

Republic of Bulgaria
Ministry of Regional Development – DG Territorial
Cooperation Management

# EX-ANTE EVALUATION AND SEA OF THE BULGARIA – TURKEY IPA CBC PROGRAMME 2014-2020

**Scoping report** 









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#### 1 Introduction

The Regulatory framework for the period 2014-2020 drives European policies, as the Cohesion Policy, towards results in order to contribute to the Europe 2020 strategy for a smart, sustainable and inclusive growth. To this end, the Common Provision Regulation (1303/2013) increases the importance of well-designed programmes taking into great account European, national and regional needs as well as the expected results. In this framework, the role of ex-ante evaluation is reinforced as an essential support to programming authorities in designing Operational Programmes' architecture (clearly organising their intervention logic and defining their contribution to Europe 2020 strategy) and in outlining suitable implementing and monitoring devices to meet evaluation requirements.

Where appropriate, the ex-ante evaluation shall be combine with the **Strategic Environmental Assessment (SEA)** carried out according to the European Directive 2001/42/EC on the assessment of the effects of certain plans and programmes on the environment, known as the SEA Directive. The objective of this directive is *to provide a high level of protection of the environment and to contribute to the integration of environmental considerations into the preparation and adoption of plans and programmes with a view to promoting sustainable development by ensuring that an environmental assessment is carried out of certain plans and programmes which are likely to have significant effects on the environment, as the IPA Cross-border Cooperation Programme Bulgaria-Turkey Programme 2014-2020 of which it will be assessed the possible effects on the environment as an integral part of the whole programming process.* 

The Environmental Assessment of the IPA CBC Bulgaria-Turkey Programme 2014-2020 will follow the SEA process steps corresponding to the typical programming stages within the Cohesion Policy, as defined in the "Guidance document on ex-ante evaluation (2014-2020)". The IPA CBC Bulgaria-Turkey Programme 2014-2020 is a European Cross border cooperation programme which aims to support, thought Instrument for Pre-accession Assistance (IPA), the reforms in the "enlargement countries" with financial and technical help. The IPA Programme gives support for political reforms, support for economic, social and territorial development, with a view to smart, sustainable and inclusive growth, and promotes regional integration and territorial cooperation.

This means that the IPA CBC Bulgaria-Turkey Programme 2014-2020 mainly promote "soft factors" (such as the building of and increasing of capacities including exchange of knowledge and good practices among the participating countries) with limited direct effects on the environment that will be assessed thought the starting process of SEA<sup>2</sup>. Nevertheless, the promotion of "soft factors" forms the basis for further investment activities.

Following the SEA procedure and in accordance with the Bulgarian legislation on Environmental Assessment<sup>3</sup>, this Report (**Scoping report**) is presented by the Managing

<sup>&</sup>lt;sup>1</sup> Anyway, the Programme also provides support for small-scale infrastructures.

<sup>&</sup>lt;sup>2</sup> In this context it should be noted that the Programme sets a framework for cross-border cooperation in small budget and "networking" projects activities with environmental considerations strongly present in it. This probably cannot be connected with significant immediate adverse environmental impacts. In this context, what will be primarily analysed is whether the Programme will contribute to a development framework with indirect, long-term negative impacts. At the same time, long-term environmental benefits will be brought out and enhanced.

<sup>&</sup>lt;sup>3</sup> According to the "Turkey 2013 Progress Monitoring Report on the enlargement strategy" (COM), the alignment with the Strategic Environmental Assessments (SEA) Directive has not started yet.



Authority of the Programme with a request for comments by all the environmental authorities and relevant bodies mentioned in chapter 3 (paragraph 3.1).

#### 2 Purpose of the Scoping Report

In compliance with the requirements of the Directive 2001/42/EC and the national Bulgarian regulation<sup>4</sup>, the SEA aims at assessing the possible impacts on the environment of the IPA CBC Bulgaria-Turkey Programme 2014-2020. The SEA is carried out during the preparation of the programme and will be completed before the submission to the Commission of the programme. The **scoping procedure** is the **first step within the SEA** and aims to describe the range of activities needed to begin the process of collecting information and the methodologies to be applied in the environmental assessment, **serving to decide upon the scope and level of detail of the information which must be included in the Environmental Report**. In accordance with this approach, the scoping process helps, in particular, to:

- define the relevant geographical area and the relevant period of time necessary for tendencies and effects;
- identify relevant environmental issues that should be considered within the SEA;
- define relevant plans, programmes and Environmental protection objectives (SEA objectives) that will guide the assessment process within the SEA;
- define the method of evaluation of the positive and negative effects;
- define the method of generating and evaluating reasonable alternatives;
- determine draft contents and the future structure of the Environmental Report;

Furthermore, the Scoping report includes also a description of the core contents of the Programme IPA Bulgaria-Turkey 2014-2020, in particular the Intervention Logic (overall objective, thematic priorities, priority axes, actions to be supported), and the planned steps of the SEA procedure linked to the programme stages.

#### 3 Consultations

3.1 Consultation on the Scoping report

According to the SEA Bulgarian Regulation<sup>5</sup> for the terms and conditions of the Environmental Assessment of plans and programmes (EA Regulation), Art. 19a, the Scoping report should be consulted, in order to receive their professional opinion, with:

• The competent authority under Article 4 of the EA Regulation: **Ministry of Environment and Water**;<sup>6</sup>

<sup>&</sup>lt;sup>4</sup> Bulgaria transposed the SEA Directive through the Environmental Protection Act No. 91/2002 and by the Ordinance for the conditions and the order for implementing ecological assessment of plans and programmes (Adopted by Council of Ministers Decision № 139 of 24.06.2004, as last amended SG 94 of 30.11.2012).

<sup>&</sup>lt;sup>5</sup> "Ordinance for the conditions and the order for implementing ecological assessment of plans and programmes" (Adopted by Council of Ministers Decision № 139 of 24.06.2004, as last amended SG 94 of 30.11.2012).



- A relevant specialized authority under Art. 13, par. 1: **Ministry of Health** (on the content and scope of the assessment of health and hygienic aspects of the environment and human health risk);
- Other interested authorities, representatives of the public and third parties, which can be affected by the Programme implementation, in accordance with the scheme of art. 19, par. 3.: Regional Inspectorate of Environment and Water of Stara Zagora, Burgas and Haskovo; Basin Directorates of "Black Sea Region" and "East Aegean region"<sup>7</sup>.

In Turkey, even if the transposition of the SEA Directive has not been completed, the authority to be consulted is the Turkish **Ministry of Environment and Forestry**;

The Scoping report could be consulted also with the relevant **local authorities of the eligible area of the Programme** (in Bulgaria the districts of **Burgas, Yambol** and **Haskovo**; in Turkey: the provinces of **Edirne and Kirklareli**).

All the environmental authorities and relevant bodies consulted on the Scoping report will have **14 days to send** their **remarks**, that will be take into consideration for the implementation of the assessment of the environmental effects of the Programme and the implementation of the Environmental Report.

The **major goal** of the present document is, in fact, to identify and share with environmental authorities and relevant bodies the **methodological approach** proposed for the Environmental assessment. It must be underlined that this Scoping Report does not contain any technical analysis on the effects of the proposed Programme on environmental issues, but is a methodological tool to identify the investigations that will be developed in the Environmental Report. For this purpose it is asked to the identified authorities to provide comments and suggestions on the methodological approach, namely:

- Identification of additional environmental issues/cross cutting themes;
- Other plans/programmes to be considered and consequent SEA objectives;
- Possible additional evaluation questions;
- Other sources of information.

#### 3.2 Consultation on the Environmental report

According to the SEA Directive and the national SEA laws, the Environmental report and the Operational Programme (OP) must be made available to the relevant authorities and the public in both participating countries for consultation.

The **Environmental report** and it's **Non Technical Summary** will be accessible in the consultation phase of **30 days** at the same time with the draft OP. All the responses will be collected and explanation shall be given showing how the Environmental report and the consultation replies have been taken into account in the final Programme.

In the **public consultation process** should at least be involved: the competent authority and other interested and relevant environmental authorities, representatives of the public and third parties, which can be affected by the programme implementation, the districts



<sup>&</sup>lt;sup>6</sup> Art 4: Competent authorities of the EC plans and programs are: 1. The plans and programs approved by the central executive authorities and the National Assembly - Minister of Environment and Water; 2. Plans and programs approved by the local executive authority or municipal council - the director of the Regional Inspectorate of Environment and Water (RIEWs) or the Minister of Environment and Water in the scope of their competence.

<sup>&</sup>lt;sup>7</sup> As recommended by the Ministry of Environment and Water.



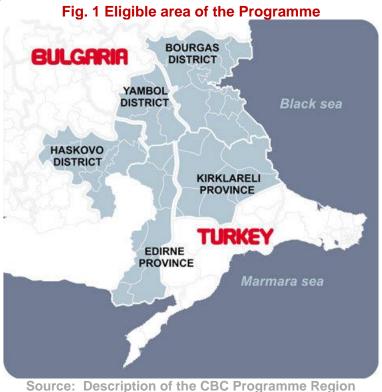
authorities, non-governmental organizations (NGOs), environmental agencies, professional associations, employer's organizations, trades unions, associations of local self-government, foundations, independent research institutes, the not-for profit media, etc..

The consultations will be formal and (eventually) informal. Formal consultations will be conducted by: official letters (on paper or by e-mail), publications in mass media and/or website of the Managing Authority of the Programme, and the competent authorities; official letters and publications in the press and on the Internet for consultations with the public, the interested authorities and third parties who are likely to be affected by the Programme. Informal consultation could be conducted through informal meetings between SEA experts and representatives of the Managing Authority, representatives of the competent authorities, national authorities.

#### 4 Overview of the Programme CBC Bulgaria – Turkey 2014-2020

#### 4.1 Geographical area of relevance

Geographically, the analysis of the current state of the environment, the description of development trends (zero-option scenario) and the assessment of possible effects resulting from the implementation of the IPA CBC Programme between Bulgaria and Turkey cover the eligible area of the Programme (see Figure 1), which is located in **South-Eastern Europe** and includes the **districts of Burgas, Yambol and Haskovo in Bulgaria** and the **provinces of Edirne and Kirklareli in Turkey**. The overall eligible area is about 29.000 km² representing 14.99% of the Bulgarian territory and 1.58% of the Turkey total country territory. The total population is of 1,5 Million people (784.480 in the Bulgarian area and 742.000 in the Turkish one) showing a very low population density from 39,7 inhabitants/km² in Yambol to 64,7 inhabitants/km² in Edirne.The core programme area remains the same as in the period 2007-2013.









#### 4.2 Relevant period of time

The considered period of time for which positive and negative effects will be assessed is the programming period 2014-2020 plus tree more years, until most of the funded projects will be completed: the relevant period of time therefore is 2014-2023.

#### 4.3 Core contents of the Programme

#### General framework of the Programme

The IPA CBC Bulgaria-Turkey Programme 2014-2020 is a European cooperation programme which aims to improve and preserve the environment to foster sustainability (in all dimension) and quality of life (**Priority Axis 1**) and strengthening the tourism sector by capitalising on the cultural and natural heritage in the BG-TR CBC region (**Priority Axis 2**). The strategic orientation of the Programme considers both EU policies and regulatory framework as well as the specific situation and needs of the Programme area<sup>8</sup>.

Regarding EU strategic and regulatory documents, the most relevant for the Programme are:

- the Union strategy for smart, sustainable and inclusive growth (Europe 2020 Strategy);
- the Framework regulation on the implementation of ETC initiatives<sup>9</sup>;
- the IPA II regulation<sup>10</sup>, the regulation on the specific rules for implementing IPA II<sup>11</sup>, and the regulation on common rules and procedures for the implementation of the Union's instruments for financing external action<sup>12</sup>;
- the (draft) EC Partnership Agreement of the Republic of Bulgaria<sup>13</sup>;
- the EC country Strategy Paper 2014-2020 for EU assistance to Turkey<sup>14</sup>;
- the Commission staff working document "Elements for a Common Strategic Framework 2014 to 2020" which suggests in Annex II a number of characteristics of transnational (and cross-border) cooperation. Cross-border cooperation, in particular, is characterised by some features, which can be summarised as: coverage of large areas with a high diversity of regions and often conflicting interests; limited budgets in relation to the covered area, population and time frame, which often contradict the scope and objectives of cooperation initiatives; limited ability to deliver direct investment effects, acting as an auxiliary to mainstream programmes; mainly intangible results.

The Bulgaria-Turkey IPA CBC Programme (2014-2020) also considers how it could potentially contribute to implement the actions foreseen by the "Black Sea Synergy – A New

The draft document is available at www.ipa.gov.tr/.../document/IPA%20II%20CSP%...



<sup>&</sup>lt;sup>8</sup> The strategic orientation further reflects the CBC relevance of potential interventions.

<sup>&</sup>lt;sup>9</sup> Regulation (EU) No 1299/2013 of the EP and the Council of 17 December 2013.

<sup>&</sup>lt;sup>10</sup> Regulation (EU) No 231/2014 of the EP and the Council of 11 March 2014.

Regulation (EU) No 447/2014 of the EP and the Council of 2 May 2014.

<sup>&</sup>lt;sup>12</sup> Regulation (EU) No 236/2014 of the EP and the Council of 11 March 2014.

<sup>&</sup>lt;sup>13</sup> Draft Partnership Agreement of the Republic of Bulgaria outlining the Support from the European Structural and Investment Funds for the 2014-202 Period, January 2014. The Partnership Agreement between Bulgaria and the European Commission defines as main priority areas for cooperation: environmental protection, promotion and development of natural and cultural heritage, tourism and education and social infrastructure, with special emphasis on employment promotion, labour mobility and poverty reduction.



**Regional Cooperation Initiative**" that focuses on 13 cooperation sectors, including democracy and good governance, managing movement and improving security, "frozen" conflicts, energy, transport, **environment, maritime policy, fisheries**, trade, research and education networks, science and technology, employment and social affairs, and regional development.<sup>15</sup>

In addition, the following **horizontal principals** are taken into consideration for the strategic orientation of the Programme:

- Sustainable development;
- · Equal opportunities and non discrimination, and
- Equality between man and women.

#### Key objectives and priorities of the Programme

The process carried on for the definition of Programme priorities has been characterized by the elaboration of a Regional Analysis and the Analysis of Strengths, Weaknesses, Opportunities, Threats (SWOT) and Needs/Challenges for the Programme's intervention area.

In a final analytical step the results, *in primis*, of the territorial situation as well as the results of the SWOT analysis and need assessment have been "translated" into a "priorisation" and a list of 2 out of 8 **Thematic Priorities** for assistance for territorial cooperation for the period from 2014-2020, as identified in the Annex III of the IPA II regulation:

- 2. Protecting the environment and promoting climate change adaption, risk prevention and management
- 4. Encouraging Tourism and cultural and natural heritage

For selection of thematic priorities (in correspondence to the strategic IPA II Programming Framework) have been taken into account the relevance of the topic regarding cross-border cooperation, as well as budget constraints<sup>16</sup>.

As results of regional consultation process (online survey and discussions with stakeholders) and on the basis of the evidence of the actual programming period (lessons learned from current CBC Programme's implementation), as per the decision taken by the Joint Working Group (JWG) on 15<sup>th</sup> May 2014 in Ankara, Turkey, the agreed strategic framework of the Programme comprises of **2 Priority Axes** (corresponding to the formulated Programme's concentration), with minimum number of **Specific objectives** under each of them, namely:

**Tab. 1 Priority Axes identified** 

THEMATIC PRIORITY	PRIORITY AXIS	
2. Protecting the environment and promoting climate change adaption, risk prevention and management	Improve and preserve the environment to foster sustainability (in all dimension) and quality of life	
4. Encouraging Tourism and cultural and natural heritage	2. strengthening the tourism sector by capitalising on the cultural and natural heritage in the BG-TR CBC region	

<sup>15</sup> http://eeas.europa.eu/blacksea/index\_en.htm

The guiding question of the assessment was: "Which ones of the priorities have cross-border relevance and which ones can develop thehighest effects in this particular border setting?".





The provisional Programme's budget<sup>17</sup> is set out at max. 27 Mio EUR (EU contribution). The programming team have proposed the following proportionate distribution of the financial resources available among the 3 Priority Axes:

Tab. 2 Distribution of the Programme's financial resources

PRIORITY AXES		% <sup>18</sup>
	eserve the environment to foster all dimension) and quality of life	47%
2. strengthening the tourism sector by capitalising on the cultural and natural heritage in the BG-TR CBC region		43%

The proposed Intervention Logic of the Bulgaria-Turkey IPA CBC Programme 2014-2020 (see the table below) reflects also the programming team approach to future selection of potential projects searching financing from the Programme, namely: the selection of actions to be made at level of "specific objectives". There is also a "long-list" of potential "result" which are to be used for further investigating the most appropriate and feasible options to be included in the Programme.

**Tab. 3 Programme's Intervention Logic** 

Thematic Priority 2: "Protecting the environment and promoting climate change adaption, risk prevention and management"

Priority Axis 1 "Cooperating on the improvement and preservation of the environment to foster sustainability (in all dimensions) and quality of life"		
Specific Objective	Results	Actions to be supported
SO-1.1.  To prevent and mitigate the risks and consequences of		Development of early warning and disaster management systems.
natural and man-made hazards and disasters in the CBC region	R1.1-1.Reducing of damages in the CBC river basins due to flooding events.	Investments in equipment related to disaster resilience: up-to-date ICT solutions in pre-fire, fire and post-fire activities; supply of specialized fire-fighting equipment; supply of specialized equipment for floods, and for search and rescue
	R1.1-2. Reduction of damages in the CBC regions due to fire (forest and agricultural land).	interventions; supply of system for air surveillance of the surface and real time transmission of data, etc.  Support of small-scale interventions / investments: sanitation and reforestation of river banks; building flood defence (dikes, canals etc.); forestation of non-permanent vulnerable land; cuttings for emergency situations.

A provisional budget proposal has been furnished at beginning of June 2014.
 10% on the total amount will be available for "Technical Assistance".





		·
SO-1.2. Improvement of the capacity for nature protection and sustainable use of common natural resources in the CBC area	R1-2. Improved capacity for nature protection and sustainable use of common natural resources in the CBC area	Appropriate investment activities in relation to flooding and fire protection & early warning systems development and implementation.  Joint trainings and raising awareness of public service actors and population for disaster resilience.  Joint cooperation initiatives targeting the effective management of protected areas  Joint initiatives towards the protection and restoration of ecosystems and endangered animal species  Preservation and improvement of the quality of natural resources (air, soil, water)  Building capacities of local authorities in the environment-related matters  Cooperation, exchange of experiences and knowledge between institutions;  Cooperation between authorities and NGOs in the field of safe and sustainable low-carbon economy
SO-1.3.	R1-1-3.	across borders Cooperative measures of education
Foster and increase capacity and knowledge transfer across borders in the field of the environment and low-carbon economy	Convincing track record of educational institutions working together across borders in the field of development and implementation of curricula of education and training activities related to the environment and low-carbon economy	institutions in the field of environment and low-carbon economy  Development and implementation of joint activities including information and awareness campaigns and exchange of know-how in the fields of environmental & nature protection

### Thematic Priority 4: "Encouraging Tourism and cultural and natural heritage"

Priority Axis 2 "Cooperating on the strengthening of the tourism sector by capitalising on the cultural and natural heritage in the BG-TR CBC region		
Specific Objective	Results	Actions to be supported
SO2.1. Increasing tourist attractiveness of the border area through better utilisation of natural and cultural heritage	R-2-1. Increased tourist attractiveness of the cross- border region	Rehabilitation of access roads to natural, cultural and historic tourism sites; public utilities upgrade (electricity, water-supply, sewerage, etc.); small touristic border crossings and related facilities; ICT facilities developed/upgrade  Restoration and maintenance of sites of historical and cultural importance; conservation and protection of (both
		tangible and non-tangible) natural, historical and cultural heritage





		Cycling routes; walking paths
		Oyoming routes, waiking patris
		Establishment of info-centres and/or kiosks to guide potential visitors; development of joint GIS platforms; development of joint platforms for online reservations, payment, etc.
SO-2.2. Increased offer of sustainable touristic services on both sides of the border	R2-2. Increased number of tourists in the sustainable tourism and hospitality sector	Joint researches on potential niche tourism activities and/or on the demand for new tourist destinations and experience.  Research activities to identify tourist products with potential for cross-border branding.  Development of local brand/s based on natural, historical and cultural heritage of the region.  Multi-lingual on-line platforms presenting ready-to-go touristic projects targeted at key investors.  Support for the development of new and innovative products and services to be delivered on sites.  Training and consultancy support services for tourism enterprises/establishments to improve skills and performance.  Visualisation of local brand/s, incl. 3D visualisation, mobile applications, social networks, tailor-made internet platforms, and other innovative tools  Organisation (and participation in) of fairs and related activities (i.e. exhibitions, conferences, seminars, round tables, presentations, etc.)  Identification and application of best practices in tourism promotion
SO-2.3 Capitalise the effect of cultural and natural heritage tourism on communities	R2-3. Enhanced capacity of public and private sector for the sustainable use of natural and cultural heritage and resources	Possibilities for exchange of good practices in sustainable tourism management, incl. online forums.  Organisation of networking events, incl. initiatives for strengthening existing and establishing new partnerships in the area of sustainable tourism.  Surveys on domestic and international demand for cross-border tourism experiences; surveys on quality of extant services, projects to monitor sustainable tourism development and related services Organisation of joint events to promote cross-border natural and cultural heritage, such as one-day festivals, exhibitions, performances, etc., etc.





 ,
common traditions of the borderland
areas.
Awareness raising campaigns on the
values of regional cultural and natural
heritage, incl. among youth.
Joint actions for regional and local
cross-border cooperation and
capacity building in the field of
tourism - trainings, best practice &
networking events, surveys,
researches on the legal framework in
the field of tourism, on-line forums,
conferences, seminars, round tables,
presentations and others
Joint local development initiatives for
specific target groups (youth,
migrants, and others)
Joint marketing and networking
activities

#### 5 Defining the scope of the assessment

#### 5.1 Environmental Issues

The main Environmental issues and concerns that will be considered under the SEA are: 1) air and climate; 2) biodiversity, fauna and flora; 3) water; 4) soil; 5) population and human health; 6) cultural/natural heritage and landscape.

Issues like the "use of renewable energy sources", "energy efficiency", "adaptation to climate change", "mobility and transport", "waste management and prevention", "risk management", "sustainable tourism", "sustainable use of natural resources" and "environmental education and awareness raising on environmental issues" will be considered as cross-cutting themes (as they directly or indirectly affect the selected environmental issues).

# 5.2 Relevant plans, programmes and Environmental protection objectives/SEA Objetcives

For comprehensive programming documents, during the preparation of the Environmental Report it is useful to initially identify all of the relevant **environmental protection objectives** for the entire programming document. In order to evaluate the consistency of the IPA CBC Bulgaria-Turkey 2014-2020 with EU and international environmental goals and objectives, the following programmes, strategies, directives and acts will be used as basic reference:

- the "7<sup>th</sup> EU Environmental Action Plan Programme: 'Living well, within the limits of our planet";
- EU Strategy Europe 2020 (for the headline targets of long term which relate to environmental aspects and the underpinning flagship initiative Resource Efficient Europe (to help decouple economic growth from the use of resources, by decarbonising the economy, increasing the use of renewable sources, modernising the transport sector and promoting energy efficiency);
- EU 2020 Biodiversity Strategy;





- "Black Sea Synergy A New Regional Cooperation Initiative" that focuses on 13 cooperation sectors, including democracy and good governance, managing movement and improving security, "frozen" conflicts, energy, transport, environment, maritime policy, fisheries, trade, research and education networks, science and technology, employment and social affairs, and regional development<sup>19</sup> and the Strategic Action Plan for the Environmental Protection and Rehabilitation of the Black Sea;
- **EU Thematic Strategies:** on Air pollution, on Soil protection, on sustainable use of natural resources, for sustainable development, on the Protection and Conservation of Marine Environment, for more Growth and Jobs in Coastal and Maritime Tourism, etc:
- **EU Directives** (EU Climate and Energy Package 2020, EU Directive on ambient air quality and cleaner air for Europe, EU Natura 2000 Directives, EU Water Framework Directive, EU Marine Strategy Framework Directive, EU Waste Framework Directive, EU Urban Waste Water Treatment Directive, EU Floods Directive, etc.);
- **EU and international Conventions**: EU Landscape convention, UNESCO World Cultural and Natural Heritage Convention; UN Convention on Climate Change and its Kyoto protocol; UE Convention on Biological Diversity and its Procotols, Barcelona Convention and its Protocol on Integrated Coastal Zone Management, etc.
- Working Documents, Discussion Paper (possible).

Moreover, environmental goals and objectives at the national level will be take into account, were available.

For <u>Bulgaria</u>, the legal and environmentally relevant policy framework to be considered includes, among all:

- National Development Programme "Bulgaria 2020" (adopted by the Council of Ministers on 19/12/2012), a leading strategic and programming document which defines the objectives and policies for the development of the country by 2020. The programme identifies the development vision, objectives and priorities<sup>20</sup>, as well as policies on priority areas;
- Guidelines for the integration of environmental policy in the programming period 2014-2020, developed by the Ministry of Environment and Water, Bulgaria (approved by the Council of Ministers on 01.03.2013);
- Environment Protection Act, and
- Other main statutes relating to the environment, namely: Biological Diversity
  Act; new Waste Management Act, Protected Areas Act, Soils Act, Ambient Air
  Purity Act, Waters Act, Plant Protection Act, etc.
- For <u>Turkey</u> the environmental strategic framework is based on the **EU integrated** environmental approximation strategy 2007-2023, the strategy by which Turkey
   aligns its legislation, institutional structures and work practices with the requirements

Priority 3: "Achieving sustainable integrated regional development and use of local potential with focus on creation of conditions for the conservation and improvement of the environment in the regions".

<sup>&</sup>lt;sup>19</sup> http://eeas.europa.eu/blacksea/index\_en.htm



- of the Environmental European legislation (Chapter 27 of the *Acquis communautaire*). The framework also includes:
- The Tenth Development Plan (2014-2018) of the Republic of Turkey centres amongst other things upon the main goal of liveable places and sustainable environment; main objectives include the construction of disaster-resistant living places and the extension of environment friendly practices and the sustainable use of natural resources;
- National parks Act, Hunting Act, animal protection Act, and
- Law on water, Law on underground water, Law on floods, forestry Law, etc.

Where the difference between the two countries' legal system in the field of environmental regulatory is significant, the relevant EU environmental goals and objectives will be considered.

Taking into account the above identified environmental legislation and policy framework, for each defined environmental issue (and cross-cutting theme), qualitative and quantitative **SEA Objectives** will be compiled.

Examples of possible SEA Objectives are summarized in the table below.

Tab. 4 Possible SEA Objectives

Tab. 4 Possible SEA Objectives		
Environmental Issue	Possible SEA Objectives	
	Reduction of the GHG emissions	
	Reduction of air pollution	
	Improvement of energy efficiency and increase of use of renewable energy resources	
Air and Climate	Support of environmentally friendly transports and promotion of development and usage of public transport	
	Promotion of forest fire fight management and prevention	
	Promotion of resilience to climate change and climate-related disasters	
	•	
	<ul> <li>Preservation of biodiversity, habitats and ecosystems and their services</li> </ul>	
	<ul> <li>Preservation of the natural diversity of fauna, flora, and habitats in protected areas and Natura 2000 sites</li> </ul>	
Biodiversity,	Protection of endangered species (plants and animals)	
Flora and Fauna	Decrease in loss of biodiversity	
	Promotion of tourism that would ensure high degree of nature conservation	
	•	
Water	Reduction of water pollution from point and diffuse sources	
VValei	Promotion of good environmental status of marine waters	





Environmental Issue	Possible SEA Objectives	
	Promotion of sustainable use of water resources	
	Reduction of flood risks	
	•	
	Preservation of the soil functionality	
	Reduction of soil degradation, erosion and pollution	
Seil.	Promotion of sustainable use of soil resource	
Soil	Reduction of waste generation, increase in waste recover and recycling of all waste	
	<ul> <li>Promotion of a better waste management in costal areas</li> <li></li> </ul>	
	Reduction of diseases caused by natural hazards	
	Promotion of sustainable waste management to protect human health	
	Promotion of controls of environmental related health risks and hazards	
Population and Human Health	Promotion of risk prevention and management of natural and man- made disasters	
	Prevention of environmental noise exposure	
	Promotion of environmentally-responsible behaviour of the public by involving the citizens into the solution of environmental problems	
	•	
	Protection, preservation and rehabilitation of natural and cultural heritage	
Cultural/Natural	Promotion of sustainable management and planning of cultural and natural landscape	
Heritage and Landscape	Promotion of sustainable use of natural resources towards sustainable tourism	
	Protection of coastal and maritime cultural landscapes	
	•	

An assessment of the relevance consistency of the Priority Axes and Specific Objectives of the IPA CBC Bulgaria-Turkey Programme 2014-2020 to the defined SEA Objectives could be given in a matrix summarizing the integration of the environmental objectives in the Draft OP.





#### 5.3 Baseline information

Alongside other **data sources**, the data used in the Environmental report will be primarily based on **statistical sources**.

Data needed for the description of the current state of the environment within the crossborder area and its likely evolution without Programme implementation (zero-option scenario)<sup>21</sup> will be, for example, based on the analysis of secondary data. The evaluation of the initial status and trends are mainly based on data at national level. Nevertheless, when regional/territorial specific environmental information and database are available, the evaluation is undertaken at that level. The description of the current state of the environment will also include an overview of the relevant environmental characteristics of areas likely to be significantly affected as well as of any existing environmental problems which are relevant to the Programme including, in particular, those relating to any areas of a particular environmental importance (e.g. areas designated pursuant to Directives 2009/147/EC and 92/43/EEC)<sup>22</sup>. In order to depict the current state of the environment within the Programme, the status quo of the environmental issues will be considered. The description will cover only those environmental issues<sup>23</sup> which have been identified as relevant in the chapter 5.1, as well as in the case of the assessment of likely significant effects on the environment (at the moment, general information on the state of the environment can be find in Annex 1). The main characteristic of these environmental issues will be described using corresponding indicators. Alongside other sources (as an example: ESPON 2013 Database), the description will be primarily based on data provided by Eurostat Publications as well as on data published by European Environmental Agency (EEA). An outline of the environmental state (and trends) for the cross-border region will be given using as a basic source the publication of EEA "The European Environment-State and Outlook 2010". In other cases other national data sources mentioned in the following list will be used:

- Statistical Reference Book, 2010-2013, National Statistical Institute of the Republic of Bulgaria (NSI);
- Statistical Yearbook, 2010-2012, National Statistical Institute of the Republic of Bulgaria (NSI);
- Regional Development Plan of Bulgarian Southeast Region 2014-2020;
- Regional Development Plan of Bulgarian Southcentral Region 2014-2020;
- Regional Development Strategies 2014-2020 of Burgas, Yambol and Haskovo;
- Tenth Development Plan (2014-2018), Republic of Turkey;
- Turkish Statistical Institute (www.tuikapp.tuik.gov.tr)
- Republic of Turkey, Ministry of Environment and Forestry, official statistics<sup>24</sup>.

Furthermore, secondary sources (background documents, specific sector database, etc.) will be gathered during detailed and systematic **literary review**.



<sup>&</sup>lt;sup>21</sup> The zero-option scenario will describe the anticipated development of environmental factors in the Programme area without the implementation of the future OP 2014-2020. Thus, it will form the baseline for the subsequent assessment of the potential effect of the Programme on the environment. The possible evolution of the environment will be estimated on the basis of data trends providing an appropriate forecast horizon up to 2020.

Relevant for the procedure of **Compatibility Assessment (CA**) that must be carried out on the Programme with the object and purpose of the conservation of the protected areas of the ecological network "Natura 2000" (according to the Bulgarian legislation: Ordinance on CA).

The description of cross-cutting themes will be integrated into the description on respective environmental issues.

<sup>24</sup> www.ormansu.gov.tr/osb/osb/istatistik.aspx?sflang=tr



The assessment of likely significant effects on the environment will be elaborated upon the relevant information based on the different stages of Programme development. It will lead to an optimized version of the OP.

#### 6 Methods and techniques of assessment

With regard to the **assessment methodology**, the SEA will be done in an **iterative process**, based on interim results of the programming process and in close co-ordination with the programming and the ex-ante evaluation team. The assessment will be based, *in primis*, on a **quality approach**. Anyway, the "toolbox" will include both qualitative (checklists, matrices, etc.) and quantitative (indicators, simple or synthetic indices) tools, as well as intermediate tools.

More specifically, **methods and techniques** provided for environmental assessment and completion of the Environmental report are those listed in the Commission guidance documents and reports on the application of the SEA Directive, in particular in the following documents:

- Handbook on SEA for Cohesion Policy 2007-2013" (Handbook on SEA) January 2006,
   "Green/environmentally friendly regional development programmes";
- Guidance on "Implementation of Directive 2001/42 on the assessment of the effects of certain plans and programmes on the environment;
- Guidance on integrating climate change and biodiversity into Strategic Environmental Assessment EA, 2013.

#### 6.1 Method of environmental assessment

The **environmental assessment** will be performed with an identification of the possible effects and impacts resulting from the implementation of the Programme, taking into account their probability, scale, frequency/duration, reversibility, transboundary dimension, uncertainty. The **assessment of likely effects on environment resulting from the Programme** will be **conducted at the level of Priority Axis and their corresponding Specific Objectives**, taking into account the cross-border actions to be supported (typology of projects) and the indicative project activities. In this context the assessment at the programme level can only provide a general outline of possible environmental effects. This is due to the fact that more detailed information on the likely environmental effects will occur at the implementation phase of the funded projects.

The assessment will be guided by the following **central question**:

"Do the Specific objectives (and corresponding cross-border actions) related to the 2 Priority axes identified in the Bulgaria-Turkey IPA CBC Programme 2014-2020 have a significantly positive or negative effect on the environmental issues (air and climate; biodiversity, fauna and flora; water; soil; population and human health; cultural/natural heritage and landscape – and their related cross-cutting themes) in the Programme's area?"

To answer the central question the assessment will be supported by guiding **Evaluation Questions** consolidated through the identified Environmental Objectives (see chapter. 5.2). Referring to a Specific Objective within any Priority Axis, examples of possible Evaluation Questions for each environmental issue are summarized in the table below.





**Tab. 5 Possible Evaluation Questions** 

Environmental Evaluation Questions			
	Issue Will the Specific objective have an effect on the		
locae	reduction of the greenhouse gases emissions?		
	reduction of air pollution?		
	improvement of energy efficiency and increase of use of renewable energy resources		
Air and Climate	support of environmentally friendly transports and promotion of development and usage of public transport?		
	promotion of forest fire fight management and prevention?		
	promotion of resilience to climate change and climate-related disasters?		
	•		
	preservation of biodiversity, habitats and ecosystems and their services support the protection and reconstruction of habitats?		
	preservation of the natural diversity of fauna, flora, and habitats in protected areas and Natura 2000 sites?		
Biodiversity,	protection of endangered species (plants and animals)?		
Flora and Fauna	decrease of loss of biodiversity?		
	promotion of tourism that would ensure high degree of nature		
	conservation?		
	•		
	reduction of water pollution from point and diffuse sources?		
	· ·		
	promotion of good environmental status of marine waters?		
Water	promotion of sustainable use of water resources?		
	reduction of flood risks?		
	•		
	preservation of the soil functionality?		
	reduction of soil degradation and pollution?		
	promotion of sustainable use of soil resource?		
Soil	· · ·		
	reduction of waste generation, increase in waste recover and recycling of all waste?		
	promotion of a better waste management in costal areas?  •		
	reduction of disease caused by natural hazards?		
Population and Human Health	promotion of sustainable waste management to protect human health?		
	promotion of controls of environmental related health risks and		





Environmental	Evaluation Questions		
Issue	Will the Specific objective have an effect on the		
	hazards?		
	<ul> <li> promotion of risk prevention and management of natural and man-made disasters?</li> </ul>		
	prevention of environmental noise exposure?		
	<ul> <li> promotion of environmentally-responsible behavior of the public by involving the citizens into the solution of environmental problems?</li> </ul>		
	•		
Cultural/Natural Heritage and Landscape	protection, preservation and rehabilitation of cultural heritage?		
	<ul> <li> promotion of sustainable management and planning of cultural and natural landscape?</li> </ul>		
	<ul> <li> promotion of sustainable use of natural resources towards sustainable tourism?</li> </ul>		
	<ul><li> protection of coastal and maritime cultural landscapes?</li><li></li></ul>		

The environmental assessment will be carried out on the basis of the following 5-point-scale:

**Tab. 6 Legend for the Environmental Assessment** 

POINT SCALE	DESCRIPTION
+	Possible positive environmental effects
-	Possible negative environmental effects
+/-	Both possible positive and negative environmental effects
0	No significant environmental effects
1	Assessment is not possible (limited availability of information)

The results of the analysis will be given in an **environmental assessment matrix** (see an example below). The cross-cutting themes will be integrated into the assessment of the respective environmental issues. Accordingly, the themes "use of renewable energy sources", "energy efficiency" and "mobility and transport" could be assigned to "air and climate"; the theme "risk management" could be assigned to the issues "population and human health", "air and climate", "soil" and "water"; the theme "sustainable use of natural resources" could be assigned to the issues "water" and "soil"; the theme "waste management and prevention" could be assigned to "soil" and "population and human health""; the theme "adaptation to climate change" could be assigned to the issues "air and climate", "biodiversity, fauna and flora" and "water"; the theme "sustainable tourism" could be assigned to the issues "biodiversity, fauna and flora", "water", "air and climate", "soil" and "cultural/natural heritage and landscape"; finally the cross-cutting theme "environmental education and awareness raising on environmental issues" could be integrated into the assessment of all the issues selected.

It has to be remarked that the **likely significant effects** and impacts on the environment resulting from the implementation of the Programme will **primarily** be **of indirect nature**.





Tab. 7 Proposed environmental assessment matrix

	Environmental Issue						
	Air and Climate	Biodiversity, Flora and Fauna	Water	Soil	Population and Human Health	Cultural/Natural Heritage and Landscape	
Priority Axis 1: '	Priority Axis 1: "Environment"						
SO 1.1. Joint Risk Management							
SO 1.2. Nature Protection							
SO 1.3 People to People Actions							
Priority Axis 2: "Tourism"							
SO 2.1. Tourist Attractiveness							
SO 2.2 Sustainable touristic services							
SO 2.3 People to People Actions							

In addition to the environmental assessment matrix, the Environmental report will provide a qualitative description of the potential positive or negative effects (direct, indirect and cumulative) of the Programme's Specific Objectives and activities on the respective environmental issues ("findings" of the analysis), with recommendations to prevent, reduce and as fully as possible offset any significant adverse effects on the environment of implementing the Programme. These recommendations will be referred, in particular, to criteria to use in course of the project selection, including eligibility and quality criteria in terms of environmental impact.

#### 6.2 Method for generation of alternatives

There is no alternative for a fundamental change of the overall structure of the Programme, as thematic priorities and priority axes have to refer to IPA II regulation and the Framework regulation on the implementation of ETC initiatives. Anyway, in a multi-step process the Environmental report will provide recommendations in order to optimize the Programme. As positive, neutral and negative effects on identified environmental issues of different draft versions of the OP will be assessed during the programming process, the SEA expert will suggest reformulations of areas of intervention, new project activities and project selection criteria which will be then incorporated in the final version of the Programme. These suggestions and recommendations will be regarded as possible alternatives to the OP.





#### 7 Monitoring

According to SEA legislation, possible significant environmental effects of the implementation of the Programme, detected in the environmental assessment, are to be monitored in order to identify, at an early stage, unforeseen adverse impacts and to enable Programme Managing Authority to undertake appropriate remedial actions. In this context the Environmental report will present, at both programme and project levels, different types of measures which will contribute to identification and monitoring of possible significant environmental effects resulting from the implementation of the IPA CBC Bulgaria-Turkey Programme 2014-2020.

In detail, at programme level, appropriate environmental indicators ("SEA indicators") will be defined and integrated in the monitoring and evaluation framework of the Programme<sup>25</sup>, in order to avoid duplication of monitoring, as required by SEA legislation. At project level, a preliminary impact assessment on environmental issues is recommended: the applicants could make an **Environmental Self-assessment** about the environmental aspects of the proposed projects following the list of defined Evaluation Questions (see previous chapter) as a scoring sheet.

#### 8 SEA procedure

The SEA process, following the plan of the Bulgaria-Turkey IPA CBC Programme 2014-2020, is scheduled within the steps indicated in the table below:

Tab. 7 Scheme of SEA procedure steps

STEP SEA	STEP OF THE PROGRAMME PREPARATION	TIMING PLANNED
Scoping phase – elaboration of the scoping report  Determine environmental issues, objectives and methodology for the SEA report	Programme strategy Selection of thematic priorities, priority axes. Defining of specific objective(s) and expected results. Preparation of a list of indicative actions to be supported. Identification of horizontal issues.	May
Consultation with environmental authorities (14 days) of the Scoping report	First draft of the Programme Preparation of a first draft of the indicator table, of financial plan and justification of the allocations. Identification of links between programme's	June
Preparation of the Environmental Report (and it's Non-technical Summary)	objectives, potential actions and horizontal issues. Draft of management and implementing provisions.  Consultations of the first draft of the Programme Submission to the JWG, ex-ante, SEA, task force and EC for feedback. Uploading of the first draft on the web-sites.	June

<sup>&</sup>lt;sup>25</sup> Already including environmental indicators (output, result and impact indicators).





STEP SEA	STEP OF THE PROGRAMME PREPARATION	TIMING PLANNED
Public consultations (30 days) on the Environmental Report and the draft of the Programme	Revised draft of the Programme Incorporating of feedback from JWG, ex-ante, SEA, task force and EC. Defining the involvement of partners and the coordination mechanisms. Describing the reduction of the administrative burden for Beneficiaries. Summary of the potential links of the programme with other development programmes and policies.	July/August
Information on decision: Final statement on SEA  (Inform environmental authorities and the public on how the outcomes of the SEA have been taken into account)  Submission to competent authorities for opinion	Revised of the Programme  Take into account environmental report and consultation results in decision making.	August/September
Submission	22 September	

#### 9 Structure of the SEA report

The proposed content of the Environmental Assessment Report is consistent with the provisions of the Bulgarian legislation<sup>26</sup>.

#### 1. Non-technical summary

- 2. Introduction
  - 2.1. Purpose and objectives of SEA
  - 2.2. Methodological approach to the assessment
- 3. Description of the programme
  - 3.1. General framework and Programme content,
  - 3.2. Key objectives and priorities of the Programme;
  - 3.3. Relation with other relevant plans and programmes;
- 4. Environmental policy framework: relevant plans, programmes and Environmental protection objectives which are relevant to the Programme and identification of SEA Objectives
  - 4.1. Air and climate
  - 4.2. Biodiversity, fauna and flora

<sup>26</sup> Chapter Six of the "Environmental Protection Act" and "Ordinance on conditions and procedures for environmental assessment of plans and programmes" (SEA Ordinance).



- 4.3. Water
- 4.4. Soil
- 4.5. Population and human health
- 4.6. Cultural/natural heritage and landscape
- 4.7. SEA Objectives
- 5. Current state of the environment and its likely evolution without the implementation of the Programme (zero-option scenario)
  - 5.1. Air and climate
  - 5.2. Biodiversity, fauna and flora
  - 5.3. Water soil
  - 5.4. Population and human health
  - 5.5. Cultural/natural heritage and landscape
- 6. The environmental characteristics of areas likely to be significantly affected
- 7. The existing environmental problems ascertained at different levels which are relevant to the Programme including, in particular, those relating to any areas of a particular environmental importance
- 8. Possible effects and impacts on the environment resulting from the implementation of the Programme and recommendations to mitigate significant negative effects
  - 8.1. Air and climate
  - 8.2. Biodiversity, fauna and flora
  - 8.3. Water soil
  - 8.4. Population and human health
  - 8.5. Cultural/natural heritage and landscape
  - 8.6. Overview of the possible effects on the environmental issues
  - 8.7. supplementary suggestions
- 9. Reasons for selecting the alternatives
- 10. Monitoring measures and indicators
  - 10.1. Description of the proposed environmental monitoring system
  - 10.2. Environmental indicators of the programme
- 11. Conclusions and recommendations

Annexes to the Environmental Assessment Report will include:

**Annex 1:** List of abbreviations

**Annex 2:** Bibliography and sources of information

Annex 3: List of consultations, developed opinions and ways of integration in the EA Report





#### Annex 1: Current state of the environment

This chapter provides an overview of the current state of the environment as presented in the IPA CBC Bulgaria-Turkey Programme 2014-2020<sup>27</sup>. **The Environmental Report will extend this analysis situation**, also providing the likely evolution of the state of environment within the cross-border area without the implementation of the Programme.

#### **Geographical characteristics**

The geographical structure of the co-operation area alternates from altitude 710m to 1000 m and includes plains, low altitude valleys, plateaus and hilly areas, with some mountain features. In the North-West the area borders to the Eastern Rhodopi Mountains and to the low branches of the Sakar Mountain in Bulgaria, and on the South-west to the Aegean Sea (Saros Gulf) in Turkey. In the North- East the co-operation area borders to the Balkan Range in Bulgaria, and in the South-East to Strandja/Yildiz Mountain and Black Sea littoral presented both in Bulgaria and in Turkey.

The water reserves of CBC area comprise both surface and ground waters. Maritsa/Meric River is the biggest river on the Balkan Peninsula. Tundja/Tunca River is another important one in the region. The region of Strandja/Yildiz Mountain is the richest on water resources in the entire Thracian – Strandja/Yildiz area.

Five rivers take their sources from the Strandja/Yildiz Mountain. The largest of them are Ropotamo, Dyavolska and Veleka/Değirmendere. Also the surface waters are presented by several big lakes situated on the Bulgarian side. The ground water resources consist of mineral springs and thermal waters. Joint influence of the Black Sea and Aegean Sea; Strandja, Sakar, Balkan Range and Eastern Rhodopes Mountains as well as Maritza and Tundja/Tunca Rivers set the patterns of *the climate* over the cooperation area.

The climate varies from transitional-continental to continental-Mediterranean (mild winters, hot summers). The *mountains* are generally forested with deciduous trees and some evergreen. Different types of *mineral resources* are presented in the co-operation area. There are non-metal deposits (limestone, marble, gabro, granite, asbestos and argil), metal deposits (polimetallic ore - mainly lead, zinc, and silver) and brown coal deposits on the Bulgarian side. On the Turkish side there are deposits of coal, chrome, iron, copper, bauxite, marble and sulphur. There are considerable sources of sea-salt in the Black Sea coastal areas of the cooperation area.

## Environment, climate change adaptation and mitigation & risk prevention and management

Taking a look at different environmental media, such as air, water and soil shows, that the air conditions in the region are quite good, with the "main reasons for air pollution are emissions of fuel used in industry and for households heating and exhaust gases of vehicles" (Bulgaria-Turkey IPA CBC Programme 2007-2013, 2011)

The same situation is visible in the field of surface water, main reason for polluted water is the lack of sewerage systems in the majority of smaller municipalities. For ground water, there is pollution with phosphates or nitrates (cf. Bulgaria-Turkey IPA CBC Programme 2007-2013, 2011). In Haskovo and Jambol districts nearly 70% of the population live in areas with public sewerage systems, that is close to the national average, whereas in Burgas region

<sup>&</sup>lt;sup>27</sup> In: "Preparation of Bulgaria-Turkey IPA Cross-border Programme 2014-2020: Baseline analysis & SWOT analysis".



almost the total population live in areas with public sewerage systems (cf. Regional Profiles, 2014: online).

In the Turkish provinces Edirne and Kırklareli 100% of the population is served by water supply networks (2010). The rate of population served by drinking water treatment plant amounts 41% in Edirne and 24% in Kırklareli. This is also mirrored in the actual investments in water supply facilities, whereas the province of Kirklarlie shows a quite higher expenditure (more than 210.000 TL) than the province of Edirne, which resembles the need for improvement in Kırklareli (about 6.000 TL) (cf. Turkish Statistical Institute, 2010).

In the field of soil, especially erosion is a main issue for the region, where especially larger areas in Kırklareli are affected (cf. Bulgaria-Turkey IPA CBC Programme 2007-2013, 2011).

Both countries have a tradition in the preservation and management of nature. Especially the issue of the maintenance of biodiversity is an important topic in the area and a range of regional best-practice examples is already available (Bulgaria-Turkey IPA CBC Programme 2007-2013). The region also hosts a number of nature parks and protected areas, such as the Strandja Nature Park in Bulgaria and the Gala Lake National Park in Turkey (Edirne). Additionally, the two areas Kasatura Korfezi Nature Reserve (Kırklareli) and Saka Lake Nature Reserve (Kırklareli) are located in the province of Kırklareli (cf. Strandja, 2014: online; Republic of Turkey, Ministry of Culture and Tourism, 2014a/b: online).

Taking into account the environmental situation, some differences between the two neighbouring countries may be identified. Especially for the topics of health and heat waves different results for the area become evident. Northern parts of Bulgaria and the Turkish regions being engaged in CBC, are classified as vulnerable regions whereas the eastern eligible Bulgarian regions are categorised as most vulnerable ones. Generally, the whole cross-border area is rated as region with deficits to adapt to climate change. The cluster to which the cross-border area belongs is "characterized by general below average performances in adaptive capacities, once again reflecting the lag in their national economies compared to the EU average" (OIR et al., 2011: 71).

One main environmental issue includes the Black Sea, which is one of the main connection factors of the CBC region (Burgas and Kırklareli are connected to the Sea). The Black Sea is habitat for 168 fish types, four different marine mammals and thousand of plants.

Generally, the Black Sea faces numerous problems and threats such as the decrease of biological resources, declining diversitiy of spaces as well as the reduction of aesthetic values of the sea (cf. Commission on the Protection of the Black Sea Against Pollution, 2013: online). Reasons for these developments are pollution, irresponsible fishing in the sea as well as eutrophication. Taking into account, for example the total amount of loaded and unloaded goods<sup>28</sup> in the NUTS 2 regions Yugoiztochen (BG) and Tekirdag, Edirne, Kırklareli (TR), shows an excessive increase in Turkey between 2010 and 2011 (2010: 4.576 thousand tonnes to 16.093 thousand tonnes). Due to the efforts of the last years, improvements are already visible, although these are "still in the early stages, [and] are unstable and still far from the strategic target: that is to bring the conditions of the environment back to those that were observed in the 1960s" (Black Sea Commission, 2013: online). Therefore, the BSEC especially points out, that "elaborate work needs to be done in this sphere individually and collectively by the Member States and with the support/involvement, when and where needed, of the Third Parties who are also responsible, albeit partly, for the existing pollution. The NGO support and active participation in combating pollution is an effective way and needs to be propagated" (BSEC, 2014a: online).

PARTNERSHIP

<sup>&</sup>lt;sup>28</sup> "Goods loaded refers to goods placed on a means of transport and dispatched" (EUROSTAT, 2014: online).



Another relevant issue for the CBC region is the issue of natural threats, especially flooding. Maritsa River is the biggest river on the Balkan peninsula with a catchment area more than 53.000 km². Maritsa River basin has been quite densely populated (more than 2 million people on the Bulgarian territory), highly industrialised and with intensive agriculture. The basin area at the upper course of the river has predominantly high-mountain character while the character in the middle and lower river course is plain. The biggest tributaries of Maritsa River are Tunca and Arda Rivers. While Arda River does not belong to the Bulgarian-Turkish border area, the Tunca River crosses the border region and marks the border between the two countries for about 9 km. Tunca River catchments area is about 7884 km² and the length on the Bulgarian territory is 350 km. Arda and Tunca Rivers converge the main stream of Maritsa river on Turkish territory, south of the Bulgarian – Turkish border near the city of Edirne.

The climatic and geographical characteristics of Maritsa and Tunca River Basins lead to specific run-off conditions: flash floods, high inter-annual variability, heavy soil erosion reducing the channel and reservoirs' capacities through sedimentation, etc. The destructive forces of climatic hazards manifesting themselves in the form of rainstorms, severe thunderstorms, intensive snowmelt, floods and droughts. Climate change is a causative element in flood disasters. Despite of the significant number of reservoirs and cascades having total capacity for Maritsa and Tunca about 2.2x109m3 and for Arda about 1x109m3 in the Bulgarian territory, their retention possibilities are not sufficient to reduce (control) the floods downstream.

In February 2005 and March 2006, significant flood hazards occurred in Maritsa River Basin. A lot of losses in agriculture occurred, in 2006, along the lower part of Tunca, 2.500 ha agricultural area were heavily affected and downstream at the city of Edirne flooded area was 37.500 ha.

As part of prevention, four telemetric hydrometry stations have been established in Bulgarian part of the Maritsa catchments, one is on the Arda river, cast after Ivaylovgrad dam (close to Greece border), two stations installed on the main channel of Maritsa river, one in Plovdiv city the other one near to Svilengrad town and the forth one established on Tunca River in Elhovo. These stations are recording continuously and supplying real time river data using satellite and GSM communication systems to the both countries.

Starting from PHARE Cross-Border Co-operation Programme (CBC) between Bulgaria and Turkey as well as continuing with Bulgaria-Turkey IPA CBC Programme 2007-2013, several projects have been implemented so to prevent the floods in the CBC region (cf. Plovidiv, 2014: online).

