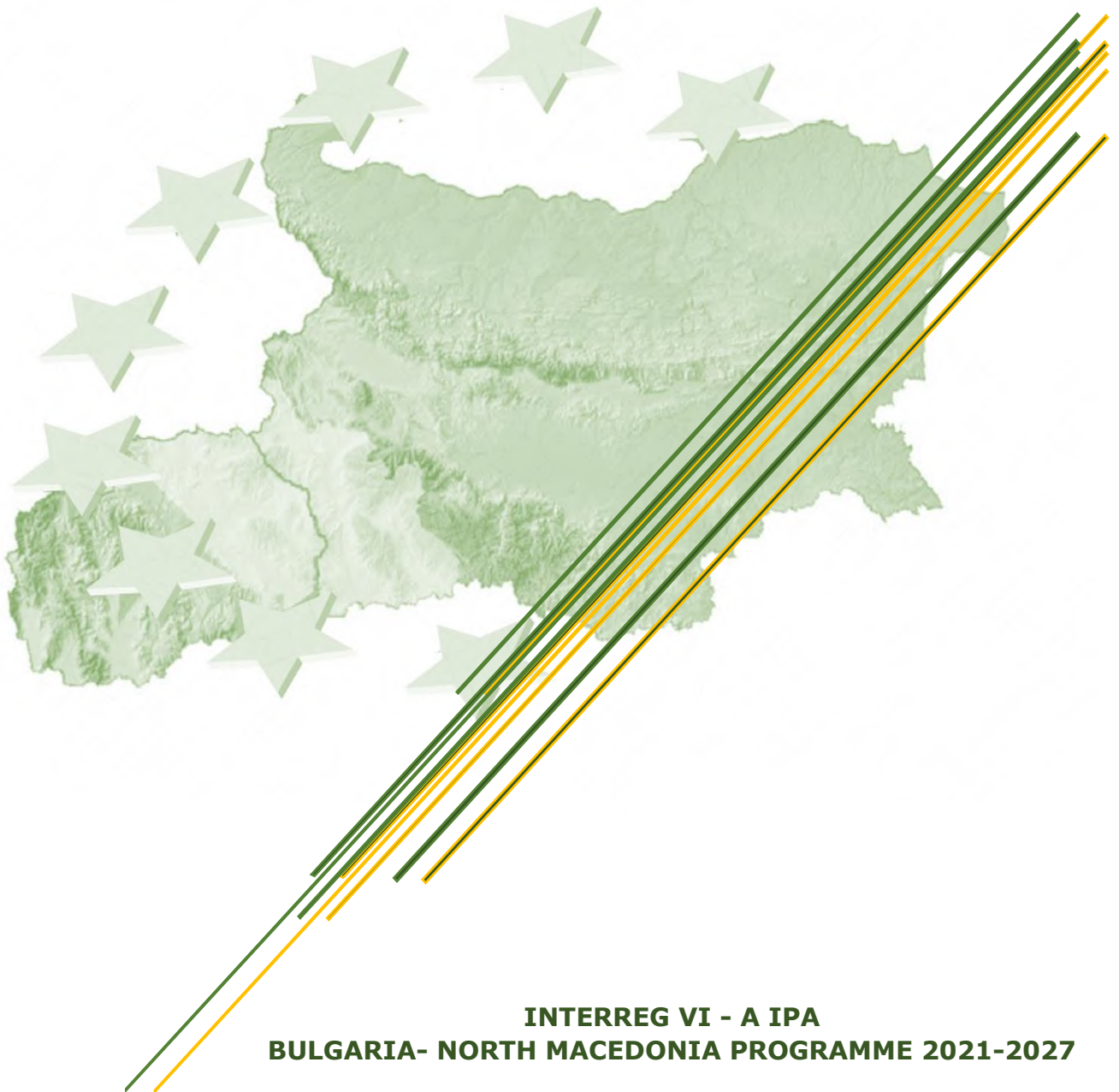




TERRITORIAL ANALYSIS

OF BULGARIA – NORTH MACEDONIA CROSS BORDER AREA



**INTERREG VI - A IPA
BULGARIA- NORTH MACEDONIA PROGRAMME 2021-2027**

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Glossary of acronims

BCCP	Border-crossing Check Points
BG	Bulgaria
BGN	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	Immovable cultural heritage
ISO	International Organization for Standardization
IBM	Integrated Border Management
ISIC	International Standard Industrial Classification of All Economic Activities
INTERREG	European territorial cooperation programmes
JRC	Joint Research Centre
MA	Managing Authority
MAKSTAT	State Statistical Office of North Macedonia
MKD	Denar of North Macedonia
MRDPW	Ministry of Regional Development and Public Works, Bulgaria
MEUR	Million EUR
NCS D	National Concept for Spatial Development of Bulgaria
NER	North-East Region of North Macedonia
NUTS	Nomenclature of Territorial Units for Statistics
NCRD	National Centre for Regional Development, Bulgaria
NSI	National Statistical Institute, Bulgaria
NINKN	National Cultural Heritage Institute, Bulgaria
RSPS	Regional Spatial Planning Scheme of Bulgaria NUTS 2 regions
PO	Policy Objective
PM	Fine particulate matter
RES	Renewable energy sources
MK	Republic of North Macedonia
SER	Southwest Region of North Macedonia
SWOT	Strengths, Weaknesses, Opportunities and Threats
SO	Specific Objective
SWR	Southwest NUTS 2 region of Bulgaria
SME	Small and medium-sized enterprise
SSO	State Statistical Office 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 Bulgaria, Territorial cooperation management Directorate) and the National Authority (Ministry of Local-self Government of North Macedonia).

It represents the first step in elaborating the Interreg VI –A IPA Bulgaria – 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 Bulgaria- 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:

- what are the common challenges, needs, potentials and priorities that would benefit from joint actions?

1

- *Socio-economic analysis of the regions in Bulgaria, 2019* - <https://www.eufunds.bg/en/node/2816>
- *Updated National Concept for Spatial Development of Bulgaria – draft version* - <http://www.strategy.bg/PublicConsultations/View.aspx?lang=bg-BG&Id=4894>
- *Spatial development schemes of Bulgaria NUTS 2 regions – draft versions* <https://www.mrrb.bg/bg/proekt-na-regionalni-shemi-za-prostranstveno-razvitiie-na-rajonite-ot-nivo-2/>
- *Socio economic analysis of Bulgaria - North Macedonia cross-border area (Northeast, East and Southeast regions in North Macedonia), December 2019*

- 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 Bulgaria - North Macedonia programme 2021-2027.

1.2. EU LEVEL VISION AND STRATEGIC FRAMEWORK

The future Interreg IPA Bulgaria - 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 Bulgaria- North Macedonia programme area.

1.2.1 European Legislative Framework

The REGULATION (EU) 2021/1060 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 24 June 2021 laying down common provisions on the European Regional Development Fund, the European Social Fund Plus, the Cohesion Fund, the Just Transition Fund and the European Maritime, Fisheries and Aquaculture Fund and financial rules for those and for the Asylum, Migration and Integration Fund, the Internal Security Fund and the Instrument for Financial Support for Border Management and Visa Policy (CPR) is the general regulation guiding the operation of funds in the 2021-2027 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 more competitive and smarter Europe by promoting innovative and smart economic transformation and regional ICT connectivity;**
- 2. A greener, low-carbon transitioning towards a net zero carbon economy and resilient Europe by promoting clean and fair energy transition, green and blue investment, the circular economy, climate change mitigation and adaptation, risk prevention and management, and sustainable urban mobility;**
- 3. A more connected Europe by enhancing mobility;**
- 4. A more social and inclusive Europe implementing the European Pillar of Social Rights;**
- 5. Europe closer to citizens by fostering the sustainable and integrated development of all types of territories and local initiatives.**

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

- 1) *A more competitive and smarter Europe by promoting innovative and smart economic transformation and regional ICT connectivity***
 - *SO1.1. Developing and enhancing research and innovation capacities and the uptake of advanced technologies*
 - *SO1.2. Reaping the benefits of digitisation for citizens, companies, research organisations and public authorities*
 - *SO1.3. Enhancing sustainable growth and competitiveness of SMEs and job creation in SMEs, including by productive investments*
 - *SO1.4. Developing skills for smart specialisation, industrial transition and entrepreneurship*
 - *SO1.5. Enhancing digital connectivity*
- 2) *A greener, low-carbon transitioning towards a net zero carbon economy and resilient Europe by promoting clean and fair energy transition, green and blue investment, the circular economy, climate change mitigation and adaptation, risk prevention and management, and sustainable urban mobility***
 - *SO2.1. Promoting energy efficiency and reducing greenhouse gas emissions*

- *SO2.2. Promoting renewable energy in accordance with Directive (EU) 2018/2001, including the sustainability criteria set out therein*
- *SO2.3. Developing smart energy systems, grids and storage outside the Trans-European Energy Network (TEN-E)*
- *SO2.4. Promoting climate change adaptation and disaster risk prevention, and resilience, taking into account eco-system based approaches*
- *SO2.5. Promoting access to water and sustainable water management*
- *SO2.6. Promoting the transition to a circular and resource efficient economy*
- *SO2.7. Enhancing protection and preservation of nature, biodiversity and green infrastructure, including in urban areas, and reducing all forms of pollution*

3) A more connected Europe by enhancing mobility

- *SO3.1. Developing a climate resilient, intelligent, secure, sustainable and intermodal TEN-T*
- *SO3.2. Developing and enhancing sustainable, climate resilient, intelligent and intermodal national, regional and local mobility, including improved access to TEN-T and cross-border mobility*

4) A more social and inclusive Europe implementing the European Pillar of Social Rights

- *SO4.1. Enhancing the effectiveness and inclusiveness of labour markets and access to quality employment through developing social infrastructure and promoting social economy*
- *SO4.2. Improving equal access to inclusive and quality services in education, training and lifelong learning through developing accessible infrastructure, including by fostering resilience for distance and on-line education and training*
- *SO4.3. Promoting the socio-economic inclusion of marginalised communities, low income households and disadvantaged groups, including people with special needs, through integrated actions, including housing and social services*
- *SO4.4. Promoting the socio-economic integration of third country nationals, including migrants through integrated actions, including housing and social services*
- *SO4.5. Ensuring equal access to health care and fostering resilience of health systems, including primary care, and promoting the transition from institutional to family-based and communitybased care*
- *SO4.6. Enhancing the role of culture and sustainable tourism in economic development, social inclusion and social innovation*

5) Europe closer to citizens by fostering the sustainable and integrated development of all types of territories and local initiatives

- *SO5.1. Fostering the integrated and inclusive social, economic and environmental development, culture, natural heritage, sustainable tourism, and security in urban areas*

- *SO5.2. Fostering the integrated and inclusive social, economic and environmental local development, culture, natural heritage, sustainable tourism and security in areas other than urban areas*

European territorial cooperation (Interreg) programmes, including the future Interreg-IPA Bulgaria - 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 (EU) 2021/1059 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 24 June 2021 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 VI-A IPA Bulgaria - 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 cooperation 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, civil society actors and institutions, in particular, with a view to resolving legal and other obstacles in border regions;
- building up mutual trust, in particular by encouraging people-to-people actions;
- enhancing institutional capacity of public authorities and stakeholders to implement macro-regional strategies and sea-basin strategies, as well as other territorial strategies;
- enhancing sustainable democracy and support civil society actors and their role in reforming processes and democratic transitions;
- other actions to support better cooperation governance.

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 the following specific objectives through joint actions under Interreg programmes ((a) to (l) of Article 4(1) of Regulation (EU) 2021/1057):

- a. improving access to employment and activation measures for all jobseekers, in particular young people, especially through the implementation of the Youth Guarantee, for long-term unemployed and disadvantaged groups on the labour market, and for inactive people, as well as through the promotion of self-employment and the social economy;
- b. modernising labour market institutions and services to assess and anticipate skills needs and ensure timely and tailor-made assistance and support for labour market matching, transitions and mobility;
- c. promoting a gender-balanced labour market participation, equal working conditions, and a better work-life balance including through access to affordable childcare, and care for dependent persons;
- d. promoting the adaptation of workers, enterprises and entrepreneurs to change, active and healthy ageing and a healthy and well-adapted working environment that addresses health risks;
- e. improving the quality, inclusiveness, effectiveness and labour market relevance of education and training systems including through validation of non-formal and informal learning, to support acquisition of key competences including entrepreneurial and digital skills, and by promoting the introduction of dual-training systems and apprenticeships;
- f. promoting equal access to and completion of quality and inclusive education and training, in particular for disadvantaged groups, from early childhood education and care through general and vocational education and training, to tertiary level, as well as adult education and learning, including facilitating learning mobility for all and accessibility for persons with disabilities;
- g. promoting lifelong learning, in particular flexible upskilling and reskilling opportunities for all taking into account entrepreneurial and digital skills, better anticipating change and new skills requirements based on labour market needs, facilitating career transitions and promoting professional mobility;
- h. fostering active inclusion with a view to promoting equal opportunities, non-discrimination and active participation, and improving employability, in particular for disadvantaged groups;
- i. promoting socio-economic integration of third-country nationals, including migrants;
- j. promoting the socio-economic integration of marginalised communities, such as Roma people;
- k. enhancing equal and timely access to quality, sustainable and affordable services, including services that promote the access to housing and person-centred care including healthcare; modernising social protection systems, including promoting access to social protection, with a particular focus on children and disadvantaged groups; improving accessibility including for persons with disabilities, effectiveness and resilience of healthcare systems and long-term care services;

- I. promoting social integration of people at risk of poverty or social exclusion, including the most deprived persons and children.

The Interreg Regulation also sets the rules for thematic concentration, that should be considered in the design of the programme²:

- At least 60% of the ERDF and, where applicable, of the external financing instruments of the Union allocations to each Interreg A, B and D programme shall be allocated to policy objective 2 and a maximum of two other policy objectives set out in Article 5(1) of Regulation (EU) 2021/1060 [new CPR].
- Up to 20 % of the ERDF contribution and, where applicable, of the external financing instruments of the Union allocations to each Interreg A, B and D programme may be allocated to the Interreg-specific objective of ‘a better cooperation governance’ and up to 5 % may be allocated to the 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 areas³, 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.

² 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

³ https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal_en#policy-areas

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, 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.

BIODIVERSITY | 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 new 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 Bulgaria- North Macedonia 2021-2027 programme could contribute to addressing the abovementioned challenges.

1.2.3 The Revised Territorial Agenda

The Territorial Agenda⁴ 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 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:

1. 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
 - Interdependencies between places
 - Global embeddedness

⁴ <https://www.territorialagenda.eu/home.html>

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 III programmes between Bulgaria and respectively 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 Bulgaria and 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 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 programmes managed by 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 socio-economic 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 Bulgaria, 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 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 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 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 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

Interreg IPA III programmes can play an important role for coordinated actions aimed at improving cross-border 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 submitted already at the adoption phase of the programme.
- Open calls for proposals can be used to select operations that would complement the above pre-identified 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 employment-boosting 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 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 envelopes, 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*

INTERREG 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 Ionian, 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 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 macro-regional 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 CHALLENGES

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 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, which led to increased uncertainty on the financial markets.

By causing a lockdown of several months 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 Bulgaria on 13 March 2020 was replaced by an “Emergency epidemic situation” on 14 May 2020. The amended Health Act in 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 checkpoints and relevant restriction measures (where appropriate); 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 Bulgaria from abroad come in force when cases in foreign countries rise and education and childcare institutions as well as day-centres for elderly and disabled people remain closed when infection rates are high on a regional level. Employers are encouraged to arrange for their staff to work remotely to the greatest possible extent.

North Macedonia was under lockdown starting 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 an IMF forecast from 14 April 2020, due to the outbreak, GDP growth would 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 Poverty Watch⁵, 21.5% of the population is estimated to live below the 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 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 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

⁵ https://www.eapn.eu/wp-content/uploads/2020/09/EAPN-EAPN-North-Macedonia-Poverty-Watch-2020_ENG-4687.pdf

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.

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.

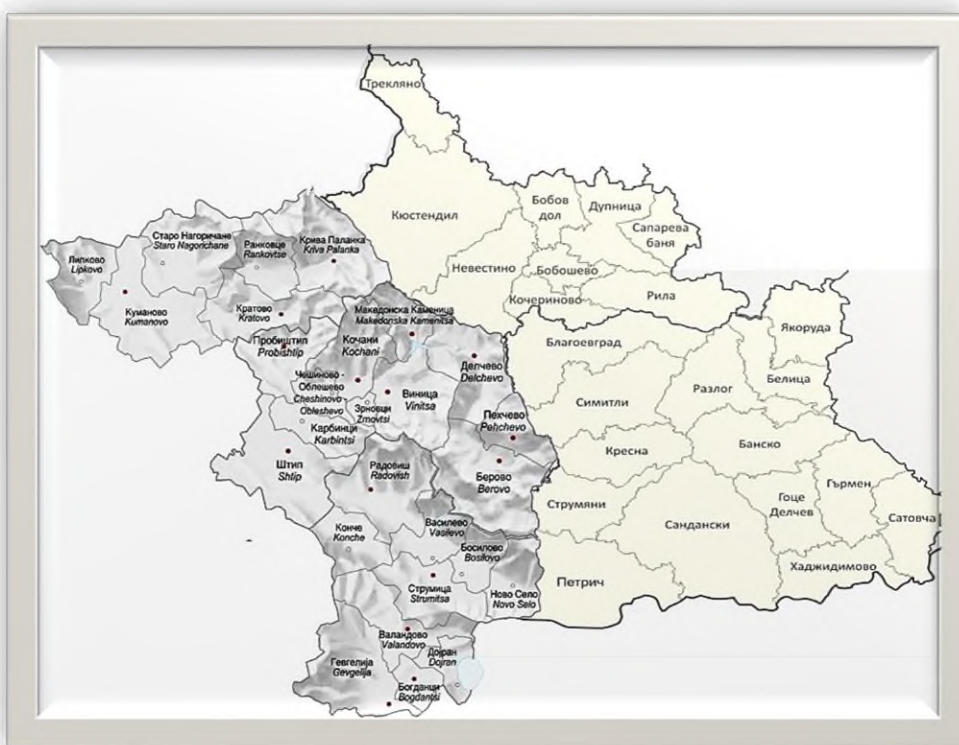
At the EU-Western Balkans Zagreb summit on 6 May 2020, the EU leaders reaffirmed the EU's commitment to the collaboration in the fight against COVID-19 with the Western Balkans partners (including North Macedonia). The EU is mobilising a package of over €3.3 billion to the benefit of the Western Balkans 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 (Bulgaria – 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 Bulgaria and North Macedonia is 165 km long with three operating border crossings (Zlatarevo-Novo Selo, Stanke Lisichkovo-Delchevo and Gyueshevo-Deve Bair).

Map 1: Administrative units in the CBC Region



The programme territory includes on the 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 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 the side 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 Bulgaria; Kumanovo, Shtip and Strumica on side 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 Bulgaria, representing over 40% of all thermal springs available in the country) and the ones in Kocani, Vinica, Strumica (in 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 942 157 inhabitants. The population structure among the participating units differs.

The population of the Bulgarian part of the programme area is 417 757 people, accounting for 6,03% of the country's total population. The biggest cities are the two district centres Blagoevgrad (301 138 inhabitants) and Kyustendil (116 619 inhabitants).

The population on the border side of North Macedonia is 524 288 people, accounting for 25,34% 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 (172 277 inhabitants), there is a total of

11 municipalities and the biggest one is Shtip. The population of the Southeastern Region amounts to 171 840 people with the biggest town being Strumica.

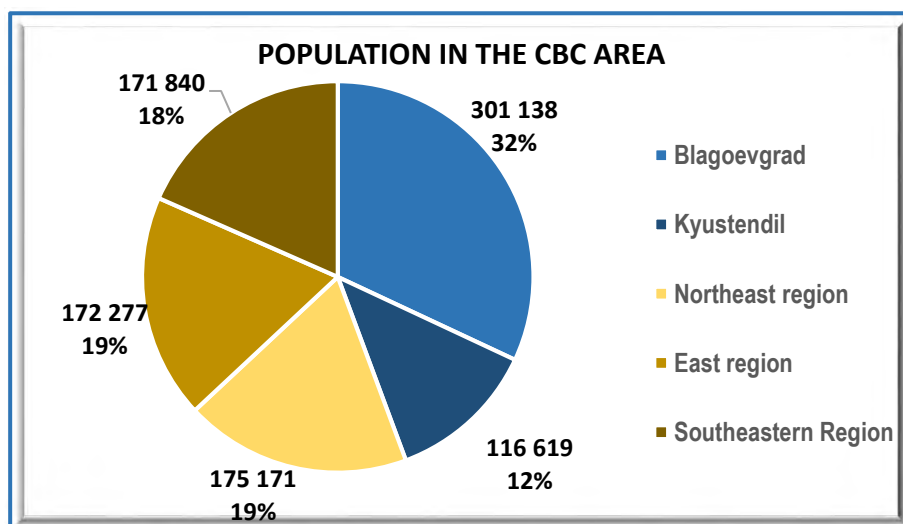
There is a concentration of population, economic and social activities in several regional centres, in particular Blagoevgrad and Kyustendil (on the side of Bulgaria) as well as in Kumanovo, Shtip and Strumica (on the side of North Macedonia). There are also sparsely populated rural and peripheral areas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

Table 1: Population by Districts / Statistical Regions⁶, 2020

BG total	6 916 548			100,00%	MK total	2068808			100,00%
CBC BG total	417 757		100,00%	6,03%	CBC MK total	524 288		100,00%	25,34%
Blagoevgrad	301 138	100,00%	72,08%		Northeast region	175 171	100,00%	33,41%	
Bansko	13006	4,31%			Kratovo	8901	5,08%		
Belitsa	9099	3,02%			Kriva	19518	11,14%		
Blagoevgrad	74452	24,72%			Kumanovo	109330	62,41%		
Gotse Delchev	29686	9,85%			Lipkovo	30465	17,39%		
Garmen	14726	4,89%			Rankovce	3605	2,06%		
Kresna	5214	1,73%			Staro Nagorichane	3753	2,14%		
Petrich	48593	16,13%			East region	172 277	100,00%	32,85%	
Raslog	18966	6,29%			Berovo	12406	7,20%		
Sandanski	36893	12,25%			Cheshinovo-Obleshevo	6600	3,83%		
Satovcha	14127	4,69%			Delchevo	15617	9,06%		
Simitli	12999	4,31%			Karbinci	3893	2,24%		
Strumyani	4811	1,59%			Kochani	37260	21,62%		
Hadzhidimovo	8914	2,96%			Makedonska Kamenica	7315	4,24%		
Yakoruda	9652	3,2%			Pehchevo	4682	2,71%		
Kyustendil	116 619	100,00%	27,92%		Probishtip	14679	8,52%		
Bobov dol	7158	6,13%			Shtip	48571	28,19%		
Boboshevo	2577	2,20%			Vinica	19117	11,09%		
Dupnitsa	38480	32,99%			Zrnovci	2902	1,68%		
Kocherinovo	4300	3,68%			Southeast Region	171 840	100,00%	33,74%	
Kyustendil	52269	44,82%			Bogdanci	7993	4,65%		
Nevestino	1958	1,67%			Bosilovo	13834	8,05%		
Rila	2470	2,11%			Dojran	3258	1,89%		
Sapareva banya	6639	5,69%			Gevgelija	22494	13,09%		
Treklyano	768	0,65%			Konche	3533	2,05%		
					Novo Selo	10418	6,06%		
					Radovish	28995	16,84%		
					Strumica	57251	33,31%		
					Valandovo	11597	6,74%		
					Vasilevo	12958	7,54%		

⁶ Source: NSI & SSO (MAKSTAT)

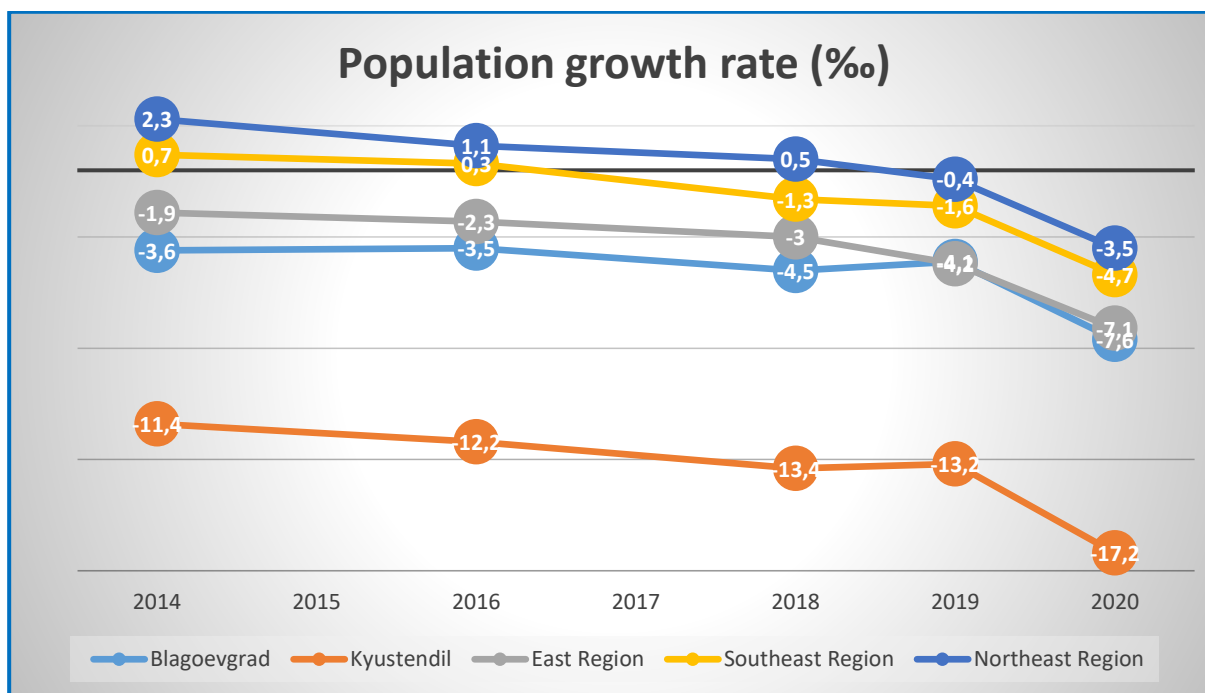
Figure 1: Population in the CBC area



Source: NSI and 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, over 13%, in comparison to the rest of the regions.

Figure 2: Population growth rate (‰)



Source: NSI and MAKSTAT

In the district of Blagoevgrad the negative natural growth rate is close to the average national values (-7,1‰). 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 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 cooperation area of North Macedonia also shows 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. From 2019 onwards all regions now show negative figures.

Regarding the migration flows in the CBC region it can be noted that the immigration is higher than the emigration, 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.

Over the last years the population of the Bulgarian side of the co-operation area is ageing, following the national trend and the ageing index for 2020 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.

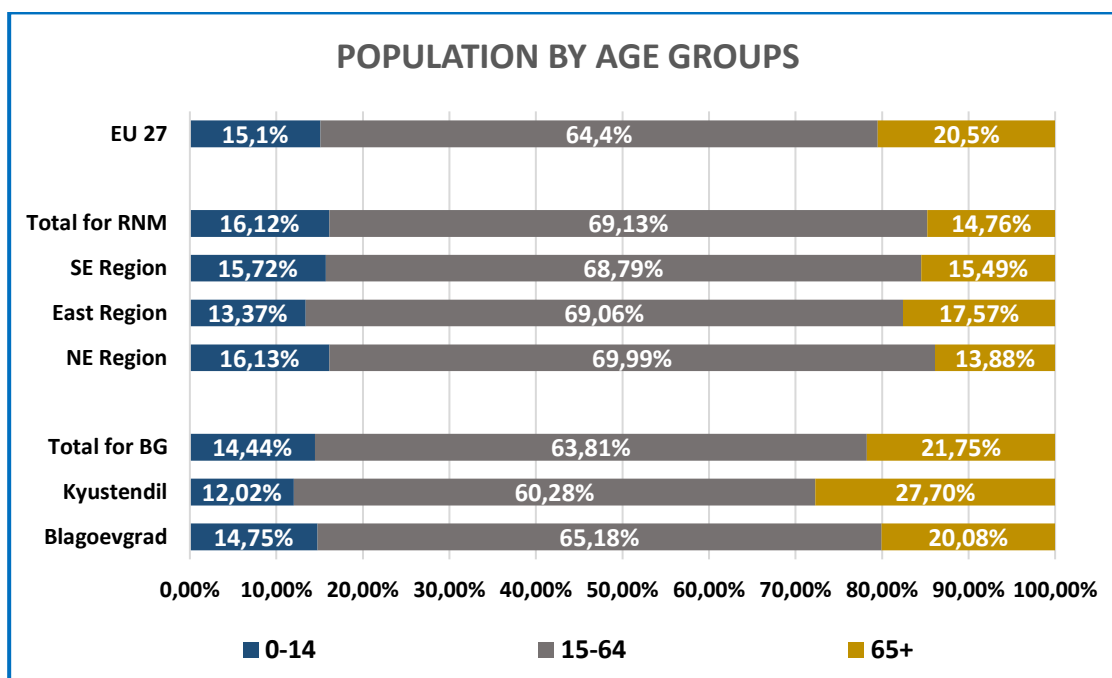
The border area of North Macedonia also faces ageing of the population in the last years. The population in 2020 within the different age groups is close to the country's average. Nevertheless the share of working-age population (within the range 15-65) is more than two thirds of the total one.

Table 2: Population by age groups, 2020

	Blagoevgrad	Kyustendil	Total for BG	NE Region	East Region	SE Region	Total MK
below 15	44 413	14 019	999 014	28 249	23 040	27 003	333 373
15-65	196 271	70 293	4 413 486	122 569	1 189 710	118 430	1 429 966
above 65	60 454	32 307	1 504 048	24 312	30 266	26 617	324 440
Total	301 138	116 619	6 916 548	175 171	172 277	171 840	2 068 808

Source: NSI and MAKSTAT

Figure 3: Population by age groups



Source: NSI, MAKSTAT and EUROSTAT

The average population density of the co-operation area of Bulgaria is lower than the national one (62,31 inhabitants per km²) and varies significantly between urban and rural areas. The district of Kyustendil has the lowest population density of the whole cross-border region.

The population density of the cooperation area of North Macedonia remains below to the national average (80,46 inhabitants per km²). The Northeast statistical region has the highest population density of the whole programme area – 75,96 inhabitants / km², close to the national average (80,46 inhabitants / km²).

The average population density of the total BG-MK border region (59,83 inhabitants per km²) is far below the EU-27 average, which is 109 inhabitants per km² (for year 2019).

Table 3: Population density by administrative unit, 2020

Administrative unit	Territory (km ²)	Population density (per km ²)
Blagoevgrad district	6449	46,70
Kyustendil district	3084	37,81
Total/Average BG border area	9534	43,82
Total/Average BG	110 994	62,31
NE Region	2306	75,96
East Region	3539	48,68
SE Region	2835	60,61
Total/Average MK border area	8680	59,83
Total/Average MK	25 710	80,46

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 Bulgaria and 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 2020, the tertiary (services) sector in 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 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 North Macedonia, analysed by sectors in 2020, 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 in North Macedonia has increased to 5 146 EUR in 2020 (26 380 EUR of EU-27) compared to 3510 EUR in 2012 (25 100 EUR of EU-27).

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, 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 increased 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 18.9 % 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 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 Southeast region is the most economically underdeveloped planning region in the MK with GDP share of 8.9% in 2020. 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 8.2% in 2020, and is dominated by services and agriculture with vineyard area (20.7 % of the total area in the country).

Table 4: Gross Domestic product, 2020, (MEUR)

Administrative unit	GDP	Share (%)
Bulgaria	59 886	100,00%
Blagoevgrad	1569	2,6%
Kyustendil	558	0,9%
North Macedonia	10 665	100,00%
North-East Region	510	4,8%
East Region	872	8,2%
South East Region	952	8,9%

Source: MAKSTAT and NSI

2.4.2 GDP per capita

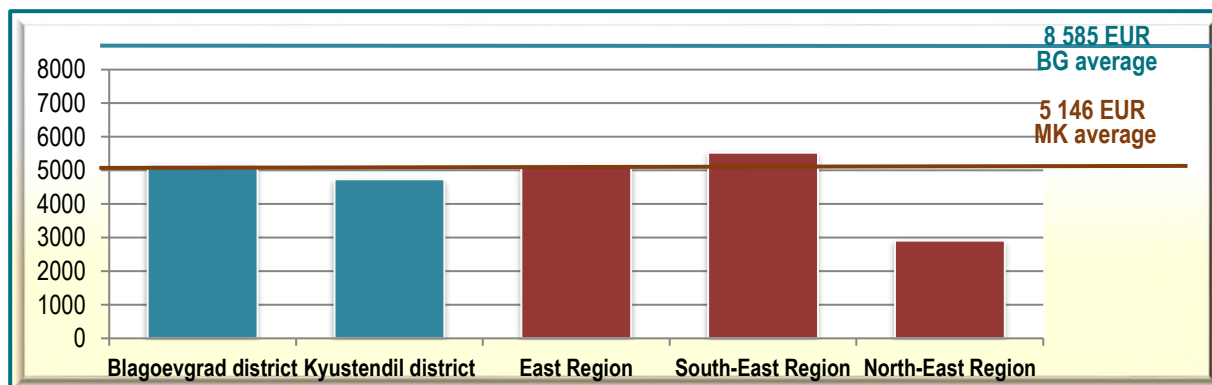
The **gross domestic product per capita** in Bulgaria during the period from 2013 to 2020 was increasing slightly faster than the EU average and in 2020 it reached 8585 EUR. In terms of this indicator, the differences between the regions as well as the internal differences within the regions were also 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, 2020 (EUR)

North Macedonia	East Region	South-East Region	North-East Region	Bulgaria	Blagoevgrad district	Kyustendil district
5 146	5042	5526	2909	8585	5164	4734

Source: MAKSTAT and NSI

Figure 4: GDP per capita, 2020



A higher gross domestic product per capita compared to the average of North Macedonia was recorded in the Southeast Region. Other two border regions had gross domestic product per capita below the average 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 North Macedonia, with GDP share of 4.8%, 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 9% 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 border region 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

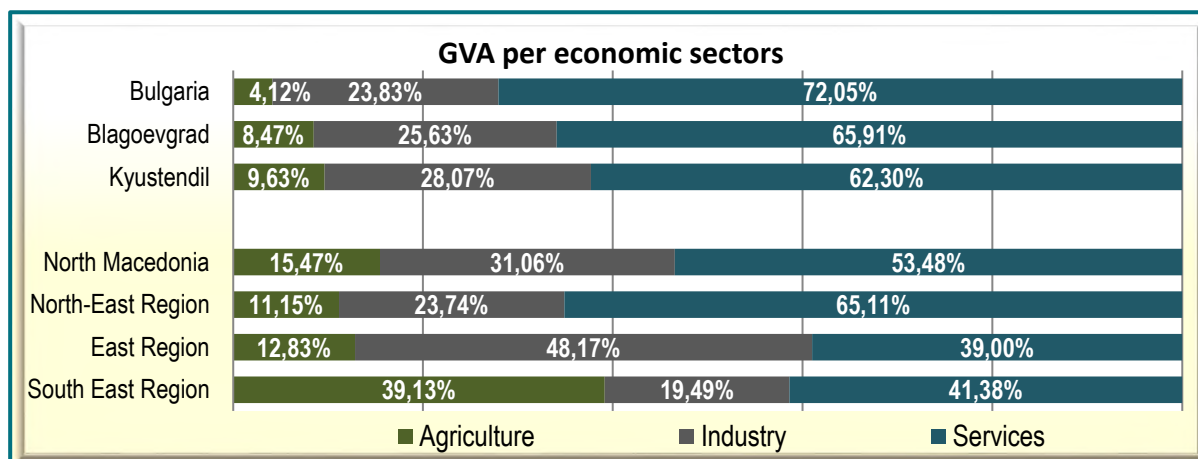
Table 6: GVA per economic sectors, 2020

Administrative unit	GVA per economic sectors (MEUR)			GVA total (MEUR)
	Agriculture	Industry	Services	
Bulgaria	2 102	12 149	36 737	51 988
Blagoevgrad	115	348	895	1 358
Kyustendil	47	137	304	486
North Macedonia	919	1845	3177	9345
North-East Region	31	66	181	448
East Region	77	289	234	764

South East Region	261	130	276	834
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Source: NSI + MAKSTAT

Figure 5: GVA per economic sectors, 2020



Source: NSI + MAKSTAT

The values of the GVA indicator in Bulgaria (at national level) replicates the characteristics of the GDP indicator. The Southwestern NUTS 2 region. The changes in the economic structure of the CBC region on the 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 2019, 71% of the total value added in the CBC region (57.3% in 2010) was formed in the service sector. The industry sector produces 25% of the regional added value (32% in 2010). The contribution of the agriculture, forestry and fisheries sectors to the newly created value was only 4%, but it still remained very important for the regional economy.

GVA share in Bulgaria by sectors — 2016 – 2019

Table 6.1: GVA in Agriculture Sector

	2016			2017			2018			2019		
	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	9,82%	218	2221	10,12%	239	2362	8,58%	222	2588	7,9 %	214	2710
Kyustendil	10,90%	91	835	11,52%	101	877	8,07%	78	967	9,13 %	88	964

Table 6.2: GVA in Service Sector

	2016			2017			2018			2019		
	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	59,52%	1322	2221	62,02%	1465	2362	64,72%	1675	2588	65,65 %	1779	2710
Kyustendil	53,89%	450	835	55,76%	489	877	34,95%	338	967	61,93%	597	964

Table 6.3: GVA in Industry Sector

	2016			2017			2018			2019		
	Industry share %	GVA in industry	Total	Industry share %	GVA in industry	Total	Industry share %	GVA in industry	Total	Industry share %	GVA in industry	Total

Blagoevgrad	30,71%	682	2221	27,86%	658	2362	26,7%	691	2588	26,46%	717	2710
Kyustendil	35,09%	293	835	32,73%	287	877	34,95%	338	967	28,94%	279	964

Source NSI

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

The **industry** taking the second place in the CBC area of Bulgaria and third place in the economy of CBC region 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 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).

The Agricultural sector has a substantial share in North Macedonia and takes the third place in the border region of Bulgaria. 95 % of the total rice production in North Macedonia is produced in the East Region (Kocani). East region is also the biggest potato producer and produces 40% of the countries pork. 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 the 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 Bulgaria.

Service sector is in the lead position in Bulgaria and took the second position in the border area 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 (North Macedonia) and Kyustendil district (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%, mostly as a result of intensified activity in trade, transportation and food and accommodation services by 9.7%.

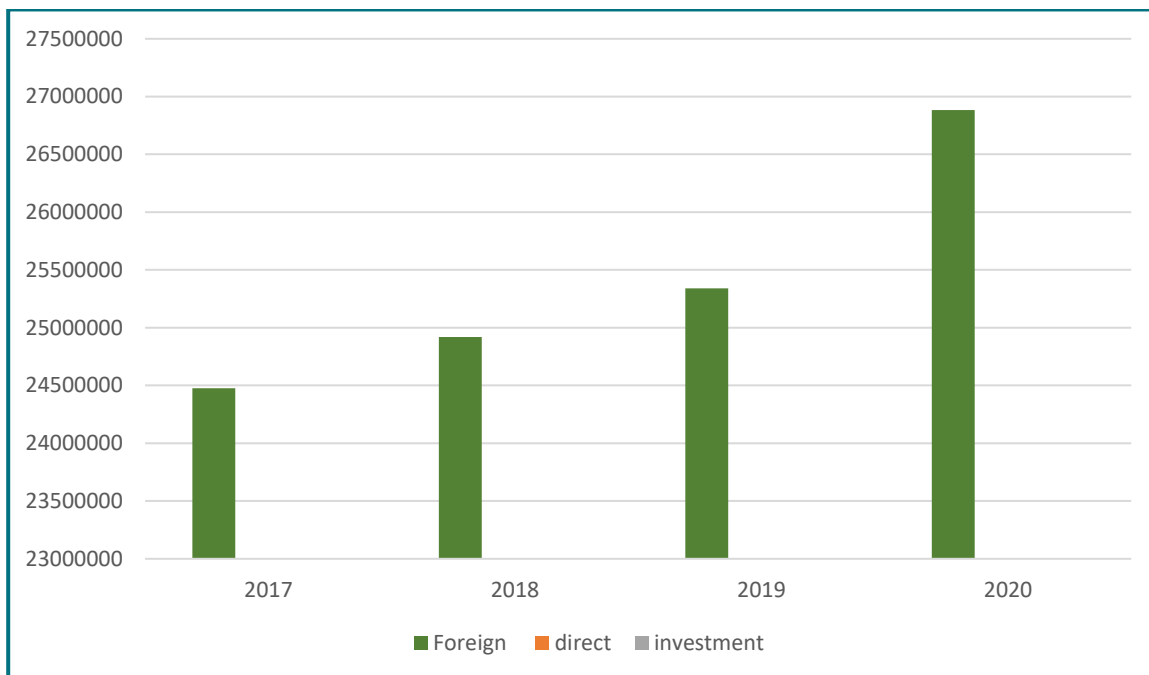
2.4.4 Foreign direct investments (FDI)

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 2020), foreign direct investment in 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 in Bulgaria



Foreign direct investment (FDI) in non-financial sector in the Kyustendil district amounted to EUR 40.8 million as of December 31, 2020, which is 4.3% more than in 2017. Their share in the total amount of foreign investments made in the country is 0.15% and 0.25% 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 the non-financial sector in the Blagoevgrad district as of December 31, 2020 amounted to EUR 517.6 million, which is 9.15% more than in 2017. Their share in the total amount of foreign investments made in the country is 1.92% and 3.1% respectively of FDI within the Southwest region. In terms of foreign investment, Blagoevgrad District ranks eighth in the country. In 2020, 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 517,6 million, 1.93% more than in 2018 year.

Enterprises in the Industry (except construction) invested EUR 139.5 million or 3.0% more than in 2017. In 2020, these two activities together accounted for 90% of total FDI, and their total relative share increased by 3 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 (1,93%) and the least performing district in the region (and one of the last places in the country) at the end of 2020 - district Kyustendil (0.15%).

Table 7: Foreign direct investments in non-financial enterprises, 2020

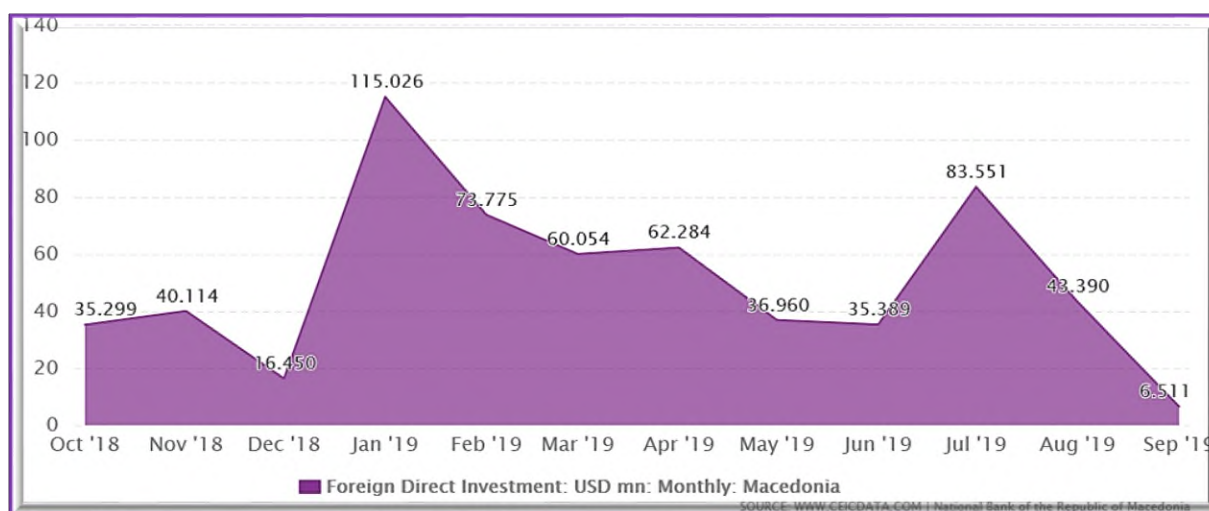
	Total FDI (EUR)	Share
Blagoevgrad district	517 670 000	1,93%
Kyustendil district	40 859 000	0,15%
Bulgaria	26 884 352 000	100,00%
Northeast region	183 087 368	16,28%
East region	142 350 885	12,66%
Southeast region	116 042 541	10,32%
North Macedonia	2 014 200 000	100,00%

Source: NSI (2020) and MAKSTAT (2020)

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

The total amount of Foreign direct investments for 2020 is 2014.2 MEUR

Figure 7: Foreign Direct Investment in North Macedonia, 2019



Foreign Direct Investments in 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 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*⁷ issued yearly by the World Economic Forum compares all national economies in terms of competitiveness.

For the 2018-2019 edition⁸, Bulgaria ranks 49th out of 141 countries analysed, advancing from 51st place in the previous edition, while North Macedonia is at 82nd globally, a slight increase (+ 2 points) over last year. Compared to 2012-2013 period, Bulgaria improved its performance (advanced 13 positions⁹). The figures for North Macedonia show a slight decrease (with 2 positions) on the global ranking scale (80th position out of 144 countries analysed in 2012-2013 period).

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 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.

North Macedonia's performance is mixed, with significant progress in some dimensions while losing some ground in others. Among the most improved elements, 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.

⁷World Economic Forum, *Global Competitiveness Report 4.0*, 2019.

http://www3.weforum.org/docs/WEF_TheGlobalCompetitivenessReport2019.pdf

⁸ Idem 19, pg. 118-121, pg. 434-437

⁹ World Economic Forum, *Global Competitiveness Report*, 2013,

http://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2012-13.pdf

Figure 8: GCI 4.0 for Bulgaria

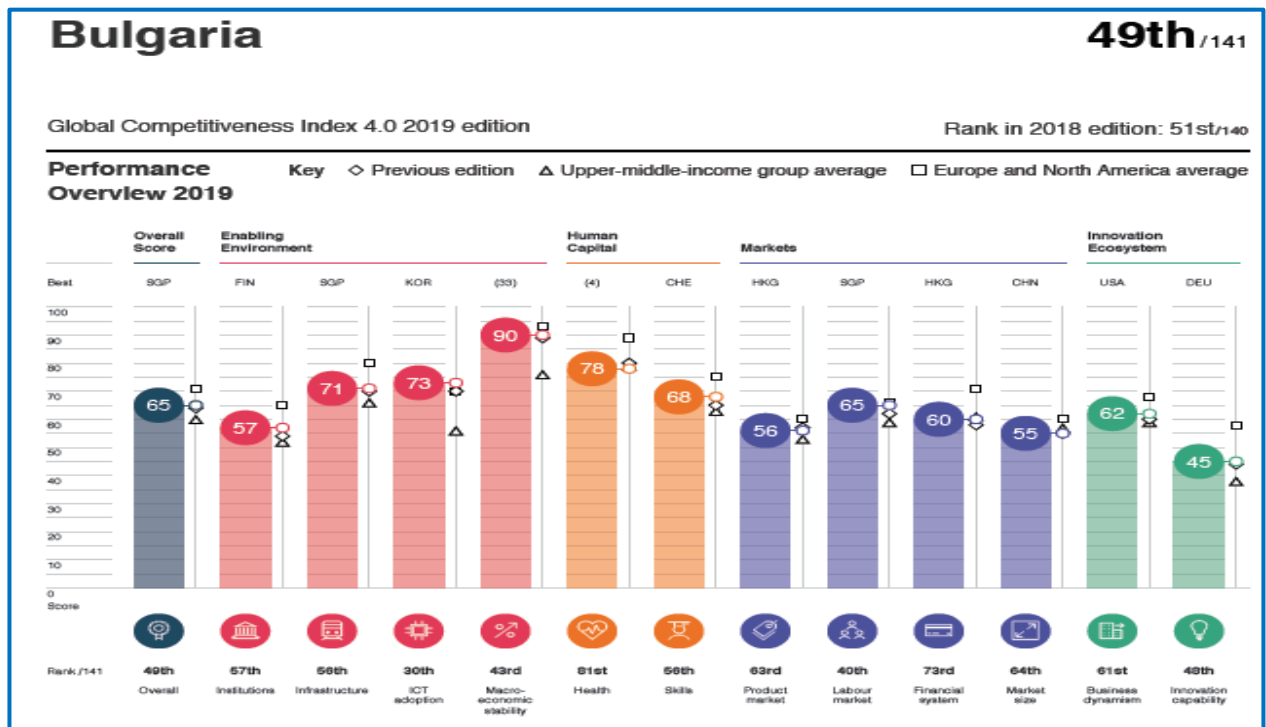
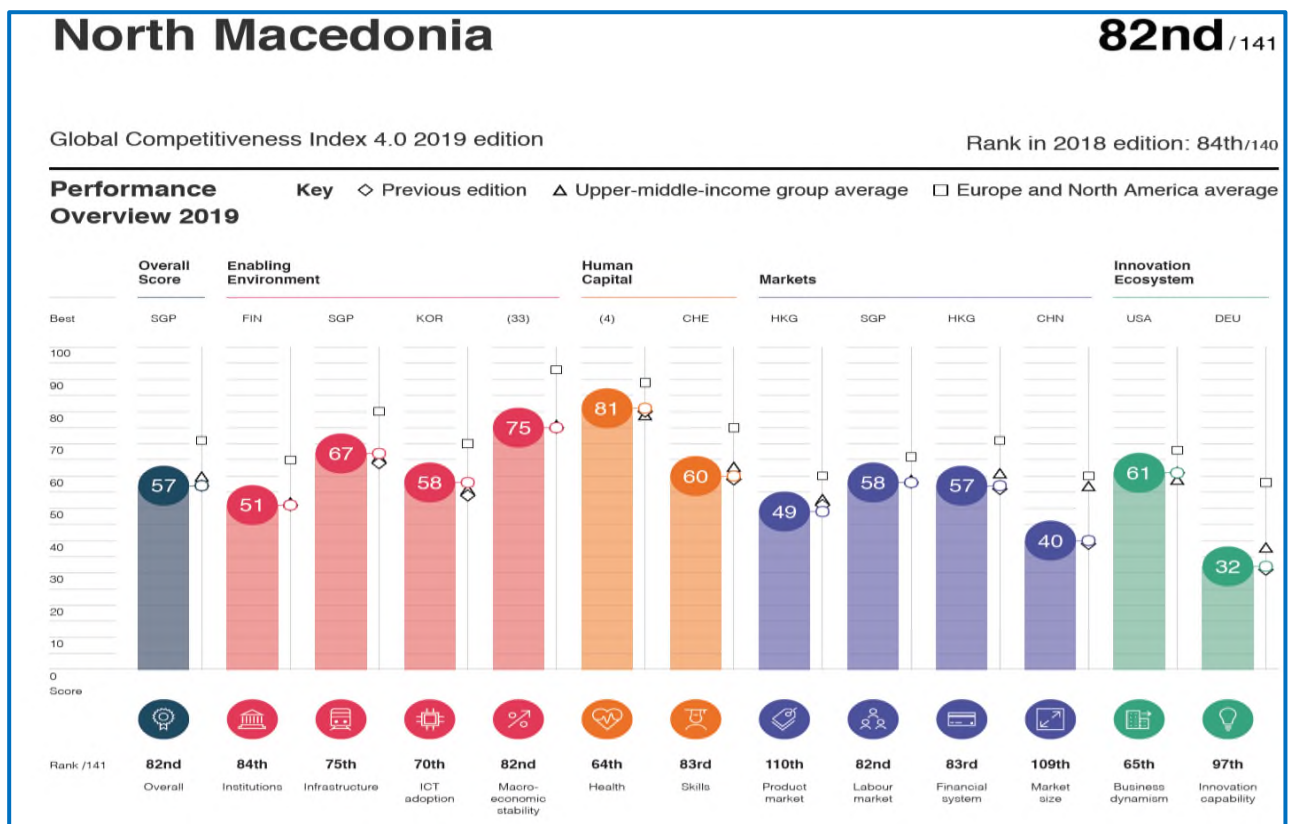


Figure 9: GCI 4.0 for North Macedonia



2.4.6 Small and medium-sized enterprises (SMEs):

SMEs are the backbone of the national economy and generate more than 60% of the GDP 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 383 013 in 2020 (92.7% of the total number of enterprises). The group of enterprises with 10 to 49 employees counts in 2020 a number of 24 489 enterprises (with a share of 6.00 %). In Bulgaria from 2020, 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 2011¹⁰. The report for 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 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.

Table 8: Enterprises in Bulgarian CBC region per number of persons employed – 2020

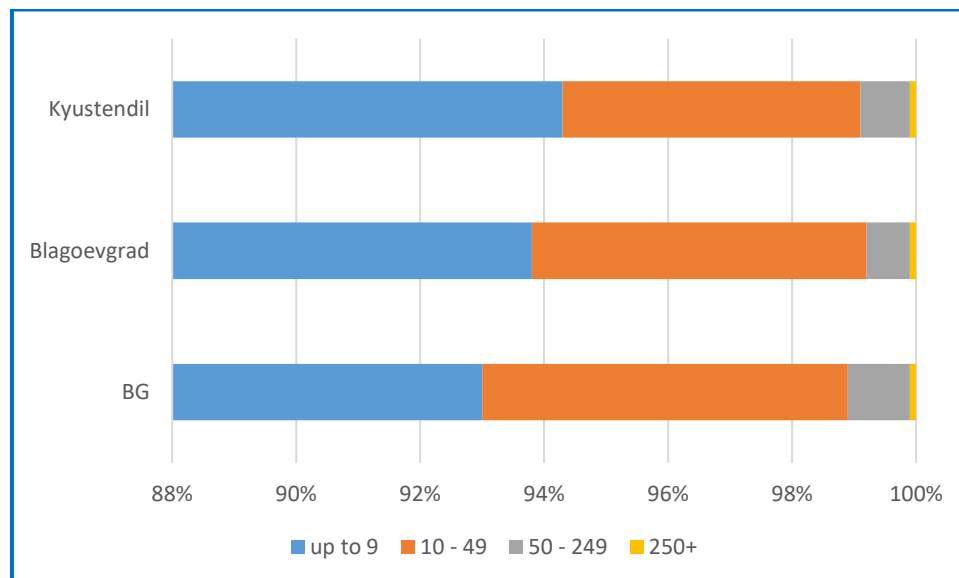
Administrative unit	Total number	Enterprises per number of employees							
		up to 9		10 - 49		50 - 249		250+	
BG	411 564	383 013	93,0%	24 489	5,9%	4 344	1,0%	718	0,1%
Blagoevgrad			93,8%		5,4%		0,7%		0,1%
Kyustendil			94,3%		4,8%		0,8%		0,1%

Source: NSI

According to the data of the National Statistical Institute (NSI) 94,3% of non-financial enterprises operating on the territory of the Kyustendil district in 2020 are micro (with up to 9 employees). Micro-enterprises (up to 9 employees) prevail also in the district Blagoevgrad – 93,8% of the total. Small enterprises (10 to 49 employees) are 5,4% in Blagoevgrad and 4,8% in Kyustendil, medium-sized enterprises (50 to 249 employees) are respectively 0,7% and 0,8% and large enterprises (over 250 employees) - 0.1% of all non-financial enterprises in the both districts.

¹⁰ https://www.mi.government.bg/files/useruploads/files/sba-fs-bg-2011_bg.pdf

Figure 10: Enterprises in the CB region by number of persons employed, Bulgaria, 2020



In 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.¹¹

In **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 9 employees), which account for about 90% of the total active business entities, while the smallest share in business community in 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 North Macedonia is considered to be at satisfactory level. In 2020, over 15 000 active business entities were operating in the border area. Current collaboration between businesses 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 MK, 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 2020 created 65% of total employment and 53% of value added in the Union, it can be concluded that SMEs in North Macedonia play a greater role in national economy compared to the EU-27 enterprise average. However,

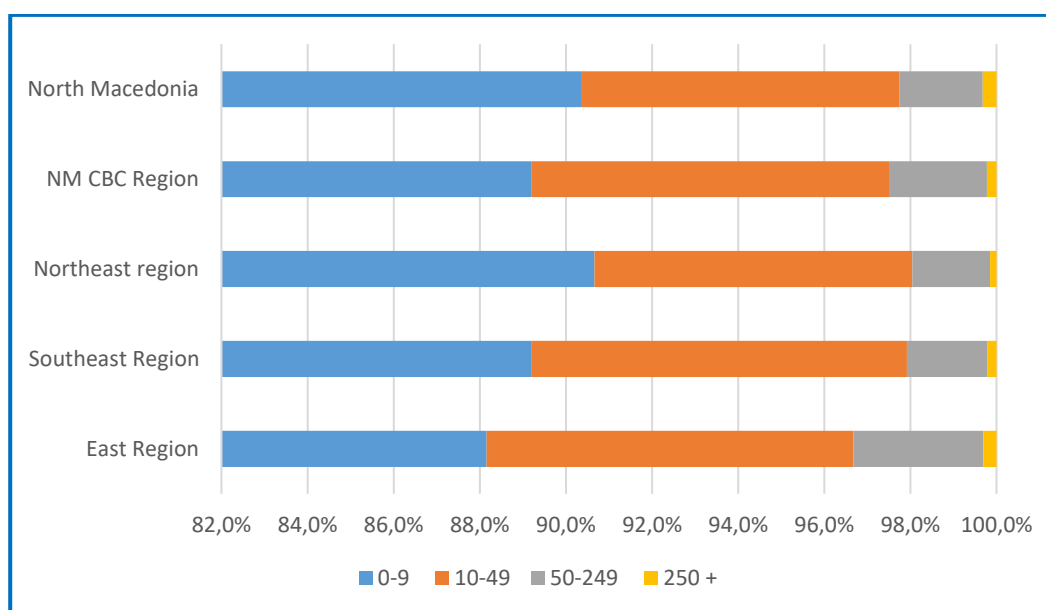
¹¹https://www.mi.government.bg/files/useruploads/files/vip/sme_strategy.pdf

despite the great importance SMEs have to the MK 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).

Table 9: Number of enterprises by number of persons employed in North Macedonia - 2020

Number of employees	East Region	Southeast Region	Northeast region	NM CBC Region	North Macedonia
0-9	4 906	5231	3 710	13847	66 013
10-49	474	512	302	1288	5405
50-249	168	110	74	352	1 410
250 +	17	12	6	35	233

Figure 11: Share of enterprises by number of persons employed, North Macedonia - 2020



Source: MAKSTAT

In terms of the unemployment rate, which shows a permanent downward trend in the past years, in 2020 the lowest unemployment rates in CBC Region of North Macedonia were recorded in the Southeast and the Eastern Region of 4.3 % and 8.1%, respectively, and the highest in the Northeast with an amount of 32.4%.

2.4.7 Tourism

A lasting upward development of national tourism is satisfactory, but in parallel there are serious negative factors that threaten 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 2018, EU countries continued to be the most important generating market for international tourism in 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 2030¹² predicts a steady upward development of tourism in the region.

The variety of natural and cultural attractions in 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, 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 the 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 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

¹² UNWTO. 2011. Tourism towards 2030. <https://www.e-unwto.org/doi/book/10.18111/9789284414024>

Map 3: Tourism regions in 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 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%.

Table 10: Tourism indicators for the CBC Region (2020)

Administrative unit	Accommodation establishments ¹³	Bed-places	Nights spent		Arrivals		Revenues from the nights spent (BGN)	
			Total	by foreigners	Total	by foreigners	Total	by foreigners
BG	3 317	281 666	11 968 483	4 656 289	4 023 763	1 175 779	645 544 880	315 517 867
Blagoevgrad	228	17333	892 107	400 938	343 428	118 073	49 735 860	25 178 610
share %	6.87 %	6.15%	7.45 %	8.61%	8.53 %	10.04%	7.7 %	7.97%
Kyustendil	88	3295	110 879	0	61 898	0	4 048 795	..

¹³ https://ec.europa.eu/eurostat/statistics-explained/index.php/Glossary:Tourist_accommodation_establishment

share %	2.65%	1.17%	0.93%	0%	1.54%	0%	0.63%
MK		30 064	1 697 535	252 930	467 514	118 206	
NE region		763	8861	2384	6195	1355	139
share %		2.53%	0.52%	0.94%	1.32%	1.14%	
East region		2088	43 354	8745	91213	3089	843
share %		6.94%	2.64%	3.45%	19.51%	2.613%	
SE region		6748	30 7942	48078	74602	16514	2118
share %		22.44%	18.14%	19%	15.95%	13.97%	

Source: NSI and MAKSTAT

In general the contribution of the CBC area of **Bulgaria** to the tourism development at national level is quite modest. The two big resorts in Blagoevgrad district Bansko and Sandanski offer yearly accommodation and provide relatively well developed 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 **North Macedonia** represents one of the changing circumstances in which tourism operates. 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 2020 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.

Table 11: Employment indicators in 2020

Administrative unit	Employment rate	Unemployment rate	Activity rate
Blagoevgrad	56%	7,2%	60,3%
Kyustendil	46,7%	4,5%	48,9%
BG average	52,7%	5,1%	55,5 %
NE region	37%	32,4%	54,7%
East region	53,1%	8,1%	57,7%
SE region	62,5%	4,3%	65,3%
MK average	47,2%	16,4%	56,4%

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

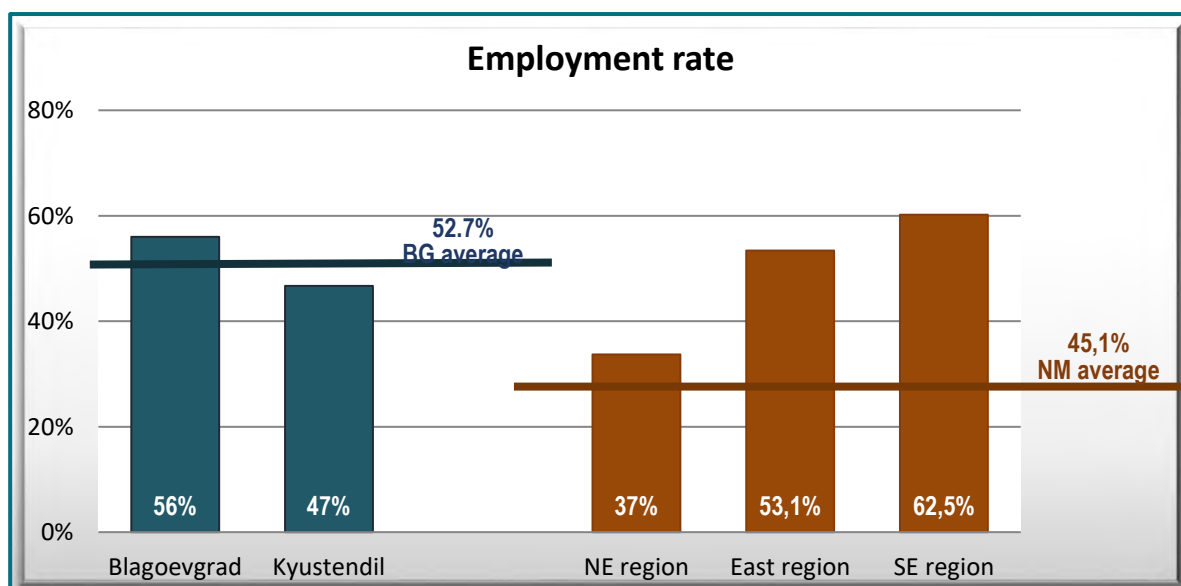
The average employment rate in the Bulgarian border region as of 2020 is 51.3 % as the activity rate is high 60.3%. According to Eurostat population estimates in the EU Member States, the number of people of working age in Bulgaria will continue to decline in the future. This is the main factor that will influence the reduction of workforce in the area.

On border side of North Macedonia, the employment rate for 2020 is 50.9 %. 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 15-64 years employed in 2020 show values of 68,5% (Bulgaria), 54,7% (North Macedonia) compared to the EU average of 67,7 %. The youth unemployment rate (15-24 years) is also higher than the EU average (17, 6%), in North Macedonia (35,7%). The youth unemployment rate in Bulgaria is lower (17,4%). 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 North Macedonia in 2020 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 62,5%. On the other hand the highest unemployment rate is registered in the Northeast Region (32,4%) as the lowest unemployment rate of 4,3% 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 North Macedonia and Kyustendil on the Bulgarian side show low employment rate, also compared to the national levels of both countries.

Figure 12: Employment rate in CBC Region, 2020

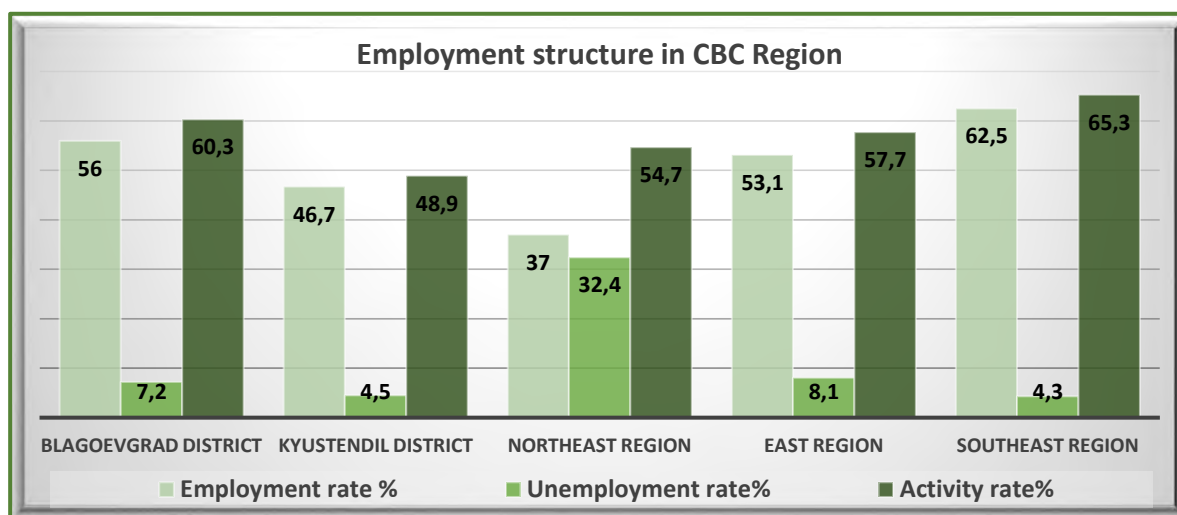


Source: NSI and MAKSTAT

Employment of the population in the most active age (15-64 years) increased in the cross-border region of Bulgaria in the period 2011-2020, reaching its peak of 71,4% in 2019, well above the national average of 70,1%. In practice, employment rate of population 15-64 years in 2020 was higher than its pre-crisis peak levels - in 2008 the employment rate in the region was 71,0%. Both border regions – Blagoevgrad (71,5%) and Kyustendil (66%) showed high employment rate even above the employment average rate for Bulgaria (68,5%).

Comparing employment rate in the border area of North Macedonia it is evident that the Southeast Region has the highest employment rate (65,3%) even above the average for the country while the Northeast region has the lowest rate (37%) far below the average employment rate for North Macedonia.

Figure 13: Employment structure in CBC Region



Source: NSI and MAKSTAT

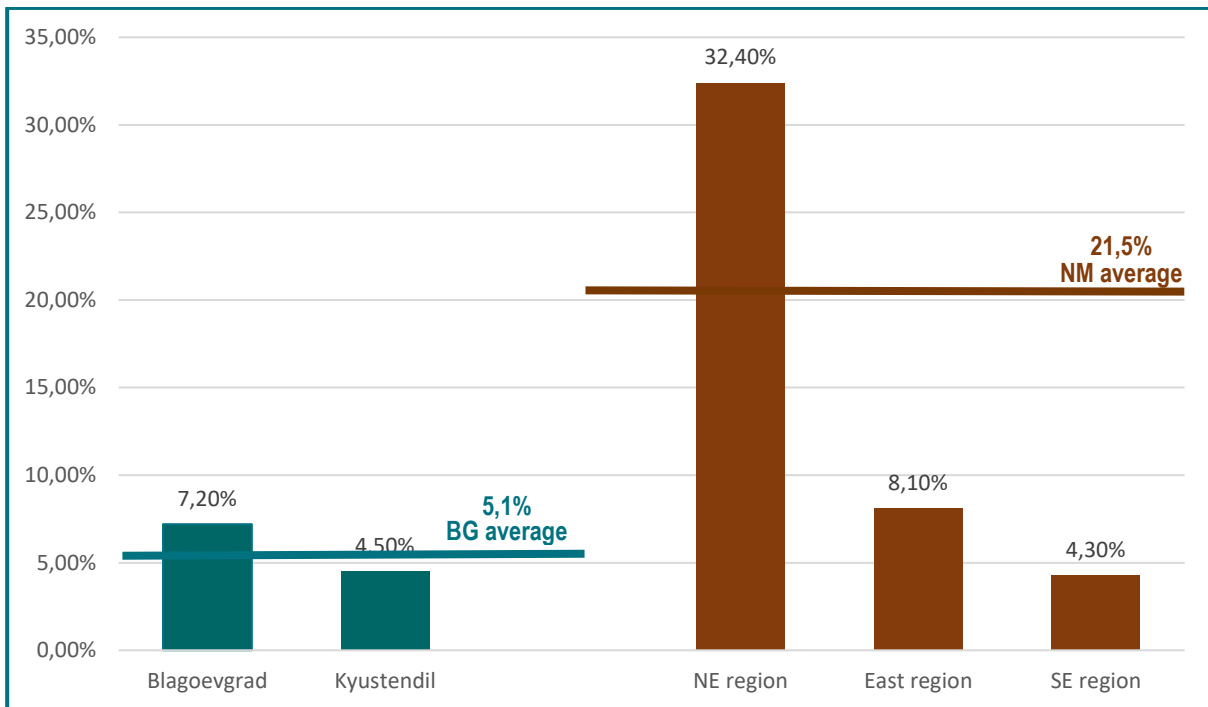
The **unemployment rate** represents the relative share of unemployed persons in the economically active population (labor force). High unemployment, as well as long-term unemployment, have a negative impact on the economy and cause social problems, especially directly on poverty and social exclusion.

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 7.2%.

The border region of Bulgaria is characterised by divergent downward dynamics of the intraregional differences in the employment rate for 2013-2020 (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 (4.5 %) ¹⁴ and Blagoevgrad District (7.2 %).

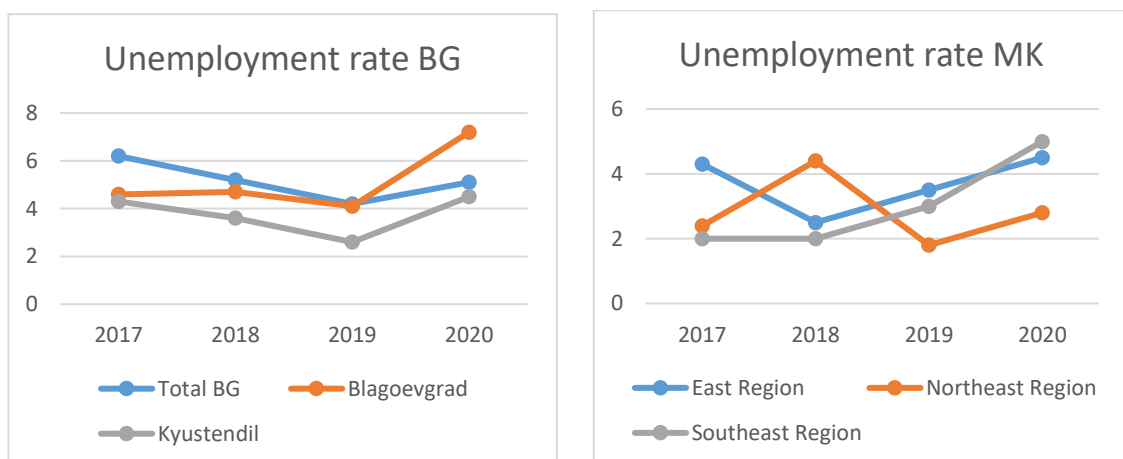
Figure 14: Unemployment rate in CBC region, 2020



Source: NSI and MAKSTAT

There is a clear gap in the average of the *unemployment rate* of the two countries. While Bulgarian districts show low unemployment rate close to the national average, the figures of the districts 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.

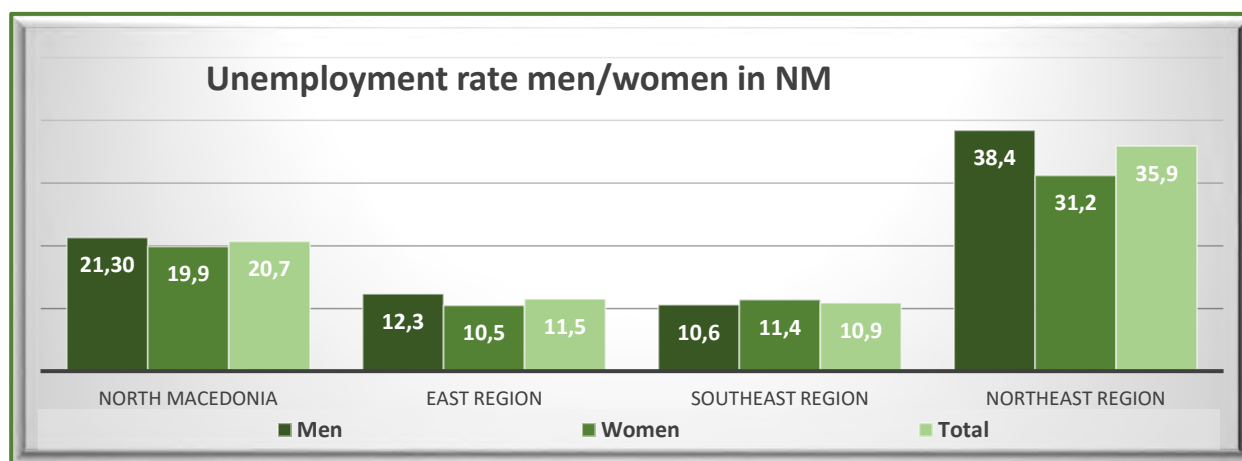
Figure 15, Figure 16: Unemployment rates in BG and MK



Despite the measures taken in Bulgaria to promote employment in recent years, and in particular for women, there is still a slight gender gap. The employment rate for year 2020 for men is 72,5% and for women 64,3% (population 15-64 years).

On the border side of North Macedonia the unemployment rates 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 North Macedonia



The highest average monthly gross wage paid per employee in 2020, compared to the overall average in North Macedonia, was observed in East Region while the lowest average monthly gross wage paid per employee in 2020, compared to the overall average in North Macedonia, was recorded in the Northeast Region. 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 MK, 2020 (in MKD)

Sector	MK	East Region	Southeast Region	Northeast Region
Average gross wage	28718	33 187	32 666	32 483
Agriculture, forestry and fishing	22 883	33 013	28 763	29 916
Mining and quarrying	41 600	57 903	N/A	N/A
Manufacturing	25 655	28 476	28 804	26 834
Electricity, gas, steam and air conditioning	41 196	52544	N/A	N/A
Water supply; sewerage, waste	23 163	30 518	29 320	29 128
Construction	29 566	28 938	32 098	37 945
Wholesale and retail trade; repair of motor	26 865	32 179	31 019	26 866
Transportation and storage	26 960	31 956	27 586	30 816
Accommodation and food service activities	20 023	28 189	23 526	22 631
Information and communication	55 142	38 273	61 892	49 005
Financial and insurance activities	45 052	51 931	56 296	51 941
Real estate activities	28 305	39 744	N/A	N/A
Professional, scientific and technical	34 299	31 849	32 419	32 678
Administrative and support service activities	21 549	25 014	22 640	26 615
Public administration and defence;	30 875	40 126	39 840	37 572
Education	27 765	41 691	38 263	38 276
Human health and social work activities	33 515	44 228	40 309	40 545
Arts, entertainment and recreation	26 376	39 225	31 918	36 976

Other service activities	34 691	17 737	N/A	29 133
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Source: MAKSTAT

The highest gross wage per employee in the border area 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 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)*¹⁵ 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 2020 there were 1948 general education schools in **Bulgaria**. Out of them 129 were primary schools, 1151 basic schools, 71 combined schools, 114 upper secondary and 483 secondary schools. In comparison with the previous school year, because of closure or modification, the total number of general education schools decreased by 7. According to Eurostat, the share of early school leavers in the EU-27 in 2020 is 9,9% and in Bulgaria it is 12.8%, which is lower compared to the previous year - 2019 (13,9%). For the period 2012-2020 there is no change in the trend – the early school leavers each year are between 12,5% and 13,9% without a tendency for a steady decrease or increase

¹⁵https://ec.europa.eu/education/policies/european-policy-cooperation/et2020-framework_bg

The general conclusion is that Bulgaria is still not achieving the Europe 2020 target of 10% early education and training drop outs despite the positive change in 2020.

Since 2014, significant progress has been made in consolidating democratic government and opening the economy in education system in **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 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.

Table 13: Number of students/graduates in 2020/2021

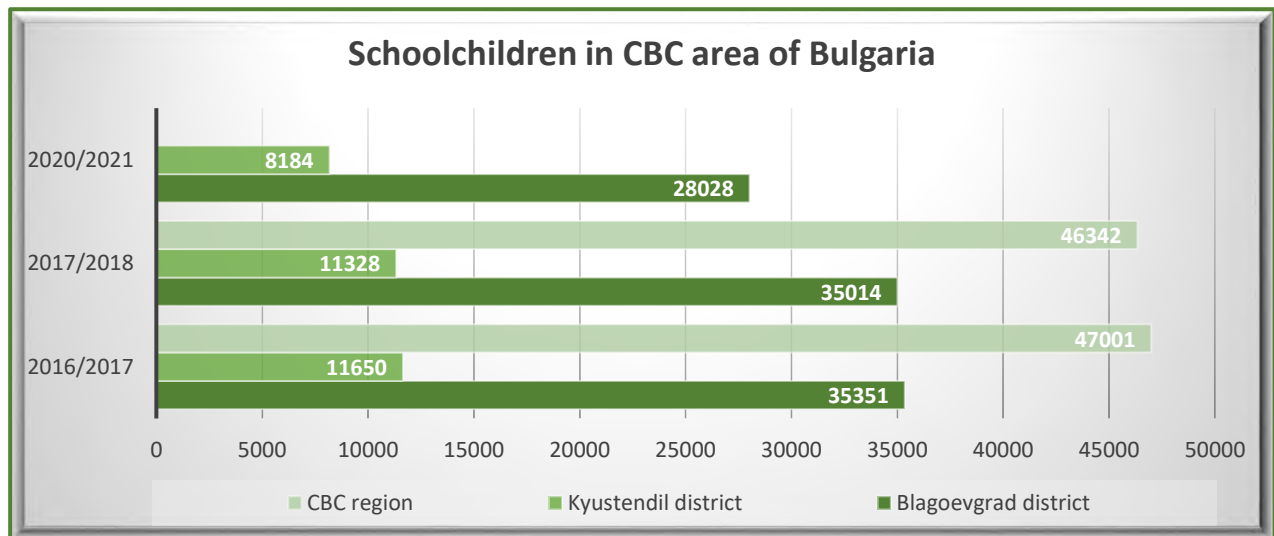
Administrative unit	Primary and lower secondary education		Secondary and vocational schools		Universities		Total
	Number	%	Number	%	Number	%	
Blagoevgrad	2981	39.9%	2143	28.7%	2334	31.3%	7458
Kyustendil	866	56.4%	668	43.5%		0%	1534
BG CBC	3847	42.7%	2811	31.2%	2334	25.9%	8992
BG	59914	34.3%	45133	25.8%	45258	25.9%	150305
NE region	15778	70.9%	6212	27.5%	521	1.6%	22511
East region	12587	69.3%	5200	28.5%	446	2.4%	18233
SE region	13643	73.9%	4441	24.7%	357	1.9%	18444
NM CBC	42008	70.9%	15853	26.7%	1324	2.2%	59185
North Macedonia	187555	71.25%	68273	26.8%	6474	2%	262302

Source: NSI and MAKSTAT

As of 2020, 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 2020/2021 school year, the number of teachers in the Bulgarian border area increased by 7,3 % as compared to 2019/2020 school year - 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 Bulgaria 2016/2021



Source: NSI

Table 14: Education indicators in Bulgaria, 2014-2021 (number)

Administrative unit	Schoolchildren in Bulgaria in school years:					
	2014/2015	2015/2016	2016/2017	2017/2018	2019/2020	2020/2021
Total for Bulgaria	605657	608926	588555	581957	573141	565632
CBC Region	32798	32759	31319	37492	37097	36212
Blagoevgrad	23448	23303	22384	28700	28485	28028
Kyustendil	9350	9456	8935	8792	8612	8184
	Teachers in Bulgaria in school years:					
	2014/2015	2015/2016	2016/2017	2017/2018	2019/2020	2020/2021
Total for Bulgaria	42617	45288	47427	49294	49820	53987
CBC Region	2276	2341	2374	3098	3231	3467
Blagoevgrad	1623	1652	1786	2363	2497	2720
Kyustendil	653	689	588	735	734	747
	Schoolchildren per teacher in Bulgaria in school years:					
	2014/2015	2015/2016	2016/2017	2017/2018	2019/2020	2020/2021
Total for Bulgaria	14.21	13.45	12.41	11.81	11.5	10.47
CBC Region	14.41	13.99	13.19	12.10	11.4	10.6
Blagoevgrad	14.45	14.11	12.53	12.15	12.1	10.3
Kyustendil	14.32	13.72	15.20	11.96	11.7	10.9

Table 15: Schools and enrolled students in all kinds of schools in Bulgaria for 2015-2021

	2015	2016	2017	2018	2019	2020	2021
Schools (primary, lower and upper secondary)							
Blagoevgrad	128	127	124	126	123	122	101
Kyustendil	45	42	41	41	41	36	25
Enrolled students in all kind of schools (primary, lower and upper secondary)							
Blagoevgrad	34 879	35 249	34 940	28 700	28 485	28 267	28 028
Kyustendil	11 908	11 625	11 328	8 792	8 612	8 324	8 184

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 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)¹⁶ 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 Bulgaria, 2020

Indicator	BG	Blagoevgrad	Kyustendil
Number of Universities	54	3	0
Number of university graduates	45258	2334	-
• Professional Bachelor	1712	104	-
• Bachelor	23151	1349	-
• Master degree	20395	881	-
Number of Academician	20716	448	-
• In colleges	677	12	-
• In universities	20039	436	-

Source: NSI and VFU

There are three universities in the CBC region of Bulgaria, all located in Blagoevgrad: South-West University ‘Neofit Rilski’ and American University in 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 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 North Macedonia graduated every year in the SWU.

¹⁶ https://ec.europa.eu/education/policies/european-policy-cooperation/et2020-framework_bg

American University in 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 Bachelor's and 13 Master's programmes. The mayor part of students (more than 30%) is from the neighboring countries North Macedonia and Serbia. 54 students graduated in 2018 out of them 7 were from North Macedonia.

There is only one university in the MK 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 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 - bachelor'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 the **border region 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).

Table 17: Basic data regarding education in CBC region of North Macedonia (2019-2020)

	MK	East Region	Southeast Region	Northeast Region
Primary and lower secondary education				
Number of schools	979	90	116	90
Share of teachers (%)	100.0	8,0	9.1	9.5
Share of enrolled pupils (%)	100.0	6.7	7.3	8.5
Average number of pupils per school	191	140	118	175
Average number of pupils per teacher	10	8	8	9
Upper secondary education				
Number of schools	130	14	8	10
Share of teachers (%)	100.0	9.5	6	7.9
Share of enrolled pupils (%)	100.0	7.5	6.4	8.9
Pupils who finished upper secondary education (%)	100.0	7.6	7.3	8.9
Number of pupils per teacher	10	7.5	10	11
Tertiary education				
Number of graduated students	6 474	446	357	521
Graduated students per 000 population	3.5	3.2	2.9	3.3

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 of absolute numbers in the projects area in the proportion of active, unemployed and non-active share of the population aged 15-24 in the CBC area. According to 2016/17 GEM National Report on entrepreneurship, 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 solutions within the system carries a significant potential for efficiency gains in the system. Bulgaria lags behind in this regard and has been ranked 23 among other EU Member States.

Bulgaria has an extensive hospital infrastructure, which comprises 342 hospitals with a total capacity of 54 216 beds, including 183 general hospitals that are essential to the system and 137 specialist hospitals. A total of 69 % of hospitals are situated in 12 district centres with only 31 % of hospitals serving the population in the remaining 16 district centres.

The analysis of the health system of the **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 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 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.

Table 18: Health establishments in CBC region of Bulgaria, 2020

Administrative unit	Hospitals			Outpatient support						Other health and medical establishments
	Total	Type		Total	Diagnostic and consulting centres	Medical diagnostic centres	Medical diagnostic and technical laboratories	Dental centres	Medical dental centres	
		General hospitals	Specialised hospitals							
Bulgaria	342	183	137	2098	110	752	1132	54	50	149
CBC region	16	8	7	105	-	42	58	-	5	7
Blagoevgrad	11	5	5	84	-	29	50	-	5	4
Kyustendil	5	3	2	32	-	15	17	-	-	3

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.

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

Year	Health care workers				Hospital beds			
	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
2020	6 217	3 848	1 633	1 039	8 909	1 696	750	858

Source: MAKSTAT

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

For the border area of Bulgaria a decrease of doctors and pharmacists is observed. Compared with previous years a 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) is observed. 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 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 (1 750 persons per GP) as the lowest coverage rates were registered in the district of Kyustendil (1 476 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.

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

Administrative unit	Population per general practitioner (<i>number</i>)						
	2014	2015	2016	2017	2018	2019	2020
Total for the country (average)	1 592	1 614	1 611	1 556	1 618	1703	1 772
CBC Region (average)	1 508	1 502	1 556	1 475	1534	1581	1 613
Blagoevgrad	1 578	1 588	1 659	1 604	1692	1727	1 750
Kyustendil	1 438	1 416	1 452	1 346	1393	1428	1 476

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 the 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 (978) as in North Macedonia the dental care and number of dentists had declined compared for the last years.

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

Administrative unit	Number of patients per dentist					
	2015	2016	2017	2018	2019	2020
Bulgaria (average)	1101	887	862	967	953	946
CBC Region (average)	1204	1010	966	948	987	1024
Blagoevgrad district	1234	991	947	1056	1021	978
Kyustendil district	1174	1029	985	839	948	1070

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

	2015	2016	2017	2018	2019	2020
Stomatologists total	1 405	1 044	1 029	1 001	1 016	1 022
Dentists	6	57	35	2	32	27
Dental technicians	220	211	123	221	184	194
Dental assistants	1 080	1 085	1 175	1 104	1 098	1 157

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 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 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 Bulgaria, 2019-2020

Administrative unit	One person (in BGN)	Two persons with 2 kids under 14 years (in BGN)
Average Bulgaria	5 412	11 365
Blagoevgrad	4 855	10 195
Kyustendil	5 296	11 122

Source: NSI

Table 24: Population at risk of poverty or social exclusion by gender, Bulgaria, 2020

Administrative unit	Total		Men		Women	
	Number (in thousands)	% from population	Number (in thousands)	% from population	Number (in thousands)	% from population
Bulgaria	2 231.5	32.1	1 005.6	29.8	1 225.9	34.2
Blagoevgrad	92.3	30.5	43	29.2	49.3	31.7
Kyustendil	38.9	33.3	16.7	29.3	22.2	37

Source: NSI

In two border districts poverty was reduced in 2020 compared to 2016: Blagoevgrad (-2.1 %); and Kyustendil (-1.2 %).

There is a well-recognised need in 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 North Macedonia, 2020

	East Region	Southeast Region	Northeast Region	MK
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.

Table 26: Registered average levels of main air pollutants

Administrative unit / monitoring point	NO2 µg/m ³	CO µg/m ³	SO2 µg/m ³	PM10 µg/m ³
Blagoevgrad station	17,82	-	15,65	29,96
Kyustendil	-	-	-	-
NE region	21,42	0,1	1,98	53,57
East region / Kochani station	17,91	0,2	3,87	33,28
SE region	16,25	0,9	6,72	48,51
MAXIMUM LIMIT	40	10	125	40

Source: MOEW, 2019, MAKSTAT 2020 and <https://www.eea.europa.eu/data-and-maps/dashboards/air-quality-statistics-2018>

2.7.2 WATERS

During the period from 1996 to 2018 the quality of **surface waters** in Bulgaria continued to improve, and this positive trend was most prominent with regard to the core physico-chemical parameters. Nevertheless, in 53% of the ‘lake’ category and in 51% of the ‘river’ category the good status objectives with regard to the biological assessment indicator have not been achieved.

Between 1997 and 2018 gradual improvement of the majority of indicators for monitoring **groundwater** quality was observed. Nitrates are a major groundwater pollutant – in approximately 11,5% 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, Malashevka, 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.

Bulgaria has 1 027 protected areas¹⁷ which cover approximately 5.3% of the country's territory. Their total area gradually increased from 5.2% in 2007 to 5.3% in 2019. The above data ranks 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

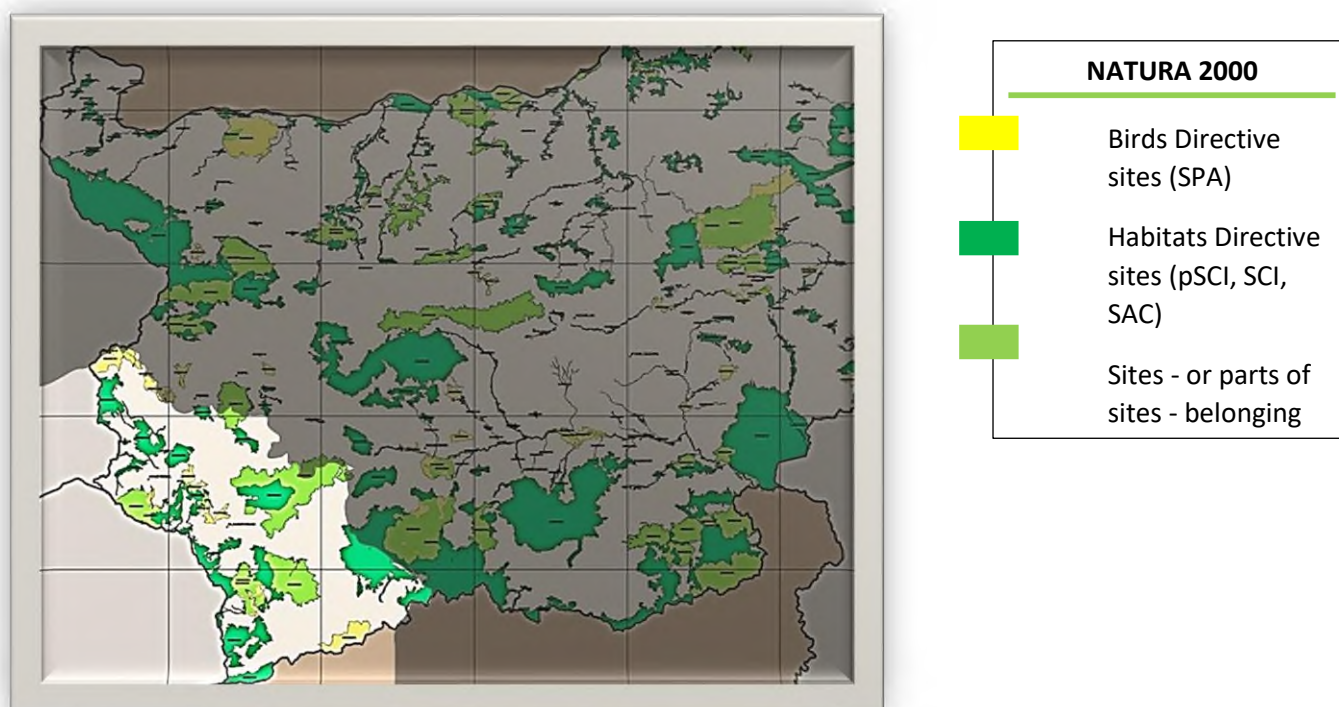
¹⁷ <http://eea.government.bg/zpo/bg/result1.jsp>

Importance (SCI), interconnected by ecological corridors.

The establishment of the NATURA 2000 network in Bulgaria is postulated by the Biodiversity Act, where the sites of this network are called “protected zones”. According to the two EU Directives 340 protected sites constitute the European Ecological Network NATURA 2000 in Bulgaria (120 according to the Bird Directive and 233 according to the “Habitats” Directive). In 2020 the total area is 3 873 704 ha that constitutes 34,9% of the country’s territory.

40 protected sites have been identified within the border area. National parks, mountains, well-preserved 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 North Macedonia to determine species, boundaries and regimes.

Map 4: Natura 2000 sites in Bulgaria



Source: https://ec.europa.eu/environment/nature/natura2000/db_qis/pdf/BGn2k_0802.pdf
<https://natura2000.eea.europa.eu/#>

Table 27: Natura 2000 sites in Bulgaria

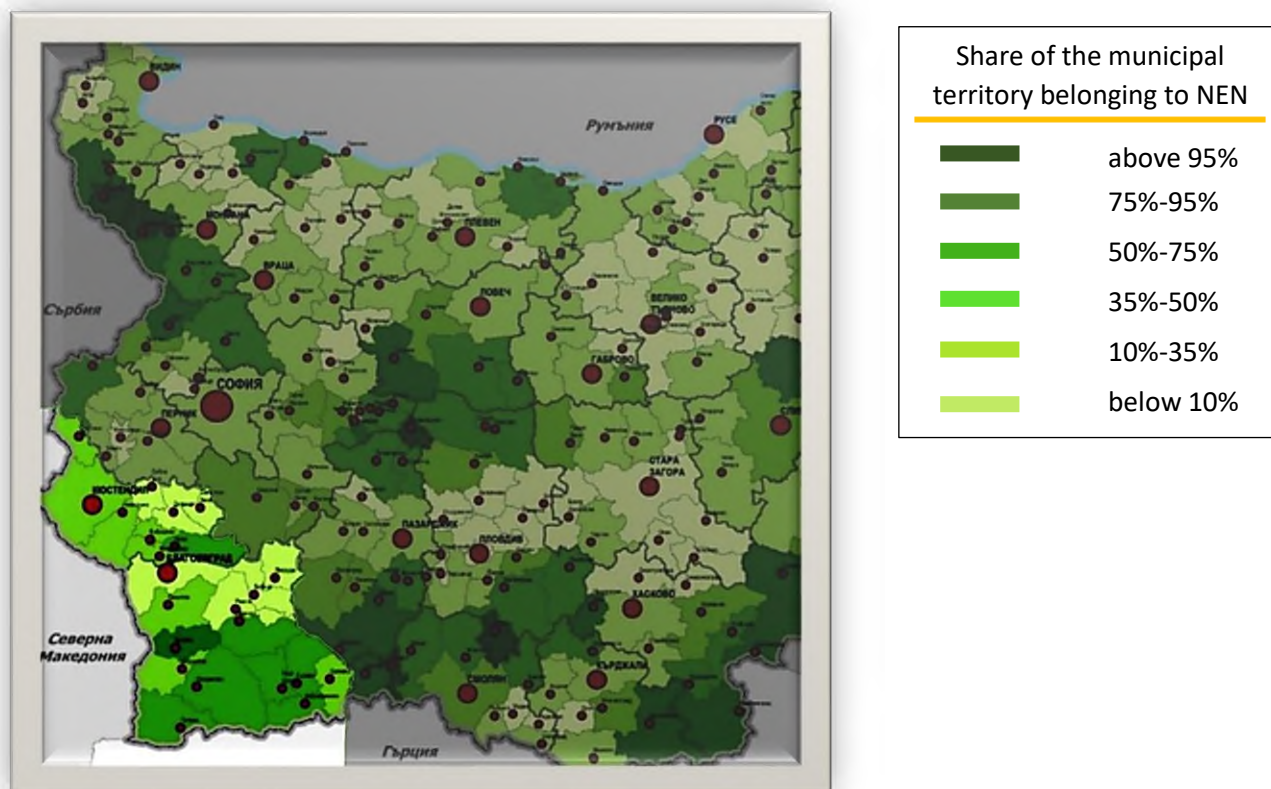
	BLAGOEVGRAD	KYUSTENDIL	
Birds Directive sites (SPA)	BG0002107	Boboshevo	
	BG0002129	Rila Bufer	
	BG0001013	Skrino	
	BG0002072	Melnik pyramids	BG0002100 Lower Koznitsa
	BG0002076	Mesta	BG0002079 Osogovo
	BG0002063	Western Rodopes	
	BG0002099	Kocherinovo	
	BG0002126	Pirin buffer	

	BG0002098	Rupite		
	BG0002078	Slavyanka		
Habitats Directive sites (pSCI, SCI, SAC)	BG0000167	Belasitsa	BG0000308	Verila
	BG0000220	Lower Mesta	BG0000295	Lower Koriten
	BG0002003	Kresna	BG0001012	Zemen
	BG0000366	Kresna-Ilinden	BG0000298	Konyavska mountain
	BG0000626	Krushe	BG0001017	Bloody stone
	BG0000636	Low Rila	BG0000294	Karshalevo
	BG0000224	Ograzden- Malashevo	BG0000636	Lower Rila
	BG0001022	Oranovki gorge - Leshko	BG0001011	Osogovo mountain
	BG0000167	Belasitsa	BG0001013	Skrino
	BG0000220	Lower Mesta	BG0000134	Choklyovo swamp
	BG0000625	Izvorovo		
	BG0001021	Mesta river		
	BG0001030	Rodopi- West		
	BG0001023	Rupite- Strumeshnitsa		
	BG0001028	Middle Pirin - Alibotush		
Sites belonging to both directives		BG0000495	Rila	
		BG0000496	Rila Monastery	
	BG0000209	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 declared under the Protected Areas Act. At present in Bulgaria 1027 protected areas are declared covering approximately 5,3% of the country territory. According to the Protected Areas Act, the protected areas are 6 categories: reserves (55), national parks (3), natural monuments (349), managed nature reserves (35), nature parks (11) and protected sites (574).

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 Bulgaria



Source: National Centre for Regional Development, Bulgaria

On the territory 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 North Macedonia.

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 North Macedonia includes 35 sites, as of December 2021. 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 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 candidate sites in North Macedonia

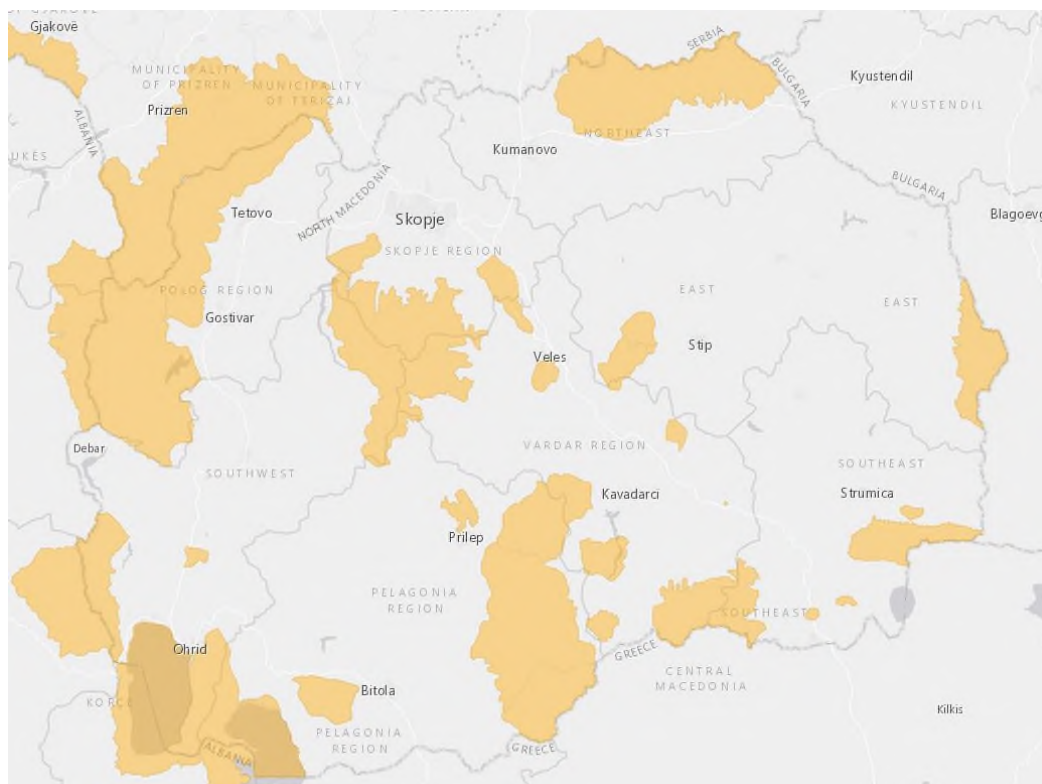


Table 28: Candidate sites for Protected Species under EMERALD Network in North Macedonia

Site Code	Site Name	Site Area (Ha)
MK0000001	Galichica	22750
MK0000002	Ezerani	2137
MK0000003	Dojransko Ezero	2696
MK0000004	Pelister	12500
MK0000005	Demir Kapija	4250
MK0000006	Tikvesh	11605
MK0000007	Mavrovo	73088
MK0000008	Shar Planina	46980
MK0000009	Matka	5442
MK0000010	Bogoslovec	4500
MK0000011	Orlovo Brdo	1980
MK0000012	Smolarski Vodopad	810
MK0000013	Monospitovsko Blato	1082
MK0000014	Belchishko Blato	1544
MK0000015	Alshar	3133
MK0000016	Markovi Kuli	3648
MK0000017	Jakupica	76740
MK0000018	Nidze	21320
MK0000019	Kozuf	28250
MK0000020	Jablanica	17980
MK0000021	Belasica	16710
MK0000022	Blato Negorski banji	625
MK0000023	Babuna - Topolka	2941
MK0000024	Ohridsko Ezero	24370
MK0000025	Prespansko Ezero	19000
MK0000026	Osogovski Planini	56630
MK0000027	Churchulum (Bogdanci)	652
MK0000028	Raechka klisura	26040
MK0000029	German - Pchinja	63490
MK0000030	Katlanovo-Taor	8160
MK0000031	Klisura na Bregalnica	7170
MK0000032	Mariovo	58660
MK0000033	Maleshevski Planini	19140
MK0000034	Gorna Pelagonija	67000
MK0000035	Ovche Pole	41360

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 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, North Macedonia, Romania, 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 Bulgaria and 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.

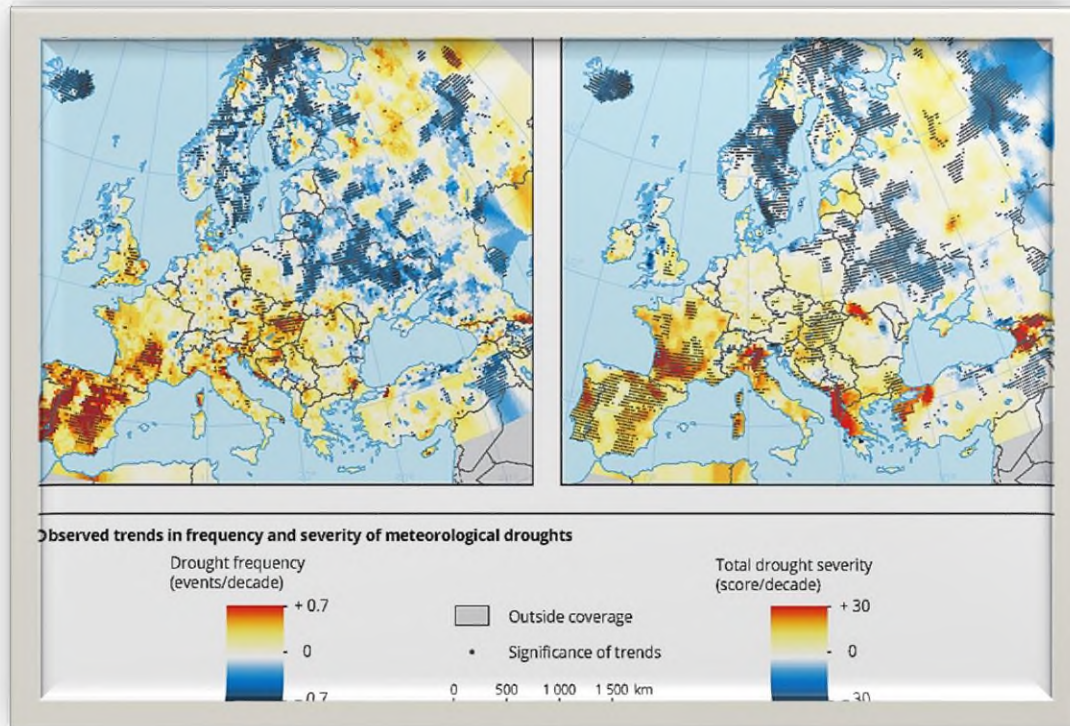
The frequency of natural disasters has increased in recent years. A series of disasters have been observed, mainly related to the development of powerful convective storms, which have caused serious material damage and casualties in a number of regions of Bulgaria. The effects of these processes are 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 Bulgaria increased, while rainy years are not significantly present anymore.

Map 7: Drought frequency and severity in Europe

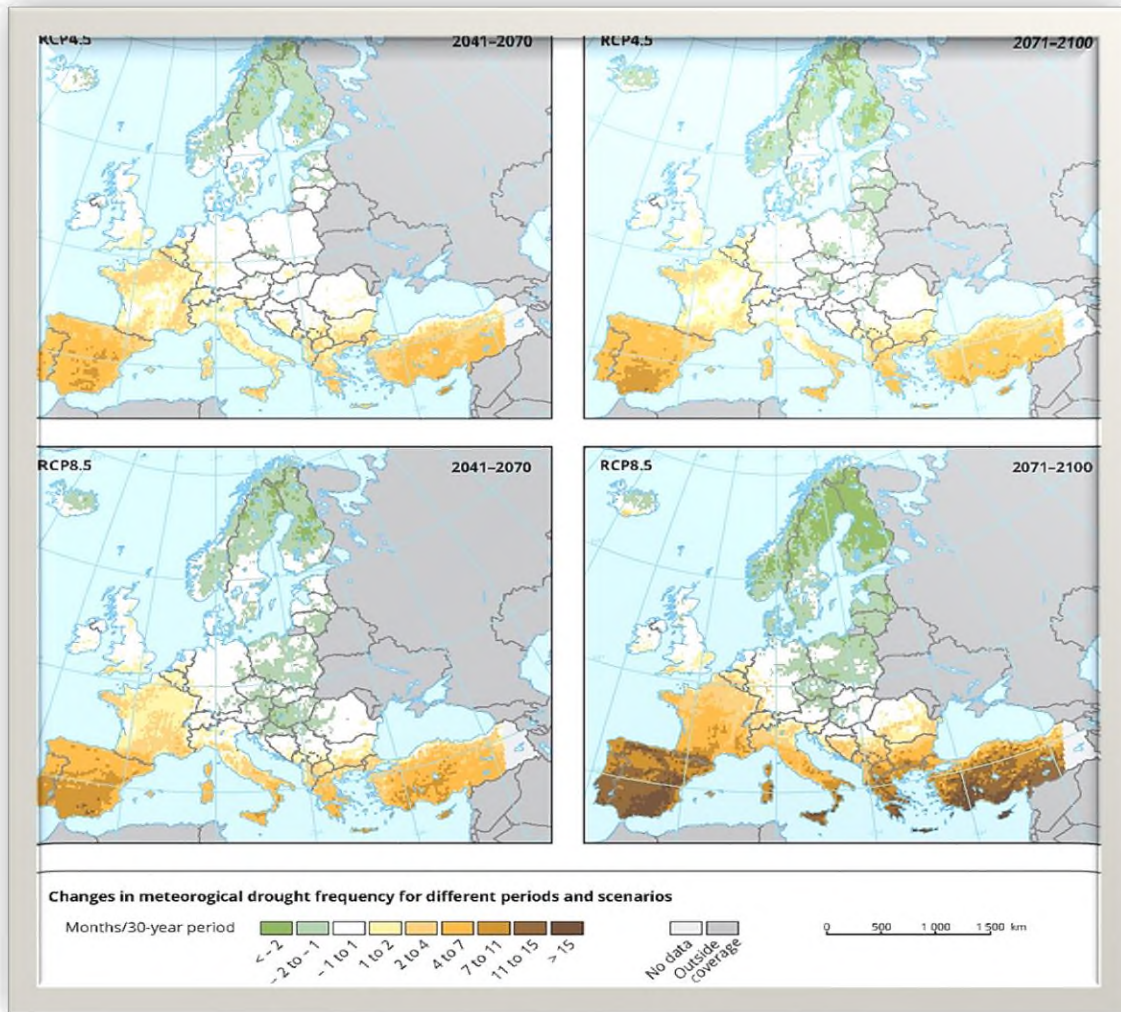


Source: EUROPEAN Environmental agency

According to two of the four Representative Concentration Pathways (RCP)18 scenarios developed by the Intergovernmental Panel on Climate Change (IPCC), the Bulgaria - 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.

¹⁸ 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).

Map 8: Projected change in the frequency of meteorological droughts

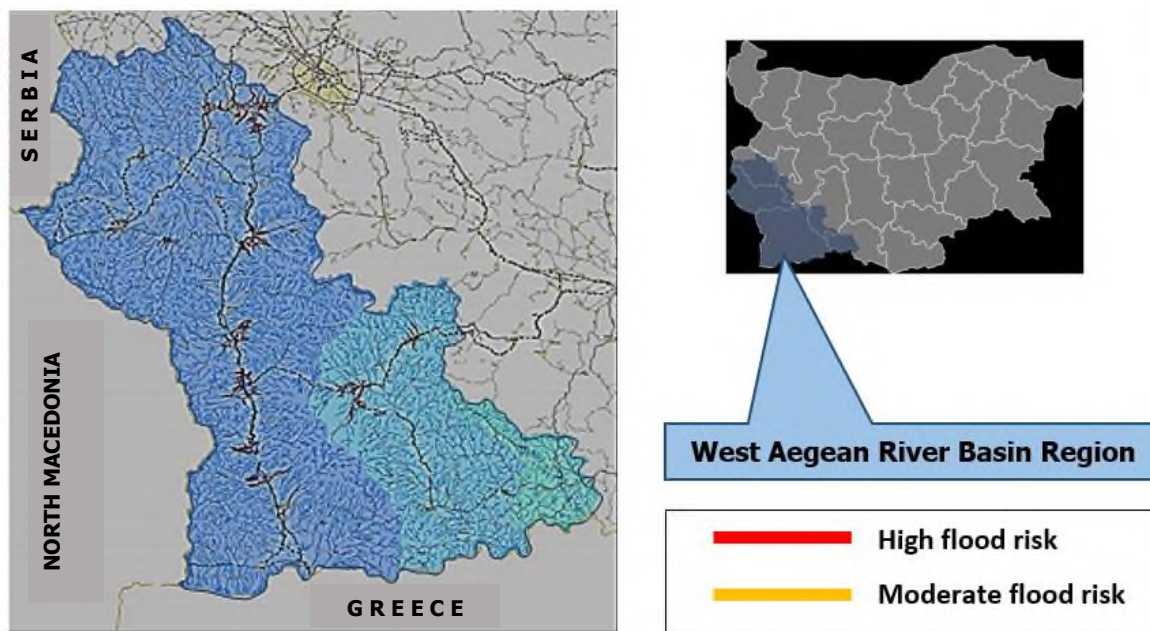


Source: Environmental European Agency

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 autumn 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.)

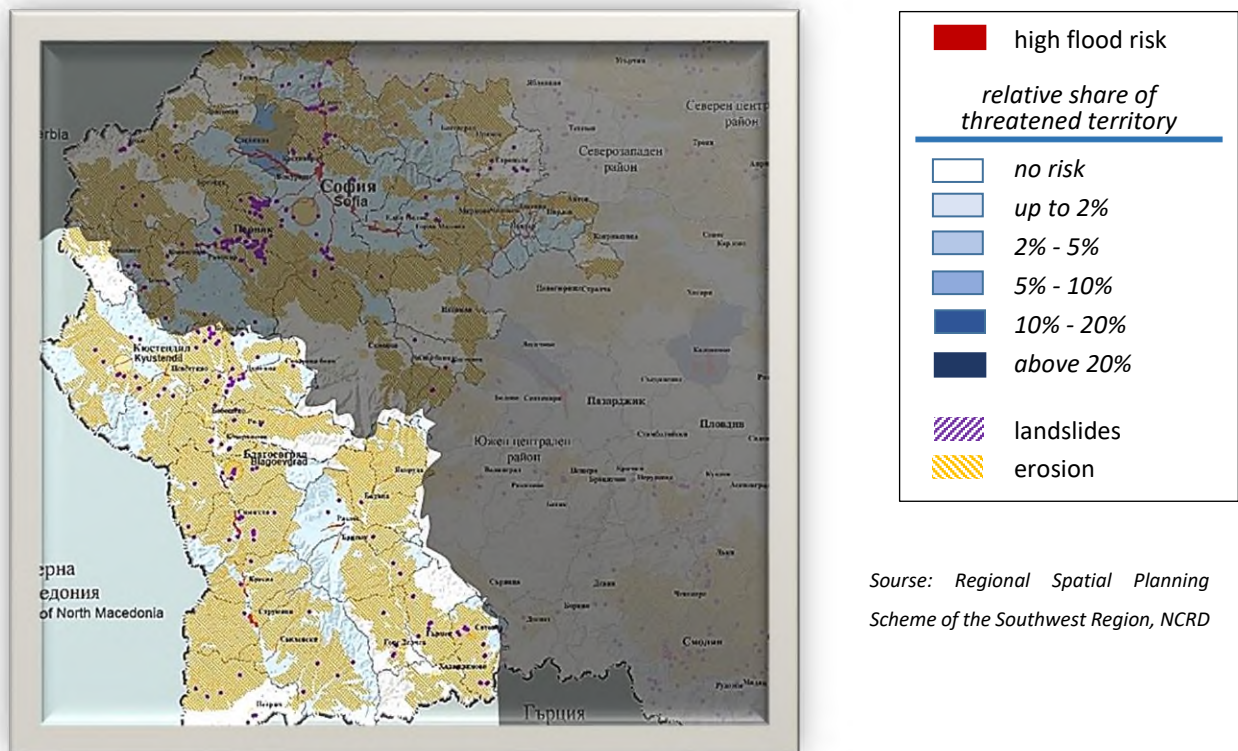
In the recent years the Bulgarian CBC region faces decreasing number and respectively moderate risk of fires. However the historical data show that fires (especially in 2015) are not a rare phenomenon and should not be neglected.

Table 28: Fires in Bulgaria

Administrative unit	Number of fires									
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Total BG	2185	3010	764	2245	2474	2448	741	480	654	754
Blagoevgrad	103	61	20	12	346	30	23	.	48	64
Kyustendil	153	23	122	135	211	97	.	4	.	.
total BG CBC	256	84	142	147	557	127	23	4	48	64

Source: NSI

Map 10: Scheme of areas under natural threat and risk



Source: 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 phenomena 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

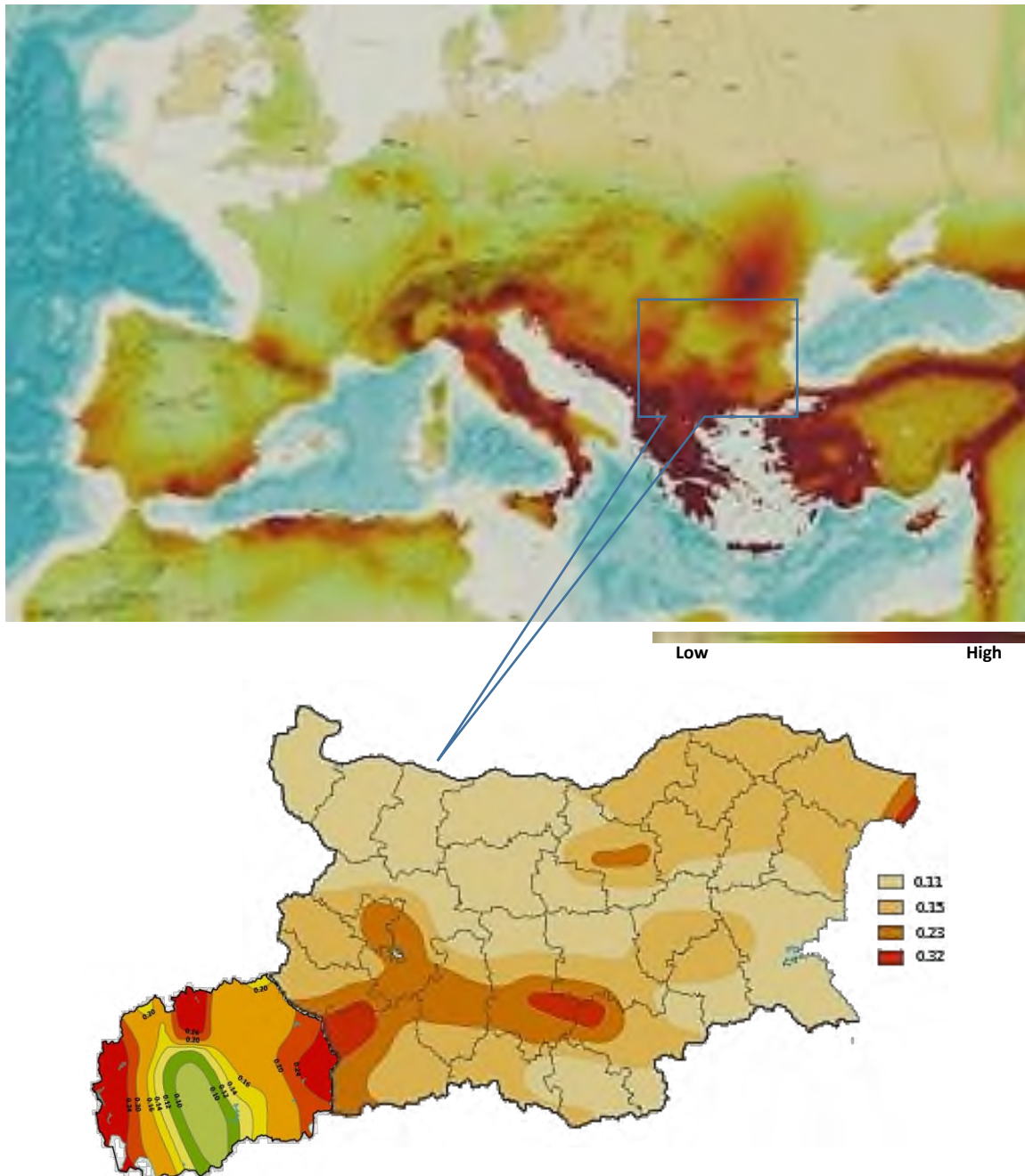
Seismic Risk

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 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 Bulgaria belong to the most vulnerable to earthquakes regions in the country.

Map 11: Map of seismic hazard in Europe

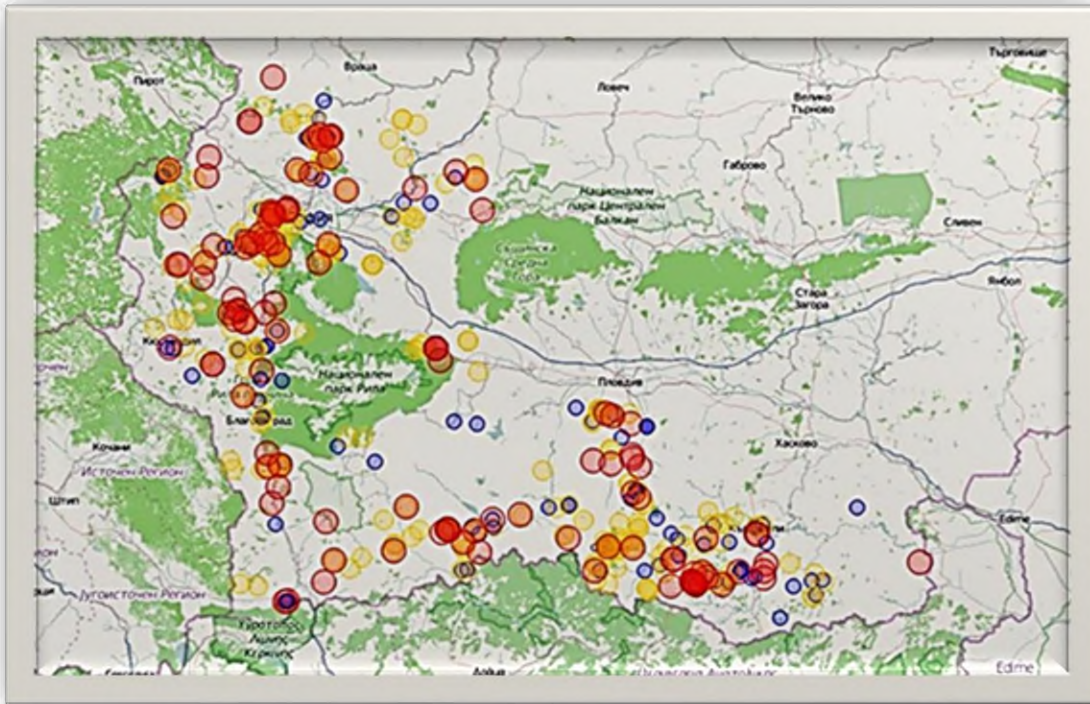


Landslides

Heavy rain and human activity contribute to the activation of landslides in 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 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 Network Through the

territory of Bulgaria - North Macedonia border 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



Source: <https://ec.europa.eu/transport/infrastructure/tentec/tentec-portal/map/maps.html?corridor=4&layer=8,9>
<https://ec.europa.eu/transport/infrastructure/tentec/tentec-portal/site/en/maps.html>

Road Network

The group of roads of international and national importance includes motorways, I-st class roads, II-nd class roads (categorized in the European network), that are subject to significant traffic, including transit. Transport network also includes III-rd class (municipal) roads that have predominantly local importance (connecting small settlements and providing access 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 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-Kulata-border 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 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 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 and the capital of Sofia.
- 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 Bulgaria, through Velingrad spa resort.

Table 29: National Road network – length and structure, 2020 (km)

Administrative unit	Total	Motorways	I class	II class	III class
Bulgaria	19 917	806	2 883	4 019	12 209
Blagoevgrad	716	49	75	152	440
Kyustendil	622	44	85	54	439

Source: National Statistical Institute

Table 30: Road network density, 2020 (km/1000 km²)

Administrative unit	Total	Motorways	I class	II and III class
Bulgaria	179.2	7.2	25.9	146.1
Blagoevgrad	101.5	7.5	11.5	91
Kyustendil	201.3	14.2	27.5	159.5

Source: National Statistical Institute (Calculated on Road Length Database 2020)

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 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 Bulgaria is more than twice above the national average - see table below:

Table 31: Share of the road network by classes of total length, 2020.

Administrative unit	Motorways	I class	II class	III class
Bulgaria	4.04	14.50	20.17	61.29
Blagoevgrad	6.84	10.48	21.23	61.45
Kyustendil	7.07	13.67	8.68	70.58

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 Blagoevgrad, where 64,1% of the road network is maintained in good condition, with an average of 40,4% for the country (for year 2020). Kyustendil District also has a better maintained road network - over half (54%). 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 **North Macedonia** connects Kosovo with Skopje and continues Southeast towards Štip, Radoviš, and Strumica, reaching the border with Bulgaria near Novo Selo. The 47 km stretch from Miladinovci to Štip was completed in late 2018. Further South-east from Štip to Radoviš, 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 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 North Macedonia 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 47.1 km 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 the territory 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 North Macedonia, 1 557 km, 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 Bulgaria (2020), 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 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).

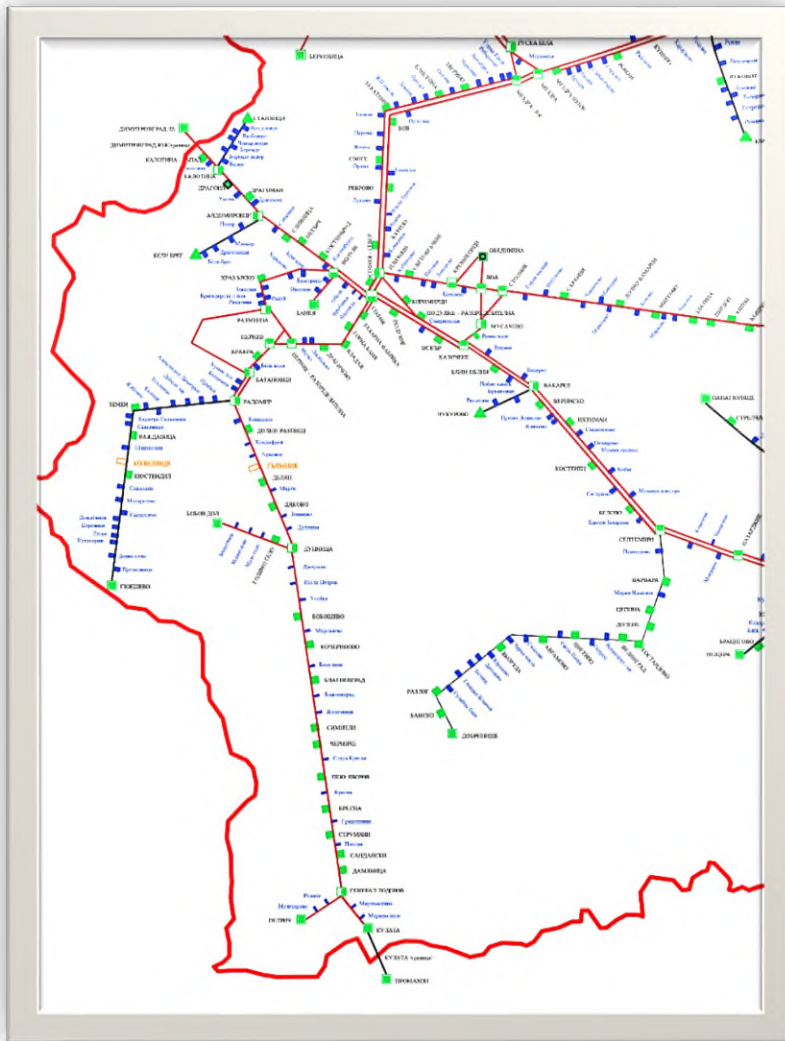
A significant part of the railway lines in Bulgaria have been built more than 50 - 100 years ago (Gyueshevo -Kyustendil - Radomir), with geometric parameters, construction and facilities suitable for speed up to 100 km/h, and in some places even with almost exhausted possibilities to keep the speed and 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 Bulgaria, 2020

Region – NUTS III/District	Total length km	Electrified lines km	Density km /1000 km ²	Stations
Total BG	4029	2871	36,6	307
Total CBC BG	282	168	29,5	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 Bulgaria – lines and stations

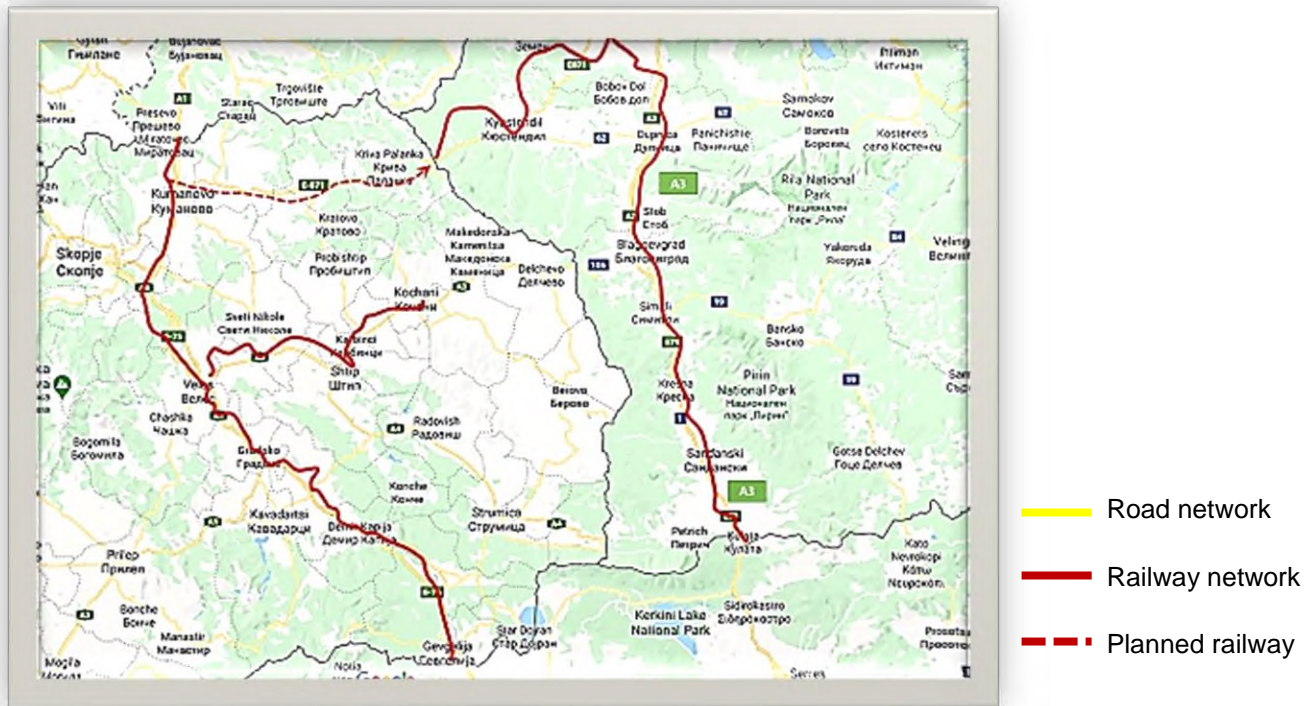


Source: National Railway Infrastructure Company

The *narrow-gauge line Septemvri-Dobrinishte* or line №16 from the National railway network of Bulgaria is a one-track, non-electrified and the only operating narrow-gauge railway line in Bulgaria with 760 mm distance between the rails also known as Bosnian type of railway. It connects Dobrinishte with the Sofia-Plovdiv-Burgas 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 Bulgaria it's a big tourist attraction for Bulgarian and foreign tourists. It's also favored 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).

Map 15: Railway lines in CBC Region



Bulgaria still has no railway connection with 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 –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 - 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.

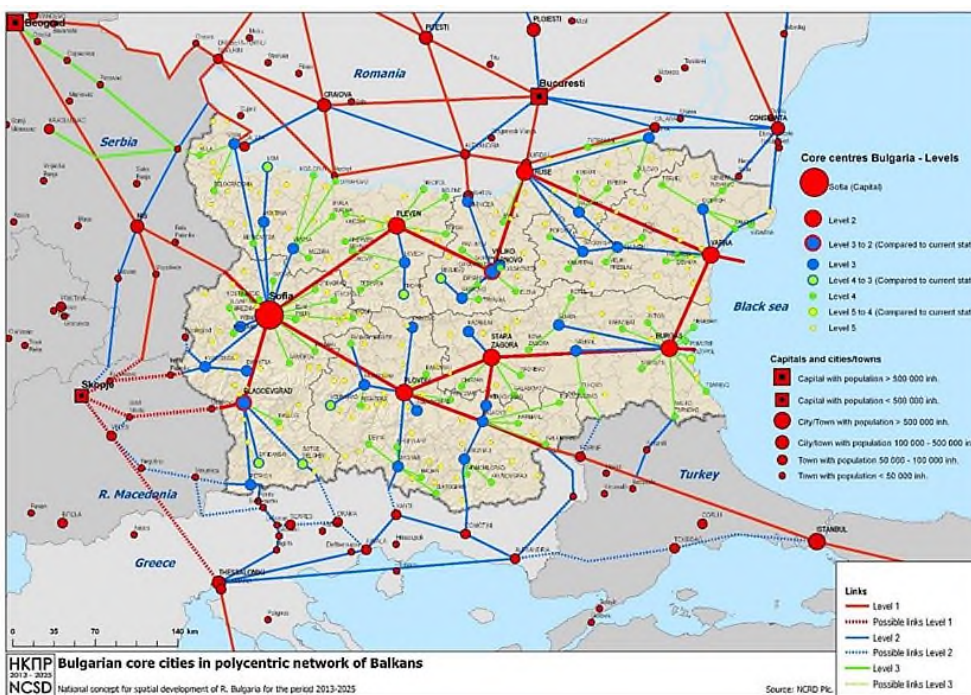
The construction of the railway is a high priority - both in view of connecting the rail networks of the two neighboring countries, as well as for ensuring the proper functioning of the EU TEN-T corridor.

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

Map 16: Bulgaria spatial links with neighbouring countries



Source: National centre for regional development - National Concepts for Spatial Development (NCSD)

Main connections between centers-cities of Bulgaria and 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 North Macedonia, level 3) - Skopje (Capital city, Level 1);

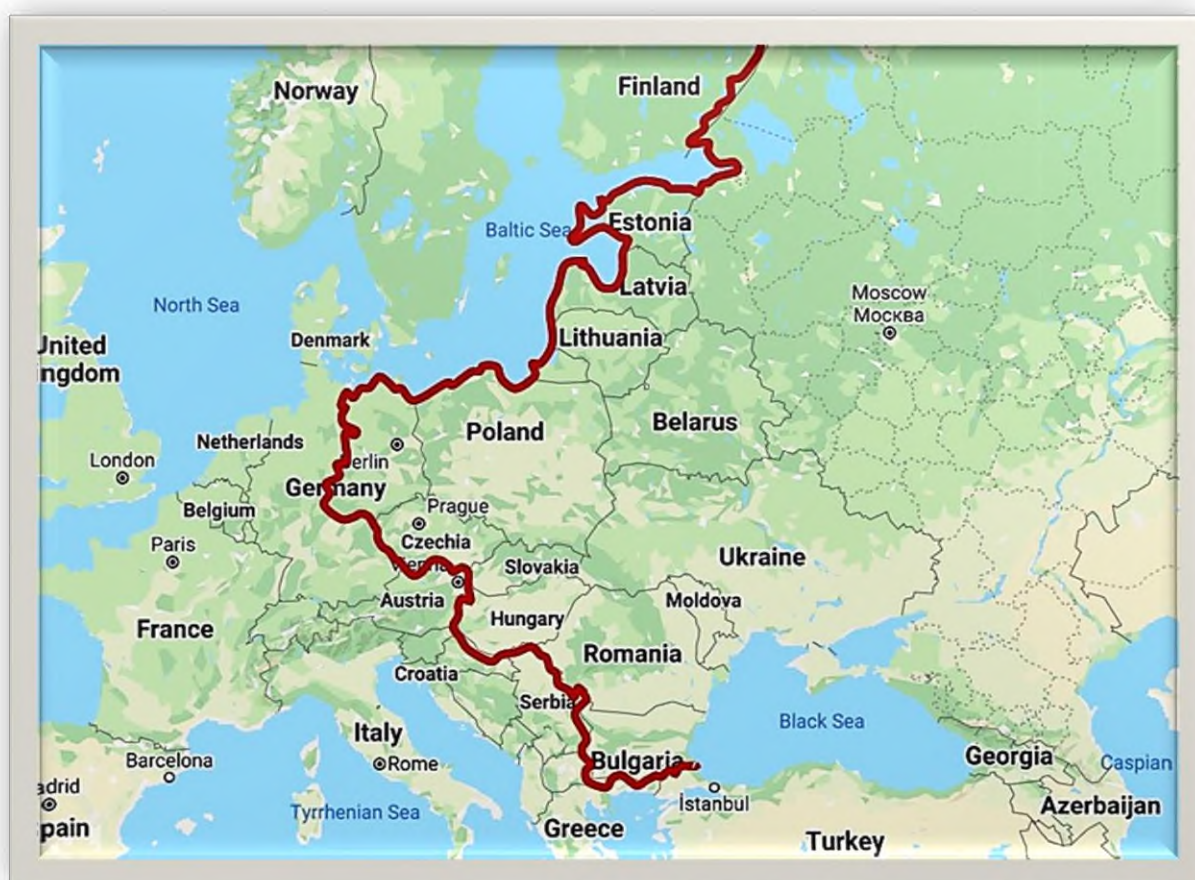
- cross-border connections between the cities level 3-2 - Blagoevgrad (regional center, level 2) and Shtip (center of the Eastern Planning Region of North Macedonia, level 3);
- cross-border connections between cities, level 3-4 – Strumica (center of the South-East Planning Region of North Macedonia, 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 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 Bulgaria are developed or at least signalled.

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 Bulgaria and 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 MK 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.

These sites are included in the short-term investment program of the RIA (Road Infrastructure Agency) for the rehabilitation of the roadway and, accordingly, the reconstruction of the Zlatarevo border crossing after the incident of fire in 2019. All three border checkpoints ensure the movement of goods 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 North Macedonia is built, and from Bulgaria the section of 30 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 cross-border business.

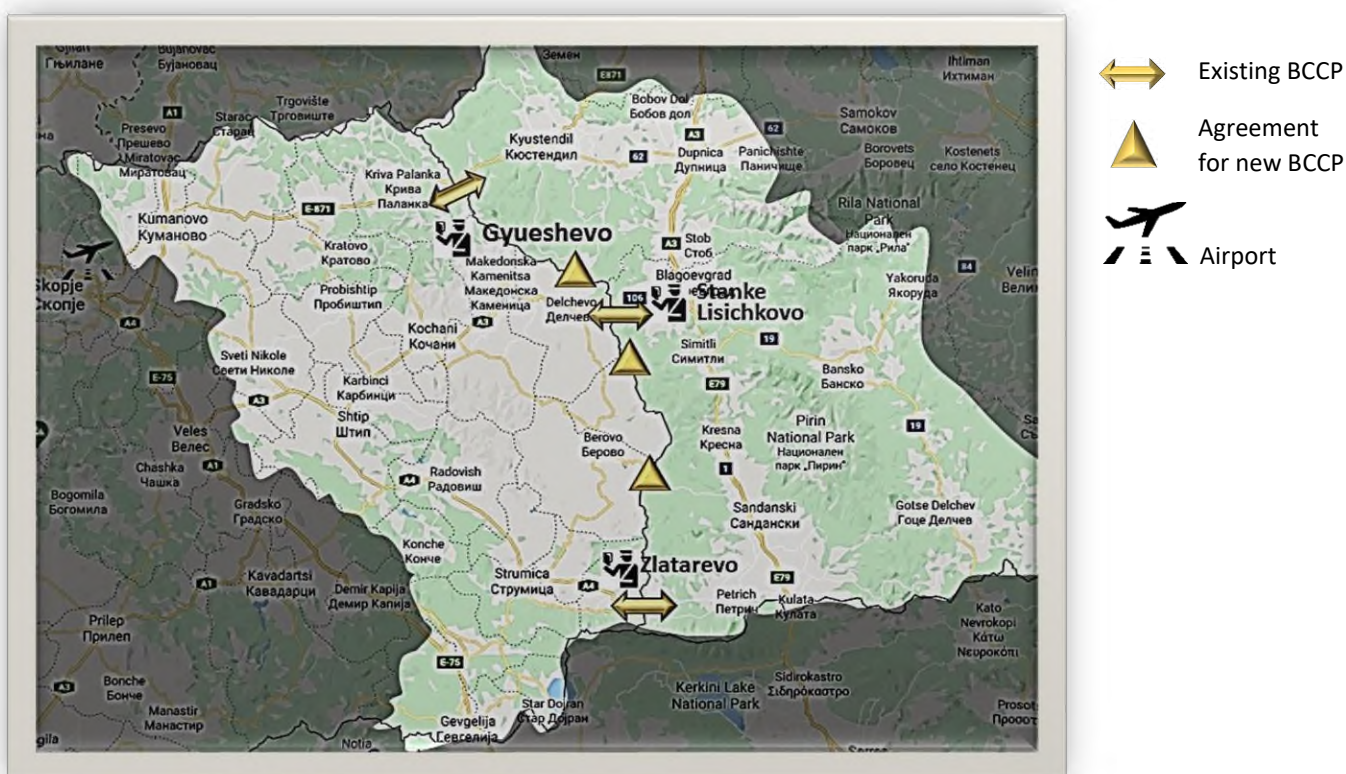
There are intergovernmental agreements between the two countries for opening of three new Border Crossing check-points (BCCP), namely: Strumyani-Berovo (Klepalo), Simitli-Pehchevo and Nevestino-Delchevo (Chernata skala). The Agreement between the Government of North Macedonia and the Government of Bulgaria for opening new international road Border Crossing Check Points Strumyani – Berovo and Simitli – Pehchevo was signed on 14 June 1999 in Skopie.

On the territory of North Macedonia, the BCCP 'Klepalo', Strumyani - Berovo, as well as the access road, have already been constructed in 2001, while on the territory of Bulgaria both the road section and the BCCP are not constructed yet. The detailed works design or construction of the BCCP on Bulgarian territory has been approved and respectively permit for construction has been issued in 2005. Given the long period of time since the approval of works design to the present moment, the

documentation have to be updated accordingly taking into account the current legislation and technical requirements.

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

Map 18: Border crossings



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, Bulgaria and respectively Skopje, 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 2020. 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 2020 around 79 % of households in Bulgaria have access to the Internet and 71 % have a desktop computer, a laptop or tablet. Almost 75 % 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 2013-2020, the relative share of households with Internet access increased by 25 percentage points and the use of broadband increased also by 25 points.

Despite the positive trend in the recent years, the broadband coverage in Bulgaria is still under the EU27 average (89% in 2020) and there is an imbalance between the densely populated areas and sparsely populated ones.

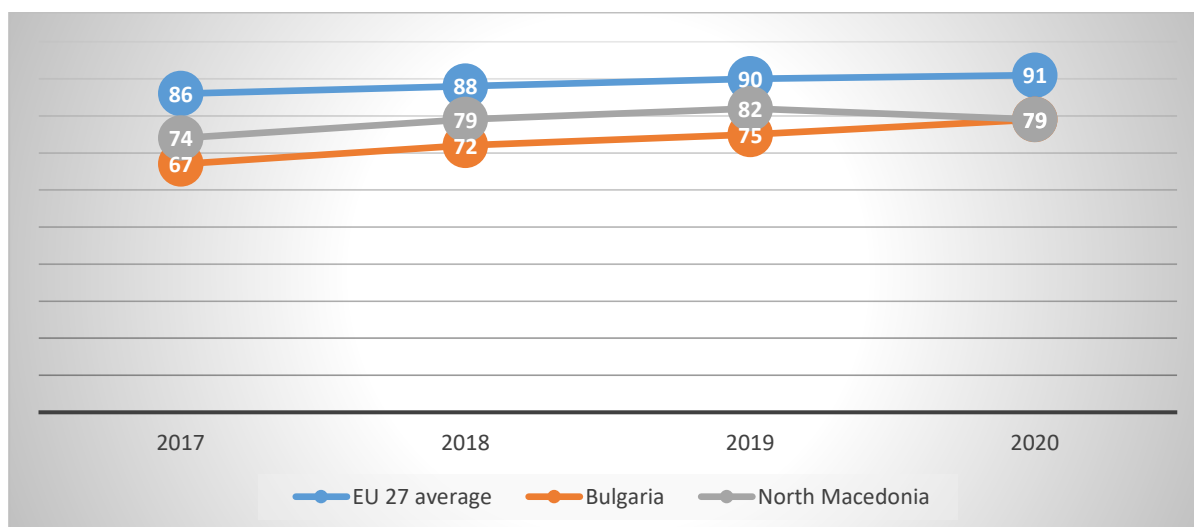
In North Macedonia the use of Broadband Internet connection and mobile broadband connection is higher in the North-East and South-East region – showing a share of 77%, while the share of persons (aged 16 to 74) who used the Internet in 2020 registered in those two regions was 80 and 82% respectively. The East region demonstrated that the share of household units that had access to the Internet in 2020 was 74%, while the share of persons (aged 16 to 74) who used the Internet in 2020 reached 94%.

Table 33: Internet access and usage, 2020 for BG and EU27, 2021 for MK

Administrative unit	Share of households with internet access (%)	Percentage of people aged 16-74 regularly using the Internet (%)
BG average	78.9	69.2
Blagoevgrad	75.8	71.9
Kyustendil	78.6	74.9
MK average	83,7	85,6
NE region	77	80
East region	74	94
SE region	77	82
EU 27	91	86

Source: NSI-2020, MAKSTAT-2021 and EUROSTAT

Figure 19: Share of households with internet access 2014 – 2020 (%)



Source: EUROSTAT

In all the CBC regions the share of households with internet access is below the national and EU 27 average.

Though still below the EU 27 average both Bulgaria and North Macedonia in the period of 2014-2020 demonstrate a significant increase in the share of of housholds with internet access.

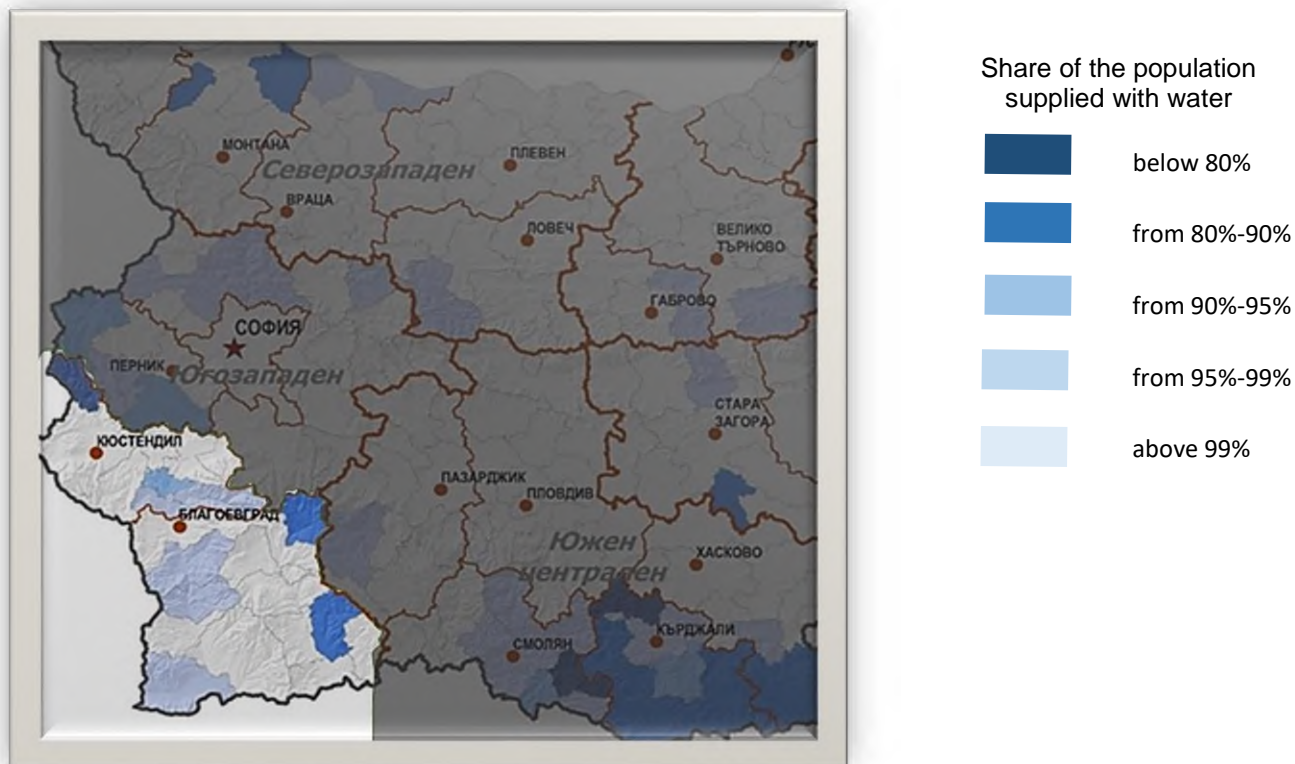
2.8.7 WATER SUPPLY AND SEWAGE

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 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 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 220,000m³ or 0.01%, discharge of unpurified water

Map 19: Scheme of Water supply of the population, 2020



Source: NSI, data processing, NCTR

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 2020, only 76,3% of the Bulgarian population is covered by sewage networks, and less than two-thirds (66,7%) are served by wastewater treatment stations.

In 2020, the Southwestern region has the highest degree of construction (89,8%) 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 period 2013-2020 Blagoevgrad District registered the highest progress of 5.8 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 (in 2020 77.6% of the population connected to WWTP), 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.

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
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
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 – 2020 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:

Table 35: Municipal waste (in thousand tons), 2020

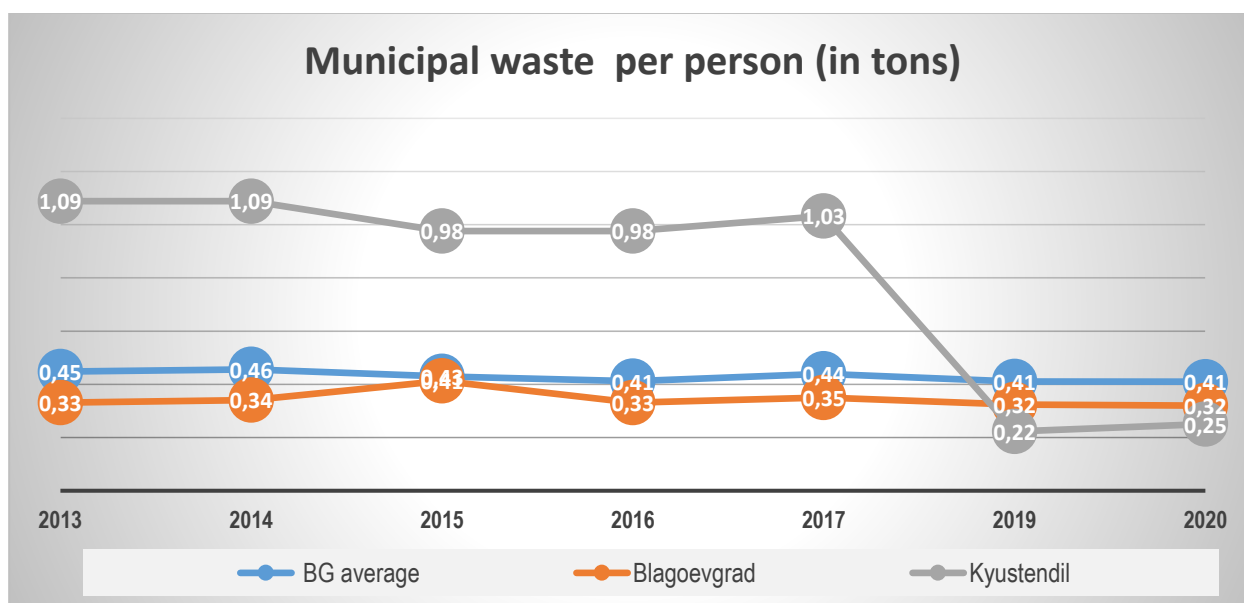
Administrative unit	2012	2013	2014	2015	2016	2017	2018	2019	2020
Total BG	3249	3135	3193	3011	2881	3080	2862	2838	2826
Total BG CBC	149	159	162	178	153	162	127	126	127
Share %	4.6%	5.1%	5.1%	5.9%	5.3%	5.3%	4.4%	4.4%	4,4%
Blagoevgrad	91	101	104	126	101	107	93	99	98
Kyustendil	58	58	58	52	52	55	34	27	29

Source: NSI

Table 36: Municipal waste per person (in tons)

Administrative unit	2012	2013	2014	2015	2016	2017	2018	2019	2020
BG average	0.35	0.43	0.44	0.42	0.41	0.44	0,41	0.40	0,41
Blagoevgrad	0.30	0.33	0.34	0.41	0.33	0.35	0,30	0.32	0,32
Kyustendil	0,44	0,45	0,45	0.41	0.42	0,45	0.29	0.23	0,25

Source: NSI

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

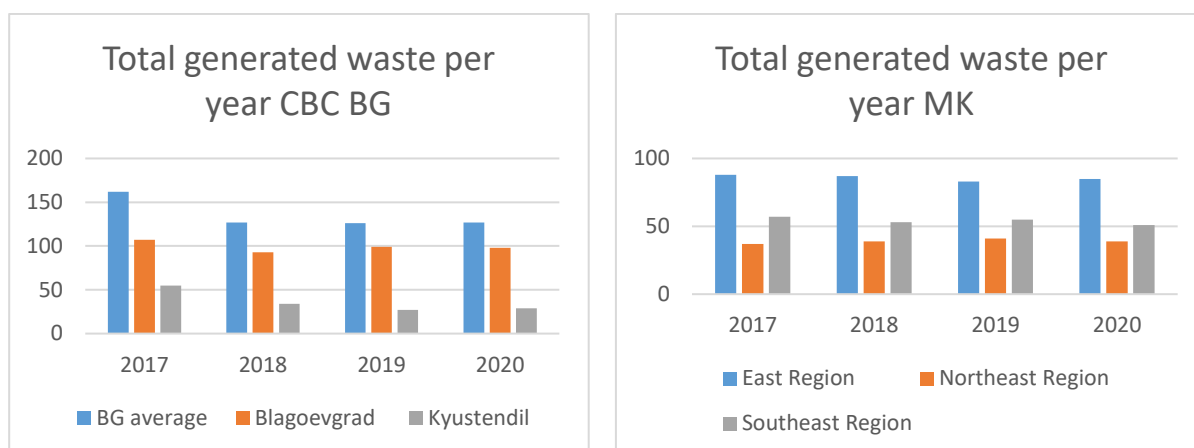
In both Blagoevgrad and Kystendil districts not all settlements have an organized waste collection systems. In most cases, this is due to inaccessible small villages and organizational weaknesses.

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 2020 is showing a slight increase in the generated waste in the Bulgarian part of the CBC area. Whereas, in the CBC area 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 North Macedonia in 2018 (625 thousand tonnes) was landfilled (99,5%). There were 45 active landfills in North Macedonia in 2018.

2.8.9 RENEWABLE ENERGY SOURCES

In line with the commitments made to implement the European Energy 2020 Strategy, 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.

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

Municipality/ District	Hydro power plants	Photovoltaic power plants	Wind Power Plants	Bio Power Plants	Total number	Total power	Density MW/ 1000km ²
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

Municipality/ District	Hydro power plants	Photovoltaic power plants	Wind Power Plants	Bio Power Plants	Total number	Total power	Density MW/ 1000km ²
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
Bulgaria	2362.4	1052.83	700.2	64.2	2337	4179.7	37.7

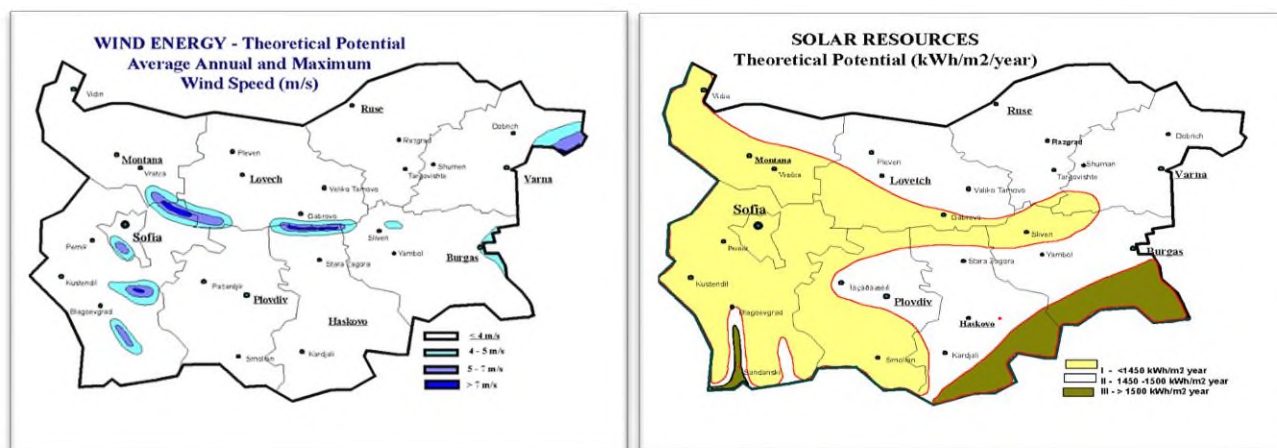
Due to the natural conditions in the Bulgarian part of CBC region - Kyustendil and Blagoevgrad districts, the renewable capacity of RES has long been based on hydropower, most of which are located on the territory of Sandanski municipality. Hydroelectric Power Plants 'Popina Luka' (22 MW), 'Lilyanovo' (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 Bulgaria, and the installed capacity in the region represents 6.08% of the capacity in those in 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 and Solar resources in 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 detailed researches under IPA programme for CBC between Bulgaria and 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.

Table 38: Installed electricity production capacity in North Macedonia

	North – East region MW	East region MW	South-east region MW
2016	6	25	42
2017	6	27	43
2018	6	27	43
2020	6	27	43

2.9 CULTURAL, HISTORICAL AND NATURAL HERITAGE

2.9.1 CULTURAL AND HISTORICAL HERITAGE, INSTITUTIONS

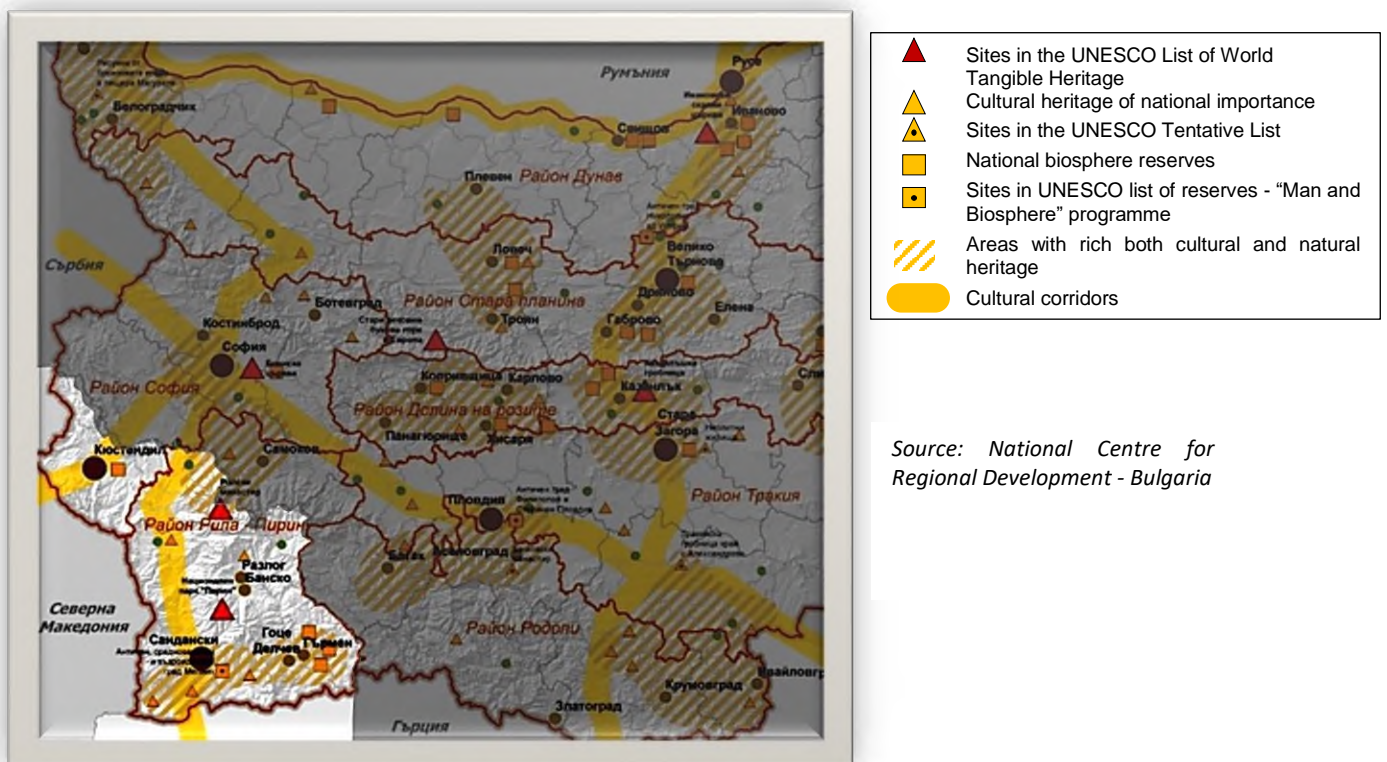
Culture is among the most important factors in the cross-border cooperation framework, since it gives a clear view of common features and provides a common identity for the region. It is a prerequisite for an attractive tourism product and could furthermore be easily utilized as a driving engine for 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**¹⁹ includes 7 cultural and 3 natural sites in Bulgaria. One of them is located in the CBC area – **Rila Monastery** being the largest and most famous Eastern Orthodox monastery in Bulgaria. The whole complex occupies an area of 8800 m² 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 Bulgaria's most important cultural, historical and architectural monuments and is a key tourist attraction for both Bulgaria and Southern Europe.

Map 22: Cultural heritage in CBC area of Bulgaria



Source: National Centre for Regional Development - Bulgaria

¹⁹ <https://whc.unesco.org/en/statesparties/bg>

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 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 Bulgaria among which are Town of Melnik and the Rozhen Monastery.

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

Table 39: Number of Cultural Institutions in Bulgaria (year 2020)

Administrative unit	theatres		museums		cinemas		libraries	
	number	attendance	number	visits in thousands	number	attendance in thousands	number	readers in thousands
total BG	71	769000	182	2236	70	1 316	47	205
CBC	5	51 633*	10	97	5	166	3	9
share %	6.7%	1.9%	5.7%	4.9%	7.2%	3.0%	6.4%	3.8%
Blagoevgrad	3	37 267*	6	61	3	134*	2	6
Kyustendil	2	14 366*	4	36	2	32*	1	3

Source: NSI

*Data is for 2019

Community centres are a traditional public institution in 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 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 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 2014-2019 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 public 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 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 buildings are Ajduk bazaar, Kratovo towers and bridges in Kratovo, national museum and other buildings in Kumanovo and others. It's worth mentioning that due to the historical and cultural importance 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, "Golden Days" in Kratovo, the International "European Festival of Tambourine Orchestras" in Kratovo, 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 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. This shows the need to augment the offer of cultural facilities in the region.

South-East Region 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, Smokvijada Day 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 with 1,564 attendances; 1 professional theatre with 8,160 attendances, 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 trans-continental, even of world importance. Starting from Central Europe into Slovenia, passing successively through Croatia, Bosnia and Herzegovina, Serbia, North Macedonia, 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 Bosphorus 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, 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 Bulgaria and 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-MK). World Heritage Sites (Boyana Church- Bulgaria, Stari Ras and Sopocani, Decani Monastery-Serbia-Montenegro, Ohrid Churches-MK).

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 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 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 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 handicrafts**. 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 Bulgaria that is included in UNESCO World Heritage List: <https://whc.unesco.org/en/list/>

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.

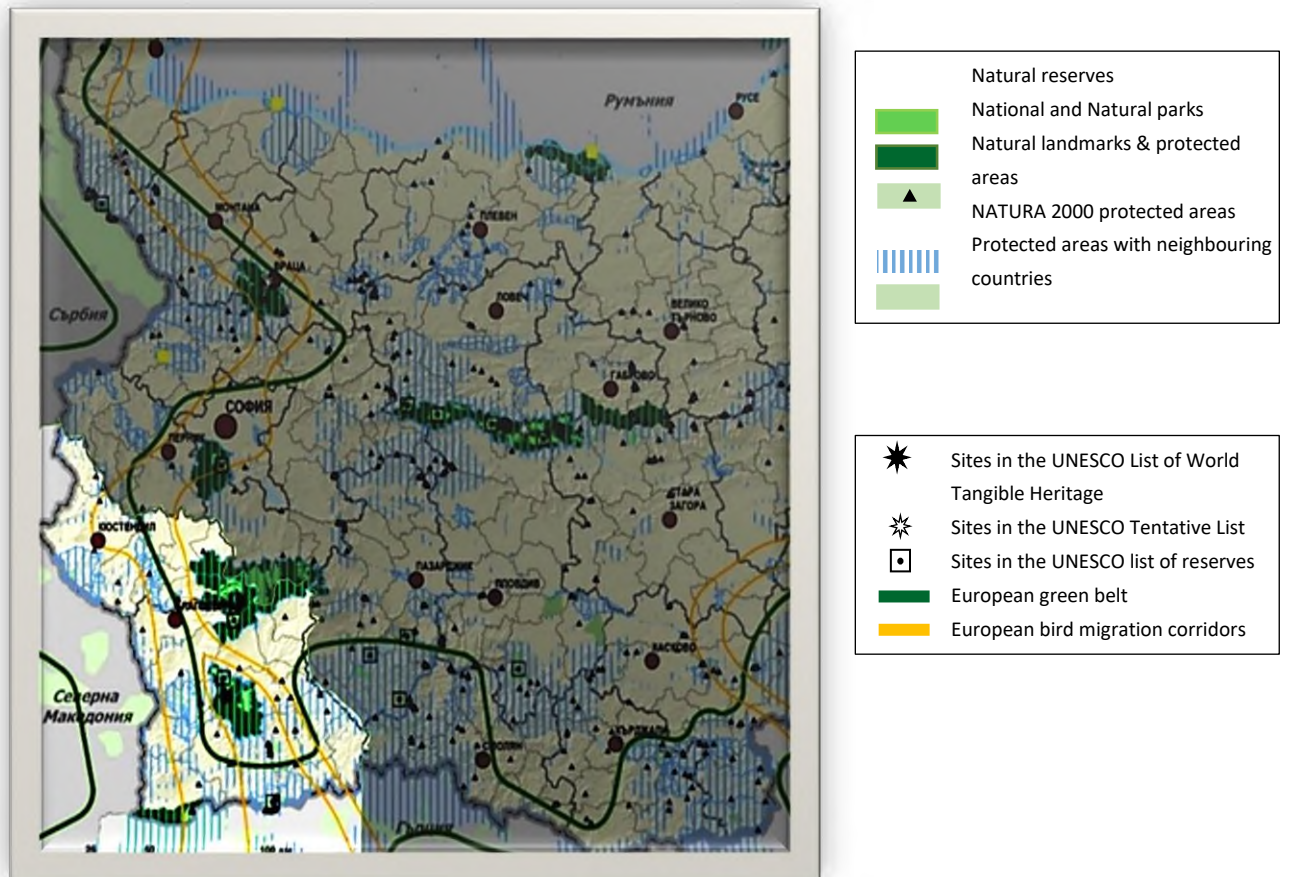
Vihren Park is the park area of Pirin National Park with the most developed tourist network. This is due to the proximity of the park area to the town of Bansko. The city itself is highly developed tourism, which further contributes to the number of tourists in this park area. The main tourist attractions 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 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 Bulgaria, out of which three are situated in the CBC area, namely: Bayuvi Dupki – Dzhindzhiritsa, Alibotoush and Parangalitzha.

Bayuvi Dupki – Dzhindzhiritsa is one of the oldest reserves in Bulgaria (1934) protecting the endangered black and white fir (*Pinus 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 Bulgaria



Source: National Centre for Regional Development - Bulgaria

Parangalitzha 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 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 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 anorthosites 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 North Macedonia.

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 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 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.

3. SWOT ANALYSIS

GEOGRAPHICAL FEATURES	
<p>Strengths</p> <ul style="list-style-type: none"> ✓ Favourable geographic and transport location; ✓ Favourable climate and geo-morphologic conditions; ✓ Proximity of the capital (District of the city of Sofia) 	<p>Weaknesses</p> <ul style="list-style-type: none"> ✓ Peripheral position of the border areas within the territory of the countries; ✓ Mountain relief of the region that impedes transport development
<p>Opportunities</p> <ul style="list-style-type: none"> ✓ Existing natural potential for development and diversification of different forms of tourism; ✓ Opportunities for development taking direct advantage of the favourable location and transport connections; ✓ Opportunities for development of the lagging behind municipalities in terms of favourable geographical situation and resources. 	<p>Threats</p> <ul style="list-style-type: none"> ✓ Natural conditions with negative impact - river floods and fires; ✓ Isolation of smaller municipalities

ECONOMIC DEVELOPMENT	
<p>Strengths</p> <ul style="list-style-type: none"> ✓ Economic growth in BG and MK in recent years; ✓ Good resources for economic diversification (agricultural land, tourism, water, traditions) ✓ Increased economic activity of SMEs; ✓ Availability of active border gates and potential daily visits from neighbor countries; ✓ Availability of natural landmarks, cultural and historical heritages which attract tourist; ✓ Favorable natural/cultural conditions for development in key sectors: tourism, agriculture (plant-growing and stock-breeding), food-processing 	<p>Weaknesses</p> <ul style="list-style-type: none"> ✓ Less investments in areas with demographic issues identified; ✓ Lack of internationally competitive products, low standard accommodation infrastructure; ✓ Low entrepreneurial activity and weak capacity of SMEs to access funds; ✓ Seasonal nature of tourism sector in the CBC area; ✓ Limited maturity of the innovation and entrepreneurship; ✓ With the exception of the North-East Region in MK the rest of the administrative units in the CBC area are with GDP per capita below the average for the respective state
<p>Opportunities</p> <ul style="list-style-type: none"> ✓ Transition to circular economy, reduction in the resource and energy dependency as well as reduction and recovery of waste; 	<p>Threats</p> <ul style="list-style-type: none"> ✓ The overall development of rural areas lagging behind, due to their peripheral and isolated location.

<ul style="list-style-type: none"> ✓ Increased demand for sustainable tourism and organic products; ✓ Regional potential for diversification and promotion of alternative tourism facilities - cultural and wine tourism; ✓ Diversification of the available tourist products and services; ✓ Increasing importance of SMEs in employment and production; ✓ SMEs development and direct support could lead to further economic development of the co-operation area; ✓ Establishing a strong cohesion between business, science and education through contemporary hubs promoting start-up innovation export-oriented companies; ✓ Orientation towards high-technology manufacturing activities in the primary and secondary sectors of the economy. ✓ Applying innovative approaches (digitization, innovative industries, etc.). 	<ul style="list-style-type: none"> ✓ Economic disparities, mainly between urban and rural areas; ✓ Vulnerability to national and world wide financial and economic crisis; ✓ Vulnerability of micro and small enterprises, as well as and tourism sector to the negative consequences of world-wide pandemic situations; ✓ Low technological level of the economy; ✓ Reduction of trained professionals in response to the new challenges for the economic sectors; ✓ Further lagging behind in the competitiveness of the least developed areas;
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LABOUR MARKET	
<i>Strengths</i>	<i>Weaknesses</i>
<ul style="list-style-type: none"> ✓ Positive trend of the employment rate; ✓ With the exception of the NE region the unemployment rate in the CBC area is below the respective national average, ✓ Decrease of unemployment rate in the active population in the eligible area. 	<ul style="list-style-type: none"> ✓ People at risk of poverty and social exclusion; ✓ Migration of younger people and intellectuals from the region to other more developed parts of the country and abroad ✓ Strong disproportion in the level of employment between the regional centre and larger towns and the smaller municipalities ✓ High level of unemployment, in particular in small municipalities ✓ Discrepancy between professional qualification of the labour force and labour market demands and expectations in Bulgarian part of the eligible area.
<i>Opportunities</i>	<i>Threats</i>
<ul style="list-style-type: none"> ✓ Setting up conditions for professional development and attracting young people; ✓ Opportunities for cooperation among the educational and training institutions and business community across the border ✓ Development of labour skills and opportunities and improvement of labour mobility in the CB region; 	<ul style="list-style-type: none"> ✓ Declining sectors in industry leading to unemployment; ✓ Unemployment leads to migration; ✓ Poor employment opportunities in the rural areas and smaller settlements leading to concentration of business activities and employment opportunities mainly in the big towns; ✓ The education is not labour market demands orientated, limited improvement of the educational system.

<ul style="list-style-type: none"> ✓ Growth of the service sectors provides opportunities for new jobs ✓ Stimulating (incl. financing schemes) for start-ups and micro-companies in key fields with potential to create alternative employment (crafts, guest-housing, etc.) ✓ Capacity building activities for self-employment ✓ Development of dual education approach; 	
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SOCIAL DEVELOPMENT	
<i>Strengths</i>	<i>Weaknesses</i>
<ul style="list-style-type: none"> ✓ Relatively good coverage of primary and secondary education; ✓ Relatively good coverage of social and primary healthcare service networks; ✓ Proximity of the universities located in the BG capital (almost 25% of the total number in the country); ✓ Access of the population to all levels of education; 	<ul style="list-style-type: none"> ✓ People at risk of poverty and social exclusion; ✓ Decrease in the number of schools and students in the Bulgarian part of the eligible area; ✓ The skills acquired by university and vocational education graduates are not fit for the labour market of the eligible area; ✓ Insufficient services for the persons with special needs and aged population; ✓ Well educated people are migrating to more developed urban areas.
<i>Opportunities</i>	<i>Threats</i>
<ul style="list-style-type: none"> ✓ Promotion of social entrepreneurship; ✓ Social innovation and cross-border cooperation models for improving social, cultural and health services and inclusion of the disadvantaged groups ✓ Cooperation among the educational and training institutions and business community across the border; ✓ Development of modern types of vocational training, remote learning and tailor-made professional courses; ✓ Existing know-how and positive local practices for social inclusion. 	<ul style="list-style-type: none"> ✓ Further increase of population at risk of poverty and exclusion; ✓ Further increase of population at risk of poverty and exclusion; ✓ Emigration of young and educated (brain drain); ✓ Increase of elderly population due to negative population growth and migration processes; ✓ Vulnerability of healthcare systems to the negative consequences of world-wide pandemic situations; ✓ Increased demand to extension healthcare due to higher share of older population; ✓ Insufficient provision of healthcare service;

ENVIRONMENT	
Strengths	Weaknesses
<ul style="list-style-type: none"> ✓ Diversity of natural environment; ✓ High density of the river network with relatively good eco-status; ✓ Natural resources (forests, waters, thermal spring, mineral resources). ✓ Well-developed National Ecological Network in the CBC region; ✓ Protected areas (national and nature parks, reserves) with well-preserved unique bio-diversity and unique eco-systems; 	<ul style="list-style-type: none"> ✓ Low awareness of the population regarding nature and environment protection; ✓ High degree of vulnerability to climate changes; ✓ High risk of earthquakes; ✓ Relatively high risk of floods; ✓ Relatively high levels of PM10 and PM2.5 in the urban areas; ✓ Outdated infrastructure related to risk prevention; ✓ Low level of development of eco-friendly tourism;
Opportunities	Threats
<ul style="list-style-type: none"> ✓ Increase of the adaptive capacity and support for preventive actions; ✓ Joint risk management and emergency preparedness; ✓ Awareness raising related to climate change; ✓ Common actions to raise awareness on the importance of environment protection. ✓ Cross-border cooperation for sustainable use and management of natural resources of mutual interest; ✓ Existing rich biodiversity as a precondition for diversification of tourism sector, development of eco-tourism; ✓ Direct support of SMEs dealing in the sphere of green and blue economy; 	<ul style="list-style-type: none"> ✓ Industrial risks related to the pollution of waters and soils; ✓ Loss of biodiversity due to air and river pollution; ✓ Uncontrolled use of natural resources; ✓ High frequency of natural and man-made hazards; ✓ Inefficiency in water resources management and flood protection interventions leading to an increase in flood consequence

INFRASTRUCTURE	
Strengths	Weaknesses
<ul style="list-style-type: none"> ✓ 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 style="list-style-type: none"> ✓ Lack of the railway connection between the two sides of the border; ✓ The road and railway network in the Bulgarian part of the eligible area needs additional improvement;

<ul style="list-style-type: none"> ✓ 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 style="list-style-type: none"> ✓ 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
<ul style="list-style-type: none"> ✓ 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; ✓ Replacement and/or reconstruction and modernisation of the water supply network and facilities for reducing water losses. 	<ul style="list-style-type: none"> ✓ 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 treatment;

CULTURAL, HISTORICAL AND NATURAL HERITAGE	
Strengths	Weaknesses
<ul style="list-style-type: none"> ✓ Availability of rich cultural and historical/ archaeological heritage both in MK and BG ✓ Existing variety of cultural and historic monuments and sites ✓ The Cultural Corridor Diagonal road (connecting South East Europe to Asia) passes through the territory of the cross-border region; ✓ Rich natural heritage with unique flora and fauna; 	<ul style="list-style-type: none"> ✓ Low level of visitors/attendees to cultural institutions in the BG CBC area; ✓ Insufficiently developed infrastructure for access to the cultural and historical sites ✓ Insufficient joint actions in the field of cultural heritage exchange ✓ The differences between the administrative systems in the two countries - an obstacle for joint measures concerning preservation of natural and cultural heritage;
Opportunities	Threats
<ul style="list-style-type: none"> ✓ Growth of cultural exchange across the border; ✓ Valorization of natural and cultural resources ✓ Introducing new innovative technologies/ equipment to improve the cultural, historical and natural heritage ✓ Great potential in cooperative measures (e.g. joint planning, strategies, mapping) related to nature and landscape protection and promotion. ✓ Direct support of SMEs and diversification of tourism sector. 	<ul style="list-style-type: none"> ✓ Poor level of protection of natural environment, including absence of environmental infrastructure ✓ Insufficient financial support for cultural activities and cultural heritage exchange ✓ Low integration of the cultural, historical and natural heritage in the tourism product development;

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.

The link between biodiversity and the provision of ecosystem services has not yet been built in the CBC area, despite the large amount of natural areas that enjoy various national and international protection statuses. The Territorial Analysis outlines the pollution of rivers, floods, landslides and fires as the biggest environmental problems of the border region. There are polluted river sections particularly within the catchment area of the Struma, Bregalnitsa, Strumica and part of the Vardar river resulting mainly from the direct flow of waste waters from industry (and mine sites) and households, mine deposits and the use of pesticides and fertilizers in agriculture. According to the EU 2030 biodiversity strategy, ecosystems and their services can be maintained and enhanced by establishing Green Infrastructure (GI) and restoring degraded ecosystems. GI is a strategically planned network of natural and semi-natural areas that are aimed at providing large scope of ecosystem services with a positive impact on all environmental components. As highlighted in the EU Green Infrastructure Strategy, investments in GI have significant potential to strengthen regional and urban development, including by maintaining or creating jobs. The development and deployment of ecosystem-based services in the CBC area would enhance the greening practices benefiting from the existing potential of the border region in and building on the well preserved nature and landscape, rich biodiversity, large number of protected areas and landscapes, taken environmental protection and risk prevention and mitigation measures. PO 2 “A greener, low-carbon Europe by promoting clean and fair energy transition, green and blue investment, the circular economy, climate adaptation and risk prevention and management” is proposed as the exploitation of new forms of ecosystem-based services, through the large variety of greening measures, would contribute to the maintenance of healthy green, physical and living environment, and moreover would generate non-material benefits for people, including aesthetic qualities and recreational experiences.

Taking into account the fact that Bulgaria still has no railway connection with 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 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 Skopje Agreement between the two governments, the road section and the BCCP on territory of Bulgaria were foreseen to be financed under the External Border Initiative 2001 but failed to be realized.

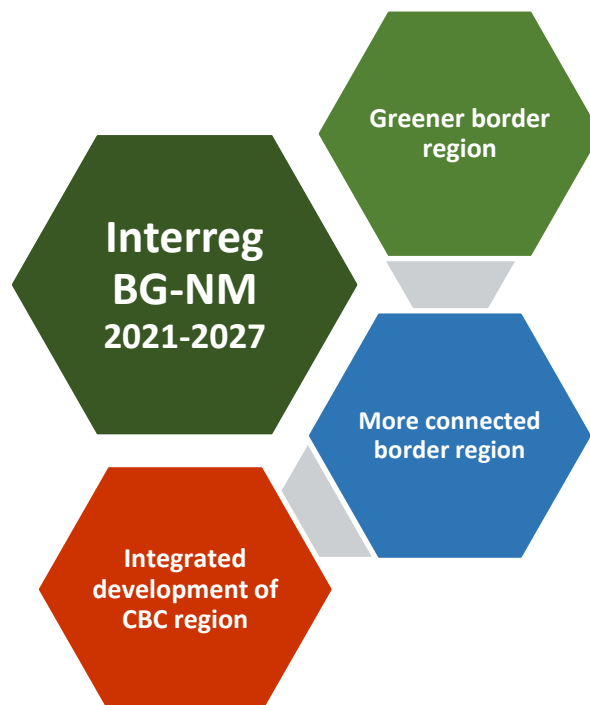
Given the above including construction/reconstruction measures for opening of a new border crossing (at EU external border) are extremely suitable to be included in the programme. The proposed investments require a more strategic approach involving the responsible bodies in both countries and can be foreseen to be financed under PO 3 “A more connected Europe by enhancing mobility”, in particular by actions in the fields of border crossing management and mobility.

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 investments 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 specificities 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 particular local economy and tourism 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 for the thematic concentration of the future programme based on a common territorial development strategy.

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. SMEs support is suitable to be combined by other investments within the scope of the integrated territorial development.

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 Bulgaria – North Macedonia Programme strategy.



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