





# **TERRITORIAL ANALYSIS**

# OF REPUBLIC OF BULGARIA – THE REPUBLIC OF NORTH MACEDONIA CROSS BORDER AREA



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# Glossary of acronims

ВССР	Border-crossing Check Points
BG	Republic of Bulgaria
BGN	Republic of Bulgarian Lev
CBC	Cross-border Cooperation
CPR	Common Provision Regulation
EC	European Commission
ERDF	European Regional Development Fund
EU	European Union
EUR	Euro
EUSAIR	EU Strategy for the Adriatic-Ionian Region
EGTC	European Grouping of Territorial Cooperation
ENI	European Neighborhood Instrument
FDI	Foreign direct investments
GDP	Gross domestic product
GVA	Gross value added
GCI	Global Competitiveness Index
IPA	Instrument for Pre-Accession Assistance
ICT	Information and communication technology
ICH	Immornation and communication technology
ISO	International Organization for Standardization
IBM	Integrated Border Management
ISIC	Integrated Border Management
INTERREG	European territorial cooperation programmes
JRC	Joint Research Centre
MA	Managing Authority
MAKSTAT	State Statistical Office of the Republic of North Macedonia
MKD	RNM Denar
MRDPW	Ministry of Regional Development and Public Works, Republic of Bulgaria
MEUR	Million EUR
NCSD	National Concept for Spatial Development of the Republic of Republic of
11000	Bulgaria
NER	North-East Region of the Republic of North Macedonia
NUTS	Nomenclature of Territorial Units for Statistics
NCRD	National Centre for Regional Development, Republic of Bulgaria
NSI	National Statistical Institute, Republic of Bulgaria
NINKN	National Cultural Heritage Institute, Republic of Bulgaria
RSPS	Regional Spatial Planning Scheme of Republic of Bulgarian NUTS 2 regions
PO	Policy Objective
PM	Fine particulate matter
RES	Renewable energy sources
RNM	Republic of North Macedonia
SER	Southwest Region of the Republic of North Macedonia
SWOT	Strengths, Weaknesses, Opportunities and Threats
SO	Specific Objective
SWR	Southwest NUTS 2 region of Republic of Bulgaria
SME	Small and medium-sized enterprise
SSO	State Statistical Office of the Republic of North Macedonia
TEN-T	Trans-European Transport Network
UNESCO	United Nations Educational, Scientific and Cultural Organization
WIFI	Wireless Fidelity
WWTP	Wastewater Treatment Plant

## **1. INTRODUCTION**

The present Territorial Analysis is jointly developed by the Managing Authority (Ministry of Regional Development and Public Works of the Republic of Republic of Bulgaria, Territorial cooperation management Directorate) and the National Authority (Ministry of Local-self Government of the Republic of North Macedonia).

It represents the first step in elaborating the Interreg IPA Republic of Bulgaria – the Republic of North Macedonia Programme 2021-2027, which will be done in accordance with the regulatory framework for the programming process that is set out in the EC legislative package for the programming period 2021-2027.

The information included in the analysis is taken from the respective National statistics institutions of both partnering countries, relevant strategic documents on EU, national and regional level as well as from the existing territorial and situation analyses1.

Following the experience from the 2007-2013 and 2014-2020 programming periods, the main goal of the method used in the current analysis is to investigate the possibilities for strengthening and tightening the internal and cross-border relationships, as well as enhancing the territorial, economic and social cohesion in the programme area. For this purpose, the conclusions and recommendations should pave the way for a development equally beneficial for the people living on both sides of the border. The analysis of the situation is based on the available information in the analysis of the respective partnering country, covering the following main aspects: territorial (infrastructure, density, capacity of border crossings, settlements, environment and landscapes, energies etc.), economic (GDP, economic sectors, tourism, etc.) and social (demographic conditions, healthcare and education systems, etc.). In order to get access to the necessary information statistics available at European and national level are used.

The territorial analysis of the Republic of Bulgaria- the Republic of North Macedonia cross-border area focuses on the challenges, needs, potentials and common priorities (including economic, social and territorial disparities, investment complementarity, cultural and natural heritage, etc.) of the border regions. It highlights the strengths, weaknesses, opportunities and threats of the programme area, looking at the internal and external factors that influence its development and identifying trends and potentials, thus supporting the choice of an appropriate cooperation strategy. The current document analyses the cross-border development, in the following aspects:

<sup>1</sup> 

<sup>•</sup> Socio-economic analysis of the regions in the Republic of Republic of Bulgaria, 2019 https://www.eufunds.bg/en/node/2816

Updated National Concept for Spatial Development of the Republic of Republic of Bulgaria – draft version -<u>http://www.strategy.bg/PublicConsultations/View.aspx?lang=bg-BG&Id=4894</u>

<sup>•</sup> Spatial development schemes of Republic of Bulgarian NUTS 2 regions – draft versions <u>https://www.mrrb.ba/ba/proekt-na-regionalni-shemi-za-prostranstveno-razvitie-na-rajonite-ot-nivo-2/</u>

<sup>•</sup> Socio economic analysis of the Republic of Bulgaria - the Republic of North Macedonia cross-border area (Northeast, East and Southeast regions in the Republic of North Macedonia), December 2019

- what are the common challenges, needs, potentials and priorities that would benefit from joint actions?
- which European objectives are relevant for the programme area and would benefit from joint actions?
- what are the areas for development where Interreg would add value?

Given the importance and relevance of the analysis for the programming process, as well as EU, national, regional and local policy processes, a more strategic approach was adopted, that helped identifying the exact needs, challenges and potentials for the 2021-2027 programming period.

## **1.1. STRUCTURE OF THE DOCUMENT**

The analysis is structured on 5 main chapters, including the current introductory chapter. Each chapter is developed on the basis of the available data and information, ensuring, on the one hand, comparability with the previous analysis, allowing to assess the progress of the territory, and, on the other hand, updating the analysis according to the current trends and priorities (e.g. in terms of economic development, smart specialisation, sustainability etc.).

The main fields in the Territorial Analysis include:

- Description and Geographical characteristics of the programme area
- Demographic features
- Economic development
- Social development and Labour market
- Environment and Climate change
- Infrastructure and Digital connectivity
- Cultural and Natural heritage

The methodological approach allowed to investigate, for each of the chapters the main issues and challenges for the border regions (considering also link with challenges tackled in relevant European strategic documents), the needs related to the identified challenges, as well as the potentials for future development.

The concluding section includes an integrated SWOT analysis (summarizing the strengths, weaknesses, opportunities and threats regarding the development in the Programme area) and a chapter dedicated to the possible strategic approach and spheres of intervention for the INTERREG IPA Republic of Bulgaria-the Republic of North Macedonia programme 2021-2027.

## 1.2. EU LEVEL VISION AND STRATEGIC FRAMEWORK

The future Interreg IPA Republic of Bulgaria-the Republic of North Macedonia programme is being developed in accordance with the regulatory framework for the programming process, set out in the EC legislative package for the programming period 2021-2027, and taking into account all relevant

documents expressing the EU vision on territorial cooperation and the development of the Republic of Bulgaria- the Republic of North Macedonia programme area.

## 1.2.1 European Legislative Framework

The proposal for a REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL laying down common provisions on the European Regional Development Fund, the European Social Fund Plus, the Cohesion Fund, and the European Maritime and Fisheries Fund and financial rules for those and for the Asylum and Migration Fund, the Internal Security Fund and the Border Management and Visa Instrument (CPR), May 2019, is the general regulation guiding the operation of funds in the 2021-2017 period and sets the strategic approach and policy objectives in this sense. The thematic objectives used in 2014–2020 have been simplified to five clear policy objectives (POs) for the post-2020 programming period:

- 1. A smarter Europe innovative and smart economic transformation;
- 2. A greener, low-carbon Europe;
- 3. A more connected Europe mobility and regional ICT connectivity;
- 4. A more social Europe implementing the European Pillar of Social Rights;
- 5. Europe closer to citizens sustainable and integrated development of urban, rural and coastal areas through local initiatives.

Each policy objective is detailed by several specific objectives (SOs), as follows:

#### 1) A smarter Europe - innovative and smart economic transformation

- SO1.1. Enhancing research and innovation capacities and the uptake of advanced technologies
- SO1.2. Reaping the benefits of digitisation for citizens, companies and governments
- SO1.3. Enhancing growth and competitiveness of SMEs
- SO1.4. Developing skills for smart specialisation, industrial transition and entrepreneurship
- 2) A greener, low-carbon Europe
- *SO2.1. Promoting energy efficiency measures*
- SO2.2. Promoting renewable energy
- SO2.3. Developing smart energy systems, grids and storage at local level
- SO2.4. Promoting climate change adaptation, risk prevention and disaster resilience
- SO2.5. Promoting sustainable water management
- SO2.6. Promoting the transition to a circular economy
- SO2.7. Enhancing biodiversity, green infrastructure in the urban environment, and reducing pollution
- 3) A more connected Europe mobility and regional ICT connectivity
- SO3.1. Enhancing digital connectivity
- SO3.2. Developing a sustainable, climate resilient, intelligent, secure and intermodal TEN-T

- SO3.3. Developing sustainable, climate resilient, intelligent and intermodal national, regional and local mobility, including improved access to TEN-T and cross-border mobility
- SO3.4. Promoting sustainable multimodal urban mobility
- 4) A more social Europe implementing the European Pillar of Social Rights
- SO4.1. Enhancing the effectiveness of labour markets and access to quality employment through developing social innovation and infrastructure
- SO4.2. Improving access to inclusive and quality services in education, training and lifelong learning through developing infrastructure
- SO4.3. Increasing the socio-economic integration of marginalised communities, migrants and disadvantaged groups, through integrated measures including housing and social services
- SO4.4. Ensuring equal access to health care through developing infrastructure, including primary care
- 5) Europe closer to citizens sustainable and integrated development of urban, rural and coastal areas through local initiatives
- Fostering the integrated social, economic and environmental development, cultural heritage and security in urban areas

European territorial cooperation (Interreg) programmes, including the future Interreg-IPA Republic of Bulgaria- the Republic of North Macedonia Programme, have to contribute to the abovementioned policy objectives, in a mix according to the territorial specificities of their eligible areas.

According to the CPR, due to the specificities of each Fund, specific rules applicable to each Fund and to the European territorial cooperation goal (Interreg) should be laid down in separate Regulations ('Fund-specific Regulations') to complement the provisions of this Regulation. The REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on specific provisions for the European territorial cooperation goal (Interreg) supported by the European Regional Development Fund and external financing instruments sets the framework for the programming of the future Interreg-IPA Republic of Bulgaria- the Republic of North Macedonia. According to the Regulation, "the 2021-2027 period will seek to further strengthen cooperation by adapting the architecture of Interreg programmes to take better account of functional areas. Cross-border programmes will be better streamlined in order to concentrate resources on land borders where there is a high degree of cross-border interaction. Maritime cooperation will be reinforced by combining the cross-border and transnational dimension of working across sea basins in new maritime programmes.

Considering the specific features of Interreg programmes, two-Interreg specific objectives are set out:

6. A better Interreg governance – aiming at strengthening institutional capacity, enhancing legal and administrative cooperation, in particular where linked to implementation of the Border Regions Communication, intensify cooperation between citizens and institutions and the development and coordination of macro-regional and sea-basin strategies. This objective can be supported by the following actions:

- enhancing the institutional capacity of public authorities, in particular those mandated to manage a specific territory, and of stakeholders;
- enhancing efficient public administration by promoting legal and administrative cooperation and cooperation between citizens and institutions, in particular, with a view to resolving legal and other obstacles in border regions;
- enhancing institutional capacity of public authorities and stakeholders to implement macro-regional strategies and sea-basin strategies.
- 7. A safer and more secure Europe addressing specific external cooperation issues such as safety, security, border crossing management and migration.

In addition to the specific objectives for the ERDF presented above, the ERDF and, where applicable, the external financing instruments of the Union may also contribute to several Interreg - specific objectives under PO 4:

- enhancing the effectiveness of labour markets and improving access to quality employment across borders;
- improving access to and the quality of education, training and lifelong learning across borders with a view to increasing the educational attainment and skills levels thereof as to be recognised across borders;
- enhancing the equal and timely access to quality, sustainable and affordable healthcare services across borders;
- improving accessibility, effectiveness and resilience of healthcare systems and long-term care services across borders;
- promoting social inclusion and tackling poverty, including by enhancing equal opportunities and combating discrimination across borders.

The Regulation also sets the rules for thematic concentration, that should be considered in the design of the programme<sup>2</sup>:

- At least 60% of the ERDF and, where applicable, of the external financing instruments of the Union allocated under priorities other than for technical assistance to each Interreg programme under components 1, 2 and 3, shall be allocated on a maximum of three of the policy objectives set out in Article [4(1)] of Regulation (EU) [new CPR].
- An additional 15% of the ERDF and, where applicable, of the external financing instruments of the Union allocations under priorities other than for technical assistance to each Interreg programme under components 1, 2 and 3, shall be allocated on the Interreg-specific objective

<sup>&</sup>lt;sup>2</sup> The REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on specific provisions for the European territorial cooperation goal (Interreg) supported by the European Regional Development Fund and external financing instruments

of 'a better Interreg governance' or on the external Interreg-specific objective of 'a safer and more secure Europe'.

## 1.2.2 The European green deal

Supported by investments in green technologies, sustainable solutions and new businesses, the Green Deal is the new EU growth strategy. It supports the transition to a fair and prosperous society that responds to the challenges posed by climate change and environmental degradation, improving the quality of life of current and future generations. Nevertheless, the involvement and commitment of the public and of all stakeholders is crucial to its success.

In order for Europe to become the first climate-neutral continent by 2050, the European Green Deal includes a package of measures that should enable European citizens and businesses to benefit from sustainable green transition. Measures accompanied with an initial roadmap of key policies range from reducing emissions to investing in cutting-edge research and innovation and to preserving Europe's natural environment.

According to the European Green Deal, the major challenges for the next decade, translated into policy areas<sup>3</sup>, consist of:

**CLEAN ENERGY** | Further decarbonising the energy system is critical to reach climate objectives in 2030 and 2050. The production and use of energy across economic sectors account for more than 75% of the EU's greenhouse gas emissions. Energy efficiency must be prioritised. A power sector must be developed that is based largely on renewable sources, complemented by the rapid phasing out of coal and decarbonising gas. At the same time, the EU's energy supply needs to be secure and affordable for consumers and businesses. For this to happen, it is essential to ensure that the European energy market is fully integrated, interconnected and digitalised, while respecting technological neutrality.

**SUSTAINABLE INDUSTRY** | Achieving the EU's climate and environmental goals requires a new industrial policy based on the circular economy. Thus, the industries must be helped to modernise and exploit opportunities domestically and globally and the decarbonisation and modernisation of energy-intensive industries such as steel and cement is essential. In this case, the Commission presents a "sustainable products policy", which will prioritise reducing and reusing materials before recycling them. Minimum requirements will be set to prevent environmentally harmful products from being placed on the EU market.

**BUILDING AND RENOVATING** | To address the twin challenge of energy efficiency and affordability, the EU and the Member States should engage in a 'renovation wave' of public and private buildings. While increasing renovation rates is a challenge, renovation lowers energy bills, and can reduce energy poverty. It can also boost the construction sector and is an opportunity to support SMEs and local jobs. The Commission will launch an open platform bringing together the buildings and construction sector,

<sup>&</sup>lt;sup>3</sup> https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal\_en#policy-areas

architects and engineers and local authorities to develop innovative financing possibilities, promote energy efficiency investments in buildings and pool renovation efforts into large blocks to benefit from economies of scale.

**SUSTAINABLE MOBILITY** | Promoting more sustainable means of transport and improving public transport with stricter standards on pollution by cars. To achieve climate neutrality, a 90% reduction in transport emissions is needed by 2050. Achieving sustainable transport means putting users first and providing them with more affordable, accessible, healthier and cleaner alternatives to their current mobility habits. The Commission will adopt a strategy for sustainable and smart mobility in 2020 that will address this challenge and tackle all emission sources.

**BIODIVERISTY** | The Commission will present a Biodiversity Strategy by March 2020 and will work towards an ambitious new global framework to protect biodiversity at the UN Biodiversity Conference in October 2020. With the farm to fork strategy, the Commission will work to reduce the use of pesticides and fertilisers in agriculture and will prepare a neu EU Forest Strategy for planting new trees and restoring damaged or depleted forests. 96% of Europeans think that we have a responsibility to protect nature and 95% of Europeans consider that looking after nature is essential for tackling climate change.

**FROM FARM TO FORK** | European farmers and fishermen are key to managing the transition. The Farm to Fork Strategy will strengthen their efforts to tackle climate change, protect the environment and preserve biodiversity. The common agricultural and common fisheries policies will remain key tools to support these efforts while ensuring a decent living for farmers, fishermen and their families.

**ELIMINATING POLLUTION** | To protect Europe's citizens and ecosystems, the EU needs to better monitor, report, prevent and remedy pollution from air, water, soil, and consumer products. To ensure a toxic-free environment, the Commission will present a chemicals strategy for sustainability. This will both help to protect citizens and the environment better against hazardous chemicals and encourage innovation for the development of safe and sustainable alternatives. All parties including industry should work together to combine better health and environmental protection and increased global competitiveness.

In order to implement the Green Deal, a substantial contribution of the EU's budget through all programmes directly relevant to the transition will be ensured, as well as other EU funds. In this context, through the proposed objectives, the Interreg IPA Republic of Bulgaria- the Republic of North Macedonia 2021-2027 programme could contribute to addressing the abovementioned challenges.

#### 1.2.3 The Revised Territorial Agenda

The Territorial Agenda<sup>4</sup> is a strategic policy document for Europe, its regions and communities, providing a framework for action towards territorial cohesion and a future for all places in Europe, as

<sup>&</sup>lt;sup>4</sup> <u>https://www.territorialagenda.eu/home.html</u>

well as strategic orientations for territorial development and for strengthening the territorial dimension of policies at all governance levels.

The aim of the Territorial Agenda is to contribute to the sustainable and inclusive development of Europe and to the achievement of the Sustainable Development Goals.

The renewed Territorial Agenda is currently being elaborated and it starts from the premise that Europe consists of different types of places (e.g. capital regions, metropolitan areas, small and medium sized towns, rural areas, inner peripheries, peripheral areas, northernmost areas, sparsely populated areas, islands, coastal areas, mountainous areas or areas in economic transition), that show a great variety of development potential and challenges. From the sub-local to the pan-European level, disparities between places and between people as well as environmental risks and pressures increase. Key challenges and potential for local and regional development in Europe are linked to increasing imbalances and to the need for a transition to sustainable development, including the reaction to the challenges of climate change. A common feature is the importance of good government and governance. Hence, the renewed Territorial Agenda clustered the main challenges of the European continent in two main categories:

- The need to act as people and places drift apart increasing imbalances and inequalities, for example in the fields of:
- Quality of life
- Services of general interest
- Demographic and societal imbalances
- Digitalisation and the 4th industrial revolution
- Employment and economy
- Independencies between places
- Global embeddedness
- 2. The need to respond to the increasing pressure concerning sustainable development and climate change, for example in the fields of:
- Climate change
- Loss of biodiversity and land consumption
- Healthy quality of air, soil and water
- Secure, affordable and sustainable energy
- Just transition
- Circular regional value chains
- Natural, landscape and cultural heritage

#### **1.2.4** Border Orientations

**The Border Orientation Paper** for the Interreg IPA CBC cooperation programmes between Republic of Bulgaria and respectively: Republic of North Macedonia, Serbia and Turkey sets out the key characteristics of the cross-border territories and outlines suggestions for the programming of the next Interreg IPA programmes. It does not represent the negotiating position of the EC, but is destined to provide ideas, options and orientations on the thematic focus of the future programmes.

According to the paper, the main orientations for the cross-border area between Republic of Bulgaria and the Republic of North Macedonia that should be considered in the next programming period by the two countries are:

#### 1) Territorial dimension

The proposed geography for the three Interreg IPA CBC programmes is identical to the set-up of the two previous generations of programmes (2007-2013 and 2014-2020).

2) Orientations linked to challenges

Orientations (for all three IPA CBC programmes managed by Republic of Bulgaria) are structured in view of the proposed objectives for Cohesion Policy (PO 1 to 5, cf. Art. 4 (1) of the proposed CPR:

#### PO1: A smarter Europe by promoting innovative and smart economic transformation

The current framework conditions for innovation and competitiveness of SMEs in the programme areas are challenging and the impact of earlier actions funded by the IPA Cooperation programmes on socioeconomic development has been limited. However, there is potential to help the development of Balkan value chains through cross-border partnerships between territories with similar specialisations. Such projects would complement:

- Projects financed under the respective national/regional programmes supporting innovation and competitiveness in Republic of Bulgaria, the Republic of North Macedonia, Serbia and Turkey. Full complementarity between those programmes and the cross-border cooperation programmes need to be ensured.
- Activities organised by the JRC in the framework of macro-regional strategies through targeted scientific support to the Danube Strategy (applicable for Republic of Bulgaria-Serbia programme)
   Possible areas of investments may include:
- The provision of support to local SMEs taking into account also the activities under the Enterprise Europe Network to face challenges related to their size, limited resources (such as skills and finance) or industry and market conditions. This could take the form of voucher schemes to purchase cross-border business advice. The use of financial instruments may be considered to facilitate the access of SMEs to finance, with generic support in the form of grants only used if justified and avoiding competition with the repayable forms of support / ensuring that it does not crowd out FI support.

- The enhancement of links, networks and clusters taking into account also the activities funded under the European Cluster Collaboration Platform and the Danube Strategy between businesses active in similar fields.
- The promotion of entrepreneurship education taking into account also the activities under the European Institute of Innovation and Technology to build the competencies needed for successful start-up and growth of enterprises.

PO2: A greener, low-carbon Europe by promoting clean and fair energy transition, green and blue investment, the circular economy, climate adaption and risk prevention and management Energy transition: Possible areas of investment may include:

- Consider investing in cross border small-scale energy generation from renewable sources and smart energy systems if investment and distribution conditions are favourable. This could for instance take the shape of simple FIs with a grant component to make them sufficiently attractive and manageable. In that case, complementarity with other sources of funding (national funding, ERDF funding for Republic of Bulgarian national/regional operational programmes, IPA national programmes, Regional Efficiency Programme for the Western Balkans etc) should be ensured. For further details on the orientations in relation to the use of financial instruments please refer to section E governance)
- Where possible, exchange of best practices across borders for developing energy efficiency including in SMEs or public buildings

**Climate change and risk prevention:** *Possible areas of investments may include:* 

- Joint climate change measures with a strong focus on sustainable and eco-friendly measures (such as green infrastructure (e.g flood plains and reforestation).
- Consolidate existing cooperation through the development of joint policies, protocols, procedures and approaches on risk prevention and rapid response management to many potential emergencies (such as wildfires, flooding, natural disasters, severe weather evacuations, health emergencies).

#### Circular economy:

*Ensure that resources are used in a more sustainable and efficient way, possible areas of investments may include:* 

- Joint actions and campaigns to raise awareness and support sustainable consumption practices and behaviour (reuse and recycling of waste) in border regions
- Sharing of best practices to build the capacity of stakeholders involved in the transition to circular economy

 Joint measures to increase resource efficiency and to promote the circular economy in SMEs (if this is their primary objective, otherwise support should be focused under PO 1) such as advisory services, training on business-to-business circular procurement or 'circular' hubs.

#### **Bio-diversity and pollution:**

- Support actions to jointly protect nature and biodiversity. Ensure that actions are more strategic in their approach and that awareness of the local population and visitors is raised on some of the specific challenges of the cross border region when it comes to biodiversity, ecological connectivity, ecological quality of water bodies, invasive plants, ground and lake water pollution. Maximise the positive contributions that can be made to protecting and developing natural resources (large number of Natura 2000 and ramsar sites, large mammal habitats, landscape connectivity, green infrastructure networks). In this context, invest also in:
- The protection of wetlands (for example the Dragoman Marsh at the border between Republic of Bulgaria and Serbia) so that they also function as a natural filter, to remove pollution from the watershed, to reduce flooding and improve the habitat quality for birds and other wildlife (for example in the Sakar hills at the border between Republic of Bulgaria and Turkey)
- Develop the capacity of environmental authorities and the non-governmental sector to exploit the common natural heritage of the region while respecting environmental standards and securing sustainability. Joint capacity-building measures for environmental authorities should be considered.

#### Air pollution:

- Measures to improve air quality such as green infrastructure, joint awareness campaigns as well as monitoring
- Decontamination and rehabilitation of industrial sites and contaminated land on both sides of the border (for example in the case of mining waste)

## PO 3: A more connected Europe by enhancing mobility and regional ICT connectivity

IPA CBC programmes can play an important role for coordinated actions aimed at improving crossborder mobility and connectivity, in line with the Connectivity Agenda for the Western Balkan countries and in complement to other funding (ERDF, national IPA, Western Balkans Investment Framework etc). Depending on the funding available and on the basis of a commonly agreed strategic framework, possible investments could include:

#### Mobility:

 Targeted support for projects that tackle complex issues and aim at improving cross-border mobility in the programme area. Depending on the financial allocation available this could include: new/improved border crossing points, coach lines, public bicycle and car sharing schemes etc.

- Strategic projects (list of priority connections and planned operations) can be a submitted already at the adoption phase of the programme.
- Open calls for proposals can be used to select operations that would complement the above preidentified operations.

## Digital connectivity:

- supporting ICT infrastructure (WIFI spots on municipal buildings) mainly in rural areas (white spots
   / no interest of private providers), complementary to national programmes funding and EU
   initiatives (WIFI 4 EU).
- improving general conditions for joint e-solutions for instance in education (digital literacy), health care, business support and cultural cooperation.

## PO4: A more social Europe implementing the European Pillar of Social rights

Under PO 4 the programmes should establish a more pro-active interaction and convergence with employment programmes operating in their cooperation areas (Impact Evaluation Report 2007-2013). Other possible areas of investments include:

- Support more extensive and structured *learning activities* as a vector for building an employmentboosting factor.
- Mechanisms for active inclusion and improving the employability of vulnerable groups

# PO5: A Europe closer to citizens by fostering the sustainable and integrated development of urban, rural and coastal areas and local initiatives

Under PO5 interventions shall be based on an **integrated**, **place-based strategy**, i.e. strategies targeting a specific geographical area, identify common challenges and objectives based on the local needs, developed with appropriate citizen involvement, and endorsed by the relevant urban, local or other territorial authorities or bodies.

Possible areas of investments can also refer to policy objectives (1-4) and could concern:

- Investments in common historical, natural and cultural heritage products and services.
   Shared resources can also create new opportunities linked to the exploitation of complementary assets across the borders with a positive impact on employment:
- Improvement of the attractiveness of the region as a destination for green tourism and cultural heritage
- The promotion of local products and quality labels through the establishment of a network of local partners
- The preparation of plans and strategies to develop sustainable tourism
- Targeted support for environmentally friendly agricultural and forestry practices on both sides of the border
- Integrated actions targeting the economic, social, cultural and environmental local development needs of the area

- Promote training in vocational and entrepreneurial skills tackling the regional qualified and skilled labour
- Enhance interaction and networking between different actors to stimulate economic activities (development strategies)

Explore the possibility of establishing joint territorial instruments adapted to the characteristics of the border regions, especially with a view to tackling specific situations such as rural areas facing similar challenges on both sides of the border.

**Town twinnings, urban-rural linkages, and cooperation within cross-border functional urban areas** could provide an opportunity for facilitating local authorities' involvement in the EU acquis alignment process while learning from good practices in EU Member States. On the other hand, town twinning can set a framework for creating people-to-people exchanges and thereby involve citizens, universities and civil society.

It will be important to identify projects of a strategic nature, which will enhance the impact of the programmes on the cross-border regions. In this context, some inspiration could be drawn from the EUSDR and EUSAIR Strategies in cooperation with all neighbouring CBC programmes and with national and regional programmes.

#### ISO 2: A safer and more secure Europe

Address capability gaps relating to EU external borders identified by the European Border and Coast Guard Agency and by EU customs.

– ISO 2 to support EU policies on integrated border management so as to strengthen security of EU external borders and to protect supply chains. In close coordination with IPA special national envelops, cooperation programmes can support the upscaling and replication of border crossing point's infrastructures that can help the setting-up the Integrated Border Management (IBM) on EU's external borders.

Integrate people with a migrant background / foster cohesive and inclusive societies regardless of ethnicity, nationality, legal status, gender, sexual orientation, religion and disability.

 ISO 2 to support small-scale reception, health, education and housing infrastructure in cross-border areas while long-term integration measures to be primarily financed by the cohesion mainstream programmes.

Manage disaster risk better, by improving assessment, prevention, preparedness and response.

- For the Cohesion policies, these needs are essentially covered by PO2 at the exception of pandemics and emerging infectious diseases. ISO2 to support EU policies on cross-border health threats.
   Improve protection of all public spaces from terrorist attacks and make cities secure and resilient.
- For the Cohesion policies, these needs are essentially covered by mainstream programmes.
   Protect critical infrastructures, the Digital Single Market and the digital life of citizens against malicious cyber activities.

 For the Cohesion policies, the needs are essentially covered by mainstream programmes at the exception of ensuring disaster-proofing of infrastructure to support resilience of basic societal functions located in cross-border areas.

In addition, orientations are made in the context of Cross Border Governance, as follows:

In order to facilitate cooperation and reduce cross-border obstacles in the cross-border, the programmes could:

- Identify key obstacles and unused potential and facilitate the process of finding ways to reduce these obstacles or exploit the potential (e.g. by *funding meetings, experts, pilot projects*, etc.).
- Reinforce the participation of civil society as much as possible, inviting selected representatives at MC meetings.
- Continue organising joint information seminars for potential beneficiaries,
- Establish cooperation at the level of projects
- The future programmes are encouraged to explore the possibility of using FIs.
   Given the limited budget of the concerned programmes and the local constraints, consider simple
   FIs with a possible grant component to make them sufficiently attractive and manageable, e.g.
   providing a "capital rebate" (forgiving a part of the loan) of X% (or more e.g. linking the amount with income) of the project costs. Such a combination would be greatly simplified in post-2020 period.
- Investments in energy efficiency and support to SMEs appear to have a high potential for using
   FIs: the eligible costs are easy to define, the instrument could be relatively simple and
   implementation could be fast.
- Support more extensive and structured ways to develop a common vision for the cross-border region, possibly using public participation tools and practices (citizens' consultations, townhall meetings, competitions, etc).
- Better coordination with existing macro-regional, national, regional or sectoral strategies (e.g. with an analysis on how to translate these in a cross-border context). Therefore set out a coherent overview of all existing strategies (i.e. have a mapping of the strategies affecting the border area).
- Establish (or participate to) a strong coordination mechanism with the authorities managing mainstream programmes in the concerned countries, in particular the national and IPA programmes dealing with transport, environment, regional development, ICT and labour issues. Any future regional programme located along the borders should also be closely associated to the CBC programmes. This coordination implies exchange of information and cooperation and should happen at all stages: planning (e.g. designing complementarities), implementation (e.g. building on synergies) and communication (showing the benefits for the citizens and the region). Synergies with the transnational programmes (Adriatic and Ioanian, Danube and Balkan Mediterranean for

2021-2027) and the ENI CBC Black Sea Basin programme should be sought, avoiding overlapping to the maximum possible extent. These programmes cover a wider area and are therefore are more strategic by nature.

- Design the actions based on functional areas which will depend on the issue at stake rather than on the administrative scale defining the programme area. Authorities are encouraged to use the different available tools to support functional areas such as the European Grouping of Territorial Cooperation - EGTC -, Euroregions, Integrated Territorial Investments, Community Led Local Development, metropolitan areas, natural parks, and to cooperate with the relevant macroregional key stakeholders, where appropriate.
- Put in place mechanisms to finance small projects or people-to-people projects that make a strong contribution to the social and civil cohesion of the cross-border region. Programmes could focus on measures that will increase citizen's knowledge of each other and build trust. This can be done using the new tool proposed by the Commission (the Small Projects Fund) or via specific calls managed by the Managing Authority itself, focused on people-to-people activities.

#### **1.3. LATEST CHALLENGIES**

The COVID-19 outbreak was declared a global pandemic by the World Health Organization on 11 March 2020. The crisis is assessed to be the greatest global challenge since World War Two, as there has not been a nation-wide emergency situation declared since then. The spread of the COVID-19 across countries has prompted many governments to introduce unprecedented measures to contain the pandemic such as businesses being shut down temporarily or widespread restrictions on travel and mobility, and led to increased uncertainty on the financial markets.

By causing a several months of lockdown the COVID-19 health crisis has had significant unfavourable economic and social effects. The economy is contracting and unemployment is rising worldwide as the uncertainty of the situation to follow may lead to slower recovery. The lockdown will severely impact regions where culture and tourism sectors contribute significantly to regional economies. Available data on EU level indicates that economic and social impact resulting from imposed travel restrictions as well as drop in confidence of customers is likely to be the greatest in territories more reliant on tourism and hospitality.

The initial responses to the crisis largely depended on national and regional capacities, which differ to a large extent across states and regions, due to the diverse economic structures and fiscal space.

The state of emergency, declared by the National Assembly of the Republic of Bulgaria on 13 March 2020 was replaced by emergency epidemic situation on 14 May 2020. The amended Health Act in Republic of Bulgaria provides powers for application of further anti-epidemic measures grouped into administrative orders of the Minister of Health, as follows: anti-epidemic measures; introducing

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checkpoints and relevant restriction measures (where apropriate); quarantine and isolation of people in case of infected people or those in close contact; order concerning work activities and relevant conditions. Restrictions for travel and obligatory quarantine when entering the territory of Republic of Bulgaria from abroad are still in force and education and childcare institutions as well as day-centres for elderly and disabled people remain closed (by the end of May 2020). Employers are encouraged to arrange for their staff to work remotely to the greatest possible extent.

The Republic of North Macedonia has been under lockdown since 19 March due to the Covid-19 outbreak. An initial state of emergency was later extended. As of 20 March, a sharp decline of tax revenues by around 25% per day was observed. According to the updated IMF forecast from 14 April 2020, due to the outbreak, GDP growth is expected to fall to -4% in 2020 and reach up to 7% in 2021, subject to the post-pandemic global economic recovery. Unemployment is also affected by the negative economic impact of the pandemic. According to the National Agency for Employment, more than 8000 people lost their jobs between 11 March and 30 April. According to the latest data available from the World Bank, 5.2% of the population is estimated to live below the national poverty line.

The government adopted a set of economic measures for supporting business sector including support for salaries and firm liquidities as well as credit support from the National Bank of the Republic of North Macedonia.

The European Commission is proposing to harness the full power of the EU budget to mobilise investment and frontload financial support in the crucial first years of recovery. These proposals are based on two pillars. On the one hand, an emergency European Recovery Instrument which will temporarily boost the EU budget to raise additional financing to the EU markets and on the other hand, a reinforced multiannual financial framework for 2021-2027.

The EU's response to COVID-19 focuses on four priorities:

- limiting the spread of the virus
- ensuring the provision of medical equipment
- promoting research for treatments and vaccines
- supporting jobs, businesses and the economy

These priorities were agreed on by EU leaders who regularly meet by video conference to discuss and assess the EU's response to the COVID-19 outbreak.

As part of its emergency support package to tackle the economic impact of the COVID-19 crisis, the EU has put in place a temporary instrument to help workers keep their jobs during the crisis. Member states will be able to request up to €100 billion in loans under favourable terms to help finance sudden and severe increases of national public expenditure in response to the crisis in specific areas.

SURE (Support to mitigate Unemployment Risks in an Emergency) is one of the three safety nets, worth €540 billion, for jobs and workers, businesses and member states, agreed by the Eurogroup and endorsed by EU leaders.

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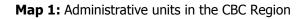
The EU is also helping EU citizens stranded in third countries. EU delegations are working with member states' embassies to coordinate the repatriation of EU citizens.

At the EU-Western Balkans Zagreb summit on 6 May 2020, the EU leaders reaffirmed the EU's commitment to the collaboration in the fight against COVID-19 with the Western Balkans partners (including the Republic of North Macedonia). The EU is mobilising a package of over €3.3 billion to the benefit of the Western Balkans partners to support the health sector, social and economic recovery, and provide macro- as well as micro-financial assistance through the European Investment Bank.

# **2. TERRITORIAL ANALYSIS**

## 2.1 Description of the Border Area

The programme area (Republic of Bulgaria – the Republic of North Macedonia Programme) is located in the South-Central part of the Balkan Peninsula and covers a territory of 18 087 km2. The length of the border between Republic of Bulgaria and the Republic of North Macedonia is 165 km long with three operating border crossings (Zlatarevo-Novo Selo, Stanke Lisichkovo-Delchevo and Gyueshevo-Deve Bair).





The programme territory includes on Republic of Bulgarian side two territorial units at NUTS III level (part of BG41 - Югозападен (Yugozapaden) NUTS II region) - **Blagoevgrad and Kyustendil** (52,5% of

the programme area, 8,6% of the country area), comprising of 23 municipalities and 462 settlements. The municipalities on the side of Republic of Bulgaria are:

- **District of Blagoevgrad:** Bansko, Belitsa, Blagoevgrad, Gotse Delchev, Garmen, Kresna, Petrich, Razlog, Sandanski, Satovcha, Simitli, Strumiani, Hadzhidimovo and Yakoruda;
- **District of Kyustendil:** Bobovdol, Boboshevo, Dupnitsa, Kocherinovo, Kyustendil, Nevestino, Rila, Sapareva Banya and Trekliano.

The territory on side of the Republic of North Macedonia comprises of the **North-East, the East and the South-East** equivalent to NUTS III level statistical regions (47,5% of the programme area, 33,8% of the country area), consisting 27 municipalities and 597 settlements:

- North-East region: Kratovo, Kriva Palanka, Rankovce, Kumanovo, Lipkovo and Staro Nagorichane;
- **East region:** Berovo, Pehchevo, Vinica, Kochani, Cheshinovo-Obleshevo, Zrnovci, Probishtip, Shtip, Karbinci, Delchevo and Makedonska Kamenica.
- South-East region: Valandovo, Gevgelija, Bogdanci, Dojran, Radovish, Konche, Strumica, Bosilovo, Vasilevo and Novo Selo;

The settlement structure in the CBC region is characterized by a concentration of population, economic and social activities in several regional centres (Blagoevgrad, Kyustendil, Dupnitsa, Sandanski, Goce Delchev and Petrich on the side of the Republic of Bulgaria; Kumanovo, Shtip and Strumica on side of the Republic of North Macedonia – above 47% of the total CBC region's population) and numerous sparsely populated mountainous, rural and peripheral areas.

## 2.2 GEOGRAPHICAL CHARACTERISTICS

More than half of the programme area is mountainous with forests occupying over 40% of the territory. The entire Rila and Pirin mountains, part of Western Rhodopi, the mountains of Verila, Konyavska, Zemenska, Slavyanka, Plackovica, Belasica, Osogovo, Malesevska, Ograzden and Vlahina fall within the programme territory. The geographical structure of the programme area includes also numerous valleys with agricultural lands (Kocani plain, Struma and Mesta valleys, Kyustendil valley, Dupnica valley etc.), which favours the development of tourism, agriculture and food processing industries.

The programme area is rich in water resources: *rivers*, the biggest of which are Struma, Mesta, Bregalnica, Strumica (Strumeshnica); *lakes* (part of Dojran lake, Vodoca, Mantovo; numeros lakes in Rila and Pirin mountains, of which the most popular are the Seven Rila lakes); *groundwater* (both springs and thermal waters), available across the whole cooperation area. The most significant thermal springs with potential for development of spa tourism are the ones in the towns of Sandanski, Marikostino, Ognyanovo, Kyustendil, Sapareva Banya, the villages of Nevestino and Chetirtsi (at the border side of the Republic of Bulgaria, representing over 40% of all thermal springs available in the country) and the ones in Kocani, Vinica, Strumica (in the Republic of North Macedonia).

The climate is diverse, from moderate-continental, transitional-continental and mountainous to Mediterranean along the river valleys. The soil profile varies as well: from forest soil in the mountain areas to alluvial soils in the river valleys which provides favourable conditions for agriculture (both fruit and vegetable crops).

The mountains are generously forested with deciduous and evergreen trees that provide excellent opportunities for tourism, recreational activities and for the wood-processing industries.

Different types of mineral resources are presented in the border region, but those have no significant input for the economic development of the region, with the exception of coal and marble.



Map 2: Geography of the CBC Region

## 2.3 DEMOGRAPHIC FEATURES

The total population of the co-operation area is 948 564 inhabitants. The population structure among the participating units differs.

The population of the Bulgarian part of the CBC area is 424 164 people, accounting for 6,06% of the country's total population. The biggest cities are the two district centres Blagoevgrad (75329 inhabitants) and Kyustendil (53273 inhabitants).

The population on border side of the Republic of North Macedonia is 524 400 people, accounting for 25,26% of the country's total population. There is a total of 7 municipalities in the Northeast region and in terms of population, the biggest one is Kumanovo. In the East region (174877 inhabitants), there is a total of 11 municipalities and the biggest one is Shtip. The population of the Southeastern Region amounts to 173327 people with the biggest town being Strumica.

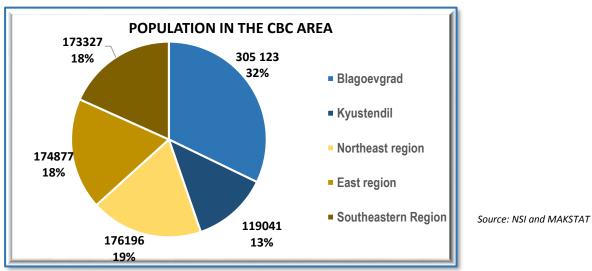
There is a concentration of population, economic and social activities in several regional centres, in particular Blagoevgrad and Kyustendil (on the side of the Republic of Bulgaria) as well as in Kumanovo, Shtip and Strumica (on the side of Republic of North Macedonia). There are also sparsely populated rural and peripheral areas in the mountains closer to the border.

BG total	7 000 039			100,00%	RNM total	2 076 217			100,00%
CBC BG total	424 164		100,00%	6,06%	CBC RNM total	524 400		100,00%	25,26%
Blagoevgrad	305 123	100,00%	71,94%		Northeast region	176196	100,00%	33,60%	
Bansko	12827	4,20%			Kratovo	9134	5,18%		
Belitsa	9316	3,05%			Kriva Palanka	19718	11,19%		
Blagoevgrad	75329	24,69%			Kumanovo	109573	62,19%		
Gotse Delchev	29859	9,79%			Lipkovo	30294	17,19%		
Garmen	14793	4,85%			Rankovce	3632	2,06%		
Kresna	5143	1,69%			Staro Nagorichane	3845	2,18%		
Petrich	49530	16,23%			East region	174877	100,00%	33,35%	
Raslog	19294	6,32%			Berovo	12646	7,23%		
Sandanski	37400	12,26%			Cheshinovo- Obleshevo	6742	3,86%		
Satovcha	14263	4,67%			Delchevo	15918	9,10%		
Simitli	13249	4,34%			Karbinci	3918	2,24%		
Strumyani	5053	1,66%			Kochani	37566	21,48%		
Hadzhidimovo	9178	3,01%			Makedonska Kamenica	7398	4,23%		
Yakoruda	9889	3,24%			Pehchevo	4782	2,73%		
Kyustendil	119 041	100,00%	28,06%		Probishtip	14874	8,51%		
Bobov dol	7498	6,30%			Shtip	48766	27,89%		
Boboshevo	2597	2,18%			Vinica	19299	11,04%		
Dupnitsa	39414	33,11%			Zrnovci	2968	1,70%		
Kocherinovo	4365	3,67%			Southeast Region	173327	100,00%	33,05%	
Kyustendil	53273	44,75%			Bogdanci	8078	4,66%		
Nevestino	2018	1,70%			Bosilovo	13932	8,04%		
Rila	2458	2,06%			Dojran	3280	1,89%		
Sapareva banya	6660	5,59%			Gevgelija	22647	13,07%		
Treklyano	758	0,64%			Konche	3570	2,06%		
					Novo Selo	10600	6,12%		
					Radovish	29132	16,81%		
					Strumica	57412	33,12%		
					Valandovo	11673	6,73%		
					Vasilevo	13003	7,50%		

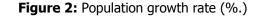
Table 1: Population by Districts / Statistical Regions<sup>5</sup>

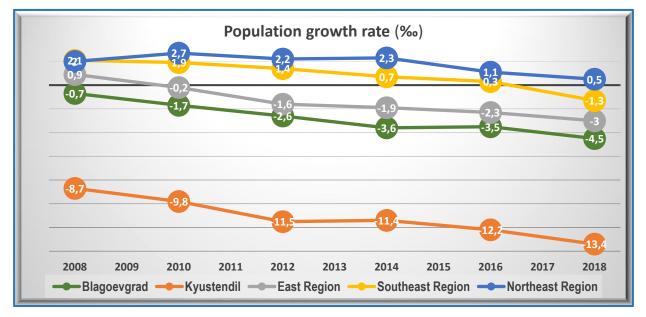
<sup>&</sup>lt;sup>5</sup> Source: NSI & SSO (MAKSTAT)





The demographic potential of the co-operation area is similar for both sides with the exception of Kyustendil District where there is a definite negative Population growth rate in comparison to the rest of the regions.





#### Source: NSI and MAKSTAT

On the Bulgarian side of the CBC region the negative natural growth rate is close to the average national values (-6,5‰). In general the area is characterised by a continuing decline and ageing of the population, decreasing birth rates and persistently high crude mortality rate, and a negative natural and mechanical population change. In addition, due to a negative natural growth (mainly in rural territories) and dominating out-migration processes, there are serious depopulation especially in the rural areas. The large-scale emigration processes, mainly among young age groups, contributed significantly to the age structure in Republic of Bulgaria. Population ageing is a process with profound

implications for the economy, the labour market and social systems. It affects all aspects of the country's economic and social life.

The co-operation area of the Republic of North Macedonia shows also a decreasing population growth rate. During the last 10 years starting from positive figures for the population growth rate of the three statistical regions – at the end of 2018 only the Northeast Region continues to have a positive rate (close to the country average) while the rest two regions show negative figures.

Regarding the migration flows in the CBC region it can be noted that the in-migration is higher than the out-migration, e.g. the net migration is positive (as the country's average).

The most significant demographic characteristic is the **population ageing**, which is typical of the majority of the EU countries.

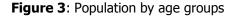
The population of the Bulgarian side of the co-operation area is ageing over the last years following the national trend and the ageing index for 2019 is close to the country's average one. As a result, human potential for the economic development especially in rural areas of the Bulgarian side is decreasing since the working-age population accounts for less than two thirds.

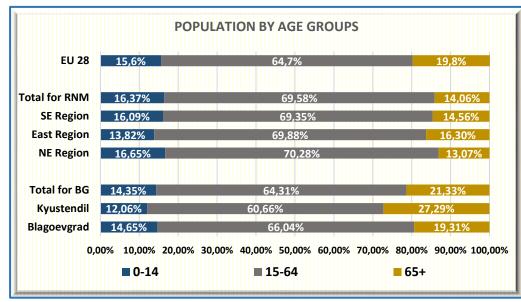
The border area of the Republic of North Macedonia also faces ageing of the population in the last years. The population in 2018 within the different age groups is close to the country's average. Nevertheless the share of working-age population (within the range 15-65) is more than two thirds of the total one.

	Blagoevgrad	Kyustendil	Total for BG	NE Region	East Region	SE Region	Total RNM
below 15	44692	14351	1004845	29337	23240	27886	339955
15-65	201504	72208	4502075	123794	117491	120183	1445077
above 65	58927	32482	1493119	23024	27404	25235	291921
Total	305123	119041	7000039	176155	168135	173304	2076953

 Table 2: Population by age groups

Source: NSI and MAKSTAT





Source: NSI and MAKSTAT The average population density of the co-operation area of the Republic of Bulgaria is lower than the national one (63,9 inhabitants per km<sup>2</sup>) and varies significantly between urban and rural areas. The district of Kyustendil has the lowest population density of the whole CBC region.

The population density of the cooperation area of the Republic of North Macedonia shows remains below to the national average (81,4 inhabitants per km<sup>2</sup>). The Northeast statistical region has the highest population density of the whole CBC area - 76.3 inhabitants / km<sup>2</sup>, close to the national average (83.2 inhabitants / km<sup>2</sup>).

The average population density of the total BG-RNM CBC region (52,1 inhabitants per km<sup>2</sup>) is far below the EU-28 average, which is 117,7 inhabitants per km<sup>2</sup>

Administrative unit	Territory (km²)	Population density (per km <sup>2</sup> )
Blagoevgrad district	6449	47,3
Kyustendil district	3084	38,6
Total/Average BG CBC area	9534	44,5
Toptal/Average BG	110994	63,9
NE Region	2306	76,3
East Region	3539	49,5
SE Region	2835	63,3
Total/Average RNM CBC area	8680	60,5
Total/Average RNM	25710	81,4

Table 3: Administrative unit

Source: NSI and MAKSTAT

#### 2.4 ECONOMIC DEVELOPMENT

Economic development is a multi-layered process influencing the economic growth, the output of the innovation and business sectors, the labour productivity growth, the improving of the standard of living of the population of countries with sustainable growth from a low-income economy to a modern, highly profitable economy. Economic development and the discrepancies between and within regions are assessed with the help of several main indicators

A common characteristic of the cross-border region between Republic of Republic of Bulgaria and Republic of North Macedonia is its relatively low economic development, mainly represented by the trade and service sector, being clearly underdeveloped, compared to the rest of the partnering countries' territories.

In the period between 2010 and 2017, the tertiary (services) sector in Republic of Bulgaria is in the lead by a share that is more than twice higher, followed by the secondary sector (industry sector) and the primary sector (agriculture, forestry, hunting and fishing). Another factor which has a positive impact on the growing economic activities in Republic of Bulgaria is the dynamically developing global economy, which is resulting also in an increasing demand for Bulgarian goods and services. The increasing export volume in the last 5 years is a good indicator for the competitiveness of the Bulgarian industrial production and service delivery.

Economic growth in the Republic of North Macedonia, analysed by sectors in 2018, was a result of the positive performance in the services and industrial sectors, while construction and agricultural sectors had negative contribution to growth. Services sector registered real growth of 4.0%, mostly as a result of intensified activity in trade, transportation and food and accommodation services by 9.7%. Industrial sector experienced real growth of 3.1%, as a result of growth in Manufacturing of 5.4%. The decline in Agricultural sector continued with weaker dynamics compared to the previous year, amounting to 7.4%. During this period, activity in the Construction sector experienced 7.6% decline in real terms, mostly as a result of the dropped construction activity as regards civil engineering structures. Convergence with EU income levels remains sluggish. Real GDP per capita has increased from 34% of the EU-28 average in 2012 to 37% in 2017.

#### 2.4.1 Gross domestic product (GDP)

Gross domestic product (GDP) refers to the measurement of the total value of goods (products) and services produced in a given territorial area over a specified period (usually within a year) before depreciation. This is one of the ways of measuring national income and output.

The current analysis of territorial differences in terms of GDP was made on the basis of comparisons of the following indicators:

- Gross domestic product by territorial units for statistical purposes;
- Gross domestic product per capita;
- Gross value added (GVA)

Despite its relatively good overall economic performance, Republic of Bulgaria has been slow to catch up with the rest of the EU. Real Gross Domestic Product (GDP) (adjusted for inflation) grew by an estimated 3.2 % in 2018 and is expected to increase by 3.6 % in 2019 and 2020, driven by domestic demand. Potential GDP growth has strengthened over recent years. This has been driven mainly by improvements in total factor productivity (2) while the contributions of capital and labour have been modest. Regional disparities are growing and hampering the competitiveness of the country. Although it accounts for just 18.8 % of the population, the Sofia-city region generates nearly half of the country's GDP. The GDP situation is no different in the constituent districts of NUTS 2 regions. In most cases, the figure in one or two districts of a region is several times higher than in the remaining constituent districts.

The cross-border area in the Republic of North Macedonia is characterized by diverse economic structure, as well as diverse development processes depending of the specifics of each region, tradition and natural resources. The Northeast region is the most economically underdeveloped planning region

in the RNM with GDP share of 5% in 2017. The East region, due to great climate conditions favours agriculture and agriculture products development, while the economy in the Southeast regions much more competitive compared to the other two, as it registers GDP share of 9.8% in 2017, and is dominated by services and agriculture with vineyard area (20.7% of the total area in the country).

Administrative unit	GDP	Share (%)		
Republic of Bulgaria	51 663	100,00%		
Blagoevgrad	1 390	2,69%		
Kyustendil	500	0,97%		
The Republic of North Macedonia	10 066	100,00%		
North-East Region	500	4,97%		
East Region	831	8,26%		
South East Region	988	9,82%		

Table 4: Gross Domestic product 2018, (MEUR)

Source: MAKSTAT and NSI

#### 2.4.2 GDP per capita

The **gross domestic product per capita** in Republic of Bulgaria during the period from 2013 to 2017 was increasing slightly faster than the EU average and in 2017 it reached 50% of the EU average. In terms of this indicator, the differences between the regions as well as the internal differences within the regions were also distinct. The differences in GDP per capita were even more distinct between the districts, within the region these districts formed. Less investment, which affects GDP per capita, was observed in districts where personnel shortages are identified in terms of both quantity and quality (education and qualification).

#### **Table 5**: Gross domestic product (GDP) per capita, 2018 (EUR)

Republic of North Macedonia	East Region	South-East Region	North-East Region	Republic of Bulgaria	Blagoevgrad district	Kyustendil district
5 153	2746	4341	7702	7 984	4495	4085

Source: MAKSTAT and NSI

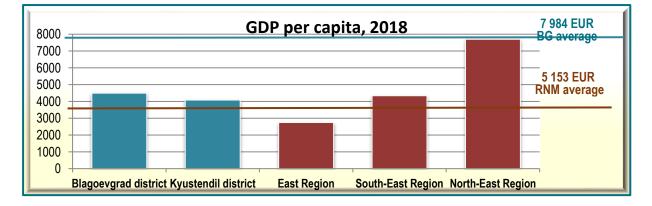


Figure 4: GDP per capita, 2018

A higher gross domestic product per capita compared to the average of the Republic of North Macedonia was recorded in the Southeast Region. Other two border regions had gross domestic product per capita below the average of the Republic of North Macedonia while the smallest gross domestic product per capita compared to the average of the country was in North-East region. The Northeast region is the most economically underdeveloped planning region in the RNM, with GDP share of 5%, far less than the region's share in the total territory and total population of the country. The economic development of the Southeast region has achieved significant results compared to the other two regions. It has the GDP rate of almost 10% compared to national level. This region has the following index rates (Development index of 0.89, Socio-economic index of 1.36 and Demographic index of 0.58). Although the agriculture is dominated sector followed by services and industry, there is a dynamic growth in CBC region of Republic of North Macedonia.

#### 2.4.3 Gross Value Added (GVA)

The **gross value added (GVA)** is the measure of the value of goods and services produced in an area, industry or sector of an economy. GVA is obtained by subtracting the value of goods and services (intermediate consumption) used to produce this product from the value of goods and services (output) produced by economic units in a region

Administrative unit	GVA per	economic secto	rs (MEUR)	GVA total
	Agriculture	Industry	Services	(MEUR)
Republic of Bulgaria	2 104	12 744	29 961	44 809
Blagoevgrad	122	346	737	1 205
Kyustendil	52	136	246	433
Republic of North Macedonia	7 446	2317	5177	14940
North-East Region	370	99	281	750
East Region	613	255	334	1202
South East Region	587	211	376	1174

Table 6: GVA per economic sectors, 2018

Source: NSI + MAKSTAT

Figure 5: GVA per economic sectors, 2018

GVA per economic sectors											
Bulgaria	4,70%	28,44%	66,86	5%							
Blagoevgrad	10,12%	28,71%	61	,16%							
Kyustendil	11,98%	31,34%		56,68%							
North Macedonia		49,84%	15,51%	34,65%							
North-East Region		49,33%	13,20%	37,47%							
East Region		51,00%	21,21%	27,79%							
South East Region		50,00%	17,97%	32,03%							
	■ Agriculture ■ Industry ■ Services										

Source: NSI + MAKSTAT

The values of the GVA indicator in Republic of Bulgaria (at national level) replicate the characteristics of the GDP indicator. The Southwestern NUTS 2 region. The changes in the economic structure of the CBC region on Bulgarian side follow the trends of more developed economies. The strong share of services continued to grow at the expense of shrinking sectors of industry and agriculture. In 2017, 59% of the total value added in the CBC region (57.3% in 2010) was formed in the service sector. The industry sector produces 30.05% of the regional added value (32% in 2010). The contribution of the agriculture, forestry and fisheries sectors to the newly created value was only 11%, but it still remained very important for the regional economy.

#### GVA share in Republic of Bulgaria by sectors - 2014 - 2017

	2014			2015			2016			2017		
	Agriculture share %	GVA in agriculture	Total	Agriculture share %	GVA in agriculture	Total	Agriculture share %	GVA in agriculture	Total	Agriculture share %	GVA in agriculture	Total
Blagoevgrad	11,96%	248	2074	9,84%	210	2134	9,82%	218	2221	10,12%	239	2362
Kyustendil	7,62%	59	774	10,27%	85	828	10,90%	91	835	11,52%	101	877

#### Table 6.1: GVA in Agriculture Sector

#### Table 6.2: GVA in Service Sector

		2014			2015			2016		2017		
	Services share %	GVA in services	Total	Services share %	GVA in services	Total	Services share %	GVA in services	Total	Services share %	GVA in services	Total
Blagoevgrad	56,36%	1169	2074	58,62%	1251	2134	59,52%	1322	2221	62,02%	1465	2362
Kyustendil	55,81%	432	774	52,78%	437	828	53 <i>,</i> 89%	450	835	55,76%	489	877

#### Table 6.3: GVA in Industry Sector

	2014			2015			2016			2017		
	Industry share %	GVA in industry	Total									
Blagoevgrad	31,68%	657	2074	31,49%	672	2134	30,71%	682	2221	27,86%	658	2362
Kyustendil	36,56%	283	774	36,96%	306	828	35,09%	293	835	32,73%	287	877

Source NSI

A higher gross GVA compared by sectors of economy in the CBC Region of Republic of North Macedonia was recorded in the Southeast Region as the lowest is to North-East region.

The **industry** taking the second place in the CBC area of the Republic of Bulgaria and third place in the economy of CBC region of the Republic of North Macedonia, is mainly represented by mining, being a leading sector in the past and still keeping its most important part in the regional industrial production. The most famous mining centres in the Republic of North Macedonia are Konce (Southeast Region) with the extraction of limestone, marble and copper, iron mine in Radovis (Southeast Region), zink mines in Makedonska Kamenica (East Region).

**Agricultural sector** has the substantial share in the Republic of North Macedonia and took the third place in the border region of the Republic of Bulgaria. 95 % of the total rice production in the Republic of North Macedonia is produced in East Region (Kocani). East region is also the biggest potato producer and has 40% from pork production in the country. As to the vineyard area, Southeast Region reserves

a territory of 4,408 (ha), which is 20.7 % of the total vineyard area in the country. On Bulgarian side there are 30,000 acres of vineyards planted in the Blagoevgrad region. Kyustendil region annually produce more than 6 thousand tons of cherries, being one of the biggest cherry producer and exporter in Republic of Bulgaria.

**Service sector** is in the lead position in the Republic of Bulgaria and took the second position in the border area of the Republic of North Macedonia. The region's geographical location and rich natural resources form an excellent base for the development of the service sector, specifically international trade, transport and related services, tourism, thus becoming an important engine for boosting the socio-economic development of the border region. The Southeast region (Republic of North Macedonia) and Kyustendil district (Republic of Bulgaria) are rich with thermo-mineral potential that is one of the main prerequisite for development of spa-tourism in the CBC region. Services sector registered real growth of 4.0% in the Republic of North Macedonia, mostly as a result of intensified activity in trade, transportation and food and accommodation services by 9.7%.

#### 2.4.4 Foreign direct investments (FDI)

Foreign direct investments (FDI) are by nature financial resources invested in buying fixed tangible assets, patents, trademarks, know-how, securities, acquisition of new fixed tangible assets, reconstruction and expansion or extension of already existing ones, etc.

The size of investments and their structure determine the speed and nature of economic growth. Poor investment reduces economic growth and employment, the reverse process stimulates economic activity as output and employment.

In all the years of the period covered by the analysis (between 2010 and 2017), foreign direct investment in Republic of Bulgaria had the highest values in the tertiary sector (the services sector) and extremely low values in the primary sector (agriculture, forestry and fisheries).

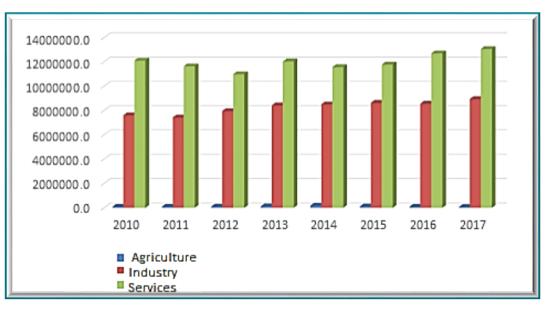


Figure 6: Foreign direct investment by sectors in Republic of Bulgaria

Foreign direct investment (FDI) in non-financial sector in the Kyustendil district amounted to EUR 42.9 million as of December 31, 2018, which is 0.4% more than in 2017. Their share in the total amount of foreign investments made in the country is 0.2% and 0.3% respectively of FDI within the South-West region. In terms of foreign investment, Kyustendil is ranked 21st in the country, followed by Montana and Silistra districts. The highest value of foreign investments in industrial enterprises in the district is EUR 24.6 million or 3.3% less than in 2017 - 39.4% of them are in the section "Manufacture of textiles and clothing; leather processing; manufacture of footwear and other articles of fur. EUR 11.0 million has been invested in the Real Estate Industry. In the services sector (trade; repair of cars and motorcycles; transport, warehousing and post offices; hotels and restaurants) EUR 4.6 million was invested or 24.5% less than in the previous year. In 2018, these three activities together account for 93.6% of the total FDI in the Kyustendil District, and their total size decreases by 2.6% compared to 2017.

Foreign direct investment (FDI) in non-financial sector in the Blagoevgrad district as of December 31, 2018 amounted to EUR 499.3 million, which is 5.3% more than in 2017. Their share in the total amount of foreign investments made in the country is 2.0% and 3.4% respectively of FDI within the Southwest region. In terms of foreign investment, Blagoevgrad District ranks eighth in the country. In 2018, the highest value of foreign investments made in the services sector (trade; repair of cars and motorcycles; transport, warehousing and post offices; hotels and restaurants) - EUR 248.3 million, 1.3% more than in 2017 year.

Enterprises in the Industry (except construction) invested EUR 139.5 million or 3.0% more than in 2017. In 2018, these two activities together accounted for 77.7% of total FDI, and their total relative share decreased by 2.5 percentage points compared to 2017.

There are significant differences in the ability of individual districts in Bulgarian CBC region to attract foreign direct investment, which further widens the gap between the districts. In the table below the difference between the districts in terms of foreign direct investment is also illustrated by the difference between the Blagoevgrad district (1,9%) and the least performing district in the region (and one of the last places in the country) at the end of 2018 - district Kyustendil (0.2%).

	Total FDI (EUR)	Share
Blagoevgrad district	474 397 000	1,94%
Kyustendil district	42 782 000	0,17%
Republic of Bulgaria	24 475 196 000	100,00%
Northeast region	183 087 368	16,28%
East region	142 350 885	12,66%
Southeast region	116 042 541	10,32%
Republic of North Macedonia	1 124 616 167	100,00%

**Table 7**: Foreign direct investments in non-financial enterprises

Source: NSI (2018) and MAKSTAT (2017)

Investments are very important for regional development, and their distribution should be based on many demographic, social and economic factors.

The total investments in the **Republic of North Macedonia** for period 2011 to 2018, the largest percentage of investments was allocated to the Northeast region with 16,28 %. Lower percentage was allocated to the Southeast region with 10,32%.

Republic of North Macedonia's Foreign Direct Investment (FDI) increased by 6.5 USD mn in Sep 2019, compared with an increase of 43.4 USD mn in the previous month.



Figure 7: Foreign Direct Investment in the Republic of North Macedonia, 2019

Foreign Direct Investments in Republic of Bulgaria are continuously rising too, especially in the sectors real estate, financial brokerage, as well as production and trade of electricity. All these trends are showing a rapid developing economic situation in Republic of Bulgaria with a positive outlook for the upcoming years. Looking closer at the relevant labour market indicators, the picture shows similar positive trends.

## 2.4.5 Global competitiveness of the national economies

Competitiveness represents a complex indicator reflecting the quality of certain dimensions that have an impact on the productivity of a national economy and on its ability to compete on the global scale. The *Global Competitiveness Report*<sup>6</sup> issued yearly by the World Economic Forum compares all national economies in terms of competitiveness.

For the 2018-2019 edition<sup>7</sup>, Republic of Bulgaria ranks 49<sup>th</sup> out of 141 countries analysed, advancing from 51<sup>st</sup> place in the previous edition, while the Republic of North Macedonia is at 82<sup>nd</sup> globally, a slight increase (+ 2 points) over last year. Compared to 2012-2013 period, Republic of Bulgaria improved its performance (advanced 13 positions<sup>8</sup>). The figures for the Republic of North Macedonia show a slight decrease (with 2 positions) on the global ranking scale (80<sup>th</sup> position out of 144 countries analysed in 2012-2013 period).

- <sup>7</sup> Idem 19, pg. 118-121, pg. 434-437
- <sup>8</sup> World Economic Forum, *Global Competitiveness Report*, 2013, http://www3.weforum.org/docs/WEF\_GlobalCompetitivenessReport\_2012-13.pdf

<sup>&</sup>lt;sup>6</sup>World Economic Forum, *Global Competitiveness Report 4.0, 2019*. http://www3.weforum.org/docs/WEF TheGlobalCompetitivenessReport2019.pdf

The report illustrates that on average, world economies still struggle to find the optimal balance between technology integration and human capital as to ensure competitiveness, equality and sustainability, and are still rebounding after the productivity losses incurred after the economic crisis. Enhancing competitiveness remains key for improving living standards.

The Global Competitiveness Index 4.0 is built based on four major components (enabling environment, human capital, markets, innovation ecosystem), defining the institutions, policies and factors that determine the level of productivity. The framework for computing the GCI 4.0 includes the four key components and the twelve pillars they reunite, as follows:

- *Enabling environment:* (1) Institutions, (2) Infrastructure, (3) ICT adoption, (4) Macroeconomic stability
- Human capital: (5) Health, (6) Skills
- Markets: (7) Product market, (8) Labour market, (9) Financial system, (10) Market size
- Innovation Ecosystem: (11) Business dynamism, (12) Innovation capability

The figures from 2019 edition show that Republic of Bulgaria performs better in Macroeconomic stability, Labour market conditions, Financial system and the Innovation ecosystem indicators. At the same time the figures for the following pillars show a need for improvement: Infrastructure, Health, Product market and Business dynamism.

The Republic of North Macedonia's performance is mixed, with significant progress in some dimensions while losing some ground in others. Among the most improved elements, the Republic of North Macedonia advances on Innovation ecosystem, Health and ICT adoption.

The cross-border area follows the same path as the national economies, so there are still numerous issues to be solved in the coming period. Despite the differences, both economies need to tackle certain dimensions, where they rank poorer than the overall score, such as health, skills, product market, financial system as well as innovation ecosystem maturity. Among others ICT adoption remains one of the variables on which both countries position relatively well.

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Global Competitiveness Index 4.0 2019 edition

Key

# Bulgaria

Performance

Overvlew 2019

Rank in 2018 edition: 51st/140



Figure 9: GCI 4.0 for the Republic of North Macedonia

## **The Republic of North Macedonia**

Global Competitiveness Index 4.0 2019 edition

Rank in 2018 edition: 84th/140

82nd/141





## 2.4.6 Small and medium-sized enterprises (SMSs):

SMEs are the backbone of the national economy and generate more than 60% of the GDP of Republic of Bulgaria. The number of SME sector on the Bulgarian side of the border has a share of 98% in industry and 99% in services. The number of micro-companies with staff between 0 and 9 people prevails – reaching 317 834 in 2018 (91.83 % of the total number of enterprises). The group of enterprises with 10 to 49 employees counts in 2018 a number of 14 289 enterprises (with a share of 6.72 %). In Republic of Bulgaria from 2018, according to Eurostat data for the previous year, shows that the value added of SMEs has increased from 59.2% in 2012 (according to 2008-2009 data) to 65.2% and is above the EU average, which fell from 58.4% to 56.8% in the same period.

The development of small and medium-sized enterprises in the country is monitored annually in the analyses performed on certain indicators since 2011<sup>9</sup>. The report for Republic of Bulgaria from 2018, according to Eurostat data for the previous year, shows that the value added of SMEs has increased from 59.2% in 2012 (according to 2008-2009 data) to 65.2% and is above the EU average, which fell from 58.4% to 56.8% in the same period. After the 2009 crisis, employment increased from 73.5% to 75.4% in the period 2011-2017 and is above the EU average for the same period, where there was a slight decrease from 66.9% to 66.4%.

The analyses made highlight both the advantages and the problems facing SMEs in Republic of Bulgaria. They account for 75% of employment (compared with 68% in the EU for the same period) and 62% of value added (compared to 58% in the EU for that period). From 2002 to 2011, SMEs have increased fourfold their contribution to value added. The high number of graduates and people with language and computer skills, high relative share of women in SMEs have been highly appreciated. Among the shortcomings are the deteriorated economic indicators for the period 2008-2011, the high indebtedness of part of the enterprises and the concentration of most of SMEs in Sofia and the district centres.

Administrative	Total	Share			Enterp	ises per	numbe	r of em	ployee	S	
unit	number	Share	re		o 9	10 -	49	50 -	249	250	+
BG	413535		100,00%	383 134	92,7%	24 982	6,0%	4549	1,1%	827	0,2%
CBC region	27 842	100,0%	6,7%	26060		1525		229		28	
Blagoevgrad	21 907	78,7%		20 505	93,6%	1 205	5,5%	175	0,8%	22	0,1%
Kyustendil	5 935	21,2%		5 555	93,6%	320	5,4%	53	0,9%	6	0,1%

Table 8: Number of active SME by number of persons employed in Republic of Bulgaria – 2018

Source: NSI

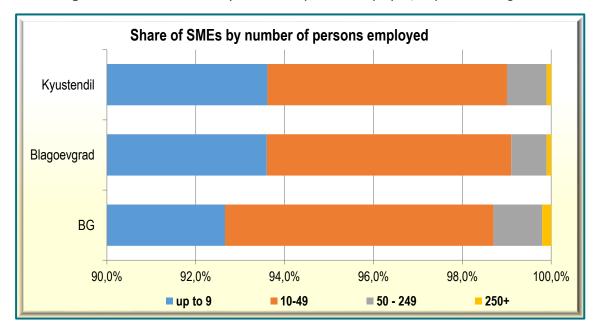
#### Kyustendil

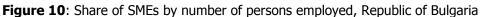
According to the data of the National Statistical Institute (NSI), a total of 5 935 non-financial enterprises are operating on the territory of the Kyustendil district in 2018, or 3.6% more than in 2017. The largest is the number of non-financial enterprises in the municipalities of Kyustendil (2 971) and Dupnitsa (2 149), respectively 50.1% and 36.2% of the total for the district.

<sup>&</sup>lt;sup>9</sup> https://www.mi.government.bg/files/useruploads/files/sba-fs-bg-2011\_bg.pdf

# Blagoevgrad

According to data from the NSI, a total of 21 907 non-financial enterprises are acting in the district of Blagoevgrad in 2018, or 1.7% more than in 2017. Micro-enterprises (up to 9 employees) prevail in the district - 93.6% of the total. Small enterprises (10 to 49 employees) are 5.5%, medium-sized enterprises (50 to 249 employees) - 0.8% and large enterprises (over 250 employees) - 0.1% of all non-financial enterprises in the district.





In Republic of Bulgaria directly related to regional development policy are measures proposed to assist SMEs in low-employment lagging regions. Besides the measures for technological modernisation and for the improvement of the professional qualification for such regions, the development of low-tech sectors, different forms of joint activities and cluster initiatives are proposed. Emphasis is also placed on the need to implement specific targeted programmes to reduce regional disparities. For the regional specialisation are indicated municipalities with potential for development of industry of clothes – Blagoevgrad and leather and shoes - Kyustendil, Blagoevgrad.<sup>10</sup>

In the **Republic of North Macedonia**, micro enterprises, small and medium-sized enterprises make up 99.7% of the total business population. Among them, the largest group comprises micro enterprises (up to 10 employees), which account for about 90% of the total active business entities, while the smallest share in business community in the Republic of North Macedonia, of only 0.3%, is owned by large enterprises with over 250 employees (SSO, 2019).

Private sector development in the cross-border area of the Republic of North Macedonia is considered to be at satisfactory level. In 2018, 15,695 active business entities were operating in the area, of which in the same year 1,323 new businesses were registered, while 1,278 stopped work. This shows 3.40% positive difference of enterprise development in the region. Current collaboration between businesses

<sup>&</sup>lt;sup>10</sup>https://www.mi.government.bg/files/useruploads/files/vip/sme\_strategy.pdf

is oriented towards internal economic, social and cultural urban centres Kumanovo (North-East Region), Shtip (East Region), Strumica (South-East Region) mostly due to the fact that the important transport corridors provide easy access to these centres and consequently to the capital of RNM, which allows possibilities for easy communication and collaboration between entities. There are some cluster initiatives and with appliance of innovation and technologies can help companies to become competitive nationally and internationally.

If we compare the situation with the European Union countries, where SMEs in 2016 created 66.4% of total employment and 56.6% of value added in the Union, it can be concluded that SMEs in the Republic of North Macedonia play a greater role in national economy compared to the EU-28 enterprise average. However, despite the great importance SMEs have to the RNM economy in terms of both employment and value added, they record very low productivity calculated as a ratio between value added and employment.

In terms of sectorial distribution, in 2018, the sectors with the largest share in the structure are: wholesale and retail; repair of motor vehicles and motorcycles with 22,950 entities; and manufacturing industry with 8,033 entities, according to which in the total active business entities these two sectors account for 31.7% or 11.1%, respectively (SSO, 2019).

Number of employees	East Region	Southeast Region	Northeast region	NM CBC Region	North Macedonia
0-9	4 980	5371	3 688	14039	65 405
10-49	459	491	305	1255	5271
50-249	173	111	79	363	1 399
250 +	20	12	6	38	240
Total	5 632	5 985	4 078	15695	72 315

Table 9: Number of active SME by number of persons employed in RNM - 2018

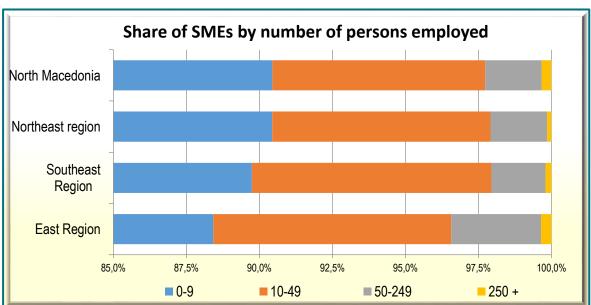


Figure 11: Share of SME by number of persons employed, RNM

#### Source: MAKSTAT

In terms of the unemployment rate, which shows a permanent downward trend in the past years, in 2017 the lowest unemployment rates in CBC Region of the Republic of North Macedonia were recorded in the Southeast and the Eastern Region of 12% and 12.9%, respectively, and the highest in the Northeast with an amount of 35.1%.

#### 2.4.7 Tourism

A lasting upward development of national tourism is satisfactory, but in parallel there are serious negative factors that threat the sustainable development of the established and the new destinations. They include the population ageing, the high unemployment in peripheral areas, poverty, crime, climate change, increased pressure on natural resources and political instability in the region. Politicians and decision-makers are aware of this context and have institutionalised it in the National Strategy for Sustainable Development of Tourism. In 2017, EU countries continued to be the most important generating market for international tourism in the Republic of Bulgaria with a relative share of 61.4% and a total volume of 5 450 280 tourist visits (growth of 8.2%). The forecast of the UN World Tourism Organisation by 2030<sup>11</sup> predicts a steady upward development of tourism in the region.

The variety of natural and cultural attractions in the Republic of North Macedonia is strong potential for defining target- oriented tourist offer. On the other hand the analysis indicates a lack of defined tourist products, both on national and regional level. The tourist offer is spontaneously created by the suppliers of the tourist services, without guidelines and support from the policy makers. As a result, the tourist offer mostly includes basic tourist products, while more attractive services and tourist arrangements are not developed. Findings show the necessity for improvement of the situation in this sector, mainly related to defining and establishment of national priorities for future tourism development in the country, both for domestic and foreign tourism.

Based on territorial concentration and tourism resources, Republic of Bulgaria is conceptually divided into nine tourism regions. The division into tourism regions helps for forming regional tourism products and implementing regional marketing and promotion. The concentration and quality of tourism resources by regions as well as the inherited product features determine the basic and extended specialisation of regions.

In the context of the tourist zoning, the programme territory on Bulgarian side falls under the following tourism regions:

- Sofia Region (popular for business and cultural tourism)
- Rila Pirin Region (popular for mountainous and religious tourism)

In its scope there are: Rila and Pirin National Parks, Vitosha, Rila Monastery and Belasitsa Nature parks, many reserves and landmarks. All of them represent invaluable potential for development of tourism and

<sup>&</sup>lt;sup>11</sup> UNWTO. 2011. Tourism towards 2030. <u>https://www.e-unwto.org/doi/book/10.18111/9789284414024</u>

for preservation of rich biodiversity of national and pan-European importance. In addition to these factors, we must add the diversity of historical periods and relevant cultural values. They are a prerequisite for socialisation and valorisation through tourist products that integrate not only the cultural and historical heritage but also the natural resources in the area



Map 3: Tourism regions in Republic of Bulgaria

The Bulgarian part of the CBC area has wide tourism potential and resources: diverse climate conditions, mineral waters, rich flora and fauna, as well as the fact that the territory includes national and nature parks, numerous reserves and natural landmarks.

All of them represent invaluable potential for the development of tourism and for the preservation of rich biodiversity of national and pan-European importance. The mountains Rila and Pirin have well developed tourism infrastructure. There are many resorts that offer very good conditions of resting.

The number of tourists in Republic of North Macedonia is increasing year by year. The average annual increase of tourists is 15%, while only in April 2018 it grew by 21.4% compared to the same period last year. Domestic tourists increased by 10.8%, while foreign tourists increased by 23%.

	Accommodation Bed-pl			Arrivals		Revenues from the nights spent (BGN)		
unit	establishments <sup>12</sup>	Deu-places	Total	by foreigners	Total	by foreigners	Total	by foreigners
BG	3 458	335 597	26 845 013	17 748 925	7 799 680	3 910 159	1 455 702 154	1 085 224 585

**Table 10**: Tourism indicators for the CBC Region (2018)

<sup>&</sup>lt;sup>12</sup> https://ec.europa.eu/eurostat/statistics-explained/index.php/Glossary:Tourist\_accommodation\_establishment

Blagoevgrad	250	18034	1437615	684027	579494	217909	70965715	37580249
share %	7.23%	5.37%	5.36%	3.85%	7.43%	5.57%	4.88%	3.46%
Kyustendil	87	3298	181480	26679	111325	15859	6485869	
share %	2.52%	0.98%	0.68%	0.15%	1.43%	0.41%	0.45%	
RNM		76 558	3 176 808	1 491 535	1 126 935	707 345		
NE region		763	14185	10905	10820	8508		
share %		1.00%	0.45%	0.73%	0.96%	1.20%		
East region		2090	69419	29828	34354	13864		
share %		2.73%	2.19%	2.00%	3.05%	1.96%		
SE region		6436	571670	108341	160173	55202		
share %		8.41%	18.00%	7.26%	14.21%	7.80%		

Source: NSI and MAKSTAT

In general the contribution of the CBC area of the **Republic of Bulgaria** to the tourism development at national level is quite modests. The two big resorts in Blagoevgrad district Bansko and Sandanski offer yearly accommodation and provide relatively well developped tourism infrastructure (ski and spa), which is in the process of further renovation. Outside those resorts, the accommodation is represented by mainly family hotels, houses and guest rooms, while the mountain huts and shelters are in poor technical condition. In the National and Nature Parks a visitor infrastructure has been built along the ecotourism routes. With few exceptions, in the other mountains there is practically no developed tourist infrastructure.

Differentiation of the statistical regions in the **Republic of North Macedonia** represents one of the changing circumstances in which tourism operates. The Republic of North Macedonia's border diversity of tourist resources also lies in its natural heritage, enriched by diverse reliefs and climate. In terms of contribution to the tourism development, the Southeast region has the highest share, compared with other two regions, while for 2018 the lowest percentage of tourists and nights spent were registered in the Northeast Region. Analyses of potentials included identification of existing strengths for tourism development within the border regions, and indicate that the basic assumptions for tourism are closely related to the existence of natural values and attractiveness, cultural heritage, social and economic development of regions, transport communications and accessibility of regions.

## 2.5 LABOUR MARKET

In general, the labour market in the border area is characterized by low level of employment of the population, low wages, and low mobility of labour force.

Administrative unit	Employment rate	Unemployment rate	Activity rate
Blagoevgrad	73.8%	4,8%	74.6%
Kyustendil	71.0%	3,6%	70.0%
BG average	67.7%	5.2%	56.6 %
NE region	33,7%	35,9%	52.5%
East region	53,4%	11,5%	60.4%
SE region	60,2%	10,9%	67.5%
RNM average	45.9%	21.5%	56.9%

Table 11: Employment indicators in CBC Region, 2018

Source: NSI and MAKSTAT

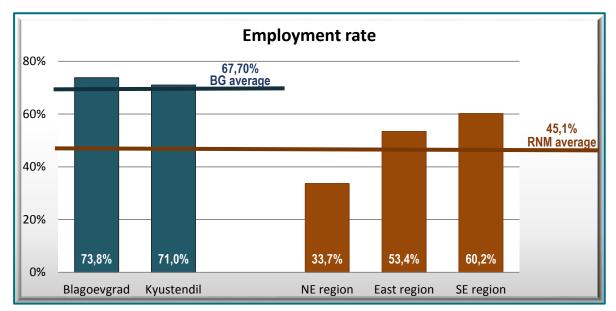
The **employment rate** represents the relative share of employees of the same age population. It is a leading indicator of the labor market, showing how much of the working age population works The average employment rate in the Bulgarian border region as of 2018 is 72,4 % as the activity rate is high 72,3%. According to Eurostat population estimates in the EU Member States, the number of people of working age in Republic of Bulgaria will continue to decline in the future. This is the main factor that will influence the reduction of workforce in the area.

On border side of the Republic of North Macedonia, the employment rate for 2018 is 49.10 %. The most important sector in employment creation is manufacturing, followed by wholesale and retail trade, repairs. The employment performance is considerably lower than the EU average. Eurostat data on the share (%) of the population employed in 2017 (employment rate) show values of 71, 3% (Republic of Bulgaria), 54, 8 % (Republic of North Macedonia) compared to the EU average of 72, 2 %. The youth and long-term unemployment rate is also higher than the EU average (16, 8%), in the Republic of North Macedonia (46, 7%). The youth unemployment rate in Republic of Bulgaria is lower (12, 9%). Matching skills with the labour market requirements is still a challenge and the share of informal employment is high. Labour productivity is increasing in two countries but remains lower than the EU average.

The **employment and unemployment rates** of the population at the regional level show fluctuations in relation to the total rates at the country level. The employment rate in Republic of North Macedonia in 2018 in the East and Southeast regions was above the total rate at the national level as the Southeast Region having the highest employment rate of 60.2%. On the other hand the highest unemployment rate is registered in the Northeast Region (35.9%) as the lowest unemployment rate of 10.9% was recorded in the Southeast Region.

The employment structure clearly reflects the distinction and the disparities of the regional economic structure and potentials. Southeast region and Blagoevgrad district have a particular positive influence on the employment figures of the whole CBC region, while the Northeast region on the side of the Republic of North Macedonia and Kyustendil on Republic of Bulgarian side show low employment rate, also compared to the national levels of both countries.

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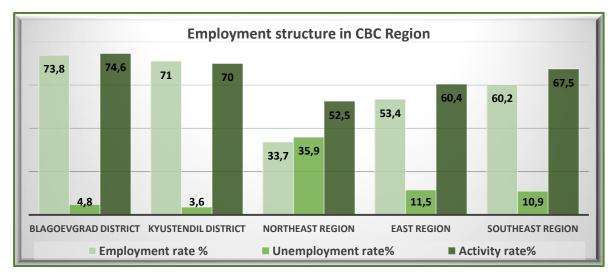


## Figure 12: Employment rate in CBC Region

#### Source: NSI and MAKSTAT

Employment of the population in the most active age (15-64 years) increased in the cross-border region of Republic of Bulgaria in the period 2011-2018, reaching 72.4% in 2018, well above the national average of 67.7%. In practice, employment is currently higher than its pre-crisis peak levels - in 2008 the employment rate in the region was 71.0%. Both border regions – Blagoevgrad (73,8%) and Kyustendil (71%) showed high employment rate even above the employment average rate for Republic of Bulgaria (67,7%).

Comparing employment rate in the border area of the Republic of North Macedonia it is evident that the Southeast Region has the highest employment rate (60,2%) even above the average for the country while the Northeast region has the lowest rate (33,7%) far below the average employment rate for the RNM.



## Figure 13: Employment structure in CBC Region

Source: NSI and MAKSTAT

The **unemployment rate** represents the relative share of unemployed persons in the economically active population (labor force). High unemployment, as well as long-term unemployment, have a negative impact on the economy and cause social problems, especially directly on poverty and social exclusion.

In most cases, districts/regions in CBC border area with high unemployment rate are either too far from leading economic centers or traditional daily labor migration, or are characterized by low levels of education and skills. These negative factors on local labor markets speaks for permanent isolation from the ongoing processes at national level. There are many disparities between the municipalities in one area. For example, unemployment in the Blagoevgrad district is 4.8%, as in the Blagoevgrad municipality it is 6.1%.

Border region of the Republic of Bulgaria is characterised by divergent downward dynamics of the intraregional differences in the employment rate for 2013-2017 (between 7.9 and 11.8 percentage points). The region is characterised by one of the lowest unemployment rates in the country - in Kyustendil District (3.6 %)<sup>13</sup> and Blagoevgrad District (4.8 %).

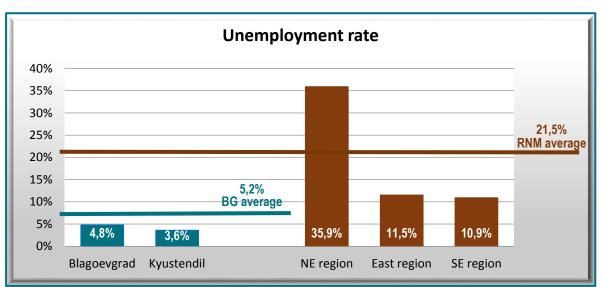


Figure 14: Unemployment rate in CBC region

#### Source: NSI and MAKSTAT

There is a clear gap in the average of the *unemployment rate* of the two countries. While the Republic of Bulgarian districts show low unemployment rate close to the national average, the figures of the districts of the Republic of North Macedonia are quite diverse – for example the unemployment rate in Northeast region is almost 3 times above the Southeast region, while for East region is 2 times below the average for the country.

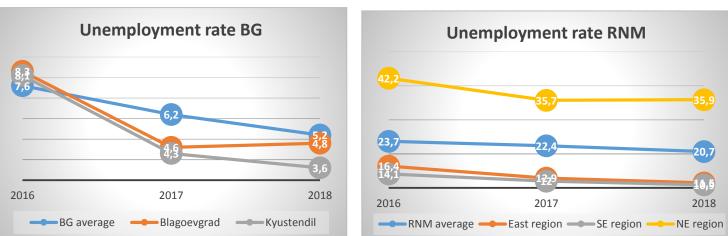


Figure 15, Figure 16: Unemployment rates

Despite the measures taken in Republic of Bulgaria to promote employment in recent years, and in particular for women, there is still a slight gender gap. The employment rate for men is 76.1% and for women 71.5%.

On the Republic of North Macedonia border side unemployment rate between men and women are highest in the Northeast Region (35,9%) while the Southeast Region unemployment rate between men (10,6%) and women (11,4%) is almost equal and is the lowest one (10,9%) - chart below:

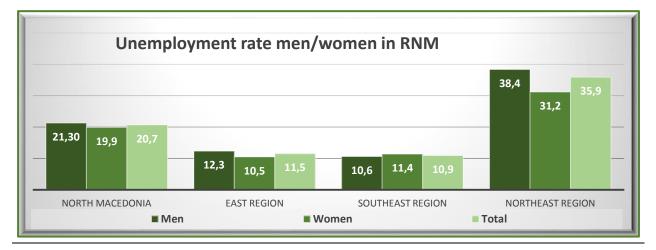


Figure 17: Unemployment rate (%) men/women in the Republic of North Macedonia

The highest average monthly gross wage paid per employee in 2018, compared to the overall average in the Republic of North Macedonia, was observed in Southeast Region while the lowest average monthly gross wage paid per employee in 2018, compared to the overall average in the Republic of North Macedonia, was recorded in the Northeast Region (23.5%). The average gross wage paid per employee per sectors is given in the table below:

Table 12: Average gross wage paid per employee per sectors in RNM, 2018 (in MKD)

Sector	RNM	East Region	Southeast Region	Northeast Region
Average gross wage	22 342	16 701	17 506	16 952
Agriculture, forestry and fishing	16 873	16 130	14 900	16 370

Mining and quarrying	26 232	29 715		
Manufacturing	17 096	13 954	14 415	12 892
Electricity, gas, steam and air conditioning	37 225			
Water supply; sewerage, waste	19 854	17 151	15 252	17 911
Construction	21 205	16 922	15 113	15 890
Wholesale and retail trade; repair of motor	20 313	14 591	16 301	13 569
Transportation and storage	22 907	16 711	15 059	16 800
Accommodation and food service activities	15 423	14 678	15 466	12 346
Information and communication	36 489	22 396	45 940	18 610
Financial and insurance activities	39 701	31 086	33 857	30 032
Real estate activities	23 969	17 855		
Professional, scientific and technical	28 891	20 706	16 952	28 375
Administrative and support service activities	16 535	14 013	14 867	15 144
Public administration and defence;	26 734	23 825	23 896	22 593
Education	22 190	22 281	20 367	20 887
Human health and social work activities	24 571	20 814	20 892	21 070
Arts, entertainment and recreation	21 096	19 091	18 889	18 658
Other service activities	26 128	17 737	19 008	19 189
Source: MAKSTAT				

The highest gross wage per employee in the border area of the Republic of North Macedonia is given in the service sector related to financial and insurance activities as the lowest one is registered in industry sector of manufacturing.

In the different districts in Republic of Bulgaria, the trends in the number of employed persons varied over the years, with a slight increase in their number in the districts of Blagoevgrad and Kyustendil. In CBC area problems to be addressed relate to the much higher unemployment rates in the rural areas as opposed to urban centres (due to low economic activity, low educated work force) and the high youth unemployment which is a serious problem also on national level of both countries. Unemployment among young people, especially those with higher educational levels is worrying, as it is a main reason for emigration thus worsening the already unfavourable demographic situation of the region.

The problem of **long-term unemployment** is particularly difficult to tackle given the fact that the bulk of long-term unemployed are people without professional qualification and with a low level of education thus in a particularly vulnerable position on the labour market. The highest share of unemployed is among the Roma population, with 80% or more officially unemployed.

The unemployment decline in the CBC region, although positive in nature, shows that available free labor is gradually declining. This disadvantage will be offset by the increasing economic activity of the still inactive population, after their profile and qualifications are being aligned with market demand.

# 2.6 SOCIAL DEVELOPMENT

## 2.6.1 EDUCATION

Education and continuing education are among the main drivers of economic growth. The successful implementation of education policies affects the development of human capital, economic growth and smart specialisation, the labour market, social inclusion and quality of life.

In addition to the education objectives in 'Europe 2020', the *Strategic Framework for European Political Cooperation in Education and Training* (ET 2020)<sup>14</sup> sets additional general objectives for lifelong learning and mobility; equality and social cohesion, fostering creativity, innovation and entrepreneurship at all levels of education and training, in order to overcome the deficits in the education system.

As of 2018 there were 1 955 general education schools in Republic **of Bulgaria**. Out of them 131 were primary schools, 1173 basic schools, 68 combined schools, 115 upper secondary and 468 secondary schools. In comparison with the previous school year, because of closure or modification, the total number of general education schools decreased by 14. According to Eurostat, the share of early school leavers in the EU-28 in 2018 is 10.6% and in Republic of Bulgaria it is 12.7%, with a positive trend compared to the previous years - 2015 (13.4%) and 2016 (13.8%). The general conclusion is that Republic of Bulgaria is still not achieving the Europe 2020 target of 10% early education and training drop outs despite the positive change in 2017.

Since 2014, significant progress has been made in consolidating democratic government and opening the economy in education system in the **Republic of North Macedonia**. At the same time, the country has improved access to education, with school and tertiary enrolment. Steps have also been taken to improve inclusiveness – such as introducing instruction in minority languages and establishing higher education quotas for students from ethnic groups. Yet despite these improvements, young citizens of Republic of North Macedonia continue to leave education with among the lowest learning outcomes in Europe and the Western Balkans. Major differences in educational outcomes across different ethnic groups also persist. While poverty rates have fallen in recent decades, low educational performance is limiting the employment and life opportunities of many individuals and impeding national development.

The share of attained primary and secondary education level in the whole CBC area is slightly above or very close the national average of the respective country.

Administrative unit	-	y and lower ry education	Second vocationa	ary and al schools	Unive	rsities	Total
Blagoevgrad	3461	40.6%	2551	30.0%	2504	29.4%	8516
Kyustendil	1190	59.9%	796	40.1%	54	2,6%	2040
BG CBC	4651	44.3%	3347	31.9%	2558	24,2%	10502
BG	71880	41.2%	49504	28.4%	53115	30.4%	174499
NE region	28982	70.6%	11110	27.1%	954	2.3%	41046
East region	13059	68.5%	5462	28.6%	553	2.9%	19074
SE region	13937	72.8%	4703	24.6%	503	2.6%	19143
NM CBC	55978	70.6%	21275	26.8%	2010	2.5%	79263
RNM	188102	70.3%	71650	26.8%	7698	2.9%	267450

 Table 13: Number of students/graduates in 2018/2019

Source: NSI and MAKSTAT

<sup>&</sup>lt;sup>14</sup><u>https://ec.europa.eu/education/policies/european-policy-cooperation/et2020-framework\_bg</u>

As of 2018, the existing educational basis of the cross-border area includes 4 universities/faculties, 6 colleges and 650 schools (including primary/lower secondary/upper secondary schools). The education facilities structure in border area from both countries is relatively good but with visible territorial disparities in the secondary and upper educational institutions, which are mostly located in the administrative centres of the CBC region.

In 2017, the number of teachers in Bulgarian border area increased by 7.4 % as compared to 2014 - a sound base for achieving a higher standard and quality of school education. The increase of teacher salaries is expected to raise the attractiveness of the teaching profession, attract younger professionals dedicated to the teaching profession and increase the standard and quality of teaching and education in general.

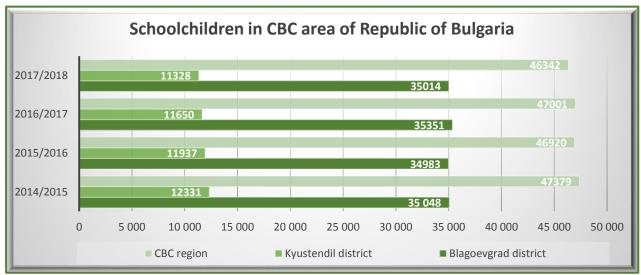


Figure 18: Schoolchildren in CBC area of Republic of Bulgaria

Source: NSI

# **Table 14:** Education indicators in Republic of Bulgaria, 2014-2018 (number)

A dua inistrativa vusit	Schoolchi	ildren in Republic	of Bulgaria in scl	nool years:		
Administrative unit	2014/2015	2015/2016	2016/2017	2017/2018		
Total for Republic of Bulgaria	605657	608926	588555	581957		
CBC Region	32798	32759	31319	37492		
Blagoevgrad	23448	23303	22384	28700		
Kyustendil	9350	9456	8935	8792		
	Teache	ers in Republic of	Bulgaria in schoo	ol years:		
	2014/2015	2015/2016	2016/2017	2017/2018		
Total for Republic of Bulgaria	42617	45288	47427	49294		
CBC Region	2276	2341	2374	3098		
Blagoevgrad	1623	1652	1786	2363		
Kyustendil	653	689	588	735		
	Schoolchildren per teacher in Republic of Bulgaria inschool years					
	2014/2015	2015/2016	2016/2017	2017/2018		
Total for Republic of Bulgaria	14.21	13.45	12.41	11.81		

	Schoolchildren in Republic of Bulgaria in school years:							
Administrative unit	2014/2015	2015/2016	2016/2017	2017/2018				
CBC Region	14.41	13.99	13.19	12.10				
Blagoevgrad	14.45	14.11	12.53	12.15				
Kyustendil	14.32	13.72	15.20	11.96				

Table 15: Schools and enrolled students in all kinds of schools in Republic of Bulgaria for 2015-2017

	2015	2016	2017
Schools (primary, lower and upper secondary)			
Blagoevgrad	128	127	124
Kyustendil	45	42	41
Enrolled students in all kind of schools (primary, lower and uppe	er secondary)		
Blagoevgrad	34 879	35 249	34 940
Kyustendil	11 908	11 625	11 328

Source: NSI

The large number of people with higher education is a strong prerequisite for economic growth, competitiveness and labor productivity. In both countries/regions, the number of students enrolled in universities continues to decrease, mainly due to demographic trends. In addition, most of the young people prefer to continue their education abroad.

The higher education system in Republic of Bulgaria comprises 54 (37 public and 17 private) higher education institutions, notably 50 universities and specialist higher education schools and 4 independent colleges. The Strategic Framework for European Political Cooperation in Education and Training (ET 2020)<sup>15</sup> sets additional general objectives for lifelong learning and mobility; equality and social cohesion, fostering creativity, innovation and entrepreneurship at all levels of education and training, in order to overcome the deficits in the education system.

Table 16: Education Indicators in Republic of Bulgaria, 2018/2019

Indicator	BG	Blagoevgrad	Kyustendil
Number of Universities	54	3	1
Number of university graduates	53115	2504	54
Professional Bachelor	1869	112	-
Bachelor	27831	1507	54
Master degree	23415	885	-
Number of Academician	21756	778	-
In collegies	692	23	-
In universities	21064	755	-

Source: NSI and VFU

<sup>&</sup>lt;sup>15</sup> <u>https://ec.europa.eu/education/policies/european-policy-cooperation/et2020-framework\_bg</u>

There are three universities in the CBC region of the Republic of Bulgaria, both located in Blagoevgrad: South-West University 'Neofit Rilski" and American University in Republic of Bulgaria. There is also a College of tourism in Blagoevgrad. In Kyustendil there is one filial of Varna Free University "Chernorizetz Hrabar" (VSU).

South-West University 'Neofit Rilski" of Blagoevgrad is the only state university in the border region of the Republic of Bulgaria. Founded in 1975, today the University comprises 7 faculties and 1 colleges which offer 76 Bachelor and over 70 Master degree programmes. On 27 January 1997 with Act No. 16 of the Council of Ministers, the College of Machine Building and Electrotechnics, Blagoevgrad is transformed into Technical College, affiliated in the structure of the South-West University, Blagoevgrad.The university has established active scientific relations with institutes and universities in England, France, Germany, Russia, Turkey, Spain, Italy, Hungary, Serbia, Poland, Slovenia and etc. They give opportunity for scientific specializations and study practice of the academic staff and students, for exchange of lecturers, academic and scientific literature. Many students from the Republic of North Macedonia graduated every year in the SWU.

American University in Republic of Bulgaria is one of the first private universities in the country. AUBG is an education leader for the ninth consecutive year according to the national university rankings for 2019. The university is number one in the country in the professional fields Administration & Management, Political Science and Public Communications & Information Sciences. AUBG graduates have 0% unemployment rate in three of the disciplines (Political Science, Informatics & Computer Science and Public Communications & Information Sciences) and the highest average salaries in four of the disciplines (Administration & Management, Economics, Political Science and Public Communications & Information Sciences). All the University's main activities have been certified, as well as its degree programmes: education of students in Bachelor, Master and PhD programmes in 19 programmes, qualification, research and international relations activities. The Skaptopara campus in Blagoevgrad is home to the university undergraduate programs. It includes three residence halls; Balkanski Academic Center, which houses classrooms, computer labs, and offices; Panitza Library, the largest English-language library in Southeast Europe and a unique Student Center. In 2019 924 students had enrolled in the university out of them 897 undergraduate and 27 graduate programmes.

College of Tourism Blagoevgrad was established in 2003 and offers courses and programs leading to officially recognized higher education degrees such as bachelor degrees in several areas of study. The College is a responsible educational institution that provides specialized training in the professional fields "Tourism" and "Administration and Management". It provides competency and competitiveness for the local, national and international labor market.

Filial of Varna Free University "Chernorizetz Hrabar" had been established in 2013 in Kyustendil. The college in partnership with International center "Slavic enlightenment" accepts students in 6 Bechelor's and 13 Master's programmes. The mayor part of students (more than 30%) is from

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neighboring countries the Republic of North Macedonia and Serbia. 54 students had been graduated in 2018 out of them 7 from Republic of North Macedonia.

There is only one university in the RNM border region - Goce Delčev University of Štip. The Goce Delčev University (GDU) of Štip is a state university ranked on the second place on the list of state universities in the Republic of North Macedonia. Founded in 2007 university started with seven faculties and one higher-level vocational school as follows: Faculty of Law; Faculty of Economics; Faculty of Education; Faculty of Mining, Geology and Polytechnic; Faculty of Agriculture; Faculty of Computer Science and Information Technology; Faculty of Music; and Higher Medical School. Since the 2008–09 academic year, GDU has included six new faculties: Faculty of Medical Science, Faculty of Philology, Faculty of Electrical Engineering, Faculty of Mechanical Engineering, Faculty of Technology, and Faculty of Tourism and Business Logistics. Nowadays, the university comprises of 13 faculties and three academies, and it offers over 100 study programs in three cycles of studying - bechelor's, master's and doctor's degrees. As of 2018–19 school year, a total of 8,237 students were enrolled at the university The trends that will influence the education sector in the future reflect the basic requirements for equal access to quality education at all levels and for all social groups, better link between education, science and business. Planned reforms on national level are expected to improve outcomes across the education system at all levels and the effective deployment of the necessary infrastructure at all places.

Regarding **border region** of the **Republic of North Macedonia** at the beginning of the 2018/2019 school year, the highest number of pupils per school in primary and lower secondary education was registered in Northeast region (171) as the lowest number is in the Southeast Region (118). For the same period, the pupil-teacher ratio in the upper secondary education was highest in the Northeast Region (11) and the Southwest Region (10) as the lowest in the East Region (8).

	RNM	East Region	Southeast Region	Northeast Region			
Primary and lower secondary education							
Number of schools	987	91	118	93			
Share of teachers (%)	100.0	7.9	9.3	9.4			
Share of enrolled pupils (%)	100.0	6.9	7.4	8.4			
Average number of pupils per school	191	144	118	171			
Average number of pupils per teacher	10	9	8	9			
Upper seco	ondary educatio	on					
Number of schools	132	14	9	10			
Share of teachers (%)	100.0	8.9	6.2	8.2			
Share of enrolled pupils (%)	100.0	7.6	6.6	9.1			
Pupils who finished upper secondary education (%)	100.0	7.6	7.3	8.9			
Number of pupils per teacher	10	8	10	11			
Tertia	ry education						
Number of graduated students	7 263	553	503	590			
Graduated students per 000 population	3.5	3.2	2.9	3.3			
Source: MAKSTAT							

Table 17: Basic data regarding education in CBC region of the Republic of North Macedonia

Source: MAKSTAT

Education and training can help to increase employment opportunities and make it easier to adapt to emerging sectors in the context of globalisation. Targeted measures are needed for social integration of disadvantaged groups. In this respect, initiatives for partnerships between school and economic units have to be further supported in order to achieve a better integration of the youths on the labour market.

### 2.6.2 YOUTH ENTREPRENEURSHIP

A factor that shows a significant correlation with the labour market dynamics and equilibrium is entrepreneurship. The size of investments and their structure determines the speed and nature of economic growth. Poor investment reduces economic growth and employment, while the reverse process stimulates economic activity in terms of output and employment.

In general, **youth entrepreneurship** should be a cross-cutting issue in educational systems, and should not be a part of just students that took interest in economics.

However, compared to 2017, there is a decrease in the share if absolute numbers in the projects area in the proportion of active, unemployed and non-active share if the population aged 15-24 in the CBC area. According to 2016/17 GEM National Report on entrepreneurship, Republic of Bulgaria has a number of significant weaknesses of the sphere of entrepreneurship. The most critical ones have to do with the entrepreneurship education at the primary and secondary levels and the lack of targeted government support and initiatives that turn entrepreneurship into a government priority. Young people with innovative and internationally oriented businesses are also faced with several obstacles as: access to finance, government policies, lack of active search for solutions and business acceleration programmes, culture and social norms, etc.

The share of necessity-motivated female entrepreneurship is very similar to the male equivalent. The most entrepreneurially active individuals are the 25-44-year-olds. The group of 18-24-year-olds shows a participation rate almost as high as the subgroup of 35-44-year-olds.

Another stable trend in the region is the youth migration from smaller towns (villages) to bigger cities due to lack of opportunities for prosperity in smaller settlements.

#### **2.6.3 HEALTHCARE SERVICES**

Health policy is another important policy on which welfare and successful personal and professional fulfilment depend. Therefore it is linked to demographic, education, labour, social and environmental policies, to sustainable, inclusive and smart growth.

The territorial dimensions of this policy are related on the one hand to the need to ensure a safe, clean and healthy environment for the population and, on the other hand, to the distribution of the healthcare establishments on the territory of the country and their accessibility. The remoteness of some small municipalities from urban agglomerations from the point of view of medical assistance delivery (primary, specialist, hospital, urgent and emergency) remains a serious challenge in healthcare. Reliance on e-health

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solutions within the system carries a significant potential for efficiency gains in the system. Republic of Bulgaria lags behind in this regard and has been ranked 23 among other EU Member States.

**Republic of Bulgaria** has an extensive hospital infrastructure, which comprises 346 hospitals with a total capacity of 512 744 beds, including 184 general hospitals that are essential to the system and 138 specialist hospitals. A total of 59 % of hospitals are situated in 9 district centres with only 41 % of hospitals serving the population in the remaining 19 district centres.

The analysis of the health system of the **Republic of North Macedonia** reviews recent developments in organization and governance, health reforms and health system performance. The total health care expenditure has risen between 1-1.3% of its Gross Domestic Product (GDP) on the healthcare sector. The health of the population has improved over the last decades, with life expectancy and mortality rates for both adults and children reaching similar levels to those in EU countries. Future challenges include sustainable planning and management of human resources as well as enhancing quality and efficiency of care through reform of hospital financing and organization.

The problems in CBC border region are mainly related to the quality of health services, staff shortages, the high relative share of individual health costs, and for small and remote settlements and rural areas with a concentration of poor and aging populations – to poor access to health services, medicines and emergency medical care. Problems with access to health care have 4.7% of Republic of Bulgaria, compared to an average of 3.2% in the EU.

It is expected that the integration of health and social services in the Bulgarian border region, the increase in outpatient care costs and the transformation of part of hospital beds into long-term care beds will have a positive impact on the functioning of the health system and will be better matched with the demographic characteristics. In the sector studies more conclusions were drawn regarding the low percentage of general practitioners in Republic of Bulgaria (15.6%), compared to the EU average (30.2%), the shortage of general medical staff, the shorter average life expectancy and higher mortality than the EU average. High interregional and intra-regional differences are highlighted. The best health care is to be found in the district centres, which are also educational centres for the training of medical staff.

	Hospitals				Outpatient support						
Adustationation		Т	уре		Diagnostic		Medical			Other health	
Administrative unit	Total	otal         General         Specialised         Total         and consulting         diagnostic centres           hospitals         hospitals         centres         tentres         tentres         tentres		neral Specialised Total and diagnost consulting centres	eneral Specialised Total con		and Centres		Medical dental centres	establishments	
Republic of Bulgaria	346	185	137	2066	114	734	1115	52	51	145	
CBC region	16	8	7	105	-	42	58	-	5	7	
Blagoevgrad	11	5	5	75	-	28	42	-	5	4	
Kyustendil	5	3	2	30	-	14	16	-	-	3	
Source: NSI											

Table 18: Health establishments in CBC region of Republic of Bulgaria 2018

Source: NSI

In both sides of border region the remoteness of some municipalities from urban agglomerations from the point of view of medical assistance delivery (primary, specialist, hospital, urgent and emergency) remains a serious challenge in healthcare on both sides of border region. The most important tasks in healthcare will be linked to demographic projections and the changing needs of the population in all age groups in order to better prepare it for the specific challenges arising from longer life expectancy through appropriate prophylactic care and educational efforts. There should be more emphasis on this matter in the future years, in order for the numbers to grow so that the population in the programme area would benefit from accessibility to health care services and effective and timely care.

	Health care workers				Hospital beds			
Year	Total	specialists	dentists	pharmacists	Total	surgery	pediatrics	gynecology and obstetrics
2015	5 975	3704	1 824	1 029	9 084	1 408	811	985
2016	6 201	3715	1 806	1 019	9 059	1 655	752	910
2017	6 220	3751	1 811	1 070	8 879	1 617	718	911
2018	6 329	3822	1 861	1 104	8 754	1 637	726	880

Table 19: Health care personnel and hospital beds in Republic of North Macedonia (number)

Source: MAKSTAT

Compared with previous years, the data shows that there is an upward trend in physicians, dentists and especially pharmacists after 2015 in the Republic of North Macedonia. The expenditures for health care is also increased from 2014 together with health care workers in RNM. The number of health care institutions remained the same.

For border area of the Republic of Bulgaria is observed decrease of doctors and pharmacists. Compared with previous years is observed trend of fewer young professionals joining the healthcare system due to a lower number of students and the migration of skilled medical professionals (physicians and nurses). The combination of these processes could jeopardise the capacity of the systems to provide high-quality and timely health services to the population in the mid-to-long term.

General practitioners (GPs) are the first tier of the healthcare system in the Republic of Bulgaria. The general practitioner coverage rate indicates both the availability of medical staff to the population and the workload of physicians. The highest coverage rates have been registered in the districts Blagoevgrad (1 604 persons per GP) as the lowest coverage rates were registered in the district of Kyustendil (1346 persons per GP), which is indicative of certain regional imbalances in access to general practitioners and the higher workload of physicians in the districts concerned.

			-				
Administrative unit	Po	Population per general practitioner (number)					
	2014	2015	2016	2017			
Total for the country (average)	1 592	1 614	1 611	1 556			
CBC Region (average)	1 508	1 502	1 556	1 475			
Blagoevgrad	1 578	1 588	1 659	1 604			
Kyustendil	1 438	1 416	1 452	1 346			

### Table 20: Population served by general practitioner (GP), Republic of Bulgaria

Source: NSI, own calculation

Policies to protect and improve health are geared towards generating long-term economic growth at national and regional levels as well as towards ensuring effective action by public sector defence mechanisms on social inclusion and the fight against poverty.

In Bulgarian border region there are large differences in the availability of dentists as the most unfavorable is the provision of the population with dentists in the districts of Blagoevgrad (1056) as in Republic of North Macedonia the dental care and number of dentists had declined compared for the last 4 years.

Table 21: Number of patients served by dentist in CBC Region (Republic of Bulgaria)

Administrative unit	Number of patients per dentist						
	2015	2016	2017	2018			
Republic of Bulgaria (average)	1101	887	862	967			
CBC Region (average)	1204	1010	966	948			
Blagoevgrad district	1234	991	947	1056			
Kyustendil district	1174	1029	985	839			

Table 22: Number of stomatologists in CBC Region (Republic of Bulgaria)

	2014	2015	2016	2017	2018
Stomatologists total	1 291	1 405	1 044	1 029	1 001
Dentists	6	6	57	35	2
Dental technicians	267	220	211	123	221
Dental assistants	882	1 080	1 085	1 175	1 104

Source: NSI

One of the main problems in border area is uneven distribution of medical centres/hospitals on the territory of the CBC region and insurance of equal opportunities for access to health services to the people, including those living in small villages far from urban centres.

One of the challenges the healthcare system in CBC region has been facing is the internal and external brain drain of practitioners, who for professional or subjective reasons, leave certain areas in search of better work conditions and advancement. This lack of human resources continues to undermine the system and does not provide for an equal access to healthcare for all the citizens. The number of problems that have to be addressed by the corresponding bodies, among which the discrepancy between the available funds and the quality of service expected; the inefficient use of facilities; old equipment and apparatuses; lack of certain healthcare services, and lack of transparency in the management of human resources. Some new improvements such as the information system, storage, replacement and transplantation, as well as the new programme for cancer screening, although introduced, either fail to be fully operational, or their functioning is still not in alignment with European standards.

#### 2.6.4 SOCIAL POLICIES

Social inclusion policies also have several dimensions and address disadvantaged people, immigrants, the disabled and people at risk of poverty. Social inclusion is linked to employment, education, health and long-term care policies, housing policy and its territorial dimensions. Issues are most pronounced in national, regional and local periphery where adequate measures for equal access to social services, provision of the necessary infrastructure and creation of employment opportunities and poverty reduction are to be implemented.

Reduction of poverty and promotion of social inclusion among the priorities and links them with the activities under three sub-priorities: providing employment opportunities and raising labor income; ensuring sustainable, quality and accessible cross-sectoral services to prevent social exclusion and ensure the sustainability and adequacy of social benefits.

The social services system in Republic of Bulgaria, including community-based services and specialist institutions, covers a wide range of services aiming to provide social protection to certain marginal groups (groups at risk) in the population. Social assistance activities are within the remit of competence of the Social Assistance Agency (SAA) under the jurisdiction of the Ministry of Labour and Social Policy (MLSP). The SAA has 28 regional directorates for social assistance in all district administrative centres, along with 148 Social Assistance Directorates

The regional coverage of long-term care and other social services per CBC region is uneven, although it usually reflects the differences in the size of population in each region. More social services with a higher capacity are typically available in administrative centres with a larger population. The institutional model of care, particularly for people with disabilities and elderly people, continues to prevail, with certain negative consequences attending institutional care such as depersonalisation, rigidity in daily regime and programme, following a group approach and social distance. In Republic of Bulgaria, institutional care, particularly for elderly people, is still in demand. The situation with bed-ridden patients who need palliative care and patients with mental disorders is similar, particularly in view of persisting stigma, which is difficult to overcome.

 Table 23: Poverty and social inclusion indicator (income) per districts in Republic of Bulgaria,

 2017-2018

Administrative unit	<b>One person</b> (in BGN)	Two persons with 2 kids under 14 years (in BGN)
Average Republic of Bulgaria	4 213	8 848
Blagoevgrad	3 655	7 676
Kyustendil	3 949	8 293

Source: NSI

Table 24: Population at risk of poverty or social exclusion by gender, Republic of Bulgaria

	Total		Men		Women	
Administrative unit	<b>Number</b> (in thousands)	% from population	Number (in thousands)	% from population	<b>Number</b> (in thousands)	% from population

Republic of Bulgaria	2 315.2	32.8	1 057.7	30.8	1 257.4	34.6
Blagoevgrad	91.9	29.8	45.1	29.9	46.8	29.6
Kyustendil	24.8	20.5	11.4	19.3	13.5	21.6

Source: NSI

In two border districts poverty was reduced in 2017 compared to 2016: Blagoevgrad (-2.2 %); and Kyustendil (-1.0 %);

There is a well-recognised need in the Republic of North Macedonia to improve synergies in the implementation of integrated education, health, employment and social services' policies to make progress in social inclusion and to increase the impact of spending and efforts.

Table 25: Social services in the Republic of North Macedonia, 2018

	East Region	Southeast Region	Northeast Region	RNM
Share of children aged 0-5 in kindergartens (%)	42.1	28.0	19.8	26.3
Share of children from 0 to 18 years of age, recipients of child care allowances (%)	2.9	1.2	2.0	2.1
Share of people from 0 to 26 years of age, recipients of special allowances (%)	1.2	1.0	1.1	1.1
Households - recipients of social financial benefits aged 18+ (per 1000 population)	9.3	13.2	30.1	14.1

Source: MAKSTAT

## 2.7 ENVIRONMENT

The diversity of terrain, climate, ecological, hydrological and pedological (soils in their natural environment) characteristics of the targeted area showcase significant geo diversity and biodiversity. As a result of the climatic, relief and soil exuberance the border area is characterized by highly varied flora and fauna. However, it can be easily affected by economic activities like industry, construction, etc. Air, water and soils are the most important environmental components, as not only human health, but also the quality of life and the protection of biodiversity depend on them. Limiting the harmful impact of climate change and mitigating the risk of natural disasters are dependent on their quality and their integrated management.

## 2.7.1 AIR

Air pollutants are emitted from a range of both man-made and natural sources including: burning of fossil fuels in electricity generation, transport, industry and households; industrial processes and solvent use, for example in the chemical and mining industries; agriculture; waste treatment; natural sources, including volcanic eruptions, windblown dust, emissions of volatile organic compounds from plants chemical transformations, reactions to sunlight, additional natural and hemispheric contributions and the impact of weather and topography. Air pollutants can be released directly into the atmosphere (primary emissions) or can form as a result of chemical interaction involving precursor substances.

The region has no registered serious permanent places of pollution of ambient air by industrial enterprises. It is difficult to envisage the risk of sporadic, short-term "shot-type" air pollution locally. There is no area in the region, classified as ecological hot point. The main air polluter is dust.

In the CBC region there are only 2 stations for measuring the air quality. In Kyustendil district as well as in Northeast and Southeast regions monitoring of the above air quality indicators is not held.

Administrative unit / monitoring point	NO2 µg/m³	CO μg/m³	SO2 µg/m³	PM10 μg/m³
Blagoevgrad station	17,82	-	15,65	29,96
Kyustendil	-	-	-	-
NE region	-	-	-	-
East region / Kochani station	-	-	3,06	40,11
SE region	-	-	-	-
MAXIMUM LIMIT	40	10	125	40

**Table 26**: Registered average levels of main air pollutants

Source: MOEW, 2019 and <u>https://www.eea.europa.eu/data-and-maps/dashboards/air-quality-statistics 2018</u>

#### 2.7.2 WATERS

During the period from 1996 to 2016 the quality of **surface waters** in Republic of Bulgaria continued to improve, and this positive trend was most prominent with regard to the core physico-chemical parameters. Nevertheless, in 65% of the 'lake' category and in 57% of the 'river' category the good status objectives with regard to the biological assessment indicator have not been achieved.

Between 1997 and 2016 gradual improvement of the majority of indicators for monitoring **groundwater** quality was observed. Nitrates are a major groundwater pollutant – in approximately 21% of the monitored groundwater points the average annual values were found to be above the limit values. During the 20-year period concerned there have been individual exceedances of heavy metal content in groundwater, in most cases unstable in time. The region covers the water basins of rivers Mesta, Struma and partly Vardar. The inflow of untreated waste industrial and household waters and the change in the water outflow are the major reasons for worsening the water quality. Parallel to that the trend of improving the surface water quality continues, due to partial technological renovation and closure of ineffective polluting productions. The water pollution problems for the three main water arteries will be solved with the improvement, construction and putting into operation of water treatment plants.

### 2.7.3 SOILS

The soil cover ranges from forest soil in the mountain areas to alluvial soils in the river valleys and is most favorable for the traditionally developed tobacco, fruit and vegetable growing. Mineral resources in the region comprise of: granite, marble, clay, dolomite, brown and lignite coal, and ores. While raw mineral resources are noted for their diversity, only coal and marble are of economic significance. Higher pesticide content has been identified in separate areas of the border region. The content of heavy metals does not reveal particularly high values. An important issue to solve is the recultivation of land around the mines. There are strong erosion processes along the slopes of the mountains Vlahina, Malashevska, South-West Rila and partly along the slopes of West Pirin. All arable lands, sloped over 6 degrees are subject to water erosion. The wind erosion is revealed mostly in the plains and the deforested regions.

#### 2.7.4 PROTECTED AREAS, BIODIVERSITY, FLORA AND FAUNA

The border area is characterized by a variety of flora, fauna and natural habitats. It is characterized by clean and preserved environment. Numerous plains and valleys form a strong natural potential for the development of agriculture, forestry and tourism. The region is rich in natural parks, protected areas and natural reserves due to its location in the centre of the Balkan Peninsula. A further credit to the natural wealth of the region bring also its healthy thermal springs, which form a factor with significant added value to the potential for tourism development in the region. Numerous geomorphologic phenomena (caves, natural bridges, gorges and canyons), hydrologic (springs), dendrology monuments and smaller nature reserves are protected by formal instruments as well. These natural beauties combined with the rich historical and cultural heritage of the region are unique regional assets which should be built on, invested in and further developed to improve the CBC region's attractiveness as a tourist destination and a place for living with good quality of life.

**Republic of Bulgaria** has 1 015 protected areas which cover approximately 5.3% of the country's territory. Their total area gradually increased from 5.2% in 2007 to 5.3% in 2014, and that percentage remained unchanged in 2016. The above data rank Republic of Bulgaria's National Ecological Network (NEN) as third in the EU.

Protected areas that are strictly set aside to protect biodiversity and also possibly geological/geomorphological features, where human visitation, use and impacts are strictly controlled and limited to ensure protection of the conservation values. Such protected areas can serve as indispensable reference areas for scientific research and monitoring. The border region is rich in nature reserves and protected areas. On the Bulgarian side of the border are Rila and Pirin National Parks (included in UNESCO's list of world natural and cultural heritage sites), the seven Rila Lakes, the Stob Pyramids, Parangalitsa (the oldest nature reserve in the country), as well as the biggest (2873 ha) nature reserve of Bayuvi Dupki (Djindjirica).

The European ecological network **NATURA 2000** is of the highest importance for the preservation of the natural habitats. It is a pan-European system of protected areas and ecological corridors whose identification is based on scientific criteria, thus putting into force the EU Directives 79/409 for the protection of birds and 92/43 for the conservation of the natural habitats and the habitats of the wild flora and fauna. The conservation measures in these directives postulate the establishment of a multifunctional uniform network of key areas – Special Protection Areas (SPA) and Sites of Community Importance (SCI), interconnected by ecological corridors.

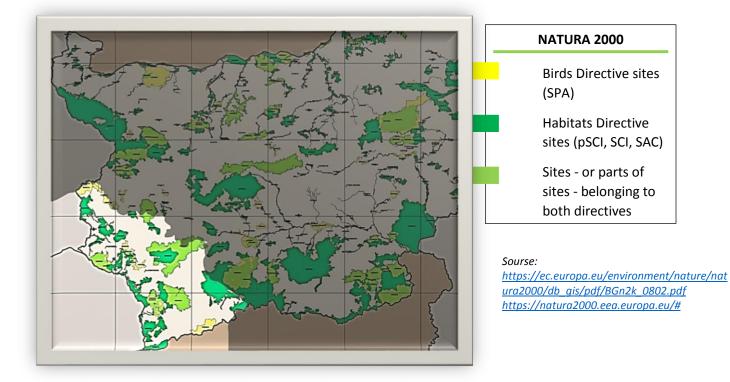
The establishment of the NATURA 2000 network in the Republic of Bulgaria is postulated by the

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Biodiversity Act, where the sites of this network are called "protected zones". According to the two EU Directives 335 protected sites constitute the European Ecological Network NATURA 2000 in Republic of Bulgaria (114 according to the Bird Directive and 231 according to the "Habitats" Directive). The total area is 3 901 084 ha that constitutes 34,3 % of the country's territory.

40 protected sites have been identified within the border area. National parks, mountains, wellpreserved river valleys, nature landmarks and locations of preserved habitats or valuable for Europe flora and fauna species are some of the sites, proposed for inclusion in the Network. Natura 2000 sites under study in the Republic of North Macedonia to determine species, boundaries and regimes.

Map 4: Natura 2000 sites in Republic of Bulgaria



# Table 27: Natura 2000 sites in Republic of Bulgaria

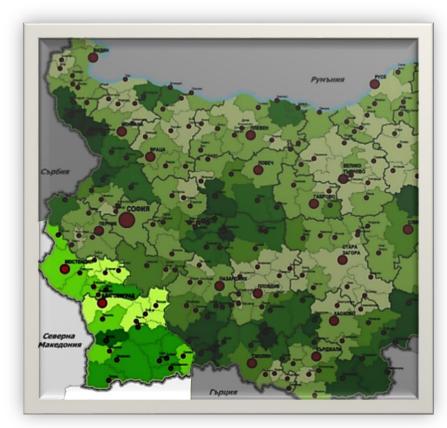
	BI	LAGOEVGRAD		KYUSTENDIL
Birds		<u>BG0002107</u>	Boboshevo	)
Directive		<u>BG0002129</u>	Rila Bufer	
sites (SPA)		<u>BG0001013</u>	Skrino	
	<u>BG0002072</u>	Melnik pyramids	<u>BG0002100</u>	Lower Koznitsa
	<u>BG0002076</u>	Mesta	<u>BG0002079</u>	Osogovo
	<u>BG0002063</u>	Western Rodopes		
	<u>BG0002099</u>	Kocherinovo		
	BG0002126	Pirin buffer		
	BG0002098	Rupite		
	BG0002078	Slavyanka		
	<u>BG0000167</u>	Belasitsa	<u>BG0000308</u>	Verila

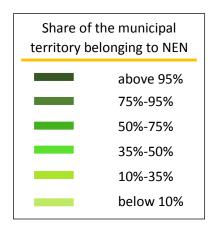
Habitats Directive sites (pSCI, SCI, SAC)	<u>BG0000220</u>	Lower Mesta	<u>BG0000295</u>	Lower Koriten
	<u>BG0002003</u>	Kresna	<u>BG0001012</u>	Zemen
	<u>BG0000366</u>	Kresna-Ilinden	<u>BG0000298</u>	Konyavska mountain
	<u>BG0000626</u>	Krushe	<u>BG0001017</u>	Bloody stone
	<u>BG0000636</u>	Low Rila	BG0000294	Karshalevo
	<u>BG0000224</u>	Ograzden- Malashevo	BG0000636	Lower Rila
	<u>BG0001022</u>	Oranovki gorge - Leshko	BG0001011	Osogovo mountain
	<u>BG0000167</u>	Belasitza	BG0001013	Skrino
	<u>BG0000220</u>	Lower Mesta	BG0000134	Choklyovo swamp
	<u>BG0000625</u>	Izvorovo		
	BG0001021	Mesta river		
	BG0001030	Rodopi- West		
	BG0001023	Rupite- Strumeshnitsa		
	BG0001028	Middle Pirin - Alibotush		
Sites belonging to both directives		BG0000495	Rila	
		BG0000496	Rila Monas	tery
	<u>BG0000209</u>	Pirin		

The significant share of *National Ecological Network (NEN) sites* is evidence of the biological significance of the different areas and of the undertaken conservation measures. It is a prerequisite for developing educational tourism and ecotourism. On the other hand, this circumstance significantly limits human activities in such areas. Issues in spatial development and in economic life arise in cases where the restrictive regimes of protected areas overlap with those of protected zones and natural habitats, and where the social and economic aspects of development are underestimated on account of the environmental aspects. This problem is most prominent at the lowest level, that of municipalities, especially those where almost the entire area of the municipality is covered by NEN sites. The National Ecological Network consists of protected areas are declared under the Protected Areas Act. At present in Republic of Bulgaria 955 protected areas are declared covering approximately 5.1% of the country territory. According to the Protected Areas Act, the protected areas are 6 categories: reserves (55), national parks (3), natural monuments (350), managed nature reserves (35), nature parks (11) and protected sites (501).

Blagoevgrad district is among the districts that have very high percentage of protected areas and the share of the municipal territory belonging to NEN.

Map 5: National eco network (NEN) in Republic of Bulgaria





Source: National Centre for RegionalDevelopment, Republic of Bulgaria

On the territory of the **Republic of North Macedonia**, there are other natural protected areas, environmentally important ecological corridors like: Kumanovo Kozjak, proposed for a Nature Park despite the rocky sections important for nesting several species of birds of prey. Then, the archaeological site Kokino, from about the 19th century BC, corresponding to the early European Bronze Age, situated between 1010-1030m above sea level covers 30 hectares in Staro Nagoricane municipality, represents a great and unique opportunity for alternative tourism. Besides the great cultural significance, it also has a great geomorphological value, representing a geological phenomenon, the secretion of pyroxene andesite and anthensites with an age of 32-33 million years, as well as Kokino's "megalithic observatory" is an exceptional site worth visiting. Additionally, the stone town Kuklica, located 8 km northwest of Kratovo, with altitude of 415-420m, extending over an area of 0.3 square km, represents a monument of nature, with a rare geomorphologic form. It's consisting of over 120 naturally formed stone pillars situated on the right bank of the Kriva River valley. This area is protected by law as natural rarity in the country of the RNM.

*EMERALD Network:* It is a network of Areas of Special Conservation Interest developed on the territory of the Bern Convention Parties and it represents prolongation of the principles and criteria of the Natura 2000 network in non-EU countries, hence it is a basic tool for preparation of countries for their future work under Natura 2000 and implementation of Birds and habitats Directives. At the moment,

the National Emerald Network in the Republic of North Macedonia includes 16 sites which represent about 80% of the whole network. Within the border area the following sites with valuable European habitats and species have been identified: Bogoslovec, Monospitovsko Blato (Monospitovo swamp), Monument of Nature Smolarski vodopad (Smolare waterfall) and Monument of Nature Dojransko Ezero (Doyran Lake).

The Potroshnica River has great ornithological and botanical importance; the Bislim ravine is a short ravine with a pronounced sub-Mediterranean climate impact, rich in underground and surface karst formations, the ravine of the river Kiselica and others. Osogovo Mountains possess a number of internationally and nationally significant species of flora and fauna. This is an important corridor for the movement of wild plant and animal species within the Pan-European ecological network for south Eastern Europe (PEEN SEE) and Emerald area. There are 18 habitats registered under the EUNIS classification system for habitats, five of which are significant for conservation under the Habitats Directive. There are 1,007 types and subspecies of plants registered, of which 18 are registered only in Osogovo, among which: Viola biflora, Anemone narcissiflora, Myriophyllum verticillatum, Pulsatilla Montana ssp. Slaviankae etc. On the territory of Republic of North Macedonia, there are other natural protected areas, which represent a sound basis for potential tourism attractions: Belasica Mountain contains two geomorphologic properties that are declared natural monuments – Smolare and Kolesino Waterfalls; the Monospitovo Swamp, near Strumica, has also been declared a natural monument due to the presence of glacial relicts of fern (Osmunda regalis). Osogovo Mountain, Belasica Mountain, Malesevo Mountain, and parts of Watersheds of Struma and Vardar rivers are also recognized in the Strategy of the World Conservation Union (IUCN) as areas with a high potential for CBC activities.

Map 6: EMERALD Network sites in the Republic of North Macedonia

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Sourse: http://emerald.eea.europa.eu/

Candidate sites for Protected Sites under EMERALD Network	No	Area: (km²)	Region of RNM
1. German - Pchinja	MK0000029	635.73	North-East Region
2. Maleshevski Planini	MK0000033	191.64	East Region
3. Bogoslovec	MK0000010	45.06	East Region
4. Belasica	MK0000021	167.34	South-East Region
5. Monospitovsko Blato	MK0000013	10.83	South-East Region
6. Churchulum (Bogdanci)	MK0000027	6.53	South-East Region
7. Blato Negorski banji	MK0000022	6.26	South-East Region
8. Kozuf	МКООООО19,	282.82	South-East Region

As a result of the climatic, relief and soil exuberance the border area is characterized by highly varied flora and fauna. However, it can be easily affected by economic activities like industry, construction, etc. There are areas in the region with loss, fragmentation and modification of habitats, reduced or destructed ecosystems. Basic reasons for that loss are: non-compliance with existing legislation, weak control systems, low level of education, lack of information, unstable economic development and poverty, lack of integrated planning, etc.

Protected natural areas in Republic of North Macedonia and ecological corridors for connecting protected areas and environmentally important areas like:

• Northeast region: Kumanovo Kozjak, proposed for Nature Park despite the rocky sections important for nesting several species of birds of prey; Archaeological site Kokino; The stone town Kuklica (protected area as natural rarity); Potroshnica river (ornithological and botanical importance); Bislim ravine (sub-Mediterranean climate impact, rich in underground and surface karst formations); The ravine of the river Kiselica; Osogovo Mountains (important

corridor for the movement of wild plant and animal species within the Pan-European ecological network)

 Southeast region: The forest eco-systems in Strumica are covering the territory of Belasica and Ograzden mountains and are dominated by deciduous forests; Evergreen forests – rare and mostly found in the higher parts of the mountains; Rich in natural resources – Radovish and Konche regions popular for their supply of mineral, non-metal raw materials.

In addition to the natural diversity of the region there are also forests, covering around 46.5% of the total border area territory and providing raw materials for the wood-processing industries as well as opportunities for recreational and hunting activities.

**Balkan Green Belt** is part of Green Belt Europe and is running along the barrier that separated Balkan countries (Croatia, Serbia and Montenegro, Republic of North Macedonia, Romania, Republic of Bulgaria, Albania, Greece, Turkey), ending at the Black Sea. The "Iron Curtain" dividing Europe for almost 40 years created a zone/strip between West and East Europe where no activity was allowed and where natural habitats remain undisturbed. The aim of the Green belt is to have this strip becoming a part of an ecological network and to preserve bio-diversity.

### 2.7.5 CLIMATE CHANGE

Various analyses, assessments and scenarios by national and international institutions and experts place Republic of Bulgaria and Republic of North Macedonia among the countries at higher climate change risk. The factors which are expected to impact adversely human health, the environment, biodiversity and economic growth include extreme temperatures, higher precipitation frequency and intensity, torrential rains and the related processes and disasters.

Taking into account the environmental situation, the whole CBC area is rated as region with deficits to adapt to climate change.

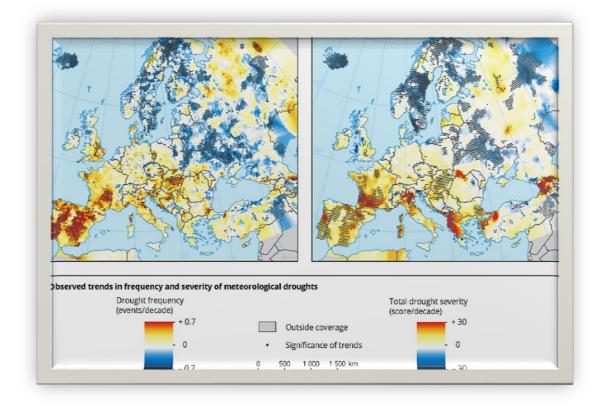
The frequency of natural disasters has increased in recent years. A series of disasters have been observed, mainly related to the development of powerful convective storms, which have caused serious material damage and casualties in a number of regions of Republic of Bulgaria. The effects of these processes are also frequent floods.

#### Droughts

One of the main outcomes of climate change is represented by prolonged periods of meteorological and hydrological droughts and the decrease of soil moisture. Droughts usually occur in areas that are already arid, or which are prone to dryness. According to the existing data, the analysed region is characterized by a slightly higher drought frequency. The frequency of dry years registered in the Republic of Bulgaria increased, while rainy years are not significantly present anymore.

Map 7: Drought frequency and severity in Europe

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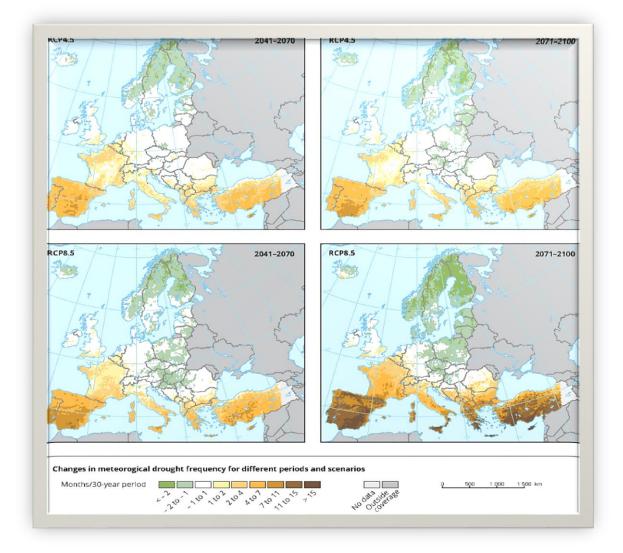


Source: EUROPEAN Environmental agency

According to two of the four Representative Concentration Pathways (RCP)16 scenarios developed by the Intergovernmental Panel on Climate Change (IPCC), the Republic of Bulgaria- the Republic of North Macedonia cross-border area will not be bypassed by meteorological droughts in the future. In this context, while droughts are almost a certainty, it is up to policy makers and central governments to develop and implement strategies for mitigation and a series of adaptive measures so that the negative effects could be reduced as much as possible.

Map 8: Projected change in the frequency of meteorological droughts

<sup>&</sup>lt;sup>16</sup> Scenarios that include time series of emissions and concentrations of the full suite of greenhouse gases (GHGs) and aerosols and chemically active gases, as well as land use/land cover (Moss et al., 2008).

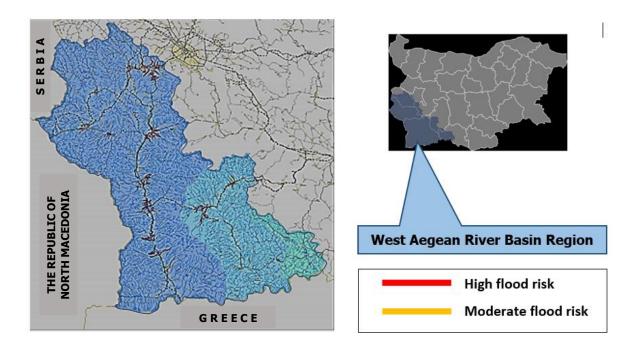


### Source: Environmental European Agency

### Floods

Natural and anthropogenic causes for flooding are associated with: the existence of a topographic variety and the concentration of surfaces with high flood risk; insufficient arrangement of the torrent slopes surrounding localities, particularly in the Bulgarian hilly area; sub-sizing of the hydro technical network with a regulatory role; absence of afforestation works.

Map 9: West Aegean River Basin Region



Climate change is projected to lead to a higher intensity of rain, with projections showing an increase of heavy rain in most parts of Europe in a.tumn and winter by up to 35 % by the end of 21st century in a high emissions scenario.

# Forest fires

Forest fires cause serious damages to the environment and agriculture. They often result in human casualties as well. The most common causes for forest fires are as follows: self-ignition of dry grass near forests, natural phenomena (lightnings), negligent handling of fire, uncontrolled burning of household waste, etc.

The consequences of forest fires are various, including: ecological (deforestation and erosion of soil, destruction of unique habitats of rare, protected species etc.), Economic (loss of timber, necessity of resources for remedy measures etc.) and Social (deterioration of business conditions, decline in tourism sector, depopulation of affected country sides etc.).

Administrative	Number of forest fires								
unit	2010	2011	2012	2013	2014	2015	2016	2017	2018
Total BG	1630	2185	3010	764	2245	2474	2448	741	480
Blagoevgrad	8	103	61	20	12	346	30	23	
Kyustendil	62	153	23	122	135	211	97		4
total BG CBC	70	256	84	142	147	557	127	23	4

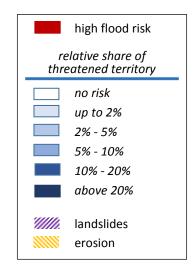
Table 28: Forest fires in the Republic of Bulgaria

Source: NSI

Given the above table a conclusion may be drawn the in the recent years the Bulgarian CBC region faces decreasing number and respectively moderate risk of forest fires. However the historical data show that forest fires (especially in 2015) are not a rare phenomenon and should not be neglected.

#### Map 10: Scheme of areas under natural threat and risk





Sourse: Regional Spatial Planning Scheme of the Southwest Region, NCRD

Basically the most significant threat of geological risks in Blagoevgrad and Kyustendil regions is landslides. These negative phenomenons are directly related to the settlements, technical and engineering infrastructure. Efforts in this direction must be linked to specific technical interventions and large financial resources.

The risk of floods in Blagoevgrad and Kyustendil regions has been detected on the basis of reports from the Basin Directorate of West Aegean region - Blagoevgrad. The risk of flooding is a threat to the population and elements in urban areas such as housing, public and industrial buildings, urban engineering infrastructure. The risk of flooding is within three territorial limits, defined by the three levels of risk - high, medium and low.

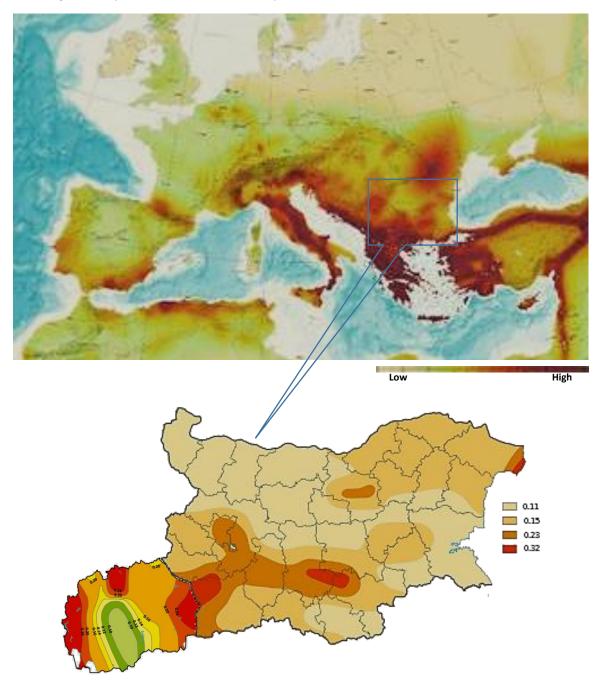
### 2.7.6 OTHER NATURAL RISKS

#### Seismic Risk

The countries of the Balkan Peninsula are located in the Aegean seismic zone, which is part of the Mediterranean earthquake area. Given the relatively high population density and high density of construction, even in the case of weaker earthquakes significant adverse effects may be observed. Earthquakes in Republic of Bulgaria are among the most dangerous natural disasters, as 97% of the country's territory is threatened by seismic impact.

The cross-border area is exposed to relatively high seismic risk. The two districts in the Republic of Bulgaria belong to the most vulnerable to earthquakes regions in the country.

Map 11: Map of seismic hazard in Europe

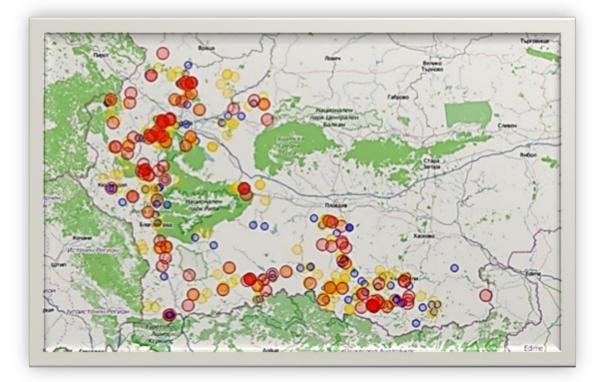


## Landslides

Heavy rain and human activity contribute to the activation of landslides in Republic of Bulgaria which are most prominent along the Danube River and the Black Sea coast.

There are three categories in terms of exposure to landslides: low, moderate and high risk of landslides.

# Map 12 Landslides in the CBC region of the Republic of Bulgaria



Source: MRDPW

The Bulgarian CBC region is characterized by low to moderate landslide development.

### 2.8 INFRASTRUCTURE

### 2.8.1 TRANSPORT INFRASTRUCTURE

#### **TEN-T** network

The Trans-European Transport Network (TEN-T) policy addresses the implementation and development of a Europe-wide network of railway lines, roads, inland waterways, maritime shipping routes, ports, airports and railroad terminals. The ultimate objective is to close gaps, remove bottlenecks and technical barriers, as well as to strengthen social, economic and territorial cohesion in the EU. The current TEN-T policy is based on Regulation (EU) No 1315/2013.

Besides the construction of new physical infrastructure, the TEN-T policy supports the application of innovation, new technologies and digital solutions to all modes of transport. The objective is improved use of infrastructure, reduced environmental impact of transport, enhanced energy efficiency and increased safety.

TEN-T comprises two network 'layers':

- The *Core Network* includes the most important connections, linking the most important nodes, and is to be completed by 2030.

- The Comprehensive Network covers all European regions and is to be completed by 2050.

The backbone of the Core Network is represented by nine Core Network Corridors, which were identified to streamline and facilitate the coordinated development of the Core NetworkThrough the

territory of the Republic of Bulgaria- the Republic of North Macedonia CBC region passes one of the core TEN-T network corridors with extensions to third countries, namely - Orient/East-Mediterranean corridor that links northern Germany (Hamburg-Berlin) to Eastern Europe (Prague-Bratislava, Budapest-Timișoara-Craiova-Sofia) and South Eastern Europe (Sofia-Thessaloniki-Athens/Pireaus).



Map 13: TEN-T network with extensions to third countries



#### **Road Network**

The group of roads of international and national importance includes motorways, I-st class roads, IInd class roads (categorized in the European network), that are subject to significant traffic, including transit. Transport network also includes III-rd class (national) roads and IV-th class (municipal) roads that have predominantly local importance (connecting small settlements and providing acess to cultural and natural heritage sites).

The Bulgarian CBC region is crossed by A3 Struma Motoway from Sofia to the Kulata-Promachonas

border crossing checkpoint and provides a direct link from the Republic of Bulgarian capital to the border with Greece.

The cross-border region is served also by the following first-class roads:

- First-class road *I-1 border with Romania-Vidin-Montana-Botevgrad-Sofia-Blagoevgrad-Kulataborder with Greece* / European categorization E79 /. The road is part of the core TEN-T network -Orient / Eastern Mediterranean, with the southern part of the route defined by Struma Motorway.
- First-class road I-6 *border with* **the Republic of North Macedonia-Gyueshevo-Kyustendil-Radomir**-Sofia-Karlovo-Kazanlak-Burgas forms the direction of the part of one of the additional routes included in the expanded TEN-T network as a connection between the capitals Sofia and Skopje.

In addition, the Bulgarian part of the programme area is served by the following second class roads:

- Second-class road II-19 Simitli-Gradevo-Razlog-Bansko-Dobrinishte-Gotse Delchev-border Greece - important road connection that connects the region and the country with the Republic of Greece through Ilinden / Exohi border crossing.
- Second-class road II-62 *Kyustendil-Dupnitsa*-*Klisura-Samokov* it gives convenient access from the regional center Kyustendil to Struma Motorway.
- Second-class road II-84 (Belovo-Pazardzhik) Zvanichevo-Vetren-Velingrad-Yundola-Yakoruda-Razlog - inter-regional connection of the South-West and South-Central NUTS 2 regions in Republic of Bulgaria, through Velingrad spa resort.

Administrative unit	Total	Motorways	I class	II class	III class
Republic of Republic of Bulgaria	19 876	757	2 925	4 022	12 172
Blagoevgrad	708	43	75	152	438
Kyustendil	629	44	85	54	446

Table 29: National Road network – length and structure, 2018 (km)

Source: National Statistical Institute

Table 30: Road network density, 2018 (km/1000 km2)

Administrative unit	Total	Motorways	I class	II and III class
Republic of Republic of Bulgaria	179.1	6.8	26.4	145.9
Blagoevgrad	109.8	6.7	11.6	90.7
Kyustendil	205.6	14.4	27.8	163.4

Source: National Statistical Institute (Calculated on Road Length Database 2018)

Road density is the ratio of the length of the country's total road network to the country's land area. The road network includes all roads in the country: motorways, highways, main or national roads, secondary or regional roads, and other urban and rural roads. The density of the road network also determines the extent of service of all kind of roads – with international and national importance, respectively regional and municipal ones. Blagoevgrad district has a relatively well developed motorways network close to the average for the country, while the figures for Kyustendil district are more than twice above the average values for Republic of Bulgaria. A similar tendency is observed regarding I, II and III class roads.

**The structure of the road network** / according to the national classification - national roads and municipal roads / determines the quality of transport service in the respective territory and shows that the share of motorways in both districts in the Republic of Bulgaria is more than twice above the national average - see table below:

Table 31: Share of the road network by classes of total length, 2018.

Administrative unit	Motorways	I class	II class	III class
Republic of Republic of Bulgaria	3.80	14.72	20.23	61.25
Blagoevgrad	6.07	10.60	21.46	61.70
Kyustendil	7.00	13.51	8.59	70.91

Source: National Statistical Institute

Given the role of the motorways and first-class roads in conducting transit flows and ensuring the integration of the country's road network with that of neighbouring countries, the high share of motorways and first-class roads built on the territory of both districts give to cross-border area a more favourable position to integrate both nationally and at European level.

The condition of the road network is a determining factor for the service of settlements and development opportunities in the area. In the best positions in the region is the district of Kyustendil, where over half (56%) of the road network is maintained in good condition, with an average of 40% for the country. Blagoevgrad District also has a better maintained road network (47%).

The actual transport services of the municipalities are implemented by the municipal road network, which provides the connections of settlements in the municipality with the municipal centre, connections with settlements in neighbouring municipalities, or access to local transport infrastructure facilities and the categorisation of the municipalities is determined by the degree of network completion.

The difficult transport access in less developed peripheral regions results in a lack of effective economic activity, high levels of unemployment, process of depopulation of settlements and insufficient provision of public services.

The A4 motorway passing through the **Republic of North Macedonia** connects Kosovo with Skopje and continues Southeast towards Štip, Radoviš, and Strumica, reaching the border with Republic of Bulgaria near Novo Selo. The 47 km stretch from Miladinovci to Štip was completed in late 2018. Further South-east from Štip to Radovis, there is an express road under construction, which could potentially be upgraded to a motorway in the future.

The road infrastructure in the Northeast region of the Republic of North Macedonia consists of an 888

km local road, 370 km regional and 99 A road network (Skopje - Kumanovo Border with Serbia) and A2 (Kumanovo - Kriva Palanka - Border with BG). Through the RNM programme area pass two of the Pan-European transport corridors (VIII and X), which makes it very strategic one in terms of transport links. The *Southeast region* has a good road infrastructure - the A4 motorway from Miladinovci - Sveti Nikole - Stip, with the total length of 47.1km represents the largest investment in this region. Other important roads are the ones connecting the cities Veles-Stip-Kocani-Kamenica-Delchevo-Pehchevo-Berovo. Lately, the road sections Kocani - Ponikva, Vinica - Berovo, Delchevo - border crossings (Stanke Lisichkovo) and Berovo - border crossing (Klepalo) have been partially reconstructed, but there is a need for further investments, in order to finalize the rehabilitation works. In addition, on territory of the Republic of Bulgaria, there is no road connection to the Klepalo checkpoint (e.g. respective measures have to be undertaken in order the border crossing to be functional).

The *Southeast region* has a good road infrastructure. Out of the total of 14 395 km of road network in the entire territory of the Republic of North Macedonia, 1 557km, or 10.82% of the road network is located in this region. The road infrastructure connects the country with the European road network (international corridors - E roads), whereas the state road network includes state roads A, regional and local roads.

#### **Railway network**

There are 4 030 km of railway lines in operation on the territory of the Republic of Bulgaria (2017), of which 282 km are in the cross-border area. The TEN-T network includes the following main lines of the national railway infrastructure passing through the CB region:

- Railway line 5 Sofia Vladaya Radomir Dupnitsa Kulata (border with Greece).
- Railway line 6 Voluyak-Razmenna-Batanovtsi and **Radomir-Gyueshevo** (border with the Republic of North Macedonia).

Both lines are part of the core TEN-T network - Orient/East-Mediterranean corridor. Railway connections with neighbouring countries in the Bulgarian part of the CBC region are limited only to the one with Greece (Kulata/Promahon border checkpoint).

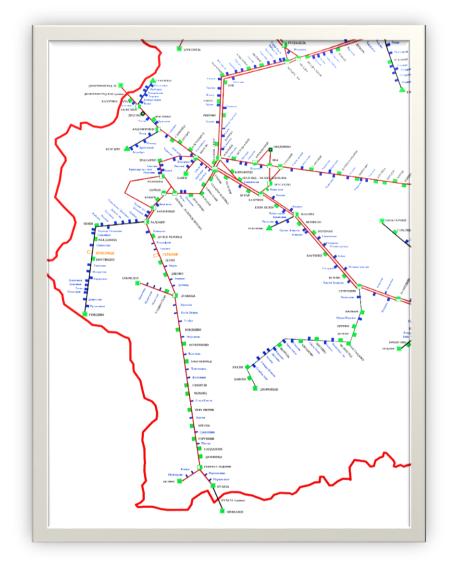
A significant part of the railway lines in the Republic of Bulgaria have been built more than 50 - 100 years ago (Gyueshevo -Kyustendil - Radomir), with geometric parameters, construction and facilities suitable for speed up to 100 km/h, and in some places even with almost exhausted possibilities to keep the speed and to ensure the traffics security and safety. This data come to show that the average technical speed of passenger trains is one of the lowest in Europe, which is the reason for the poor quality of the service offered.

## Table 32: Length of railway lines in Republic of Bulgaria, 2018

Region – NUTS III/District	Total length km	Electrified lines km	Density km /1000 km²	Stations
Total BG	4030			
Total CBC BG	282	168		68
Blagoevgrad	161	104	24.9	37
Kyustendil	121	64	39.5	31

Source: National Railway Infrastructure Company

## Map 14: Railway network in Soth-West NUTS 2 region of Republic of Bulgaria – lines and stations

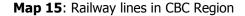


Source: National Railway Infrastructure Company

The *narrow-gauge line Septemvri-Dobrinishte* or line №16 from the National railway network of Republic of Bulgaria is a one-track, non-electrified and the only operating narrow-gauge railway line in Republic of Bulgaria with 760 mm distance between the rails also known as Bosnian type of railway. It connects Dobrinishte with the Sofia-Plovdiv-Bourgas railway. With the 1925 Railway expansion law, the railway is officially called "Tatar Pazardzhik-Nevrokop with a branch Saranbay-Varvara". The 125 km distance between the two terminal stations could be passed for around 5 hours with average speed of 25 km/h. The trace leads from Septemvri station (at the main road Kalotina-Svilengrad) to

Dobrinishte station through 12 stations (Septemvri, Varvara, Dolene, Kostandovo, Velingrad, Cvetino, Avramovo, Yakoruda, Belitsa, Razlog, Bansko and Dobrinishte) and 13 stops. The line is actively used with four passenger trains running the length of the line in each direction per day. The journey takes five hours through the valleys and gorges between Rila and Rhodopes linking the western part of the Upper Thracian Plain with the Western Rhodopes, Rila and Pirin mountains. Due to the characteristics of the route through the mountains, the narrow-gauge line Septemvri–Dobrinishte is also known as the Alpine railway in the Balkans. Avramovo station, situated at 1267 meters above the sea, is the highest station in the Balkans.

The railway was built in several stages between 1921 and 1945 with total length of 125 km (78 miles). The Varvara–Pazardzhik branch line, which was closed in 2002, was 16.6 km (10.3 miles) long. It's passing through the Chepinska and Mesta rivers. Being the only narrow-gauge railway in Republic of Bulgaria it's a big tourst attraction for Bulgarian and foreign tourists. It's also favoruited by the admirers of the railway transport and there are often visitor groups that came specifically for this railway line - historical and unique construction from the beginning of the twentieth century (built in the period 1921 – 1945).





Republic of Bulgaria still has no railway connection with Republic of North Macedonia. The construction of a high speed railway Sofia-Gyueshevo will contribute to facilitate the connection between the capitals of the two countries. The designed railway connection Kumanovo – the Republic

of Bulgaria border has a total length of 96,8 km, with a speed of 100 km/h – 130 km/h, providing combined traffic (both passengers and freight).

The project is divided into two parts:

a) Renovation and reconstruction of the railway section Kumanovo - Beljakovce in use in the period from 1956 to 1994 when the works for its reconstruction were started. The section has a length of 28.6 km and about 65% of the construction works have been completed.

b) Construction of the railway section Beljakovce - Deve Bair where some works have been performed between 1994 and 2004 in the area between Beljakovce up to about 7 km West of the city of Kriva Palanka and the border tunnel was partially excavated. The construction of the whole section includes numerous tunnels (around 55) and more than 35 bridges.

The section is divided into two sub-sections:

Sub-section Beljakovce - Kriva Palanka West with a length of 34.8 km where about a third of construction works are completed.

Sub-section Kriva Palanka West - Republic of Bulgaria border with a length of 33.4 km where 0,9 km of the foreseen border tunnel (with total length 2,35 km) are completed.

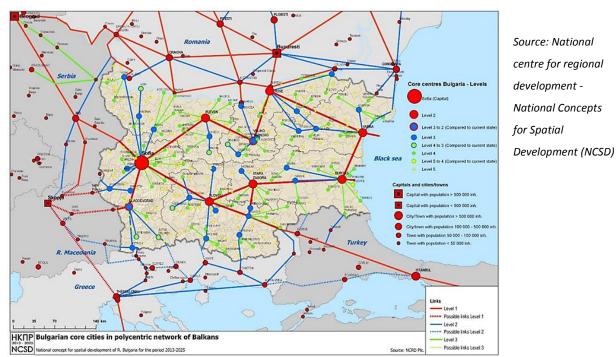
The construction of the railway is a high priority - both in view of connecting the rail networks of the two neighboring countries, as well as for ensuring the proper functioning of the EU TEN-T corridor.

#### 2.8.2 CROSS-BORDER LINKS AND FUNCTIONAL AREAS

The potential for creating cross-border functional areas is mainly determined by the presence of neighbouring territories on both sides of the border with a concentration of the similar types of resources - urbanised territories, protected areas, areas with tourism potential (historical, cultural, wine, culinary, etc.).

**Urbanised territories** are characterised by a population concentration, i.e. service users on the one hand and workforce on the other, as well as potential for development of cross-border functional areas with different functions - education, health, social services, tourism and recreation, sports, labor and employment, i.e. potential for the development of cross-border multifunctional zones.

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## Map 16: Republic of Bulgaria spatial links with neighbouring countries

Main connections between centers-cities of Republic of Bulgaria and Republic of North Macedonia are as follows:

- cross-border connections between cities of level 1 Sofia (Capital city, level 1) Kyustendil (regional center, level 3) Kumanovo (center of the North-East Planning Region of Republic of North Macedonia, level 3) Skopje (Capital city, Level 1);
- cross-border connections between the cities level 3-2 Blagoevgrad (regional center, level 2) and Shtip (center of the Eastern Planning Region of Republic of North Macedonia, level 3);
- cross-border connections between cities, level 3-4 Strumica (center of the South-East Planning Region of the Republic of North Macedonia, level 3) with the city of Sandanski (level 4);

## 2.8.3 Eurovelo – European cycle route network

In addition to the TEN-T network in the CBC area passes one of the European cycle routes, namely EuroVelo 13 Iron Curtain Trail. It gives the possibility of visiting 20 countries starting in northern Finland passing near the Baltic Sea, Germany, Czech Republic, Slovakia-Bratislava, Romania and ending in Republic of Bulgaria at the small Black Sea town of Rezovo. Following this route for more than 9,950 km is a living history lesson but also provides a welcome reminder of the peace and reconciliation that have followed the fall of the 'Curtain'.

The Eurovelo routes have a touristic purpose, hence they do not link large cities but aim for places with important natural or cultural heritage. Unfortunately, none of the Eurovelo corridor segments passing through Republic of North Macedonia and Republic of Bulgaria are developed or at least signalised.

## Map 17: EUROVELO 13 Iron Curtain Trail – EUROPEAN CYCLE ROUTE NETWORK



Source: https://en.eurovelo.com/ev13

## 2.8.4 Border crossings

There are 3 Border Crossing points along the border between Republic of Republic of Bulgaria and Republic of North Macedonia:

- Gyueshevo Deve Bair
- Stanke Lisichkovo (Logodazh)
- Zlatarevo Novo selo

The capacity, the technical condition of the Gyueshevo - Deve Bair border checkpoint, together with all the related infrastructure, meets the modern requirements. The route is suitable for all types of transport – vehicles, minivans, buses, cargo vehicles and trucks, especially on Bulgarian territory where the highway is with optimal parameters for absorbing the traffic. In the RNM part, rehabilitation is needed and foreseen to improve the parameters of the road.

For the other two points, there is a need for implementing measures for reconstruction of the road network – Logodazh, and the modernization of the building infrastructure - Zlatarevo.

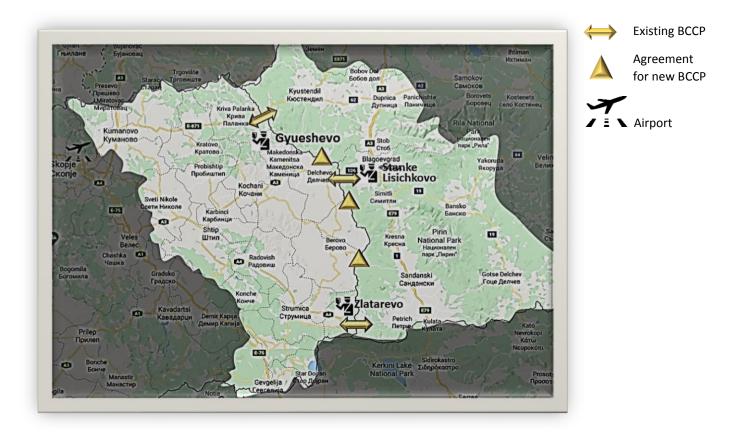
All three border checkpoints ensure the movement of people and goods, as their geographical location allows the construction of high-class roads for the passage of any type of motor vehicle. However, they are not sufficient to make direct and efficient connections, since the settlements on both sides of the border are relatively short distances by air through existing roads through the existing border checkpoints, and the distance through existing roads and border checkpoints increases with times. This need for effective links for road transport - cars, light commercial vehicles and mini buses has led to the conclusion of an intergovernmental agreement for the construction of two new points, with priority being Klepalo (Strumyani-Berovo). The point on the side of the Republic of North Macedonia is built, and from Republic of Bulgaria the section of 17 kilometers should be completed to the border checking point. Due to the mountain terrain and high altitude, the parameters of the road can provide optimum passage for cars, vans and minibuses, which meets the needs of local people and crossborder business.

There are intergovernmental agreements between the two countries for opening of three new Border Crossing check-points (BCCP), namely: Strumyani-Berovo (Klepalo), Simitli-Pehchevo and Nevestino-Delchevo (Chernata skala). The Agreement between the Government of the Republic of North Macedonia and the Government of Republic of Bulgaria for opening new international road Border Crossing Check Points Strumiany – Berovo and Simitli – Pehchevo was signed on 14 June 1999 in Skopie. On the Republic of North Macedonia territory, the BCCP 'Klepalo', Strumyani - Berovo, as well as the access road, have already been constructed in 2001, while on the territory of the Republic of Bulgaria both the road section and the BCCP are not constructed yet. The preliminary stage of works design for construction of the BCCP on Bulgarian territory was approved in 2005. Given the long period of time since the approval of the preliminary stage of works design to the present moment, the documentation have to be updated and developed in working phase accordingly taking into account the current legislation and technical requirements.

The missing road section on teritory of the Republic of Bulgarian has to link the district of Blagoevgrad with BCCP Strumyani-Berovo, respectively with the relevant municipalities in the border region in the Republic of North Macedonia as follows: Berovo, Kochani, Radovish, Vinitsa, Zarnovtsi and Blatets. The acess road on North Mecedonian territory is a connection of the existing BCCP 'Klepalo' with I-class road Berovo-Skopie. The last section of the road from the border to Berovo village is completed, but needs rehabilitation.

#### Map 18: Border crossings

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## 2.8.5 AIRPORTS

There are no international or local airports in the CBC region. The population is served by the international airports in the capitals of both countries – Sofia, Republic of Bulgaria and respectively Skopje, Republic of North Macedonia.

## 2.8.6 INFORMATION AND COMMUNICATION TECHNOLOGIES (ICT)

Progress in information society development is considered crucial to meeting the needs of society and economy. Gradually, the information and communication technologies (ICTs) are becoming widely available to the public, both in terms of accessibility and cost, with access rates rising between 2007 and 2018. For ten years, the share of households with Internet access in the EU-28 has reached 85 %, which is 30 percentage points higher than 2007.

In 2017 around 67 % of households in Republic of Bulgaria have access to the Internet and 63 % have a desktop computer, a laptop or tablet. Almost 67 % of households have a fast and reliable broadband connection, which, in addition to a fixed wired connection, also includes an Internet connection through the network of the mobile operators. In the period 2013-2017, the relative share of households with Internet access increased by 13,6 percentage points and the use of broadband increased by 13,3 points.

Despite the positive trend in the recent years, the broadband coverage in Republic of Bulgaria is still under the EU28 average and there is an imbalance between the densely populated areas and sparsely populated ones. In the Republic of North Macedonia the use of Broadband Internet connection and mobile broadband connection is highest in the Northeast region – showing a share of 90%, while the share of persons (aged 15 to 74) who used the Internet in 2018 registered in the region was 93%. The East region demonstrated that the share of household units that had access to the Internet in 2018 was 77%, while the share of persons (aged 15 to 74) who used the Internet in 2018 reached 85%. Similar is the situation in the Southeast region where the figures are very close to the East region, respectively 77% of household units that had access to the Internet and 84% persons (aged 15 to 74) who used the Internet in 2018.

Table	33:	Administrative	unit
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Administrative unit	Share of households with internet access (%)	Percentage of people aged 16-74 regularly using the Internet (%)
BG average	72.1	63.6
Blagoevgrad	71.4	61.2
Kyustendil	59.8	47.5
RNM average	81.9	83.4
NE region	90	93
East region	77	85
SE region	77	84
EU 28	89	82

Source: NSI-2018 and MAKSTAT-2019

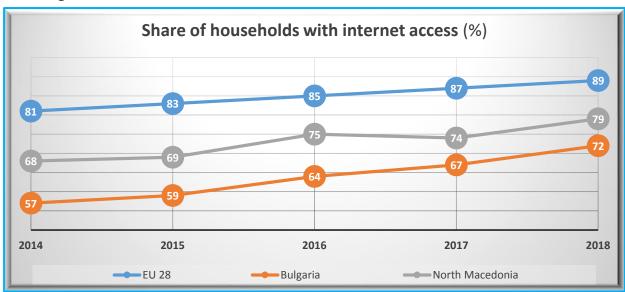


Figure 19: Share of households with internet access 2014 - 2018

With the exception of Northeast Region all the rest districts/regions the share of households with internet access is below the national and EU 28 average.

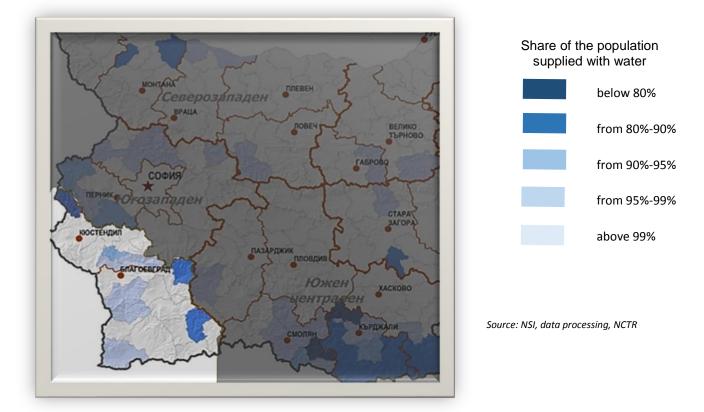
Though still below the EU 28 average both Republic of Bulgaria and Republic of North Macedonia in the period of 2014-2018 demonstrate a significant increase in the share of of housholds with internet access, recording an increase of 5% for only 2018 compared to 2017.

### 2.8.7 WATER SUPPLY AND SEWAGE

Republic of Bulgaria is characterised by relatively important fresh water resources compared to other European countries. The country ranks among the top 10 European countries on freshwater resources on average per capital.

As a vital service, the centralised water supply is provided for almost all the settlements in the country, for which Republic of Bulgaria is ahead of a number of European countries. Nearly the entire population (99.4%) receives centralised water supply but there are territorial imbalances because of several non-supplied settlements, most frequently in peripheral municipalities.

The data related to water supply, use and protection against pollution in industry and mining show that Southeast NUTS 2 region in Republic of Bulgaria used 220 thousand m3 water supply of the population or 0.015 compared to national level, while the water used for technological purposes was 220,000m<sup>3</sup> or 0.01%, discharge of unpurified water



Map 19: Scheme of Water supply of the population, 2017

With the lowest indicators for water supply of the population from Kyustendil district is the municipality of Treklyano, followed by the municipalities of Boboshevo, Rila and Kocherinovo.

In the district of Blagoevgrad only two municipalities have high percent of non-water supplied population; Yakoruda municipality where half of all eight settlements are non-water supplied and that consists of 20% of the population of the municipality, and Gurmen municipality where four out of sixteen settlements are non-water supplied and the non-supplied population is 16%. With larger count of non-water supplied settlements are the Petrich (21) and Sandanski (13) municipalities and they are

also with limited relative share of the population – respectively 2.15% and 0.87% which is defined by the specifics of their dispersed settlement system.

Kyustendil Municipality has a large number of undeveloped settlements (22), but only 0.2% of the population live in them, while in Treklyano municipality 10 settlements are not water supplied and almost a quarter of the municipality's population lives there.

The Committee on energy and water regulation's report from 2018 monitors the quality of the services provided by the operators, showing alarmingly high losses in the territories of several districts. The losses for the companies "Water Supply and Sewerage Dupnitsa" (71%) and "UVEX" - Sandanski (70%) are also very high.

In 2017, only 76% of the Bulgarian population is covered by sewage networks, and less than two-thirds (63.4%) are served by wastewater treatment stations.

In 2013 and 2017, the Southwestern region has the highest degree of construction (90%) of the sewerage network in the country, but there are intra-regional differences in the relative share of the population served by the sewerage network. For the observed period Blagoevgrad District registered the highest progress of 4.4 points and it occupies the first place in the region with the exception of Sofia-city with the expected highest construction. In the district of Kyustendil, there has been less progress and it continues to be one of the last sewer population districts in the area.

Wastewater treatment indicators are similar to wastewater treatment. Again, the Southwestern region has the highest indicator (77.3% of the WWTP population), although for the observed period it is growing at twice lower rate than the national average. The indicator for the district of Kyustendil is close to the national average, while in Blagoevgrad district the population served by WWTP is less than one third. The wastewater treatment in the district of Blagoevgrad is definitely lagging behind and this is one of the biggest discrepancies in the country - a high degree of sewage network construction, while at the same time very small part of the wastewater is treated - for almost 50% of the population the waters covered by sewage is not treated.

Quality Score/ Plumbing operator/ Groups, %	The level of coverage of the water supply services	Drinking water quality in large water supply areas	Total water losses in water supply systems	Level of coverage with wastewater disposal services	Level of coverage with wastewater treatment services
Kyustendilska voda LTD, Kyustendil	99.37	99.70	62.54	60.10	56.81
Water supply and sanitation LTD, Dupnitsa	100	100	70.94	97.70	66.58
" Water supply and sanitation Panichishte" LTD, Sapareva Banya	100		42.67	0	0
Water supply and sanitation LTD, Blagoevgrad	97.90	99.96	61.72	78.32	42.25
"UVEX" LTD, Sandanski	99.01	100	70.08	84.58	0.88

Table 34: Levels for quality of water supply and sewerage services achieved by operators (%)

Quality Score/ Plumbing operator/ Groups, %	The level of coverage of the water supply services	Drinking water quality in large water supply areas	Total water losses in water supply systems	Level of coverage with wastewater disposal services	Level of coverage with wastewater treatment services
Water supply and sanitation – Kresna LTD,	100		62.88	80.19	0
Water supply and sanitation LTD, Petrich	97.19	78.95	26.47	53.52	0

Sources: Energy and Water Regulatory Commission, Regional Spatial Planning Scheme of the Southwest Region - NCRD

## 2.8.8 WASTE MANAGEMENT

Waste represents an enormous loss of resources in the form of both materials and energy. The amount of generated waste can be seen as an indicator of how efficient we are as a society, particularly in relation to our use of natural resources and waste treatment operation. Its poor management is seen as an environmental risk.

Among the areas of collected municipal waste in the period 2011 – 2017 both regions show steadiness. Blagoevgrad Region registered its highest amount in 2015, whereas Kyustendil Region registers a decrease since 2011 with relantiveness among the years:

Administrative unit	2011	2012	2013	2014	2015	2016	2017	
Total BG	3572	3249	3135	3193	3011	2881	3080	
Total BG CBC	163	149	159	162	178	153	162	
Share %	4.6%	4.6%	5.1%	5.1%	5.9%	5.3%	5.3%	
Blagoevgrad	101	91	101	104	126	101	107	
Kyustendil	62	58	58	58	52	52	55	

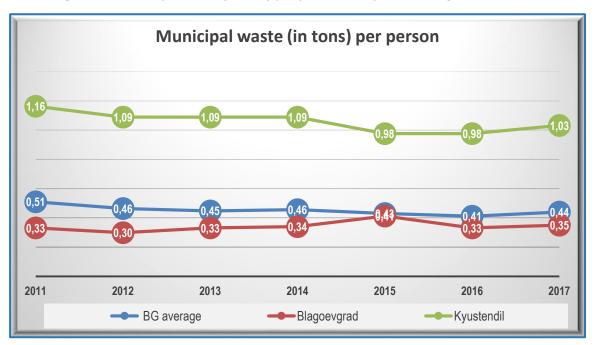
## Table 35: Municipal waste (in thousand tons)

Source: NSI

## Table 36: Municipal waste per person (in tons)

Administrative unit	2011	2012	2013	2014	2015	2016	2017
BG average	0.51	0.46	0.45	0.46	0.43	0.41	0.44
Blagoevgrad	0.33	0.30	0.33	0.34	0.41	0.33	0.35
Kyustendil	1.16	1.09	1.09	1.09	0.98	0.98	1.03

Source: NSI



## Figure 20: Municipal waste (in tons) per person in Republic of Bulgaria

In both Blagoevgrad and Kystendil districts not all settlements have an organized waste collection systems. In most cases, this is due to inaccessible small villages and organizational weaknesses.

Good waste management reduces the pressure on landfill activities. In the table below it is presented the total number of landfill sites for municipal waste.

The comparison between the years 2016 and 2017 is showing a slight increase in the generated waste in the Bulgarian part of the CBC area. Whereas, in the CBC area of the Republic of North Macedonia of 2017 presents smaller amounts of generated waste in comparison to 2018. The collected waste is increasing in East and Southeast region for 2018 and decreasing in the Northeast region for the same year.

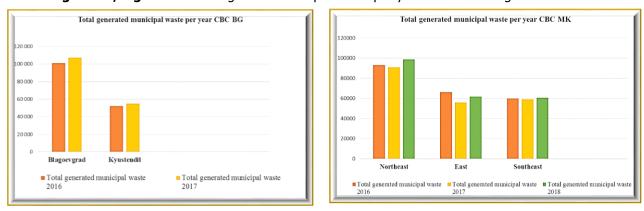


Figure 21, Figure 22: Total general municipal waste per year in the CBC region

Almost the entire amount of collected municipal waste in the Republic of North Macedonia in 2018 (625 thousand tones) was landfilled (99,5%). There were 45 active landfills in Republic of North Macedonia in 2018.

#### 2.8.9 RENEWABLE ENERGY SOURCES

In line with the commitments made to implement the European Energy 2020 Strategy, Republic of Bulgaria has already exceeded the national targets set for increasing the usability of renewable energy sources (RES). Construction of different types of power plants from renewable sources went through its "peak" in the middle of the 2007-2013 period, when the capacity built was almost 50 %, and in the period 2013-2018 - just over 2 %, which is due to the changed state policy in this regard.

Water, wind and solar energy are used in the country for production of alternative electricity, depending on the specific natural conditions of each region. The use of renewable energy has a number of potential benefits, including reduction of greenhouse gas emissions, diversification of energy supply and reduced dependence on fossil fuel markets (in particular oil and gas). Increasing the share of renewable energies also has the potential to stimulate employment in the EU by creating jobs in new "green" technologies.

Municipality/ District	Hydro power plants	Photovoltaic power plants	Wind Power Plants	Bio Power Plants	Total number	Total power	<b>Density</b> MW/ 1000км <sup>2</sup>
Bansko	7.9	0.1			7	8.0	16.76
Belitsa	1.9	0.0			4	2.0	6.24
Belitsa	9.3	0.1		0.50	18	10.0	16.04
Gotse Delchev	4.9	0.2			17	5.1	15.28
Garmen		0.5			4	0.5	1.33
Kresna	8.7	0.5	0.9		10	10.1	29.40
Petrich	1.3	8.2			25	9.5	14.58
Razlog	4.4	5.7			16	10.0	23.76
Sandanski	120.7	6.7			39	127.4	127.70
Simitly	2.2	0.5			14	2.6	4.69
Strumyani	1.5	2.0			13	3.5	9.87
Hadgidimovo		10.3			8	10.3	31.41
Yakoruda	1.6	0.0			4	1.6	4.75
Blagoevgrad District	164.2	34.9	0.9	0.5	179	200.6	31.06
Bobov Dol	0.3	0.1			3	0.4	1.98
Dupnitsa	10.0	0.1			11	10.1	30.73
Kocherinovo	0.3	0.2			6	0.4	2.44
Kyustendil	1.5	0.0			6	1.6	1.62
Nevestino		0.1			1	0.1	0.30
Rila	23.4	0.3			4	23.8	65.51
Sapareva Banya	2.9	5.0			5	7.9	43.73
Treklyano		0.4			2	0.4	1.52
Kyustendil District	38.5	6.3	-	-	38	44.7	14.62
Republic of Bulgaria	2362.4	1052.83	700.2	64.2	2337	4179.7	37.7

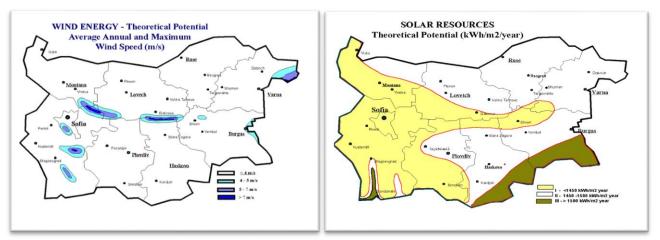
**Table 37**: Built capacities (in MW) by type and by district in Republic of Bulgaria, 2018

Due to the natural conditions in the Bulgarian part of CBC region - Kyustendil and Blagoevgrad districts, the renewable capacity of RES has long been based on hydropower, most of which are located on the territory of Sandanski municipality. Hydroelectric Power Plants 'Popina Luka' (22 MW), 'Lilyanovo' (20 MW) and Sandanski (14 MW) from Sandanska Bistritsa Cascade, as well as 'Pirin' (20 MW) together with HPP, Spanchevo' (28 MW) from the ,Pirinska Bistritsa' cascade give off their produced energy in the 110 kV network. 'Kalin' HPP (4.0 MW), 'Kamenitza' HPP (3.4 MW), 'Pastra' HPP (5.5 MW) and 'Rila' HPP (10.9 MW) from the Rila Cascade on the territory of Rila Municipality.

The installed hydroelectric capacity in the Bulgarian part of CBC region represents 8.6% of those in the country, the capacity of the photovoltaic power plants is 4%, the wind power plants is 0.12% and the bioelectric power plant is 0.77%. The number of renewable energy plants in the region represents 9.28% of those in Republic of Bulgaria, and the installed capacity in the region represents 6.08% of the capacity in those in Republic of Bulgaria. The least developed are biomass and wind power generation capacities, both in the region and in the country. On the other hand, according to studies of the regional potential of renewable energy sources - biomass, wind and solar energy, the potential estimate is relatively high and represents a significant opportunity for a significant increase in the share of electricity produced from RES is the large-scale use of biomass in all its forms and varieties.

In accordance with the set national targets (in the European Energy 2020 Strategy) for increasing the use of renewable energy in recent years, solar energy capacities have been built. Most of the RES, because of their smaller capacities, give off their energy to the electricity grid.

To track which municipalities contribute most to the absorption of RES, a specific indicator called conditional "power density" - (MW / 1000 km2) was sought. The municipality of Sandanski stands out from the rest of the Bulgarian border municipalities.



Map 20, Map 21: Maps of Wind energy ans Solar resources in Republic of Bulgaria

Assessing the potential of biomass requires a very careful approach, as these are resource-constrained resources and many other valuable applications, including providing human nutrition and oxygen to the atmosphere. Therefore, the approach is to include only agricultural and forestry waste, household waste, low value wood that is not used otherwise and is lost for natural reasons without use, energy crops grown on desert land, etc.

Belitsa municipality and Zrnovtsi realized detiled researches under IPA programme for CBC between Republic of Bulgaria and the Republic of North Macedonia in order to assess the potential of renewable energy in Belitsa and Zrnovci municipalities. According to the analyses, the territory has a high potential for installing renewable energy based on solar energy, wind, biomass and water.

	North – East region MW	East region MW	South-east region MW
2016	6	25	42
2017	6	27	43
2018	6	27	43

**Table 38**: Installed electricity production capacity in the Republic of North Macedonia

## 2.9 CULTURAL, HISTORICAL AND NATURAL HERITAGE

## 2.9.1 CULTURAL AND HISTORICAL HERITAGE, INSTITUTIONS

Culture is among the most important factors in the cross-border cooperation framework, since it gives a clear view of common features and provides a common identity for the region. It is a prerequisite for an attractive tourism product and could furthermore be easily utilized as a driving engine for regional development and prosperity. Cultural heritage encompasses tangible and intangible movable and immovable heritage as a set of cultural values that bear historical memory, national identity and have scientific or cultural value.

In the Bulgarian part of the cross-border territory are registered 2922 **immovable cultural values** (NGC) of tangible immovable cultural heritage (1159 in Kyustendil District and 1763 in Blagoevgrad District) dating from different historical periods as prehistoric, ancient, medieval, Renaissance to recent times. Cultural Property in the Bulgarian CBC region with category of **national importance** includes 99 sites – 43 in Kyustendil District and 56 in Blagoevgrad District among which are:

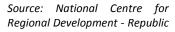
- Town of Melnik and the Rozhen Monastery
- The ancient and medieval town of Pautalia-Velbuzhd, Kyustendil
- Kovachevitsa village, Blagoevgrad district,
- Village of Dolen, Blagoevgrad district,
- National Museum "Rila Monastery and its Environment", Kyustendil district
- Ancient and Late Antique City of Nikopolis ad Nestum, Garmen Village,

The UNESCO List of World Tangible Cultural Heritage<sup>17</sup> includes 7 cultural and 3 natural sites in the Republic of Bulgaria. One of them is located in the CBC area – **Rila Monastery** being the largest and most famous Eastern Orthodox monastery in Republic of Bulgaria. The whole complex occupies an area of 8800 m<sup>2</sup> and is rectangular in form with a tower and the main church situated centred in the inner yard. Founded in the 10th century, the Rila Monastery is regarded as one of Republic of Bulgaria's most important cultural, historical and architectural monuments and is a key tourist attraction for both Republic of Bulgaria and Southern Europe.

<sup>&</sup>lt;sup>17</sup> <sup>17</sup> <u>https://whc.unesco.org/en/statesparties/bg</u>







Republic of Bulgaria registers various elements in UNESCO's representative list of the **intangible cultural heritage** of humanity on a regular basis and 5 of them have been approved by 2019. Among them are the Cultural practices associated with 1 March. The name of the holiday celebrated in the whole country means "Grandma March" in the Republic of Bulgaria and the wearing of Martenitsi is a Bulgarian tradition related to welcoming the spring, which according to Bulgarian folklore begins in March.

The UNESCO **Tentative List** of World Cultural Heritage includes 16 tangible immovable sites in the Republic of Bulgaria among which are Town of Melnik and the Rozhen Monastery.

Professional institutes of culture are well developed in Republic of Bulgaria. Traditional cultural organizations such as libraries, cinemas, museums, theatres, galleries, community and cultural centres, etc. have a long-lasting presence.

A ducius interaction	theatres		mus	eums	cinemas		libraries	
Administrativ e unit	numbe r	attendance	number	visits in thosands	numbe r	attendance <i>in thosands</i>	number	readers in thosands
total BG	BG 75 23	2388823	174	5084	69	4885	47	239
СВС	5	45300	10	247	5	146	3	9
share %	6.7%	1.9%	5.7%	4.9%	7.2%	3.0%	6.4%	3.8%
Blagoecgrad	3	29282	6	130	3	111	2	6
Kyustendil	2	16018	4	118	2	34	1	3

Table 39: Number of Cultural Institutions in Republic of Bulgaria (year 2018)

Source: NSI

Community centres are a traditional public institution in Republic of Bulgaria with a 150-year old tradition, which serve educational and enlightenment functions, provide a venue for local talent groups and enjoy the reputation of a robust cultural institution with a specific mission to preserve and develop traditional national values. According to the latest survey conducted in 2017 there are 3 321 community centres in Republic of Bulgaria (663 in towns and 2 658 in villages). In the modern era, having preserved their social legitimacy and flexibility and owing to their geographical coverage that spans the entire territory of Republic of Bulgaria, community houses continue to meet the present-day needs of the Bulgarian society as centres for cultural, information and social activities.

During the period 2012-2017 the number of community houses increased by 241 (7.8 %) — a trend that has seen new community houses emerge in both towns and villages. The number of community houses per 100 000 does not show significant disparities at regional and district level owing to their relatively even dispersal across Republic of Bulgaria, including in smaller agglomerations. In the eligible area the number of Community centres is as follows: in Blagoevgrad district – 118 and in Kyustendil district – 97.

#### North-East Region of the Republic of North Macedonia

This region is rich with historical and cultural objects: monastery complex St. Joakim Osogovski in Kriva Palanka, monastery H. Bogorodica near the village Matejce (XIV), the monastery H. Presveta Bogorodica - Karpinski Monastery near village of Orah, churches of St. Nikola (1851) and St. Trojca, in Kumanovo, church of St. Gjorgi in the village of Staro Nagorichino (XIV). Other important cultural institutions and monuments of culture are Ajduk bazaar, Kratovo towers and bridges in Kratovo, national museum and local cultural centre in Kratovo, national museum, national library and local cultural centre in Kratovo towers are protected with the Law on nomination of the old city of Kratovo on cultural heritage of special sign. Several events are organized in the region, among which are: "Tumba Fest", "Days of Comedy" and "International Jazz Festival" in Kumanovo, representing a brand of the city as it's a centuries-old traditional music promoting the cultural and musical creation in Kratovo, then the Folk Festival "St. Joakim Osogovski" in Kriva Palanka, art colonies (the art colony "St. Joakim Osogovski") and more.

Northeast region, in aspect to cultural institutions, has only 2 cinemas in which 2,153 persons attended in 2018, which is lower compared to national level (14%), while the number of museums reaches 2, with 3,179 attendants; 18 theatres with 14,147 attendances.

#### East Region of the Republic of North Macedonia

East region in aspect to cultural institutions has only 1 cinema which was visited by only 206 persons in entire 2018, 2 museums with 8,621 attendants and 1 professional theatre with 8,869 attendances.

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Additionally this region has five local cultural centres and five libraries. This shows the need to augment the offer of cultural facilities in the region.

## South-East Region of the Republic of North Macedonia

There are a great number of cultural and sports events, such as the Valandovo Folk Festival, the Strumica Carnival, Strumica open Festival, SmokvijadaDay of Leek in the villages of Gradashorci, the festival of the Chestnut in Smolare; the 1st of May races in the village of Stojakovo, the Festival of old folklore Gajda, in Ignjevo, Warm Cultural Wave in Konche; Dojran handshaking and so on.

The Southeast region in aspect to cultural institutions has 2 cinemas in which only 11,205 persons in entire 2018, it has 2 museums and national gallery with 1,564 attendances; 1 professional theatre with 8,160 attendances, four local cultural centres, one institute for cultural heritage protection in Strumica and one library, demonstrating the need to enrich the cultural facilities in the region.

The **Cultural Corridor** *Diagonal road* (connecting South East Europe to Asia) passes through the territory of the cross-border region. This cultural corridor is one of the most ancient arteries, of transcontinental, even of world importance. Starting from Central Europe into Slovenia, passing successively through Croatia, Bosnia and Herzegovina, Serbia, the Republic of North Macedonia, Republic of Bulgaria and Turkey, continuing to the Far East. Its numerous branches are on one hand geographically determined (passing the valleys of big rivers, the lowlands between the mountain chains, the convenient passages), striving to the Bosporus strait.

The *Western Trans-Balkan Road* crosses South-East Europe in a north-south direction. The corridor unites the territories on both sides of the Balkan-Balkan Mountains, passing through Romania, Republic of Bulgaria and Greece. The road connects Western and Central Europe with the Aegean Sea and the Mediterranean, intersecting the Danube Road, Diagonal Road, Sofia-Ohrid Road and Via Egnatia. The Western Trans-Balkan Road is a peculiar axis of spread of ancient Greek culture to the north, a specific axis in time, connecting habitats with distinguished cultural values from different historical periods.

The *Sofia-Ohrid* road is a cultural corridor passing through Republic of Bulgaria and Republic of North Macedonia, linking the monastery agglomerations around the two historic cities and the religious cultural area of Metohija in Serbia and Montenegro. The Sofia-Ohrid road is a kind of religious axis on which cultural influences flow towards the great Via Egnatia pilgrimage route. In the direction connecting the monasteries and churches of St. Sophia Mountain, the Metohia district and those around Lake Ohrid, the faith and the arts related to religious construction have been spreading for centuries - architectural techniques and techniques, mural painting, wood carving (Debar-RNM). World Heritage Sites (Boyana Church-Republic of Bulgaria, Stari Ras and Sopocani, Decani Monastery-Serbia-Montenegro, Ohrid Churches-RNM).

*Via Trayana Roman Road*, built during the times of Emperor Traian in the 1st century AD, crosses the Balkan Range at the Beklemeto-Troyan Pass and connects Mizia with Thrace and the White Sea. It

arises in the 2nd connection between the cities of Eskus (Gigen village) and Nove (Svishtov) in the north, through Montemno (Beklemeto-Troyan passage) to Trimontium (Plovdiv) in the south.

*Via Aristotelis* is the main bio-corridor of bird migration from Europe to Africa, passing through Western Republic of Bulgaria, described in ancient times by Aristotle. According to him, the Pelicans are moving south along the Struma River, while the cranes fly through Via Pontica. The road connects the Danube River to the White Sea, from Vidin through the Vrachanski Balkan, Iskar Gorge, Sofia Field, along the Struma River Valley (a branch of the Mesta River) to the White Sea.

The **historical heritage** of the cross-border region goes back to the traces left behind by the Thracians, the Romans and the Byzantines, although the historical landmarks from the Middle Ages are the most numerous and preserved (such as the architecture-historical reserves in Melnik, Bansko, Kovachevica, Dolen). Valuable archaeological remains from antiquity could be found in almost all of the municipalities: ruins of castles and sanctuaries across the countryside of Bansko, Belica, Razlog, Satovcha, the ancient town of Nikopolis ad Nestrum, etc. - in Bulgarian side of the border; the ancient towns of Tiveriopolis (today Strumica), Astibo (nowdays Stip), Bargala (in the area of the river Kozjacka), archaeological sides "Vardarski Rid" near Gevgelija and "Isar" near Valandovo, etc. – in the Republic of North Macedonia.

In relation to the monuments of the **Christian culture**, the eligible cross-border area is characterised by relatively high destiny of churches and monasteries (the Rozhen monastery, the churches in Rupite and Brestovo etc. – in the Bulgarian side of the border, as well as the church of the Holy Fifteen saints, the Veljusa monastery etc. – in the Republic of North Macedonia. Among all, the most famous are the Rila monastery (included in UNESCO's list of protected sites) and the St. Joakim Osogovski monastery (near Kriva Palanka).

The region is rich in diversified **culinary traditions and handcrafts**. These traditions could play an important role in the promotion and the tourism offer of the region but, so far, are largely underestimated.

#### 2.9.2 NATURAL HERITAGE

The Pirin National Park is one of the three natural sites in the Republic of Bulgaria that is included in UNESCO World Heritage List: <u>https://whc.unesco.org/en/list/</u>

The park includes seven municipalities in the district of Blagoevgrad: Bansko, Gotse Delchev, Razlog, Sandanski, Strumyani, Kresna, and Simitli. Spread over an area of over 27,000 ha, at an altitude between 1008 and 2914 m, the site comprises diverse limestone mountain landscapes with many glacial lakes, waterfalls, caves and predominantly coniferous forests. It was added to the World Heritage List in 1983.

Vihren Park is the park area of Pirin National Park with the most developed tourist network. This is due to the proximity of the park area to the town of Bansko. The city itself is highly developed tourism,

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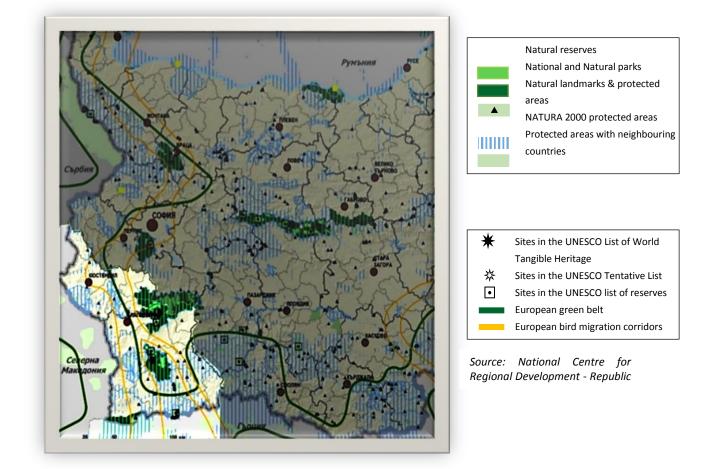
which further contributes to the number of tourists in this park area. The main tourist attractions in the area of Vihren Park are the rivers Demyanitsa and Banderitsa and the Vasilashki lakes, Tipitskaya lakes, the Long, Ribno and other lakes, as well as various rock gates. The area is home to one of the largest natural landmarks of the national park - Baikusheva Mura, which with its age over 1300 years is one of the oldest trees in the Republic of Bulgaria. Baikus pine is a type of pine. Within the boundaries of the Vihren Park is the peak Vihren, which is the highest peak in the Pirin Mountain - 2914 meters. The peak attracts many hikers and climbers.

UNESCO list of reserves as part of the "Man and Biosphere" programme comprises 10 biosphere reserves located in Republic of Bulgaria, out of which three are situated in the CBC area, namely: Bayuvi Dupki – Dzhindzhiritsa, Alibotoush and Parangalitza.

Bayuvi Dupki – Dzhindzhiritsa is one of the oldest reserves in the Republic of Bulgaria (1934) protecting the endangered black and white fir (Pinum peuce) and the habitats of many other plants and animals. It covers an area of 2858,5 hectares between 1300 m and 2884 m altitude. Together with Yulen Reserve, both are part of the Pirin National Park. The reserves are rich in water resources and a big number of glacial lakes. The most typical mammals are brown bear, gray wolf and chamois.

Alibotoush Biosphere Reserve is situated in the Slavyanka Mountain, next to the border to Greece. The reserve was established in 1951 to protect the largest forests of Heldreich pine (Pinus heldreichii) in the Balkans and was declared a biosphere reserve in 1977.

Map 23: Natural Heritage in CBC region of the Republic of Bulgaria



Parangalitza Biosphere Reserve is situated on the southwestern side of the Rila Mountains in the Blagoevgrad region in western Bulgaria. The reserve was established in 1933 to protect the undisturbed primary forests, particularly the Norway spruce (Picea abies) and various pines. It was declared a biosphere reserve in 1977. It covers an area of 1509 hectares from 1400 to 2485 meters above sea level and includes about 400 hectares of the oldest conifers in Republic of Bulgaria (150-350 years old). Other habitats include sub-alpine and alpine vegetation. The flora is represented by more than 290 species of vascular plants.

Rila Monastery Nature Park covers forests, mountain meadows, alpine terrains, high peaks and over 28 high mountain lakes in the Rila Mountains. The Rila Monastery Forest Reserve and the Rila Monastery, World Cultural Monument, are within the boundaries of the park. The park is a protected area with one of the highest in the country degree of naturalness, stability and representativeness of ecosystems.

Belasitsa Nature Park is located in the southwestern part of the country and covers most of the Bulgarian part of Belasitsa Mountain. The park also includes the Kongura Reserve.

#### North-East Region of the Republic of North Macedonia

This region is characterized by protected 16 natural areas and ecological corridors for connecting protected areas and environmentally important areas like *Kumanovo Kozjak*, proposed for a Nature Park despite the rocky sections important for nesting several species of birds of prey.

Besides the great cultural significance the archaeological site *Kokino* also has a great geomorphological value, representing a geological phenomenon, the secretion of pyroxene andesite and anthensites with an age of 32-33 million years, as well as Kokino's "megalithic observatory" is an exceptional site worth visiting.

The *stone town Kuklica*, located 8 km northwest of Kratovo, with altitude of 415-420m, extending over an area of 0.3 square km, represents a monument of nature, with a rare geomorphologic form. It's consisting of over 120 naturally formed stone pillars situated on the right bank of the Kriva River valley. This area is protected by law as natural rarity in the country of the RNM.

The *Potroshnica River* has great ornithological and botanical importance; the Bislim ravine is a short ravine with a pronounced sub-Mediterranean climate impact, rich in underground and surface karst formations, the ravine of the river Kiselica and others.

*Osogovo Mountains* possess a number of internationally and nationally significant species of flora and fauna. This is an important corridor for the movement of wild plant and animal species within the Pan-European ecological network for south Eastern Europe (PEEN SEE) and Emerald area. There are 18 habitats registered under the EUNIS classification system for habitats, five of which are significant for conservation under the Habitats Directive. In its hydrographic structure, the region has various types of water springs, two artificial reservoirs and two thermo-mineral water sources.

## East Region of the Republic of North Macedonia

The Radovish and Konche regions are characteristic for their supply of mineral, non-metal raw materials, such as quartz and clay. Mineral metal raw materials present in Radovish include iron and zinc ore, copper, gold, silver, chrome and uranium, whereas Konche is host to limestone, marble and copper.

The forest eco-systems in Strumica are covering the territory of Belasica and Ograzden Mountains, and are dominated by deciduous forests mostly composed of oak, black and white hornbeam, chestnut and beech trees. Evergreen forests are rarer and mostly found in the higher parts of the mountains, dominated by the pine, fir and juniper trees.

#### South-East Region of the Republic of North Macedonia

In Strumica, 12 km southeast of the city of Strumica, under Belasica Mountain, is the village of Bansko where the thermo-mineral springs of Bansko Spa are located. Out of the total five thermo-mineral springs, only the biggest one is professionally piped, while the other four flow out freely without any plumbing. The temperature of the water in the main spring is around 71°C and 56°C in the others.

In Gevgelija micro region, 5 km South-West of Gevgelija, at 59 meters above sea level Negorski spa (Negorski banji) is located. It is the lowest spa in the country and has two springs - Vrela Banja (Hotspa) at 40°C and Studena Bana (Cold Spa) at 38°C. The water contains calcium, magnesium, rubidium, cesium, radon and other minerals.

From the water resources of the Southeast region very famous are Smolare waterfalls with a height of 39.5 meters and Koleshino waterfalls with a height of 15 m, both located in the Municipality of Novo Selo.

The region has several artificial lakes such as "Mantovo" in Municipality of Konche, "Turija" and "Vodocha" in Municipality of Strumica, "Paljurci" in the Municipality of Bogdanci. The natural Dojran Lake in Municipality of Dojran is one of the most beautiful natural resources in the country.

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# **3. SWOT ANALYSIS**

GEOGRAPHICAL FEATURES				
Strengths	Weaknesses			
<ul> <li>✓ Favourable geographic and transport location;</li> <li>✓ Favourable climate and geo-morphologic conditions;</li> <li>✓ Proximity of the capital (District of the city of Sofia)</li> </ul>	<ul> <li>✓ Peripheral position of the border areas within the territory of the countries;</li> <li>✓ Mountain relief of the region that impedes transport development</li> </ul>			
Opportunities	Threats			
<ul> <li>✓ Existing natural potential for development and diversification of different forms of tourism;</li> <li>✓ Opportunities for development taking direct advantage of the favourable location and transport connections;</li> <li>✓ Opportunities for development of the lagging behind municipalities in terms of favourable geographical situation and resources.</li> </ul>	<ul> <li>✓ Natural conditions with negative impact - river floods and fires;</li> <li>✓ Isolation of smaller municipalities</li> </ul>			

ECONOMIC DEVELOPMENT				
Strengths	Weaknesses			
<ul> <li>✓ Economic growth in BG and RNM in recent years;</li> <li>✓ Good resources for economic diversification (agricultural land, tourism, water, traditions)</li> <li>✓ Increased economic activity of SMEs;</li> <li>✓ Availability of active border gates and potential daily visits from neighbor countries;</li> <li>✓ Availability of natural landmarks, cultural and historical heritages which attract tourist;</li> <li>✓ Favorable natural/cultural conditions for development in key sectors: tourism, agriculture (plant-growing and stock-breading), food-processing</li> </ul>	<ul> <li>✓ Less investments in areas with demographic issues identified;</li> <li>✓ Lack of internationally competitive products, low standard accommodation infrastructure;</li> <li>✓ Low entrepreneurial activity and weak capacity of SMEs to access funds;</li> <li>✓ Seasonal nature of tourism sector in the CBC area;</li> <li>✓ Limited maturity of the innovation and entrepreneurship;</li> <li>✓ With the exception of the North-East Region in RNM the rest of the administrative units in the CBC area are with GDP per capita below the average for the respective state</li> </ul>			
Opportunities	Threats			
<ul> <li>Transition to circular economy, reduction in the resource and energy dependency as well as reduction and recovery of waste;</li> </ul>	<ul> <li>The overall development of rural areas lagging behind, due to their peripheral and isolated location.</li> </ul>			

√	Increased demand for sustainable tourism and organic products;	✓	Economic disparities, mainly between urban and rural areas;	1
√	Regional potential for diversification and promotion of alternative	√	Vulnerability to national and world wide financial and economic crisis;	
	tourism facilities - cultural and wine tourism;	√	Vulnerability of micro and small enterprises, as well as and tourism sector to	L
√	Diversification of the available tourist products and services;		the negative consequences of world-wide pandemic situations;	L
√	Increasing importance of SMEs in employment and production;	√	Low technological level of the economy;	L
✓	SMEs development and direct support could lead to further economic	✓	Reduction of trained professionals in response to the new challenges for the	
	development of the co-operation area;		economic sectors;	
✓	Establishing a strong cohesion between business, science and education	√	Further lagging behind in the competitiveness of the least developed areas;	
	through contemporary hubs promoting start-up innovation export-			L
	oriented companies;			L
✓	Orientation towards high-technology manufacturing activities in the			
	primary and secondary sectors of the economy.			
✓	Applying innovative aproaches (digitization, innovative industries, etc.).			

LABOUR MARKET				
Strengths	Weaknesses			
<ul> <li>✓ Positive trend of the employment rate;</li> <li>✓ With the exception of the NE region the unemployment rate in the CBC area is below the respective national average,</li> <li>✓ Decrease of unemployment rate in the active population in the eligible area.</li> </ul>	<ul> <li>People at risk of poverty and social exclusion;</li> <li>Migration of younger people and intellectuals from the region to other more developed parts of the country and abroad</li> <li>Strong disproportion in the level of employment between the regional centre and larger towns and the smaller municipalities</li> <li>High level of unemployment, in particular in small municipalities</li> <li>Discrepancy between professional qualification of the labour force and labour market demands and expectations in Bulgarian part of the eligible area.</li> </ul>			
Opportunities	Threats			
<ul> <li>✓ Setting up conditions for professional development and attracting young people;</li> <li>✓ Opportunities for cooperation among the educational and training institutions and business community across the border</li> <li>✓ Development of labour skills and opportunities and improvement of labour mobility in the CB region;</li> </ul>	<ul> <li>Declining sectors in industry leading to unemployment;</li> <li>Unemployment leads to migration;</li> <li>Poor employment opportunities in the rural areas and smaller settlements leading to concentration of business activities and employment opportunities mainly in the big towns;</li> <li>The education is not labour market demands orientated, limited improvement of the educational system.</li> </ul>			

✓ Capacit	pment of dual education approach;
•	nousing, etc.)
in kev	fields with potential to create alternative employment (crafts,
✓ Stimula	ating (incl. financing schemes) for start-ups and micro-companies
✓ Growth	n of the service sectors provides opportunities for new jobs

SOCIAL DEVELOPMENT				
Strengths	Weaknesses			
<ul> <li>✓ Relatively good coverage of primary and secondary education;</li> </ul>	✓ People at risk of poverty and social exclusion;			
<ul> <li>✓ Relatively good coverage of social and primary healthcare service networks;</li> </ul>	<ul> <li>Decrease in the number of schools and students in Republic of Bulgarian part of the eligible area;</li> </ul>			
<ul> <li>Proximity of the universities located in the BG capital (almost 25% of the total number in the country);</li> </ul>	<ul> <li>The skills acquired by university and vocational education graduates are not fit for the labour market of the eligible area;</li> </ul>			
<ul> <li>Access of the population to all levels of education;</li> </ul>	<ul> <li>✓ Insufficient services for the persons with special needs and aged population;</li> <li>✓ Well educated people are migrating to more developed urban areas.</li> </ul>			
Opportunities	Threats			
<ul> <li>✓ Promotion of social entrepreneurship;</li> </ul>	✓ Further increase of population at risk of poverty and exclusion;			
$\checkmark$ Social innovation and cross-border cooperation models for improving	✓ Further increase of population at risk of poverty and exclusion;			
social, cultural and health services and inclusion of the disadvantaged	<ul> <li>Emigration of young and educated (brain drain);</li> </ul>			
groups	<ul> <li>Increase of elderly population due to negative population growth and</li> </ul>			
<ul> <li>Cooperation among the educational and training institutions and business community across the border;</li> </ul>	<ul> <li>migration processes;</li> <li>✓ Vulnerability of healthcare systems to the negative consequences of world-</li> </ul>			
<ul> <li>Development of modern types of vocational training, remote learning</li> </ul>	wide pandemic situations;			
and tailor-made professional courses;	<ul> <li>✓ Increased demand to extension healthcare due to higher share of older</li> </ul>			
<ul> <li>Existing know-how and positive local practices for social inclusion.</li> </ul>	population;			
	<ul> <li>✓ Insufficient provision of healthcare service;</li> </ul>			

ENVIR	RONMENT
Strengths	Weaknesses
<ul> <li>✓ Diversity of natural environment;</li> <li>✓ High density of the river network with relatively good eco-status;</li> <li>✓ Natural resources (forests, waters, thermal spring, mineral resources).</li> <li>✓ Well-developed National Ecological Network in the CBC region;</li> <li>✓ Protected areas (national and nature parks, reserves) with well-preserved unique bio-diversity and unique eco-systems;</li> </ul>	<ul> <li>✓ Low awareness of the population regarding nature and environment protection;</li> <li>✓ High degree of vulnerability to climate changes;</li> <li>✓ High risk of earthquakes;</li> <li>✓ Relatively high risk of floods;</li> <li>✓ Relatively high levels of PM10 and PM2.5 in the urban areas;</li> <li>✓ Outdated infrastructure related to risk prevention;</li> <li>✓ Low level of development of eco-friendly tourism;</li> </ul>
Opportunities	Threats
<ul> <li>✓ Increase of the adaptive capacity and support for preventive actions;</li> <li>✓ Joint risk management and emergency preparedness;</li> <li>✓ Awareness raising related to climate change;</li> <li>✓ Common actions to raise awareness on the importance of environment protection.</li> <li>✓ Cross-border cooperation for sustainable use and management of natural resources of mutual interest;</li> <li>✓ Existing rich biodiversity as a precondition for diversification of tourism sector, development of eco-tourism;</li> <li>✓ Direct support of SMEs dealing in the sphere of green and blue economy;</li> </ul>	<ul> <li>✓ Industrial risks related to the pollution of waters and soils;</li> <li>✓ Loss of biodiversity due to air and river pollution;</li> <li>✓ Uncontrolled use of natural resources;</li> <li>✓ High frequency of natural and man-made hazards;</li> <li>✓ Inefficiency in water resources management and flood protection interventions leading to an increase in flood consequence</li> </ul>

	INFRASTRUCTURE				
	Strengths	Weaknesses			
* *	One of the core TEN-T network corridors(Orient/East-Mediterranean) passes through the CBC territory with its extensions to third countries; High share of motorways and first-class roads in the CBC area;	<ul> <li>✓ Lack of the railway connection between the two sides of the border;</li> <li>✓ The road and railway network in the in the Republic of Bulgaria part of the eligible area needs additional improvement;</li> </ul>			

✓ ✓ ✓	Existence of three functioning Border-crossing Check Points (BCCP). In close proximity to the CBC area are located Sofia and Skopje international airports; The households with internet access is constantly increasing; Well-developed water supply system and energy network.	<ul> <li>✓</li> <li>✓</li> <li>✓</li> </ul>	Weak connections of small cities to main routes; Insufficiently developed network of waste water treatment plants; Weak connections of small cities to main routes; No airports in the region.
	Opportunities		Threats
✓	Further development and university of the information in the		
~	Further development and maintenance of the infrastructure in the eligible area; Reconstruction of the existing border crossing and opening of new border checkpoints with adjacent infrastructure;	✓ ✓ ✓	Damages in the existing infrastructures due to floods and storms. Insufficient investments in infrastructure may increase the of isolation of the cross-border area; Deterioration of the environment because of low level of waste-water

CULTURAL, HISTORICAL AND NATURAL HERITAGE			
Strengths	Weaknesses		
<ul> <li>✓ Availability of rich cultural and historical/ archaeological heritage both in RNM and BG</li> <li>✓ Existing variety of cultural and historic monuments and sites</li> <li>✓ The Cultural Corridor Diagonal road (connecting South East Europe to Asia) passes through the territory of the cross-border region;</li> <li>✓ Rich natural heritage with unique flora and fauna;</li> </ul>	<ul> <li>✓ Low level of visitors/attendees to cultural institutions in the BG CBC area;</li> <li>✓ Insufficiently developed infrastructure for access to the cultural and historical sites</li> <li>✓ Insufficient joint actions in the field of cultural heritage exchange</li> <li>✓ The differences between the administrative systems in the two countries - an obstacle for joint measures concerning preservation of natural and cultural heritage;</li> </ul>		
Opportunities	Threats		
<ul> <li>✓ Growth of cultural exchange across the border;</li> <li>✓ Valorization of natural and cultural resources</li> <li>✓ Introducing new innovative technologies/ equipment to improve the cultural, historical and natural heritage</li> <li>✓ Great potential in cooperative measures (e.g. joint planning, strategies, mapping) related to nature and landscape protection and promotion.</li> <li>✓ Direct support of SMEs and diversification of tourism sector.</li> </ul>	<ul> <li>Poor level of protection of natural environment, including absence of environmental infrastructure</li> <li>Insufficient financial support for cultural activities and cultural heritage exchange</li> <li>Low integration of the cultural, historical and natural heritage in the tourism product development;</li> </ul>		

## 4. CONCLUSIONS

Given the above territorial and SWOT analyses conclusions can be drawn on the most relevant spheres and ways of intervention which will contribute most in tackling the needs and opportunities of the cross border region. In general both, strategic and competitive approaches for project selection, are appropriate to be applied depending on the concrete objectives to be addressed.

Taking into account the economic development of the border area as well as the significant unfavourable economic and social effects of COVID-19 health crisis, the CBC programmes are considered as most suitable in supporting local businesses in peripheral and border regions for overcoming the negative consequences of the pandemic. Given the fact that most affected from the crisis are the micro and small enterprises typically having insufficient capital and poor development potentials, a direct support to SMEs is more appropriate than the usual indirect support from the current and previous programming periods. The most suitable way for providing the above support is through a competitive approach – open calls or other financing tools which provide a possibility for simplified procedures and absroptrion of funds (such as Small Project Fund).

For avoiding uncoordinated, dot-like investments a more integrated territorial approach is desirable based on the needs and competitive advantages of the region. For the last two programming periods the limited resources of the programme were directed to scattered sectoral investements based on open calls where coordination with the local territorial needs is not sufficient. For the future programme high attention shall be given to the specifisities of the territory and an integrated approach to address the local needs and priorities. Such an approach will support the regional economies through dedicated measures which will exploit the full potential of the region. Smart integrated investments for fostering the territorial development and in particluar local economy would bring high added value and ensure the leverage effect of the funds. In that respect PO5 "A Europe closer to citizens" is deemed most relevant fot the thematic concentration of the future programme based on a common territorial development strategy.

Taking into account the fact that Republic of Bulgaria still has no railway connection with the Republic of North Macedonia, the construction of a high speed railway Sofia-Gyueshevo-Kumanovo will contribute to facilitate the connection between the capitals of the two countries. The construction of a railway connection requires huge financial resources which the programme cannot ensure but other measures for improvement of the accessibility between the two countries are appropriate to be sought. There are intergovernmental agreements between the two countries for opening of three new Border Crossing check-points (BCCP), namely: Strumyani-Berovo (Klepalo), Simitli-Pehchevo and Nevestino-Delchevo (Chernata skala). On the territory of Republic of North Macedonia, the BCCP "Klepalo", Strumyani - Berovo, as well as the access road, have already been constructed in 2001. In conformity with the signed on 14 June 1999 in Skopie Agreement between the two governments, the road section and the BCCP on territory of the Republic of Bulgaria were foreseen to be financed under the External Border Initiative 2001 but failed to be realized.

Given the above including construction/reconstruction measures for opening of a new border crossing (at EU external border) are extremely suitable to be included in the programme. The proposed investments require a more strategic approach involving the responsible bodies in both countries and can be foreseen to be financed under external INTERREG-specific objective "A safer and more secure Europe", in particular by actions in the fields of border crossing management and mobility.

Having in mind that 2021 – 2027 Multiannual Financial Framework and Cohesion Policy Legal Framework are still subject of negotiations, the final decision of the Joint Programming Working Group on the thematic concentration of the INTERREG Republic of Bulgaria – Republic of North Macedonia programme will be taken

on one hand on the basis of the above conclusions and the agreements reached in the trialogues.

Considering the requirements regarding the thematic concentration and following the analysis of the strategic framework related to the next programming period and of the region's characteristics, needs and challenges that may be solved via cross-border cooperation the following scenario could be considered as possible to be further discussed in order to be the basis for the development of the Republic of Bulgaria – Republic of North Macedonia Programme strategy.



# **5. ANNEXES**

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