 8: Transport connectivity	
	progressive decarbonisation of the economy, including in the coal regions	Component 1: Education and skills, INVESTMENT 2: Modernising education institutions for more attractive and quality environment for learning and innovation, Component 2: Research and innovation; Component 3: Smart industry; Component 4: Low- carbon economy; Component 8: Transport connectivity; Component 11: Social inclusion, INVESTMENT 1: Continuing support for deinstitutionalisation of elderly care and care for people with disabilities; Component 12: Healthcare, INVESTMENT 1: Modernising the facilities and implementing innovative technology for treatment of the population in key state and municipal medical establishments, INVESTMENT 3: Modernising and developing psychiatric care	



Council's Specific Recommend ations	Part of Specific Recommendation	Recovery and Resilience Plan	Other mechanisms (PA, national budget,)
	Minimise administrative burden to companies	Component 10: Business environment	Further information will be provided
4. Minimise administrative burden to companies by improving the	improving the effectiveness of public administration	Component 10: Business environment	Further information will be provided
effectiveness of public administration and reinforcing	Reinforcing e- government	Component 10: Business environment	
digital government. Ensure an effective functioning of	Ensure an effective functioning of the insolvency framework.	Component 10: Business environment, REFORM 4: Improving the effectiveness of the insolvency framework and stabilisation	
the insolvency framework. Step up the efforts to ensure adequate risk assessment, mitigation, effective	Step up the efforts to ensure adequate risk assessment, mitigation, effective supervision and enforcement of the anti-money laundering framework		
supervision and enforcement of the anti-money laundering framework.			

3. Coherence

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. The plan includes 48 investments and 31 reforms. The highest concentration of reform efforts could be found in the components "Business environment" and "Low-carbon economy".

The focus on further improvement of the business environment in the county is logical, given the economic turbulences caused by the COVID-19



pandemic. In addition to the direct support provided by the Government to the business during the economic crisis, facilitating the conditions in which the business operates is a powerful instrument. Timely efforts and results along these lines are important because they have the potential to attract foreign investment at times when multinational capital builds strategies to address supply chain disturbances, including by reallocating capacities and resources. Last but not least, effective efforts to improve the business environment are a prerequisite for further increasing the efficiency of all other investments included in the Plan. Therefore, in order to increase the potential for sustainable growth of the economy and improve its resilience to shocks, the structural challenges in the investment environment are considered as a priority by the Government.

The strong presence of the low-carbon economy component in the Plan clearly gives a sign of its place in the hierarchy of the Government priorities. Decarbonisation efforts, along as a sign of a conscious responsibility to future generations and a commitment to pan-European goals, must also be seen through the prism of the national interest. The high dependence on imports of (fossil) energy resources also provides economic arguments for interventions aimed at utilizing the local potential for "clean" production. At the same time, the intensified efforts to improve energy efficiency would also enhance the economic efficiency (because of improved competitiveness) and the social (improved quality of life) resilience to shocks.

Connectivity (in its various dimensions – digital, transport) is another priority theme in the Recovery Plan. In addition, the two above-mentioned priorities are interwoven into the strategic approach to connectivity – transport connectivity interventions are designed to contribute to the decarbonisation of the sector, while reform and investment intentions for both digital and transport connectivity are indirectly aimed at improving the business environment.

In addition to its direct effect on the resilience (of the economy, of the society) to shocks, improved connectivity also has a significant effect in terms of territorial cohesion – a topic that does not have strong presence in the Recovery Plan at first glance, but is actually horizontally interwoven in all its components and pillars: the focus of transport connections is on Northern Bulgaria given its infrastructural delay; the main purpose of digital connectivity is to address territorial imbalances in the spread of broadband





access; the seemingly sectoral component Sustainable Agriculture intervenes towards closing the gaps along the urban-rural areas axis; a reform in the Healthcare component addresses the imbalanced geographical distribution of health workers, etc. The economic theory and practice have proven that, in addition to their obvious relation to social resilience, investments have also a positive spill-over economic effect even outside the underdeveloped regions targeted by the investments.

The human factor is another element which is horizontally interwoven in all components of the Plan, being central to at least three of them. Main principle in drafting the document and in designing the policies is to ensure equal access of all members of the society to public goods (education, healthcare,...). Deliberate efforts are focused on the vulnerable groups who are threatened by social exclusion and who, due to their social status, have the lowest social resilience to shocks.

The focus on double transition is also proclaimed in the document. However, this focus is determined not solely by the thematic concentration laid down in the Regulation on the Recovery and Resilience Facility but by the attempt to respond to the challenges stemming from the crisis. An argument along that line is the fact that the objectives laid down in the Regulation are significantly exceeded as the green and digital dimensions of the Plan represent 46% and 29% of the total resource, accordingly. In addition to the efforts to reduce the carbon footprint, the Plan highlights other aspects of the green transition such as water management, combating climate change, conservation of biodiversity, focusing research on climate and environmental challenges, etc. On the other hand, in the context of digital transition, the interventions planned in almost all policy areas contain elements that facilitate digital transformation. Example in this respect is the effort to improve the digital skills of the population, which is also included as a special intervention, as well as a reform model being established in the education system and as a supplementary connotation in the interventions planned in other policy areas (from culture to agriculture).

PART 2: DESCRIPTION OF REFORMS AND INVESTMENTS

The plan is structured in four pillars:

- **Innovative Bulgaria** aiming to improve the competitiveness of the economy and its transformation into an economy based on knowledge and smart growth **25.8**% 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 stability, so that these needs can continue to be met in the long run 34.8% of the resources under the Plan;
- **Connected Bulgaria** focusing on providing preconditions to improve 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 **22.5**% of the resources under 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 the business and citizens –**16.9**% of the resources under the Plan.



2.A INNOVATIVE BULGARIA

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



Components	Reforms
Education and skillsResearch and innovationSmart industry	Comprehensive educational reform in preschool, school education and lifelong learning; Reform in higher education; Implementing a common policy for development of research, innovation and technology towards improved economic and social development of the country; Updating the strategic framework of the industrial sector; Building a mechanism to attract industrial investments and develop industrial ecosystems

2.A.1. Education and skills

a) Description of the component

Summary, Education and skills

Policy area: education, labour market.

Objective: The policy objective is to improve the quality and coverage of education and training with a focus on acquiring analytical skills and developing creative thinking, increasing the ability of people to timely adapt to technological transformation and the respective changes in the labour market. Accelerated modernisation and digitalisation of educational approaches, methods and practices. Improving the digital skills of the workforce and focusing active labour market policies on improving the qualification and skills of the workforce for better conformity with the developments on the labour market.

Reforms and/or investments:

- Comprehensive educational reform in pre-school, school education and lifelong learning;



- Reform in higher education;
- Creating a national STEM environment for skills of tomorrow;
- Modernisation of the educational institutions to create a more attractive and quality environment for learning and innovation;
- Trainings for digital skills and building a national online platform for adult learning;
- Establishing personal development centres for pupils and youth, in support of the sustainable recovery of municipalities.

Cost estimation: Indicative estimates of the costs for achieving the component's objectives – total 1 497.4 million BGN, from the Recovery and Resilience Facility.

b) 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 to 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. However, according to estimates of the Ministry of Education and Science 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 relief 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 November presupposed 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, 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 relevance and inclusiveness remains a challenge for 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 EU average, 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 Roma. The challenges of modernizing, internationalizing and adapting universities in the context of digital and industrial transformation remain.

On the other hand, the problems of low labour market relevance of education, low participation of adults in trainings for qualification and prequalification, the unsatisfactory level of digital skills of the workforce, etc., prevent economy's quick adaptability to the new conditions resulting from the crisis, and do not create grounds for quick economic recovery. Demographic trends and increasing skill shortage show that Bulgaria must invest more in the qualification of its current and future workforce. There is a high need to qualify and prequalify the adult population but participation in adult trainings is low (2.0% in 2019 which is much lower than the EU average of 11.3%). The general level of basic digital skills in the country is among the EU lowest. The share of persons with at least basic digital skills is about 29% of the Bulgarian population aged 16-74, whereas the EU average is 58%. Only 11% of the people have above-basic skills, making up to one-third of the EU average.

c) Objectives

The component is in line with the Council's 2019 and 2020 Country-Specific Recommendations. It will directly contribute to implementation of aspects





of SR2/2020 and SR4/2019. The aim of Reforms 1 and 2 is to improve the quality of the education system and the labour market relevance of education. Investment 3 brings a new tool in the active labour market policies. On the other hand, some elements of the reform efforts (STEM orientation and development of cognitive skills in school education, as well as the chosen model of reform of higher education) create preconditions for development of research and innovation activity, thereby indirectly addressing SR 3/2019. The component will indirectly contribute to implementation of the other Country-Specific Recommendations of the Council, e.g., improving the energy efficiency (SR 3/2019, SR 4/2020), thereby helping to fulfil the green transition tasks. Building digital skills needed to meet the digital transition challenges is a horizontal element which is present in almost all measures within the component.

Investments in the education system create preconditions to simultaneously attain the objectives of improving economic and social resilience to shocks. On one hand, they are a powerful tool for social inclusion, while on the other they lead to accumulating human capital and skills allowing participation of the individuals in the labour market, as well as productivity growth in a macroeconomic aspect. Increasing the education system coverage, which is the explicit and implicit aim of Reform 1, Investment 2 and Investment 4, is investment in economic and public interest.

The component is in line with one of Europe's flagship initiatives - Reskill and Upskill. Major contributors to attainment of the objectives at EU level are expected to be investments 3 and 1, as well as the reform intentions expressed, whereas Investment 2 will be mainly an indirect contributor along this line.

- d) Planned reforms and investments
 - Reform 1: Comprehensive educational reform in pre-school and school education and in lifelong learning

A comprehensive, multifaceted educational reform enhancing the focus on building skills and key competences from an early age is implemented to improve the quality and relevance of education.

1. Developing and adopting amendments to the Pre-school and School Education Act $(Q_3/2020)$







The adopted amendments to the laws and regulations are part of a comprehensive educational reform to focus the education system around acquiring competences and applying them in practice, update the curricula, create, implement and disseminate innovation, expand the coverage of education, building on successful distance learning practices and skills, STEM-orientation and cognitive skills development. The changes made include 4-year olds in the system of pre-school education. They also allow greater flexibility in the use of innovative methods and technical means for different forms of distance learning in an electronic environment for the purposes of prevention at times of emergencies, as well as continuity of the learning process.

2. Developing and adopting amendments to the secondary legislation (Q4/2020)

Amendments to Ordinance No. 9 / 2016 on the institutions in the system of pre-school and school education expand the options for creating innovative schools and allow improvement of the quality of education by designing new tools, methods, activities, organisation and environment;

Amendments to Ordinance No. 5 / 2016 on pre-school education expand the coverage of pre-school education which now includes 4-year olds. This is a key condition for combating school dropout and improving the educational outcomes;

Amendments to Ordinance No. 10 / 2016 on the organisation of activities in school education increase e-learning options thereby improving access to and quality of education;

Amendments to Ordinance No. 7 / 2016 on profiled training improve the quality of assessment;

Ordinance No. 24 / 2020 on the physical environment and the information and library support of kindergartens, schools and personal development support centres changes the requirements to the physical environment in educational institutions, laying down requirements for provision of quality and inclusive education. Draft new ordinance laying down the state educational standard for quality management in education institutions is a subject of public discussion;

3. Designing and approving Strategic Framework for development of education, training and learning in the Republic of Bulgaria (2021-2030) (Q1/2021)





A draft strategic document has been prepared; broad public consultation has been carried out; the document is pending approval by the Council of Ministers. The draft document lays down fundamental principles and priorities for the development of the education system up to 2030. In the area of preschool and school education are formulated specific goals, activities and measures for their implementation, in order to achieve, , greater access to education, enhanced coverage, improved quality, career guidance, digitalization of the learning process, developed innovative activities, sustainable and environmental development, formed attitudes for lifelong learning, highly qualified pedagogical specialists, developed modern and innovative educational environment, as well as educational training that is relevant to labour market needs.

• Reform 2: Reform in higher education

The reform provides for changes in the regulatory and strategic framework of higher education:

1. Designing and approving amendments to the Higher Education Act $(Q_1/2020)$

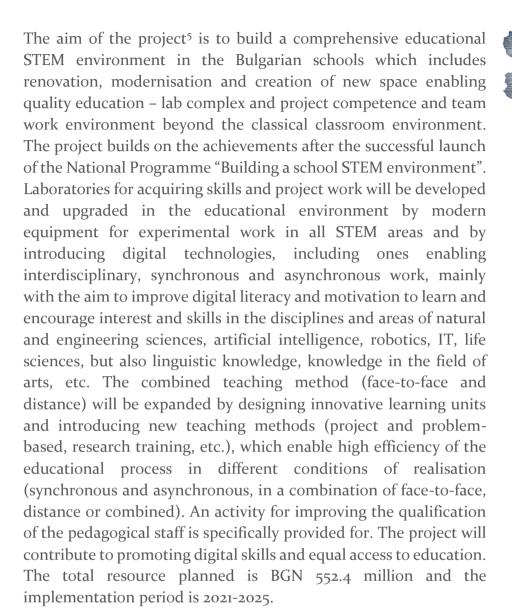
The reforms laid down set as an objective shared responsibility of the Ministry of Education and Science, on one side and the rectorates on the other, for the development of higher education and higher education institutions, by promoting the modernisation of the higher education schools and providing conditions for active research activity, transfer and commercialisation of knowledge and technologies, rejuvenation of the teaching staff, improved quality of teaching and enhanced requirements to students;

2. Strategy for development of higher education in the Republic of Bulgaria for the period 2021-2030 (Q4/2020)

The following areas of reform are prioritised: improving quality by upgrading training content, methods and forms; accelerated modernisation and digitalisation of educational approaches, methods and practices; ensuring access to higher education and lifelong learning that supports personal development and professional career. Furthermore, it provides for enhanced role of research and applied research, innovation and entrepreneurial skills.

• Investment 1: Building a national STEM environment for skills of tomorrow





• Investment 2: Modernisation of educational institutions for a more attractive and quality environment for learning and innovation

The project⁶ aims to provide conditions for equal access to education by creating a favourable, inclusive, innovative, supportive and motivating educational environment. To ensure a complete renewed appearance of educational institutions and to create more attractive conditions for learning, activities of interest, sports and recreation of children, pupils and students, activities will

⁶See annex No. A2





⁵See annex No. A1

be carried out for repair, reconstruction, rehabilitation, building installations for use of alternative energy sources, heating, ventilation and cooling of the building stock, landscaping, etc. Priority will be given to the implementation of complete repairs and construction of kindergartens, schools, student dormitories and campuses to provide children, pupils and students with favourable conditions of living, learning, education, socialisation and development. The total planned resource is BGN 604.6 million with and the implementation period is 2021-2026.

• Investment 3: Trainings for digital skills and building a national online platform for adult learning

The project⁷ will be implemented in two components envisaging, on one part, provision of training to the workforce for acquiring and validating basic digital skills and competences tailored to the new labour market needs and the penetration of digital technologies in the economic processes, and, on the other part – design and implementation of a virtual online learning platform.

Free and generally accessible training for the persons in the target group (unemployed and employed persons) for acquiring the necessary basic digital skills and competences is motivated by the current extremely low levels of those skills in national context. A uniform curriculum, as well as uniform training resources and assessment tools will be designed for the purposes of the trainings in accordance with the European Digital Competence Framework DigComp2.1. Trainings will be provided by training organisations registered in the electronic module of the virtual online learning platform (to be created simultaneously). Training providers will be registered on the basis of an application and examination of the circumstances. The target group members who want to be trained for acquiring basic digital skills and competences will register in the electronic module of the virtual online learning platform. After the person is approved, an "electronic voucher" for learning will be generated. It will allow the person to get included in training for basic digital skills and competences at a training organisation of his choice from the list of training organisations in the module. Persons who do not have internet access or encounter problems with the registration will receive on-site assistance in the Labour Office

⁷See annex No. A₃





Directorates. The component also provides for a mechanism for certification of the acquired skills and competences on the basis of examination according to the designed uniform assessment tools at a certification centre chosen by the trainee on a random principle from the list of certification centres in the electronic module of the virtual online learning platform. Certification centres will not have the right to validate basic digital skills and competences of persons included in trainings organised by the respective centre. The established mechanism for certification of digital skills and competences could be used also to validate skills acquired through informal learning. The data about the persons who are issued certificates will be registered in the electronic module of the virtual platform. In this way it will be possible to monitor what share of the persons registered for training have successfully acquired basic digital skills and competences and have been awarded a certificate (effect of the training), as well as to monitor the level of validation of digital skills and competences in general. The electronic module will also support an electronic archive of the certificates issued. The total planned resource for the component is BGN 192 million and the implementation period is 2021-2026.

The creation of a virtual online learning platform aims to improve the quality and employability of the workforce by expanding the access and providing more opportunities for quality learning making use of the opportunities offered by digital technologies. The key activities planned include: building and developing a virtual online learning platform, designing methodologies and e-content, holding trainings of trainers, building and supporting a network of digital clubs, furnished with modern computer equipment and other devices and internet access, where the persons, assisted by mentors, will be able to use the equipment to participate in electronic and distance learning. Digital clubs will be built/adapted locally in the buildings of municipalities, district information centres, libraries, chitalishta (cultural-education centres), Labour Office Directorates, etc., across the country. Digital clubs will offer free access to all interested persons, with priority given to individuals that do not have their own equipment and internet access and would not otherwise have access to the virtual online learning platform. An interactive map of digital clubs will be created and published in the virtual online learning platform. A





uniform information database of online training courses will be created and the platform will be integrated with the national labour market database, the competence assessment information system My Competence, the Employment Agency's training provider platform, the electronic register of vocational training centres of the National Agency for Vocational Education and Training. The total planned resource for the component is BGN 87.5 million and the implementation period is 2021-2026.

The total planned resource for the whole project is BGN 279.5 million and the implementation period is 2021-2026.

• Investment 4: Establishment of centres for personal development of pupils and youth, in support to the sustainable recovery of municipalities

The measure⁸ will support the formation, development and realisation 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. Specific activities and policies targeted at young people will be designed and pursued towards improvement of digital competences, development of entrepreneurial literacy, general and financial literacy, development of specific soft skills supporting social inclusion and employability. Maintaining the interest of students and young people in education and 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. The project provides for inclusion of at least 15 000 pupils and youth in the centre and at least 2 000 young people receiving training for improvement of their professional competence, including digital, financial, entrepreneurial. In addition, this programme would have a real effect on the creation of new jobs in the municipalities, with at least

⁸See annex No. A₄





170 in total envisaged for the entire project. The total planned resource is BGN 60.0 million and the implementation period is 2021-2026.

e) Complementarity and demarcation with Cohesion Policy instruments

To have a lasting impact on the education reform, the projects will complement the activities under *Education* Programme 2021-2027 for digital transformation of education and promotion of educational innovation in pre-school and school education.

In a broad context, 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 for achieving professional realization and will also support reforms in vocational and higher education in order to strengthen the links between them, with science and the dynamic needs of the labour market and facilitate the transition from education to employment.

f) Green and digital dimensions of the component

Some of the planned interventions (mostly Investment 2) will have as a direct effect of their implementation increased energy efficiency as a result of the renovation of the building stock of educational institutions. The measures proposed in the component contribute to the environmental transition by taking into account the six climate and environmental objectives set out in the Taxonomy Regulation and do not infringe the principle of "do not significantly harm" as set out in the Taxonomy Regulation. With its 40% climate costs (see Table xxx below), this component contributes to the 37% target for the green dimensions of the Plan set out in the Regulation on the Recovery and Resilience Facility.

Building digital skills required to meet the challenges of digital transition is a horizontal element present in almost all measures within the component. This is particularly pressing issue given the fact that Bulgaria seriously lagging behind the other EU Member States. The share of persons with at least basic digital skills is about 29% of the Bulgarian population aged 16-74, against 58% EU average. With its 57% digital costs (see Table xxx below), this component contributes also to the 20% target for the digital dimensions





of the Plan, laid down in the Regulation on the Recovery and Resilience Facility.

Table xxx: Green and digital impact

Table 1. Green and digital impact								
Short title	Green objectives				Digital objectives Transition cha			allenges
Snort title	Climate	Environmental	Intervention field	DNSH			Green	Digital
Component 1:	Tag	Tag						_
Education and skills	40%				57%		604,597	855,850
REFORM 1: Comprehensive educational reform in pre-school, school education and lifelong learning	n/a	n/a	n/a	n/a	n/a		n/a	n/a
REFORM 2: Reform in higher education	n/a	n/a	n/a	n/a	n/a		n/a	n/a
Investment 1: Creating a national STEM environment for skills of tomorrow	0%	0%	108	yes	100%		0	552,338
INVESTMENT 2: Modernisation of the educational institutions to create a more attractive and quality environment for learning and innovation	100%	40%	26	yes	0%		604,597	0
INVESTMENT 3: Trainings for digital skills and building a national online platform for adult learning, component 1 - National virtual platform	0%	0%	12	yes	100%		0	279,513
INVESTMENT 4: Establishing personal development centres for students and youth, in support of the sustainable recovery of municipalities	0%	0%	99	yes	40%		0	24,000

g) Milestones, objectives and timetable

Table xxx presents the milestones and objectives for implementation of the component.

Table. xxx: Milestones and objectives



h) Financing and costs

Table xxx presents the indicative estimated financial resources required for the implementation of the component.

Table xxx: Estimated costs

		Detailed costs		Methodological information		Comparative costing data from past reforms/investments		
Componen t	Reform /Investment	Costs in BGN	Cost description	Methodology used	Source	Cost s in BGN	Source	Possible reference to past EU programs
	Comprehensiv e educational reform in pre- school, school education and lifelong learning	0	n/a	n/a	n/a	n/a	n/a	n/a
	Reform in higher education	0	n/a	n/a	n/a	n/a	n/a	n/a
Education and skills	Creating a national STEM environment for skills of tomorrow	552,337,50 0	Creating a national STEM environment for skills of tomorrow	Historical data from the implementatio n of past projects financed under National Program	statements of expenditur e		Detailed costs and justification of detailed cost formation are given in the Annex to table 3b	-
	Modernisation of the educational institutions to create a more attractive and quality environment for learning and innovation	604,759,50 0	Modernisation of the educational institutions to create a more attractive and quality environment for learning and innovation	Historical data from the implementatio n of past projects financed under National Program	statements of expenditur e		Detailed costs and justification of detailed cost formation are given in the Annex to table 3b	OPRD 2014-2020
	Trainings for digital skills and building a national online platform for adult learning	279,512,81 9	Trainings for digital skills and building a national online platform for adult learning				Detailed costs and justification of detailed cost formation are given in the Annex to table 3b	



Establishing personal development centres for pupils and youth, in support of the sustainable recovery of municipalities	60,000,000	Establishing personal development centres for pupils and youth, in support of the sustainable recovery of municipalitie s	Historical data from the implementatio n of past projects	concluded contracts	Detailed costs and justification of detailed cost formation are given in the Annex to table 3b	EEA Financial Mechanis m
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2.A.2. Research and innovation

a) Description of the component

Summary, RESEARCH AND INNOVATION

Policy area: research, innovation.

Objective: The main goal is to provide a favourable environment for the realization of new products and processes and 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 projection. The priority is to strengthen and stimulate scientific activity in higher education, 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.

Reforms and/or investments:

- Implementing a common policy for development of research, innovation and technologies towards improved economic and social development of the country;
- Programme for accelerating economic recovery and transformation through science and innovation;
- Enhancing the innovation capacity of the Bulgarian Academy of Sciences in the field of green and digital technologies.



Cost estimation: Indicative estimates of the costs for attainment of the component's objectives – total 365.4 million BGN from the Recovery and Resilience Facility.

b) 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 hightech 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. The total funding that Bulgaria has received under the EU Framework Program for Research and Innovation "Horizon 2020" is equal to only 0.26% of the total budget of the Program thus showing a modest performance of the country.

c) Objectives

The component is in line with the Council's 2019 and 2020 Country-Specific Recommendations. It will directly contribute to implementation of aspects of SR 3 / 2019 and SR 3 / 2020. All measures planned target research and innovation and unleashing their potential to accelerate economic growth. In that light, while not associated with expectations for having a significant role in the economic recovery process in the short and even in the medium term, the component has the potential to become a driver of national economic development in the long term, improving country's competitiveness, hence its economic resilience to shocks. Investment 2 is specifically focused on green transition and digital technologies, thereby contributing to reaching the relevant national targets.



d) Planned reforms and investments

 Reform 1: Implementing a common policy for development of research, innovation and technology towards improved economic and social development of the country

The reform implemented provides for changes in the regulatory and institutional framework of the sector of research and innovation.

1. Establishing State Agency for Research and Innovation $(Q_3/2021)$

The institution will implement the policy in the field of interaction of research, innovation and technology and the associated reforms, providing the required coordination and ensuring the contribution of the other policies for attaining the objectives and priorities laid down.

The main approach of this reform is the ecosystem one – building a sustainable research and innovation ecosystem enabling intensive development and full contribution by all has a key role in designing, implementing and monitoring the Innovative Strategy for Smart Specialisation 2021-2027 and its synchronisation with other strategic documents and policies such as the National Strategy for Development of Scientific Research in the Republic of Bulgaria 2017-2030, the National Roadmap of Scientific Infrastructure, Industry 4.0, etc.;

2. Designing and approving the required legislative framework $(Q_1/2022)$

An interdepartmental working group will be established with representatives of the State Agency for Research and Innovation, the Ministry of Education and Science and the Ministry of Economy, with the task of drafting a new Research and Innovation Act, which will give the regulatory parameters of the new common policy for research, innovation and technology. The draft act will be consulted with all stakeholders and submitted to the National Assembly;

3. Improving stakeholder involvement in the process of policy design and implementation $(Q_3/2023)$

A science and innovation board/council will be set up within the State Agency for Research and Innovation; the role, membership and functions of the Council for Smart Growth will be enhanced in relation to the objectives and priorities of the new policy. The board will assist the chairperson of the Agency, mainly in the policy





development and strategic planning process and will play a decisive role in the decision making on matters related to the implementation of key projects and strategic investments in the field of research and innovation.

The Board members will include recognised and prominent national and international scientists from various scientific areas, representatives of BAS, high-level policy-makers from the Ministry of Education and Science, the Ministry of the Economy, prominent, internationally recognised innovators, business representatives;

- 4. Increasing the capacity of research organisations and higher education schools to developed applied research and innovation and to implement joint projects with the industry (Q1/2026) Gradually increase the share of project financing in the budgetary structure of public research organisations and higher education institutions, thereby creating a sustainable platform for introduction of mechanisms for monitoring and evaluation of their work and continuation of result-oriented financing;
- 5. Strengthening the relationship between research and higher education $(Q_1/2026)$

Creating a national model for development of research universities, enabling higher education schools to migrate to a next level in their development and become full members of the research and innovation ecosystem by developing their research capacity and training highly qualified and prepared individuals and contributing to the development of knowledge-based economy and society; fully-fledged participation in the research and innovation eco system; strengthening their relationship with the industry and the demand for new products, services and technologies, and becoming a science hub for the business; developing and deepening their specialisation – building thematic coalitions and networks between them towards greater specialisation;

6. Increasing the capacity for technology transfer from research organisations to the private sector $(Q_4/2025)$

Creating a new technology transfer model. The main objective is to improve the interaction between research organisations and the industry towards encouraging transformation of research into innovations and technologies by creating a model for promotion of technology transfer and commercialisation of results. The new model enables more effective implementation of the process







through improvements at every stage of implementation. The starting point are World Bank's recommendations received within the Knowledge Tech Transfer Country Note for Bulgaria, as well as the recommendations of the Joint Research Centre in respect of 14 ERDF-co-funded centres of excellence and competence centres in Bulgaria. An important part of the technology transfer model is the management of intellectual property rights, as well as the European and international practice in the field.

• Investment 1: Programme to accelerate economic recovery and transformation through science and innovation

The project⁹ provides for the creation of a mechanism to encourage public and private investment in research and innovation through coordination of government efforts and policies to optimize and strengthen the transfer of research results and technologies. The planned investments are in two main pillars: the first one is aimed at accelerating the internationalisation of the Bulgarian research and innovation system; the second emphasises on the creation and development of a network of research universities model in support of the industry and the society. Two operations are planned within the first pillar of the funding of: (i) project proposals from innovative SMEs that have been awarded the quality label "Seal of Excellence" in the competitions organised by the European Innovation Council, and (ii) project proposals under the "Widening Participation" element of FP "Horizon Europe" for strengthening the research and innovation capacity of the Bulgarian higher education schools and research organisations.

The purpose of the second pillar is to create and pilot a national model for development of research universities which enables higher education schools to migrate to a next level in their development and become full members of the research and innovation system. The activities planned within the pillar will be facilitated also by the amendments to the Higher Education Act adopted in 2020, enabling a higher education school with significant contribution to the development of important public areas through top-level research and has excellent research results to be designated as a research university. The plan is by approbating this financing model to make changes in the funding from the

⁹See annex No. A₅





budget of the higher education school. Research universities will be granted subsidies for research and innovation at the rate of 40% of the subsidy for education. The other higher education schools will receive up to 10% for this purpose. By increasing the funds for research and activity of research universities, the sustainability of the programme will contribute to greater increase of public R&D spending. The total planned resource for the programme, in its two components, is BGN 318 million and the implementation period is 2021-2026.

• Investment 2: Enhancing the innovation capacity of the Bulgarian Academy of Sciences in the field of green and digital technologies

The investment¹⁰ is aimed at enhancing the innovation capacity of the Bulgarian Academy of Sciences (BAS) and its active participation in the national research and innovation ecosystem towards supporting and accelerating the country's economic transformation, with a main thematic focus on the areas related to double transition. The project is aimed at creating institutional structures and mechanisms for effective cooperation between BAS and the business, towards accelerated implementation of innovation in the economy and transforming it into a knowledgebased economy; unleashing the research potential of BAS by improving skills and qualification in the innovation area and establishing an interdisciplinary, cross-sectoral and international approach; modernising the green and digital technology transfer infrastructure; creating innovative products and solutions by scientific teams from BAS in response to specific requests by the business related to the green transition; creating sustainable longterm relationships with the business in the field of green and digital technologies through joint PhD programs; enhancing country's participation in R&D competitions announced by European and other institutions; protecting BAS' intellectual property in the field of green and digital technologies with a view to facilitating the commercialisation of scientific results and deepening the internationalisation of the BAS' R&D system in the field of green

¹⁰See annex No. A6





and digital technologies. The total planned resource is BGN47.4 million and the implementation period is 2021-2026.

e) Complementarity and demarcation with Cohesion Policy instruments

The projects will complement efforts to develop innovation and research as a critical 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 partnerships of research organizations and universities with industry and enterprises throughout the country. Investment will be oriented to capacity building and human resources development, support for the creation of knowledge-intensive sectors, promotion start-ups internationalization of enterprises and of the Bulgarian research and innovation ecosystem.

f) Green and digital dimensions of the component

The measures proposed in the component contribute to the environmental transition by taking into account the six climatic and environmental objectives set out in the Taxonomy Regulation and do not infringe the principle of "do not significantly harm" as set out in the Taxonomy Regulation. With its 13% digital costs and 5% climate costs (see Table xxx below), this component contributes to the 20% target for the digital dimensions of the Plan and the 37% target for the green dimensions, as set out in the Regulation on the Recovery and Resilience Facility.

Table xxx: Green and digital impact

Table 1. Green and digital impa	ct						
Charletta		Green obj	ectives		Digital objectives	Transition	challenges
Short title	Climate	Environmental	Intervention Buou			0	Disital
	Tag Tag field DNSH					Green	Digital
Component 2: Research and innovation	13%				35%	47,441	127,200





REFORM 1: Implementing a common policy for development of research, innovation and technology towards improved economic and social development of the country	n/a	n/a	n/a	n/a	n/a	n/a	n/a
INVESTMENT 1: Program to accelerate economic recovery and transformation through science and innovation	0%	0%	21	yes	40%	0	127, 200
INVESTMENT 2: Enhancing the innovation capacity of the Bulgarian Academy of Sciences in the field of green and digital technologies	100%	40%	22	yes	0%	47,441	0



g) Milestones, objectives and timetable

Table xxx presents the milestones and objectives for implementation of the component.

Table xxx: Milestones and objectives

h) Financing and costs

Table xxx presents the indicative estimated financial resources required for the implementation of the component.

Table xxx: Estimated costs

		Detailed	l costs	Methodol	Methodological information					dological information Comparative costing data from reforms/investments			
Componen t	Reform /Investment	Costs in BGN	Cost description	Methodology used	Source	Cost s in BGN	Source	Possible reference to past EU programs					
Research and innovation	Implementing a common policy for development of research, innovation and technologies towards improved economic and social development of the country	0	n/a	n/a	n/a	n/a	n/a	n/a					



		-				
Programme for accelerating economic recovery and transformation through science and innovation	318,000,000	Programm e for acceleratin g economic recovery and transforma tion through science and innovation	Historical data based on the implementatio n of national scientific programs and projects under FP "Horizon 2020"	EC data bases FP "Horizon Europe" https://cordis.europa.eu/ projects	Detailed costs and justification of detailed cost formation are given in an Annex	
Enhancing the innovation capacity of the Bulgarian Academy of Sciences in the field of green and digital technologies	47,440,970	Enhancing the innovation capacity of the Bulgarian Academy of Sciences in the field of green and digital technologi es	market research, historical data		Detailed costs and justificatio n of detailed cost formation are given in an Annex	



2.A.3. Smart industry

a) Description of the component

Summary, SMART INDUSTRY

Policy area: Industry 4.0.

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

Reforms and/or investments:

- $\hbox{-} \ Up dating the strategic framework of the industrial sector;} \\$
- Building a mechanism to attract industrial investments and develop industrial ecosystems;
- Programme for public support for development of industrial parks and improvement of their infrastructural connectivity;
 - Economic transformation programme.



Cost estimation: Indicative estimates of the costs for attainment of the component's objectives – total 2 145.0 million BGN, including 1 316.5 million BGN from the Recovery and Resilience Facility and 828.5million BGN national co-financing.

b) Main challenges

Restrictive measures taken to control the pandemic have led to a reductions 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 reached 28.3% decline compared to the previous year. GDP decrease is 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 pandemic situation, 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, in medium term, the Government should focus its support for economic recovery to overcome 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. Another significant problem of Bulgarian enterprises is the low level of resource productivity - in 2019, the resource productivity in Bulgaria amounts to 0.3288 EUR / kg, compared to an EU average of 2.1 EUR / kg. At the same time, the intensity of greenhouse gas emissions in the economy is

more than 4 times higher than the EU average, with a minimal reduction in the gap in this respect for the past ten years or more. The decomposition of carbon intensity by sectors of the economy shows that high values are registered in electricity production (more than three times above the EU average), transport (more than three times above the EU average) and manufacturing (more than 2.5 times the EU average).

c) Objectives

The component is in line with the Council's 2019 and 2020 Country-Specific Recommendations. It will directly contribute to implementation of aspects of SR 3 / 2020 and SR 3 / 2019. All measures planned target promotion of private investments (SR 3/2020). The updated strategic framework of the industrial sector and the proposed programme for economic transformation aim to support the industrial sector in the double transition (SR 3/2020) and will contribute to decarbonisation of the economy. The reform intentions for building a mechanism to attract industrial investments and develop industrial ecosystems and the accompanying investment project for public support to develop industrial parks and improve their infrastructural connectivity will result in improved business environment, taking into account the regional disparities (SR 3/2019). Some of the elements of the economic transformation programme have direct relevance to the targets of the Integrated National "Energy - Climate" Plan. All measures proposed will contribute to increased economic resilience to shocks. The planned quick start of the implementation of Investment 2 will be critical for the progress to economic recovery from the consequences of the COVID-19 pandemic.

d) Planned reforms and investments

• Reform 1: Updating the strategic framework of the industrial sector

The implemented reform provides for changes to the strategic framework of the industrial sector in the context of the country's commitments stemming from the UN Sustainable Development Goals and EU Green Deal.

1. National Development Programme BULGARIA 2030 (Q4/2020)

The detailed strategy of the National Development Programme BULGARIA 2030¹¹ (adopted by the Council of Ministers on 02

[&]quot;https://www.minfin.bg/upload/46210/bulgaria+2030.pdf



December 2020) sets within "Smart Industry" priority specific objectives for improving the level of digitalisation of the economy and industry and the technological level of Bulgarian products and exports.

2. Action plans pursuant to the National Development Programme BULGARIA 2030 (Q4/2025)

The detailed description of the specific measures and interventions that will be undertaken in implementation of the National Development Programme BULGARIA 2030 priorities (including the priority "Smart Industry") will be structured in three-year action plans, which will be updated on an annual basis no later than the end of each calendar year. Each action plan (except the first one) will contain a report (and impact assessment) on the implementation of the measures under the individual priorities – including under the Smart Industry priority – for the period from the enforcement of the strategic document up to the mid-calendar year for which it is drafted. Five three-year action plans will be designed within the implementation of the Recovery and Resilience Plan.

• Reform 2: Building a mechanism to attract industrial investments and develop industrial ecosystems

The reform provides for amendments to the national regulatory framework and regulating in a special act the Government support for attracting investments and developing industrial ecosystems:

1. Industrial Parks Act (Q1/2021)

There are a couple of objectives in this area – putting in place institutional conditions for faster realisation of investments in industry; more favourable conditions for development of industrial ecosystems; more opportunities for industrial investors to partner with local authorities, educational, scientific, research and social organisations. The Act will provide for an ambitious reduction in the necessary procedures for industrial investment and minimum standards for work in industrial ecosystems so that the latter can benefit from state support. To the extent that this regulatory instrument does not directly concern the possibility of public support for industrial parks and zones, 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 underdeveloped regions will be part of the tools of the state and the municipalities to counteract economic imbalances region by region.

Investment 1: Programme for public support for development of industrial parks and improvement of their infrastructural connectivity

The investment¹² complements the reform effort for building a mechanism to attract industrial investments and develop industrial ecosystems. 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 planned: formulating criteria for determining industrial parks of strategic importance for financing activities; identifying key industrial parks, according to the Industrial Parks Act; valuating and financing technical infrastructure elements. The programme also provides for financing activities to attract and retain 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 xxx million (BGN 416.5 million from the Recovery and Resilience Facility) and the implementation period is 2021-2023.

• Investment 2: Economic transformation programme

The programme¹³ envisages provision of targeted support to Bulgarian small and medium enterprises in the main problematic areas which are slowing down the transformation to a digital, low-carbon and resource-efficient economy. Apart from being a tool for promoting economic transformation, the timely implementation of the programme will also be a catalyst for the economic recovery of Bulgarian enterprises from the negative consequences of the economic crisis caused by the COVID-19 pandemic. The programme consists of three funds: Fund 1 – "Technological

¹³See annex No. A8





¹²See annex No. A7

modernisation", Fund 2 - "Green transition" and Fund 3 - "Digitalisation".

Two complementary procedures will be announced within Fund 1, targeted respectively at: (i) providing support to high-tech companies from the nationally designated priority sectors of the National Strategy for Promotion of Small and Medium-sized Enterprises 2021-2027, for implementation of new technologies and technological renovation of the production process with knowhow, software and next-generation machines; (ii) implementation of a new technology/know how and/or innovation and purchase of new technological equipment for the purpose, for low- and medium-tech companies (priority sectors at the regional level in the National Strategy for Promotion of Small and Medium-sized Enterprises 2021-2027), to enable them to acquire market innovation advantage, product personalisation, flexibility, effectiveness and originality for diversification of their production. BGN 400 million are planned from the Recovery and Resilience Facility for the operation of Fund 1. They are expected to attract BGN 570million in private investment.

Fund 2 is also structured in two strands - one part for the implementation of a pilot scheme supporting small and medium-sized enterprises to build both new RES for their own needs and local facilities for storage of electricity. The second strand within this fund envisages provision of support for optimisation and implementation of environmental solutions and technologies for SMEs from the carbon-intensive sectors of the Bulgarian economy¹⁴. BGN 250 million are planned from the Recovery and Resilience Facility for the operation of Fund 2. They are expected to catalyse BGN 237.5 million in private investment.

The third fund will provide support for implementation of solutions from the initial two stages of digitalisation (first level "Computerisation" and second level "Connectivity"), as well as support for implementation of measures to ensure cyber security of

¹⁴According to Eurostat, the economic activities with the highest level of CO₂ emissions in 2017 are: production of electricity and gaseous fuels, manufacture of other non-metallic mineral products; chemical products, paper, cardboard and paper and cardboard products; manufacture of basic metals, wood, products of wood and cork; manufacture of food products, beverages and tobacco products and pharmaceuticals.





enterprises. Support will be provided to SMEs from all economic sectors, in the form of vouchers. Computerisation and connectivity are major requirements for the implementation of Industry 4.0 and migration to the higher levels of digital transformation. The two initial stages of digitalisation supported under this strand are followed by four additional stages in which the technologies necessary for Industry 4.0 are developed, with financing from Competitiveness and Innovation Programme 2021-2027. At the same time, Fund 3 will support the creation of digital innovation hubs, complementing the development of the European Network of Innovation Hubs by establishing a local regional network. The initiative will support projects from the national selection for European digital innovation hubs under Digital Europe Programme 2021-2027 and awarded with Seal of Excellence by the European Commission. Those who were successful in the selection procedures but did not receive funding will be able to apply for support after they adapt their project proposals to the requirements of the scheme announced within this strand. The support for implementation of innovation in SMEs, penetration of digital technologies and for competitiveness and sustainability of local economies will be this increased. BGN 250 million are planned from the Recovery and Resilience Facility for the operation of Fund 3. They are expected to catalyse BGN 21 million in private investment. The total planned resource under the Programme for economic transformation is BGN 1 728.5million (BGN 900 million from the Recovery and Resilience Facility), and the implementation period is 2021-2026.



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 the territorial imbalances in the 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 Innovation and 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, promotion of the efficient use of resources during the entire life cycle of the products, as well as development and implementation of innovations in the field of circular economy according to the Innovation Strategy for Smart Specialization 2021-2027.

e) Green and digital dimensions of the component

The challenges to the industrial sector in the context of double transition objectives are significant, given the unsatisfactory starting points (low levels of digitalisation and resource productivity, very high levels of carbon intensity). The reform intentions described, which set specific objectives under these strands in the updated strategic framework of the sector, will indirectly contribute to attaining the green and digital transition objectives, although they will not contribute directly to meeting the thematic concentration targets of 37% and 20% accordingly from the resources under the Plan (because the reform itself does not result in committing financial resource from the Recovery and Resilience Facility. However, a significant portion of the financial resource under the component is allocated to those strands and the estimates (see Table xxx below) show 44% in digital costs and 8% in climate costs, demonstrating the component's contribution for attainment of the thematic concentration sought by the Regulation on the Recovery and Resilience Facility. The measures proposed in the component contribute to the environmental transition by taking into account the six climatic and environmental objectives set out in the Taxonomy Regulation and do not infringe the principle of "do not significantly harm" as set out in the Taxonomy Regulation.

Table xxx: Green and digital impact

Table 1. Green	and digital impact		
Short title	Green objectives	Digital objectives	Transition challenges





	Climate	Environmental	Intervention	DNSH		0	District
	Tag	Tag	field	DNSH		Green	Digital
Component 3: Smart industry	8%				44%	100,000	576,600
REFORM 1: Updating the strategic framework of the industrial sector	n/a	n/a	n/a	n/a	n/a	n/a	n/a
REFORM 2: Building a mechanism to attract industrial investments and develop industrial ecosystems	n/a	n/a	n/a	n/a	n/a	n/a	n/a
INVESTMENT 1: Programme for public support for development of industrial parks and improvement of their infrastructural connectivity	0%	0%	14	yes	40%	0	166,600
INVESTMENT 2: Economic transformation programme	0%/40%/0%	0%/40%/0%	15/47/10	yes	40%/0%/100%	100,000	410,000



g) Milestones, objectives and timetable

Table xxx presents the milestones and objectives for implementation of the component.

Table xxx: Milestones and objectives

h) Financing and costs

Table xxx presents the indicative estimated financial resources required for the implementation of the component.

Table xxx: Estimated costs

Componen Reform Detailed costs Methodological Comparative costing data information reforms/investment



		Costs in BGN	Cost description	Methodol ogy used	Sourc e	Cost s in BGN	Source	Possible reference to past EU programs
	Updating the strategic framework of the industrial sector	0	n/a	n/a	n/a	n/a	n/a	n/a
	Building a mechanism to attract industrial investments and develop industrial ecosystems	0	n/a	n/a	n/a	n/a	n/a	n/a
Smart Industry	Programme for public support for development of industrial parks and improvement of their infrastructural connectivity	416,500, 000	Programme for public support for development of industrial parks and improvement of their infrastructural connectivity	market research, historical data			Detailed costs and justification of detailed cost formation are given in an Annex	
	Economic transformation programme	1,728,50 0,000	Economic transformation programme	market research, historical data			Detailed costs and justification of detailed cost formation are given in an Annex	



2.B GREEN BULGARIA

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

|--|



- Low carbon economy
- Biodiversity
- Sustainable agriculture

Establishment of a National Decarbonisation Fund; Developing a definition of "energy poverty" for households in the Energy Efficiency Act for the purposes of financing energy efficiency projects; Mechanism to finance energy efficiency and RES projects together with electricity bills; One-stop-shop; Support producers of energy from RES. Develop, facilitate and accelerate international trade in guarantees of origin; Preparing and adopting a National Roadmap to improve the conditions for unleashing the potential of hydrogen technologies and mechanisms for production and supply of hydrogen; Updating the strategic framework in the field of biodiversity; Updating the strategic framework of the agriculture sector.



2.B.1. Low-carbon economy

a) Description of the component

Summary, LOW-CARBON ECONOMY

Policy area: energy sector, energy efficiency, social policy.

Objective: The main objective of this component is to decrease the carbon footprint and energy intensity of the economy and to contribute to the green transition by implementing measures to increase the energy efficiency of residential, industrial and public buildings and by promoting generation of electricity from RES. Of a key importance will be to modernise the activities for planning, management and maintenance of the country's electricity grid and to complete the reform of the energy market towards full liberalisation of trade.

Reforms and/or investments:

- Establishing a National Decarbonisation Fund;
- Developing a definition of "energy poverty" for households in the Energy Efficiency Act for the purposes of financing energy efficiency projects;



- Energy efficiency of the building stock;
- Programme to finance single energy efficiency measures in one-dwelling buildings and multi-dwelling buildings that are not connected to heat and gas transmission networks;
 - Energy efficient municipal systems for outdoor artificial lighting;
- Mechanism to finance energy efficiency and RES projects together with electricity bills;
 - One-stop-shop;
- Support producers of energy from RES. Develop, facilitate and accelerate international trade in guarantees of origin;
- Digital transformation and development of information systems and real-time systems of the Energy System Operator in a low-carbon economy;
- Preparing and adopting a National Roadmap to improve the conditions for unleashing the potential of hydrogen technologies and mechanisms for production and supply of hydrogen;
- Design, build and commission infrastructure adequate for transmission of hydrogen and low-carbon gaseous fuels for supply of power stations and other consumers in coal regions in the Republic of Bulgaria;
- Scheme to support pilot projects for production of green hydrogen and biogas.

Cost estimation: Indicative estimates of the costs for attainment of the component's objectives – total 3 604.3 million BGN, including 3 377 million BGN from the Recovery and Resilience Facility and 227.3 million BGN national co-financing.

b) Main challenges

The Bulgarian economy is one of the most resource-intensive in the EU, lagging behind the EU Member States 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 the gap with the EU is relatively lower (2.5 times).

The household sector is also characterised by high energy intensity with 93% of the residential building stock not meeting the energy efficiency requirements. Moreover, according to the Review of unrenovated residential buildings by energy characteristics and energy consumption 15, 90% of the unrenovated buildings have the poorest energy characteristics with energy consumption classes E, F and G. According to the Long-term national strategy to support the renovation of the national building stock of residential and non-residential buildings, the investments required to improve the energy efficiency and renovate the building stock exceed 4.6 billion BGN only for the period 2021-2030.

Along with the significant investment requirements, an obstacle to more intensive rolling out of activities to improve energy efficiency is the administrative burden (for households, as well as for companies) accompanying the process of renovation in taking measures to improve energy efficiency. There is a need to take steps to facilitate the renovation process and support the citizens and the business with information, technical assistance and advice on regulatory, technical and financial matters related to their energy efficiency improvement projects.

Over the last ten years, the share of energy from renewable sources in gross final energy consumption doubled to 21.6% in 2019. According to this indicator, the country continues to perform better than the EU (the average for the EU in 2019 amounts to 18.9%), and the level of the indicator remains significantly above the national target under the Europe 2020 strategy (16% in 2020).

The ambitious gradual decarbonisation targets of the Green Deal and their projection in the national strategic documents (National Development Programme BULGARIA 2030 and the Integrated National Plan "Energy-

¹⁵Long-term national strategy to support the renovation of the national building stock of residential and non-residential buildings up to 2050.



Climate"), however, imply significant further effort to increase the share of electricity from RES in the gross final energy consumption. At the same time, the raised development of renewable sources and the related variable electricity generation call for improvement of the adaptivity of the operational management of the electricity grid to ensure the required manoeuvrability, security and prompt action in its management.

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 narrowing the gap in this regard in recent years.

The Energy sector is the biggest source of greenhouse gas emissions in the country with over 70% of total emission in the country. Thermal power plants generating electricity from coal make up almost half of the emissions in the sector but do not have access to adequate infrastructure enabling them to change the fuel base. The endeavour to decarbonise the economy calls for a wide reform of the national energy sector but implies significant investment requirements for phased replacement of the fuel base in power plants using alternative, environment-friendly carriers such as hydrogen.

c) Objectives

The component is in line with the Council's 2019 and 2020 Country-Specific Recommendations. It will directly contribute to implementation of aspects of SR 3 / 2020 and SR 3 / 2019. Investments 1, 2 and 3 are directly aimed at energy efficiency improvement. Reform 1 will create a sustainable mechanism for support of energy efficiency measures beyond the horizon of the Recovery and Resilience Plan. Reform 2 will offer a permanent solution to the problem with support financing of energy efficiency improvement projects of energy-vulnerable households. Reform 4 is targeted at lowering the administrative burden for the business and the households accompanying the process of renovation in implementing energy efficiency improvement measures. Reform 3 will expand the opportunities for implementation of measures and projects for energy efficiency improvement. These investments and reforms, in their entirety, will result in decreased national energy consumption and greenhouse gas emissions, thereby contributing significantly to the green transition targets



and the targets of the Integrated Plan "Energy-Climate". Furthermore, the above investments and reforms will contribute directly to achievement of the objectives of the pan-European flagship initiative "Renovation". On the other hand, investments 4, 5 and 6, as well as reforms 3, 5 and 6 will help address effectively the structural challenges identified in SR 3/2019 and SR 3/2020 which recommend investments in energy infrastructure and clean energy production. Grouped as above, these reform efforts and investment intentions will contribute directly to the implementation of the flagship initiative "Scale-up". All proposed projects and reforms have their important place in the process of decarbonisation of the economy and reduction of its carbon footprint. At the same time, the package of measures will contribute to economic recovery by generating temporary employment in the construction sector, however, also creating preconditions for new and sustainable employment in the carbon economy. The component will also increase social sustainability in many aspects: addressing low-income members of society, improving the living conditions of households with renovated housing, improving the quality of life of the entire population and the future generations in terms of reduced greenhouse gas emissions, etc.



d) Planned reforms and investments

• Reform 1: Establishing 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 maximise the goals of decarbonisation of the Bulgarian economy. The structuring of the fund will be supported by an ongoing project for technical assistance from DG Reforms of the European Commission, expected to be completed in the beginning of 2022. 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 provides for the creation of a single point for the technical assistance of the candidates by onestop-shop 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.

1. Preliminary phase–Technical support for consultations on the establishment of the Fund, DG Reform, EC $(Q_1/2022)$

An analysis of the barriers to EE investments will be prepared and relevant recommendations for changes in the national regulatory framework will be made; a proposal for structuring the fund will be prepared; a draft investment strategy and financing models of the fund will be developed;

2. Drafting proposals for regulations establishing the rules for the structuring and operation of the fund $(Q_4/2022)$

A special working group will prepare proposals for regulations on the operation of the fund, defining the exact structure, management and rules of the fund. These will include an investment strategy, implementation arrangements, financial products, final recipients, a combination of financial instruments and grants, as well as eligible projects, promotion of energy efficiency, use of renewable sources and reduction of pollution. Submitting the proposals for decision to the Council of Ministers and then to the National Assembly;

3. Institutionalisation of the Fund (Q1/2023)

Within this stage, a fund manager will be appointed, an advisory board, as well as sub-funds, will be established and a public procurement procedure will be launched for the election of fund managers of the individual sub-funds - public sector, corporate clients and residential buildings;

4. Conducting an information campaign to promote the Fund $(Q_2/2023)$

Creating presentation materials to be published on the websites of all institutions and participants involved. Creating content in the social media that can be shared through popular channels. Creating interest in the media for the established fund.

• Reform 2: Developing a definition of "energy poverty" for households in the Energy Efficiency Act for the purposes of financing energy efficiency projects

The aim of the reform is to respond to Commission's recommendation to regulate the "energy poverty" phenomenon and use the definition for priority treatment of households falling







within the definition in the implementation of measures and projects for energy efficiency improvement.

1. Setting up a working group to prepare a proposal for regulatory changes $(Q_3/2021)$

A working group will be set up with representatives of the Ministry of Energy and the Agency for Sustainable Energy Development, tasked with drafting the relevant regulatory changes regulating "energy poverty". The development of the definition of "energy poverty" in Europe will be examined, including information and practices from CA EED, CA EPBD, the Odyssee-Mure Additional Benefits Instrument, the European Energy Network, the Energy Poverty Observatory and others. The Bulgarian context and the social indicators monitored by the National Statistical Institute will be analysed. A proposal for possible indicators to be included in the definition and criteria for determining the target group of the definition will be prepared;

2. Stakeholder consultations (Q4/2021)

Three (3) round tables will be organized to discuss the proposals of the working group with representatives of the stakeholders, and a compromise option will be sought, in the case of divergent opinions;

3. Drafting a definition of "energy poverty" and regulatory changes $(Q_1/2022)$

Based on the feedback from the consultations, the working group will propose a draft definition of "energy poverty" and will draft regulatory amendments to the Energy Efficiency Act, which will be submitted to the Council of Ministers for decision;

4. Approval of the proposed regulatory changes by the National Assembly $(Q_2/2022)$

Promulgation of the amendments to the Energy Efficiency Act, regulating "energy poverty" for the purposes of priority treatment of households falling within the scope of the definition in the implementation of measures and projects for energy efficiency improvement.

• Investment 1: Energy efficiency in buildings

The measure¹⁶ provides for the implementation of three components to improve energy efficiency. Measures to improve the

¹⁶See annex No. A9







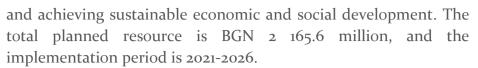
energy efficiency in the national housing stock will be financed within the first component. Residential buildings will be renovated in accordance with the objectives of the Long-term national strategy to support the renovation of the national building stock of residential and non-residential buildings (with a horizon up to 2050), financing the envisaged measures for energy efficiency in multi-dwelling residential buildings with energy consumption classes E, F and G aiming to achieve minimum class B of energy consumption. The component covers also one-dwelling residential buildings with energy consumption classes E, F and G, again with the aim to achieve minimum class B of energy consumption. The component provides for building a special information system to enable the development of a data base for monitoring and reporting of the residential building renovation process. Indicative resource for Component 1: BGN 1 427 million. The second component provides for financing measures for energy renovation of state and municipal buildings, including administrative (70%), cultural (15%) and sport (15%) infrastructure. Indicative resource for Component 2: BGN 354.4 million. The third component provides for financing measures for energy renovation of buildings in the area of production, trade and services¹⁷, with indicative resource of BGN 282.2 million.

Expenditures for organisation, management, evaluation, control and monitoring of the programme and the projects will be eligible under this measure.

Energy efficiency is considered as a high 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 air quality and reducing greenhouse gas emissions and improving the quality of life of citizens. The improved energy efficiency of the building stock will have a positive effect in terms of economic growth and job creation, and energy savings will also result in savings of financial resources. Energy savings are one of the fastest and most cost-effective ways to attain the strategic objectives of combating climate change, ensuring energy security

 $^{^{17}}$ According to Ordinance No. 1 / 30 July 2003 on the nomenclature of the types of construction projects of the Ministry of Regional Development and Public Works





• Investment 2: Programme to finance single energy efficiency measures in one-dwelling buildings and multi-dwelling buildings that are not connected to heat and gas transmission networks

The programme¹⁸ aims to improve energy efficiency of final consumption in the household sector by financing the purchase of energy-efficient thermo pumps, solar systems for household heat supply and photovoltaic systems. Three energy efficiency measures for households will be financed:

- Replacing existing heating appliances with thermo pumps of high efficiency class (A++ and higher, respectively SCOOP 4.6 or higher) in buildings that are not connected to the heat and gas transmission networks. The maximum amount of the grant per household will be 50% of the thermal pump cost, but not more than BGN 1 050, and for a household on heating benefits 100% of the thermal pump cost but not more than BGN 2 100;
- Building solar systems for household heated water supply. The maximum amount of the grant per household will be 50% of the thermal pump cost, but not more than BGN 1250, and for a household on heating benefits 100% of the thermal pump cost but not more than BGN 2 500;
- Supply and installation of photovoltaic systems up to 3 kW. The maximum amount of the grant per household will be 50% of the thermal pump cost, but not more than BGN 4 000, and for a household on heating benefits 100% of the thermal pump cost but not more than BGN 8 000;

The total planned resource is BGN 33.3 million (BGN 20 million from the Recovery and Resilience Facility), and the implementation period is 2021-2024.

• Investment 3: Energy-efficient municipal systems for outdoor artificial lighting

The project¹⁹aims to improve energy efficiency, reduce the energy costs for outdoor artificial lighting and improve the living

¹⁹See annex No. A11





¹⁸See annex No. A10

conditions of the population nationwide through technological renovation and modernisation of the systems for outdoor artificial lighting. The project, with final beneficiaries of the grant - the Bulgarian municipalities, is a continuation of the procedure "Rehabilitation and modernisation of municipal infrastructure systems for outdoor artificial lighting" under Programme "Renewable energy, energy efficiency, energy security", financed from the Financial Mechanism of the European Economic Area 2014-2021 г., which was closed in 2020. The planned project activities include dismantling of existing luminaires, wires and cables; delivery and installation of new luminaires, wires and cables; supply and installation of facility/ies for production and storage of electricity from renewable sources for own consumption in the system for outdoor artificial lighting; performing construction and installation works directly related to the reconstruction of the system/s for external artificial lighting; dismantling of existing control devices, delivery and installation of new management, measuring and control devices, with possibility for upgrading and expansion, incl. introduction or connection to an existing system for automation and control of the system for external artificial lighting; preparation of technical/detailed design; construction supervision; author's supervision; project management and publicity. The total amount of the grant to final beneficiaries will amount to 50% of the project value and the remaining 50% will be provided in the form of an interest-free loan to be repaid within 5 years by instalments to the National Decarbonisation Fund upon its institutionalisation. The total planned resource is BGN 352.3 million, and the implementation period is 2021-2024.



The reform aims to expand the opportunities for implementation of measures and projects for energy efficiency improvement and construction of renewable energy sources in conditions of limited financial resources. For this purpose, good practices will be studied and relevant changes in the legal framework will be prepared.

1. Setting up a working group to prepare a proposal for regulatory changes $(Q_2/2021)$

A working group will be set up with the task to design the mechanism and prepare the relevant regulatory changes. The



experience of the EU Member States will be studied with the purpose to adapt it for implementation in the country. The requisite changes in the regulatory basis will be prepared on the basis of the adapted model;

2. Stakeholder consultations (Q3/2021)

Three (3) round tables will be organized to discuss the proposals of the working group with representatives of the stakeholders (organisations of traders in electricity, associations of endconsumers, financial mediators, banks, etc.), and a compromise option will be sought, in the case of divergent opinions;

- 3. Drafting a mechanism and regulatory changes (Q4/2021) Based on the consultations feedback, the working group will propose a draft mechanism and will draft regulatory changes to be submitted to the Council of Ministers for decision;
- 4. Approval of the proposed regulatory changes by the National Assembly $(Q_4/2022)$

Promulgation of the regulatory changes governing the mechanism in the State Gazette;

5. Conducting an information campaign to present to end-consumers and traders in electricity the opportunities of the mechanism $(Q_2/2023)$

Creating presentation materials to be published in the websites of ME and the Sustainable Energy Development Agency (SEDA). Creating content in the social media which can be shared via popular channels. Creating media interest in the established mechanism.

• Reform 4: One-stop-shop

The reform aims to lower the administrative burden (for households as well as for companies), associated with the renovation process in taking measures for energy efficiency improvement, and to support the citizens and the business with information, technical assistance and advice on regulatory, technical and financial matters related to their energy efficiency improvement projects. For this purpose in a 12-month horizon 6 territorial units will be piloted, providing services on the "one-stop shop" principle, and in a 24-month horizon the activity will be rolled out in all 28 districts of the country.

1. Setting up a working group with representatives of all stakeholders $(Q_4/2021)$





A working group with representatives of all stakeholders (ME, MRDPW, SEDA, MF, NAMRB, financial institutions, designers, consultants, business representatives, etc.) will be set up and tasked to: prepare specific recommendations for streamlining and reducing the administrative barriers throughout the project cycle; identify services to be offered (digital and physical); determine the required resources for provision of the services; coordinate and approve a structure of a "One-stop-shop unit"; determine the places where the units will be structured;

- 2. Piloting "one-stop-shop" (Q2/2022)
- Six pilot one-stop-shops will be established on a regional principle throughout the country to test the requirements for the establishment and operation of the centres/offices. The aim is to manage the pilot structures within a test period and then analyse the circumstances (fostering/preventing) the introduction of one-stop-shop. Based on the analysis, the setup of identical structures in all NUTS-3 regions (or the relevant functional areas) will be proposed. The establishment and operation of the one-stop-shop units will be financed from the central budget.
- 3. Rolling out/establishing "one-stop-shop" in all NUTS-3 regions (or the relevant functional area) (Q2/2023)

One-stop-shop centres will be established in all NUTS-3 regions (or the relevant functional areas) The establishment and operation of the one-stop-shop units will be financed from the central budget;

4. Conducting regular assessments of the operation of the one-stop-shop units $(Q_2/2023)$

The regularity of the inspections and the control body will be further specified. The findings of the inspections and the recommendations made on their basis will be published. Deadlines for fulfilment of the recommendations will be set, including deadlines for addressing detected non-compliances.

 Reform 5: Support producers of energy from RES. Develop, facilitate and accelerate international trade in guarantees of origin

The reform aims to encourage the expansion of energy generation from RES in the context of the ambitious goals for decarbonisation of the economy.

1. Abolishing the 5% contribution to the Electricity System Security Fund ($Q_1/2021$)



In order to promote the faster development of electricity generation from renewable sources and to achieve the national target of 27.09% share of energy from renewable sources in the gross final consumption of energy by 2030, the contribution of 5% to the Electricity System Security Fund has been abolished for newly commissioned energy facilities producing electricity from renewable sources;

- 2. Joining the Association of Issuing Bodies (Q1/2022) With a view to develope, facilitate and accelerate the international trade in guarantees of origin, which will promote the production of energy from renewable energy sources in Bulgaria, the necessary steps will be undertaken for the Sustainable Energy Development Agency to join the Association of Issuing Bodies (AIB): obtaining administrative approvals and authorisations, filing an application together with specific technical and legal information, preparing a roadmap for joining, amending the regulatory framework, integrating the SEDA energy with the inter-registry centre of AIB, etc.
- Investment 4: Digital transformation and development of the information systems and real-time systems of the Electricity System Operator in conditions of a low-carbon energy sector

The aim of the project²⁰ is complete modernization of the activities for planning, management and maintenance of the national electricity grid through the introduction of modern digital tools and methods to ensure the necessary manoeuvrability, security, reliability and speed in managing the power system in a situation of 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 the systems and processes in the Electricity System Operator and comprises the following subprojects: a system for automated control of substations, modernization of SCADA into a support post with introduction of remote reservation, expansion and modernization of the telecommunications network with new devices for remote control

²⁰See annex No. A12





of substations, complete cyber security system, adding up functionalities in the reserve centre for power system management, display walls, building a 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 (BGN 467 million from the Recovery and Resilience Facility) and the implementation period is 2021-2026.

• Reform 6: Preparing and approving National Roadmap to improve the conditions for unleashing the potential of hydrogen technologies and mechanisms for production and supply of hydrogen

The reform is a key precondition for reaching the targets of the Green Deal and for decarbonisation of the economy given the potential of hydrogen to replace fossil energy sources in the economy of the future. The steps planned for its implementation include:

1. Setting up a working group $(Q_2/2021)$

A working group will be set up and tasked to prepare the National Roadmap. Its members will include public administration representatives (ME, SEDA, Ministry of Economy, MRDPW and MoEW) but also representatives of the private sector and the academia, identified on the basis of criteria supported by the European and the national experience;

- 2. Preparing a report for evaluation of the potential for development of hydrogen technologies $(Q_3/2021)$
- Based on an analysis of the experience of other countries, the working group will prepare an evaluation of the potential for development of hydrogen technologies. The barriers to the development and implementation of these technologies will be identified and proposals for regulatory changes will be prepared in order to improve the conditions for unleashing the potential for development of hydrogen technologies and the mechanisms for production and supply of hydrogen;
- 3. Stakeholder consultations (Q4/2021) Forums to discuss the proposals of the working group will be organised with the target groups that have potential interest in participating in the hydrogen economy;
- 4. Preparing a National Roadmap (Q4/2021)



Based on the consultations feedback, the working group will propose draft National Roadmap to improve the conditions for unleashing the potential for development of hydrogen technologies and the mechanisms for production and supply of hydrogen, which will be submitted to the Council of Ministers for decision;

5. Conducting an information campaign (Q1/2022)
Preparing materials published in the websites of ME and SEDA.
Creating positive attitudes, explaining possible business models, engaging financial instruments, promoting private sector participation, attracting international investments to the sector.

Investment 5: Design, build and commission infrastructure

adequate for transmission of hydrogen and low-carbon gaseous fuels for supply of power stations and other consumers in coal regions in the Republic of Bulgaria The project²¹ aims to enable the phasing out of the use of coal for electricity generation and the phased replacement of the fuel base in the thermal power plants in coal areas of the country by using alternative, environmentally-friendly energy sources such as hydrogen. This will result in reduced and subsequently eliminated greenhouse gas emissions from the generation of electricity from fissile fuel in those regions. Creating infrastructure adequate for hydrogen transmission, the project implementation will put in place conditions for a wide reform of the national energy sector by gradual decarbonisation of the energy sector and the economy. The project includes a set of activities to provide new basic gas transmission infrastructure adequate for the transmission of hydrogen and low-carbon gaseous fuels to supply on one hand, TPS Maritsa East 2, Contour Global Maritsa East 3, A&S - 3C Maritsa East 1 and other consumers in the Maritsa East coal basin (gas pipelines with total length of about 125 km), as well as TPS Bobov Dol and other consumers in the region (gas pipelines with a total length of about 50 km) on the other hand. In order to implement the transition at an economically reasonable price and ensure security, reliability and continuity of energy supply in the country

and the respective regions, the gas infrastructure is to be used for transmission of low-carbon gaseous fuels (hydrogen, biogas, natural gas) and their mixtures in different proportions until

²¹See annex No. A13







adequate hydrogen production capacities are made available. In this respect the infrastructure will be connected to the existing gas transmission network of Bulgartransgaz EAD and the gas pipeline in the Maritsa East coal basin will also be connected to IGB (Interconnector Greece-Bulgaria). The project implementation will further give an impetus to the development of the gas distribution infrastructure in those regions, enabling supplies of low-carbon gaseous fuels, including hydrogen, to other consumers such ass smaller industrial and administrative facilities and household consumers. The project will thus enable the implementation of innovative technologies and will contribute to reducing greenhouse gas emissions, as well as ambient air pollution with fine dust particles and harmful substances in the regions concerned. The project is in line with the vision of the European Hydrogen Roadmap according to which achieving the transition to a decarbonised energy system will require hydrogen at large scale. According to the Roadmap, hydrogen will play a systemic role in the transition to renewable energy sources. There is interest in hydrogen technologies in Bulgaria and about 10 organisations and companies are already members of the European Clean Hydrogen Alliance. The total planned resource is BGN 477.2 million (BGN 333) million from the Recovery and Resilience Facility) and the implementation period is 2021-2025.

• Investment 6: Scheme to support pilot projects for production of green hydrogen and biogas

The main purpose of the measure²² is to provide support for designing pilot projects enabling the introduction of green hydrogen and biogas with application in industrial productions, as well as to be used in the future in transport and for electricity and thermal energy production. Taking into account the technological level, the existing practices and the underdeveloped (yet) commercialisation of hydrogen technological solutions, efforts will be focused on launching projects which can be implemented in close cooperation between research and industry. These are essentially more developed demonstration projects having industrial value, though on a limited scale, but being a reliable basis for gaining operational experience and developing subsequent

²²See annex A₁₄



large-scale projects. The total planned resource is BGN 78.2 million (BGN 39.1 million from the Recovery and Resilience Facility) and the implementation period is 2021-2026.

e) Complementarity and demarcation with 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 up to 2050. Those measures will be combined with interventions, primarily in energy efficient buildings, for replacement of individual heating devices on solid fuel with environmental friendly and energy efficient appliances/systems, the focus being on the municipalities with poor ambient 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.

e) Green and digital dimensions of the component

The energy sector is the biggest greenhouse gas emitter in the country, generating over 70% of all greenhouse gas emissions nationally. The interventions under the component will bring about the reduction of those emissions and the component will thus contribute significantly to reaching the 37% climate change target of the Plan, as laid down in the Regulation on the Recovery and Resilience Facility, by including 100% climate costs (see Table xxx below). The measures proposed in the component contribute to the environmental transition by taking into account the six climatic and environmental objectives set out in the Taxonomy Regulation and do not infringe the principle of "do not significantly harm" as set out in the Taxonomy Regulation.





With 6% digital costs (see Table xxx below), this component also contributes to the 20% target of the digital dimensions of the Plan, as set out in the Regulation on the Recovery and Resilience Facility.



Table xxx: Green and digital impact

Table 1. Green and digital impact										
01 1171		Green objectives					Trans	ition challenges		
Short title	Climate	Environmental	Intervention	DNOU				D: " 1		
	Tag	Tag	field	DNSH			Green	Digital		
Component 4: Low-carbon economy	100%				6%		3 376 983	186 800		
REFORM 1: establishing a National Decarbonisation Fund	n/a	n/a	n/a	n/a	n/a		n/a	n/a		
REFORM 2: Developing a definition of "energy poverty" for households in the Energy Efficiency Act for the purposes of financing energy efficiency project	n/a	n/a	n/a	n/a	n/a		n/a	n/a		
INVESTMENT 1: Energy efficiency of the building stock	100%	40%	25	yes	0%		2 165 566	0		
INVESTMENT 2: Programme to finance single energy efficiency measures in one-dwelling buildings and multi-dwelling buildings that are not connected to heat and gas transmission networks	100%	40%	25	yes	0%		20 000	0		
INVESTMENT 3: Energy efficient municipal systems for outdoor artificial lighting(OAL)	100%	40%	26	yes	0%		352 300	0		



REFORM 3: Mechanism to finance energy efficiency and RES projects together with electricity bills	n/a	n/a	n/a	n/a	n/a	n/a	n/a
REFORM 4: One-stop shop	n/a	n/a	n/a	n/a	n/a	n/a	n/a
REFORM 5: Support producers of energy from RES. Develop, facilitate and accelerate international trade in guarantees of origin	n/a	n/a	n/a	n/a	n/a	n/a	n/a
INVESTMENT 4: Digital transformation and development of information systems and real-time systems of the Electricity System Operator in a low-carbon economy	100%	40%	33	yes	40%	467 000	186 800
REFORM 6: Preparing and adopting a National Roadmap to improve the conditions for unleashing the potential of hydrogen technologies and mechanisms for production and supply of hydrogen	n/a	n/a	n/a	n/a	n/a	n/a	n/a
INVESTMENT 5: Design, build and commission infrastructure adequate for transmission of hydrogen and low-carbon gaseous fuels for supply of power stations and other consumers in coal regions in the Republic of Bulgaria	100%	40%	27	yes	0%	333 000	0
INVESTMENT 6: Scheme to support pilot projects for production of green hydrogen and biogas	100%	40%	32	yes	0%	39 117	0



g) Milestones, objectives and timetable

Table xxx presents the milestones and objectives for implementation of the component.

Table xxx: Milestones and objectives

h) Financing and costs

Table xxx presents the indicative estimated financial resources required for the implementation of the component.



			De	etailed costs	Methodo inform			rative costi from past ms/investm	_
	Component	Reform /Investment	Costs in BGN	Cost description	Methodol ogy used	Source	Costs in BGN	Source	Possi ble refere nce to past EU progr ams
		Establishing a National Decarbonisation Fund	0	n/a	n/a	n/a	n/a	n/a	n/a
		Developing a definition of "energy poverty" for households in the Energy Efficiency Act for the purposes of financing energy efficiency projects	0	n/a	n/a	n/a	n/a	n/a	n/a
	Low-carbon economy	Energy efficiency of the building stock	2,165,5 66,080	Energy efficiency of the building stock	historical data			Detaile d costs and justifica tion of detailed cost formati on are given in an Annex	
		Programme to finance single energy efficiency measures in one-dwelling buildings and multi-dwelling buildings that are not connected to heat and gas transmission networks	20,000, 000	The project aims to improve energy efficiency of final consumption in the household sector by financing the purchase of energy-efficient thermo pumps, solar systems for household heat supply and photovoltaic systems in 10 680 households, including 2 670 on heating benefits. The share of the grant will be 100% for households on heating benefits and 50% for the other households	Online market research by type of technolog y on the national market.	Internet researc h accordi ng to enclose d project dossier			



Mechanism to finance energy efficiency and RES projects together with electricity bills	Energy efficient municipal systems for outdoor artificial lighting	352,30 0,000	The project provides for awarding grants for reconstruction and modernisation of municipal outdoor artificial lighting systems. The project aims to improve the energy efficiency, reduce energy costs for OAL and improve the living conditions of the population nationwide through technological renovation and modernisation of the systems for outdoor artificial lighting in Bulgaria.	The project indicators have been evaluated based on an existing project pipeline of 84 projects for modernis ation of municipal outdoor artificial lighting systems	Energy audit was conduct ed of 84 outdoor artificial lighting system s, some of which a working design prepare d and approve ed in accorda nee with the regulat ory require ments. Audits were conduct ed in accorda nee with the standar d CEN/T R 13201 and some addition al criteria according to the EU Green Public Procure ment Criteria for Road Lighting and Traffic Signals Calculations and estimat es are summa rised in the project dossier	specif y the amou nt of invest ments for the 20 projec ts appro ved under BEEE EC.	Proced ure "Rehabi litation and modern isation of municip al infrastr ucture outdoor artificial lighting system s of municip alities" under Progra alme "Renew able energy, energy efficien cy, energy security ", finance d from the Financi al Mechan ism of the Europe an Econo mic Area 2014-2021.	Finan cial Mech anism of the Europ ean Econ omic Area 2014-2021.
	energy efficiency and RES projects together	0	n/a	n/a	n/a	n/a	n/a	n/a



Support producers of energy from RES. Develop, facilitate and accelerate international trade in guarantees of origin	0	n/a	n/a	n/a	n/a	n/a	n/a
Digital transformation and development of information systems and real-time systems of the Electricity System Operator in a low- carbon economy	511,00 0,000	Digital transformation and development of information systems and real- time systems of the Energy System Operator in a low-carbon economy	market research, historical data			Detaile d costs and justifica tion of detailed cost formati on are given in an Annex	
Preparing and adopting a National Roadmap to improve the conditions for unleashing the potential of hydrogen technologies and mechanisms for production and supply of hydrogen	0	n/a	n/a	n/a	n/a	n/a	n/a
Design, build and commission infrastructure adequate for transmission of hydrogen and low-carbon gaseous fuels for supply of power stations and other consumers in coal regions in the Republic of Bulgaria	477,21 3,276	Design, build and commission infrastructure adequate for transmission of hydrogen and low-carbon gaseous fuels for supply of power stations and other consumers in coal regions in the Republic of Bulgaria	market research, historical data			Detaile d costs and justifica tion of detailed cost formati on are given in an Annex	
Scheme to support pilot projects for production of green hydrogen and biogas	78,233, 200	Scheme to support pilot projects for production of green hydrogen and biogas	market research			Detaile d costs and justifica tion of detailed cost formati on are given in an	





2.B.2.Biodiversity

a) Description of the component

Summary: BIODIVERSITY

Policy area: environment.

Objective: The objective 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 for ceasing the loss of biodiversity.

Reforms and / or investments:

- Updating the strategic framework in the field of biodiversity;
- Integrating the ecosystem approach and implement nature-based solutions in the protection of Natura 2000 areas.

Cost estimation: The indicative estimate of the costs needed to achieve the objectives of the component amount to a total of 32.3 million BGNfrom the Recovery and Resilience Facility.

b) 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 achieve 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.



c) Objectives

This component is in line with the Council 2019 and 2020 Country Specific Recommendations and will directly contribute to the implementation of aspects of SR 3 of 2020, as well as SR 3 of 2019. Improving knowledge of ecosystems and the ecosystem services in Natura 2000 will create conditions for sustainable and balanced economic development, together with the conservation of biodiversity through the implementation of nature-based solutions that will generate new jobs and livelihood for local communities. The implementation of the planned interventions will be important in the context of the green transition, as cessation of the loss of biodiversity will have a direct positive effect on the decarbonisation of the economy (the Land Use, Change of Land Use and Forestry sector plays the role of "absorber" of greenhouse gases for Bulgaria through the categories Forests and Pastures, which absorb CO2: They are subject to conservation and restoration in Natura 2000, whereas the link of their good condition to achieving the decarbonisation objectives has been proven). Destruction and damage to these areas would lead to the release of carbon emissions into the atmosphere.

d) Planned reforms and investments

• Reform 1: Update of the strategic framework in the field of biodiversity

The ongoing reform envisages changes in the strategic framework of biodiversity, in the context of the country's commitments to the UN Sustainable Development Goals and the EU Green Deal.

1. National Development Programme BULGARIA 2030 (Q4 / 2020)

In the detailed strategy of the National Development Programme BULGARIA 2030²³ (adopted by the Council of Ministers on December 2, 2020), within the Clean Air and Biodiversity specific

²³https://www.minfin.bg/upload/46210/bulgaria+2030.pdf



priority, the cessation of biodiversity loss is identified as a policy goal, which is envisaged to be achieved through interventions both within the National Ecological Network (aimed at ensuring effective network management and protection of natural habitats and species of European and national importance, and conservation, strengthening and restoration of ecosystems, habitats and species) and outside NATURA 2000 (by building "green" and "blue" infrastructures to achieve good conservation status of species and natural habitats);

2. Action plans in implementation of the National Development Programme BULGARIA 2030 (Q4 / 2025)

The detailed description of the specific measures and interventions that will be undertaken as priorities (including the Clean Air and Biodiversity priority) in the implementation of the National Development Programme BULGARIA 2030 will be structured in three-year action plans, which will be updated on an annual basis no later than the end of each calendar year. Each action plan (except the first one) will contain a report (and an impact assessment) on the implementation of the measures under the individual priorities - incl. the Clean Air and Biodiversity priority, for the period from the beginning of the validity of the strategic document to the middle of the calendar year in which it is prepared. 5 three-year action plans will be developed within the framework of the implementation of the Recovery and Resilience Plan.

• Investment 1: Integration of the ecosystem approach and implementation of nature-based solutions in the protection of Natura 2000 areas

Following groups of activities have been planned²⁴: creation of specialized databases on ecosystems, ecosystem services and green infrastructure in the Natura 2000 network and their visualization in the existing information environment, including by groups of economic activities, according to the Taxonomy Regulation; assessment of the condition of ecosystems and ecosystem services, monetary valuation of their economic value and assessment of the condition of the elements of the green infrastructure in the Natura 2000 network; development of specific for the Natura 2000 network areas goals and measures for their protection with a focus on the

²⁴ See Appendix No.P₁₅



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implementation of solutions based on nature; ensuring support from the society by involving it in the decision-making process for the protection of Natura 2000 areas. The total planned resource is BGN 32.3 million with an implementation period of 2021-2025.

e) Complementarity and demarcation with the instruments of Cohesion Policy

The activities planned under the component complement the interventions of the National Framework for Priority Actions for Natura 2000 (2021-2027), for which financial support is provided under the Common Agricultural Policy and 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.

f) Green and digital dimensions of the component

The assessment of the state of ecosystems and the valuation of the material, maintenance, regulatory, cultural and recreational services of ecosystems in Natura 2000 allows for better integration of climate goals, along with nature conservation in the management of the network in Bulgaria. Their valuation makes it possible to calculate the value of the necessary investments, through which solutions nature based will be implemented in the conservation of the Natura 2000 network. It also monetarily illustrates the benefits and costs of biodiversity loss by supporting management decision-making. In this way, the component will contribute to the achievement of the 37% target for the climate dimensions of the Plan set out in the Regulation on the Recovery and Resilience Facility (valuated 40% climate costs - see Table xxx below). The measure proposed in the component contributes to the environmental transition, taking into account the six climatic and environmental objectives set out in the Taxonomy Regulation, and does not infringe the principle of "do not significantly harm" as defined in the Taxonomy Regulation.

The implementation of the project will also contribute to the Digital Transformation of Bulgaria for the period 2020-2030, which in terms of public administration is focused mainly on the transformation of processed



and stored data into fixed capital of society. By developing specialized databases on ecosystems, their services, the green infrastructure by groups of economic activities, the state of the Natura 2000 network and the inclusion of databases in the existing information environment, stakeholder participation in the decision-making process will be improved. At the same time, opportunities will be created for knowledge extraction from data, data analysis, integrated monitoring, etc., which will ensure more sustainable management of biodiversity in the country and in particular the Natura 2000 network. Thus, the component indirectly contributes to the digital dimensions of the Plan, although according to the methodology used by the Commission for calculating the contributions to the double transition, the component includes o\% digital costs, i.e., there is no direct contribution to the 20% target for the digital dimensions of the Plan set out in the Regulation on the Recovery and Resilience Facility.

Table xxx: Green and digital impact

Charachi.		Green objectives					Transitio	n challenges
Short title	Climate	Environmental	Intervention	DNSH			Green	Digital
	Tag	Tag	field	DNSII			Green	Digital
Component 5: Biodiversity	40%				0%		12,912	0
REFORM 1: Updating the strategic framework in the field of biodiversity	n/a	n/a	n/a	n/a	n/a		n/a	n/a
INVESTMENT 1: Integration of the ecosystem approach and implementation of nature-based solutions in the protection of Natura 2000 protected areas	40%	100%	49	yes	0%		12,912	0

g) Key stages, goals and time plan

Table xxx presents the key stages and objectives related to the implementation of the component.

Table xxx: Key stages and goals

h) Funding and costs

Table xxx presents the indicative estimates of the financial resources required for the implementation of the component.





Tabl exxx: Estimated costs

		De	tailed cost estimates	Methodological information		Comparative information on the costs of previous reforms / investments			
Component	Investment / reform	Cost BGN	Description	Methodology used	Source	Cost BGN	Source	Possible reference to previous EU programmes	
	Updating the strategic framework in the field of biodiversity	0	n/a	n/a	n/a	n/a	n/a	n/a	
Biodiversity	Integrating the ecosystem approach and implementing nature- based solutions in the protection of Natura 2000 protected areas	32,279,996	Integrating the ecosystem approach and implementing nature- based solutions in the protection of Natura 2000 protected areas	historical data			Detailed estimates and justification for the formation of detailed costs are given in the Annex		



2.B.3. Sustainable agriculture

a) Component description

Summary: SUSTAINABLE AGRICULTURE

Policy area: water management, digitalization, agriculture.

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

Reforms and / or investments:

- Updating the strategic framework of the agricultural sector;
- Reconstruction, restoration and modernization of the state hydroameliorative fund in the Republic of Bulgaria for sustainable water management and adaptation to climate change;
 - Digitalization of the processes from the farm to the fork.

Estimated cost: The indicative estimates for the costs necessary for the realization of the objectives of the component amount to a total of BGN 871.4 million from the Recovery and Resilience Facility.

b) 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 regarding 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, resulting in significant irrigation water losses 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.

c) Objectives

The component is in line with the Council 2019 and 2020 Country Specific Recommendations and will directly contribute to implementation of aspects of SR 3 of 2020 as well as SR 3 of 2019. Investment 1 aims at and will contribute to sustainable water management in the country, mitigating the negative impact on the climate and adapting to the consequences of its change, addressing both the recommendations and the challenges related to the implementation of the green transition, especially with regard to efficient management of natural resources. The implementation of Reform 1 will also contribute in this respect. At the same time, Investment 2 will focus on the digital aspects of economic transformation and in addition to the targeted contribution to the implementation of SR 3/2020 ("focus on investment in the digital transition") will also have an indirect effect with regard to aspects of SR 4/2020 related to "efficiency of public administration and strengthening of e-government" with a view to the envisaged provision of e-services to the farmers. All planned measures will help to increase the economic resilience to shocks, in connection with the expected increased competitiveness of the agricultural sector. At the same time, they have the potential to lead to greater social resilience to shocks, as well as to territorial cohesion, by reducing disparities along the urban-rural axis, taking into account the high dependence of the rural population on the agricultural sector.

d) Planned reforms and investments

• Reform 1: Updating the strategic framework of the agricultural sector

The ongoing reform envisages changes in the strategic framework of agriculture, in the context of the country's commitments arising from the UN Sustainable Development Goals and the EU Green Deal.

1. National Development Programme BULGARIA 2030 (Q4/2020)







The detailed strategy of the National Development Programme BULGARIA 2030²⁵ (adopted by the Council of Ministers on December 2, 2020) identifies a specific Sustainable Agriculture priority, aimed at developing an intelligent, sustainable and diversified agricultural sector to ensure food security for the population. Increasing the role of the agricultural sector in environmental protection has been identified as one of the main policy objectives, which is envisaged to be achieved by promoting the application of environmentally friendly practices, contributing to the protection of water, soil, air and biodiversity, as well as placing the focus on the use of solutions for adapting agriculture, forests and rural areas to the changing environment and those contributing to mitigating the effects of climate change;

2. Action plans in implementation of the National Development Programme BULGARIA 2030 (Q4/2025)

The detailed description of the specific measures and interventions that will be undertaken in the implementation of the National Development Programme BULGARIA 2030 priorities (including the priority "Sustainable Agriculture") will be structured in three-year action plans, which will be updated on an annual basis no later than the end of each calendar year. Each action plan (except the first one) will contain a report (and an impact assessment) on the implementation of the measures under the individual priorities – also including the Sustainable Agriculture priority, for the period from the beginning of the validity of the strategic document to the middle of the calendar year in which it is prepared. 5 three-year action plans will be developed within the framework of the implementation of the Recovery and Resilience Plan.

• Investment 1: Reconstruction, restoration and modernization of the state hydro-ameliorative fund in the Republic of Bulgaria for sustainable water management and adaptation to climate change

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

²⁵https://www.minfin.bg/upload/46210/bulgaria+2030.pdf







dikes, are envisaged²⁶. The implementation of the project will lead to a significant reduction of water loss 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 project will not have a negative impact on habitats and species both within and outside Natura 2000, on the contrary, investments in the restoration of old hydro-ameliorative infrastructure will improve the water balance of soils and reduce overcrowding and wind erosion in severe droughts. After the rehabilitation of surface water sources and systems, the pressure on the use of groundwater sources, springs, rivers, etc. will be reduced, which will have a beneficial effect on ecosystems. The expected increased competitiveness of the sector will also contribute to the reduction of interregional and intra-regional disparities along the urban-rural axis. The total planned resource is BGN 847.5 million with an implementation period of 2021-2025.

Investment 2: Digitization of the processes from the farm to the fork

A complete electronic information system in agriculture will be built²⁷ to achieve: electronic the information flows from and for the implementation of the administrative activity; provision of eservices to the farmers, centralization and use of e-services 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:

use of plant protection products and fertilizers through digitizing the logs for their use; registration and tracing of the import, production, trade and storage of veterinary medicinal products and medicated fodders, as well as their application on animals; "farm to

²⁷SeeAppendixNo. P₁₇



²⁶SeeAppendixNo. P₁6

fork" 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; 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 total planned resource is BGN 23.8 million with an implementation period of 2021-2025.



e) Complementarity and demarcation with Common Agricultural Policy instruments

Investment 1 of the Plan envisages restoration and reconstruction of hydroameliorative irrigation facilities outside the agricultural holdings. Activities will be carried out to restore the existing main line infrastructure and its facilities, which are publicly owned and operated by the state.

The CAP Strategic Plan for the period 2023-2027 envisages an intervention "Investment in agricultural holdings" to support investments in irrigation systems and equipment in eligible agricultural holdings. In addition, the Strategic Plan will support the restoration and reconstruction of parts of the main hydro-ameliorative infrastructure provided for the management of Associations for Irrigation of Agricultural Producers.

Effective irrigation of agricultural land will provide completeness and a good basis for the development of the agricultural sector while adapting to climate change.

During the preparation of the Strategic Plan for the implementation of the CAP, a clear demarcation was made between interventions in the field of digitalization, training and consultation and Investment 2 of the Sustainable Agriculture component. The Recovery and Resilience Plan envisages investments for the construction of a Unified Information System in Agriculture, which will integrate the information systems of the administration and the software for management of agricultural holdings. The introduction of digital solutions and technologies at farm level will be encouraged by including interventions in the Strategic Plan through interventions "Investment in agricultural holdings" and "Digitalization of agricultural holdings".

f) Green and digital dimensions of the component

By providing investments to improve sustainable water management, mitigate the negative effects on the climate and adapt to the effects of its change, the component will contribute to meet the objectives of the green transition. Investments in the restoration of old hydroameliorative infrastructure will improve the water balance of the soils and will reduce overcrowding and wind erosion during severe droughts. After





the rehabilitation of surface water sources and systems, the pressure on the use of groundwater sources, springs, rivers, etc. will be reduced, which will have a beneficial effect on ecosystems. Overall, the measures proposed in the component contribute to the environmental transition (estimated 39% climate costs - see Table xxx below), taking into account the six climate and environmental objectives set out in the Taxonomy Regulation, and do not infringe the "do not significantly harm" principle as defined in the Taxonomy Regulation.

Including 3% digital costs (see Table xxx below), this component also contributes to the 20% target for the digital dimensions of the Plan set out in the Regulation on the Recovery and Resilience Facility. The electronification of the information flows from and for administrative activity, in the contact of the administration with the farmers, as well as the provision of e-services to the farmers, their centralization and their use by the business are examples of digital interventions in the component.

Table xxx: Green and digital impact

Short title		Green objectives					Transition	challenges
Short title	Climate	Environmental	Intervention	DNSH			Green	Digital
	Tag	Tag	field					
Component 6: Sustainable Agriculture	39%				3%		339,003	23,848
REFORM 1: Updating the strategic framework in the field of the agricultural sector	n/a	n/a	n/a	n/a	n/a		n/a	n/a
INVESTMENT 1: Reconstruction, restoration and modernization of the state hydro- ameliorative fund in the Republic of Bulgaria for sustainable water management and adaptation to climate change	40%	100%	40	yes	0%		339,003	0
INVESTMENT 2: Digitization of the processes from the farm to the table	0%	0%	11	yes	100%		0	23,848

g) Key milestones, objectives and timetable

Table xxx presents the key stages and objectives related to the implementation of the component.

Table xxx: Key stages and objectives

h) Funding and costs

Table xxx presents the indicative estimates of the financial resources required for the implementation of the component.

Table xxx: Estimated costs

Component Investment / reform Detailed cost estimates Methodological information reforms / investment / reform information reforms / investment / / reforms / investment





		Cost BGN	Description	Methodology used	Source	Cost BGN	Source	Possible reference to previous EU programmes
	Updating the strategic framework of the agricultural sector	0	n/a	n/a	n/a	n/a	n/a	n/a
Sustainable agriculture	Reconstruction, restoration and modernization of the state hydro-ameliorative fund in the Republic of Bulgaria for sustainable water management and adaptation to climate change	847,854,185	Reconstruction, restoration and modernization of the state hydro- ameliorative fund in the Republic of Bulgaria for sustainable water management and adaptation to climate change	historical data			Detailed estimates and justification for the formation of detailed costs are given in the Annex	
	Digitization of the processes from the farm to the table	23,874,045	Digitization of the processes from the farm to the table	Market research			Detailed estimates and justification for the formation of detailed costs are given in the Annex	





2.B CONNECTED BULGARIA

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



Policy areas	Reforms
 Digital connectivity Transport connectivity Local development 	Develop and implement an effective policy and regulatory framework; Efficient use of the radio frequency spectrum; Creating a favourable investment environment; Updating the strategic framework of the transport sector; Conceptually new management of road safety in a single integrated strategic framework for the period 2021-2030; Integration of sustainable urban mobility in the strategic planning of regional and spatial development; A new regional approach with direct involvement of local communities in the management of European funds and instruments.

2.B.1. Digital connectivity

a) Description of the component

Summary: DIGITAL CONNECTION

Policy area: digitalization.

Objective: This component aims to build a modern and secure digital infrastructure and to overcome the territorial imbalances associated with the spread of broadband access.

Reforms and / or investments:

- Development and implementation of an effective policy and regulatory framework;
 - Efficient use of the radio frequency spectrum;
 - Creating a favourable investment environment;



- Large-scale deployment of digital infrastructure.

Cost estimation: The indicative cost estimates needed to achieve the objectives of the component amount to a total of BGN 1,005.1 million, of which BGN 685.1 million at the expense of the Rehabilitation and Sustainability Mechanism and BGN 320 million from investments by private operators.



b) Main challenges

One of the main reasons for the slowdown in digitalization in Bulgaria (along with the low level of digital skills and the shortage of ICT specialists) is the insufficient investment in digital infrastructure. The index for the penetration of digital technologies in the economy and society DESI ranks Bulgaria 26th among EU member states in terms of "Connectivity". Only 58% of households have a broadband internet subscription (compared to the EU average of 78%), and the distribution of fixed broadband internet access at a speed of at least 100 Mbps is only 11% (26% for the EU). The situation in rural areas is unsatisfactory, with only 1% of households benefiting from VHCN (Very High-Capacity Network) technology, which is well below the EU average of 24%. The use of FTTP (Fibre to the Premises) networks has increased to 42%, but not in rural areas, where it is used by only 1% of households, compared to 21% at EU level. In addition, the country lags behind in terms of readiness to enter 5G and according to DESI 2020 has allocated only 14% of the spectrum for wireless broadband. There is a need to intensify efforts to improve and accelerate the deployment of broadband Internet access, given the fundamental role of modern broadband infrastructure in achieving the so-called digital growth.

c) Objectives

The component is in line with the Council 2019 and 2020 Country Specific Recommendations and will directly or indirectly contribute to the implementation of aspects of SR 2, SR 3 and SR 4 of 2020, as well as SR 3 and SR 4 of 2019. The proposed reforms and investments implicitly or explicitly aim to increase investment in high-capacity digital infrastructure with a view to increase coverage and distribution. This will ensure equal access to broadband-based services, which will improve the possibility of distance learning and work (SR 2/2020). The envisaged measures will create



preconditions for the realization of the digital transition in the country (SR 3/2020), with indirect expected positive effects in terms of social inclusion (SR 4/2019), e-government, efficiency of public administration and therefore of administrative burden for enterprises (SR 4/2020) and the business environment in general (SR 3/2019). The reforms included in the component aim to reduce barriers to investment in connectivity, incl. 5G connectivity, by taking action to release and efficiently use the required radio spectrum. The set of proposed measures will contribute to the country's economic recovery in the medium term, while creating the conditions for increasing long-term growth potential, job creation and strengthening economic and social sustainability.

* * * *

The component is also essential for the implementation of the pan-European Flagship *Connection* Initiative. Through the successful and full implementation of the measures envisaged in the component, Bulgaria will exceed the goals set by the Flagship Initiative.

d) Planned reforms and investments

 Reform 1: Develop and implement an effective policy and regulatory framework

The ongoing reform envisages changes in the strategic framework (an adopted by the Council of Ministers updated national plan for broadband access, as well as approved by the Council of Ministers framework strategic document "Digital Transformation of Bulgaria for the period 2020 - 2030") and in the legislation (amendments in the Electronic Communications Act):

1. National Broadband Plan (Q3 / 2020)

In August 2020 was adopted an updated national plan for next-generation broadband infrastructure - *Connected Bulgaria*, which outlines national goals and priorities and is linked to the goals at the European level until and after 2025. Digital connectivity is defined as an important factor not only for the competitiveness of enterprises, but also for supporting social inclusion and for the development and use of e-government services. The measures envisaged in Connected Bulgaria in this area will be concentrated in improving the access to high-speed internet in less populated regions and its active use by the population and business, as well as in the development of high-speed mobile internet in the country. Investments for the introduction of 5G mobile networks in the



country will be of key importance for the digitalization of the Bulgarian economy and public services.

2. Strategic approach to digital transformation (Q3/2020) Adequate digital connectivity is part of the Digital Transformation of Bulgaria framework for the period 2020 - 2030, approved in July 2020. Digital transformation is recognized as a necessary process of technological development to create conditions for innovation and business growth, to increase the efficiency of the workforce, create a competitive digital economy and a high standard for citizens. The deployment of very large capacity networks to ensure that no part of the country or group in society is left without adequate digital connectivity is at the heart of developing a dynamic and innovative economy and provides better access for businesses to diverse, high quality and innovative digital services.

Digital connectivity contributes to providing access to all major drivers of socio-economic development such as schools, hospitals, transport centres, major public service providers, etc. Infrastructure that integrates physical and digital aspects is crucial to deliver the next wave of innovation and economic growth.

- 3. Modern legislative framework in the sector $(Q_1 / 2021)$ An updated legislative framework has been developed to promote connectivity and access to very high-capacity networks and competition, including in terms of infrastructure, as well as to support market development and protect the interests of citizens. The aim is to encourage investment in very high-capacity networks due to their crucial importance for achieving sustainable economic growth in the context of digitalisation of the economy, while not affecting the competitive environment and consumer interests. A draft law amending the Electronic Communications Act will achieve:
- ensuring more efficient, effective and coordinated use of radio spectrum;
- development of the electronic communications market;
- maintaining conditions for effective competition;
- creating conditions for building and developing networks with very large capacity, including 5G networks;
- improving the protection of the interests of citizens and the rights of end-users, including people with disabilities.
- Reform 2: Efficient use of radio frequency spectrum





To address the challenges posed by the readiness to enter 5G, the following reform efforts are envisaged and are already under implementation:

1. Reduction of spectrum charges (Q1 / 2021)

To promote the accelerated deployment of 5G networks, the Council of Ministers approved amendments and from January 1, 2021 changes in the fees collected by the Communications Regulation Commission under the Electronic Communications Act are into force. This will reduce the one-time fee by 50% and the annual spectrum usage fee by 35%. Optimizing spectrum charges is an important condition for more investment in the mobile communications sector, enabling businesses to use wider bands and build networks with greater capacity to provide high-speed broadband services with better quality to meet the needs of consumers.

2. Accelerated spectrum allocation process ($Q_1/2021$ - $Q_3/2025$) In order to ensure the efficient and effective use of the radio frequency spectrum, to achieve wireless broadband coverage on the territory of the country and the population with high quality and speed, coverage on major transport routes, as well as to promote competition and avoid distortions - extension is envisaged of authorizations for the use of harmonized radio spectrum, including for wireless broadband services - not less than 15 years with the possibility of extension for at least 20 years.

700 MHz

Until 30 May 2020, a 2x20 MHz frequency resource in the 700 MHz band was provided for 5G networks.

In July 2020, the national regulatory authority launched a procedure for public consultation on the prospects and conditions for the use of the available resource in the 700 MHz band. In the course of the consultations, only a general interest was expressed and there are no specific intentions from operators.

2.6 GHz

In December 2020, the national regulatory authority announced a public consultation on the use of an individually defined limited resource - radio frequency spectrum in the 2.6 GHz band.

3.6 GHz

In December 2020, the national regulatory authority announced its intention to authorize the use of an individually defined limited





resource - radio frequency spectrum in the 3.6 GHz band for the provision of electronic communications via a terrestrial network, allowing the provision of electronic communications services with national coverage, using 100 MHz in band 3600 - 3700 MHz (TDD mode).

26 GHz

Bulgaria has set 2,078 GHz in the 26 GHz band for harmonized use for 5G. The spectrum is fragmented, but blocks between 300 and 500 MHz continuous spectrum can be provided. The national regulatory authority plans to conduct a public consultation procedure in early 2021 on the use of the available resource in the 26 GHz band.

- **Reform 3: Creating a favourable investment environment** In an effort to encourage private investment in the sector, the government efforts are focused on:
 - 1. Reduction of administrative burdens (Q_3 / 2020) Amendments to the Spatial Planning Act have eased the regime for the deployment of base stations, no longer requiring a building permit for maintenance, equipment and/or improvement of elements of radio transmission systems, as well as their replacement or supplementation by assembling or disassembling elements of the radio transmission system. Nevertheless, the measurement of electromagnetic fields is mandatory and the National Regulatory Authority maintains an electronic register of upgraded base stations.
 - 2. Reduction of investment costs (Q4 / 2020)

With a decision of the government in the future implementation of infrastructure projects with public funds, there are requirements obliging the beneficiaries, where possible, to prepare investment projects, which include construction of protective pipes and cable shafts laid in underground infrastructure, which can be used by all network operators.

3. Promotion of joint investments (Q1 / 2021) Implementation of measures to improve the horizontal coordination between the different infrastructure sectors in terms of joint planning, construction, use and maintenance of physical infrastructure. Improving the availability of the information needed to share existing physical infrastructure by providing entirely electronic information through the Single Information Point.





Investment 1: Large-scale deployment of digital infrastructure The main goal of the project²⁸ is to build symmetric gigabit access networks throughout the country. The sustainable optical network, combined with a universally accessible mobile network, will allow every citizen, every business and every public institution to use the opportunities of digitalization on equal terms throughout the country. The main road network will be covered by secure broadband mobile connectivity, which will ensure high-speed coverage for the main roads included in the TEN-T network -Trakia, Hemus, Struma highways, as well as the connections with Romania and Turkey. The digital divide will be overcome to the maximum extent by deploying digital connectivity in remote and sparsely populated areas and by increasing the digital competencies of the population. Preconditions will be created for improving the digitization processes and expanding the accessibility to the administrative, health and social services in the country. Planned activities include providing high-speed mobile connectivity along key transport corridors; improving coverage in settlements with a focus on peripheral, sparsely populated and rural areas; development of the state support network by building optical connectivity to municipalities and by increasing its transmission capacity; "Green" connectivity and stimulating consumption. The total planned resource is BGN 1,005.1 million (BGN 685.1 million from the Recovery and Resilience Facility) with an implementation period of 2021-2025.

e) Complementarity and demarcation with Cohesion Policy instruments

Investments in this component of the Plan will allow the implementation of digitalization as a horizontal priority, contributing not only to the competitiveness of enterprises and universities, but also to support social inclusion and the development and use of e-government services. The improved data transmission environment, as well as digital connectivity and high protection of public institutions, administrations and consumers, will allow adequate implementation of the measures envisaged under the Cohesion Policy to increase the pace of digitalization of the public sector and ensure a high level of cyber security.

²⁸ See Appendix No. P₁8



f) Green and digital dimensions of the component

By increasing coverage and using very high-capacity digital infrastructure, the measures proposed in this component will develop solutions based on digital technologies, thus directly supporting the digital transition, while also indirectly supporting decarbonisation of all sectors of the economy and reduction of their carbon footprint. Thus, the component indirectly contributes to the climate dimensions of the Plan, although according to the methodology used by the Commission for calculating the contributions to the double transition, the component includes o% climate costs, i.e., does not directly contribute to the 37% target for the green dimensions of the Plan set out in the proposed in the component contribute to the ecological transition, taking into account the six climatic and environmental objectives set out in the Taxonomy Regulation, and do not infringe the principle of "do not significantly harm" as defined in the Taxonomy Regulation.

Including 100% digital costs (see Table xxx below), this component contributes significantly to the 20% target for the digital dimensions of the Plan set out in the Recovery and Resilience Facility Regulation.

Table xxx: Green and digital impact

Short title		Green objectives					Transition	Transition challenges	
Short title	Climate	Environmental	Intervention	DNSH			Green	Digital	
	Tag	Tag	field	DNSH			Green	Digital	
Component 7: Digital connectivity	0%				100%		0	685,075	
REFORM 1: Updating the strategic framework in the field of the agricultural sector	n/a	n/a	n/a	n/a	n/a		n/a	n/a	
REFORM 2: Efficient use of radio spectrum	n/a	n/a	n/a	n/a	n/a		n/a	n/a	
REFORM 3: Creating a favorable investment environment	n/a	n/a	n/a	n/a	n/a		n/a	n/a	
INVESTMENT 1: Large-scale deployment of digital infrastructure	0%	0%	51	yes	100%		0	685,075	

g) Key milestones, objectives and timetable

Table xxx presents the key stages and objectives related to the implementation of the component.

Table xxx: Key stages and objectives





h) Funding and costs

Table xxx presents the indicative estimates of the financial resources required for the implementation of the component.

Table xxx: Estimated costs

		Detailed o	cost estimates	Methodolo informat		Comparative information on the costs of previous reforms / investments				
Component	Investment / reform	Cost BGN	Description	Methodology used	Source	Cost BGN	Source	Possible reference to previous EU programmes		
D	Develop and implement an effective policy and regulatory framework	0	n/a	n/a	n/a	n/a	n/a	n/a		
Digital connectivity	Effective use of radio frequency spectrum	0	n/a	n/a	n/a	n/a	n/a	n/a		
	Creating a favorable investment environment	0	n/a	n/a	n/a	n/a	n/a	n/a		
Digital connectivity	Large-scale deployment of digital infrastructure	685,075,323	Large-scale deployment of digital infrastructure	Market research, historical data			Detailed estimates and justification for the formation of detailed costs are given in the Annex	n/a		



2.C.2. Transport connectivity

a) Description of the component

Summary: TRANSPORT CONNECTIVITY

Policy area: transport.

Objective: The main objective of the component is to reduce the carbon footprint of the transport sector through investments in the modernization and digitalisation of the railway segment. The expected effects of the interventions include a contribution to the green and digital transition, increased security, as well as territorial balance of growth.

Reforms and / or investments:

- Updating the strategic framework of the transport sector;
- Digitalization in railway transport through modernization of safety and energy efficiency systems on railway lines of the main and wideranging TEN-T network;
- Reconstruction and rehabilitation of key station complexes and construction of an intermodal terminal Gorna Oryahovitsa;
- Modernization of power substations and sectional posts along the main and wide-ranging TEN-T network, with construction of SCADA remote control and tele-signalling system;
- Ensuring sustainable transport connectivity and service on electrified and rehabilitated railway sections for 160 km/h, by purchasing energy-efficient and comfortable rolling stock;
- Conceptually new management of road safety in a single integrated strategic framework for the period 2021-2030;
- Improving road safety in the Republic of Bulgaria by creating conditions for sustainable road safety management;
- Integration of sustainable urban mobility in the strategic planning of regional and spatial development;
- Ensuring sustainable transport connectivity by building sections of Line 3 of the metro in Sofia;





- Pilot support scheme for the renewal of rolling stock for urban and interurban *Green Mobility* transport.

Cost estimation: The indicative estimate of the costs needed to achieve the objectives of the component amount to a total of 1 806.5million BGN, of which 1 309.2 million BGN from the Recovery and Resilience Facility and 498.3 million BGN national co-financing.



b) Main challenges

The carbon intensity of the transport sector in the country is 3.5 times higher than the EU average, reaching 2.8 kg of greenhouse gases (GHG) for 1 euro gross value added in 2019. The sector is one of the main emitters of GHG and is associated with 14 % of the total amount of GHG in the country. In the context of the efforts to decarbonise the economy there is a need to intensify investment in sustainable transport to reduce the sector's carbon footprint.

The construction and electrification of the railway infrastructure in the country is at a good level (despite some territorial imbalance), but its condition remains problematic which together with the high degree of amortization of the rolling stock, reflects the outflow of users of the service in the passenger segment. The liberalization of the rail freight market has led to the entry of private railway companies and an increase in the relative share of the railway sector in the segment, with an increase of market share at the expense of the road freight transport, which, however, retains a dominant position. At regional level, the interventions should be focused on the less infrastructurally developed Northern Bulgaria, which in addition to the expected positive effects on the environment and the green transition will create preconditions for reducing the interregional disparities in the country.

In 2019, 628 people died and 1,937 were seriously injured on Bulgarian roads. Bulgaria has relatively low levels of road traffic safety (RTS) compared to the EU average.

c) Objectives

This component is in line with the Council 2019 and 2020 Country Specific Recommendations and will directly contribute to the implementation of aspects of SR 3 of 2020 as well as SR 3 of 2019. Proposed reforms and investments implicitly or explicitly aim to increase the



resilience of the transport sector by reducing its carbon footprint. The implementation of the planned interventions will be crucial in the context of the green transition, given the current significant share of the transport sector in greenhouse gas emissions. At the same time, concentrating part of the investments in Northern Bulgaria, which is characterized by a relatively lower level of infrastructure development, will help mitigate regional imbalances. Road safety interventions will also help to increase the sustainability of transport, as they address its safety, attractiveness and functionality - aspects that directly determine the level of development of the sector. As a result, the overall mobility of the population is improved, supporting industry and trade, because transport acts as a link between producers, on the one hand, and raw materials, the labour market and consumers, on the other. Sustainability is also measured by the fact that with the increase in the number of passengers and the increase in the transportation of goods and services, economic growth and stimulated economic activity will take place in a higher level of safety, as the inherent risks of any economic activity are mitigated by a more prepared

risks of any economic activity are mitigated by a more prepared environment to meet them.

The envisaged interventions will also directly contribute to the economic recovery through the implementation of investment projects and the temporary employment created due to them.

d)Planned reforms and investments

 Reform 1: Updating the strategic framework of the transport sector

The ongoing reform envisages changes in the strategic framework of the transport sector, in the context of the country's commitments arising from the UN Sustainable Development Goals and the EU Green Deal.

1. National Development Programme BULGARIA 2030 (Q4 / 2020)

The detailed strategy of the National Development Programme BULGARIA 2030 (adopted by the Council of Ministers on December 2, 2020), within the *Transport connectivity* specific priority, to increase the sustainability and reduce the carbon footprint of the transport sector, sets specific objectives for priority development of the railway segment with an increase in the share of transported passengers and freight by the railway transport, as well as







expanding the construction of the main conventional TEN-T railway network. In addition, specific objectives are set for increasing the share of renewable energy in the consumption of fuels by the transport, improving the quality of naval ports infrastructure, the efficiency of air transport services, etc.

2. Action plans in implementation of the National Development Programme BULGARIA 2030²⁹ (Q4/2025)

The detailed description of the specific measures and interventions that will be undertaken in the implementation of the National Development Programme BULGARIA 2030 priorities (including the Transport Connectivity priority) will be structured in three-year action plans, which will be updated on an annual basis no later than the end of each calendar year. Each action plan (except the first one) will contain a report (and an impact assessment) for the implementation of the measures under the individual priorities - incl. the Transport Connectivity priority - for the period from the beginning of the action of the strategic document to the middle of the calendar year in which it is prepared. 5 such three-year action plans will be developed within the framework of the implementation of the Recovery and Resilience Plan.

Investment 1: Digitization in railway transport through modernization of safety and energy efficiency systems by rail routes through the main and wide-ranging TEN-T network This measure³⁰ aims to improve the quality of railway transport services by controlling the operating parameters and increasing the security, reliability and safety of transport operations. A system for monitoring and control of parameters of the rolling stock in operation will be implemented, solar/photovoltaic power plants will be built in the area of the railway stations for the needs of the National Railway Infrastructure Company, energy saving LED lighting will be installed in the area of 120 railway stations and stops, an optical cable network and digital telecommunication equipment will be built in the section Sofia - Karlovo - Filipovo. A system of cyber security solutions will be provided, contributing to the achievement of a cyber secure and safe infrastructure. An automated unified information management hub will be designed

³⁰SeeAppendixNo. P19



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²⁹https://www.minfin.bg/upload/46210/bulgaria+2030.pdf

and built at the National Railway Infrastructure Company. The total planned resource is BGN 267.7 million with an implementation period of 2021-2026.

• Investment 2: Reconstruction and rehabilitation of key station complexes and construction of an intermodal terminal - Gorna Oryahovitsa

This project³¹ envisages construction, reconstruction rehabilitation of key station complexes (Mezdra and Cherven Bryag), located on the main and wide-ranging TEN-T network, as well as construction of a modern intermodal railway terminal in the largest railway junction in Northern Bulgaria - Gorna Oryahovitsa. The implementation of the project will improve the quality of the railway infrastructure in the country and will allow increasing the share of railway transport in the structure of transported goods and passengers at the expense of road transport with expected positive effects in terms of environmental components and factors. At the same time, the project will strengthen the growth potential of the areas in which the included individual sites are located. These are station complexes in the less infrastructurally developed Northern Bulgaria. In this way, preconditions will be created for reducing the interregional differences in the country. The total planned resource is BGN 78.7 million with an implementation period of 2021-2025.

 Investment 3: Modernization of power substations and sectional posts along the main and wide-ranging TEN-T network, with construction of SCADA remote control and tele-signalling system

A complete modernization of 20 traction substations, modernization of 21 sectional posts, as well as construction of a system uniting the SCADA remote control and tele-signalling systems is envisaged³². The quality of infrastructure will be improved in terms of its safety, security, efficiency, resilience to climatic conditions, as well as the quality of services and the continuity of transport flows. The introduction and deployment of telematics applications, as well as the promotion of the development of innovative technologies, will have a direct impact on sustainable economic development, contributing to both the

³²SeeAppendixNo. P21





³¹SeeAppendixNo. P20

green and the digital transition. The implementation of the project will strengthen the growth potential of the more backward regions in Northern Bulgaria, where most of the sites included in the scope of the project are located. The total planned resource is BGN 273.2 million with an implementation period of 2021-2026.

• Investment 4: Ensuring sustainable transport connectivity and service by purchasing energy efficient and comfortable rolling stock

20 medium and long-distance electric trains will be purchased³³ to improve the competitiveness of rail transport compared to other modes of transport and create the conditions for the transfer of passengers from road to rail, which would lead to lower emissions of greenhouse gases, i.e., to reduce the overall negative impact of transport on the environment. 30% national co-financing will be provided through loans. The total planned resource is BGN 312.1 million (BGN 217.6 million from the Recovery and Resilience Facility) with an implementation period of 2021-2024.

• Reform 2: Conceptually new management of RTS in a single integrated strategic framework for the period 2021-2030

To address the challenges of road traffic related injuries, the government plans (and is planning) the following reform efforts:

1. Preparation of the reform $(Q_3 / 2020)$ - Development, consultation and coordination of a draft National Strategy for RTS in the Republic of Bulgaria for the period 2021-2030 and an Action Plan to it.

Pursuant to Decision No. 16 of January 17, 2019 of the Council of Ministers, the government adopted a package of measures to limit road traffic related injuries until 2020. The State Agency for Road Safety, together with the State Public Consultative Commission on Road Safety, initiated the preparation of the new National Strategy for RTS in the Republic of Bulgaria for the period 2021-2030, as well as the first Action Plan 2021-2023 to it;

2. Genuine reform STAGE 1 (Q_4 / 2020): Adoption of the National Strategy for RTS in the Republic of Bulgaria for the period 2021-2030 and Action Plan to it.

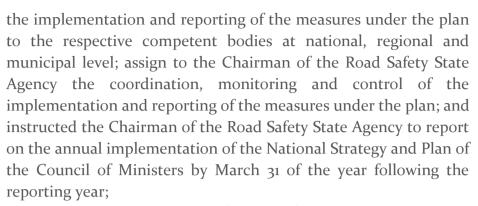
With its Decision $N^{o}775$ / 26.10.2020 the Council of Ministers adopted the strategic document and the action plan to it, assigning

³³SeeAppendixNo. P22









- 3. Genuine reform STAGE 2 (Q2 / 2026): Full implementation of the National Strategy for RTS in the Republic of Bulgaria for the period 2021-2030 and Action Plan to it, according to the defined vision, thematic areas, strategic objectives and areas of impact. In the framework of the implementation of the Recovery and Resilience Plan, the short- and medium-term objectives of the strategy should be met, as well as progress towards its long-term goal (reducing in half of fatalities and injuries as a result of road accidents):
- 3.1 Integration of road safety in the activities of the institutions at central, regional and municipal level (Q1 / 2021) Development of 1 general annual action plan for RTS; Development of 5 sectoral strategies and action plans for RTS; Development of 28 regional plan-programmes for RTS;
- 3.2 Introduction into national law of the provisions of Directive (EU) 2019/1936 (Q2 / 2021): Adoption of a Law amending the Roads Act to introduce new and detail existing road safety procedures;
- 3.3 Carrying out a comprehensive safety assessment of the road network $(Q_4 / 2024)$;
- 3.4 Improving road safety and reducing road traffic injuries (Q1 / 2026) reducing by xxx % the number of deaths and serious injuries as a result of road accidents.
- Investment 5: Improving road safety in the Republic of Bulgaria by creating conditions for sustainable road safety management

The specific objective of the project³⁴ is to reduce the risk of road accidents and reduce injuries, through targeted impact on key processes of road safety management. Measures will be taken to

³⁴SeeAppendixNo. P23





optimize the safety management activities of the national and municipal roads, including: development and integration of software applications for management and prioritization of road activities to ensure road safety, as well as to build a national electronic system for submission and processing of signals related to the safety of the road infrastructure, as well as for procurement of equipment, ensuring the needs for current repair and maintenance of the republican roads. Specialized equipment will be provided to assess the state of road safety when inspecting roads, including roadside sites, in order to establish specific design features, road surface performance and their functional condition. It is also envisaged to improve the traffic conditions in the border checkpoint areas by introducing a system for managing the crossing of cross-border heavy traffic through a specialized mobile application intended for road users. The total planned resource is BGN 12 million with an implementation period of 2021-2026.

 Reform 3: Integrating sustainable urban mobility into the strategic planning of regional and spatial development

A reform in the field of regional development has introduced a new approach to policy implementation with the direct involvement of local communities in the management of European funds and instruments, including integrated territorial development in cooperation between all levels and all stakeholders. The 2020 amendments to the Regional Development Act (RDA) and the Rules for Implementing the Regional Development Act (RIRDA) are a necessary precondition for the reform of sustainable urban mobility, as they introduce the requirements for the system of documents for strategic planning of regional and spatial planning. development. Building on the reform of regional development, the reform of sustainable urban mobility aims to link and integrate the planning of measures for sustainable urban mobility with the documents for strategic planning of regional and spatial development. A requirement has been imposed to incorporate all elements of sustainable urban mobility plans according to the Concept for Sustainable Urban Mobility Plans into their Plans for Integrated Municipalities' Development (PIMD) and Integrated Territorial Development Strategy (ITDS) for the new period

1. Introduction of new strategic documents for spatial and regional planning $(Q_3 / 2020)$



Preparation of amendments to the Regional Development Act and the Rules for implementation of the Regional Development Act, introducing the new strategic documents for spatial and regional development - Integrated Territorial Strategies and Plans for Integrated Urban Municipalities' Development. Preparation of Methodological guidelines for development and implementation of strategic documents;

- 2. Development of Integrated Territorial Development Strategies for the level 2 planning regions with elements for sustainable urban mobility included (Q_1 / 2021)
- 3. Development of Plans for integrated development of urban municipalities with plans for sustainable urban mobility incorporated in them $(Q_1 / 2021)$.
- Investment 6: Ensuring sustainable transport connectivity by building sections of Line 3 of Sofia metro

This project³⁵ envisages the construction of the last two sections of Line 3 of Sofia metro: MS Hadzhi Dimitar – Levski residential area section (length 3 km and planned 3 metro stations) and Shipka Str. - Geo Milev residential area - Slatina residential area - Arena Armeets Hall / Tech Park Sofia - Tsarigradsko Shose Blvd. section. With high environmental standards, the envisaged sections of the project with a total length of 9 km will provide fast and efficient service to a large number of passengers with intermodal connections to the national railway network, the airport and buffer metro stations with parking at the main entrance/exit arteries of the city, with the main car traffic to the capital. With the sections of the two lots of the proposed project: over 26 million passengers will be transported annually; harmful gases - greenhouse gases, fine dust particles, lead aerosols, etc. in the city and the region will be reduced by over 7 thousand tons per year; the number of cars in traffic in the city will be reduced by more than 17 thousand cars per day; the average speed of public transport will increase more than 2 times; due to the significant speed of movement, the inhabitants of the city will save an additional 40 thousand hours per day. The total planned resource is BGN 762.9 million (BGN 360 million from

³⁵SeeAppendixNo. P24





the Recovery and Resilience Facility) with an implementation period of 2021-2025.

Investment 7: Pilot scheme *Green Mobility* for renewal of rolling stock for urban and interurban transport

The scheme³⁶ aims to support the implementation of the urban mobility reform (Reform 3) through the preparation and implementation of pilot projects in line with the new territorial approach. Eligible activities include the supply of new environmentally friendly rolling stock for public transport, including urban and interurban transport, and accompanying small integrated measures such as charging stations, intelligent transport systems and integrated digital solutions to improve the efficiency and effectiveness of public transport. The implementation of the measure will contribute to connectivity and connections between urban and rural areas and the development of functional areas, while contributing to the implementation of national objectives for decarbonisation and energy efficiency. The total planned resource is BGN 100 million with an implementation period of 2021-2023.

e) Complementarity and demarcation with Cohesion Policy instruments

In order to improve the railway infrastructure on the main Trans-European transport network and to develop the connections with the neighbouring countries, under the Transport Connectivity programme 2021-2027 it is planned to complete the modernization of Elin Pelin -Kostenets railway section and the modernization of the Sofia - Pernik -Radomir section, as well as the construction of a railway connection between Bulgaria and the Republic of Northern Macedonia. The implementation of the projects will contribute to the development of the Orient/East-Mediterranean corridor, passing through the Republic of Bulgaria, whereas the transport connectivity will be improved and interoperability will be ensured. To improve the connectivity between railway and air transport and increase their efficiency, railway connections will be built to Plovdiv Airport and Bourgas Airport. It is planned to complete the facilities and systems on Karnobat - Sindel railway line of the "extended" Trans-European Transport Network in order to ensure greater transport safety. Gorna Oryahovitsa railway junction, Ruse railway junction

³⁶SeeAppendixNo. P25





and Varna railway junction will be developed, the construction and modernization of railway stations will continue, as well as the implementation of ERTMS.

f) Green and digital dimensions of the component

The transport sector is one of the most significant emitters of greenhouse gases in the country, whereas in 2019 14% of all greenhouse gases at the national level were generated by the transport sector. The planned interventions in the component will lead to their reduction, thus the component will make a significant contribution (estimated 40% climate costs - see Table xxx below) to achieving the 37% target for climate dimensions of the Plan set out in the Regulation on the Recovery and Resilience Facility. The measures proposed in the component also contribute to the ecological transition, taking into account the six climatic and environmental objectives set out in the Taxonomy Regulation, and do not infringe the principle of "do not significantly harm" as set out in the Taxonomy Regulation.

Including 13% digital costs (see Table xxx below), this component also contributes to the 20% target for the digital dimensions of the Plan set out in the Regulation on the Recovery and Sustainability Mechanism.

Table xxx: Green and digital impact

Short title		Green obj	ectives		Digital objectives Trans		Transition	n challenges
Short title	Climate	Environmental	Intervention	DNSH			G	District
	Tag	Tag	field	DNSH			Green	Digital
Component 8: Transport connectivity	47%				13%		616,749	174,272
REFORM 1: Update the strategic framework of the transport sector	n/a	n/a	n/a	n/a	n/a		n/a	n/a
INVESTMENT 1: Digitization in railway transport through modernization of safety and energy efficiency systems on railway lines of the main and wide-ranging TeN-T network	40%	0%	70	yes	100%		32,125	80,312
INVESTMENT 2: Reconstruction and rehabilitation of key station complexes and construction of an intermodal terminal - GornaOryahovitsa	0%	40%	69	yes	0%		0	0
INVESTMENT 3: Modernization for power substations and sectional stations along the main and wide-ranging TEN-T network, with construction of SCADA remote control and tele- signalling system	40%	0%	70	yes	100%		32,784	81,960
INVESTMENT 4: Providing sustainable transport connectivity and service on electrified and rehabilitated railway sections for 160 km/h, by purchasing energy-efficient and comfortable railway rolling stock	40%	40%	72	yes	0%		87,040	0
REFORM 2: Conceptually new road safety management in a single integrated strategic framework for the period 2021-2030	n/a	n/a	n/a	n/a	n/a		n/a	n/a
INVESTMENT 5: Improving road safety in the Republic of Bulgaria by creating conditions for sustainable road safety management	40%	0%	63	yes	100%		4,800	12,000
REFORM 3: Integrating sustainable urban mobility into strategic planning for regional and spatial development	n/a	n/a	n/a	n/a	n/a		n/a	n/a







INVESTMENT 6: Ensuring sustainable transport connectivity through the construction of sections of Line 3 of the metro in Sofia	100%	40%	73	yes	0%	360,000	0
INVESTMENT 7: Pilot scheme for aid for the renewal of rolling stock for urban and interurban transport "Green mobility"	100%	40%	73	yes	0%	100,000	0



g) Key milestones, objectives and timetable

Table xxx presents the key stages and objectives related to the implementation of the component.

Table xxx: Key stages and objectives

h)Funding and costs

Table xxx presents the indicative estimates of the financial resources required for the implementation of the component.

Table xxx: Estimated costs

		Detailed	l cost estimates	Methodo informa		C	omparative information on th reforms / investm	
Component	Investment / reform	Cost BGN	Description	Methodology used	Source	Cost BGN	Source	Possible reference to previous EU programmes
	Updating the strategic framework of the transport sector	0	n/a	n/a	n/a	n/a	n/a	n/a
Sustainable agriculture	Digitization in railway transport through modernization of safety and energy efficiency systems by rail from the main and wide-ranging TEN-T network	267,705,000	Digitization in railway transport through modernization of safety and energy efficiency systems by rail from the main and wide-ranging TEN-T network	Historical data from the implementation of previous sites	concluded contracts		A detailed breakdown of contracts, as well as a justification for the formation of detailed costs is contained in the Annex to Table 3b	OPTTI 2014-2020
	Reconstruction and rehabilitation of key station complexes and construction of an intermodal terminal - Gorna Oryahovitsa	78,664,000	Reconstruction and rehabilitation of key station complexes and construction of an intermodal terminal - Gorna Oryahovitsa	Historical data from the implementation of previous sites	concluded contracts		A detailed breakdown of contracts, as well as a justification for the formation of detailed costs is contained in the Annex to Table 3b	OPT 2007-2013 and OPTTI 2014-2020
Sustainable agriculture	Modernization ofpower substations and sectional stations along the main and wide-ranging TEN-T network, with construction of SCADA remote control and tele- signalling system	273,200,000	Modernization of power substations and sectional stations along the main and wide-ranging TEN-T network, with construction of SCADA remote control and telesignalling system	Historical data from the implementation of previous sites	concluded contracts		A detailed breakdown of contracts, as well as a justification for the formation of detailed costs is contained in the Annex to Table 3b	OPTTI 2014-2020 and ITU
Sustainable agriculture	Ensuring sustainable of transport connectivity and service on electrified and rehabilitated railway sections for 160 km /h, by purchasing energy- efficient and comfortable rolling stock	312,069,901	Ensuring sustainable of transport connectivity and service on electrified and rehabilitated railway sections for 160 km /h, by purchasing energy-efficient and comfortable rolling stock	Market research within the public procurement "Delivery and warranty maintenance of up to 16 newly produced electric trains for the needs of BDZ- Passenger Transport Ltd."	initial price offer - 3 pcs.			
Sustainable agriculture	Conceptually new management of road safety in a single integrated strategic framework for the period 2021-2030	0	n/a	n/a	n/a	n/a	n/a	n/a
Sustainable agriculture	Improving road safety in the Republic of Bulgaria by creating conditions for sustainable road safety management	12,000,000	Improving road safety in the Republic of Bulgaria by creating conditions for	historical data			Detailed estimates and justification for the formation of detailed costs are given in the Annex	n/a



			sustainable road safety management					
Sustainable agriculture	Integrating sustainable urban mobility into the strategic planning of regional and spatial development	0	n/a	n/a	n/a	n/a	n/a	n/a
Sustainable agriculture	Ensuring sustainable transport connectivity by building sections of Line 3 of the metro in Sofia	762,865,416	Ensuring sustainable transport connectivity by building sections of Line 3 of the metro in Sofia	historical data			Detailed estimates and justification for the formation of detailed costs are given in the Annex	
Sustainable agriculture	Pilot scheme for aid for the renewal of rolling stock for urban and interurban transport "Green mobility"	100,000,000	Pilot scheme for aid for the renewal of rolling stock for urban and interurban transport "Green mobility"					



2.C.3. Local development

a) Description of the component

Summary: LOCAL DEVELOPMENT

Policy area: regional policy.

Objective: The main objective of the component is to provide preconditions for increasing the competitiveness and sustainable development of the regions of the country, as well as to promote local development.

Reforms and / or investments:

- A new regional approach with direct involvement of local communities in the management of European funds and instruments;
- Programme for construction/completion/reconstruction of water supply and sewerage systems, incl. wastewater treatment plants for agglomerations between 2,000 and 10,000 PE;
- Digitization for complex management, control and efficient use of water;
- Construction, development and optimization of the digital TETRA system and radio relay network.

Cost estimation: The indicative estimate of the costs needed to achieve the objectives of the component amount to a total of 891.7 million BGN, of which 770.4 million BGN from the Recovery and Resilience Facility and 121.3 million BGN national co-financing.

b) Main challenges

In the years since the country's accession to the EU, regional disparities in development have increased. The dominant South-West region has managed to catch up significantly with the EU regions, while the progress of the other regions is slow. The North-Western region is deepening its lagging behind the other regions in the country in almost all areas of socio-economic development. Significant internal regional





differences continue to be observed, as well as those along the urban-rural axis.

EU Cohesion Policy instruments are a powerful tool for increasing the economic and social sustainability of regions, but the results observed after two programming periods in which the country had access to these suggest the need to readjust regional policy, focusing on increasing its effectiveness.

The share of the population connected to public sewerage and provided wastewater treatment has been growing in recent years, but by 2020 Bulgaria has not yet achieved compliance with the requirements of Directive 91/271 / EEC. In connection with climate change and the onset of periods of drought, the need to take measures regarding the shortage of drinking water by identifying new and/or backup water sources for the population has been identified. On the other hand, a large part of the population has a relatively low income, which requires the price of services in the water sector to maintain social affordability and in this regard the necessary financial resources to implement the required measures cannot be provided by increasing the price of services. The limited financial resources also limit the renewal and development of the water supply and sewerage infrastructure, which also affects the progress in terms of compliance with Directive 91/271 / EEC and Directive 98/83 / EC.

c) Objectives

The component is in line with the Council 2019 and 2020 Country Specific Recommendations and will directly contribute to the implementation of aspects of SR 3 of 2020 as well as SR 3 of 2019. The proposed reform to introduce a new regional approach objective increase the effectiveness of regional policy and therefore directly addresses the recommendation to take into account regional disparities (SR 3 / 2020), while having an indirect impact on the efficiency of public administration as a whole (SR 4/2020). The construction of the digital TETRA system, as a communication environment for the management of the elements of the National Early Warning and Notification System, has an indirect impact on the implementation of (SR3 / 2020). The planned investments in the water sector are in direct compliance with the requirements of SR 3/2019 ("To direct the economic policy related to investments to... waters... taking into account regional differences"). The implementation of the planned interventions will be the key in the context of the ecological transition,





given the relation they have with the protection of water resources. Both the construction of the digital TETRA system, as a communication environment for the management of the elements of the National Early Warning and Notification System and the projects in the water sector will lead to increased social sustainability.



The envisaged interventions will also directly contribute to the economic recovery through the implementation of investment projects and the temporary employment created due to them.

d) Planned reforms and investments

 Reform 1: A new regional approach with direct involvement of local communities in the management of European funds and instruments

The implemented reform envisages changes in the regulatory and strategic framework of the regional policy and the direct involvement of the local communities in the regions of the country in the management of the financing from the European funds and instruments, which increases their sense of ownership of the implemented projects, while experiencing the advantage of a priori higher policy effectiveness addressing with a higher level of awareness of the specific needs and potentials identified at the local level. The approach focuses on the deployment of integrated territorial investments (ITIs) in search of synergies from the implementation of their individual sectoral components.

- 1. Change in regional development legislation (Q3 / 2020) In order to implement the reform intentions, the regulatory framework has been updated with the adoption by the National Assembly in March 2020 of the Act amending the Regional Development Act (RDA) and, respectively, in August 2020 the Rules for Implementation of the RDA. The changes imposed by the new regulatory framework are two-fold: optimization of the number and quality of the system of strategic documents for regional and spatial development and enhanced involvement of the regional level in the implementation of development policies, incl. direct involvement of local communities in the management of European funds and instruments setting out the rules for the preparation, selection and implementation of ITI concepts;
- 2. Legislative change regarding EU funds (Q1 / 2021)



It is planned to upgrade the relevant legislation in the field and the Law on Management of European Structural and Investment Funds (LMESIF), in particular. It is necessary to regulate the main relations related to the selection and implementation of ITI concepts and those that complement the positive impact of the approach. In the course of the interdepartmental meetings and a working group was formed, a draft document was formed as a secondary legislation to LMESIF;

3. Implementation of regulatory changes to territorial development strategies $(Q_1 / 2021)$

The adopted approach and timetable imply the development of integrated territorial development strategies (ITDS) for each of the 6 NUTS II planning regions which will play the role of territorial strategies for the implementation of the ITI instrument;

- 4. Implementation of regulatory changes related to territorial bodies for the implementation of regional policy (Q1 / 2021) The step involves the institutionalization of Regional Development Councils (RDCs) in the 6 planning regions, incl. their expert panels. The restructured RDCs will function as territorial bodies responsible for the implementation of strategic documents at regional planning level and for the pre-selection of projects to be financed at local level;
- 5. Implementation of integrated territorial investments (Q2 / 2021)

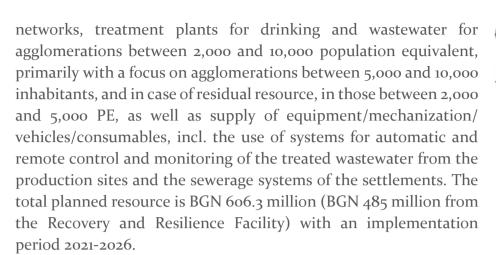
This step involves allocating resources for the implementation of an integrated approach to territorial development from the programmes that contribute to it; a separate indicative budget package of European funding for each planning region; an established mechanism for combining *top-down* and *bottom-up* approaches; approved Programme for development of the regions 2021-2027.

• Investment 1: Programme for construction/completion/reconstruction of water supply and sewerage systems, incl. wastewater treatment plants for agglomerations between 2,000 and 10,000 PE

The project³⁷ envisages activities for construction, reconstruction, rehabilitation, modernization of sewerage and water supply

³⁷SeeAppendixNo. P₂6





• Investment 2: Digitalization for integrated water management, control and efficiency

This measure³⁸ aims to establish control over the quantities of water used at national level, improve water management in quantitative terms and its effective use, incl. establishing control to ensure the minimum allowable runoff in rivers through digitalization for integrated management of water resources use. The total planned resource is BGN 134.8 million with an implementation period of 2021-2025.

• Investment 3: Construction, development and optimization of the digital TETRA system and radio relay network

It is envisaged³⁹ to build the TETRA system of the Ministry of Interior as a unified radio communication system to provide a communication environment for management, interaction and coordination of state structures, incl. all elements of the Unified Rescue System, at all levels in the protection of public order, counteraction to crime, notification and protection of the population in case of disasters and accidents related to the Disasters and Accidents Protection Act; its use as a communication environment for management of the elements of the National System for Early Warning and Notification and development of the potential of the system, with the introduction of organizational and technical solutions. The implementation of the project will allow effective operational interaction at national and regional level in the event of crises and adverse circumstances, in order to consolidate

³⁹SeeAppendixNo. P28





³⁸SeeAppendixNo. P27

resources and optimize financial resources for building and maintaining radio communications for the needs of responsible national institutions. The total planned resource is BGN 150.6 million with an implementation period of 2021-2024.

e) Complementarity and demarcation with the instruments of Cohesion Policy

The measures of the Plan will be supplemented with the instruments for the integrated territorial approach applied within the framework of the Cohesion Policy, and measures will be financed on the territory of all urban municipalities in the country. Measures that will be supported are on the one hand related to the implementation of national sectoral priorities based on needs mapping prepared by the relevant policy institutions at national level, and on the other hand these are measures identified on the basis of a *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.

The Regional Development Programme will support the implementation of infrastructure measures aimed at improving and developing health and social services, education, vocational training, culture, sports, tourism, sustainable urban mobility, digital and safe transport connectivity, circular economy, energy efficiency, access to adequate housing, access to quality public services, measures to improve the quality of the environment (including green infrastructure), measures to promote economic activity (including investments in technical infrastructure for the development of industrial zones or other infrastructure for the development of economic activities and the support of innovation and the development of SMEs).

The Environment Programme will support investments in water supply and sewerage infrastructure on the basis of developed regional pre-investment studies for separate territories, served by a consolidated water supply and sewerage operator, with a focus on agglomerations with over 10,000 PE. If there is a residual resource, funding can be directed to agglomerations between 2000 and 10,000 population equivalent in case of strict demarcation and in addition to the investments provided under this component. Interventions will be funded also to address the effects of climate change on water resources, to study and develop a system for assessing the risk of drought with the aim of upgrading already planned





interventions through the application of smart technologies and the introduction of digitalization for water efficiency.

The focus of Cohesion Policy interventions is also disaster risk management, where as one of the main areas will be preliminary forecasting, modelling and warning in order to improve the prevention of the risk of extreme adverse events. In this regard, the scope of the National System for Early Warning and Notification of the population at district level for the territory of the country will be expanded. The national system will use the resources of TETRA system, thus ensuring its operational security and synergies between the implemented investments.

f) Green and digital dimensions of the component

The implementation of the planned interventions in the water sector will be important in the context of the ecological transition, given the input they have to the protection of water resources, although according to the EC methodology used to calculate contributions to the double transition, the component includes o% climate costs, i.e.it does not directly contribute to the implementation of the 37% target for the green dimensions of the Plan set out in the Regulation on the Recovery Resilience Facility. The measures proposed in the component contribute to the ecological transition, taking into account the six climatic and environmental objectives set out in the Taxonomy Regulation, and do not infringe the principle of "do not significantly harm" as defined in the Taxonomy Regulation.

Including 37% digital costs (see Table xxx below), this component contributes to the 20% target for the digital dimensions of the Plan set out in the Regulation on the Recovery and Resilence Facility.



Table xxx: Green and digital impact

Short title		Green obj	ectives		Digital objectives	Transition	n challenges
Short title	Climate	Environmental	Intervention	DNSH		Green	Digital
	Tag	Tag	field	DNSH		Green	Digital
Component 9: Local Development	0%				37%	0	285,429
REFORM 1: A new regional approach with direct involvement of local communities in the management of European funds and instruments	n/a	n/a	n/a	n/a	n/a	n/a	n/a
INVESTMENT 1: Program for construction / completion / reconstruction of water supply and sewerage systems, incl. and wastewater treatment plants for agglomerations between 2,000 and 10,000 pe.	0%	100%	39/41	yes	0%	0	0
INVESTMENT 2: Digitization for integrated water management, control and efficiency	0%	0%	11	yes	100%	0	134,830
INVESTMENT 2: Construction, development and optimization of the digital TETRA system and radio relay network	0%	0%	11	yes	100%	0	150,599



g) Key stages, goals and time plan

Table xxx presents the key stages and objectives related to the implementation of the component.

Table xxx: Key stages and goals

h) Funding and costs

Table xxx presents the indicative estimates of the financial resources required for the implementation of the component.

Table xxx: Estimated costs

		Detailed	l cost estimates	Methodol informa		Compar	ative information on th reforms / investm	
Component	Investment / reform	Cost BGN	Description	Methodology used	Source	Cost BGN	Source	Possible reference to previous EU programmes
	A new regional approach with direct involvement of local communities in the management of European funds and instruments	0	n/a	n/a	n/a	n/a	n/a	n/a
Local development	Program for construction / completion / reconstruction of water supply and sewerage systems, incl. and wastewater treatment plants for agglomerations between 2,000 and 10,000 pe.	604,657,618	Program for construction / completion / reconstruction of water supply and sewerage systems, incl. and wastewater treatment plants for agglomerations between 2,000 and 10,000 pe.	Detailed cost estimates in the Regional Pre- Investment Studies (RPISs)			Implemented project for development of RPIS	
	Digitization for integrated water management, control and efficiency	134,830,000	Digitization for integrated water management, control and efficiency	Historical data			Detailed estimates and justification for the formation of detailed costs are given in the Annex	
Sustainable agriculture	Updating the strategic framework of the agricultural sector	150,598,910	Construction, development and optimization of the digital TETRA system and radio relay network	Market research, historical data			Detailed estimates and justification for the formation of detailed costs are given in the Annex	



2.D FAIR BULGARIA

The government's intentions under this pillar are grouped in the following key areas:



Policy areas	Reforms
- Business environment - Social inclusion - Healthcare	Reform of the legal framework of e-justice; Increasing the efficiency of corruption crime investigations; Expanding the use of alternative means of resolving disputes and introducing mediation, which shall be mandatory in certain type of cases; Increasing the efficiency of the bankruptcy and stabilization framework; Digital reform of the Bulgarian construction sector; Register reform to unleash the potential of e-government to improve the business environment; Improving the overall system of social support through the adoption of a Code of Social Support and regulations; Continuation of the reform in the field of social services; Updating the strategic framework of the Health sector; Complete implementation of the National Health Information System; Creation of mechanisms for attracting and retaining staff in the healthcare system and their professional realization in certain regions of the country

2.D.1. Business environment

a) Component description

Summary: BUSINESS ENVIRONMENT

Policy area: business environment, e-government.

Objective: The main objective of this component is to effectively strengthen the potential for sustainable growth and increase the resilience of the Bulgarian economy by addressing disincentives in the business environment and developing the potential of e-government to improve it.

Reforms and / or investments:



- Reform of the legal framework of e-justice;
- Strengthening, further development and upgrading of the Unified Information System of the Courts;
- Further development of the information systems of the courts for access of citizens and legal entities to e-services and e-justice;
- Digitalization of key court proceedings in the system of administrative justice;
 - Increasing the efficiency of investigations of corruption crimes;
- Transformation of the existing information and communication infrastructure in the Prosecutor's Office of the Republic of Bulgaria into a new type fault-tolerant, reserved, productive and protected;
- Improving the quality and sustainability of security and anticorruption policies;
- Expanding the use of alternative methods for resolving disputes and introducing mediation, mandatory in certain types of cases;
- Introduction of methods for alternative dispute resolution (ADR) in the judicial system in Bulgaria pilot introduction of mandatory judicial mediation;
- Increasing the efficiency of the bankruptcy and stabilization framework;
 - Digital reform of the Bulgarian construction sector;
- Support of a pilot phase for introduction of construction information modelling (CIM / BIM) in investment design and construction as a basis for digital reform of the construction sector in Bulgaria;
- Unified information system for spatial planning, investment design and construction permitting;
- Development of a national scheme for electronic identification and its personalization in Bulgarian personal documents;
- Register reform to unleash the potential of e-government to improve the business environment;



- Digitization of information files in the administration, containing register data and e-certification from registers.

Estimation of expenditures: The indicative estimates for the expenditures necessary for the realization of the objectives of the component, amount to a total of BGN 533.2 million, of which BGN 463.6 million from the Recovery and Resilience Facility and BGN 69.5 million national co-financing.



b) Main challenges

In the period after the country's accession to the EU, the government's efforts to improve the business environment lag behind those in comparable economies, as a result of which Bulgaria is losing ground globally. There is a need to continue efforts to increase the efficiency of the judiciary as consistent efforts in this direction have the potential to increase the international competitiveness of the economy and to intensify long-term investment commitments by companies. In the context of the economic turmoil resulting from the COVID-19 pandemic, the reform of the insolvency framework is becoming even more urgent. Businesses facing solvency problems are unable to restructure their financial obligations to creditors outside the cumbersome formal insolvency process. A more efficient regulation would help non-viable companies with financial difficulties to cease their activities, thus avoiding the retention of resources and the deterioration of their bank assets.

The forced physical distancing resulting from COVID-19 pandemic, emphasized the importance of building an information society that actively took advantage of the opportunities provided by digital technologies, highlighting the need to accelerate and finalize the digitization of public services. At the same time, the effective use of the benefits of e-government and the benefit of the population from digital administrative services requires accelerated introduction of a national e-identification scheme.

c) Objectives

This component is in line with the Council 2019 and 2020 Country Specific Recommendations and will directly contribute to the implementation of aspects of SR 4 of 2020, as well as SR 3 of 2019. All planned interventions - both investments, and reformative, are aimed directly or indirectly at improving the business environment, and their



successful and timely implementation will help increase the competitiveness of the economy and consequently the economic resilience to shocks. Continued efforts to increase the effectiveness of the insolvency framework, such as those for the introduction of judicial mediation, have a significant potential positive effect on improving the investment climate in the country, reducing the administrative burden of entering insolvency proceedings and reducing uncertainty, time and financial resources for the business within these processes. In this way, preconditions are created for intensification of private investments in medium and long-term captivity, which will help to overcome the consequences of the crisis related to the COVID-19 pandemic.



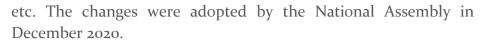
Measures in the field of e-Justice (reform 1, investments 1, 2, and 3), e-government (reform 6, investments 9 and 10) and digitalization of the construction sector (reform 5, investments 7 and 8), as well as Investment 4, have very important digital dimensions and will help to overcome the challenges associated with the digital transition. The project for building a national scheme for electronic identification and its personalization in Bulgarian personal identity documents is directly related to the goals set at the European level within the Flagship Initiative *Modernization*. Measures in the field of e-government and e-justice will have a significant contribution in this regard.

d) Planned reforms and investments

• Reform 1: Reform of the legal framework of e-Justice

1. Development and adoption of amendments to the Code of Civil Procedure and the Code of Criminal Procedure (Q4 / 2020) Introduced rules for service of notices and summons to e-mail address, possibility to pay fees and other obligations to the court electronically, and when submitting documents electronically the fee should be reduced by 15%, which will facilitate access to justice both on behlaf of citizens and business. Ensuring the possibility judicial acts to be prepared as an electronic document in the Unified Information System of the Courts and to be signed with a qualified electronic signature, exercising of procedural rights and performance of procedural actions in electronic form by the parties, as well as rules for conducting videoconference court hearings, taking a measure of remand in custody in the pre-trial proceedings,





- Investment 1: Strengthening, further development and upgrading of the Unified Information System of the Courts This project⁴⁰ aims to expand the functionalities of the Unified Court Information System (UCIS), which is a key tool for the implementation of reform efforts to introduce e-Justice. The system integrates all electronic cases and ensures their management, including the distribution of cases at random, reporting the workload of the courts and collecting and processing statistical information on the activities of the courts. The project envisages the creation of a module in the UCIS for centralized distribution and electronic processing of injunctions, as well as a module for the administration of ongoing mediations in cases (see Investment 6 and Reform 3); upgrading the existing functionalities and creating new ones with a view to the development of the normative base; changes in the internal administrative and management structure of the courts, integration with new systems, new electronic services, etc.; providing the necessary computer equipment; upgrading the data centres in the SCI. The creation of a module on injunction cases in the UCIS will achieve a comprehensive reform of the injunction proceedings and will create preconditions for addressing the uneven workload of the district courts in the country, with direct effects on the efficiency of the judiciary. The total planned resource is BGN 27.5 million with an implementation period of 2021 - 2023.
- Investment 2: Further development of the information systems of the courts for access of citizens and legal entities to e-services and e-justice

The objective of the project⁴¹ is to further develop the Single Portal for e-justice in order to improve the main activities: making certification statements in electronic form, performing procedural actions in electronic form, service of notices and summons. The portal, which has the task of providing participants in court cases with access to electronic case files, electronic summons and participation in online court hearings is one of the two pillars of

⁴¹SeeAppendixNo. P₃₀





⁴⁰SeeAppendixNo. P29

e-justice. Upgrading it will provide opportunity to all parties in cases to exercise their procedural rights electronically. The total planned resource is BGN 1.3 million with an implementation period of 2021 - 2023.

• Investment 3: Digitization of key court proceedings in the system of administrative justice

Main activities envisaged under the project⁴²: elaboration and implementation of an information system for digitalization of the files on administrative cases and exchange of information between the individual administrative courts, as well as between them and the Supreme Administrative Court, with modules for electronic summoning of the parties in administrative cases of remote closed court hearings of the court panels, for conducting remote open court hearings. The implementation of the project will allow faster and transparent administration of justice. The total planned resource is BGN 7.2 million with an implementation period of 2021-2025.

Reform 2: Improving the efficiency of corruption crime investigations

1. Preparation of expert proposals for legislative changes in the Penal Code and the Criminal Procedure Code (Q2 / 2021)
Proposals will be developed to decriminalize "bribery provocation"; detailed regulation of the procedure for carrying out such activity by undercover officers in accordance with judgments of the European Court of Human Rights, requiring guarantees of noncoercion against the official and indisputable evidence excluding the possibility of abuse; providing for heavier sanctions in case of established conflict of interest; provision of measures for the protection of persons who have reported corruption; elimination of the excessive formalism of the Bulgarian criminal process;

2. Establishment of a specialized unit: Information Centre of the Commission for Combating Corruption and Confiscation of Illegally Acquired Property (CCCCIAP) at the Directorate for Prevention of Corruption (Q1 / 2021)

In order to ensure publicity and transparency in the activities of the Anti-Corruption Commission and to confiscate illegally acquired property and increase public confidence in its work, a specialized

⁴²SeeAppendixNo. P₃₁





unit of the CCCCIAP, Information Centre, will be established, which will work to improve communication with citizens, state institutions and non-governmental organizations on the daily inquiries on the application of the Law, ensuredcapacity for conducting information campaigns with anti-corruption orientation;

- 3. Development of a concept for lobbying regulation (Q2 / 2021) It is planned to study the good European practices and prepare a concept for the regulation of lobbying in accordance with the recommendations and standards of the European Commission, Recommendation CM / Rec (2017) 2 of the Committee of Ministers of the Council of Europe to the Member States on lobbying activities in the context of public decision-making. The concept is planned to serve as a basis for drafting a bill, as well as conducting public consultations on the project.
- Investment 4: Transformation of the existing information and communication infrastructure in the Prosecutor's Office of the Republic of Bulgaria into a new fault-tolerant, reserved, productive and protected type

This measure⁴³ envisages upgrading the information and communication infrastructure of the Prosecutor's Office of the Republic of Bulgaria in order to adequately address its specific needs in the context of the COVID-19 pandemic and the challenges related to cyber security. The specific objectives of the project are to achieve high resilience, protection and redundancy of internal electronic exchange of documents between units in the Prosecutor's Office, technical implementation of policies for protection of personal and sensitive data in its electronic files and electronic identification of users of electronic systems in the Prosecutor's Office, and the level of direct communication with operational bodies and inspectors in the ministries. The project will mediate automatic electronic exchange of information between the Prosecutor's Office and other anti-corruption bodies in the country, whereas the data from the relevant databases will be accessible and provided automatically through secure electronic channels, without risk of information leakage and compromising the system.

⁴³SeeAppendixNo. P₃₂





The total planned resource is BGN 36 million with an implementation period of 2021-2022.

Investment 5: Improving the quality and sustainability of security and anti-corruption policies

This project⁴⁴ aims to improve the business environment by creating conditions for increasing public security and combating corruption. Activities are planned for building a National Intelligent Security System for the purpose of prevention and the analysis of information in the field of public security and upgrading the system for prevention and counteraction of corruption among the employees of the Ministry of Interior and increasing transparency in serving citizens. The total planned resource is BGN 128.8 million with an implementation period of 2021-2023.

- Reform 3: Expanding the use of alternative dispute resolution and the introduction of mediation, mandatory in certain types of cases
 - 1. Develop a strategy for making full use of alternative dispute resolution methods $(Q_4 / 2021)$

A working group will be set up to develop a strategic document to purposely promote the use of alternative dispute resolution methods. The document will be discussed with all stakeholders;

2. Preparation of the necessary legislative changes in the Civil Procedure Code, the Administrative Procedure Code, the Mediation Act and the Rules for Administration in the Courts, as well as the development of an Ordinance on the Organization of Mediation Centres at the Courts (Q1 / 2021)

Draft amendments to the legal and regulatory framework for the introduction of judicial mediation, mandatory in some types of cases, will be prepared. The proposals will be submitted for adoption by the National Assembly.

• Investment 6: Introduction of methods for alternative dispute resolution in the judicial system in Bulgaria - pilot introduction of mandatory judicial mediation

Main objective of this measure⁴⁵ is to introduce mandatory judicial mediation in civil and commercial proceedings as a means to encourage the use of alternative dispute resolution methods,

⁴⁵ See Appendix P₃₄





⁴⁴SeeAppendixNo. P33

reduce the workload of the courts and increase efficiency in the field of civil and commercial justice. The implementation of the project is envisaged in two phases: (i) Introduction of mandatory judicial mediation in pilot courts, in which there are already functioning centres for judicial mediation (in the cities of Sofia, Varna, Pazardzhik and Pernik) and (ii) Establishment of 15 new mediation centres to the district courts and expansion of the already existing 9 centres, outside the pilot courts. Introduction of mandatory mediation in all district court districts in Bulgaria. The total planned resource is BGN 1.5 million with an implementation period of 2021-2023.

Reform 4: Improving the effectiveness of the insolvency and stabilization framework

In order to increase the international competitiveness of the companies, as well as to reform the long and cumbersome processes in the insolvency procedure, efforts will be made to increase the efficiency of the insolvency and stabilization framework in the country.

1. Transposition of Directive (EU) 2019/1023 on preventive restructuring frameworks, debt remission and operating bans, measures to increase the efficiency of restructuring, insolvency and debt relief proceedings (Q4 / 2021)

A working group will be set up with the task of drafting amendments to the Commercial Law and secondary legislation. The prepared changes will be consulted with all stakeholders. After reflecting the feedback, the draft regulations will be proposed for adoption;

- 2. Reform of the insolvency legal framework ($Q_1 / 2022$) An early warning system will be developed to target businesses at risk of insolvency, while ensuring a more balanced way to protect the rights of workers and other stakeholders;
- 3. Establishment of a specialized unit in the Ministry of Justice $(Q_2 / 2022)$

In order to better regulate the profession of trustees and trustees in insolvency, efforts will be made to increase the capacity of the Ministry of Justice by providing the necessary human and financial resources. Efforts will be targeted to increase the efficiency of the examination procedure, preliminary trainings for the candidates and opportunities for further training will be provided. Better



organization and coordination of training and professional development initiatives for trustees has a significant impact on regulation. Maintaining and regularly updating a public register of trustees and trustees in insolvency will contribute to comprehensive and timely information. Providing additional support to trustees by organizing specialized sessions for knowledge sharing, development of manuals and guidelines, etc. will increase their efficiency, capacity and qualification in the proceedings;

4. Update of the Information System on Insolvency Proceedings (Q1 / 2022)

Actions will be taken to optimize the opportunities for exchange of data on insolvency proceedings and the instrumentarium for the activities of the specialized unit;

5. Launch of a programme for continuing education of trustees and trustees in insolvency (Q_1 / 2022)

A programme for continuing education of trustees and trustees in insolvency will be introduced in order to increase their capacity and qualification;

6. Preparation of a draft Handbook for trustees and trustees in insolvency, including models for reporting on their activities (Q2 / 2022)

This step complements step 5 in an effort to increase the capacity and qualifications of trustees and trustees in insolvency;

7. Upgrading the Commercial Register and providing an opportunity for interconnection with the European Insolvency Register (Q2 / 2021)

This step aims to optimize the possibilities for exchanging data on insolvency proceedings with the European Insolvency Register.

• Reform 5: Digital reform of the Bulgarian construction sector Digitalization of the construction sector is a large-scale reform that covers the regulatory framework, central and regional administrations, education, entrepreneurs and the construction business, the IT sector. The reform of the construction sector could not be carried out without the formulation, development and implementation of national strategic documents and policies enshrined in government programmes, which set priorities, systematic steps and funding with a view to reform the construction





sector, training the construction industry and its involvement in the implementation of the reform.

- 1. Development of a draft Long-term strategy for the introduction of construction information modelling in the design, implementation and maintenance of constructions, as a basis for the digital transformation of the construction sector (Q3 / 2021) The draft strategic document will be prepared with the support of project REFORM / SC2020 / 089 "Preparation and launch of digital reform of the Bulgarian construction sector", funded by the Structural Reform Support Programme 2017-2020;
- 2. Development of a draft Roadmap for the implementation of the long-term strategy $(Q_3 / 2021)$ The draft strategic document will be prepared with the support of

The draft strategic document will be prepared with the support of project REFORM / SC2020 / 089 "Preparation and launch of digital reform of the Bulgarian construction sector", funded by the Structural Reform Support Programme 2017-2020;

3. Decision of the Council of Ministers on the adoption of the Long-Term Strategy and the Roadmap for its implementation $(Q_3 / 2022)$

The draft strategic documents prepared will be presented for discussion with all stakeholders in a broad public consultation. After reflecting the feedback from the consultations, the strategy and the roadmap for its implementation will be submitted to the Council of Ministers for approval.

• Investment 7: Support for a pilot phase for the introduction of construction information modelling (CIM/BIM) in investment design and construction as a basis for digital reform of the construction sector in Bulgaria

This measure⁴⁶ is in support of reform 5 and should be explored as a step in this direction. The project will enhance the capacity of the CIM community in the country to provide knowledge and experience related to the implementation of CIM and will build a national digital platform for construction. The planned activities include conducting of specialized trainings, technical support for experts from the municipal, regional and state administration, as well as providing logistical support to SMEs for the implementation of CIM. In addition, drafts of normative and methodological

⁴⁶ See Appendix P₃₅



documents necessary for the implementation of the digital reform in the construction sector will be developed, as well as 2 BIM-related curricula that will be proposed for inclusion in university programmes. The total planned resource is BGN 7.9 million with an implementation period 2021-2026.

- Investment 8: Unified information system for spatial planning, investment design and construction permitting

 The objective of the project⁴⁷ is to create a unified information system as a platform for providing electronic administrative services for spatial planning and construction permits. The project will alleviate the administrative burden on citizens and businesses by significantly reducing the technological time for providing services in the sector of spatial planning, investment design and commissioning of completed constructions, creating opportunities for complex electronic administrative services. The total planned resource is BGN 3.5 million with an implementation period 2021-2026.
- Investment 9: Establishment of a national scheme for electronic identification and its personalization in the Bulgarian personal documents

It is envisaged⁴⁸ to build a system for electronic identification and its personalization in the Bulgarian personal identity documents. The implementation of the project will allow the population to effectively benefit from the electronic public services offered by the administration. The total planned resource is BGN 192 million (BGN 122.5 million from Recovery and Resilience Facility) with an implementation period 2021-2023.

• Reform 6: Register reform to unleash the potential of egovernment to improve the business environment

The envisaged reform aims to optimize the organization of the registers in the state administration to ensure: their maintenance with the lowest possible costs; the official exchange of information and data for the provision of quality services; the possibility to provide services based on registers kept by other administrative bodies; quality, completeness and security of the data. The digitization of paper files will allow the transition to data-driven

⁴⁸SeeAppendixNo. P₃₇





⁴⁷See Appendix P₃6

governance and the provision of secure, convenient, integrated end-to-end e-services to citizens and businesses.

1. Development, discussion and adoption of amendments to the Electronic Government Act (Q2 / 2022)

Legislative changes will be made to: (i) Introduce the obligation for the data in registers related to exercising of powers of the executive and the judiciary to be stored, maintained and updated in structured electronic form; (ii) Introduce rules for establishment of registers of administrative bodies and the requirements for these; (iii) Introduce definitions of a "register", "information system" and "central data controller". The draft normative act will be consulted with all affected parties and submitted to the National Assembly;

2. Development, discussion and adoption of an updated strategic document for the register reform $(Q_1 / 2022)$

An update of the strategy document for the reform of the registers will be prepared, in which: (i) Specific steps and deadlines for the implementation of the "digital by default" principle will be outlined; (ii) Targets, steps and deadlines for digitization of data in key registers will be indicated; (iii) The Information System for Centralized Establishment and Maintenance of Registers will be integrated into the general logic of the register reform and registers infrastructure. The draft strategic document will be consulted with all stakeholders and proposed for decision by the Council of Ministers;

3. Development, discussion and adoption of a plan for accelerated creation of a Property Register (Q1 / 2022)

A specific strategic document for accelerating the establishment of the Property Register will be prepared, in which: (i) Specific steps and deadlines for the individual stages for the establishment of the Property Register will be set out; (ii) the main provisions of the necessary regulatory changes in order to implement the reform will be indicated. The draft strategic document will be consulted with all stakeholders and proposed for decision by the Council of Ministers;

4. Development, discussion and adoption of amendments to special laws in connection with the applying of the principles of the register reform $(Q_1/2023)$





Draft amendments have to be prepared for 35 special laws in order to: (i) prohibit administrative authorities to require data or documents available in a public register and setting an obligation to conduct official data checks; (ii) regulate the public nature of most of the registers regulated by law and providing for them to be maintained in a publicly accessible electronic form; (iii) determination of specific rules for the maintenance of the registries and for the respective official exchange of information. The draft regulation shall be consulted with all affected parties and submitted to the National Assembly;

5. Development, discussion and adoption of amendments to the Law on Cadastre and Property Register (Q1/2023)

A draft for amendments to the law shall be prepared, with which: (i) the content of the property lots and the process of their creation are recorded; (ii) the responsibilities of the entry judges and the Registry Agency in the process of establishing the register shall be indicated. The draft regulation shall be consulted with all affected parties and submitted to the National Assembly;

5. Development, discussion and adoption of amendments to the Civil Registration Act and to special laws(Q1/2026)

Draft amendments to the Civil Registration Act and the special laws shall be prepared targeted to: (i)mandatory certification of the circumstances related to birth, marriage and death is created only ex officio through the National Electronic Register of Civil Status Acts; (ii) it is forbidden for the administrative bodies to require from the citizens data or documents related to their civil status (regarding birth, marriage and death). The draft regulations shall be consulted with all affected parties and submitted to the National Assembly.

Investment 10: Digitalizing of the information files in the administration containing registry data and e-authentication from registers

The measure⁴⁹ is planned to create prerequisites for the widespread provision of electronic and internal electronic administrative services, as well as of complex administrative services, proactive services and "life episode services". This will be achieved when a

 $^{^{49}}$ See attachment Nº P38





major part of the processes of certification will be standardized and automated. The certification will be possible where digitalized information arrays are present. The project foresees the digitalization of information arrays, containing register data of key administrations – The Registry Agency and the National Social Security Institute, as well as the digitalization of the civil status acts, kept by the municipal administrations. For the purpose of fulfillment of the objectives of the project, as well as for similar future initiatives for digitalization of less significant registers, a platform shall be implemented for automation of the processes of digitalization and the following further processing, storage and management of digitalized information. The realization of the project is of key importance for the ongoing register reform. The total planned resource is BGN 127.5 million and the period of implementation is 2021-2025 Γ.

d) Complementarity and demarcation with the Cohesion Policy instruments

The investments under the Cohesion Policy shall support the transition to a management based on the potential of data. The main emphasis is the extension of the open data volume, generated and processed by the government institutions and the business and the facilitation of their sharing. The key to achieve maximum effect is the integration and synergy of these measures with investments in ensuring connectivity through high-capacity networks, financed under the Plan.

To derive maximum benefits for the society from the digital transformation of the public sector the support will be oriented to ensure a reliable, functional and accessible infrastructure and cloud services, both for centralized and horizontal solutions for e-government. The deepening digitalization of the public sector brings to the fore the necessity to ensure a high level of cyber security. What will be supported is the development and approval of centralized mechanisms and instruments for secure data and public services protection while applying the highest standards of cyber security.

e) Green and digital dimensions of the component

The measures in the area of e-justice (Reform 1, Investments 1, 2, and 3), e-government (reform 6, investments 9 and 10) and digitalization of







the construction sector (Reform 5, Investments 7 and 8), as well as Investment 4 have very serious digital dimensions and will accordingly contribute significantly to the achievement of the objective of 20% for the digital dimensions of the Plan, as determined, in the Regulation on the Recovery and Resilience Facility (valuation of 100% digital costs – see table xxx below). The measures proposed in the component contribute for the green transition, taking into account the six climatic and ecological objectives, determined in the Taxonomy Regulation and they do not infringe the principle "do not significantly harm", as defined in the Taxonomy Regulation, but according to the used methodology of EC for calculating the contributions to the double transition, the component includes 0% climatic costs.



Table. xxx: Green and Digital Effects

Short Title		Green	objectives		Digital Objectives		sition lenges
Component	Climate Tag	Environ mental Tag	Intervention field	DNSH		Green	Digital
10:Business environment	0%	146			100%	0	463,62 9
REFORM 1 Reform of the legal framework of e-justice	n/a	n/a	n/a	n/a	n/a	n/a	n/a
INVESTMENT 1: Strengthening, further development and upgrading of the of the Single Court Information System	0%	0%	11/digitalizati on of Justice systems	yes	100%	0	27.455
INVESTMENT 2: Further development of the information systems of the court for access for citizens and legal entities to e- justice and e-services	0%	0%	11/digitalizati on of Justice systems	yes	n/a	0	1,300
INVESTMENT 3: digitalization of key court proceeding processes in the system of administration of justice	0%	0%	11/digitalizati on of Justice systems	yes	100%	n/a	7.160
REFORM 2: Raising the efficiency of the investigation of corruption practices	n/a	n/a	n/a	n/a	n/a	n/a	n/a
INVESTMENT 4: Transformation of the	0%	0%	11/digitalizati on of	yes	100%	0	36,000



Г	1				1			,
existing at the			Justice					
Prosecutor's Office of			systems					
Republic of Bulgaria								
infrastructure of new								
type –resistant to failure, reserved,								
productive and								
protected								
INVESTMENT 5:			11					
Improving the quality	0%	0%		yes	100%		0	128,80
and sustainability of				,				7
the policies in the area								
of security and counter								
action to corruption								
REFORM 3:								
Increasing the using of	n/a	n/a	n/a	n/a	n/a		n/a	n/a
alternative methods for								
conflict resolution and								
introduction of mediation, obligatory								
for certain types of								
disputes								
INVESTMENT 6:			11/digitalizati					
Introducing methods	0%	0%	on of	yes	100%		0	1,506
for alternative dispute			Justice	J				,
resolution in the court			systems					
system in Bulgaria -								
pilot introduction of								
compulsory court								
mediation								
REFORM 4: Raising	,	,	n/a	n/a	n/a		,	,
the efficiency of the	n/a	n/a					n/a	n/a
insolvency and stabilization								
framework								
REFORM 5: Digital	n/a		n/a	n/a	n/a		n/a	n/a
reform of the	11/ 61	n/a	11/60	11/ 60	11/61		11/ 66	11/ 44
Bulgarian construction								
sector								
INVESTMENT 7:								
Support to the pilot	0%	0%		Yes	100%		0	7,935
phase for introduction			11					
of information								
modeling (CIM/BIM)								
in the investment								
designing in construction as a basis								
for digital reform of								
the construction sector								
in Bulgaria								
INVESTMENT 8:								
Single information	0%	0%		Yes	100%		0	3,500
system of the spatial								
development,			11					
investment designing								
and construction								
permission INVESTMENT 9:			11/donlov-mor			H		
Creating a national	0%	0%	11/deploymen t of the	VAC	100%		0	122,46
scheme for electronic	0.70	0 70	European	yes	10070		U	6
identification and			digital identity					0
personalization in the			scheme for					
Bulgarian identity			public and					
documents.			private use			LI		
REFORM 6: Creating								
a national scheme for	n/a	n/a		n/a	n/a		n/a	n/a
electronic			n/a					
identification and								



personalization of the Bulgarian identity documents							
INVESTMENT 10: Digitalization of information arrays in the administration, containing register data and e-certificates of registries	0%	0%	11	yes	100%	0	127,50 0



g) Key stages, objectives and time plans

Table xxx presents the key stages and goals, connected with the implementation of the component.

Table xxx: Key Stages and Objectives

3) Financing and costs

Table xxx presents the indicative estimates of the financial resources, necessary for the implementation of the component.

Table xxx: Estimated Costs

Table xxx: Estimated Costs

Comp	Investments/reforms	Detailed cos	t estimates	Methodolog information	ical	Comparative in	formation about costs incl	arred in the past
onent		Cost in BGN	Description	Used methodol ogy	Source	Cost in BGN	Source	Possible reference to past EU programs
	Reform of the legal framework of e- justice	0	n/a	n/a	n/a	n/a	n/a	n/a
	Strengthening, further development and upgrading of the Single Information System of the courts	27,455,00 0	Strengthening, further development and upgrading of the Single Information System of the courts	Market study, Historical data			Detailed estimates and justification for the formation of cost details are given in Annex	
	Further development of the information systems of the courts for the access of citizens and legal entities to e-services and e-justice	1,300,000	Further development of the information systems of the courts for the access of citizens and legal entities to e-services and e-justice	Historical data			Detailed estimates and justification for the formation of cost details are given in Annex	
	Digitalization of key court proceedings in the system of the administrative justice	7,160,000	Digitalization of key court proceedings in the system of the					



		administrative justice					
Raising the efficiency of the investigations of corruption crimes	0	n/a	n/a	n/a	n/a	n/a	n/a
Transformation of the existing in the Prosecutor's office of Republic of Bulgaria information and communication infrastructure of a new type: resistant to failure, reserved, productive and protected.	36,600,00	Transformation of the existing in the Prosecutor's Office of Republic of Bulgaria information and communication infrastructure of a new type: resistant to failure, reserved, productive and protected.				Detailed estimates and justification for the formation of cost details are given in Annex	
Improvement of the quality and sustainability of the policies in the area of security and counter action to corruption.	128,807,9 38	Improving the quality and sustainability of the policies in the area of security and counter action against corruption	Market study, historical data			Detailed estimates and justification for the formation of cost details are given in Annex	
Extending the use of alternative methods for dispute resolution and introduction of mediation obligatory for certain cases	0	n/a	n/a	n/a	n/a	n/a	n/a
Introducing methods for alternative resolution of disputes in the court system in Bulgaria- pilot introduction of compulsory court mediation	1,506,40	Introducing methods for alternative resolution of disputes in the court system in Bulgaria- pilot introduction of compulsory court mediation	Market study, historical data			Detailed estimates and justification for the formation of cost details are given in Annex	
Raising the efficiency of the framework of insolvency and stabilization	0	n/a	n/a	n/a	n/a	n/a	n/a
Digital reform of the Bulgarian construction sector	0	n/a	n/a	n/a	n/a	n/a	n/a
Support to the pilot phase for introducing construction information modeling (CUM/BIM) in investment designing and construction as a basis for digital reform of the construction sector in Bulgaria	7,934,560	Support to the pilot phase for introducing construction information modeling (CHM/BIM) in investment designing and construction as a basis for digital reform of the construction sector in Bulgaria	Market study, historical data			Detailed estimates and justification for the formation of cost details are given in Annex	
Single information system for spatial development, investment designing and construction permits.	3,500,000	Single information system for spatial development, investment designing and construction permits.	Market study, historical data			Detailed estimates and justification for the formation of cost details are given in Annex	
Creating a national scheme for electronic identification and personalization in the Bulgarian personal documents	192,000,0 00	Creating a national scheme for electronic identification and personalization in the Bulgarian personal documents	Market study, historical data			Detailed estimates and justification for the formation of cost details are given in Annex	
Register reform for unleashing the potential of e- government for improvement of the business environment.	0	n/a	n/a	n/a	n/a	n/a	n/a
Digitalization of information arrays in the administrations, containing registry	127,500,0 00	Digitalization of information arrays in the administrations,	Market study, historical data			Detailed estimates and justification for the formation of cost details are given in	



			*^ ^
data and e-certificates from registers.	data and e- certificates from registers.		

2.D.2. Social Inclusion

a) Description of the component

Summery SOCIAL INCLUSION

Policy Area: Social Inclusion.

Goal:The objective of the Component is to encourage the social inclusion of the vulnerable groups (people with disabilities, elderly people and children, persons and families in a disadvantaged situation, etc.) and improving the quality and extending the scope of the offered social services, introduction of integrated approaches in the provision of social services alongside with the development of integrated services.

Reforms and/or investments:

- Improving the overall system for social support by adopting a Social Assistance Code and secondary legislation;
 - Continuing the reform in the area of social services;
- Continuing the support for deinstitutionalization of the elderly people and people with disabilities;
- Personal mobility and accessibility for people with permanent disability;
- Development of regional administrative capacity for modernizing the enterprises in the social and solidarity economy and introducing individualized solutions;
- Culture and creative industries in Bulgaria: creating an inclusive, internationally competitive and sustainable ecosystem;
- Digitalization of the files of museums, libraries and audiovisual funds.



Cost Assessment: The indicative estimates for costs necessary for the implementation of the objectives of the component stand at totally BGN 963.5million, of which BGN 944 million from the Recovery and Resilience Facility and BGN 19.6 million national co-financing.

b) Main Challenges

The main focus in the government's response to the social-economic consequences from the pandemic was the job maintaining. A key measure was the coverage of 60% of the costs for labor (wages and social security contributions) in the sectors affected by the crisis (the so called "60/40 measure"). The government also introduced subsidies for salaries where unemployed people are hired, as well as for preserving jobs in the tourism and transport sectors and provided support for self-employed people (like free lancers, people working in the area of culture). The measures in support of the most vulnerable groups also included: continuation and extending the initiative "Hot lunch"; support for families with children up to 14 yearswhere parents cannot engage in distance work from home and cannot use a paid leave; additional monthly pension supplements, etc.

The pandemic of COVID-19 showed that the degree of shock resistance of individual systems in the country is not sufficient to guarantee fully adequate and timely support for individual groups of the society, especially the vulnerable ones.

The structural challenges in the area of social inclusion are significant. Poverty and social exclusion are serious challenges and the income inequality is high. The realized economic growth is not sufficiently inclusive to help the reduction of social inequality. The social transfers have a very small impact on the reduction of poverty and inequality. The relative share of persons exposed to the risk of poverty, is among the highest in EU. The risk of poverty is even higher for some of the most vulnerable groups of the population, e.g. the elderly people. In 2019 almost ½ of the population above the working age is in the risk of poverty or social exclusion and almost 1/3 of this population suffer from severe material deprivation. Even though the two indicators show a significant improvement in the last ten and more years, the backlog within the community remains significant. At the same time, large part of elderly people live in villages which result in some restrictions to their access to social services.

The people with disabilities are another main group which representing a significant part of the population which is at serious risk of poverty and social exclusion. Almost 1/3(29.7% in 2019) of the people in working age, but with disabilities, live in material deprivation which is almost 3 times higher compared to the EU average (10.6%). The problems regarding the quality and accessibility of the social services for the people with disabilities are similar to the ones which exist in the provision of services for the elderly people. Fragmentation and low level of accessibility are among the main challenges.

* * * *

c) Objectives

The component is in line with the Council 2019 and 2020 Country Specific Recommendations and will contribute directly to implementation of aspects of SR 2 of 2020, as well as SR 4 from 2019. The planned reform for enhancement of the overall system for social support through codification of its objectives is targeted to overcome the structural challenge linked with the low efficiency of the social policy in comparison with its objectives to reduce poverty and inequality. The reform efforts in the area of social inclusion are expressed in reform 2, for the realization of which of a key importance is the successful implementation of investment 1. The realization of the interventions planned in the component and reformist intentions will be of key importance for raising the social resistance to shocks. Investments 4 µ 5 have the potential to be powerful engines in the process of overcoming the social consequences of the crisis, caused by COVID-19 pandemic, in terms of isolation and disintegration of communities. Investments 2 and 3, besides their indisputable effect regarding the strengthening of social sustainability, will give their contribution for the economic recovery as well, given the created opportunities for representatives of certain vulnerable groups to access the labour market. The component shall have indirect contribution for the implementation of other country specific recommendations such as raising the energy efficiency (SR 3/2019, SR 4/2020), thus also contributing for the implementation of the objectives of the green transition.

d) Planned reforms and investments

Reform 1: Improvement of the overall system for social support by adopting Code of Social Support and secondary legislation



The reform aims at higher efficiency of the social assistance system where a complex approach is introduced to provide social support to persons and families from the vulnerable groups; introduction of "one stop shop" servicing, which acts on the basis of simplified and unified procedures, rules, criteria for access to the measures for social support, as well as raising the efficiency of the administration, working in this area; minimization of the management costs of the regulated social processes.

1. Analysis of the system for social assistance and presentation of the analysis to the National Assembly $(O_4/2020)$

A research team of the Bulgarian Academy of Sciences has prepared "Expost evaluation of the impact of the existing legislation in the area of social assistance and social services". The evaluation was presented to the National Assembly on 30.10.2020 with a letter of the Minister of Labor and Social Policy;

2. Preparation of a Code for Social Support and necessary documentation and submission to the National Assembly. (Q4/2020)

A Joint Working Group was set up with the participation of representatives of the responsible institutions with professional expertise and competences in the social sphere, with the task till 29.12.2020 to develop a project for codification of the matter, which shall regulate the social relations in the system of social protection. The stakeholders were involved at the time for work on the draft of a normative act. Preliminary consultations were carried out with the social partners, the organizations of and for the people with disabilities, their nationally recognized representatives, non-government organizations, parent organizations and the National Association of Municipalities in Republic of Bulgaria.

The Code shall regulate the public relations, related to guaranteeing the right to social support connected of the citizens in Republic of Bulgaria, who cannot satisfy alone their basic needs due to health, age, social and other reasons. The social support shall include a complex of measures, connected with financial and/or material support and/or provision of high quality social services and/or personal assistance.

The Code was submitted to the National Assembly by the Minister of Labor and Social Policy, together with a report as per Article 22 (2) of the Ordinance on the scope and methodology for carrying out the impact assessment, as well as a summary of the overall preliminary impact assessment;



3. Discussion of the draft Code with a view of undertaking future actions in connection with the will of the law-maker. (Q1/2021) Within the framework of the started legislative process, there will be discussions realized within the political parties represented in the Parliament:

- 4. Adopting a Social Support Code $(Q_4/2021)$ The time schedule of the dossier provides for the Code to be adopted by the legislator in $Q_4/2021$;
- 5. Development and adoption of by-lawsQ2/2022)

The draft of the Code of Social Support, foresees the need to update the socandary legislation on its implementation: Ordinance on the terms and conditions for the granting, payment, amendment, suspension, recovery, resumption and termination of financial assistance; Ordinance on the conditions and order for performing social services; Ordinance on social services planning; Ordinance on the Quality of Social Services; Ordinance on the Standards for payment for the labor of employees, performing activities on providing social services, which are financed from the state budget; Ordinance on the conditions and order for determining the size, the granting, disbursement, modification, renewal and termination of financial assistance for covering the costs on heating during the heating season, as well as recovery of illegally paid funds; Ordinance on the Terms and Conditions for providing Personal Assistance; Tariff for the fees for issuing and renewal of a license for provision of social services; Code of Ethics of the employees performing the activities of providing social services:

6. Reconstruction of the Social Assistance Agency into Social Support Agency. Development and adoption of Rules of procedures of the Social Support Agency. (Q3/2022)

The Social Assistance Agency shall be transformed into Social Support Agency. The objective of this change is to optimize the administrative and functional structure of the system and of the inter-institutional coordination and interaction as an important condition for its effective financial management. The Social Support Agency shall be a legal successor of the assets, liabilities, archives, rights and obligations of the Social Assistance Agency. The activity, structure and number of staff of the Social Support Agency, the number and the territorial scope of its divisions will be determined by the Rules of procedure, adopted by the





Council of Ministers upon proposal made by the Minister of Labor and Social Policy, within 1 month after Code enters into force.

• Reform 2: Continuation of the reform in the area of the social services

Reform efforts are aimed at completing the reform of social services, which started with the adoption of the Law on Social Services.

- 1. Entering of the Law on Social Services into force (Q3/2020) The Law on Social Services entered into force on 01.07.2020 and set the mechanisms of planning, financing, control and monitoring of services, as well as improving their quality, efficiency and sustainability,;
- 2. Development and adoption of the Ordinance on Social Services Planning $(Q_1/2021)$

The Ordinance defines: criteria for determining the National Charter of Social Services for each of the social services, the criteria for determining the maximum number of users for all social services for which financing is ensured from the state budget, as well as the social services, which are planned on municipal level. The draft of the ordinance was prepared and published on the site for public consultations on 14.12.2020 Γ .;

- 3. Preparing and adopting a National Map of Social Services (Q4/2021) The National Map of Social Services shall determine the maximum number of users of all social services, for which financing is secured from the state budget. The criteria for determining the services and the maximum number of users in the National Map of Social Services shall be determined according the number and the demographic profile of the population. The National map of social services shall be developed on the basis of the analysis of the municipalities regarding the needs for social services at municipal and regional level;
- 4. Development and adoption of an Ordinance on the Quality of Social Services (Q4/2021)

The Regulation of the social services is of a key importance for the implementation of the reform in the area of social services and achievement of the objectives of the Law on social services. It will determine the standards for the organization and management of the service; qualification and professional development of the employees which perform the activity of provision of the service; the efficiency of the service in terms of results achieved for its users in response to their needs, including the integrated inter-sectoral services and the respective criteria. The procedure for control, monitoring and





assessment of their quality and efficiency of the social services by the municipalities, suppliers of social services and the Agency for quality of the social services will be covered too. The Regulation will determine the minimum requirements necessary for modernization of the system for the number and qualification of the employees, which perform the activity for delivering the different kinds of social services.

 Investment 1: Continuation of the support for deinstitutionalization of the caree for elderly people and people with disabilities

The Project⁵⁰ supports the continuation of the reform of the system of social services, including the long-term care. It is envisaged to build and equip new social and integrated health-social services for resident care and accompanying specialized and consultative social services for persons with disabilities, as well as carrying out construction activities and delivering equipment and furniture with the aim of reforming the existing homes for elderly people. The project has a specific component for raising the energy efficiency of the social infrastructure. Development, construction and equipment of new, flexible and oriented to needs of the specific target groups and meeting the current requirements social and integrated health-social services shall contribute directly to support and encourage the social inclusion of persons with disabilities and elderly people, dependent on specialized care. Outside of the direct effects from the improvement of the physical environment, the new equipment and furniture will contribute for raising the quality of services and their efficiency, with a view of the achieved results for the persons who use them in response to their needs. With the realization of the project 430 sites of the social shall be supported in the deinstitutionalization of the services for long-term care for elderly people and people with disability, as well as 1200 social services. The total planned resource is BGN 753 million. With a period of implementation 2021 - 2025.

• Investment 2: Personal mobility and accessibility for people with permanent disabilities

⁵⁰Вж. приложение № П39





The objective of the pilot project⁵¹ is to encourage the activities for securing personal mobility and accessibility for people with permanent disability for their social inclusion taking account of their specific needs. It is envisaged to provide technical aids, specialized software programs, electronic technical tools for compensation of sensory deficit, adapted motor vehicles, technical and medical devices, other similar means and devices according to the specific needs, and also ensuring training of the users of the technical aids and/or specialized programs.. The total planned resource stands at BGN 24 million with a period of implementation 2021 – 2023.

• Investment 3: Development of a regional administrative capacity for modernizing the enterprises of the social and solidarity economy and introduction of individualized solutions.

The Measure⁵² envisages expanding and modernizing the opportunities for support to the social and solidarity economy by reforming the policy and applying individualized approach to the needs of every single entity of the social and solidarity economy by creating focus points with territorial coverage in the six NUTS II regions of the country. An accent of the provided support shall be the transformation of the social and solidarity economy in the context of the double (green and digital) transition. The project envisages a survey of at least 200 social enterprises for the possibility for digitalization of their work processes and assistance for implementation of the recommendations made in at least 100 of them, as well as conducting training events with the workers related with the introduced digital solutions. At the same time the project promotes creation of networks and conducting training initiatives and partnerships for involvement of social entrepreneurs in social and civil dialogue with state institutions, local authorities and local communities. The sustainability of the results of the project will be ensured through the planned after its completion transformation of the focus points into local incubators, realized in the form of publicprivate partnership, based on maintaining their functioning and through contributing available assets. The overall planned resource is BGN 23.1 million with a period of implementation 2021 – 2024.

⁵²Вж. приложение № П41





⁵¹Вж. приложение № П40

• Investment 4: Culture and creative industries in Bulgaria България: building an inclusive, internationally competitive and sustainable ecosystem

The project⁵³ aims to mobilize the whole potential of the sector of culture for overcoming the social consequences of the COVID-19 crisis, to tackle isolation and the process of disintegration of the communities. For this reason the project proposes to reform the public costs for culture, and to define 3 cost programs "Support for the European cultural cooperation", "Support for the development and access for the audience" and "A new generation of local policies for culture", financing on competitive principle the cultural product and content. A special activity is foreseen for raising the administrative capacity of the employees of the administration and raising the skills and competences in the context of the digital transition – for the representatives of culture and creative industries. The total planned resource is BGN 96.7 million. (BGN 77.2 million at the expense of the Recovery and Resilience Facility) with a period of implementation 2021 – 2024.

• Investment 5: Digitalization of the museum, librarian and audiovisual funds

The main objective of the project⁵⁴ is to perform an overall reforming of the policies of the state for digitalization, protection and preservation of cultural heritage and to ensure equal free access for all interested parties to the cultural wealth of the country, without any restrictions. Single standards shall be introduced for digitalization of the funds of the museums, libraries, the Bulgarian National Film Library, the Bulgarian National Television and the Bulgarian National Radio; a single methodology shall be developed for realizing the process of digitalization at the national level, with which a single coordinated approach with centralized control shall be introduced; a single electronic platform shall be created, which shall keep in a digital form the cultural heritage of the country, which shall be installed on the State hybrid private cloud. Part of the funds, kept in the museums and library network in the country shall be digitalized, as well as the audiovisual funds of the Bulgarian National Film Library, Bulgarian National

⁵⁴See appendix № P44





⁵³See appendix № P42

Television and Bulgarian National Radio. The overall planned resource is BGN 66.7 million with a period of implementation 2021 – 2026.

e) Complementarity and demarcation with the instruments of Cohesion Policy

During the next programming period the interventions under ESF + will be targeted at forming and improving the quality of human capital, as a main factor for production, through employment and social inclusion. The realization at the labor market and the active inclusion of vulnerable groups in employment and in social terms will be supported by raising the possibility to start work, improve the skills, qualification and requalification, encouraging their social-economic integration, improving their access to good quality social services, intermediary services job-finding services and integrated services. The efforts shall target improving the efficiency and sustainability of the policy in the area of social inclusion as a method to reduce social inequalities. The policy shall be to support the equal access to specialized health and long-term care, the raising of the quality and extending the scope of the provided social services. The reform that started in 2014 in the system of social services for long-term care shall enter in its main phase and it is foreseen to close approximately 60% of the remaining specialized institutions for persons with disabilities while all existing homes for elderly people are reformed in accordance with the new criteria for quality. Within the framework of the implementation of the envisaged activities in the Recovery and Resilience Plan it is foreseen to perform the main construction activities and investments in equipment and furnishing necessary for the so called "second stage" of the reform of the system of social services for long-term care. On the other hand, activities for energy efficiency, renovation of equipment and furniture and social services in the community, delegated by the state ,as well as the implementation of anti-pandemic measures are aimed to raise the quality of the provided social services to the users. These basic investments shall be in parallel supplemented by activities under the Regional Development Program 2021-2027, and the "soft measures" will be financed from the Human Resources Development Program 2021-2027.

e) Green and digital dimensions of the component

Investment 1 will contribute to the increase of the energy efficiency due to the renewal of social infrastructure. The measures proposed in the component (valued 40% climate costs – see. Table. xxx below) contribute to





the green transition by taking into account the six climatic and ecological objectives, determined in the Taxonomy Regulation and do not infringe the principle "do not significantly harm" as defined in the Taxonomy Regulation.



By including 7% of digital costs (see Table xxx below), this component contributes also for the 20% objective for the digital dimensions of the Plan, specified in the Regulation on the Recovery and Resilience Facility.

	Green	Digital		Transition			
Short title	objectives			challenges			
	Climate	Environmental	Intervention	DNSH		Green	Digital
	Tag	Tag	field				
Component 11: Social	40%				7%	376,500	66,742
REFORM 1: Improving	n/a	n/a	n/a	n/a	n/a	n/a	n/a
the overall social support							
REFORM 2: Continue	n/a	n/a	n/a	n/a	n/a	n/a	n/a
INVESTMENT 1:	100%	40%	26	yes	0%	376,500	0
Ongoing support for the				,		,	
INVESTMENT 2:	0%	0%	115	yes	0%	0	0
Personal mobility and				-			
IVESTMENT 3:	0%	0%	101	****	0%	0	0
Development of regional	U%	0%	101	yes	0%	0	U
administrative canacity							
INVESTMENT 4:	0%	0%	129	T/OC	0%	0	0
Culture and creative	0%	0%	129	yes	0%	0	U
industries in Bulgaria:							
NVESTMENT 5:	0%	0%	11	yes	100%	0	66,742
Digitisation of museum,							

g) Stages, objectives and time schedule

Table xxx presents the key stages and objectives related to the implementation of this component.

Table xxx: Key stages and components

h) Financing and costs

Table xxx presents the indicative estimates financial resources necessary for the implementation of the component.

Table xxx: Cost estimates

Table xxx: Green and Digital Impact



	17	Detailed cost estimates		Methodology information		Comparative information on costs incurred in the past		t	
Component	Investment / Reform	Costs in BGN	Description	Meshodology implemented	Source	Costs in BGN	Source	Possible reference to past EU programmes.	
	Improving the overall system of social support by adopting a Code of Social Support and regulations	0	al	sa.	as	als	s a	n/s	
	Continuing the reform in the field of social services	o	s'a	s'a	a'a	a/a	s'a	e/a	
Social inclusion	Ongoing support for the desautionionalization of care for the elderty and people with disabilinies	753,000,000	Construction and equipment of 114 new social and integrated health and social services for residential care and 114 accompanying applipting and consultative social services for people with disabilities - BGN 413 million. Carrying out oppose of equipment and fluminume with view to reforming the existing \$1 flooms for the elidely - BGN command of the elidely - BGN contribution and merovation of equipment and furnithes in approximately 1200 existing social services in the community delegated by the state activities, as well as implementation of		OPRD, OPHRD, NSI	BGN 753 million	www.esf.bg www.bgregio.euwww.esi.bg	BG16RFOP001-5.002 Support for the distributionalisation of social services for the elderly and people with disabilities, funded by the Operational Program Growing Regions 2004 BG053M50P001-2.003 BG053M50P001-2.005 BG053M50P001-2.005 BG053M50P001-2.005 BG053M50P001-2.005 BG053M50P001-2.005 BG053M50P001-2.005 BG053M50P001-2.005 Support for Persons with Disabilities - Component 2 and BG053M50P001-2.062 Social Inclusion of Persons with Meetal Disorders and Intellectual Disabilities under Operational Personal mobility and accessibility for people with personaent disabilities for people with personaent disabilities of disabilities disabilit	
	Personal mobility and accessibility for people with permanent disabilities	24,000,000	Personal mobility and accessibility for people with permanent disabilities	Market survey, historical data			Detailed estimates and justification for the formation of detailed costs are given in the Annex		
	Development of regional administrative capacity for undepolation of the emergrises of the social and solidarity economy and introduction of individualized solutions	23,035,917	Development of regional administrative capacity for quodespication of the enterprises of the social and solidarity economy and introduction of individualized solutions	Market survey, historical data			Detailed estimates and justification for the formation of detailed costs are given in the Annex.		
	Culture and creative industries in Bulgaria: building an inclusive, internationally competitive and sustainable ecosystem.	96,745,900	Outrure and oceative industries in Bulgaria: building an inclusive, internationally competitive and sustainable ecosystem.				Detailed estimates and justification for the formation of detailed costs are given in the Annex.		
	Digitisation of museum, library and audiovisual funds	66,742,000	Digitiration of museum, library and audiovisual funds	Market survey, historical data			Detailed estimates and justification for the formation of detailed costs		



a) Component description

Summary HEALTH

Policy area: Health.

Objective: The main objective of the component is to increase the resilience of the health system to shocks while increasing the population's access to quality and timely health care.





Reforms and/or investments:

- Updating the strategic framework of the Health sector;
- Complete implementation of the National Health Information System;
- Creation of mechanisms for attracting and retaining staff in the healthcare system and their professional realisation in certain regions of the country;
- Modernisation of facilities and equipment and introduction of innovative technologies for treatment of the population in the main state and municipal medical sites;
- Establishment of a training and development centre for the Centre for Interventional Neuroradiology;
 - Modernisation and development of psychiatric care;
- Establishment of a national register (database) for prevention and monitoring of oncological diseases;
- Development of the national emergency call system with the single European number 112.

Cost Estimation: The indicative cost estimates needed to achieve the objectives of the component amount to a total of BGN 674.5 million, from the Recovery and Resilience Facility.

b) Main challenges

The COVID-19 pandemic has brought unprecedented changes globally, putting public systems to the test. In Bulgaria, as elsewhere in the world, the healthcare system has been most directly affected, in which urgent action had to be taken to ensure the treatment of those affected and to limit the spread of the infection. Given the degree of riks to public health, the government has provided free access to primary medical care related to testing for and treatment of COVID-19 to all citizens of the country, regardless of their social security status. Hospitals were designated for the treatment and monitoring of patients diagnosed with COVID-19, and





patient admission structures were assigned to each hospital, incl. infectious disease wards, internal medicine wards, pediatrics, pneumology and phthisiology, cardiology, etc. However, this has also put the health system to a serious test in terms of hospital treatment of patients with other infectious and non-communicable diseases who are not infected with coronavirus. In parallel with determining places for treatment and monitoring of carriers of the infection, medical consumables and hospital equipment have been provided, incl. vital personal protective equipment for medical staff. The capacity of the laboratory network in the country for detection and proof of the COVID-19 infection has been strengthened, while increasing the possibilities for daily diagnostics and reducing the time for obtaining test results. ,. In addition to the actions taken to ensure the timely diagnosis and treatment of those affected by the pandemic, support for the health system has included measures to increase the motivation of staff in charge of management of the pandemic and its consequences of, as well as measures to provide additional capacity to medical units having infectious diseases wards, for reaction in case of spread of infectious diseases. The pandemic has highlighted and exacerbated some of the structural challenges the country's health system faces in terms of its sustainability, affordability and capacity. Actions are needed to renovate outdated facilities, to address the shortage of health professionals in certain specialties and their uneven geographical distribution, as well as to cope with the difficulties in providing timely and quality health services in any part of the country.



This component is in line with the Country-Specific Recommendations of the Council for 2019 and 2020, and will directly contribute to the implementation of aspects of SR 1 of 2020 and SR 4 of 2019. All planned investments are directly targeted to strengthen the accessibility and capacity of the health system to provide quality health services. In addition, planned reform 3 aims to address the structural challenges related to the shortage and geographical distribution of health workers. A significant part of the government's decisions to address the problems in the sector fall outside the scope of the measures planned in the Recovery and Resilience Plan, such as strengthening and expanding the capacity of pre-hospital care by expanding the scope of activities related to prevention, e-health, etc. Financing of the implemented measures is provided by national funds or by the instruments of the EU Cohesion Policy. The component will also have





an indirect contribution to the implementation of other Country-Specific Recommendations, e.g. increasing energy efficiency (SR 3/2019, SR 4/2020). The implementation of the interventions and reform intentions planned in this component will be key to increasing the social resilience to shocks.

d) planned reforms and investments

- **Reform 1: Updating the strategic framework of the Health sector**The ongoing reform envisages changes in the strategic framework of the Health sector in order to increase the resilience of the healthcare system to shocks.
 - 1. National Development Programme BULGARIA 2030 (Q4 / 2020) The detailed strategy of the National Development Programme BULGARIA 2030⁵⁵ (adopted by the Council of Ministers on 2 December 2020), within the *Health and Sport* specific priority, sets specific goals for priority development of health promotion and disease prevention, as well as e-health, with a stated clear desire to optimise healthcare costs and increase the share of outpatient treatment costs. Special attention is paid to human resources in the healthcare system;
 - 2. Action plans in implementing the National Development Programme BULGARIA 2030 (Q4 / 2025)

The detailed description of the specific measures and interventions that will be undertaken in the implementation of the National Development Programme BULGARIA 2030 priorities (including the Health and Sport priority) will be structured in three-year action plans, which will be updated on an annual basis no later than the end of each calendar year. Each action plan (except the first one) will contain a report (and an impact assessment) on the implementation of the measures under the individual priorities, incl. the Health and Sport priority, for the period from the beginning of the strategic document to the middle of the calendar year in which it is prepared. Within the framework of the implementation of the Recovery and Resilience Plan, 5 three-year action plans will be developed;

3. Development of the National Health Strategy 2021-2030 (Q4 / 2021) Presenting a long-term vision for the development of the health sector, its strategic goals and priorities, as well as specific policies to address the existing structural challenges in the health system in order to plan future actions and the real chance to achieve economic growth and social well-

^{55 &}lt;u>https://www.minfin.bg/upload/46210/bulgaria+2030.pdf</u>



being through optimal investment in good health. The adoption of a long-term strategy for a period of ten years will ensure greater sustainability of the implemented policies given the inert nature of the healthcare processes;

4. Action Plan for the Implementation of the National Health Strategy $(Q_4 / 2025)$

Overcoming regional imbalances and ensuring functional interaction between the different levels of medical care, performance indicators optimising horizontal and vertical connections. Introduction of indicators - safety of the offered services, efficiency of the offered services, positive attitude and care that meet the needs of the people, good management.

• Reform 2: Complete implementation of the National Health Information System

The reform effort will lay the foundations for eHealth.

1. Phase 1 - Update of Ordinance 4 on the terms and conditions for prescribing and dispensing medicinal products and Ordinance on the exercise of the right of access to medical care $(Q_4 / 2020)$

The envisaged changes in the legal framework will contribute to the development of e-health. In phase 1 of the reform the following modules of the National Health Information System should be implemented: electronic direction for medical-diagnostic examinations; electronic prescription; electronic health record of citizens: nomenclatures, national health information standards for the real-time exchange of medical data required for the electronic prescription and electronic health record; the basic functionality of the core of the National Health Information System; health information portal; the necessary registers for the functioning of the electronic prescription and the electronic direction:

2. Phase 2 - Update of the Ordinance of the Minister of Health on the creation and maintenance of electronic health records of citizens and the conditions and procedure for keeping registers (Q4 / 2022)

The envisaged changes in the legal framework will contribute to the development of e-health. In phase 2 of the reform, the following modules of the National Health Information System must be implemented: addition to the electronic direction module of all other areas included in the National Framework Agreement; building a subsystem for collecting information from hospitals; building a system for monitoring and control







in healthcare; introduction of electronic administrative services and internal administrative services; completion of all registers.

 Reform 3: Creating mechanisms for attracting and retaining staff in the health system and their professional realisation in certain regions of the country

The reform is focused on overcoming the shortage of medical professionals.

1. Ordinance amending and supplementing Ordinance 1 of 2015 on the acquisition of a specialty in the healthcare system ($Q_2 / 2020$)

Taking measures to address the regional disparities in the number of medical professionals by creating an obligation for specialists who have obtained clinical specialties in state-funded institutions to work in areas with an established shortage of specialists for a period of 3 years, while at the same time this obligation is acceptable to candidates for specialisation and does not deter them from taking state-funded positions. In addition, a normative opportunity has been created for the municipalities to be able to participate in financing the training of the specialists necessary for the municipality;

2. Amending the Medical Institutions Act (Q2 / 2020)

Creating an opportunity for nurses (as well as midwives and medical assistants) to be able to open their own medical institution, which creates an opportunity for full realisation of the professional potential of these medical professionals and for their independent involvement in medical care, which in turn will increase the attractiveness of these professions;

3. Ordinance on the terms and conditions for ensuring the payment of tuition fees for students who have concluded contracts with an employer $(Q_1 / 2021)$

Creating an opportunity to meet the needs of employers for employees having the appropriate professional qualification and for long-term relationships between graduates with employers who are experiencing a shortage of such staff.

• Investment 1: Modernising facilities and equipment and introduction of innovative technologies for treatment of the population of major state and municipal medical institutions

The project⁵⁶ is aimed at strengthening the capacity of medical institutions for inpatient care, which are key to the health system in the country. With the envisaged measures for modernisation and renovation

⁵⁶ See appendix A44





of facilities and equipment, significant savings of funds from the increased energy efficiency, the reduced costs for maintenance of the facilities and equipment will be achieved. This will lead to optimising costs in state medical institutions and will improve the level of health services provided to inpatients. In addition to allowing the provision of highly specialised medical services to the population throughout the country, the provision of state-of-the-art medical equipment for diagnosis and treatment will contribute to the satisfaction of medical staff with their work, which is a key factor in reducing the process of doctors and nurses leaving the country. The total planned resource is BGN 578.9 million with an implementation period of 2021-2024.

Investment 2: Development of interventional neuroradiology measure⁵⁷ envisages the development of interventional neuroradiology in the country through the equipment of a training centre at the University General Hospital for Active Treatment (UMHAT) St. Ivan Rilski EAD and conducting pilot trainings for medical specialists in the country. The centre will be used to train specialists in implementing endovascular therapy for all cerebrovascular diseases treatment of cerebral aneurysms, cerebral arterio-venous malformations, arterio-venous fistulas, as well as therapy for acute stroke. After the completion of the project, the training centre will continue to operate, and the necessary inherent costs will be borne by the University Hospital St. Ivan Rilski EAD. The centre will be able to train students, specialists in radiology, as well as doctors specialised in radiology, neurology and neurosurgery to perform endovascular therapy for acute cerebral infarction, which according to statistics in the country is among the most serious social diseases – the second most frequent cause of mortality and the first most frequent cause of disability. The centre will also train specialists in radiology to perform therapy on vascular pathology in the periphery, as well as treatment of malignant diseases of the liver, kidneys, uterus, prostate, etc. The measure aims to strengthen the capacity of medical institutions for hospital care by increasing the knowledge and skills of medical professionals. Higher qualification of the staff will increase the quality of the provided medical services for the citizens from all over the country. This will reduce mortality and permanent disability of the population. The total planned resource is BGN 6.4 million with an implementation period of 2021-2023.

⁵⁷ See appendix A₄₅





- Investment 3: Modernisation and development of psychiatric care

 The project⁵⁸ is aimed at improving the facilities and equipment in the
 structures of the psychiatric care system for providing quality healthcare,
 modern opportunities for treatment and rehabilitation of patients, as
 well as for developing opportunities for their inclusion in society. The
 existing 12 state psychiatric hospitals in the country, 12 mental health
 centres and 21 psychiatric clinics and wards at multidisciplinary
 hospitals, which have a total bed capacity of about 4,000 beds, will be
 covered. The total planned resource is BGN 33.6 million with an
 implementation period of 2021-2024.
- Investment 4: Establishment of a national register (database) for prevention and monitoring of oncological diseases The measure⁵⁹ aims to create a national register (database) for prevention and monitoring of oncological diseases, analysis and prevention of risk factors and inclusion of Bulgaria in a pan-European cancer control centre. Cancer is the second most serious cause of death in Bulgaria, accounting for 16% of the total number of deaths (2019). The establishment of the register will allow tracking the health status of all citizens with regard to oncological diseases and will greatly assist the health authorities in the country to prepare and implement the right policies for early detection of the disease, providing quality treatment and care for patients and their families. The register will be integrated into the National Health Information System, and a two-way exchange of information will take place. The created register will include data from the health records of all citizens of the country related to oncological diseases, in terms of conducted preventive examinations, results obtained, participation in screening programmes. When diagnosing cancer, the information will include the treatment performed, the result, the medications used, etc. In addition, the register will analyse statistical information regarding age, gender, family history of cancer, etc. The total planned resource is BGN 4 million with an implementation period of 2021-2024.
- Investment 5: Development of the national emergency call system with the single European number 112

⁵⁹ See appendix A₄₇





⁵⁸ See appendix A₄6

The project⁶⁰ aims to provide a quality European service to citizens in need of assistance and increase the scope of the service provided in accordance with the progress and development of technology by creating an evolving unified communication and information platform, a guarantee of security and trust of citizens to the single European number 112. Next generation emergency call centres (Next Generation 112) will be built, connected in an electronic communications network with packet switching (PS), providing broadband information exchange in the network of the single European number 112 (video, data and voice) and upgrading the systems with new and modern services. The total planned resource is BGN 56.7 million with an implementation period of 2021-2023.

e) Complementarity and demarcation with the instruments of Cohesion Policy

The ongoing implementation of the health sector reform will be supported under the Regional Development Program 2021-2027 through investments in the outpatient and inpatient areas, related to the creation of equal opportunities for the population in the individual regions for access to prophylactics and prevention, as well as timely and quality inpatient treatment through measures for infrastructure, equipment, mobile assets, digitalisation and services and applications for e-health. The interventions will be based on mapping the health needs, which will forecast the directions of the necessary changes to meet the health needs of the society. Measures funded by the ESF+ will continue to support efforts to improve the health characteristics of the population and the workforce, in particular with a focus on health promotion and prevention. Support for health sector staff will continue as targeted interventions are envisaged for the upgrading and skills of highly specialised staff in key areas of the health system as well as for staff providing medical and health care in outpatient care and longterm care.

f) Green and digital dimensions of the component

Part of the planned interventions (investment 1, investment 3) will have a direct effect on increasing energy efficiency through the renovation of the building stock of hospitals. An additional positive effect in terms of the climate goals of the Plan will be observed in connection with the replacement of energy sources in medical institutions with those

⁶⁰ See appendix A₄8



characterised by a lower carbon footprint. 40% climate costs for the component are estimated - see table xxx below. The measures proposed in this component contribute to the green transition, taking into account the six climatic and environmental objectives set out in the Taxonomy Regulation, and do not infringe the principle of "do not significantly harm" as defined in the Taxonomy Regulation.

Investments 4 and 5 have a clear digital element. Including 9% digital costs (see Table xxx below), this component also contributes to the 20% target for the digital dimensions of the Plan set out in the Regulation on the Mechanism for Recovery and Sustainability.

Table xxx: Green and digital impact

Short title	Green objectives				Digital objectives	Transition challenges	
phort title	Climate	Environmental Tag	Intervention field	DNSH		Green	Digital
	Tag						
Component 12: Health	43%				9%	289,474	60,700
REFORM 1: Updating the strategic framework of the Health sector	n/a	n/a	n/a	n/a	n/a	n/a	n/a
REFORM 2: Complete implementation of the National Health Information System	n/a	n/a	n/a	n/a	n/a	n/a	n/a
REFORM 3: Creating mechanisms for attracting and retaining staff in the health system and their professional realisation in certain regions of the country	n/a	n/a	n/a	n/a	n/a	n/a	n/a
INVESTMENT 1: Modernising facilities and introducing innovative technologies for treatment of the population of major state and municipal medical institutions	100%	40%	26	yes	0%	289,474	0
INVESTMENT 2: Development of interventional neuroradiology	0%	0%	92/93	yes	0%	0	0
INVESTMENT 3: Modernisation and development of psychiatric care	0%	0%	92/93	yes	0%	0	0
INVESTMENT 4: Establishment of a national register (database) for prevention and monitoring of oncological diseases	0%	0%	95	yes	100%	0	4,000
INVESTMENT 5: Development of the national emergency call system with the single European number 112	0%	0%	95	yes	100%	0	56,700

g) Key stages, objectives and time schedule

Table xxx presents the key stages and objectives related to the implementation of this component.

Table xxx: Key stages and components

h) Financing and costs

Table xxx presents the indicative estimates financial resources necessary for the implementation of the component.

Table xxx: Cost estimates





		Detailed cost estimates		Methodology information		Comparative information on costs incurred in the pa		ist	
Component	Investment / Reform	Costs in BGN	Description	Methodology implemented	Source	Costs in BGN	Source	Possible reference to past EU programme	
	Updating of the strategic framework of the Health sector	0	n/a	n/a	n/a	n/a	n/a	n/a	
	Complete implementation of the National Health Information System	0	n/a	n/a	n/a	n/a	n/a	n/a	
	Creation of mechanisms for attracting and retaining staff in the healthcare system and their professional realisation in certain regions of the country	0	n'a	n/a	n/a	n/a	n/a	n/a	
Health E C S O C D C C D C C C C C C C C	Modernisation of facilities and equipment and introduction of innovative technologies for treatment of the population of major state and municipal medical establishments	578,947,268	Modernisation of facilities and equipment and introduction of innovative technologies for treatment of the population of major state and municipal medical establishments				Detailed estimates and justification for the formation of detailed costs are given in the Annex		
	Establishment of a training and development centre for the Centre for Interventional Neuroradiology.	6,323,750	Establishment of a training and development centre for the Centre for Interventional Neuroradiology.				Detailed estimates and justification for the formation of detailed costs are given in the Annex		
	Modernisation and development of psychiatric care	28,521,410	Modernisation and development of psychiatric care	Market survey, historical data			Detailed estimates and justification for the formation of detailed costs are given in the Annex		
	Establishment of a national register (database) for prevention and monitoring of oncological diseases	4,000,000	Establishment of a national register (database) for prevention and monitoring of oncological diseases	Historical data			Detailed estimates and justification for the formation of detailed costs are given in the Annex		
	Development of the national emergency call system with the single European number 112	56,700,000	Development of the national emergency call system with the single European number 112	Market survey, historical data			Detailed estimates and justification for the formation of detailed costs are given in the Annex		

PART 3: COMPLEMENTARITY AND IMPLEMENTATION OF THE PLAN

1. Coherence with other initiatives

The crisis, generated by COVID-19, affected many spheres of the economic and social life of the member states. In that regard the Integrated National Energy and Climate Plan of the Republic of Bulgaria 2021-2030 (NECP) should clearly indicate the areas included therein that would contribute to the rapid recovery of the economy. Since a part of the interventions envisaged in the Recovery and Resilience Plan (RRP) will have a direct impact on the sectors included in NECP, through their implementation in practice the objectives and expected results laid down therein will be supported.

The included in RRP interventions will support directly also the areas and interventions laid down in the National Development Programme BULGARIA 2030, and thereby they will contribute to the achievement of the national priorities envisaged therein, and more particularly with regard to the acceleration of the economic development (MTO 1).



The Partnership Agreement (PA) for the 2021-2027 programming period sets the strategy of the country and its priorities for the implementation of EU Cohesion Policy (and the Common Fisheries Policy). Based on the analysis of Bulgaria's socio-economic development in the 2007-2017 period the main lines of investments with European co-funding are determined. With the purpose of ensuring cohesion with the operational programmes co-financed from the European Structural Funds and the Cohesion Fund, complementarity is envisaged in PA with the interventions under the Recovery and Resilience Mechanism (RRM) for each of the five Policy Objectives.



2. Complementarity of the funding

By an Act of the Council of Ministers the coordination of the subjects related to the participation of the Republic of Bulgaria in EU RRM was assigned to be performed jointly by the Deputy Prime Minister and the Minister of Finance.

According to Art. 11, para 3 of the Rules of Procedure of the Council of Ministers the Deputy Prime Minister assists the Prime Minister by being responsible for the overall organization and management of the system for coordination of the management of the European Union funds and in performing such functions he is assisted by Central Coordination Unit Directorate.

The complementarity and coordination with regard to the interventions laid down in RRP and those of the other EU co-funded programmes is carried out also on the side of the Inter-Service Steering Group, established in July 2020 by an Order of the Prime Minister and chaired by the Deputy Prime Minister, comprising representatives of the Ministry of Finance and of the line ministries, which coordinates the preparation, implementation and monitoring of RRP on an ongoing basis.

The envisaged RRP management and control system is built upon the experience of the structures that participate therein in the management and control of the EU funds in Bulgaria. On the other hand the envisaged interventions engage structures and institutions having experience with the implementation of projects co-financed by European funds. That contributes to optimizing the coordination in the use of EU funds, on the one hand, while on the other it supports the availability of good cooperation



at all levels in the fulfilment of the objectives of the plan. The description of the interventions and projects to be funded by RRM provides for the submission of information about the demarcation with other funding sources – programmes and instruments of EU and the national investments.



3. Application

3.1. Effective implementation





The interventions envisaged in RRP engage structures which have considerable experience in the implementation of projects co-financed with European funds. Part of them were subject to audits, which gives confidence to the availability of sufficient administrative capacity to fulfil the tasks assigned to them in relation to the implementation of the RRP interventions. That experience, combined with the existence of profound knowledge in the respective spheres of intervention will guarantee the effective implementation of the RRP interventions.

In addition, in 2020 the Republic of Bulgaria submitted requests to receive support under the EU Structural Reform Support Programme and the following projects were approved and will be implemented in 2021: "Improvement of the system for integrity checks of the Commission for Counteracting Corruption and Illegal Assets Forfeiture staff ", "Support for the Establishment of a National Decarbonisation Fund "Increase of Public Investment Effectiveness", "Development and Adoption of Corruption Risk Evaluation Methodology in the National Revenue Agency of the Republic of Bulgaria" and others. The implementation of these projects will contribute to the carrying out of the reforms planned in RRP too.

The observance of the public procurement rules, as well as the checks for fraud, corruption and conflict of interests form part of the control exercised in the use of EU finds at this moment too. The fact that the structures engaged in RRP implementation and control have substantial experience and established administrative capacity in the sphere of EU funds management and control guarantees effective and working measures, rules and procedures at national level with regard to frauds, conflict of interests, corruption and double financing, by carrying out administrative checks, checks of the procedures for selection of contractors, on-the-spot checks and others.

With the purpose of ensuring a timely support for the interventions identified in RRP, as well as of the timely and full use of the funds envisaged for Bulgaria, a list was prepared of projects at national level, which are in advanced stage of readiness and which will assist the fulfilment of the objectives of the plan.



3.2. Uncertainties

The national RRP of Bulgaria is elaborated by taking into account to a maximum degree of all known risks and circumstances which might affect the interventions envisaged therein. The efforts of the structures engaged in the preparation of the plan are directed towards the pre-defining of clear and measurable objectives, as well as of maximum realistic costs that will be needed to achieve the RRP objectives for the entire period of its implementation.

The availability of impact assessment is a mandatory element of the RRP structure, including also an estimated allocation of the finance resource by years, which are in the process of development.

When preparing the plan, the links between separate objectives was analysed too in order to guarantee that all final objectives will be met. In case of emergency circumstances and need cease an envisaged in RRP investment/component, actions will be taken to revise the Plan in accordance with the procedures provided for in the RRP Regulation. For the purposes of the revision, respective evaluation will be carried out, including also a confirmation that the revised Plan contributes to achieve RRM objectives in the same way as the initial one.

3.3. Institutional structure and decision-making process

A description of the institutional structure with all final recipients is available in the Management and Control System description, elaborated by the Ministry of Finance.

The interventions which are included in RRP engage a wide range of participants to whom such measures and their adoption are relevant. In that regard the first RRP Bulgaria version was published in the Public Consultation Portal (strategy.bg) for comments and proposals by all stakeholders – regional authorities, social partners, civil society and others.

Taking into account the views of all stakeholders in determining the reforms and investments that will be included in the Plan will subsequently help their engagement in its implementation and achievement of the set goals..

The Recovery and Resilience Plan will be approved by an Act of the Council of Ministers.

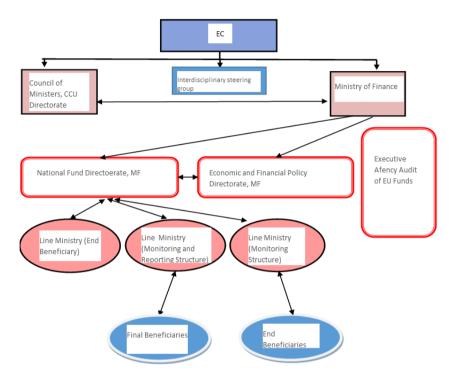




3.4. Administrative mechanisms

Detailed information about the responsibilities and coordination among the responsible institutions in RRP implementation and control.





The National Fund Directorate of the Ministry of Finance was appointed to be the coordinating unit for the RRP implementation and control. The Directorate is responsible for the preparation of the Management and Control System on the implementation of the RPP.

The National Fund Directorate is a structure responsible also in the stage of budgeting the funds under RRM, the payment and control in view of protecting EU financial interests and conducting of checks (on-the-spot checks including). It participates in drafting of financing contracts, programme documents and the applicable regulatory framework.

The National Fund Directorate consists of 60 highly qualified and trained employees with proven experience, who have participated in the development and implementation of effective and efficient EU fund management and control systems, which will guarantee the prevention of conflict of interests, corruption, fraud and double financing at each implementation stage of the National Recovery and Resilience Plan. The

Directorate has an experience of more than 20 years in the management of European funds, including in the preparation and building of an accredited system for extended decentralization in the transition from pre-accession to structural funds, the creation of guidelines for determining the payment rules, for cost verification and certification, for recovery of irregular expenditure, and for the accounting of the 2007-2013 programme period, as well as for the issuance of an Ordinance with similar scope for the 2014-2020 programme period, including the rendering of methodological assistance in their implementation.



The Central Coordination Unit Directorate in the Council of Ministers' Administration is responsible for the elaboration of RRP, the programme documents, including for the allocation of the funds under the Mechanism, for the elaboration of the regulatory framework and the applicable rules and their revision respectively. The Directorate is the coordinator of all EU programmes and instruments implementation and it has a sustainable capacity of 60 employees, built up in the pre-accession programme period, 2007-2013 and 2014-2020 programming periods, including also the preparation of the 2021-2027 programming period. The Directorate is responsible for the administering, maintenance and upgrading of the information system for the EU programmes under the shared management.

The Economic and Financial Policy Directorate of the Ministry of Finance participates in the development and revision process of the programme documents, the financing agreement, the financing contracts, the reporting of the Mechanism progress and completion. The Directorate is responsible for the preparation and implementation of the strategic and planning documents of Bulgaria in the process of EU economic governance, including the specific recommendations under European Semester, as well as for the EU budget and the multiannual financial framework negotiations. The Directorate coordinates and assists with expertise the development and monitoring of the National Development Programme: BULGARIA 2030. The Directorate is also the successor of the Economic Analyses and Forecasts Agency and it includes 41 employees. These activities are complemented with a part of the main functions it performs as a contact structure for reporting to the European Semester, as well as in terms of the negotiations on the EU multiannual financial framework.

Executive Agency "Audit of European Union Funds" to the Minister of Finance is the structure to perform the audit activity under the Mechanism with the purpose of ensuring confidence on the reliability of the data on the fulfilment of the indicators and the manner of their collecting, as well as confidence that no admission of double financing, frauds, corruption and conflict of interests is guaranteed in the implementation and the sound financial management principle is observed.



The line ministries and institutions (Ministry of Economy, Ministry of Energy, Ministry of Environment and Waters, Ministry of Regional Development and Public Works, Ministry of Transport, Information Technologies and Communication, Ministry of Education and Science, Ministry of Interior, Ministry of Agriculture, Foods and Forestry, Ministry of Justice, Ministry of Health, Ministry of Labour and Social Policy and Ministry of Culture, State e-Government Agency, State Science Research and Innovation Agency) participate in the RRM implementation stage. They are engaged with the follow-up of the implementation of the projects, funded under RRM. They carry out on-the- spot checks with the purpose of reporting the achieved stage objectives and indicators in view of the completion of the project. They follow the observance of the rules in the spending of the funds by the end beneficiaries and the non-admission of conflict of interests, corruption and fraud. A capacity is built up within the frames of all line ministries and institutions to manage the means and funds from EU.

All above structures have the administrative capacity necessary to fulfil the responsibilities assigned to them, including experience accumulated in the 2007-2013 and 2014-2020 programming periods. The State Science Research and Innovation Agency (SSRIA) is a comparatively new structure, which will manage the Science, Research, Innovation and Digitalization for Intelligent Transformation Programme 2021-2027, however it is planned to attract to its team experts from the managing authorities of the operational programmes of the 2014-2020 programming period.

Functional independence of the structures is ensured in the process of preparation, implementation and monitoring of RRP, through which transparency and avoidance of conflict of interests are guaranteed.

3.5. Communication

According to the requirements of Part "Information, Communication and Publicity" of the Regulation draft, it is necessary to ensure publicity of the projects that received funding under the Mechanism in the 2021-2026 period and included in RRP. The purpose is to achieve awareness of the general public concerning the process of implementation of each reform and investment laid down in RRP.

The National Communication Strategy (NCS) 2014-2020 is ongoing, which is developed in accordance with Art. 116 of Regulation 1303 of the European Parliament and of the Council of 17.12.2013.

With regard to RRP it is planned to adopt all main elements of NCS in order to ensure publicity and information about all activities of the implementation, management and reporting of the interventions, which will receive grants and/or loans under RRM, i.e.:

- Clear definition of the target groups (central administration, local authorities, end beneficiaries, stakeholders, general public and others);
- Responsibilities at national level regarding the adoption of the principles of information and publicity;
- Principles which should be observed (equality, transparency, partnership and others);
- Communication means (the internet portal of the Council of Ministers) https://www.nextgeneration.bg, where a special section is set apart for RRP, electronic, printed and on-line media, the 28 district information centers);
- Communication activities (advertising and PR campaigns, dissemination of newsletters, events, including conferences, information days, round tables, public discussions, specialized trainings);
- Use of social networks;
- Ensuring of uniform visual identity, namely the use of the EU logo and the slogan "EU financed next generation EU";





• Transparency and awareness regarding the achieved objectives and results.

In that regard in the agreements between the Ministry of Finance and the line ministries, the final beneficiaries obligations will be stated, related to the ensuring of publicity and information concerning the grants received in the process of implementation of the reforms and interventions laid down in the Plan.

During the implementation of the projects communication will be conducted mainly through the electronic system for RRM (MSNI-RRM).

Information about the implementation of the projects included in the Recovery and Resilience Plan shall be published on a regular basis and accessible at:

- The internet site of the Ministry of Finance https://www.minfin.bg/ The site will have a button for reporting corruption, frauds, conflict of interests and double financing.
- The public module of MSNI-RRM.
- The internet portal of the Council of Ministers https://www.nextgeneration.bg, with a special section for RRP.

4. Reporting

Bulgaria will use all common indicators provided for in the guideline of EC for performing evaluations of RRM funding contribution and with the purpose of reporting to EC. Information on the specified indicators will be received from the Technical and Financial Progress Reports submitted by the line ministries.

Indicators and milestones fulfilment will be monitored by the line ministries and the National Fund Directorate on an ongoing basis, including by on-the-spot checks. Indicators and milestones fulfilment will be subject of audit checks by the Executive Agency Audit of European Union Funds (EA AEUF). Based on the results from the audit engagement EA AEUF will make a statement for confirming the data about the achieved progress or propose correction of the information. The audit engagement result will be submitted to Economic and Financial Policy Directorate with the purpose of reporting within the frames of the European Semester cycle, and also to





the National Fund Directorate with the purpose of submitting applications for payment to EC.

5. Payments, control and audit

The functions and responsibilities envisaged for the individual participants in the payment, control and audit process of RRP are as follows:

- I. Final beneficiaries (FB) responsible for the implementation of the concrete investments/projects:
- Sign a bilateral/trilateral agreement with the Ministry of Finance;
- Adopt written policies and procedures with the purpose of ensuring reasonable confidence that EU and Bulgaria's financial interests are protected and investment/projects objectives will be achieved by:
 - 1. Compliance with the applicable European and national legislation, internal acts and contracts;
 - 2. Reliability and comprehensiveness of the financial and operational information;
 - 3. Cost-saving, effectiveness and efficiency of activities;
 - 4. Safe-keeping of assets and information;
 - 5. Prevention and detection of fraud and irregularities, including corruption, conflict of interests, and double financing, as well as undertaking follow-up actions.
- Manage the risks for achieving above objectives by adequate allocation of the responsibilities for the implementation of the project and adequate preventive, detecting and/or corrective control activities, which include at least:
 - Double signature system not allowing the undertaking of a financial obligation or the effectuation of a payment without the signatures of the head of the organization and of the person responsible for accounting entries;
 - 2. Rules for access to assets and information;
 - 3. Policies and procedures for advance control of legality;





- 4. Policies and procedures for ongoing control of the fulfilment of undertaken financial engagements and concluded contracts;
- 5. Policies and procedures for follow-up evaluations of the implementation;
- 6. Policies and procedures for objective, accurate, full, truthful and timely accounting of all economic operations;
- 7. Policies and procedures for human resource management;
- 8. Policies and procedures for observing personal integrity and professional ethics.

Within the frames of the above control activities FB will:

- Establish an organization for the fulfilment of all requirements of the agreement and of the detailed description of the management and control system (MCS), by applying all check lists (CL) included in MCS for checking the public procurement, financial and technical progress and for on-the-spot checks (CL present the elements, subject to follow-up control and audit in a structured way);
- Set up/nominate a team for the implementation of the project (FB are expected to have established units, since they have experience in project implementation, however they should make an evaluation whether such units have sufficient capacity in view of the new activities);
- Award public procurements. In case FB fall within the scope of the Public Procurement Act, its provisions shall apply, whereby the elements for public procurement checks, included in CL and applied in MCS shall be taken into account in the preparation and awarding. Public procurements are subject to advance control by the Public Procurement Agency in accordance with Art. 229, para 1, letters d, e and f of the Public Procurement Act (PPA). In case FB is not a contracting authority under PPA and award construction, supplies and services above the threshold of the public procurement directives, they follow the applicable regulatory procedure;





- Exercise control of the contractors in view of their qualitative and timely fulfilment according to the concluded contracts. That activity is also documented in a respective CL.
- Submit reports to the line ministry by a template, which includes a statement part, which confirms the fulfilment of all engagements of the agreement, the identified risks and undertaken actions to overcome them, including activities to remove omissions and deficiencies, identified within the frames of on-the-spot checks or by audit and control authorities. In case of delay in fulfilling the approved time-table it is mandatory to present information about the reasons, possibilities for overcoming/catching up the fulfilment, proposal for changing the project;
- Enter information in MSNI-RRM on a regular basis: concluded contracts with contractors, cost evidencing documents, implementation evidencing documents – certificates, acts and others depending on the specifics of the intervention, payment forecasts;
- Organize the availability of source documents in MSNI-RRM;
- Ensure access to documents and to the project execution sites for national and European control and audit authorities.

II. The line ministries (LM)

There are 3 hypotheses:

- 1. *LM performs one intervention/project, financed by RRM.* In such case LM acts as EB and its responsibilities are as those of EB, described in p. I. In such hypothesis a bilateral agreement is signed with MF.
- 2. LM performs the functions of an intermediate structure, responsible for monitoring and reporting (it acts as FB in its relations with MF), which is responsible for the selection of the beneficiaries of the support, collection of the information and exercises control on the performance of the beneficiaries of the support. The responsibilities can be summed up as follows:
- Signs a bilateral agreement with MF;





- Establishes the organization for fulfilling the requirements of the agreement and of MCS (CL are used to check the public procurements, to check the financial and technical progress and for on-the-spot checks);
- Selection of the final beneficiaries is made by observing the established rules and procedures, stated in the agreement (an Act of the Council of Ministers is in the process of preparation, which will regulate the procedure and guarantee the observance of the good financial management principle) by a special module for selection in the electronic system;
- Receives reports from the final beneficiaries it checks, by applying CL for public procurement, financial and technical progress. If necessary performs on-the-spot checks by applying the respective CL. Special attention is paid to the checks for double financing (information systems UMIS, MSNI, MSNI-RRM are used) as well as for availability of the so called red flags, which form part of the CL and ARACHNE system, directed towards the identification of suspected conflict of interests, fraud, corruption. With the purpose of achieving completeness of the double financing check, Bulgaria will, when opportunity arises, make use of the possibility to receive access from OLAF to the data base containing information about the funds received by beneficiaries under programmes directly financed by the Commission. Maintains information about the exercised control in MSNI;
- Submits summarized reports to MF to a template, which include a statement part confirming the fulfilment of all engagements of the agreement, identified risks and undertaken actions to overcome them, including actions to remove omissions and deficiencies identified within the frames of on-the-spot checks or by audit and control authorities. In case of delay in the fulfilment of the approved time-table it is mandatory to submit information about the reasons, possibilities for overcoming/catching up the fulfilment, proposal for changing the project;
- Enter information about contracts concluded with final beneficiaries and the payments to them in MSNI-RRM on a regular basis;





- Is responsible for ensuring of an adequate audit trail from the final beneficiaries by ongoing entry in MSNI-RRM of all cost evidencing and payment documents, as well as of the documents evidencing the implementation – certificates, acts and others, depending on the specifics of the intervention;
- Ensures access to documents and the intervention/project execution site for national and European control and audit authorities.
- 3. *LM acts as a first level spending unit to the FB*, *it performs functions of Structure for monitoring* and has responsibility for the implementation of the respective policy and the reform related thereto. The responsibilities can be summed up as follows:
 - Signs a trilateral agreement with MF and FB;
 - Establishes an internal organization for fulfilling the requirements of the agreement and of MCS;
 - Receives reports from FB, which it checks for compliance with the respective policy and the reform related thereto;
- Submits summarized reports to MF;
- At the request of MF participates in on-the-spot checks at EB or in the intervention/project execution site by providing expert/s with the necessary specific qualification, who apply the MCS rules for onthe-spot checks;
- III. On the basis of the summarized reports received from LM the **National Fund Directorate** carries out the following checks:
- With regard to reports from LM, implementing a single project, financed by RRM (p.II.1 above) and for reports from LM, where they act as authorizing officer by delegation of EB (p.II.3 above) it checks the reported financial and physical progress by applying the CL from MCS, including those for public procurement checks, selected at random) and on-the-spot checks (depending on the specifics of the project and in case of indications for problems in the implementation. For the on-the-spot checks MF can request from LM to provide expert/s when carrying out the check;





- For project, where the LM acts as an intermediate structure (p.II.2 above) it performs administrative checks of the accurateness of the submitted data;
- Special attention is paid to the double financing check (the information systems, ISMM, MSNI, MSNI-RRM are used) as well as the so called red flags, which form part of CL and the EC system ARACHNE, directed towards the identification of suspected conflict of interests, fraud, corruption. For the purposes of the check, the information received through the reporting button at the MF site will be taken into account too. With the purpose of achieving completeness of the double financing checks, if opportunity arises Bulgaria will make use of the possibility to receive access from OLAF to a data base containing information about funds received by beneficiaries under programmes funded directly by EC.
- Maintain information about the exercised control in MSNI-RRM.

After this check National Fund Directorate can confirm or correct the quantity information about the respective project progress. In case progress is reported for project in implementation of policies/reforms, a quality review of the data is carried out by Economic and Financial Policy Directorate with the purpose of reporting within the frames of the European Semester cycle. The results from the review shall be attached to the application for payment to the Commission, thus ensuring complete compliance and accurateness of the data.

IV. Audit

The audit activity forms an essential part of the management and control system, since it quarantess that, on one hand, the information submitted to EC is complete, accurate and reliable and that the milestones and indicators are achieved, and, on the other hand, that the operations (RRP projects and programmes) are being implemented in compliance with the applicable rules, by avoiding conflict of interests, fraud, double financing and corruption.

Executive Agency "Audit of European Union Funds" has the capacity and methodology necessary for the audit activity according to the internationally recognized audit standards and as a recognized partner of the European Court of Auditors and of the European Commission in its





capacity as Audit Authority for ERDF, ESF, CF, FEAD, Erasmus+, REACT-EU, JTF. All 63 auditors and audit managers are holders of the national audit certificate, and out of them holders of international certificates are: 15 – Certified Government Auditing Professional, 4 – Certified Internal Auditor, 3 – Certified Fraud Examiner, 2 – Certified Information Systems Auditor. In addition, 11 auditors are lawyers and 5 are engineers, including 3 civil engineers.



EA AEUF is functionally and organizationally separate and independent and it does not participate in the coordination, management and implementation of RRP. EA AEUF independency is explicitly regulated in the Public Sector Internal Audit Act, the Rules of Procedure of the agency and Ordinance No N-2 of 30.06.2016 of the Minister of Finance on the procedure and manner of carrying out, coordinating and harmonizing specific audit activities under EU funds and programmes. The audit authority has the independence necessary to perform its functions effectively both in making decisions, and in the planning and the lines of reporting (including in determining the audit scopes, carrying out the checks and presenting the results).

EA AEUF applies a strict system for quality control, which guarantees that the audit activity is carried out in accordance with the internationally recognized audit standards. The agency has an audit methodology, which is confirmed by EC and the European Court of Auditors for planning, sampling, checking of performance framework (milestones, targets, indicators), checking of compliance with the applicable rules, including observance of the good financial management principle (avoidance of double financing and conflict of interests and prevention of fraud and corruption), reporting and follow-up of results.

A large part of the participants in the implementation of RRP, who perform coordinating, monitoring and reporting functions and implement investments and reforms in the area of digitalization, green economy, energy effectiveness, transport connectivity, creation of jobs and unemployment fighting, support of SME, education, innovation etc., are also authorities and beneficiaries of ESIF, REACT-EU and the Just Transition Fund under which EA AEUF is an audit authority. That circumstance will optimize the audit work under RRP.

The audit activity under RRP will be planned systematically and bound to the implementation of RRM as follows:

- 1) The audit approach will cover the following two main areas:
 - √ Good financial management principle

The aim of the audit in that area is to guarantee that the approved operations are performed in compliance with the applicable rules and by observing the good financial management principle (including avoidance of double financing, prevention of fraud and corruption, avoidance of conflict of interests). The auditing work will focus on the most significant control activities, presented in the description of the control systems and performed by all involved participants.

✓ Reported stages/objectives

The scope includes (1) all individual stages/objectives and the respective indicators for their achievement and (2) an overall system for collecting, summarizing and reporting of the determined stages/objectives/indicators, including the audit trail for their achievement and the national information system MSNI-RRM.

The audit work in this area is aimed at confirming that the reported stages/objectives are fulfilled and to guarantee, that the related data are full, accurate, reliable, correctly summarized, based on evidence, registered in the national information system MSNI-RRM and are subject to effective control mechanisms. The audit path data will be subject to both top down and bottom up evaluation. The IT system itself will be also checked for compliance with the international IT security standards, data integrity and personal data protection.

- 2). The audit strategy includes:
 - ✓ Audit of the systems

The system audits will cover all participants in MCS – the Central Coordination Unit (MSNI-RRM), the Ministry of Finance, as well as the line ministries and agencies and the end beneficiaries, if necessary. The concrete scope of each audit is planned on the basis of risk evaluation, by taking into account the specifics of the operations approved in RRP and the progress of their performance. With regard to operations having the character of





programmes, subject of checks will be also the process of selection of project proposals. The first system audit will be carried out after the approval of the plan and it will cover the Central Coordination Unit (MSNI-RRM) and the structures in MF. Subject of checking will be the main control activities, envisaged in the MCS description. In the years to follow the scope of the system audits will be determined on the basis of risk evaluation, and respective checks for follow-up of recommendations will be made.

* * * *

✓ Audits of operations

Each half-year the audit activities will cover at least 15 % of the operations (the projects and the programmes of the approved plan) with reported indicators/stages/objectives in the respective half-year period. The selection of the sampling will be made on the basis of risk evaluation, where in case of 5 or less operations with reported indicators, all will be audited. For each audited operation checks will be made with the purpose of confirming that:

- It is performed in compliance with the applicable rules by avoiding conflict of interests and preventing frauds, corruption and double financing and by observing the good financial management principle;
- An adequate audit trail is available for the reported indicators, stages and objectives and that the data are full, accurate and reliable.

In case weaknesses are found the respective recommendations for corrective actions will be addressed to the audited structures and to the Ministry of Finance. Their execution will be duly followed up and reported.

✓ Audit activity summary

A summary of the audit activity performed, including audit scope (audit coverage of the costs and auditing period) and an analysis of the respective weaknesses and the undertaken corrective measures will be submitted to EC with each payment application.

V. Payments to final beneficiaries

For the purpose of receiving the funds from EC a BGN account with automatic arbitration and a limit account with holder the National Fund (NF) will be opened at the Bulgarian National Bank.



For payment effectuation an independent system of codes in SEBRA (NF-RRM) will be set apart, the hierarchy structure of which is as follows:

- Premium system with holder NF;
- Secondary (non-authorized) system which will include public organizations/institutions – end beneficiaries under RRM.
 These will be defined as subordinates within the frames of the secondary system.

Payments to end beneficiaries will be effected by the National Fund Directorate for expenses, justified by the end beneficiaries with cost evidencing documents or other documents of equivalent value under the project as follows:

- A payment is effected by the ten-digit code of the end beneficiary on the basis of received in SEBRA payment order about payable expenses under contracts for execution, concluded by the end beneficiary or for recovery of expenses already made by the end beneficiary under the project with his own funds. In case of end beneficiaries performing the functions of Monitoring and Reporting Structure (EB-MRS), payments will be effected to the final beneficiaries on the grounds of the cost evidencing documents issued under the concluded contracts;
- The final payment is the last payment under the project, justified by the end beneficiary with cost evidencing documents, with which the payments under the project will be completed without exceeding the budget under the concluded agreement. In case it is found by the formal check that the budget is exceeded the final payment may be effected in part or refused;
- A prerequisite to effect a payment is the availability of information in MSNI-RRM, which includes cost-evidencing documents or other documents of equivalent value under the project and their relation to the execution of the specific contract/activity under the same project;
- The payment orders received from end beneficiaries will be processed and fulfilled 2 times per week. In case technical mistakes are found in the process of the formal control of the payment orders





the end beneficiary will be informed immediately in order to clarify the inconsistency and effect/cancel the payment. In case of justified necessity the received payment orders may be fulfilled within a shorter time.

- The end beneficiary includes all payments effected under the project he is implementing in the frames of the respective quarter in a financial statement with which he reports through the MSNI-MCS information system about the financial fulfilment of the expenses. The progress of the milestones and stages, laid down in the project is justified by a technical report, to be submitted together with the financial statement. The times and procedure for financial statement and technical report submission are determined by the agreement concluded between MF and the end beneficiary;
- In case of recovered amounts (not realized transfers) due to technical mistakes the corrective operations will be carried out in the month to follow, except in the cases of urgent necessity;
- End beneficiaries shall ensure a full audit trail of the expenses incurred into for the projects, by providing all cost-evidencing documents and documents evidencing the implementation in the MSNI-RRM information system in due time;
- In view of the effective planning and budgeting of the funds necessary for the payments under the projects, the end beneficiaries will, by the 10th day of every month, enter on the monthly basis, in MSNI-RRM a forecast for the forthcoming in the current month payments and the payments in following 2 months.

The information systems for performing the financial-accounting reporting under RRM are:

– SAP information system under the administration of the Ministry of Finance: the complete accounting process will be performed in the system, including: compiling of reliable and accurate data of the received advance payments and the amounts applied for with requests for funds sent by the member states to EC; relationship with the end beneficiaries on the basis of concluded financial agreements and effected payments (intermediate and final) according to the conditions of the agreements; found receivables subject to recovery





by the end beneficiaries. The possibilities of the functionalities for investment budgeting and project management will be used too, which will be performed within the frames of the Mechanism by districts and concrete financial agreements for creating additional analytical information about each single project and control of the expenses, which are agreed upon and made. The fulfilment of all requirements arising from the national methodology for accounting reporting of EU funds will be ensured through the system;

- Information management system (MSNI-RRM): the system functionalities will ensure the processes of: contracting with final beneficiaries and provision of funds for the implementation of the projects (payment process); reporting of the financial and physical progress, including at the stage of stage objectives and results fulfilment, as well as of the expenses made by the end beneficiaries;
- Providing a clear audit trail enabling the control and audit of the expenses for investments and the creation of a logic connection and structured statistic information, through which to generate in a clear and reliable way information about the progress under the policies, laid down in the Plan for each single intermediate stage/objective/indicator;
- The ESIF management and monitoring information system (UMIS2020): selection of final beneficiaries of the support is made by UMIS2020, whereby summarized information about the selection and follow-up relationships with the line ministries performing the function of intermediate structure is provided in MSNI-RRM.

An interface will be provided between the two systems to facilitate the accounting and reporting processes.

PART 4: IMPACT ASSESSMENT

1. Strengthening economic and social sustainability

Macroeconomic perspectives

In 2020 economy, both of the world and Bulgaria, was affected by the COVID-19 pandemic crises and the measures imposed to restrict the





spread of the virus. The real GDP of the country went down by 3.9 % in the period January-September 2020 compared to the nine months period of 2019. The drop was driven mainly by the reduced export of goods and services and the investments. For the same period employment decreased by 2.4 %, and the most affected sectors were trading, transport, hotels and restaurants. The dynamics of incomes in the country was also affected in direction of decrease, however it remained positive. The inflation processes were delayed due to the drop of energy goods prices.



According to the latest official macroeconomic forecast⁶¹ used to prepare the Updated medium-term budget forecast for the 2021-2023 period economy decrease for the entire 2020 will be 3 %, with a positive boost for GDP expected by the public expenditure for consumption and investment at the end of the year. The measures taken by the government in the area of labour market gave a positive result with regard to restricting the unemployment. Unemployment rate is expected (according to the National Registry of Specialists) to reach 5.6 % and the decrease of employment to be about 2.6 %. This forecast was prepared before the introduction of additional precaution measures in the autumn months against the spread of COVID-19 both in Bulgaria and in other EU countries. Measures can be expected to lead to a negative shock for the consumption in the country and the export of goods and services and to reduce the perspectives to the economy for the current year. According to an alternative scenario in the autumn forecast with a more unfavourable dynamics, it is possible that GDP change in 2020 to be about 2 percentage points lower.

For the 2021-2023 period a gradual acceleration is expected for the GDP growth from 2.5 % in 2021 to 3.2 % in 2023. These forecasts do not include the effects of the investments and reforms, laid down in the Recovery and Resilience Plan. In 2021 it is expected that consumption and export of goods will recover, while for investments and export of services a slower return to the levels, observed before the crises is envisaged. The increased confidence among consumers and the increase of income will lead to an accelerated growth of private consumption in the 2022-2023 period, and in the last forecast year a higher increase of public investments is expected due to the reaching of the end of the period for the use of European funds under the 2014-2020 programming period and investment projects for

⁶¹ Macroeconomic forecast Autumn 2020 Γ., https://www.minfin.bg/bg/news/11151.



providing defence equipment. With the acceleration of the economic growth in the country a recovery of the employment is expected too. In 2023 it will reach again its pre-crisis levels, however in this and the following years the further increase of the number of employed persons will be limited by the unfavourable demographic factors and by the decreasing workingage population. The unemployment rate is expected to fall down to 4.6 % and to fluctuate around that achieved level. As regards income it is expected to have an upward trend with a growth of compensation for one employee within the frames of 6 - 7 %, which will reflect the acceleration of the indicator in the private sector, as well as the effects of increase of labour cost laid down in priority areas of the public sector. The inflation processes in 2021 will depend primarily on the extent of recovery of international raw material and oil prices, while for the 2022-2023 period, with the recovery of internal demand an acceleration of price increase of services and an average yearly inflation of 2.5 % - 2.6 % are expected.



Table: Autumn macroeconomic forecast 2020.

Add to the second of the second	REPORTED DATA*		FORECAST				
Main macroeconomic indicators	2018	2019	2020	2021	2022	2023	
INTERNATIONAL ENVIRONMENT							
World economy (real growth, %)	3.6	2.9	-4.7	5.1	3.4	3.4	
European economy –EU (%)	2.1	1.5	-8.3	5.8	2.6	2.5	
Exchange rate (USD/Euro)	1.18	1.12	1.14	1.18	1.18	1.18	
Brent oil price (USD/barrel)	71.1	64.0	36.5	43.8	46.4	49.1	
Non-energy raw material prices (in USD, %)	1.7	-4.2	-5.1	2.5	2.1	2.1	
EURIBOR 3m. [%]	-0.3	-0.4	-0.4	-0.5	-0.5	-0.5	
GROSS DOMESTIC PRODUCT	GROSS DOMESTIC PRODUCT						
GDP (Mil. BGN)	109 743	119 772	119 089	124 540	130 876	137 701	
GDP (real growth %)	3.1	3.7	-3.0	2.5	3.0	3.2	
Consumption	4.6	4.7	1.0	2.5	2.3	2.9	
Gross fixed capital formation	5.4	4.5	-10.5	-5.4	3.0	8.8	
Export of goods and services	1.7	3.9	-10.2	7.2	7.1	5.3	
Import of goods and services	5.7	5.2	-10.4	5.0	6.4	6.7	
LABOUR MARKET AND PRICES							
Employment (NSI) (%)	-0.1	0.3	-2.6	0.9	1.5	0.4	
Unemployment rate (LFS) (%)	5.2	4.2	5.6	5.2	4.6	4.6	



Compensation per one employed person (%)	9.7	6.9	5.0	5.9	6.5	6.9
GDP deflator (%)	4.0	5.3	2.5	2.0	2.0	2.0
Average annual inflation (HICP) (%)	2.6	2.5	1.4	2.1	2.6	23
PAYMENT BALANCE				-		
Current account (% of GDP)	1.0	3.0	3.1	3.9	4.2	3.4
Trade balance (% of GDP)	-4.8	-4.7	-1.7	-1.2	-1.3	-2.1
Direct foreign investments (% of GDP)	2.7	2.4	2.9	2.9	2.9	2.9
MONETARY SECTOR						
M3 (%)	8.8	9.9	8.0	8.1	7.9	8.1
Receivables from enterprises (%)	7.7	9.9	0.6	1.9	3.8	4.6
Receivables from households (%)	11.2	9.5	5.0	5.6	6.7	6.9

^{*} The statistical data, published by 19.10.2020 were used to prepare the forecast

Macroeconomic effects

To evaluate the effects on economy from the Recovery and Resilience Plan the Simulation Macroeconomic Model⁶² was used. The model is macroeconometric and it represents a system of equations, calibrated with the adequate tooling, which describes the Bulgarian economy structure in a realistic way. The model is updated with reported annual data up to 2019, published as of June 2020, and with assumptions on the external environment by IMF of October 2020. The model enables assessing the effects on economy by shocks, both on exogenic variables, as also on endogenic ones, as investments and government consumption. In this analysis an evaluation is made of the effects on demand in three directions - government consumption, government investments and private investments. The funds provided for in the Recovery and Resilience Plan are preset as a shock in positive direction on the respective indicators. The assumption is that such investments will be financed by grants under the Recovery and Resilience Mechanism and the respective amount is added to the budget income.

An expert assumption is made on the allocation of the funds in the amount of 12 368⁶³ Mill. BGN by components of demand and by years. The use of the funds under the Recovery and Resilience Plan will start with low values at the beginning of the period, where for the first three years about

⁶³ Information about funds is based on projects applied for by mid-January 2021.



⁶² https://www.minfin.bg/upload/46186/doc minfin sim ed.pdf

12 % of the funds will be used. After that a rapid increase of transfers is expected, which will reach a maximum volume in 2026. To allocate the funds by components a review of the individual projects is made and an assumption is made what part of the funds are for public consumption and investments. The main part of the funds (81.3%) will be realized in the form of public investments, and 13.7% are allocated for public consumption. A part of the funds under the programme for energy effectiveness is allocated as private investments. The transfers under all demand components will follow a similar dynamics in the 2021-2026 period.



Table: Allocation of the funds under the Recovery and Resilience Plan by years and GDP components

,	der components							
=		2021	2022	2023	2024	2025	2026	
Pillar	GDP component	Mill. BGN						
DW LAD	Public investments	70	93	139	596	696	864	
PILLAR 1: INNOVATIVE	Public consumption	13	18	27	115	134	167	
BULGARIA	Private investments							
PILLAR 2: GREEN BULGARIA	Public investments	84	112	168	721	841	1045	
	Public consumption	24	32	48	204	238	296	
	Private investments	17	23	35	148	173	215	
PILLART 3: CONNECTED BULGARIA	Public investments	76	101	151	646	754	937	
	Public consumption							
	Private investments							
	Public investments	56	74	111	477	556	691	
PILLAR 4: FAIR BULGARIA	Public consumption	11	14	22	92	108	134	
	Private investments							
Total	Public investments	285	381	569	2440	2847	3538	
	Public consumption	48	64	96	412	480	597	
	Private investments	17	23	35	148	173	215	

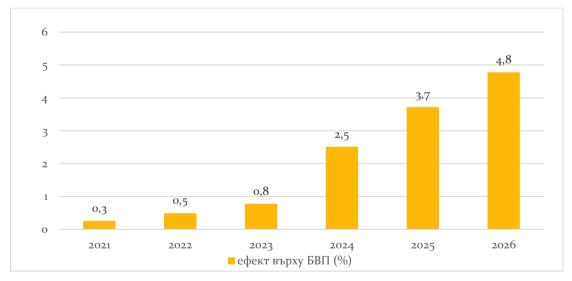
The simulation results show a 4.8 % increase of GDP level at constant prices at the end of the period in 2026, where the greatest effect is expected from Pillar Green Bulgaria, for which the largest part of the resources under the plan are envisaged. The GDP increase will, in the first place, reflect the higher investments in economy. They, on their part, will generate more jobs, where an additional growth of the number of the employed persons of 2.8 % is expected which corresponds to over 80 thousand new working places. Unemployment level is expected to be 1.4



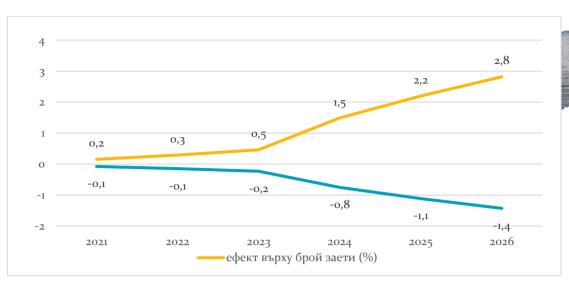
percentage points lower towards the end of 2026 compared to the scenario without investments under the plan. The effect of the higher investments will show also in the real labour productivity, which is expected to be 1.9 % higher at the end of the period. This will support the growth of the average work salary too, where the evaluated accumulated positive effect as of the end of 2026 is 2.3 % in nominal terms. The higher employment and income compared to the baseline variant will stimulate the private consumption... Increased internal demand will lead to increase of the import of goods and services into the country, the leading role being that of the import of goods. Though total level of export of goods and services will be positively affected by the improved economic situation in the country, increase of import will outpace the increase of export, which will lead to a more negative contribution of net export to GDP growth. It is not envisaged that the higher GDP level will be accompanied by a substantial acceleration of inflation, where the effect on the average annual inflation is an increase of about 0.2 percentage points and it is mostly in relation to the expected decrease of unemployment.



Graphics: GDP level at constant prices, difference from baseline scenario



Graphics: Number of employed persons and unemployment rate, difference from baseline scenario



Higher investments in economy will increase the physical capital. Positive effects are expected also on the side of the labour factor. It was evaluated as a result that, on the average, the potential growth will be about 0.7 percentage points higher compared to the scenario without the resources under the Recovery and Resilience Plan. Longer-term positive effects could be expected additionally from the increase of the technological and human capital on the side of investments and reforms, envisaged in respect of the science research and development activity, the information and communication technologies and the training.

The implementation of the plan will lead to additional expanding of the tax basis and to higher tax income compared to the baseline scenario. Income from corporate tax and VAT will be affected most significantly. At the same time, in view of the more favourable economic situation an increase of some current expenditure could be expected too. In result the fulfilment of the plan will have an almost neutral effect on the budget balance as % of GDP. The government debt in relation to GDP will be lower by between 0.1-0.9 percentage points in the 2022-2026 period, which will be due to the higher nominal GDP.

The presented scenario is dependent on the extent of the use of the funds under the Recovery and Resilience Plan. In case the use is lower the expected positive effects on Bulgarian economy will be less. Likewise the effects during the individual years will depend on the allocation of the funds. A risk in positive direction, not taken into account in the scenario, is that the implementation of the plan in the other EU countries will stimulate



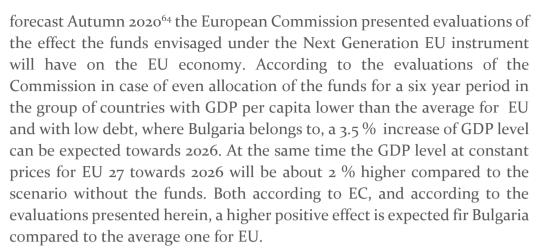
their demand of goods and services and it could be, therefore, expected to have an additional positive effect with regard to the Bulgarian export.

Table: Evaluation of the effects under the Recovery and Resilience Plan (difference from scenario without the funds under the plan)

(unreferred from section)						
Main macroeconomic indicators	2021	2022	2023	2024	2025	2026
GROSS DOMESTIC PRODUCT						
GDP level at constant prices [%]	0.3	0.5	0.8	2.5	3.7	4.8
GDP [real growth, percentage points]	0.3	0.2	0.3	1.7	1.2	1.0
Consumption	0.1	0.3	0.4	1.2	1.7	1.7
Gross fixed capital formation	1.0	1.1	1.3	7.3	5.2	4.1
Export of goods and services	0.0	0.0	0.1	0.1	0.4	0.6
Import of goods and services	0.1	0.3	0.5	1.2	2.2	2.4
LABOUR MARKET AND PRICES						
Employment [number, % deviation]	0.2	0.3	0.5	1.5	2.2	2.8
Unemployment rate (LFS) [percentage points]	-O.1	-0.1	-0.2	-o.8	-1.1	-1.4
Average work salary [level, %]	0.1	0.1	0.3	0.8	1.5	2.3
GDP deflator [percentage points]	0.0	0.0	0.0	0.1	0.1	0,2
Average annual inflation (HICP) [percentage points]	0.0	0.0	0.0	0.2	0.2	0.2
PAYMENT BALANCE						
Current account % of GDP [percentage points]	-0.1	-0.3	-0.5	-1.3	-2.5	-3.5
BUDGETARY SECTOR						
Budget balance % of GDP [percentage points]	0.0	0.0	0.0	0.0	0.1	0.1
Government debt % of GDP [percentage points]	0.0	-0.1	-0.1	-0.4	-o.6	-0.9
POTENTIAL GDP						
Potential GDP level at constant prices [%]	0.3	0.7	1.4	2.3	3.4	4.7
Potential GDP [growth, percentage points]	0.2	0.4	0.7	0.9	1.1	1,2

The significant shock caused by the coronavirus pandemic will not divert Bulgaria from its trend of convergence with the more developed economies of the European Union. The additional funds under the plan will accelerate that process. It should taken into consideration that in its







The implementation of the plan will assist the process of real convergence of Bulgaria and its getting closer to the EU average GDP levels per capita. The significant investments will increase the capital available per one employed person, which will support the increase of productivity of economy and of income respectively. The higher funds and the accompanying structural reforms in the area of education and digitalization are expected to have an additional effect on the qualification of the work force and to rise the technological intensity of production. In this way the desired structural transformation of economy and the population life standard getting closer to the average Union levels will be guaranteed, by laying at the same time solid foundations to continue the convergence of the country in the long run.

2. Comparison with the investment baseline scenario

An allocation of public expenditure was made by functions and by years in total and to the first decimal point according to the COFOG classification. The average value for years 2017-2018 is the reference level the total amount of such expenditure in the 2021-2026 period will be compared to, by excluding the expenditure, which is support under the Recovery and Resilience Mechanism (RRM).

⁶⁴ European economic forecast Autumn 2020, https://ec.europa.eu/info/sites/info/files/economy-finance/ip136 en 2.pdf
Initial evaluation of the effects on GDP, employment, debt on the side of EC https://ec.europa.eu/info/sites/info/files/economy-finance/assessment of economic and investment needs.pdf



The forecast value of the expenditure for the 2020-2023 period is based on the Updated Medium-Term Budget Forecast for the 2021-2023 period, where the allocation under COFOG is an exert evaluation. In that forecast expenditure is planned under the Recovery and Resilience Mechanism, which are presented as a total amount by years for the 2021-2023 period. The remaining amount of the expenditure, which will be funded under that mechanism and which constitutes the substantial portion of such support is expected to be used in the last three years of the forecast period.

* * * *

The forecast value of the total expenditure under COFOG in the period 2024-2026, which is affected by RRM, is based on data about public expenditure in the period 2017-2023, its share in GDP, the GDP forecast value in current prices for the period 2024-2026 under the baseline scenario (without RRP funds) and the expected expenditure to be financed through RRM.

The average value of planned public expenditure for the 2021-2026 period, as a percentage of GDP, excluding the expenditure financed by RRM, is 38 % compared to the reference level of 36 % for the 2017-2018 period.

