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STRATEGIC ENVIRONMENTAL ASSESSMENT ENVIRONMENTAL REPORT

for the Interreg VI-A Romania - Bulgaria Programme



Interreg VI-A Romania-Bulgaria
Programme 2021-2027



PARTNERSHIP WITH NATURE



ENVIRONMENTAL REPORT

for the Interreg VI-A Romania-Bulgaria Programme 2021-2027

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CONTENTS

1. INTRODUCTION	12
2. PRESENTATION OF THE PROGRAMME AND ITS OBJECTIVES, AND RESULTS OF THE ANALYSIS ON THE RELATION WITH OTHER PP _s RELEVANT TO THE PROGRAMME.....	15
2.1. THE CURENT CONTEXT	15
2.2. STRUCTURE OF THE INTERREG ROMANIA-BULGARIA PROGRAMME 2021-2027	16
2.3. SHORT OVERVIEW OF THE INTERREG ROMANIA-BULGARIA PROGRAMME IMPLEMENTATION AREA.....	17
2.4. SHORT PRESENTATION OF INTERREG ROMANIA-BULGARIA PROGRAMME 2021-2027 OBJECTIVES	18
2.5. RELATION WITH OTHER RELEVANT PLANS AND PROGRAMS	21
3. RELEVANT ASPECTS OF THE CURRENT STATE OF THE ENVIRONMENT AND THE LIKELY EVOLUTION THEREOF WITHOUT IMPLEMENTATION OF THE PROGRAMME	22
3.1. CURRENT STATE OF THE ENVIRONMENT	22
3.1.1. GENERAL ASPECTS	22
3.1.2. BIODIVERSITY	22
3.1.3. POPULATION AND HUMAN HEALTH	42
3.1.4. SOIL AND LAND USE.....	65
3.1.5. WATER.....	77
3.1.6. AIR	101
3.1.7. CLIMATE CHANGE	110
3.1.8. MATERIAL ASSEST	122
3.1.9. RISK MANAGEMENT	137
3.1.10. CULTURAL HERITAGE.....	149
3.1.11. LANDSCAPE	155
3.1.12. ENERGY EFFICIENCY	159
3.1.13. SUSTAINABLE TRANSPORT	162
3.1.14. CIRCULAR ECONOMY.....	170
3.1.15. Population awareness.....	174
3.2. EVOLUTION OF THE STATE OF ENVIRONMENT WITHOUT IMPLEMENTATION OF THE PROGRAMME.....	184

4. ENVIRONMENTAL CHARACTERISTICS OF THE AREA LIKELY TO BE SIGNIFICANTLY AFFECTED BY THE PROGRAMME IMPLEMENTATION	199
5. ENVIRONMENTAL PROBLEMS RELEVANT TO THE PROGRAMME	200
6. ENVIRONMENTAL PROTECTION OBJECTIVES SET AT NATIONAL, COMUNITARY OR INTERNATIONAL LEVEL RELEVANT TO THE PROGRAMME.....	204
7. POTENTIAL SIGNIFICANT EFFECTS ON THE ENVIRONMENT	218
7.1. ASSESSMENT METHODOLOGY	218
7.2. ENVIRONMENTAL POTENTIAL EFFECTS GENERATED BY THE PROGRAMME IMPLEMENTATION.....	219
7.2.1. ANALYSES REGARDING THE PROGRAMME OBJECTIVES	219
7.2.2. THE ASSESSMENT OF THE COMPATIBILITY BETWEEN THE PROGRAMME OBJECTIVES AND THE RELEVANT ENVIRONMENTAL OBJECTIVES (SEA OBJECTIVES).....	219
7.2.3. ASSESSMENT OF THE COMPATIBILITY BETWEEN THE SECTORAL OBJECTIVES OF THE PROGRAMME.....	221
7.2.4. ASSESSMENT OF TYPES OF INTERVENTIONS/ PROJECTS PROPOSED FOR THE PROGRAMME IMPLEMENTATION.....	223
8. POTENTIAL SIGNIFICANT EFFECTS ON THE ENVIRONMENT AND HEALTH IN A TRANSBOUNDARY CONTEXT	241
8.1. GENERAL ASPECTS	241
8.2. CUMULATIVE EFFECTS.....	241
9. MEASURES PROPOSED TO PREVENT, REDUCE AND COMPENSATE ANY POSSIBLE ADVERSE EFFECTS ON THE ENVIRONMENT DUE TO IMPLEMENTATION OF THE PROGRAMME	242
10. REASONS THAT LED TO SELECTING THE PROGRAMME ALTERNATIVES	248
11. MEASURES FOR MONITORING THE SIGNIFICANT EFFECTS OF THE PROGRAMME IMPLEMENTATION	252
12. DIFFICULTIES IN SEA ANALYSIS	255
13. NON-TECHNICAL SUMMARY	256
14. SELECTIVE BIBLIOGRAPHY	261
15. ANNEXES.....	265
15.1. Relation with other relevant plans, programs and strategies	265
15.2. Water bodies in the program area	302
15.3. SEVESO location in the program area.....	332
15.4. Protected natural areas	335

INDEX OF TABLES

Table 3-1 Urban and rural settlements in study area	46
Table 3-2 Coastal water in the program area	80
Table 3-3 Updated information on marine environmental assessment areas, name, area and coverage	81
Table 3-4 The target areas of the Black Sea region bathing areas.....	98
Table 3-5 Areas at significant risk of flooding in the program area	139
Table 3-6 Potentially affected areas for different types of land use (thousands of km ²)	142
Table 3-7 List of Areas with significant potential flood risk in BDDR.....	143
Table 3-8 List of Areas with significant potential flood risk in BDDR.....	147
Table 3-9 Historic monuments in the program area by category - Romania.....	150
Table 3-10 Ports along the Danube River	168
Table 3-11 Environmental protection awareness campaign in Romania	180
Table 3-12 Classes for assessing the current state of environmental issues and "Alternative 0"	184
Table 3-13 Current state of environmental issues and Alternative 0 - Romania.....	185
Table 3-14 Current state of environmental issues and Alternative 0 - Bulgaria	188
Table 5-1 Existing environmental issues relevant to the Romania-Bulgaria Interreg VI-A Programme 2021-2027.....	201
Table 6-1 The degree of achievement of the goals of sustainable development worldwide.....	204
Table 6-2 Objectives set at European and national level	206
Table 6-3 Relevant environmental objective	216
Table 7-1 Compatibility assessment matrix between Interreg VI-A RO-BG objectives and relevant environmental objectives	220
Table 7-2 Matrix for assessing the compatibility between the objectives of the Interreg VI-A programme RO-BG 2021-2027	222
Table 7-3 Types of actions proposed under the Programme.....	224
Table 7-4 Assessment of the types of actions.....	231
Table 7-5 Justification for the assessment of the effects on the environment for the types of actions proposed by the programme	234
Table 9-1 Avoidance and reduction measures	243
Table 11-1 Proposed indicators for monitoring the effects of the programme	254
Table 14-1 National protected areas in the program area	335
Table 14-2 Natura 2000 Sites	341



INDEX OF FIGURES

Figure no. 3-1 Biogeographical regions in programme area.....	23
Figure no. 3-2 Types of ecosystems in the programme area (the legend on next page)	24
Figure no. 3-3 Pressures and threats on habitats.....	29
Figure no. 3-4 Pressures and threats on species.....	30
Figure no. 3-5 Protected natural areas in the programm area	36
Figure no. 3-6 Location of Natura 2000 sites.....	37
Figure no. 3-7 Conservation status of habitats in program area	39
Figure no. 3-8 Conservation status of species in programm area	40
Figure no. 3-9 The conservation status of habitats at Member State level	41
Figure no. 3-10 Spatial distribution of habitat conservation trends	42
Figure no. 3-11 Population density in programm area.....	43
Figure no. 3-12 Population density in 2019 compared to 1990	44
Figure no. 3-13 Population projection	44
Figure no. 3-14 Age structure of the population in the programm area	45
Figure no. 3-15 Minority population in Romania	47
Figure no. 3-16 Minority population number in Bulgaria	47
Figure no. 3-17 Number of deaths in programme area	48
Figure no. 3-18 Infant mortality rate in programm area from Romania.....	49
Figure no. 3-19 Number of live births in programm area.....	50
Figure no. 3-20 Rate the natural increase registered in the programm area in Romania	51
Figure no. 3-21 Coefficient of natural growth by district and country, NSI	51
Figure no. 3-22 Population migration in Romania	52
Figure no. 3-23 Population migration in Bulgaria.....	53
Figure no. 3-24 People at risk of poverty or social exclusion.....	53
Figure no. 3-25 Employment in programm area	54
Figure no. 3-27 Registered malignant neoplasms for 2019 (per 100,000 people), Healthcare 2020, NSI	56
Figure no. 3-28 Newly discovered diseases from malignant neoplasms in 2019 (100 000 people), Health 2020, NSI.....	56



Figure no. 3-29 Causes of deaths in the programme area - Romania.....	58
Figure no. 3-30 Mortality by causes of death per classes according to the International classification of diasses-10 th Revision /ICD-10/ (per 100 000, %) in - Bulgaria.....	59
Figure no. 3-31 Medical care facilities, Bulgaria, NSI, 2020	60
Figure no. 3-32 Premature deaths generated by pollution.....	61
Figure no. 3-33 Soil erosion in the programme area	68
Figure no. 3-34 Standardized Precipitation Index (SPI) in the programme area from 1981-2020 period	69
Figure no. 3-35 Imperviousness density in program area.....	71
Figure no. 3-36 Landslide in the program area	72
Figure no. 3-37 CLC legend	74
Figure no. 3-38 CLC - Corine Land Cover 2018.....	75
Figure no. 3-39 Geological structure in the program area in Romania	76
Figure no. 3-40 Ecological status or potential of surface water bodies from program area.....	78
Figure no. 3-41 Chemical status of water bodies in the program area.....	79
Figure no. 3-42 Ground water - aquifer media type	90
Figure no. 3-43 Chemical status of ground water bodies.....	91
Figure no. 3-44 Total number of large WZA - 2019.....	92
Figure no. 3-45 Percentage of supplied population	92
Figure no. 3-46 Total number of large WZA- 2020	93
Figure no. 3-47 Wastewater treatment agglomerations by size.....	96
Figure no. 3-48 Annual average for the PM2.5 indicator in 2017.....	103
Figure no. 3-49 Annual average for the PM10 indicator in 2017.....	104
Figure no. 3-50 Daily average for the SO ₂ indicator in 2013-2019.....	105
Figure no. 3-51 Maximum daily 8 hour mean for the O ₃ indicator in 2017	106
Figure no. 3-52 Annual average for the NO ₂ indicator in 2013-2019.....	107
Figure no. 3-53 Maximum daily 8 hour mean for the CO indicator in 2013-2019 period	108
Figure no. 3-54 Economic losses due to climate change	111
Figure no. 3-55 Temperature increases estimated in July at 2050	113
Figure no. 3-56 Temperature increases estimated in January at 2050.....	114
Figure no. 3-57 Annual average rainfall - RO	116
Figure no. 3-58 Annual average rainfall - BG.....	117



Figure no. 3-59 Annual rainfall 2050, in the programm area	118
Figure no. 3-60 Emission GHG	119
Figure no. 3-61 Greenhouse gas emission trends and projections under the scope of the Effort Sharing - Romania	120
Figure no. 3-62 Greenhouse gas emission trends and projections under the scope of the Effort Sharing - Bulgaria	121
Figure no. 3-63 The situation of tourists in the programm area - Romania 2019	125
Figure no. 3-64 The situation of tourists in the program area - Bulgaria 2019.....	125
Figure no. 3-65 Turist ports in program area.....	127
Figure no. 3-66 Seveso location in the program area	137
Figure no. 3-67 Floods in Romania.....	139
Figure no. 3-68 Locating areas with a potential significant risk of flooding.....	140
Figure no. 3-69 Floods in programm area from Bulgaria	141
Figure no. 3-70 Risk of earthquakes in the program area (Source: Territorial Analysis for the Romania-Bulgaria Cross-Border Region).....	148
Figure no. 3-71 Landslide in the program area	149
Figure no. 3-72 Historical monuments in program area - Romania	150
Figure no. 3-73 Historical monuments in program area - Bulgaria.....	151
Figure no. 3-74 Ramsar sites on the programm area.....	153
Figure no. 3-75 Landscape types in the programm area.....	155
Figure no. 3-76 Variability of landscape fragmentation in the programm area	159
Figure no. 3-77 Final energy consumption in households per capita	160
Figure no. 3-78 Share of renewable energy in gross final energy consumption	160
Figure no. 3-79 Energy consumption by end use per dwelling, 2016	161
Figure no. 3-80 The situation of the railway lines at the level of the two countries	163
Figure no. 3-81 The situation of the railway lines in the programm area	163
Figure no. 3-82 Road infrastructure in the programm area - RO.....	164
Figure no. 3-83 Road infrastructure in the program area - BG	165
Figure no. 3-84 Average CO ₂ emissions per km from new passenger cars	165
Figure no. 3-85 Share of newly registered and registered new vehicles of the respective type	166
Figure no. 3-86 The age of the cars in the program area from Ro	166
Figure no. 3-87 Inland waterway network.....	167

Figure no. 3-88 Loaded and unloaded goods in river harbours - RO	168
Figure no. 3-89 Loaded and unloaded goods in river harbors - BG.....	169
Figure no. 3-90 Share of rail land inland waterways in total freight transport	170
Figure no. 3-91 Recycling rate during the period 2008-2019	170
Figure no. 3-92 The amount of waste generated during the period 2004-2018 (amount of waste for EU27 read on the right-hand axis)	171
Figure no. 3-93 Generation of municipal waste per capita	172
Figure no. 3-94 Circular material use rate	174
Figure no. 3-95 Early leavers from education and training, 2010 and 2020	175
Figure no. 3-96 School dropout in programm area - Romania	175
Figure no. 3-97 Left primary education from schools, number, NSI	176
Figure no. 3-98 Adult participation in learning	176
Figure no. 3-99 Employment rates of young people not in education and traing.....	177
Figure no. 3-100 School units in Romania	178
Figure no. 3-101 Number of schools, Bulgaria, NSI.....	178
Figure no. 3-102 Assessment classes identified - Alternative 0 (Romania)	197
Figure no. 3-103 Assessment classes identified - Alternative 0 (Bulgaria).....	198
Figure no. 6-1 Levels and trends for SDGs.....	205
Figure no. 7-1 Assessment classes	218
Figure no. 7-2 The link between the specific objectives and the relevant environmental objectives of the programme.....	221
Figure no. 7-3 Assessment of the compatibility between the objectives of the Interreg VI-A RO-BG Programme and the relevant environmental objectives (SEA) (percentage)	221
Figure no. 7-4 Number of effects identified	233
Figure no. 7-5 Share of identified effects on relevant environmental objectives	234
Figure no. 12-1 Differences between the presentation of the Sustainable Development Goals (SDGs) - left Romania, right Bulgaria	255



ABBREVIATIONS AND ACRONYMES

BG	Bulgaria
EC	European Commission
EIA	Environmental Impact Assessment
ERDF	European Regional Development Fund
EU	European Union
GHG	Greenhouse gases
NUTS	Nomenclature of territorial units for statistics
PM	Particulate matter
RO	România
SEA	Strategic environmental assessment
SDGs	Sustainable Development Goals



1. INTRODUCTION

This report is the Environmental Report for the Strategic Environmental Assessment of the Interreg VI-A Romania-Bulgaria 2021-2027 Programm, hereinafter abbreviated Interreg VI-A RO-BG.

The Interreg VI-A Romania-Bulgaria 2021-2027 program will be funded by the EU, from the European Regional Development Fund-ERDF. The elaboration of the Programme is be done in accordance with the regulatory framework for the programming process, which is set out in the EC legislative package for the programming period 2021-2027¹.

The paper was elaborated by EPC Consultanța de Mediu SRL, registered in the List of experts who elaborate environmental studies, at position no. 747 / 18.06.2021, for the elaboration of Environmental Reports (RM), Environmental Impact Reports (RIM), Environmental Balances (WB), Site Reports (RA / RSR) and Adequate Assessment Studies (EA).

The Environmental report was prepared in accordance to the content requirements Directive 2001/42/EC - Strategic Environmental Assessment Directive (SEA), this being transposed into national legislation Government Decision no. 1076/2004 establishing the procedure for carrying out the environmental assessment for plans and programs - for Romania and Environmental Protection Act (EPA) - Prom. SG. 91/25 Sep 2002, last amend. SG. 21/2021 and the Ordinance (SEA-O) for the conditions and the order for implementing ecological assessment of plans and programmes - Prom. SG. 57/2 Jul 2004, last amend. SG. 70/2020 - for Bulgaria.

For the elaboration of the Environmental report, were taken into consideration the following normative acts in force, guides and handbooks, relevant in the field of environmental protection, such as:

➤ General:

- Guidance on the implementation of Directive 2001/42/EC on the assessment of the effects of certain plans and programmes on the environment - European Commission - DG Environment;
- Guidance on Integrating Climate Change and Biodiversity into Strategic Environmental Assessment, 2013 - European Commission;
- The Use of Spatial Data for the Preparation of Environmental Reports in Europe, JRC technical support, 2010;
- Resource Manual to Support Application of the Protocol on Strategic Environmental Assessment, 2011 - UNECE;
- Good Practice Recommendations on Public Participation in Strategic Environmental Assessment, 16 February 2016 - UNECE;

¹ https://ec.europa.eu/commission/publications/regional-development-and-cohesion_en



- Strategic environmental assessment in Interreg NEXT programmes - Guidance note and review of approaches, July 2020, TESIM;
 - Presentation on Application of the SEA Directive to the EU 2021-2027 cofinanced programmes, 40th meeting of the Expert Group on ESIF(EGESIF), Brussels, 11-12 February 2020, Directorate-General for the Environment;
 - Technical guidance on the application of “do no significant harm” under the Recovery and Resilience Facility Regulation Brussels, 12.2.2021, C(2021) 1054 final;
 - Technical guidance on the climate proofing of infrastructure in the period 2021-2027 (2021/C 373/01);
- For Romania:
- Government Decision no. 1076/2004 on establishing the assessment procedure for certain plans and/or programmes;
 - Order no. 117/2006 approving the “Manual on the application of the procedures for environmental assessment for plans and programs”, developed by MEWF and NEPA;
 - “Practical Guide for Environmental Assessment of Plans and Programs”, developed within the project EuropeAid/121491/D/SER/RO (PHARE 2004/016 - 772.03.03) “Strengthening institutional capacity for implementation and enforcing SEA and Reporting Directives”;
 - Emergency Ordinance no. 195/2005 regarding environmental protection, approved by Law 265/2006 and further modified by GEOs nos. 57/2007, 114/2007 and 164/2008;
 - Legislation regarding the regime of natural protected areas, conservation of natural habitats and wild flora and fauna (transposing Directive 92/43/EC, with its amendments) - promulgated by Government Emergency Ordinance (GEO) no. 57/2007, approved and modified by Law no. 49/2011;
 - Order no. 262/2020 for the modification of the Methodological Guideline on the appropriate assessment of potential affects from plans/ programmes and projects on the natural protected areas of Community interest - approved by the Ministerial Order no. 19/2010;
 - The Water Law no. 107/1996 with subsequent modifications and completions;
 - Law no. 104/2011 regarding the air quality;
 - Order no. 756/1997 for approval of the environmental pollution assessment regulations;
 - Order no. 119/2014 on the approval of the hygiene norms and recommendations concerning the population’s living environment;
 - Law no. 422/2001 on the protection of historical monuments;
 - Law no. 22/2001 ratifying the Convention on Environmental Impact Assessment in a Transboundary Context (ESPOO Convention);



- Law no. 349/2009 for the ratification of the Protocol on Strategic Environmental Assessment, opened for signature in Kiev on 21-23 May 2003 and signed by Romania on 21 May 2003, on the Convention on Environmental Impact Assessment in a Transboundary Context, adopted at Espoo on 25 February 1991.

➤ For Bulgaria:

- Environmental Protection Act (EPA) and bylaw Ordinance (SEA-O) for the conditions and the order for implementing ecological assessment of plans and programmes;
- Biological Diversity Act (BDA) and bylaw Ordinance for the conditions and order for performance of appropriate assessment of plans, programmes, projects and investment proposals with the subject and aims of preservation of the protection sites (AA Ordinance);
- Water Act;
- Waste management Act;
- Atmospheric air purity Act;
- Climate Change Limitation Act;
- Plant Protection Act;
- Soil Act;
- Environmental Noise Protection Act;
- Protected areas Act;
- Protection of agricultural lands Act and Regulations for its implementation;
- Cultural Heritage Act;
- Disaster Protection Act;
- Spatial Planning Act;
- Healthy and Safe Working Conditions Act;
- Health Act;
- By-laws in the field of biodiversity, waste, air, water, soil, noise, etc.
- “Manual for Environmental Assessment of Plans and Programmes in Bulgaria”, 2002, elaborated by Consortium with participation of POVVIK OOS and with the collaboration of and under the editing of Ministry of Environment and Water, Bulgaria;
- Training Practical Guidance for SEA and EIA Directives - General elements, 2013, Jaspers.



2. PRESENTATION OF THE PROGRAMME AND ITS OBJECTIVES, AND RESULTS OF THE ANALYSIS ON THE RELATION WITH OTHER PP_s RELEVANT TO THE PROGRAMME

2.1. THE CURENT CONTEXT

The Interreg VI-A Romania-Bulgaria 2021-2027 programm is a continuation of the previous program. The drafting of the Interreg VI-A Romania-Bulgaria Programme started with a Territorial analysis, which represents the first step in designing the Programme and it had as a starting point the Interreg V-A Romania-Bulgaria Programme for 2014-2020 period.

The main focuses of the Territorial analysis report are on the challenges, needs, resources and common priorities (including economic, social and territorial disparities, investment complementarity, macro-regional strategies etc.) of the territories in the eligible area of the programme. The Territorial analysis report highlight the strengths, weaknesses, opportunities and threats of the border region, looking at the internal and external factors that influence the programme area and identifying trends and potentials, thus supporting the choice of an appropriate development and territorial cooperation strategy².

Interreg VI-A Romania-Bulgaria Programme vision focuses on the reinforcement of the socio-economic dimension of the Romania-Bulgaria cross-border territory, through developing and retaining human capital, creating opportunities for personal and professional development, providing an attractive, safe and sustainable living environment and supporting innovation and entrepreneurship.

The vision builds on the polycentric development concept, which was also part of the 2014-2020 Programme's vision, proposing a network of key urban hubs along the Danube, with enhanced institutional collaboration and economic synergies that could start articulating a common development strategy in order to mutually strengthen the secondary and peripheral cities. The network of small and medium-sized cities, such as the twin cities along the Danube, is already developed across the region, which is a plus in terms of services provided to the rural areas around them or to the potential for better service provision and jobs creation.

Therefore, improving connections between urban and rural areas and transforming small cities into support centres that provide services to the neighbouring villages with an emphasis on public services is a direction to be considered, as is the provision of digital public services to remote or peripheral areas.

² Territorial Analysis for Romania-Bulgaria Cross-border region, 2020, page 16

Also, the vision for Interreg VI-A RO-BG includes modern and effective public administrations, capitalizing on the benefits of digitalization and working together with businesses, universities, the research environment and the civil society in order to improve the life of their community and to foster territorial cooperation³.

2.2. STRUCTURE OF THE INTERREG ROMANIA-BULGARIA PROGRAMME 2021-2027

According to the latest version of the Interreg VI-A Romania-Bulgaria Programme "EXTRACT, draft January 2022" the structure of the program is divided into 7 sections:

- Section 1 "Program Strategy: main development challenges and policy responses" presents the program area, the main common challenges, the lessons learned from the previous program experience, the selection of policy objectives and program-specific objectives such as justifying choices and detailing them.
- Section 2 "Priorities" includes the 4 priorities of the program, in correlation with its objectives using a strategic approach. Also presented are the types of actions that can be developed through the implementation of the program, through operations of strategic importance.
- Section 3 - Financial plan;
- Section 4 - Actions taken to involve the relevant programme partners in the preparation of the Interreg programme and the role of those programme partners in the implementation, monitoring and evaluation;
- Section 5 - Approach to communication and visibility for the Interreg programme;
- Section 6 - Indication of support to small-scale projects, including small projects within small project funds;
- Section 7 - Implementing provisions.

The main joint challenges and investment needs are referring to:

- Connectivity
- Climate change adaptation and environment protection
- Human capital - education
- Integrated territorial development

³ Territorial Analysis for Romania-Bulgaria Cross-border region, 2020, page 332



2.3. SHORT OVERVIEW OF THE INTERREG ROMANIA-BULGARIA PROGRAMME IMPLEMENTATION AREA

The participating countries of the Programme are Romania and Bulgaria. The Interreg VI-A RO-BG is based on the NUTS III units.

The fifteen administrative units (NUTS III) included into the programme area are parts of six administrative regions (NUTS II), as it follows:

- Romanian South-West Development Region Oltenia: Mehedinti, Dolj and Olt counties;
- Romanian South Muntenia Development Region: Teleorman, Giurgiu and Calarasi counties;
- Romanian South-East Development Region: Constanta County;
- Bulgarian North West Region: Vidin, Vratsa, Montana and Pleven districts;
- Bulgarian North Central Region: Veliko-Tarnovo, Ruse and Silistra districts;
- Bulgarian North East Region: Dobrich district.

The programme area has a total surface of 69.285 km², two thirds being located in Romania and one third being located in Bulgaria (according to RO-BG programme), thus covering 19.8 % of the total area of the two countries and counting more than 4 million inhabitants.

The location of the Interreg VI-A Romania-Bulgaria Programme area is presented in the figure below.

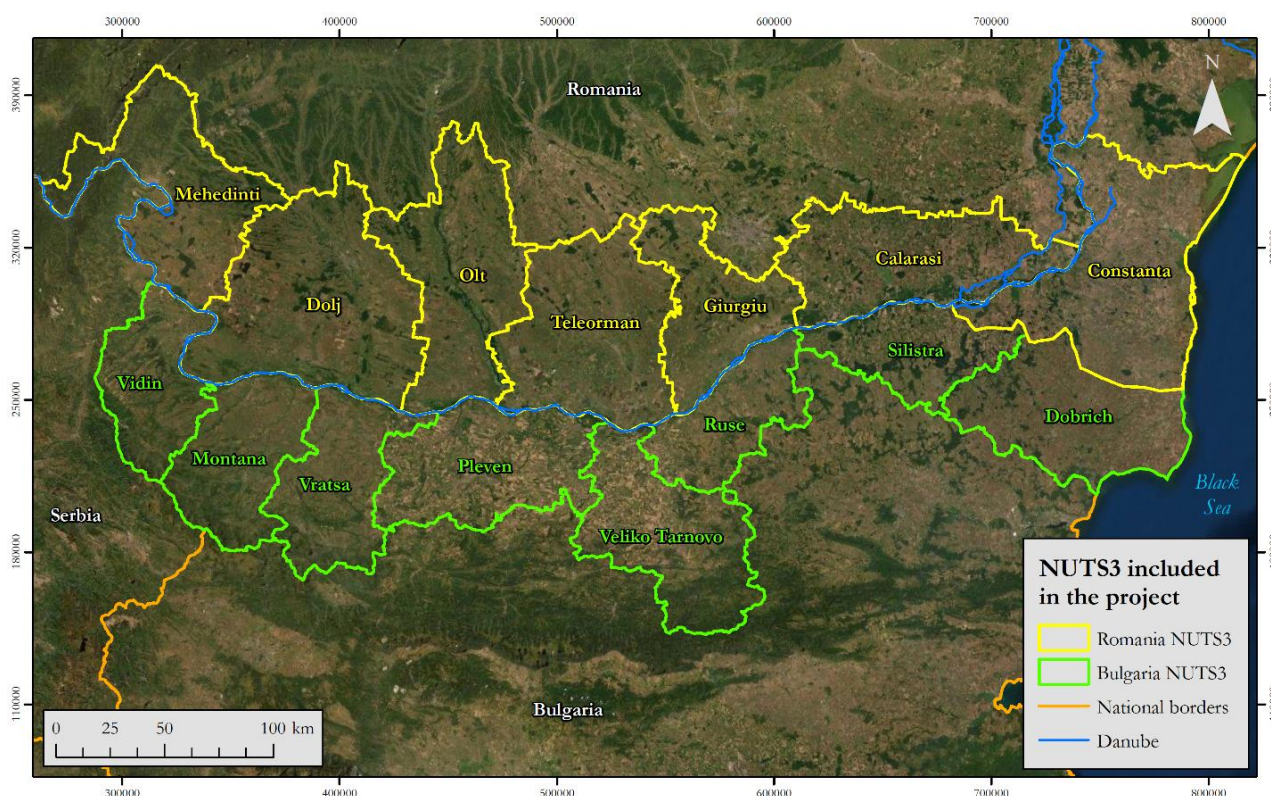


Figure no. 2-1 The eligible area for the Interreg VI-A Romania-Bulgaria Programme

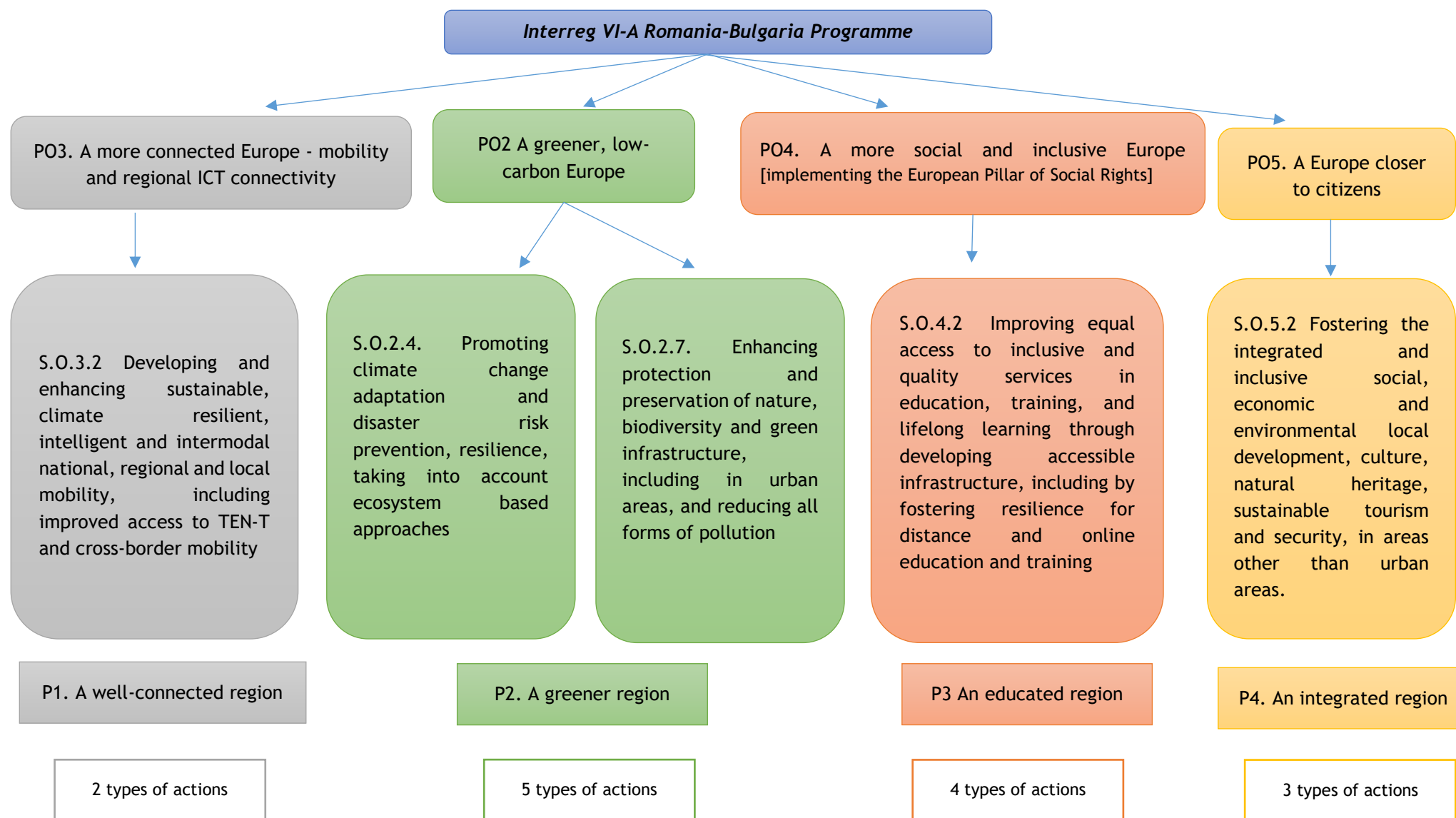


2.4. SHORT PRESENTATION OF INTERREG ROMANIA-BULGARIA PROGRAMME 2021-2027 OBJECTIVES

Taking into account the thematic requirements, for the implementation of the proposed strategy of the Interreg VI-A Romania-Bulgaria Programme and based on the ERDF policy objectives (PO) the specific objectives of the program and its priorities were established.

This proposal includes interventions that support the development of the cross-border transport infrastructure, improving the navigation conditions and safety on the Danube; actions aiming to mitigate the risks affecting the area and to promote climate change adaptation in line with Green Deal objectives, in order to minimize the economic, social and environmental impact generated by climate change; actions enhancing and protecting biodiversity, reduction of all forms of pollution and promoting green infrastructure; actions enhancing cross-border collaboration in the field of education and training, to create new opportunities for cross-border mobility and joint actions in increasing access and participation to education and training, integrated actions fostering social, economic and environmental local development, preservation of cultural and natural heritage, sustainable tourism and security, having as a backbone the Eurovelo 6 route.

The following figure shows the relationship between specific policy objectives and program priorities.



The choice of the Specific Objective 3.2 (SO) was made because it is a low density of border crossings reduces the mobility between the two sides of the border, hinders commercial flows and makes commuting difficult. Inland navigability suffers from bottlenecks, both because of the shallow river depth and the capacity of ports, including their hinterland connections. The priority of the programme "A greener region" through specific objective 3.2 development of rail transport infrastructures and improvement of the navigability conditions of the Danube.

The SO2.4 specific objective was selected because the cross-border area is at risk of flooding due to the Danube River. In addition, due to the Vrancea epicenter area, both the Romanian and the Bulgarian sector could be affected by earthquakes. From a climatic perspective, the average annual temperature has increased in both regions of the two countries, and extreme weather phenomena such as tornadoes, heavy rains, etc., have an increasing impact. This specific objective will support actions to reduce the effects of climate change, and promote adaptation action to reduce their effects in line with the objective of the European Green Pact, by minimizing the economic, social and environmental impact of the effects of climate change.

The SO 2.7 complements the previous objective with the priority "A greener region". Given the fact that in the cross-border area there are many threats and presences such as habitat degradation, climate change, pollution, urbanization, overexploitation of natural resources, etc., they can have a negative effect on biodiversity, natural heritage and landscape. The most vulnerable are Natura 2000 and Ramsar sites, where pollution is present. By implementing this specific objective, the programme will support actions enhancing and protecting biodiversity, reduction of all forms of pollution and supporting the local potential for a greener economy.

Specific Objective 4 - SO4.2 was selected because of the systemic challenges that are present on both sides of the border. The high rate of illiteracy and poverty, low participation in education and training, low language skills, are the main problems. This objective will support actions to improve cross-border cooperation in the field of education, including vocational education and training, also considering the disadvantaged groups.

Specific objective SO5.2 has been selected to support an integrated approach to economic development. Considering the relatively low economic development of the border area as well as the significant unfavourable economic and social effects of COVID-19 crisis, it is essential that an integrated approach be adopted for the future, building on the existing networks of cities and helping the local economy to embrace the digital transformation, access new markets and become more resilient to global shocks.

A strong point for economic support is the historical, cultural and environmental heritage, but some of them are often inaccessible, unprotected and in an unfavorable state. In addition, the presence of the Eurovelo 6 route offers an opportunity for tourism development, but the RO-BG sector is currently a weak link in this route. Through this objective, the development of economic activities in a sustainable manner is expected, in order to reduce the negative effects on the environment.



2.5. RELATION WITH OTHER RELEVANT PLANS AND PROGRAMS

The SEA Directive 2001/42/EC requires that the Environmental report shall identify, describe and analyse the strategic documents relevant. These strategic documents are relevant when setting out conditions and issues that need to be properly reflected in or can influence the evaluated Programme.

The identification of the relationship between the various relevant strategic documents and the Interreg VI-A Romania Romania 2021-2027 Program has the following purposes:

- identify the existence of possible synergies or constraints;
- identify issues that have already been addressed in other plans or programs;
- verification of the environmental information collected for a SEA performed for other plans or programs which may be used for the SEA of the evaluated Programme;
- consideration of the cumulative effects on key receptors following the implementation of several connected plans/ programs, in order to substantiate the evaluation of alternative options and specific forms of impact of the evaluated Programme.

Relevant plans, programs and strategies (PPS) that could interact with the Romania-Bulgaria Interreg VI-A Program 2021-2027 are presented and analyzed in Anexe 14.1.

Following the analysis of the relationship of the Interreg VI-A Romania Romania 2021-2027 Program, no situations were identified in which the analyzed program would be in contradiction with the relevant plans and programs.



3. RELEVANT ASPECTS OF THE CURRENT STATE OF THE ENVIRONMENT AND THE LIKELY EVOLUTION THEREOF WITHOUT IMPLEMENTATION OF THE PROGRAMME

3.1. CURRENT STATE OF THE ENVIRONMENT

3.1.1. GENERAL ASPECTS

The current state of the environment was analyzed at the level of the 15 administrative units included in the program in Romania and Bulgaria. In situations where no data were available at the local level, the analysis of environmental issues was performed at the level of the two countries.

The characterization of the current state of the environment was made on the basis of the data and information regarding the study area available at the time of the elaboration of the Environmental Report. The aim was to conduct a unitary analysis for the two countries, but in some cases, there may be differences in the type and resolution of available data.

The relevant environmental issues, agreed in the working group, are: biodiversity, population and human health, soil and land use, water, air, climatic factors, material values, cultural heritage, landscape, energy efficiency, sustainable transport and circular economy.

3.1.2. BIODIVERSITY

The program area overlaps over 4 biogeographical regions of Europe: Black Sea Bio-geographical Region, Continental Bio-geographical Region, Alpine Bio-geographical Region, and Steppic Bio-geographical Region, according to the different climate and altitude conditions.

The area hosts biodiversity values of both European and global importance. The flora and fauna characteristic of the program area are essential components of biodiversity in Europe.



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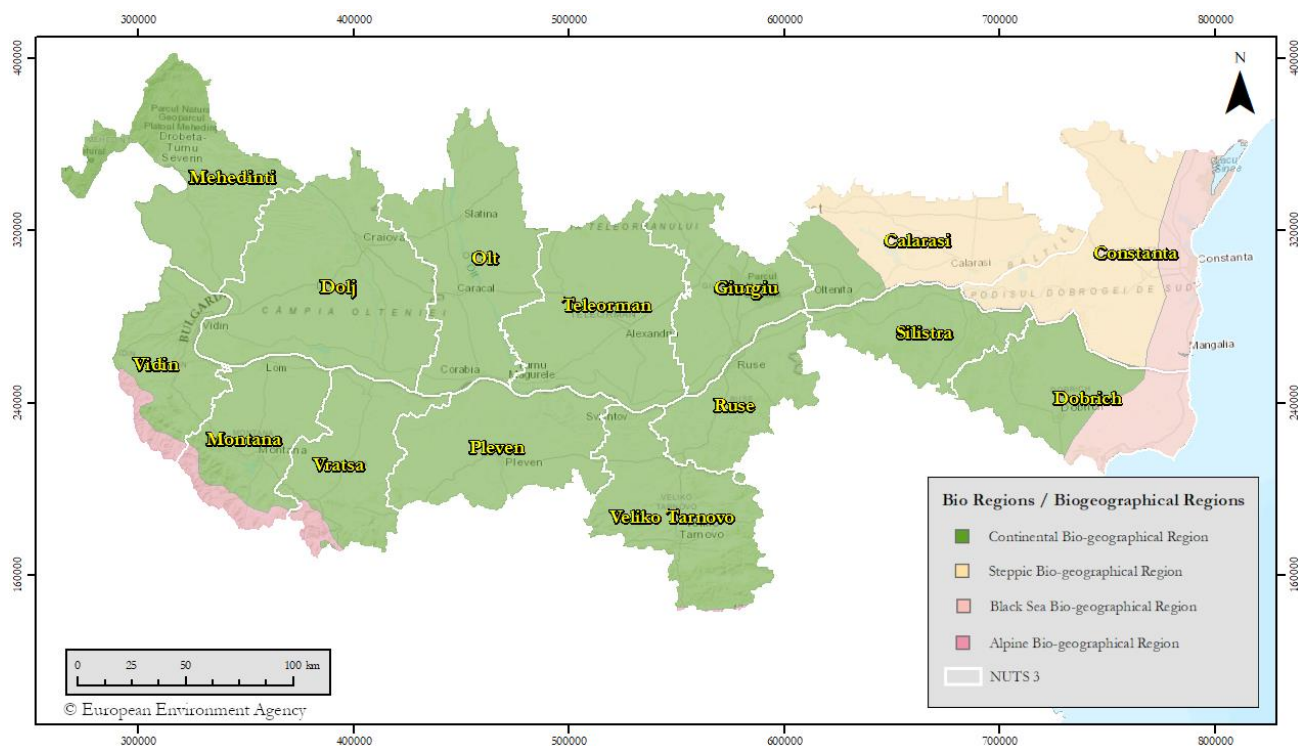


Figure no. 3-1 Biogeographical regions in programme area

The predominant types of ecosystems in the programme area are largely agricultural lands and urban ecosystems. Other types of ecosystems are also present, but to a lesser extent, such as wetland ecosystems and forest ecosystems.

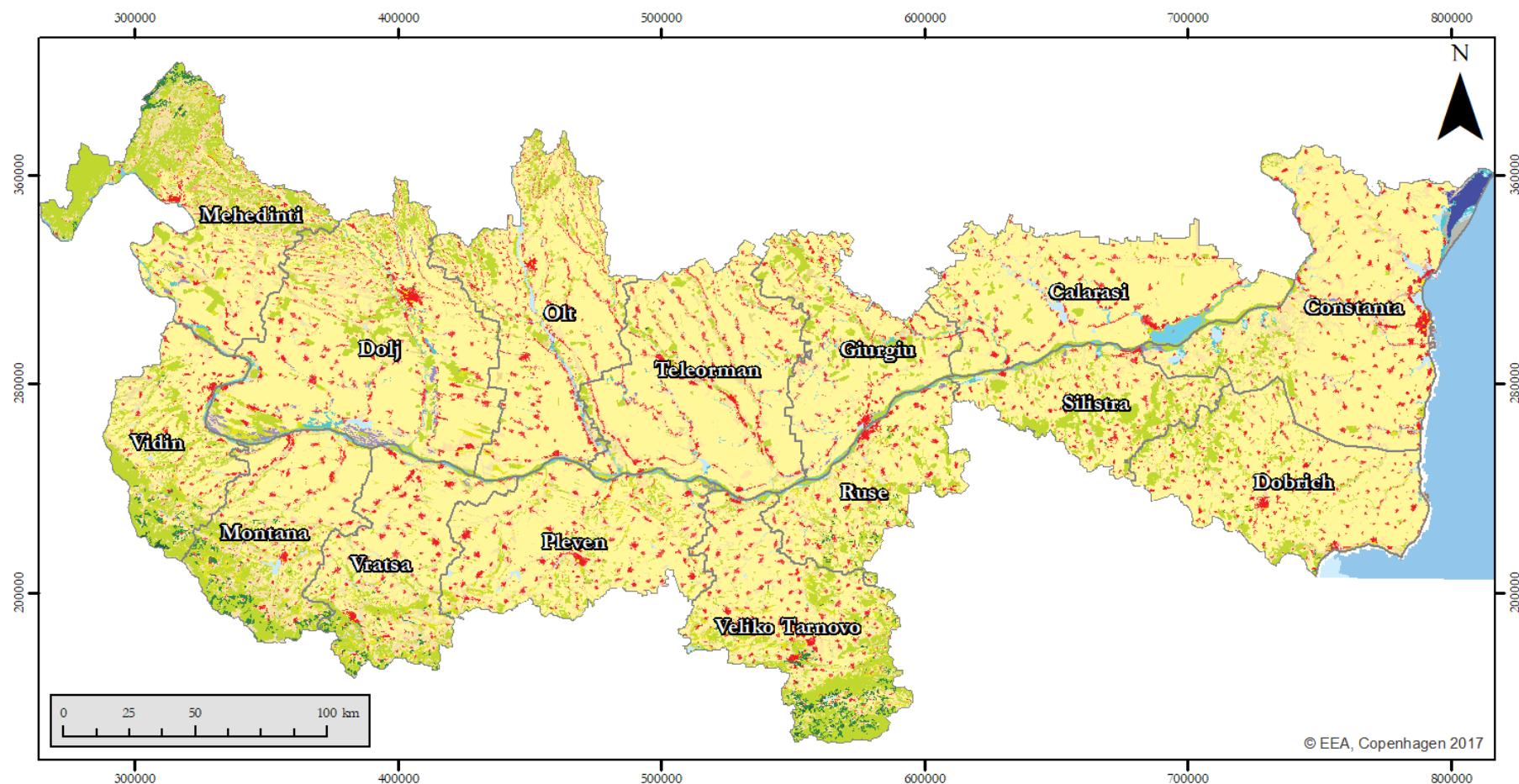


Figure no. 3-2 Types of ecosystems in the programme area (the legend on next page)



The legend of the types of ecosystems

3.1.2.1. Fauna and flora

The main part of the programme area is represented by the Danube Corridor. The Danube River is one of the largest stretches of water in Europe, this is a migration corridor for important species of fish, birds and other fauna⁴. The Danube Corridor include floodplain forests, (semi-wild) islands, dry habitats and wetlands, being valuable green infrastructure elements along the Danube and its major tributary rivers, not only fulfilling ecological functions, but also providing several ecosystem services such as flood protection or recreation. The Lower Danube and the Danube Delta are important places for breeding and resting for about 331 species of birds⁵.

The program area covers an area of 69,285 km², of which 56.75% belongs to Romania (39,320 km²) and 43.25% to Bulgaria (29,965 km²), and the Danube River represent the border between the two countries, which unfolds along 470 km from West to East.

In Bulgaria the most important ecologically areas, along the Lower Danube Green Corridor, are the Islands of Belene and Kalimok Marshes, and in Romania is the Danube Delta.

The portion of the Danube in the cross-border area of Romania-Bulgaria, has the richest biodiversity in the total course of the river. One reason for this statement is that no dams are built

⁴ https://d2ouvy59p0dg6k.cloudfront.net/downloads/wwf_factsheet_green_corridors_ldgc.pdf

⁵ <https://wwf.panda.org/?189121>



in the area, so the natural development of ecosystems has not been prevented. In addition, only in this lower part of the river, there are 4 endangered sturgeon species⁶.

Bulgaria

The program area in Bulgaria is characterized by a richness of species and habitats, which is due to the wide range of climatic, topographic and hydrological conditions. Here you can find localities and habitats of protected, rare and / or endemic species of wild flora and fauna for Bulgaria, the Balkan Peninsula or the world.

Flora - in the program area there are localities of very rare and protected plant species with different conservation status, some of which are included in the Red Data Book of Bulgaria (Golemanski et al. 2011, vol. I Plants and Fungi), the Biodiversity Act, the IUCN Red List, the CITES Convention, etc.

Some of the species of conservation importance in the program area are: *Eranthis bulgarica* - here is the only locality of the species on the planet; *Silene alpina* - one of the two Bulgarian populations of this critically endangered species is in the target area; *Salvia scabiosifolia* - the only locality of this protected plant species in the country is in the target area;

Bulgarian endemics, which occur in the target area and grow only in Bulgaria and nowhere else in the world, are: *Campanula jordanovii*, *Centranthus kellereri*, *Chamaecytisus kovacevii*, *Silene velcevii* and *Micromeria frivaldszkyana*; More interesting species from the Balkan endemics, which are found in the target area, are: *Acer heldreichii* Orph.ex Boiss, *Scabiosa triniifolia*, *Acanthus balcanicus*, *Achillea ageratifolia*, *Armeria rumelica*, *Centaurea chrysolepis*, *Cephalaria flava*, *Cerastium moesiaticum*, *Crocus veluchensis*, *Dianthus cruentus*, *Digitalis viridiflora*, *Erysimum comatum*, *Gentianella bulgarica*, *Iris reichenbachii*, *Lilium jankae*, *Pedicularis grisebachii*, *Peucedanum aegopodioides*, *Sesleria latifolia*, *Silene sendtneri*, *Vicia truncatula*, *Verbascum dieckianum* Borb. & Degen, *Astragalus suberosus* Banks & Sol. subsp. *haarbachi* (Spruner) V.Matthews), etc;

Some of the orchid species (that are found in the target area) are protected by the Biodiversity Act - *Himantoglossum caprinum*, *Orchis papilionacea*, *Ophrys cornuta*, etc., as well as *Paeonia mascula*, *Asplenium lepidum*, *Daphne laureola* и *Daphne oleoides*, together with the above-mentioned Bulgarian endemics.

- Many of the plant species that are found in the target area are included in the Red Data Book of Bulgaria with different conservation status: **Critically endangered (CR)**: *Marsilea quadrifolia*, *Limonium bulgaricum*, *Lindernia procumbens* and *Allium angulosum* and others; **Endangered (EN)**: *Galanthus elwesii*, *Jurinea ledebourii*, *Dianthus kladovanus*, *Dianthus nardiformis*, *Chamaecytisus kovacevii* (which is included in the IUCN World Red List and is restricted in the country), *Glycyrrhiza glabra*, *Nymphaepba altate peltate*, *Ruta graveolens*, *Trapa natans* and others; **Vulnerable (VU)**: *Seseli degenii*, *Micromeria frivaldszkyana*, *Acer heldreichii* Orph.ex Boiss and others; Tree species of conservation importance found in the target area are: *Acer heldreichii* Orph.ex Boiss, *Taxus baccata*, etc.

⁶ <https://www.icpdr.org/main/danube-basin/bulgaria>



Representatives of the orchid family have also been found in the target area, among which the most interesting and rare is *Himantoglossum caprinum* (M. Bieb.) Spreng.). *Orchis purpurea* Huds and *Orchis simia* Lam., *Cephalanthera damasonium* (Mill.) Druce and *Cephalanthera longifolia* (L.) Fritsch.) are also found, as well as the following species of the family Orchidaceae, which are subject to the CITES Convention: *Cephalanthera rubra*, *Epipactis helleborine*, *Epipactis Neottia nidus-avis* and *Platanthera chlorantha*.

Fauna - the geographical position, the complex paleogeographical and paleoclimatic past, the diverse relief and climate, the availability of sufficient freshwater resources and proximity to the Black Sea, the significant forest fund and others are the main and important factors favoring the existence of rich and original faunal diversity. Along the Black Sea coast there are **heat-loving and dry-loving** Mediterranean species of animals, and in the northern and mountainous regions coexist many species typical of Central and Northern Europe and the Ukrainian steppes. The number of Bulgarian and Balkan endemics is also large (Golemanski et al. 2011, vol. II Animals).

Of the northern complex, the most widespread are the holarctic species that live in the Northern Hemisphere, both in Europe and Asia, and in North America. Holarctic species in the Bulgarian fauna are brown bear (*Ursus arctos*), fox (*Vulpes vulpes*), weasel (*Mustela nivalis*), red deer (*Cervus elaphus*), barn owl (*Asio flammeus*) and others. Widely represented are the Palearctic species, which also live north of the tropics, but only in Europe, Asia and North Africa. These are: otter (*Lutra lutra*), white stork (*Ciconia ciconia*), eurasian skylark (*Alauda arvensis*), great tit (*Parus major*), common toad (*Bufo bufo*) and others. Euro-Siberian animal species are the most numerous. They are more cold-resistant and have penetrated the Bulgarian lands from North Asia and Europe and for many of them Bulgaria is the southern border of distribution. This zoogeographical category includes the species Red squirrel (*Sciurus vulgaris*), bank vole (*Myodes glareolus*), badger (*Meles meles*), roe deer (*Capreolus capreolus*), Western Capercaillie (*Tetrao urogallus*) and others.

The Central European faunal elements have similar ecological requirements to the Euro-Siberian fauna. Such representatives in our country are the Miller's water shrew (*Neomys anomalus*), European pine vole (*Microtus subterraneus*), Fire-bellied toad (*Bombina bombina*) and others. From the northern zoogeographical complex in Bulgarian part of the territory there are also steppe species (European souslik (*Spermophilus citellus*), Southern birch mouse (*Sicista subtilis*), Steppe polecat (*Mustela eversmanii*), etc.).

There is a large number of so-called cosmopolitan species, especially between Protozoa species and other Invertebrates. Many of them are synanthropic species and have coexisted with man for thousands of years (grey and black rat, oriental and German cockroach, housefly, etc.), while others are ubiquitous in the world (great white egret (*Ardea alba*), peregrine falcon (*Falco peregrinus*), common barn-owl (*Tyto alba*), etc.).

Some of the species of conservation importance in the target area are: *Protelsonia lakatnicensis* - Local endemic species. It is located only in Temnata dupka cave (Vratsa District).

There are many of the animal species of different conservation importance that are found in the target area and are included in the Red Data Book of Bulgaria with different status: *Vulnerable* (VU) species included in Red Data Book of Bulgaria - *Hippolais icterina* (BBA - Annex III; BeC -



Annex II); *Tichodroma muraria* (Bulgarian Biodiversity Act - Annex III); *Triturus cristatus* (BBA - Annex II, III; BeC - II; Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora - II, IV); *Rhinolophus mehelyi* (BBA- II, III; BeC - II; BoC- II; Council Directive 92/43/EEC - II, IV); *Nyctalus lasiopterus* (BBA - II, III; BeC - II; BoC- II; Council Directive 92/43/EEC - II, IV); *Hieraaetus pennatus* - (BBA - II, III; BeC - II; BoC- II; Directive 2009/147/EC - II, IV), etc.;

Endangered (EN) species included in Red Data Book of Bulgaria - *Accipiter gentilis* (Bulgarian Biodiversity Act (BBA) - Annex III; Convention on the Conservation of European Wildlife and Natural Habitats (BeC) - Annex II, Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)-II, Convention on the Conservation of Migratory Species of Wild Animals (BoC) - II); *Strix uralensis* (BBA - Annex II, III; BeC - Annex II, CITES-II); *Nyctalus leisleri* (BBA - II, III; BeC - II; BoC- II; Council Directive 92/43/EEC - II, IV), etc.;

Critically Endangered (CR) species included in Red Data Book of Bulgaria - *Podiceps nigricollis* (Bulgarian Biodiversity Act - Annex III; BeC - II); *Falco naumanni* - (BBA - Annex II, III; BeC - II; CITES - II; BoC - II; Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds - II); *Gallinago gallinago* (BeC - III; BoC - II); *Eudontomyzon mariae* (BeC - III; Council Directive 92/43/EEC - II); *Elaphe sauromates* (BBA - II, III; BeC - III; Council Directive 92/43/EEC - II, IV), etc.

Romania

The Southern area of Romania covers several biogeographical regions. The area of interest (the Constanța, Călărași, Giurgiu, Teleorman, Olt, Dolj and Mehedinți counties) overlap the following biogeographical regions: continental, steppic and Black Sea. This implies the existence of a high level of biodiversity in this area. It is especially the case of the Dobrogea area, where several endemic species can be found.

Regarding the existence of endemic species, the area of Dobrogea (comprising Constanța and Călărași counties) is of particular importance. In this region there are species of plants (*Centaurea jankae*, *Centaurea pontica*, *Potentilla emilii-popii*, *Moehringia jankae* among others), amphibians (*Pelobates syriacus*), reptiles (*Elaphe sauromates*, *Eryx jaculus*, *Testudo graeca*, *Podarcis tauricus*, *Lacerta trilineata* or *Vipera ursinii*) or mammals (*Vormela peregusna* or *Mesocricetus newtoni*), that are not found in other parts of Romania. These species are generally under protection in the Natura 2000 sites that exist in this area.

Due to the existence in the northern part of the Dobrogea region of Romania of the Danube Delta, the area is also of particular importance for bird species, both as a living habitat as well as a support on their migration routes. The Dobrogea region of Romania is part of the Mediterranean / Black Sea flyway corridor for migratory birds⁷. As it can be seen in the BirdLife International maps, the Dobrogea region has a high concentration of migratory birds, stopping over in their migration journey.

⁷ As described by BirdLife International here

http://datazone.birdlife.org/userfiles/file/sowb/flyways/5_Mediterranean_Black_Sea_Factsheet.pdf

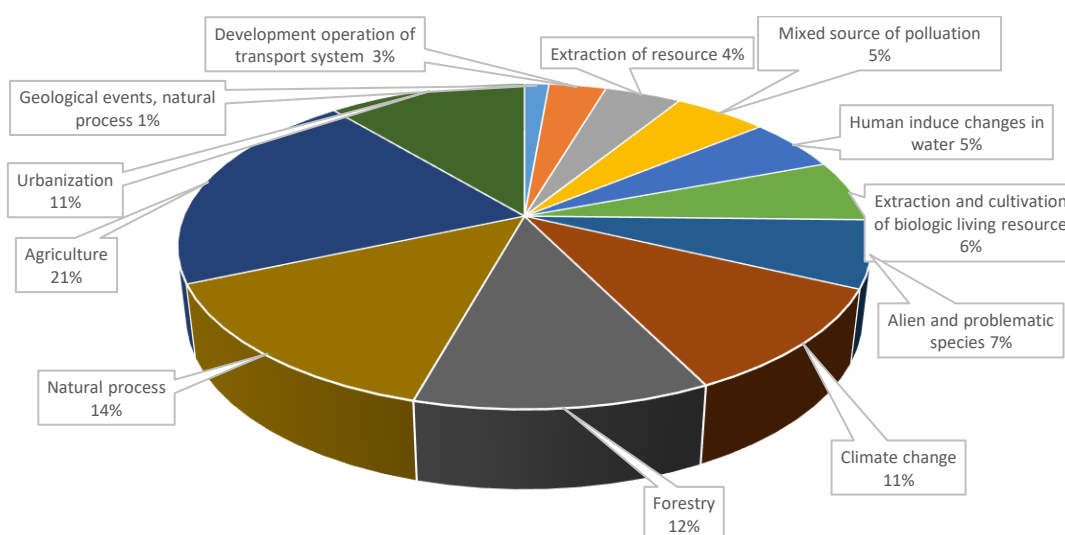


Overall, it can be concluded that the Southern part of Romania can be considered an important area for biodiversity, especially as it contains the Dobrogea region, an area hosting many important plant and animal species.

Pressures and threats

According to the classification of biogeographic regions in the program area, the main pressures and threats on the specific habitats of these regions with the highest share, resulting from the evaluation, are represented by agriculture, natural process (excluding catastrophes and processes induced by human activity or climate change), forestry, climate change and urbanization (development, construction and use of residential, commercial, industrial and recreational infrastructure and areas).

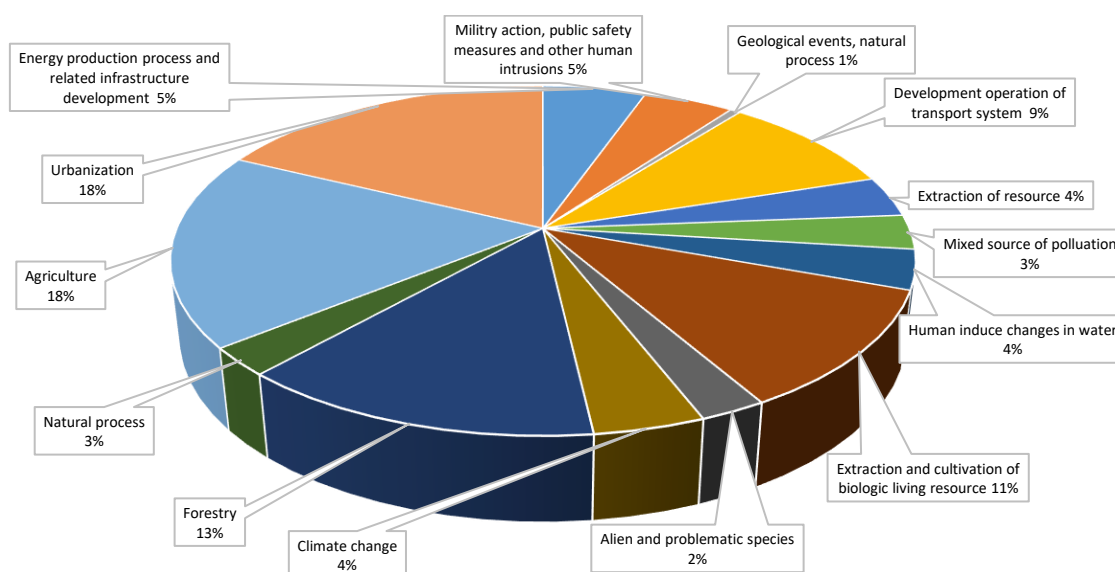
The figures below show the threats and pressures on habitats and species throughout the biogeographical region of Romania and Bulgaria.



Source of data: European Environment Agency

Figure no. 3-3 Pressures and threats on habitats

In the case of the species the main pressures and threats are constituted by agriculture, the process of urbanization, forestry and extraction and cultivation of biologic resource (other than agriculture and forestry), as shown in next figure.



Source of data: European Environment Agency

Figure no. 3-4 Pressures and threats on species

Analyzing in more detail, the pressures and threats specific to the biodiversity each county in Romania are land change, species overexploitation, the spread of invasive alien species, pollution and climate change, plus the contribution of indirect factors.

Pollution and nutrient loading in 2019, compared to the reference period of the '60s, establishes that the level of phosphate concentrations in coastal waters off the Romanian coast, have values close to those of the reference period, and silicates lower concentrations. At the same time, the concentrations of inorganic forms of nitrogen show low values compared to the intense eutrophication period.

Climate change is another pressure on biodiversity. The temperature differences are felt between the northern and southern part of the country, so the southern area has an average annual temperature of about 11°C.

The effects of climate change through temperature increases and the declining trend of annual rainfall have a definite impact on biodiversity. Some of the effects it can have are: changes in species behavior due to stress induced on their ability to adapt, changes in the distribution and composition of habitats due to changes in the species component, changes in the distribution of wetland-specific ecosystems, with possible restriction to their disappearance, the increase of the risk of diminishing the biodiversity by the disappearance of some species of flora and fauna, due to the diminution of the capacities of adaptation and survival, as well as of the possibilities of transformation into species more resistant to the new climatic conditions.

Mehedinți

On the territory of the Iron Gates Natural Park, it occupies more than 30% of the water surface. Habitat modification by building the dam for the creation of the Iron Gates I reservoir, has



produced significant changes for aquatic ecosystems and their transition from running water to lake ecosystem. Through this phenomenon many species have disappeared such as Accipenseridae, benthic fauna and the appearance of others, some of which are invasive (*Carasius* sp.). There are also other species with invasive potential that have been introduced, but have managed to colonize new areas very easily.

The fragmentation of the landscapes that took place mostly from human activities, in most of the county, with different intensities on ecosystems are the result of the following pressures: the tendency to develop economic activities with negative impact on the environment, urbanization started recently, defective managed, the development of a chaotic, unorganized tourism and especially of the weekend, the traffic on asphalt and dirt roads causes high mortality in their area of several groups of animals. The construction of the national road DN 56B in the southern part of the county, led to the anthropization of the left bank of the Danube as well as the partial isolation of the Old Danube arm and the lands of the Ostrovul Corbului de fluvial area, and the national road DN 56A fragments the Stârmina Forest, sewerage and diversion of watercourses.

Dolj

Habitat modification by deforestation in the Dolj plain and the taking over of agricultural lands, including sandy ones, have led to negative, significant changes in the stability of natural ecosystems, on sandy lands, destroying precisely what ensures the stability of the sands, on large areas producing a reactivation of them under the action of the wind. In addition, the recent transformations in the Danube Meadow, such as dams, drainage and irrigation, have led to a complete change in its appearance.

Olt

The number of invasive species on the Territory of Olt County in the period 2014-2017 was increasing, and in 2018 being constant, their number remaining at 26 species.

The eutrophication process occurs when the dead algae population begins to decompose and the oxygen in the water is consumed and the oxygen-dependent species die. In Olt County this phenomenon is severely present in all lakes.

In the area between Urzica - Stefan Cel Mare - Ianca and the Danube River, on an area of 15,000 hectares, there is the most typical aspect of a semi-arid area with accents of aridization and even desertification in Romania. This phenomenon is particularly favored by the presence of sandy soils. The response of biodiversity to the effects of climate change is that of migration to areas with the optimal temperature for development and multiplication.

The reduction of natural and semi-natural habitats by expanding the urban area in Olt County, in the period 2014-2018 registered a relatively significant increase.

Teleorman

Invasive species pose a real threat to biological diversity or may have other unintended consequences. According to the environmental assessment from 2019 at the level of Teleorman county, the types of invasive species were found, such as *Pteridium aquilinum*, Hornbills (*Xanthium italicum*), White mulberry (*Morus alba*), Pig turnips (*Helianthus tuberosus*), Acacia (*Robinia*)



pseudacacia), Amorphous (dwarf acacia) (*Amorpha fruticosa*), Canadian Sandpiper (*Solidago canadensis*), Canadian Vine (*Parthenocissus inserta*), Ambrosia (*Ambrosia artemisiifolia*).

The presence of nutrients in environmental factors is normal, pollution consists in the loading of nutrients above the allowed concentrations, bringing disturbances in the functioning mechanisms of ecosystems. Analyzing the evolution of nitrogen oxide emissions from 2014-2018, there is an increase in 2014-2015, followed by a sharp decrease in 2016-2018. Nitrogen dioxide emissions in the county resulted from the category of combustion and chemical industry, but the representative enterprise for the chemical industry in 2014 by installing emission reduction systems achieved a decrease in total NOx emissions in the county.

Regarding ammonia emissions, which come mainly from agricultural sources, analyzing their evolution in the period 2014-2018, there is a decrease in 2014-2017, followed by a slight increase in 2018.

Giurgiu

There are no data on the pressures on biodiversity in Giurgiu County.

Călărași

Pollution and nutrient loading are a pressure on biodiversity, and in the county, there are 52 sources of nitrates from agricultural activities. For these purposes, projects have been implemented with the general objective of long-term reduction of nutrient discharges into the waters flowing into the Danube and the Black Sea.

The reduction of natural and semi-natural habitats by occupying urban land in the period 2010-2014 is relatively constant.

Constanța

The pressures that are exerted on the biodiversity in Constanța County are formed by invasive species, pollution and nutrient loading, climate change, habitat change as well as excessive exploitation of natural resources.

Invasive species can cause major biodiversity loss, and are currently a real threat to aquatic and terrestrial ecosystems. Two groups of organisms and invasive were identified on the territory of the county, namely marine and freshwater aquatic species (algae, invertebrates, fish, reptiles, mammals) and terrestrial species (invertebrates, higher plants). Some of them have penetrated in the last decades and in the internal waters of the country.

Vidin

Some of the main pressures and threats with high effect on the biodiversity in Vidin district are from the following categories: *agriculture; silviculture, forestry; mining, extraction of materials and energy production* (e.g. sand and gravel extraction); *urbanisation, residential and commercial development* and *natural system modifications* (e.g. reclamation of land from estuary or marsh). In the agricultural pressures and threats can be included for example cultivation, grazing, etc., and in the pressures and threats related to urbanisation, residential and commercial development - urbanised areas, human habitation, etc.

Montana



Some of the main pressures and threats with high effect on the biodiversity in Montana district are from the following categories: *agriculture; silviculture, forestry; biological resource use other than agriculture & forestry and natural system modifications* (e.g. human induced changes in hydraulic conditions). In the agricultural pressures and threats can be included for example abandonment of pastoral systems, lack of grazing, etc., and in the pressures and threats related to biological resource use other than agriculture & forestry - hunting, trapping, poisoning, poaching, etc.

Vratsa

Some of the main pressures and threats with high effect on the biodiversity in Vratsa district are from the following categories: *agriculture; silviculture, forestry; urbanisation, residential and commercial development, biological resource use other than agriculture & forestry and natural system modifications* (e.g. modifying structures of inland water courses). In the agricultural pressures and threats can be included for example cultivation, grazing, mowing / cutting of grassland, use of biocides, hormones and chemicals, fertilisation, irrigation, etc., and in the pressures and threats related to silviculture, forestry - forestry clearance, removal of dead and dying trees, artificial planting on open ground (non-native trees), etc. As for urbanisation, residential and commercial development - the main pressures and threats for biodiversity are urbanised areas, human habitation, discharges, etc., and for biological resource use other than agriculture & forestry - trapping, poisoning, poaching, hunting, etc.

Pleven

Some of the main pressures and threats with high effect on the biodiversity in Pleven district are from the following categories: *agriculture; silviculture, forestry; mining, extraction of materials and energy production* (e.g. sand and gravel extraction); *urbanisation, residential and commercial development, natural system modifications* (e.g. modifying structures of inland water courses) and *natural biotic and abiotic processes (without catastrophes)*. In the agricultural pressures and threats can be included for example cultivation, grazing, fertilisation, etc., and in the pressures and threats related to silviculture, forestry - artificial planting on open ground (non-native trees), forestry clearance, etc. As for urbanisation, residential and commercial development - the main pressures and threats for biodiversity are urbanised areas, human habitation, factories, etc., and for natural biotic and abiotic processes (without catastrophes) - accumulation of organic material, drying out, etc.

Veliko Tarnovo

Some of the main pressures and threats with high effect on the biodiversity in Veliko Tarnovo district are from the following categories: *agricultural* (e.g. cultivation); *silviculture, forestry; biological resource use other than agriculture & forestry; natural system modifications* (e.g. modifying structures of inland water courses) and *natural biotic and abiotic processes (without catastrophes)*. In the pressures and threats related to silviculture, forestry can be included for example - artificial planting on open ground (non-native trees), forestry clearance, removal of forest undergrowth, removal of dead and dying trees, forest exploitation without replanting or natural regrowth, etc., and for these related to biological resource use other than agriculture & forestry - hunting, collection of wild animals (terrestrial), taking / removal of terrestrial plants.



As for natural system modifications - the main pressures and threats for biodiversity are landfill, land reclamation and drying out, canalisation & water deviation, flooding modifications, modification of hydrographic functioning, etc., and for natural biotic and abiotic processes (without catastrophes) - abiotic (slow) natural processes, interspecific floral relations, etc.

Ruse

Some of the main pressures and threats with high effect on the biodiversity in Ruse district are from the following categories: *agriculture; urbanisation, residential and commercial development; biological resource use other than agriculture & forestry and natural biotic and abiotic processes (without catastrophes)*. In the agricultural pressures and threats can be included for example cultivation, use of biocides, hormones and chemicals, mowing / cutting of grassland, etc., and in the pressures and threats related to urbanisation, residential and commercial development - industrial or commercial areas, discharges, etc. As for biological resource use other than agriculture & forestry - the main pressures and threats for biodiversity are hunting, taking / removal of animals (terrestrial), etc., and for natural biotic and abiotic processes (without catastrophes) - drying out, silting up, etc.

Silistra

Some of the main pressures and threats with high effect on the biodiversity in Silistra district are from the following categories: *agriculture; silviculture, forestry; transportation and service corridors* (e.g. roads, paths and railroads, utility and service lines); *urbanisation, residential and commercial development; biological resource use other than agriculture & forestry; invasive, other problematic species and genes* (e.g. invasive non-native species, genetic pollution) and *natural biotic and abiotic processes (without catastrophes)*. In the agricultural pressures and threats can be included for example cultivation, grazing, use of biocides, hormones and chemicals, etc., and in the pressures and threats related to urbanisation, residential and commercial development - urbanised areas, human habitation, disposal of household / recreational facility waste, industrial stockage, etc. As for biological resource use other than agriculture & forestry - the main pressures and threats for biodiversity are fishing and harvesting aquatic resources, etc., and for natural biotic and abiotic processes (without catastrophes) - erosion, drying out, accumulation of organic material, eutrophication (natural), etc.

Dobrich

Some of the main pressures and threats with high effect on the biodiversity in Dobrich district are from the following categories: *agriculture; biological resource use other than agriculture & forestry; invasive, other problematic species and genes* (e.g. invasive non-native species, genetic pollution) and *natural biotic and abiotic processes (without catastrophes)*. In the agricultural pressures and threats can be included for example cultivation, use of biocides, hormones and chemicals, fertilisation, irrigation, restructuring agricultural land holding, etc., and in the pressures and threats related to urbanisation, residential and commercial development - urbanised areas, human habitation, disposal of household / recreational facility waste, discharges, etc. As for biological resource use other than agriculture & forestry - the main pressures and threats for biodiversity are fishing and harvesting aquatic resources, hunting and collection of wild animals



(terrestrial), etc., and for natural biotic and abiotic processes (without catastrophes) - accumulation of organic material, eutrophication (natural), etc.

In conclusion, it can be said that among of the most important pressures and threats with high effect on the biodiversity are: *agriculture* (in all districts), *silviculture*, *forestry* and *urbanisation*, *residential and commercial development* (in 6 out of 8 districts).

3.1.2.2. National protected areas

The national protected natural areas in the program area occupy an approximately 80454.4 ha in Romania and 212587.7 ha in Bulgaria. Which means that the area of the RO-BG program is occupied in a percentage of approx. 4.23% of protected natural areas of national interest.

The national protected areas in the program area in Romania are a total of 90. Nature reserves are predominant in the program area in Romania. The national protected areas are divided into five of the eight categories according to the National legislation of Romania (OUG 57/2007) and are as follows:

- **National Park** - the program area includes 1 National Park with a total area of approximately 2,87 ha;
- **Natural Monuments** - the program area includes 10 Natural Monuments with a total surface of 5264.41 ha;
- **Natural Park** - the program area includes 4 Natural Park with a total surface of approximately 3.77 ha;
- **Nature Reserves** - the program area includes 69 Nature Reserves with a total surface of approximately 23834.46 ha;
- **Scientific Reserves** - the program area includes 6 Scientific Reserves with a total surface of approximately 183482.22 ha.

Detailed list of all national protected areas (in the Romania program area) with their category, name and surface (ha) is presented in Annex 15.4.

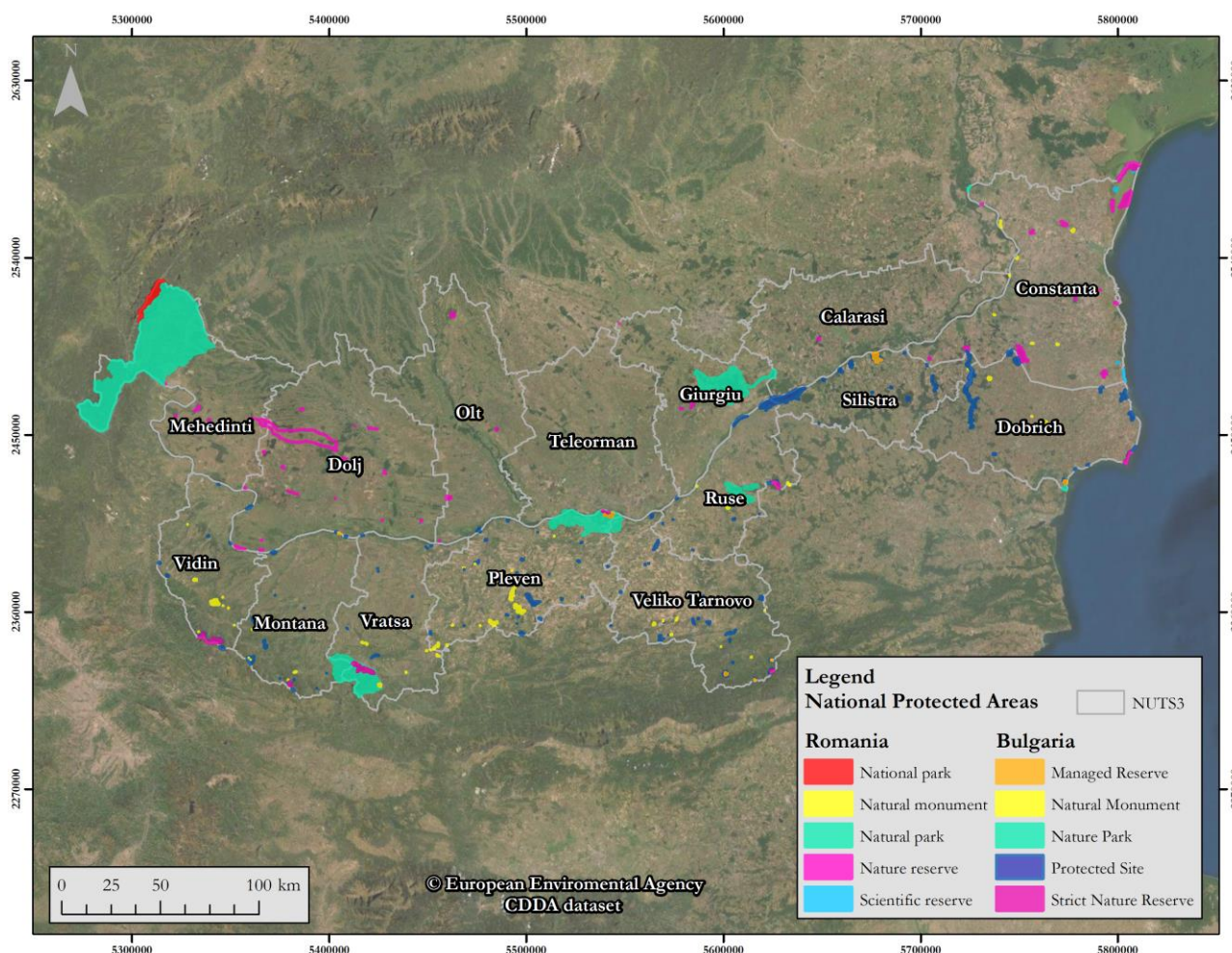
The national protected areas in the program area in Bulgaria are a total of 194. They are divided into five of the six categories according to the National legislation of Bulgaria (excluding National Parks) and are as follows:

- **Nature Parks** - the program area includes 3 Nature Parks with a total surface of 25026.1 ha;
- **Strict Nature Reserves** - the program area includes 7 Strict Nature Reserves with a total surface of 4078.1 ha;
- **Managed Reserves** - the program area includes 6 Managed Reserves with a total surface of 1670.6 ha;
- **Protected Sites** - the program area includes 113 Protected Sites with a total surface of 19561.9 ha;
- **Natural Monuments** - the program area includes 65 Natural Monuments with a total surface of 2806.5 ha.



Detailed list of all national protected areas (in the Bulgarian program area) with their category, name and surface (ha) is presented in presented in Annex 15.4.

The location of the protected natural areas in the program area is shown in the following figure.



3.1.2.3. Natura 2000 sites

Natura 2000 sites covering approx. 20% of the total eligible area. The Romanian part comprises more than 658.000 ha and the Bulgarian part circa 750.000 ha. Their location in the program area is presented in the following figure.

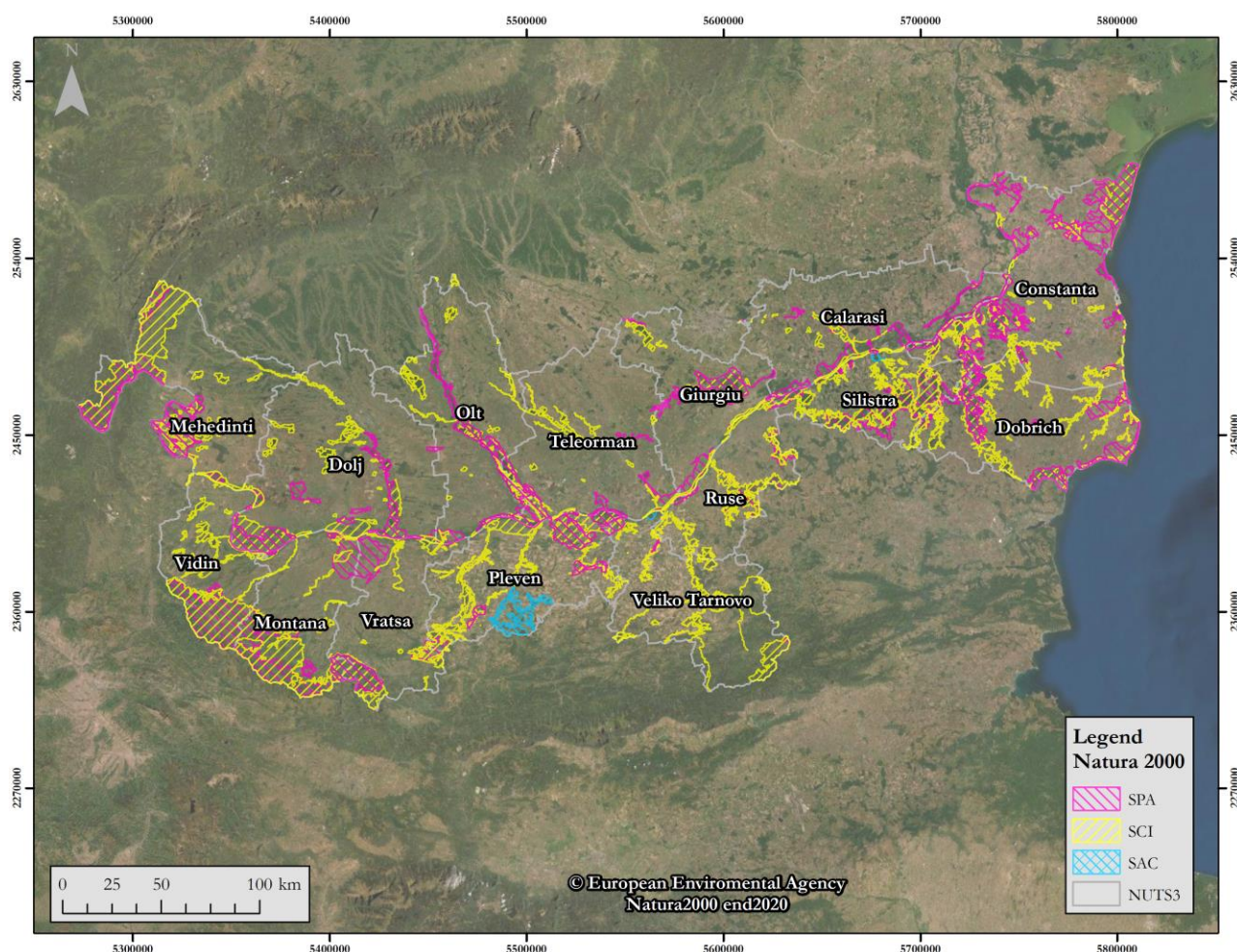


Figure no. 3-6 Location of Natura 2000 sites

Natura 2000 Sites in the programm area in Bulgaria are a total of 131. They are divided as follows:

- **Designated under Birds Directive⁸** - the program area includes 41 Natura 2000 Sites (designated under Birds Directive) with a total surface of 693413.35 ha;
- **Designated under Habitats Directive⁹** - the program area includes 90 Natura 2000 Sites (designated under Habitats Directive) with a total surface of 843836.73 ha;

Detailed list of all Natura 2000 Sites (in the Bulgarian program area) with their code, name and surface (ha) is presented in Annex 15.4.

In Romania the Natura 2000 Sites in the program area are a total of 126. They are divided as follows:

- **Designated under Birds Directive-** the program area includes 54 Natura 2000 Sites (designated under Birds Directive) with a total surface of approximately 486152.29 ha;
- **Designated under Habitats Directive** - the program area includes 72 Natura 2000 Sites (designated under Habitats Directive) with a total surface of approximately 453009.26 ha;

⁸ Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds

⁹ Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora



Detailed list of all Natura 2000 Sites (in the Romania program area) with their code, name and surface (ha) is presented in Annex 15.4.

According to Biodiversity information system for Europe, at the level of Romania, out of the total protected natural areas, 76.93% consists exclusively of Natura 2000 sites¹⁰. The protected species, according to the European legislation, respectively the Habitats Directive and the Birds Directive are in a number of 2500 habitats respectively 500 bird species. The vast majority of habitats are in a good state of conservation (43.99%), but there are also habitats with moderate conservation status (36.04%), poor (10.39) and unknown 9.58%.

The conservation status of the species by taxonomic groups is good in a proportion of approximately 54%, poor 43.4%, bad 12.2% and unknown 11.8%.

According to Biodiversity information system for Europe, in Bulgaria, the network of protected areas is 63.63% of Natura 2000 sites¹¹. They cover 323 species and 90 habitats under European legislation. In terms of conservation status, 36.87% of habitats are in a good state of conservation 30.41% moderate, 3.23% poor and 29.49% unknown. The conservation status of the species by taxonomic groups is good in a proportion of approximately good 48.92%, poor 39.93%, bad 3.09% and unknown 39.31%.

According to the reports of the two countries, from 2013-2018 regarding the conservation status of species and habitats, according to Article 17 of Directive 92/43 / EEC, in the program area are found all types of conservation status for habitats and species.

Habitat conservation status is largely unfavorable-inadequate. The "unfavorable-bad" state of conservation is present in a smaller proportion, and is found especially in Călărași County, and partially in Dolj, Constanța in the area of the program in Romania. And in the Bulgarian sector, it is partially found in the district of Vratsa, Pleven and Veliko-Tarnovo. The rest of the habitats are in a "Favorable" or "Unknown" state of conservation.

Regarding the conservation status of the species in the program area, they are largely "Favorable", followed by "Unfavorable-Inadequate". The "unfavorable-bad" conservation status is found in a low proportion in the south of Vidin district.

The main objective of species and habitats is to achieve the "favorable" conservation status.

¹⁰ <https://biodiversity.europa.eu/countries/romania>

¹¹ <https://biodiversity.europa.eu/countries/bulgaria>

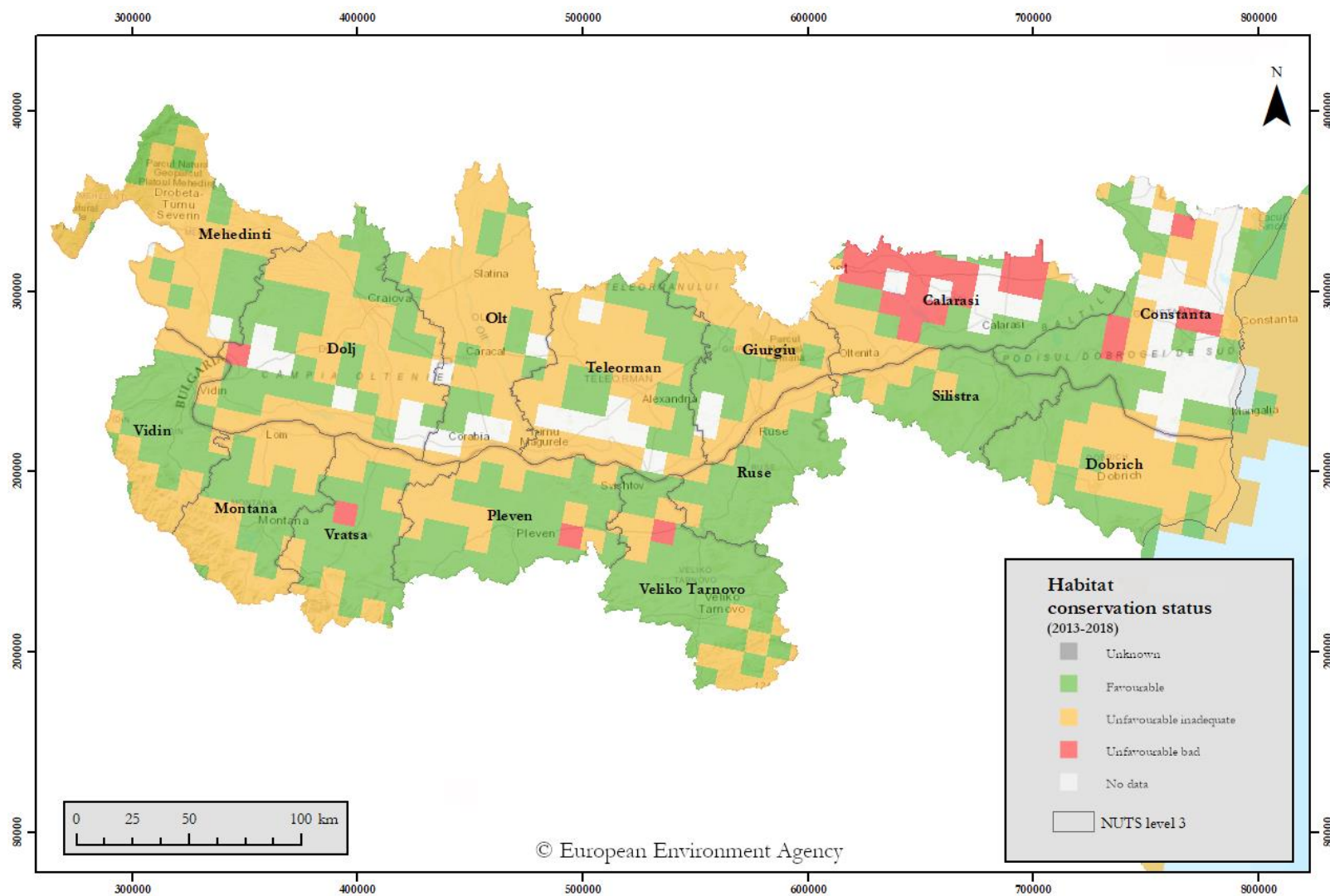


Figure no. 3-7 Conservation status of habitats in program area



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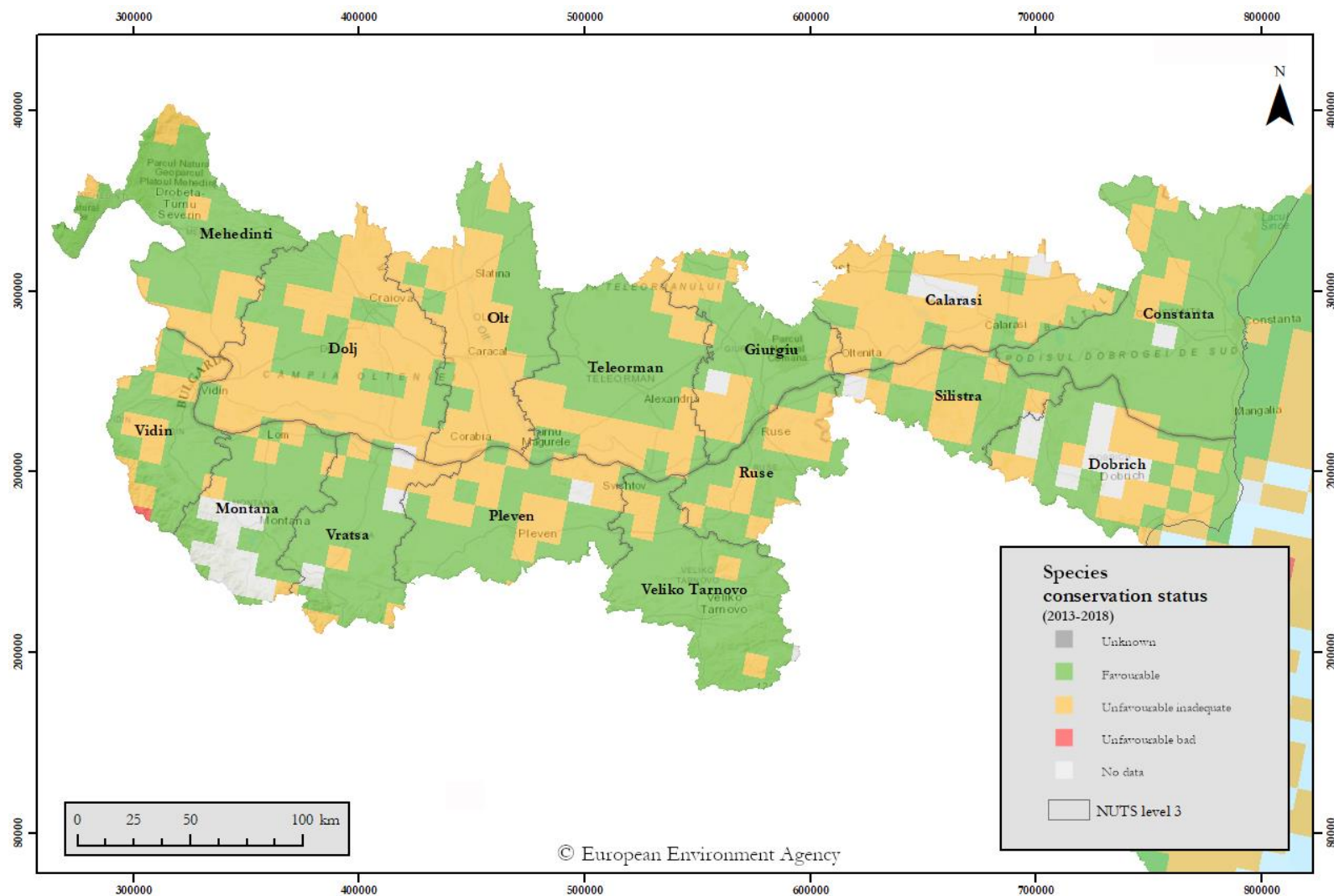


Figure no. 3-8 Conservation status of species in programm area



The conservation status of habitats in Romania is mainly good and to a small extent bad, in addition at European level Romania ranks first in terms of the share of habitats with good conservation status. In terms of habitat conservation in Bulgaria, poor conservation status predominates¹². The number of assessments per country is indicated in parentheses.

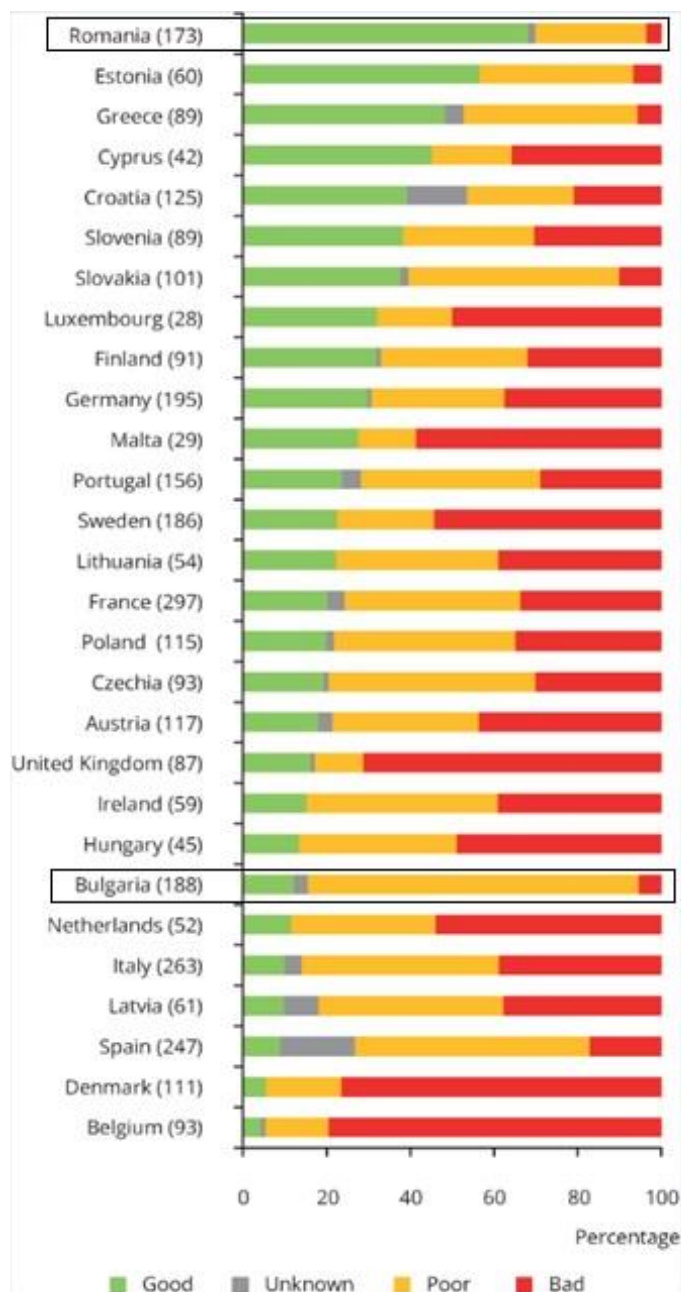


Figure no. 3-9 The conservation status of habitats at Member State level

The trend regarding the conservation status of the habitats in the programm area in Romania is stable, while in the program area in Bulgaria the trend of conservation is improving¹³.

¹² <https://www.eea.europa.eu/data-and-maps/figures/conservation-status-of-habitats-at-1>

¹³ <https://www.eea.europa.eu/data-and-maps/figures/spatial-distribution-of-habitats-conservation-1>

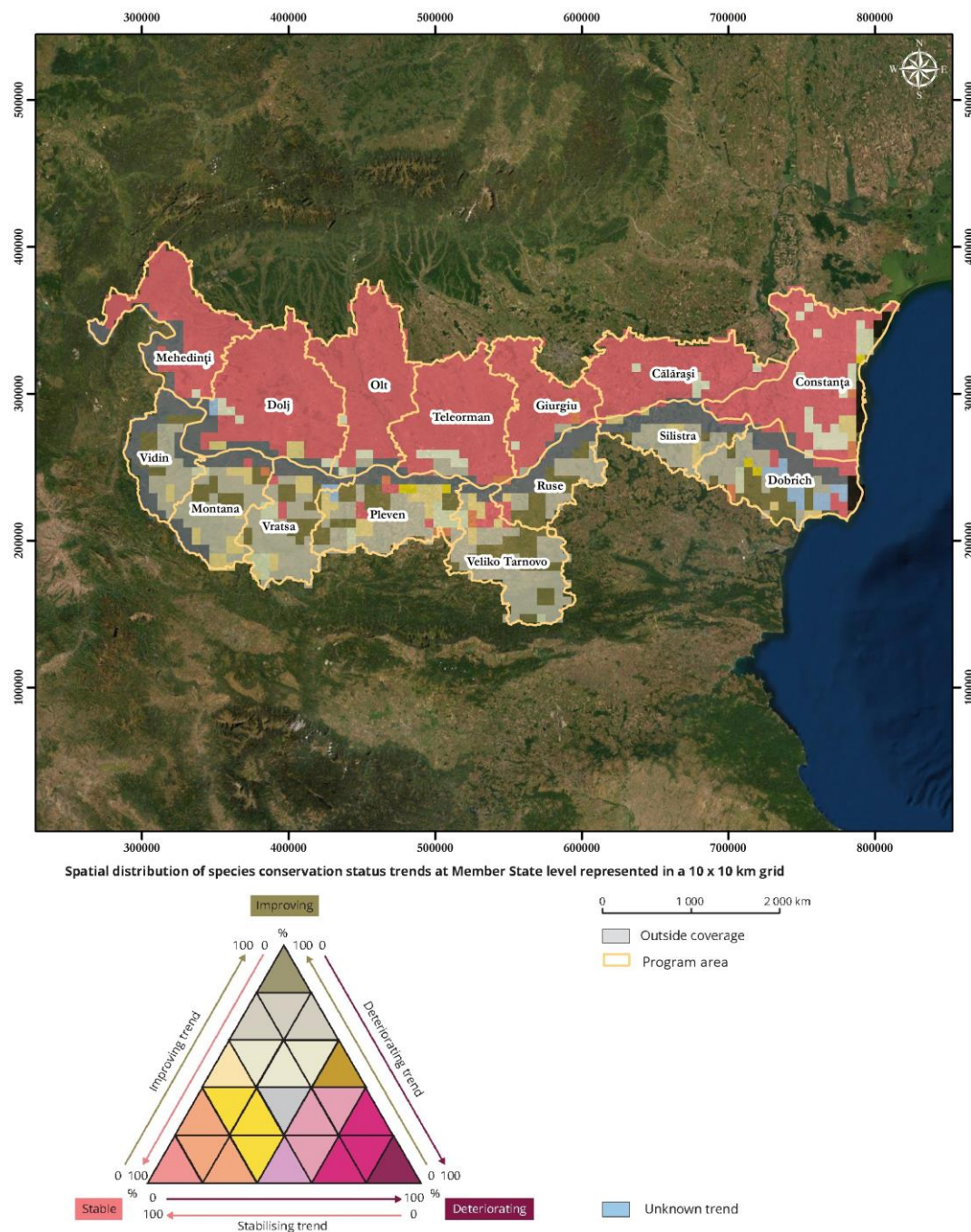


Figure no. 3-10 Spatial distribution of habitat conservation trends

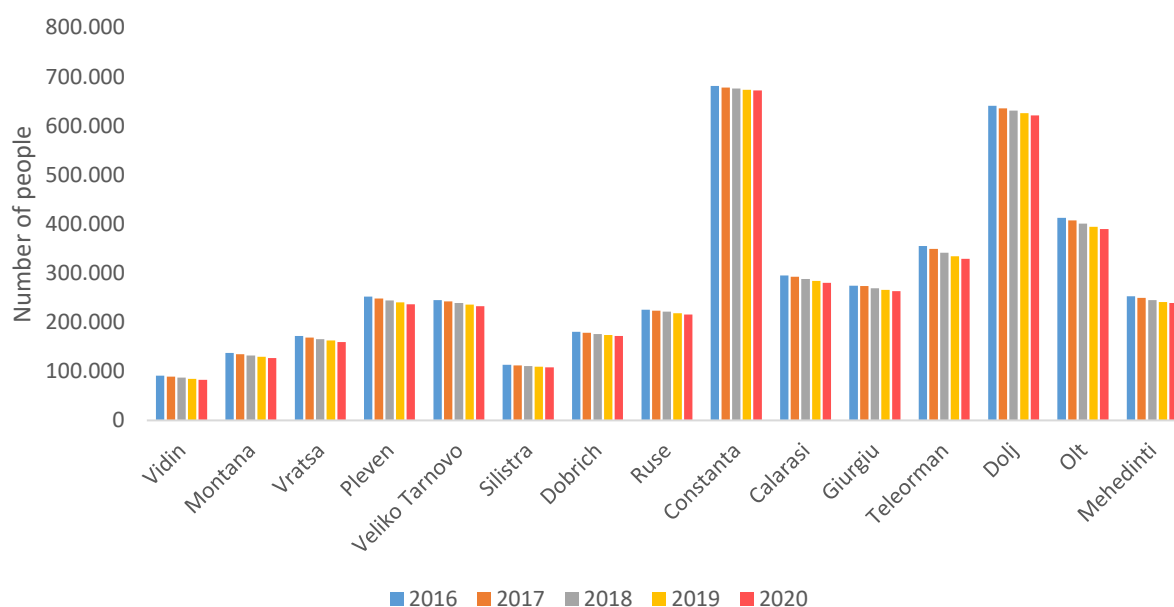
3.1.3. POPULATION AND HUMAN HEALTH

3.1.3.1. Population and demographic structure

The program area in the two countries occupies a common area of 69,424.92 km². In Romania being occupied 39,377.72 km² (16.52% of the surface of Romania), and in Bulgaria 30,047.19 km² (27.03% of the surface of Bulgaria).



If we analyze the counties and districts, we can appreciate that there is a decrease in population in the period 2016-2020. Also the largest population in the two countries is found in Constanta, Dolj Counties and Veliko Tarnovo, Pleven Districts.



Source of data: Eurostat

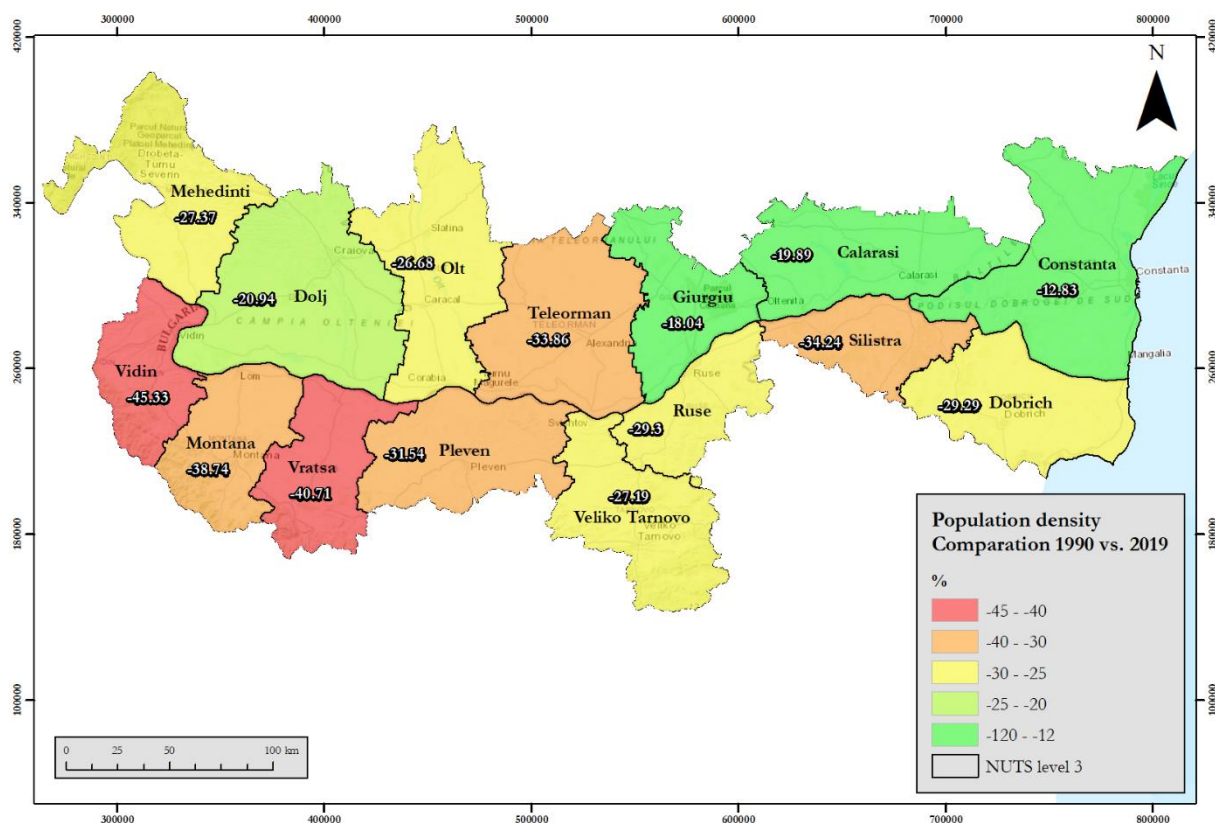
Figure no. 3-11 Population density in programm area

Analysing the statistical data, it can be seen that both sides of the border are facing the phenomenon of depopulation. These can be based on population migration to more economically developed areas, aging, low fertility rates, etc.

Following the evolution of the population, over a longer period of time, it is found that there is a very large decrease. In Bulgaria, the districts most affected by population change are Vidin and Vratsa, followed by Teleorman County in Romania. For example, in the Vidin district, the depopulation phenomenon is based on the absence of higher education centers, a weak economy and high unemployment.

Although in Romania the values are lower for the depopulation of the area, the trend is quite strong and it can be ranked in the Eastern European demographic tendency.

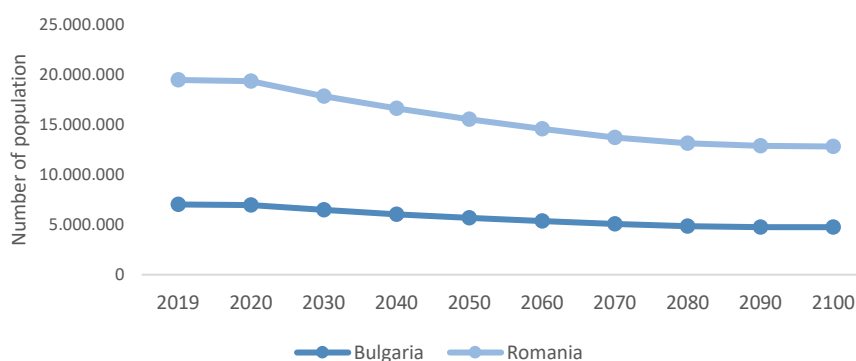
According to the report “Doing business in the European Union 2017: Bulgaria, Romania and Hungary”, the demographic trends of these countries are not favorable in the long run, and are intensified by the exodus of skilled workers, who are looking for jobs abroad. To this factor is added the lack of foreign investment and the increasing degree of uncertainty worldwide. From an economic point of view, the alignment at the same level with the standard of living of Western Europeans is unfolding at a slow pace.



Source of data: EUROSTAT

Figure no. 3-12 Population density in 2019 compared to 1990

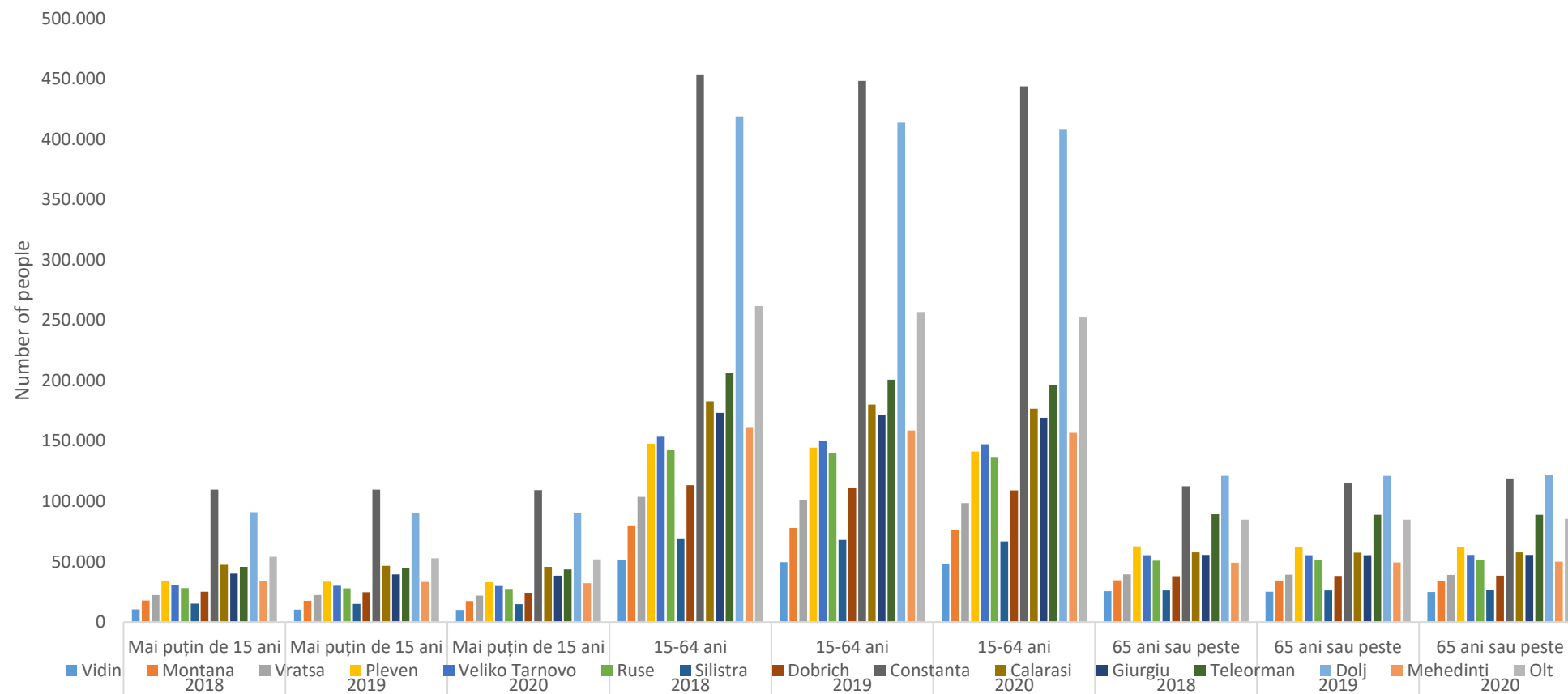
Analyzing the projections of the two sides of the border regarding the evolution of the population density in the period 2019-2100, a significant decrease of their number is observed. The program area is also directly affected.



Source of data: Eurostat

Figure no. 3-13 Population projection

Analyzing the number of the population according to the age category to which they belong, it can be seen that the predominant age group is 15-64 years. On the last place is the population less than 15 years.



Source of data: Eurostat

Figure no. 3-14 Age structure of the population in the programm area



The age structure of the population of the eight districts on the territory of the Republic of Bulgaria shows an unfavorable distribution of the working-age and over-working age population - as the working-age population is almost twice as old as the working-age population. This confirms the unfavorable trend observed in the previous years for demographic aging of the population. The aging of the population is more pronounced in the villages than in the cities.

For the last three years the values vary in low limits and remain relatively constant, on the basis of the average values for the country the indicators in the eight districts are more unfavorable.

In the program area there are predominantly rural settlements, where the rural population is 50% or more of total population. In only two areas of each country, of those included in the program, intermediate settlements are predominant, where the rural population between 20% and 50% of total population.

Table 3-1 Urban and rural settlements in study area

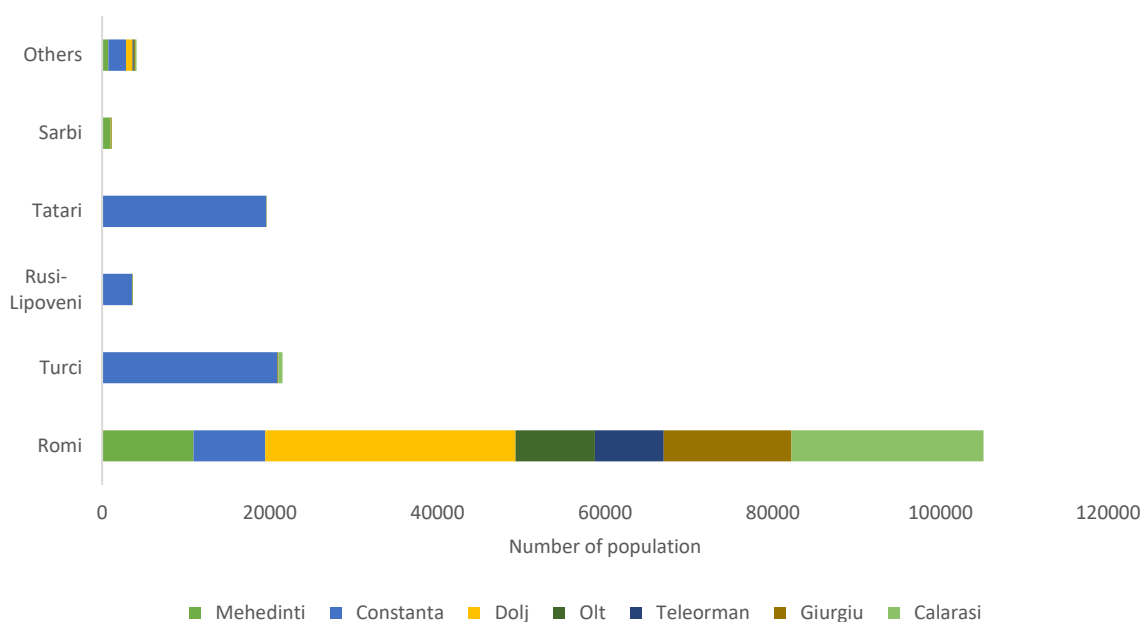
Counties/District	Urban and rural settlements
Mehedinți	Predominantly rural
Dolj	Intermediate
Olt	Predominantly rural
Teleorman	Predominantly rural
Giurgiu	Predominantly rural
Călărași	Predominantly rural
Constanța	Intermediate
Vidin	Predominantly rural
Vrasta	Predominantly rural
Montana	Predominantly rural
Veliko Tornovo	Predominantly rural
Pleven	Predominantly rural
Ruse	Intermediate
Dobrich	Intermediate
Silistra	Predominantly rural

Source of data: Eurostat

3.1.3.2. Minorities

The Romanian population is the majority in all counties included in the program. Following the last census in 2011, the main minority population was roma. Mainly in Constanta County, there are other types of minorities such as Tartars, Turks.

The category of other minorities that are found in almost all counties, but in a smaller number are formed by ethnic groups such as: Ukrainians, Bulgarians, Germans, Greeks, Italians, etc.



Source of data: Census 2011

Figure no. 3-15 Minority population in Romania

According to the official census in 2011, the main minority groups in the Republic of Bulgaria are Turks (8.85% of the country's population) and Roma (4.85%), followed by Russians (0.15%), Armenians (0,1%), Vlasi (0.05%), Karakachan (0.04%), Ukrainians (0.03%), Macedonians (0.02%), Greeks (0.02%), Jews (0.02%), Romanians (0,01%) and others.

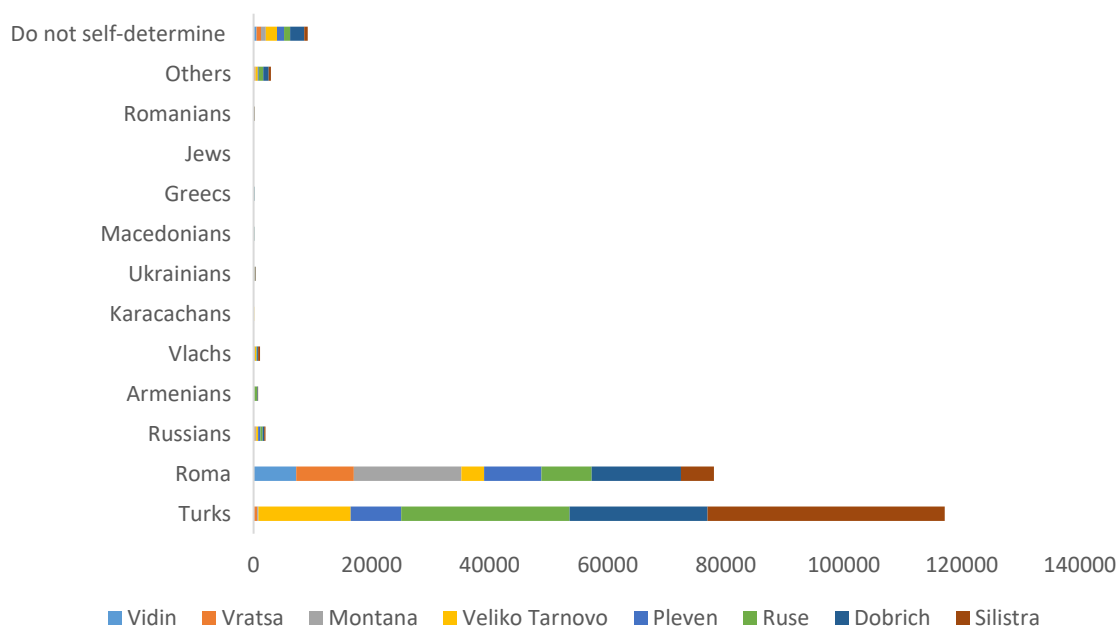
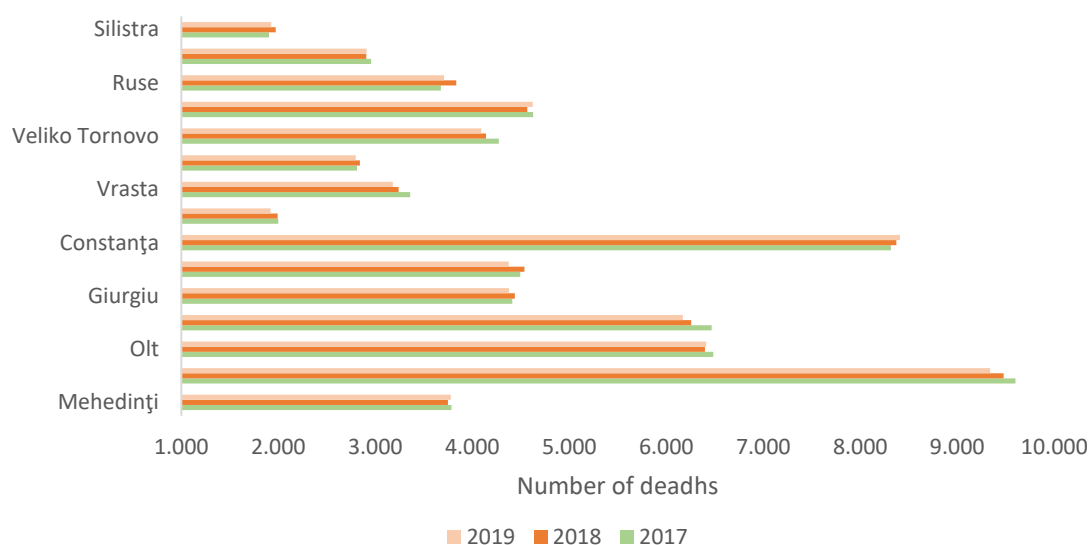


Figure no. 3-16 Minority population number in Bulgaria



3.1.3.3. Natural population trend

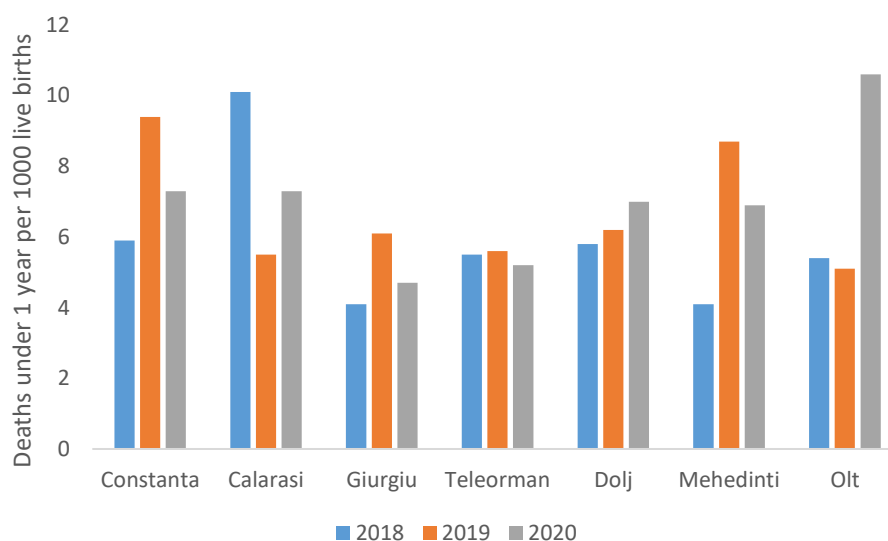
According to EUROSTAT statistics, there is a slight decrease in the number of deaths in the area where the program takes place. In 2020 the crude mortality rate by districts in Bulgaria is between 13.4‰ and 27.7‰. Highest is the mortality in districts Vidin - 27.7‰, Montana - 25.5‰. There is still a strong male super-mortality. In 2019, 108 men die per 100 women, and the mortality rate among men is 16.6 per thousand against 14.5 per thousand for women.



Source of data: EUROSTAT

Figure no. 3-17 Number of deaths in programme area

The infant mortality rate in the program area in Romania in the analyzed period 2018-2020 shows different fluctuations depending on the county. For example, in Olt County in 2020 there was a doubling of the number registered in the previous year, while in Constanța, Giurgiu, Teleorman and Mehedinți there were decreases compared to the previous period.



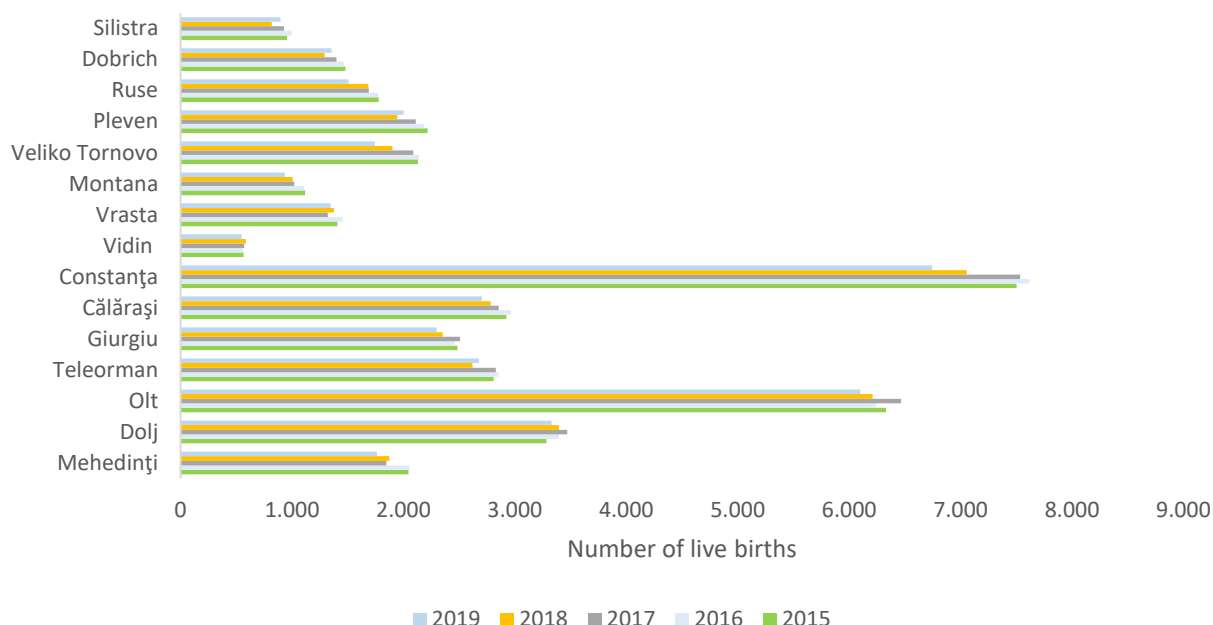
Source of data: National Statistics Institute RO

Figure no. 3-18 Infant mortality rate in programm area from Romania

Regarding child mortality in Bulgaria, the indicator has favorable trends in recent years, marking a reduction in values. The total number of cases decreased from 408 for 2017 to 342 for 2019. The total number of children in the fields subject to the program is 104 for 2017 or about 26% of cases in the country. For 2019, the total number of cases for the eight areas is 65 or 19% of cases in the country. The main cause of infant mortality is class XVI diseases - some conditions that occur during the perinatal period - this class accounts for 45% of infant mortality. In second place are diseases of class XVII - congenital anomalies, deformities and chromosomal aberrations with a share of about 22%, and in third place - diseases of class X - diseases of the respiratory system - about 11%.

The highest number of cases of child mortality is in the districts of Pleven, Veliko Tarnovo and Dobrich.

The number of live births in the period 2015-2019 registered a significant decrease in all areas included in the program, for this reason it can be explained the decrease in the number of population.

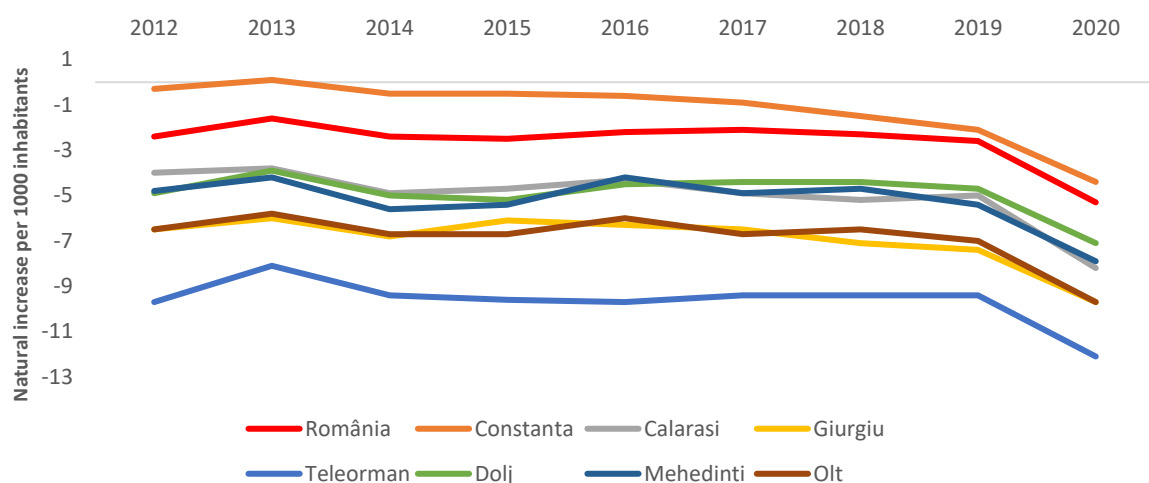


Source of data: EUROSTAT

Figure no. 3-19 Number of live births in programm area

At the level of the programm area in Romania in the period 2018-2020 there is an increase in the negative natural increase, the number of registered deaths being higher than the number of births. Compared to the rate of natural increase registered in Romania, 6 of the 7 counties included in the programm area are below the national average. The exception is Constanța County, which in 2013 registered a positive natural increase. The most significant increase in the number of deaths compared to the number of births is recorded in 2020 as a result of the COVID-19 pandemic. The lowest values are registered in Olt and Giurgiu counties.

The figure below shows: the number, structure and distribution of the population of a certain territory in a certain time interval. This refers to the natural change of the population as a result of the difference between the number of births and deaths, as well as its movement in the territory (example: the natural increase of the population which represents the difference between the birth rate and the mortality rate, the difference between the new number -born live and the number of deaths per 1000 inhabitants).



Source of data: National Statistics Institute RO

Figure no. 3-20 Rate the natural increase registered in the programm area in Romania

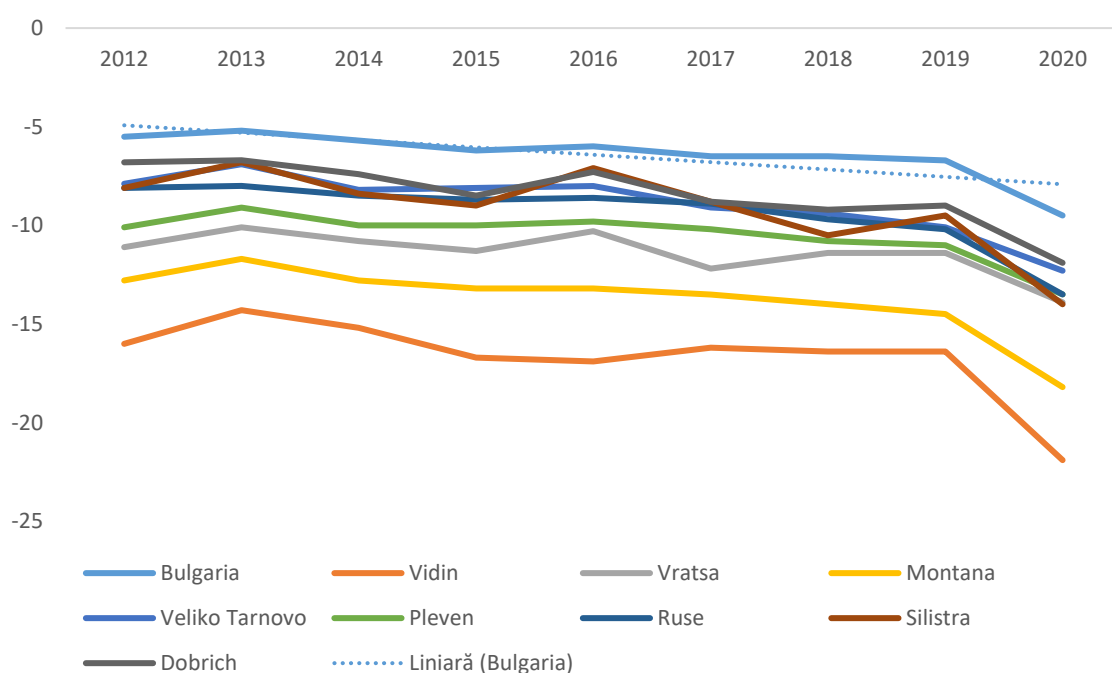


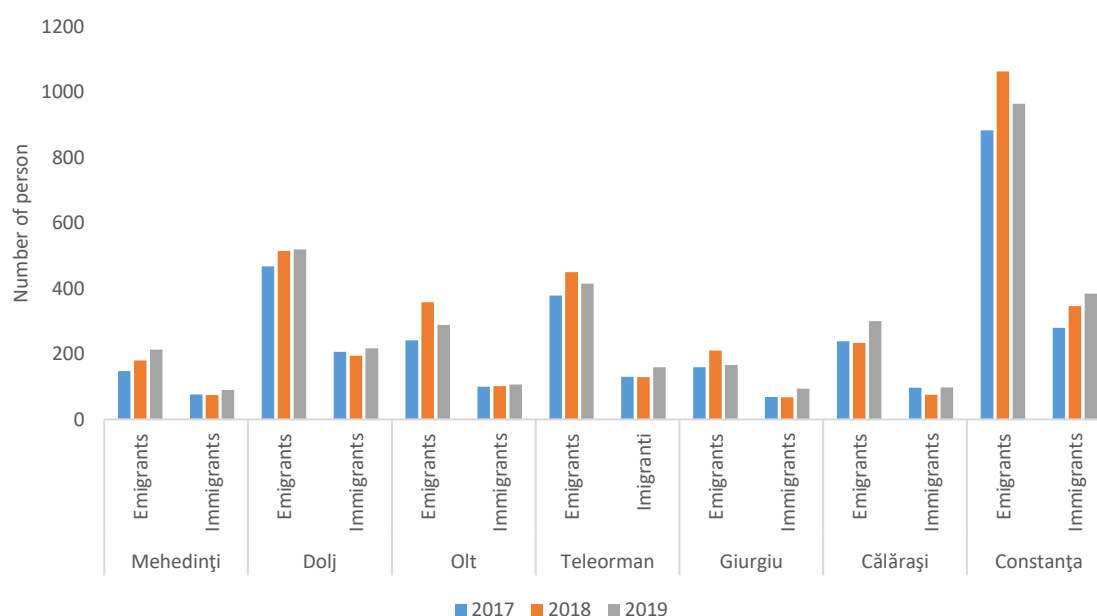
Figure no. 3-21 Coefficient of natural growth by district and country, NSI

The values of the natural growth indicator are negative, maintaining the unfavorable tendency, both for the country and for the eight districts, to decrease the values in recent years. The sharpest decline is found for 2020 compared to 2019, which is due to mortality from COVID-19. For all districts, the natural increase is lower than the national average, with the lowest values for Vidin district - there for the entire period under review the natural increase is more than twice lower.



3.1.3.4. Population migration

Both countries in the programme area have identified major changes in population migration in recent years. The population moving to the main cities or even to the capitals of Bucharest and Sofia. This phenomenon intensified when the countries joined the European Union, when the population began to emigrate for better places and living conditions.



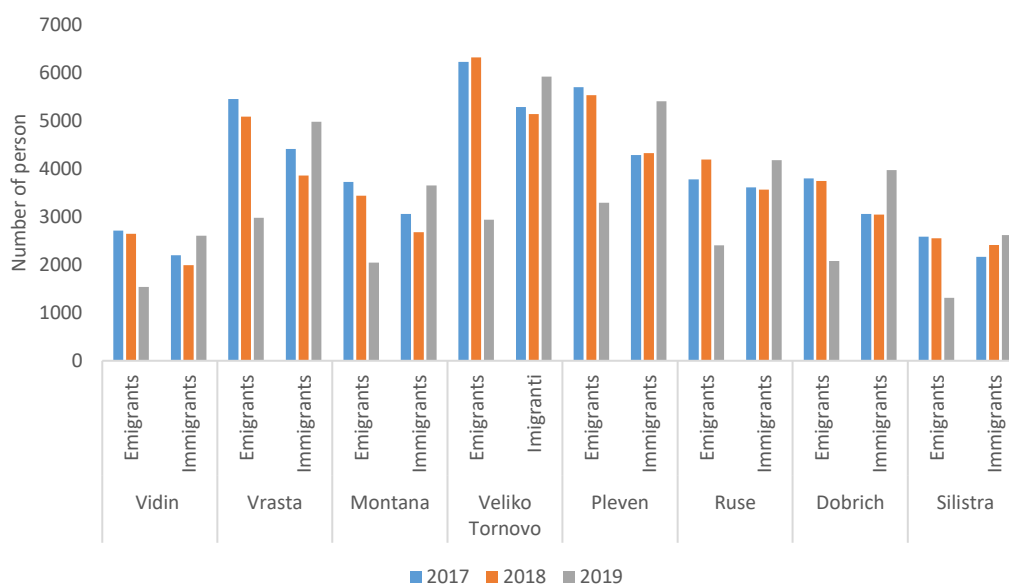
Source of data: National Statistics Institute RO

Figure no. 3-22 Population migration in Romania

In Romania, in the counties included in the programme, population emigration is higher than immigration. This contributing to reduce the population. It can be observed that from the analyzed period 2017-2019, 2018 registered the most emigrations, and this phenomenon being increasing during the analysis period.

In the case of immigration, there is also an increase, but not enough to cover the emigrated population.

In Bulgaria in the districts of the programme, the number of emigrations is approximately equal to that of immigrants. In most of the areas there was an increase in 2019 compared to 2017.

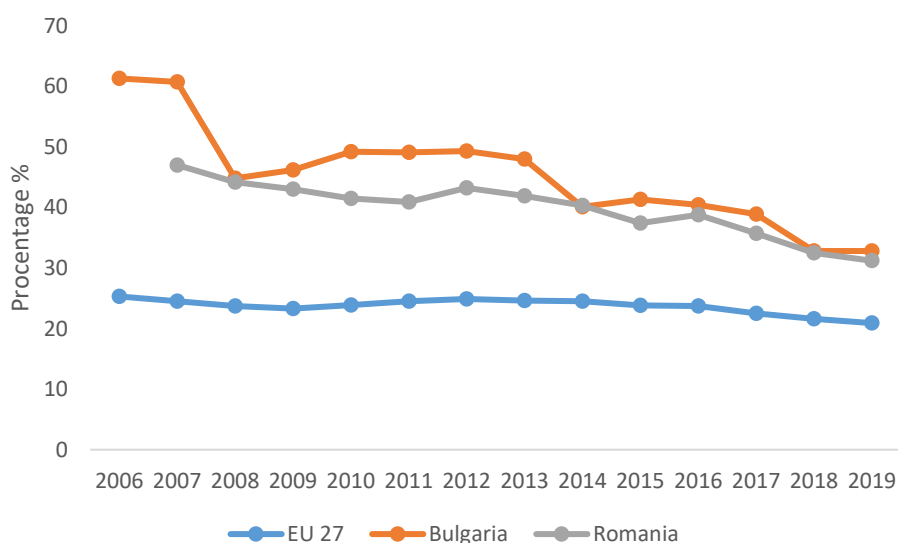


Source of data: National Statistics Institute BG

Figure no. 3-23 Population migration in Bulgaria

3.1.3.5. Standard of living

The first goal of sustainable development is specifically related to the population, "No poverty". Percentage of people who are exposed at risk of poverty after social transfers, severely materially deprived or living in households with very low work intensity, from the two countries included in the program, it is above the European average. This phenomenon is gradually declining from 2006/2007 to the present.



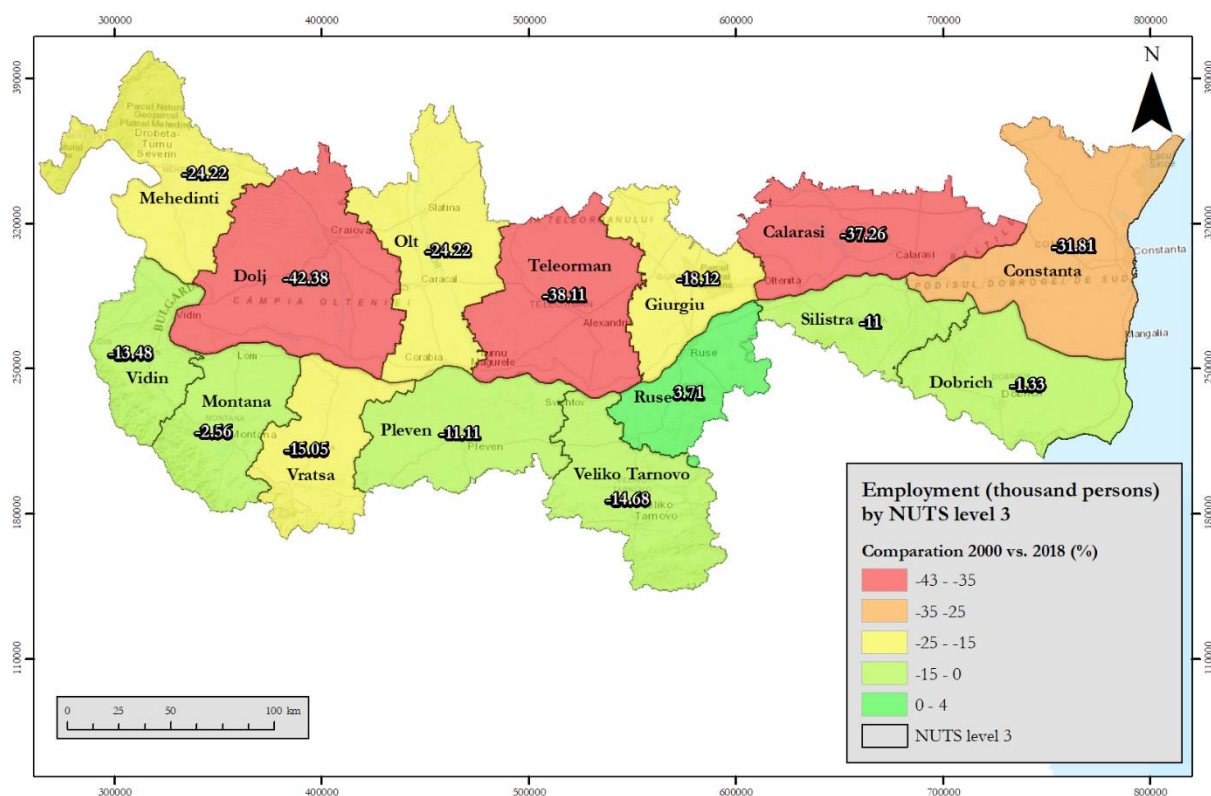
Source: Eurostat

Figure no. 3-24 People at risk of poverty or social exclusion

Employment in the program area in various areas gradually decreased between 2000 and 2018. The reasons behind this low degree are the emigration to more economically developed areas and



the aging population. The lack of specialization of the population in the fields required in the work market, and the fact that it is not found in the current job, could be another important reason for this decrease in employment.



Source: Eurostat

Figure no. 3-25 Employment in programm area

3.1.3.6. Public health indicators

This chapter is a requirement of the Bulgarian Ministry of Health according to Consultations on the Report on the Scope of Environmental Assessment of the Interreg VI-A Romania-Bulgaria Cross-Border Cooperation Programme 2021-2027, number 99-00-2-362 / 13.08.2021.

The disease is a particular state of the body conditioned by the harmful action of various environmental determinants and characterized by a complex of morphological and functional changes - local and general, reactive and lesional, which disrupts royalty and activity at various functional levels.

In epidemiology, the prevalence expresses the total number of cases of a certain disease or other event (accident, etc.) existing in a given population, without distinguishing between old and new cases that occurred during a certain period of time (prevalence period) or at a given time (momentary prevalence).

Incidence is a measure of the probability of a disease occurring in a given population over a specific period of time.

The classes of diseases according to the International Classification of Diseases -10th Revision (ICD-10), which are most related to environmental factors are:



- II class: Neoplasms;
- IV class: Diseases of the endocrine glands, nutrition, metabolism and immune disorders;
- IX class : Diseases of the circulatory system;
- X class: Diseases of the respiratory system;
- XI class: Diseases of the digestive system;
- XII class: Diseases of the skin and subcutaneous tissue;
- XIV class: Diseases of the genitourinary system;
- XVII class: Congenital anomalies.

In Bulgaria¹⁴:

In 2019, there is an increase in the incidence of some infectious diseases - measles, chickenpox, mumps, meningococcal meningitis and sepsis, viral hepatitis, viral meningitis and meningoencephalitis. Eight cases of malaria imported from abroad have been reported. Reduce the incidence of pertussis, Q fever, Crimean-Congo hemorrhagic fever, dysentery, leptospirosis and Lyme borreliosis. The incidence of active tuberculosis in 2019 is 18.5 percent. Among children under 17 years of age is 5.7 percent and is lower than the previous year. In 2019, the frequency of new cases of malignant neoplasms increased compared to the previous year and it is 434.9 per cent of the population. There are no significant changes in the nosological structure of these diseases. The incidence of malignant neoplasms is high in: the mammary gland in women; the prostate; the skin; trachea, bronchi and lungs; colon; the body of the uterus; the cervix; rectosigmoid area, rectum, anus and anal canal, etc. In 2019, the incidence of malignant neoplasms in children under 17 is 5.0 percent, with the highest incidence of malignant diseases of lymphatic, hematopoietic and related tissues - 2.6 percent. The following are the malignant neoplasms of: the eye, the brain and other parts of the central nervous system - 1.1 per hundred thousand; mesothelial and soft tissues - 0.5 per hundred thousand; urinary system, bones and articular cartilage - 0.3 per hundred thousand; inaccurate, secondary and unspecified localizations - 0.2 per hundred thousand, etc. The registered malignant neoplasms in 2019 in four of the districts within the scope of the program - Ruse, Pleven, Vratsa and Silistra are higher than the national average.

¹⁴ https://www.nsi.bg/sites/default/files/files/publications/Zdraveopazvane_2020.pdf

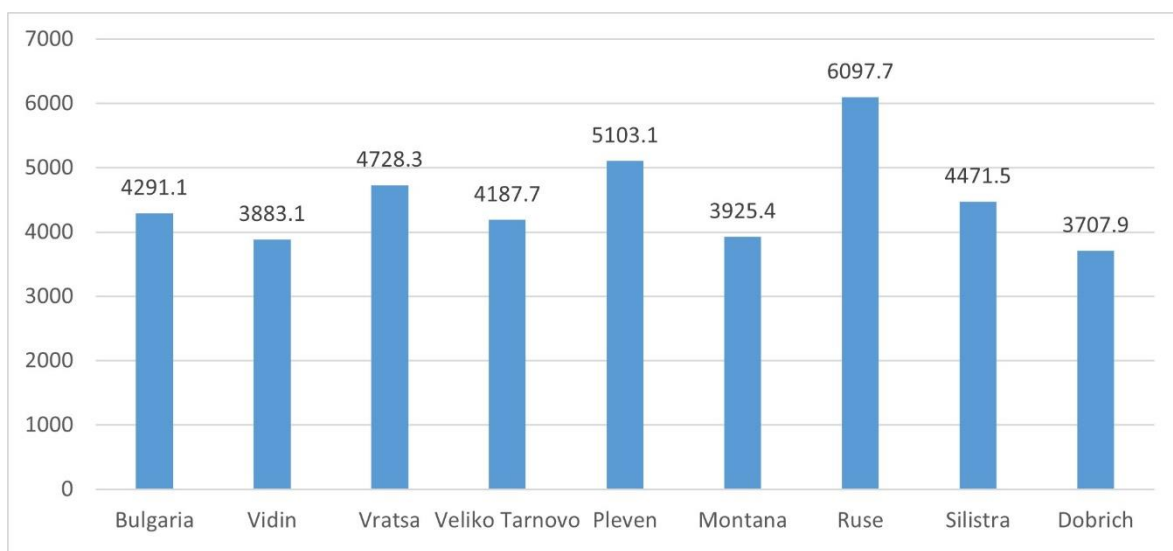


Figure no. 3-26 Registered malignant neoplasms for 2019 (per 100,000 people), Healthcare 2020, NSI

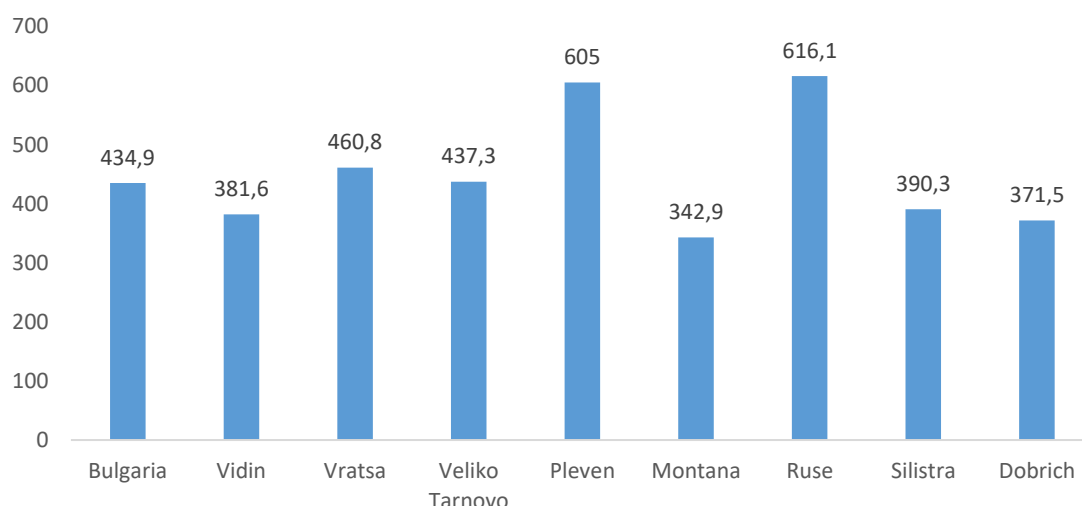


Figure no. 3-27 Newly discovered diseases from malignant neoplasms in 2019 (100 000 people), Health 2020, NSI

At the end of 2019, the number of patients under surveillance of psychiatric establishments, compartments, cabinets and ambulatories was 116 851. Among them with the highest frequency of: schizophrenia - 332.7 per cent thousand; Mental and behavioral disorders due to alcohol use - 114.3 per cent thousand; Recurring depressive disorder - 104.3 per cent thousand; Bipolar affective disorder - 85.5 per cent thousand, and so on.

Hospitalized cases (written and died) at the steady of medical establishments in 2019 are 34 584.4 per cent thousands of the population. Of these, 17.3% are the case for factors influencing the health status of the population and contact with health services. In the structure of hospitalized cases under the classes of diseases, the diseases of the blood circulation, respiratory system, digestive system, newly forms, the diseases of the urinary system, trauma, poisoning and some



other consequences of external causes, diseases of bone-muscular and connective tissue, pregnancy, birth and lasting period.

In children up to 17 years of age, the most of the classes of diseases is the relative share of hospitalized cases due to: respiratory diseases; some conditions occurring during the perinatal period; traumas, poisoning and some other consequences of the impact of external reasons; some infectious and parasitic diseases; diseases of the digestive system. The relatively high relative share of hospitalized cases in children in case of factors influencing the health status of the population and contact with health services is the result of the reporting of healthy live-lived children to this class.

Among persons aged 18-64, the largest among the classes of diseases is the share of hospitalized cases due to diseases of the digestive system, diseases of the circulatory system, pregnancy, childbirth and the postpartum period, diseases of the genitourinary system, neoplasms, bone diseases -muscular system and connective tissue.

Leading diseases in the structure of hospitalized cases by classes of diseases above 65 are the diseases of: the bloodstream organs, the digestive system, newly forms and the respiratory system.

In 2019, the number of certified persons over 16 years of age who have been recognized as permanently reduced working capacity / type and degree of disability is 9.4 per thousand people over 16 years of age. The most common reason for recognized permanently reduced working capacity / type and degree of disability are diseases of the circulatory system - 32.4%. They are followed by neoplasms (24.9%), diseases of the musculoskeletal system and connective tissue (11.1%), diseases of the endocrine system, eating and metabolic disorders (5.9%), etc.

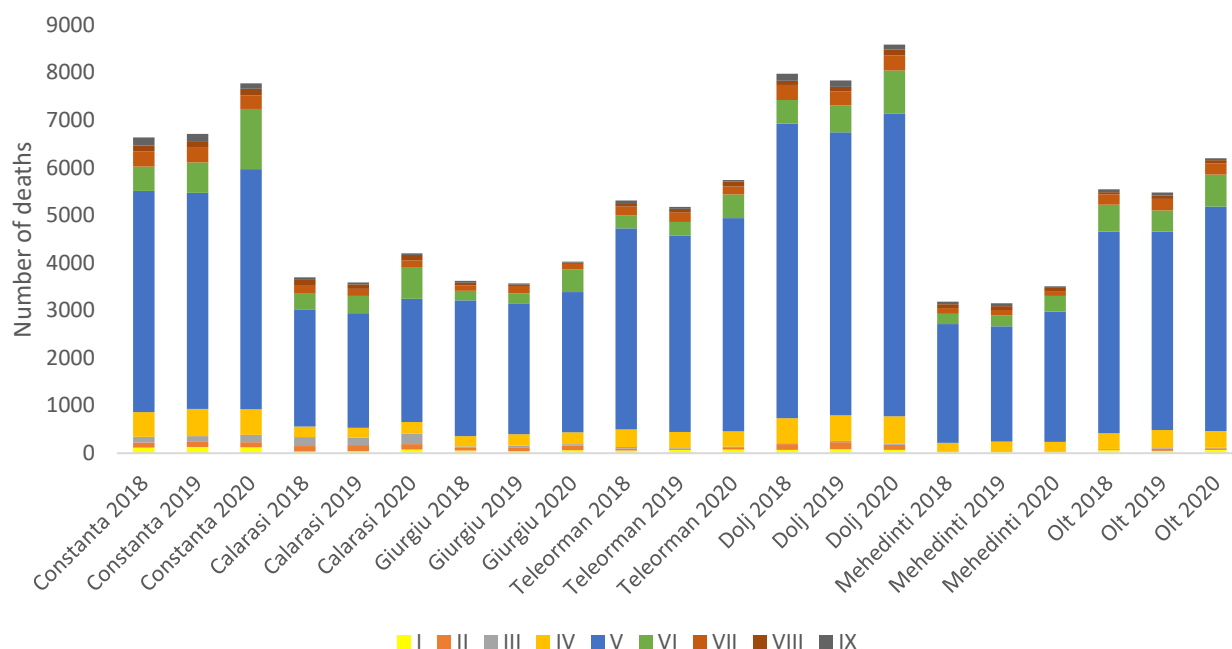
Leading reasons for recognized type and degree of disability in the examined children are mental and behavioral disorders (22.7%), diseases of the respiratory system (19.4%), congenital anomalies (malformations), deformities and chromosomal aberrations (17.9%) and diseases of the nervous system (12.0%).

The deaths registered due to air pollution in Romania and Bulgaria in 2016 were over 75 deaths (per 100,000 population), being registered in Bulgaria 121 deaths (per 100,000 population) and thus ranking 2nd in European, and Romania registered 84 deaths (per 100,000 population) and ranks 7th in Europe¹⁵.

The evolution of deaths caused by the main diseases was analysed, according to the International Classification of Diseases - Revision X 1994 from 2018-2020.

¹⁵ World Health Organization 2018

(http://gamapserver.who.int/gho/interactive_charts/phe/aap_mbd/atlas.html)



Legend:

- I Infectious and parasitic diseases
- II Diseases of the nervous system, diseases of the eye and its appendages, diseases of the ear and mastoid process
- III Endocrine diseases, nutrition and metabolism
- IV Digestive system diseases
- V Diseases of the circulatory system
- VI Respiratory diseases
- VII Traumatic injuries, poisoning and other consequences of external causes
- VIII Diseases of the genitourinary tract
- IX Other causes

Source: INS-RO

Figure no. 3-28 Causes of deaths in the programme area - Romania

In Romania, in the 7 counties included in the program, the diseases of the circular system represent the main cause of deaths caused by medical problems, followed by diseases of the respiratory system. These in the analysed period show an upward trend.

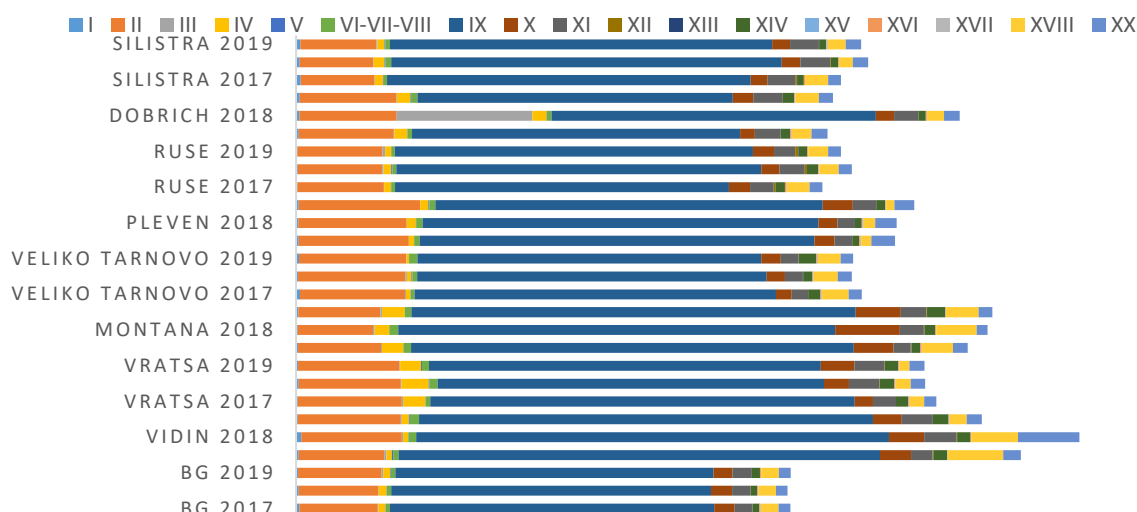


Figure no. 3-29 Mortality by causes of death per classes according to the International classification of diseases-10th Revision /ICD-10/ (per 100 000, %) in - Bulgaria

In the mortality structure for reasons in 2019, there are no significant changes in Bulgaria. The leading reason for the deaths remain the diseases of the blood circulation, whose intensity is 998.2 per cent thousands of the population and their relative share is 64.4%. Among them is the frequency of cerebrovascular diseases and ischemic heart disease. Secondly are the deaths of newly forms. In 2019, the mortality rate for this reason is 262.3 per cent thousands of the population, with mortality among men retain much higher than women. In the structure of the other causes of death follow: respiratory diseases; Diseases of the digestive system; symptoms, signs and deviations from the norm found in clinical and laboratory studies not elsewhere classified; external causes of morbidity and mortality, etc. In 2019, 95% of all deaths in the country are due on these six classes of diseases.

For both the country and the 8 districts in the scope of the program, the leading causes of death are class IX diseases - diseases of the circulatory system (they account for an average of 64% of deaths, and in almost all areas the values are less favorable than the national average), followed by class II - neoplasms (16.9% of deaths on average for the country, as all areas subject to analysis



have values higher than the national average) and class X - diseases of the respiratory system (on average 3.9% of deaths in the country are due to them, as most districts again show more unfavorable values than the national average, with the exception of Veliko Tarnovo, Dobrich, Silistra). For all three classes of diseases (according to the International Classification of Diseases - 10th revision (ICD-10) another unfavourable trend is the increase in the mortality rate in 2017-2019.

Medical infrastructure

The medical infrastructure, such as hospitals and publicly dispensed medical dispensaries, available for the human population in the 7 counties, underwent minor changes during 2012-2019. The total number of hospitals in the area of action of the project increased from 364 to 368 in 2019, most of them are found in Dolj and Constanța counties, which also have the largest area. The number of medical dispensaries decreased from 190 in 2012 to 184 in 2019, most of them in Teleorman, Olt and Dolj counties.

In 2020, the total number of medical establishments for hospital care (multidisciplinary hospitals, specialized hospitals, centers for skin and venereal diseases, complex oncology centers, mental health centers) in the eight districts of the Republic of Bulgaria in the scope of the program is 64, as compared has increased by 2 since 2012. The medical establishments for outpatient care (diagnostic-consultative centers, medical centers, dental centers, medical-dental centers, independent medical-diagnostic and medical-technical laboratories) in the eight districts are a total of 364 - compared to 2012 they have increased by 30. The other medical and health establishments are 32 - compared to 2012 they have decreased by 2. The most insured are the districts of Pleven and Veliko Tarnovo, followed by Vratsa. At least are the medical establishments in Vidin, Montana and Silistra districts.

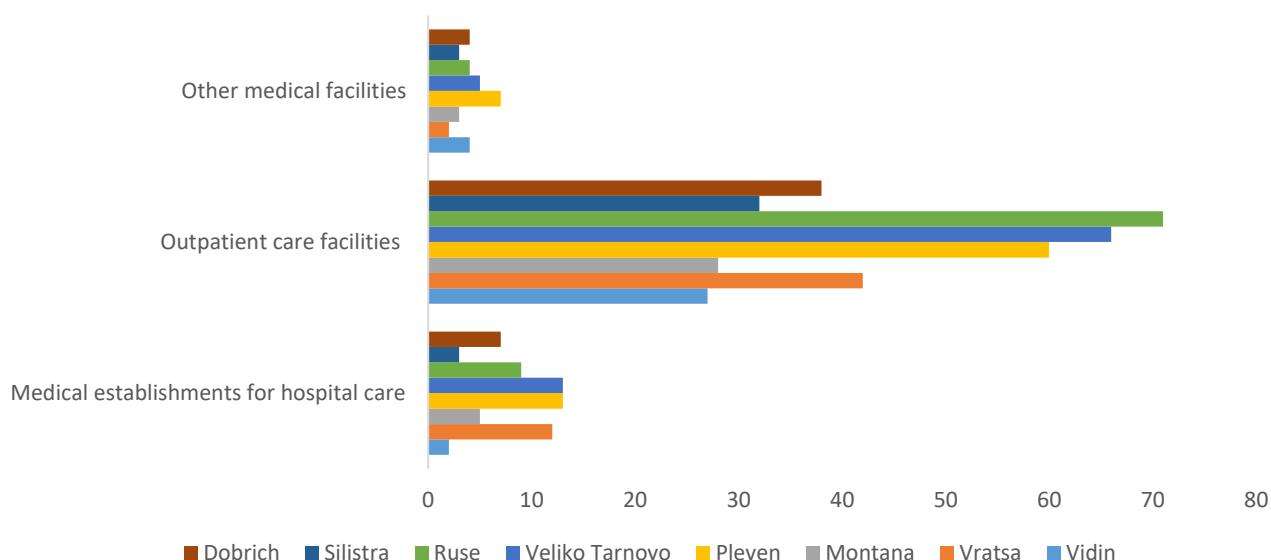


Figure no. 3-30 Medical care facilities, Bulgaria, NSI, 2020



3.1.3.7. Human health risk factors including environmental risk factors

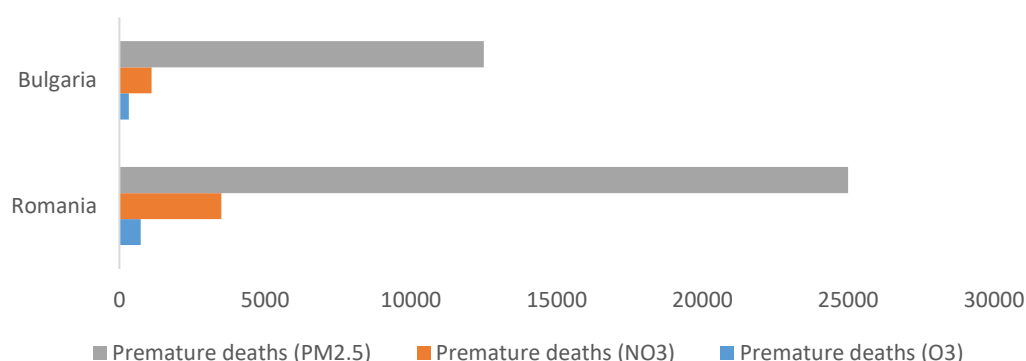
The main risk factors for the population and human health related to the environment are air quality / air pollution, quality and quantity of drinking water, bathing water, soil, waste, noise, genetically modified organisms in food, non-ionizing radiation and ionizing radiation. In recent years, the importance of the effects of climate change has also increased.

Air pollution

Air pollution is a problem for some of the areas on the territory of both Romania and Bulgaria. In the case of air pollutants, the first affected is the respiratory system, and the most vulnerable population is part of the category of children and then the age group over 65 years.

The main health indicators that can be influenced by air pollution refer to respiratory and cardiovascular diseases, mortality being the most accurate indicator in the evaluation of a certain process.

The health effects of air pollution can also be quantified and expressed as premature deaths. Emissions of PM_{2.5}, NO₂ and O₃ pollutants have caused a significant number of deaths in the two countries in the program area, in 2018 year.



Source of data: EUROSTAT

Figure no. 3-31 Premature deaths generated by pollution

Most number of deaths was caused by PM 2.5 suspended particles in both countries. Their annual values were 17.6 µg/m³ in Romania, and 21 µg m³ in Bulgaria. And the annual value in 2018 for NO₂ are 19.3 µg m³ in Romania, and 19 µg m³ in Bulgaria.

Quality and quantity of drinking water

Discrepancies in physiochemical, radiological and microbiological indicators are found in drinking water in some of the districts both in Romania and in Bulgaria, which leads to risks to human health.

Bathing water

Romania

There are 1 undeveloped area in Dolj County and 2 undeveloped areas in Olt County, which is associated with risks to the human health.

Bulgaria



There is no officially designated bathing areas in the districts of Vidin, Montana, Vratsa, Veliko Turnovo, Pleven, Ruse and Silistra. There are 20 bathing areas in the district of Dobrich, which are in good condition and 12 in poor, which is associated with risks to human health.

Soils

Areas with contaminated soils have been identified as a result of monitoring on the territory of both countries. There are no reported cases of adverse effects resulting from significant soil contamination.

Waste

The main risk to human health is the disorganized storage of waste, which leads to pollution and the risk of infectious diseases.

Noise

Romania

According to the European Environment Agency, the main sources of noise inside and outside urban areas are represented by the use of road, rail, air and industrial infrastructure. The maximum permissible noise limit during the day to limit the exposure of the population to high noise sources is 55dB and 50db at night. Analysing the number of populations in urban areas with more than 100,000 inhabitants, it is found that in the program area in Romania in 2017 there were no events of exposure of the population to noise sources generated by road transport, but must be taken into account as in Romania, the percentage of reports for road transport was only 7%. No reports were recorded for industry and air transport in 2017. For the air infrastructure, Romania's reports were 17% in 2017 and no exceedances of the noise level were identified at the level of the program area.

The trend registered in Romania regarding the population exposed to a high level of noise (above the allowed limit) for road transport is a descending one, being registered a decrease of 90% for the noise level during the day and 92% for the noise at night, within urban areas in 2017 compared to 2012.

In terms of rail transport, there is an upward trend in the period 2007-2012 both during the day and at night. For air transport, there is also an increase in the level of noise outside urban areas. In the case of industry, the noise level was reduced by 100% in 2017 compared to 2012¹⁶.

Bulgaria

According to National Institute of Statistics data for 2019 from a total of 746 monitored points in the country for measuring noise in urban areas in 2019, 509 points were reported exceedances, or in 68% of cases. The total number of points (located in all district cities, as well as in the cities of Gorna Oryahovitsa and Svishtov from Veliko Tarnovo district) on the territory of the 8 districts is 147 for 2019, and exceedances were reported in 110 of them, which is equal to almost 75% of cases. Compared to previous years (2006-2019) the acoustic situation in the cities of the country is changing slowly but noticeably in a positive direction. At most checkpoints, the measured

¹⁶ <https://www.eea.europa.eu/themes/human/noise/noise-fact-sheets/noise-country-fact-sheets-2019/romania>



equivalent noise levels still exceed the limit values. The main sources of noise continue to be the heavy traffic of cars, the lack of detours for transit vehicles outside cities, the minimum distance between buildings and roads, the lack of sufficient parking spaces, which hinders vehicle traffic; insufficient shielding of transport noise; the noise of entertainment venues. Currently, Strategic Noise Maps have been prepared and are being implemented (according to Directive 2002/49 / EC for assessment and management of environmental noise, the maps reflect the current acoustic environment and identify measures to limit and reduce noise) for the Pleven and Ruse agglomerations.

With regard to industrial noise, no violations / exceedances of the norms of the activity of the enterprises were found in the eight areas within the scope of the program.

Genetically modified organisms in food

In both countries no data are available on identified problems/ risks associated with genetically modified organisms in food.

Non-ionizing radiation

Romania

There are no data on established exceedances of norms for non-ionizing radiation sources.

Bulgaria

Non-ionizing radiation is one of the few studied environmental factors with adverse effects on humans and insufficiently elucidated mechanisms of their biological effects. Non-ionizing radiation includes a number of factors: electrostatic field, constant magnetic field, radio frequency electromagnetic waves, laser radiation, etc.

According to the RHI data in the areas within the scope of the program no exceedances of the maximum permissible levels have been established according to the requirements of Ordinance № 9 of 14.05.1991 for maximum permissible levels of electromagnetic fields in populated areas and determination of hygienic protection zones around emitting sites, namely $10 \mu\text{W} / \text{cm}^2$.

Ionizing radiation

Romania

Monitoring the radioactivity of the environment is done by monitoring the radioactivity of environmental components: soil, air, water and vegetation. At the level of Romania, the surveillance of the radioactivity of the environmental components is performed through the National Network for the Surveillance of the Environmental Radioactivity.

At the level of the program area, there are available 7 stations for monitoring the radioactivity of environmental factors in the following locations: Călărași, Cernavodă, Drobeta Turnu-Severin, Giurgiu, Slatina, Zimnicea and Zalău¹⁷.

In Călărași County, in the period 2010-2018, the annual average flow rate of the gamma dose absorbed in the air registered a decrease in 2012 and in the rest of the periods the values were

¹⁷ Raport privind starea mediului în România -anul 2019



almost constant. The values of the gamma dose flow varied in the range 0.08 - 0.14 $\mu\text{Sv} / \text{h}$, the annual average being 0.096 $\mu\text{Sv}/\text{h}$, and in Cernavoda the variation interval was 0.05-0.16 $\mu\text{Sv} / \text{h}$, the annual average being 0.099 $\mu\text{Sv}/\text{h}$ ¹⁸.

In Constanta County in 2019 and in previous years, the artificial radionuclide present in the environment was Cs-137 (identified in samples of atmospheric deposits, raw water, and spontaneous vegetation, uncultivated and arable soils). It was released into the atmosphere during the Chernobyl accident, was deposited on the ground and has been resisting since 1986. The values of the gamma dose flow varied in the range 0.08 - 0.14 $\mu\text{Sv} / \text{h}$, the annual average being 0.096 $\mu\text{Sv} / \text{h}$, and in Cernavoda the variation interval was 0.05-0.16 $\mu\text{Sv} / \text{h}$, the annual average being 0.099 $\mu\text{Sv}/\text{h}$ ¹⁹.

In Mehedinți County, in the period 2015-2019, there were no exceedances of the annual limit value of the gamma dose, the maximum hourly record being in 2018 and 2019 of approximately 0.29 $\mu\text{Sv}/\text{h}$ ²⁰.

Following the analysis of the radioactivity of atmospheric aerosols - global beta analysis on atmospheric aerosol filters on individual filters, it was found that the warning limit value was not exceeded (according to O.M. no. 1978/2010) is 10 Bq / m³).

For the analysis of water radioactivity, in the program area there are 5 points for daily sampling of surface water samples from the Danube River. In 2019, there were no exceedances for both the measurements made immediately and the 5-day exceedances for the global beta.

Regarding the radioactivity of the soil and vegetation, no radioactivity events were recorded in the program area or in Romania²¹.

Bulgaria

The National System for Radiological Monitoring of the Environment aims to monitor in time the values of radiation parameters in the main components of the environment - air, water, soil, the presence of transboundary transmission and is carried out in two ways: through an automated system for on line monitoring and through a laboratory-analytical system for off line monitoring. When registering elevated values of the radiological parameters, additional measurements are performed, changing the periodicity of monitoring established in the program and notifying the Nuclear Regulatory Agency and the public

According to the National Report on the State and Protection of the Environment in the Republic of Bulgaria for 2019, in 2019 the National Automated System for Continuous Control of the Gamma Radiation Background has not registered values of the gamma radiation background other than the natural ones. There is no tendency to increase the volume specific activity of natural and man-made radionuclides in the air.

When monitoring the radiation status from the background monitoring for:

¹⁸ Raport privind starea mediului , anul 2018 Călărași

¹⁹ Raport privind starea mediului - Constanța anul 2019

²⁰ Raport privind starea mediului în județul Mehedinți 2019

²¹ Raport privind starea mediului în România -anul 2019



- Uncultivated soils, no changes have been found above the values of the specific activity of natural and man-made radionuclides characteristic of the respective regions.
- In the surface water bodies and sediments in the country, no contaminants with natural and man-made radionuclides have been found.
- In the areas of potential pollutants, no expansion of the terrain affected by previous activity is established.

The results of the radiological monitoring carried out in 2019 compared to the results of past years do not show adverse trends in the radiation situation and the environmental status in the "observed" Zone of Kozloduy NPP EAD resulting from the operation of the nuclear power plant such as:

- The analyzed soil samples from the points of 2-30 km zone of Kozloduy NPP from the territory of Montana district (10 points) and the territory of Vratsa district (13 points) show specific activity of Cs-137 in the range $0.5 \div 31, 1 \text{ Bq / kg}$. The activities of natural radionuclides are in the ranges: U-238 from $15 \div 50 \text{ Bq / kg}$, Ra-226 from $15 \div 51 \text{ Bq / kg}$, Th-232 from $19 \div 52 \text{ Bq / kg}$, Pb $\div 210$ from $14 \div 114 \text{ Bq / kg}$, respectively the soils are not affected by the activity of Kozloduy NPP
- The radiation gamma background is in the range: $0.11\text{-}0.26 \mu\text{Sv / h}$.
- No change in the values of the natural radionuclides characteristic of the individual items in the analyzed samples was found.
- The monitoring of the content of technogenic Cs-137 in sediments from 9 points of the Danube River shows a reported content of Cs-137 in the range from 0.62 Bq / kg from the point of Belene to 5.8 Bq / kg from the point of Kozloduy, which proves that the activity of Kozloduy NPP does not affect the radiation condition of the Danube River.
- Non-compliant in terms of radiological indicators total alpha activity of drinking water (of natural origin) in the districts of Vidin and Dobrich.

Climate change

Climate change is reflected in the territories of both countries in the scope of the program. The consequences of this change lead to primary and secondary effects on human health. The primary effects directly affect human health, for example through heat and cold waves and floods (and there is a tendency to increase temperatures and heavy rainfall throughout the study area). Side effects indirectly affect human health through other factors influenced by climate, such as pollen, vector diseases, fires, contaminated food, water and air, and damaged crops

3.1.4. SOIL AND LAND USE

3.1.4.1. Soil categories in the programme area

According to the Soil Atlas of Europe, the types of soil encountered in the program area are represented by:

- Arenosols are amongst the most extensive soil types in the world. It is found in the program area of Romania, in the western part. At European level, it occupies about 1%.



- Cambisol is a young soil and cover 12% from Europa. It is found in the western part of the program area.
- Chernozems are amongst the most productive soil types in the world. It is found in almost all areas of the program, except the western part.
- Fluvisols are common in periodically flooded areas, and cover 5% of Europe's surface. They are found on a significant area in the program area, in the floodplains.
- Luvisols, this category of the soil covers 6% of Europe. And it also covers a significant part of the program area.
- Phaeozems, it covers only 3% of Europe's soil, and is found in the wet steppe regions. In the program area it is on small areas.
- On very small areas in the programme area there are also soil types, such as solonetz and gleysols.

3.1.4.2. Process affecting soil condition

In the programme area, agriculture is an important sector in socio-economic activities for the two countries. The agricultural area cultivated with the main crops in 2020 in Romania represented 37.6% (488 275 ha) of the total program area (692 850 0 ha). In the same year in Bulgaria the area occupied by agricultural land is 2 308 273.88 ha or 33.32% of the total program area. For this reason, maintaining soil quality is an important element for the population in the programme area. Soil is the environmental factor, indispensable for life. According to the Soil Thematic Strategy, the main problems identified on the soil are represented by erosion, damage to organic matter, contamination, salinization, and compaction, reduction of soil biodiversity, sealing, landslides, and floods.

Soil erosion in the programme area in 2016 was more intense in the North and East, thus causing a decrease in soil fertility. Soil erosion is generally caused by the action of water and wind.

In Romania, the area most affected by the erosion process is the southeastern part of the country that overlaps with the program area. For example, in 2019 in Giurgiu County there were approximately 4,799 ha affected by drought, and in Olt county in 2018 were affected by the soil erosion process approximately 30,124 ha. In Constanța County, approximately 41.73% of the agricultural area is affected by hydric erosion for the most part and partially wind erosion and in depth²².

In 2019, Silistra district is among the districts with the lowest intensity of erosion processes (water erosion) in agricultural lands. The least areas with high erosion risk are in Dobrich district. For the other areas of the Bulgarian part of the program territory there are no serious problems in terms of water erosion.

In 2019, Dobrich district is at very high risk of wind erosion, and Silistra and Ruse districts are at high risk. For the other areas of the Bulgarian part of the program territory there are no serious problems with regard to wind erosion.

²² Report on the state of the environment in Constanta, Calarasi and Giurgiu counties



The precipitation standardization index is used to detect and characterize meteorological droughts. These occur when the value of the SPI indicator falls below -1, and the excess precipitation is indicated by the increase of the value over 1²³.

A drought is present in the part-time programme in the Montana, Vratsa and Dobrich districts. According to research on climate change on drought, in less than 60 years the droughts present as mild will change into severe droughts. The risk of their occurrence is higher in Bulgaria than in Romania. But even in Romania this phenomenon has become more intense, in recent years being affected especially the southern part of the Romanian Plain²⁴.

Also, following the Territorial Analysis, it is found that the programme area, according to scenarios RCP4.5 and RCP 8.5, will not be protected from the phenomenon of drought²⁵.

²³ https://edo.jrc.ec.europa.eu/documents/factsheets/factsheet_spi.pdf

²⁴ www.climatechange.org/europe/droughts/

²⁵ Territorial Analysis for the Romania-Bulgaria cross-border region, page number 155



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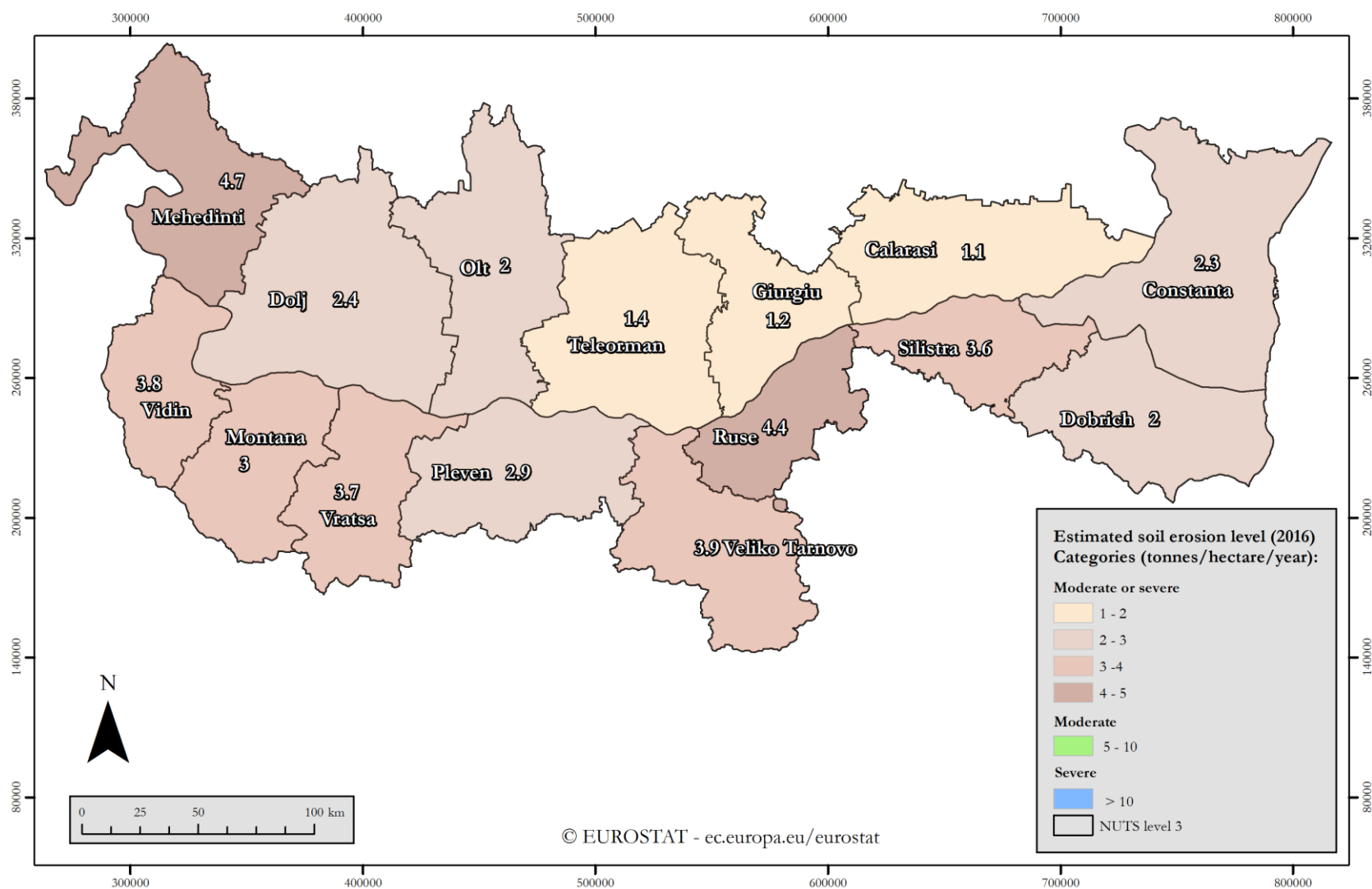


Figure no. 3-32 Soil erosion in the programme area

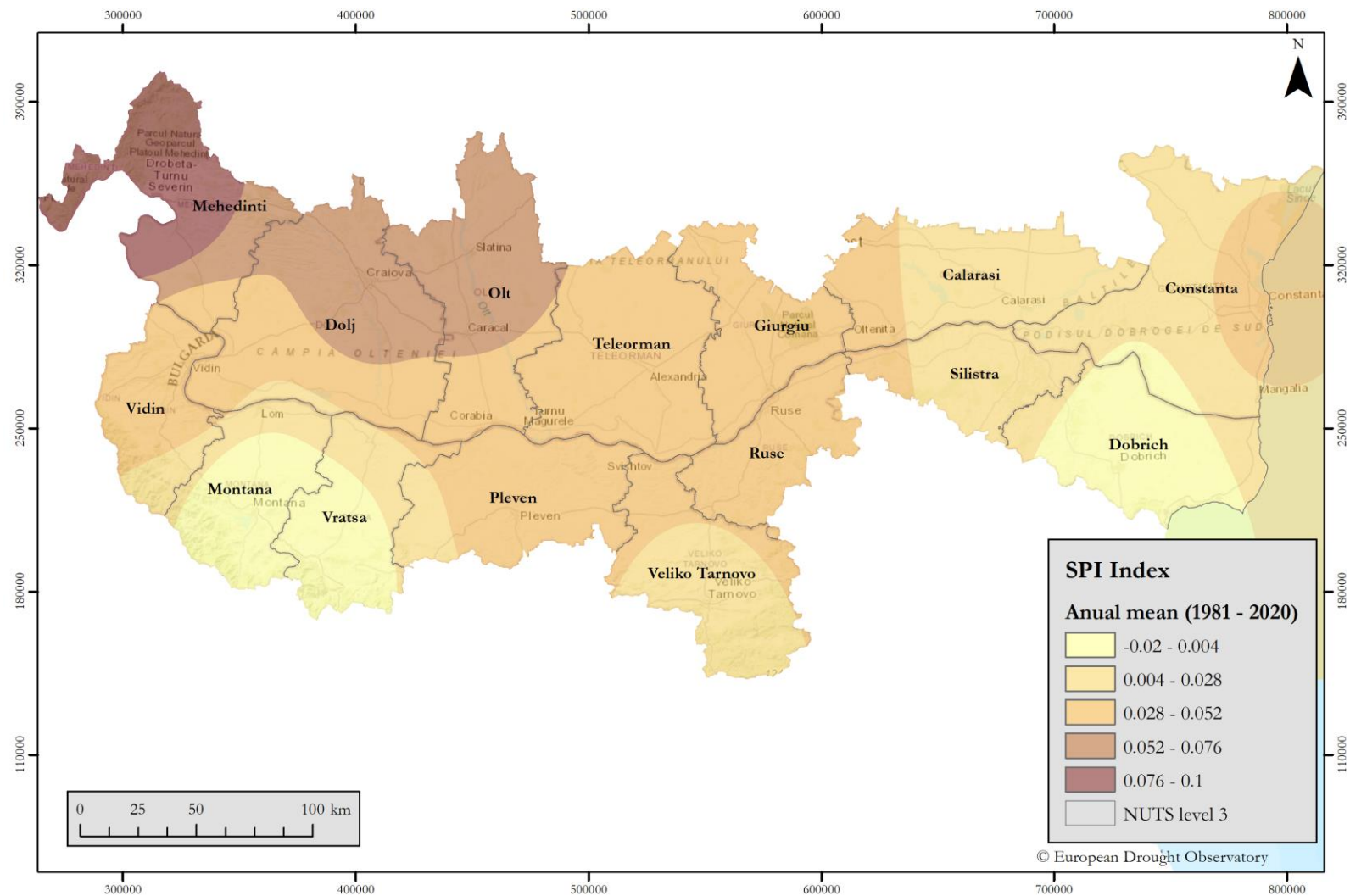


Figure no. 3-33 Standardized Precipitation Index (SPI) in the programme area from 1981-2020 period



In the area of the programme in Romania, the main problems identified in the soil, according to county reports on environmental quality in 2018, 2019 are the deterioration of soil characteristics and functions, erosion, compaction, drought, poor nutrient soil, soil acidity and use of chemical fertilizers.

Imperviousness is defined as the covering of the soil surface with impermeable materials as a result of urban development and infrastructure. Information on changes in soil sealing or impermeability is important for a number of issues of policy relevance²⁶.

Sealed/Impervious areas are characterized by the substitution of the original (semi) natural land cover or water surface with an artificial, often impervious cover. These artificial surfaces are usually maintained over long periods of time²⁷.

Imperviousness in the programme area is more intense in the more developed area in terms of urbanization and infrastructure.

In terms of landslides, they have a devastating effect on the population and the built environment. Landslides are caused by high amounts of rainfall, but also by melting snow. The frequent period of their appearance is in the spring and summer seasons, when a high amount of water accumulates in the soil due to precipitation²⁸. In the programme area, analyzing the period 1980-2018, there is a high and medium risk of landslides, especially in the north of Mehedinti County and in the southern part of Vidin, Montana, Vratsa, Veliko-Tarnovo and partly Dobrich districts. In the rest of the programme area the risk is low.

Some of the landslides are activated due to the river erosion of the Danube, which crosses 470 km of Bulgarian territory, so many landslides have been observed, especially during periods of seismic activity. In addition, the Danube Plain is fragmented in a south-north direction by the rivers Iskar, Vit, Osum and Yantra and landslides are created²⁹.

²⁶ <https://www.eea.europa.eu/data-and-maps/indicators/imperviousness-change-2>

²⁷ <https://land.copernicus.eu/pan-european/high-resolution-layers/imperviousness>

²⁸ Niculiță M. (2020) Landslide Hazard Induced by Climate Changes in North-Eastern Romania. In: Leal Filho W., Nagy G., Borga M., Chávez Muñoz P., Magnuszewski A. (eds) Climate Change, Hazards and Adaptation Options. Climate Change Management. Springer, Cham. https://doi.org/10.1007/978-3-030-37425-9_13

²⁹ Territorial analysis for the Romania-Bulgaria Cross-Border Region, page 135

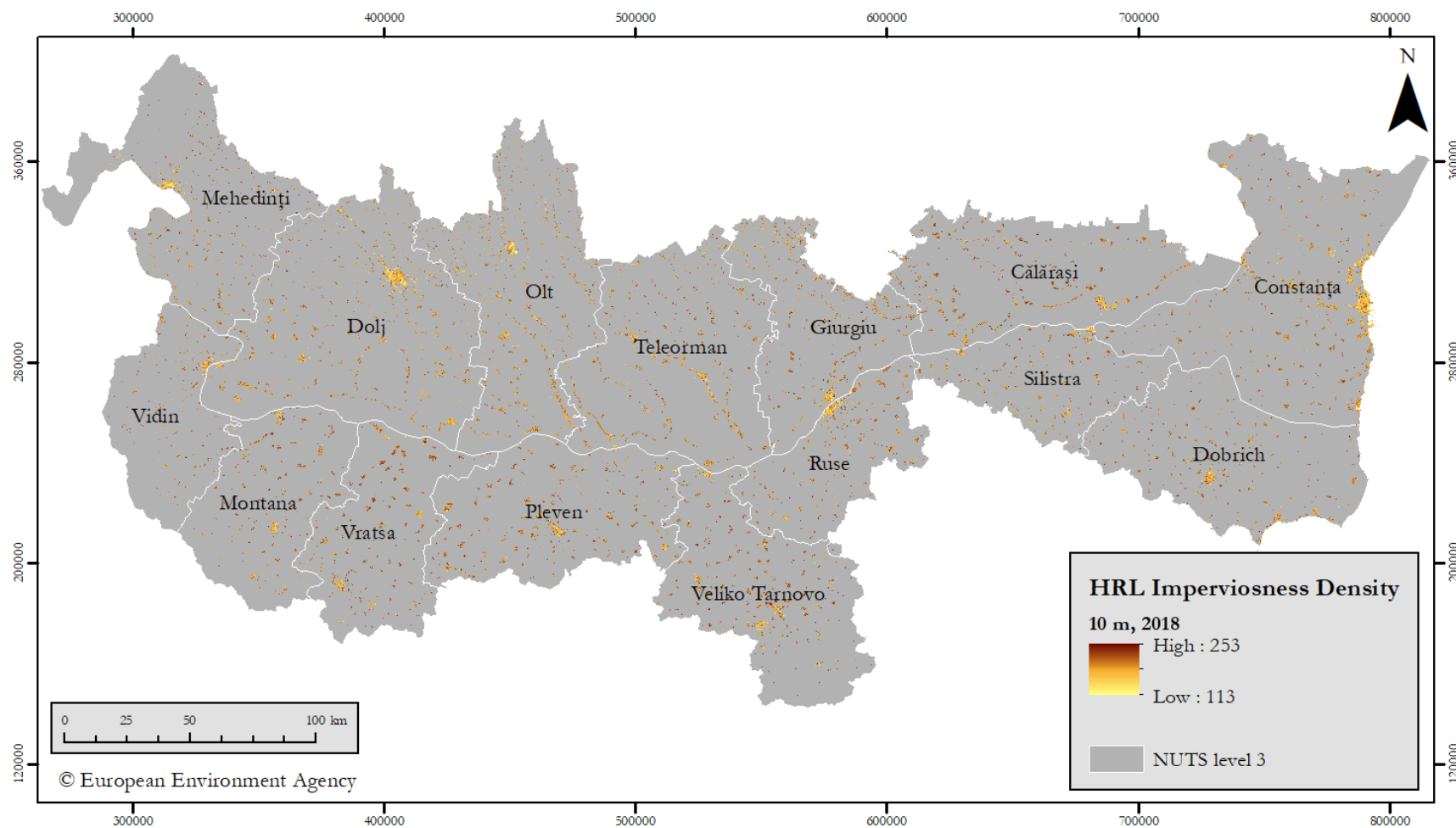


Figure no. 3-34 Imperviousness density in program area

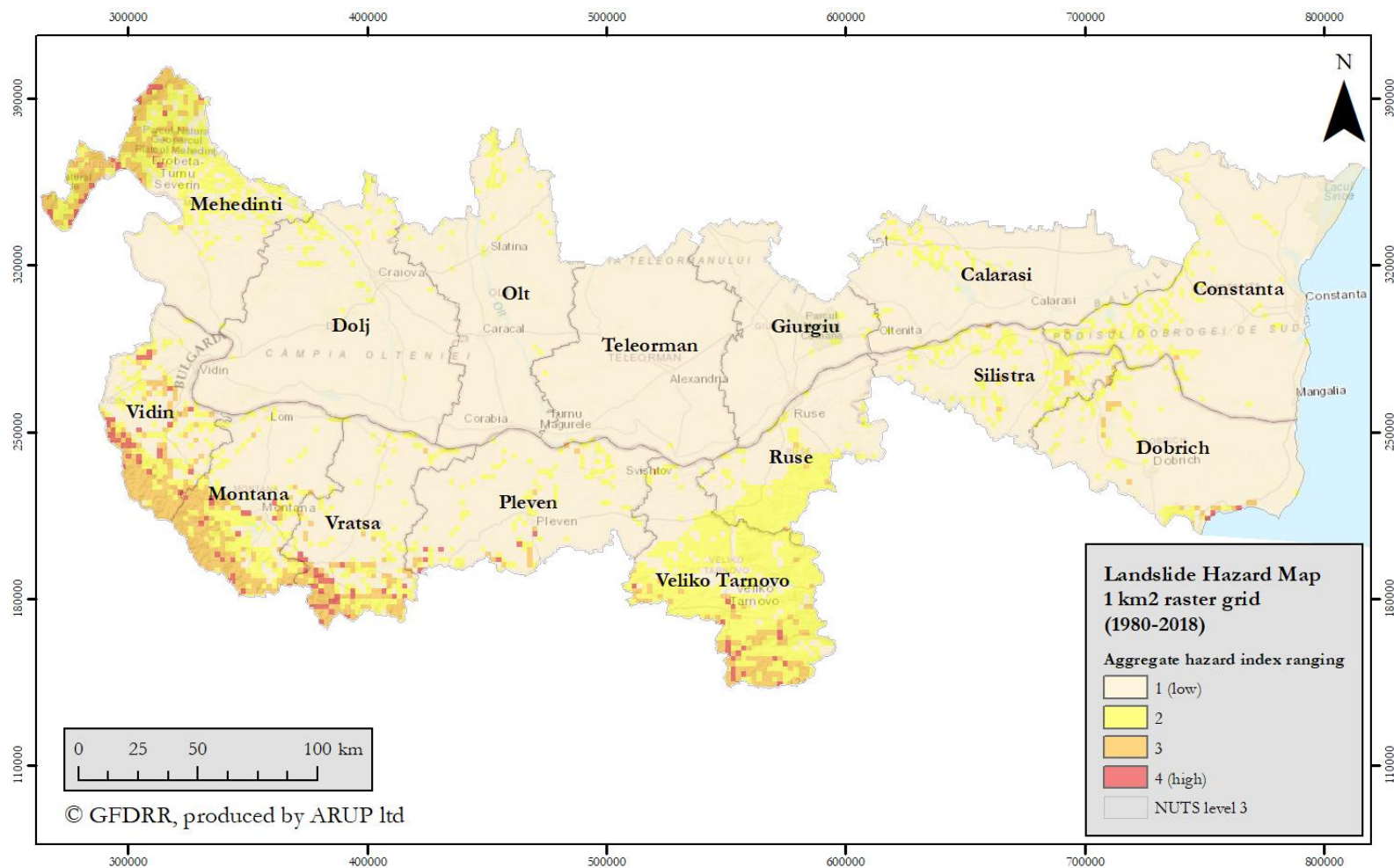


Figure no. 3-35 Landslide in the program area



3.1.4.3. Contaminated sites

Soil pollution is a process of accumulation of harmful substances from natural and / or anthropogenic sources, whose behavior and concentrations cause damage to soil functions, regardless of whether the norms in force in the country are exceeded and to the pollution of surface and groundwater. The presence of contaminants exceeding certain levels can lead to negative consequences throughout the food chain, all types of ecosystems and other natural resources³⁰.

In Romania, in 2019, there were 159 environmental incidents, of which 32 were in the counties included in the program, and the soil was one of the affected environmental components. The number of accidental pollution situations is decreasing in the period 2012-2019. Among the causes that caused these environmental accidents are: discharges of untreated or insufficiently treated water, fires in landfills, incidents at the level of some ships, various faults in the pipelines³¹, etc.

According to the Report on the state of the environment in the counties from the program area in Călărași County, there are three contaminated sites, one of which is from the metallurgical industry and two potential sites. In Giurgiu County at the end of 2019 there were 2 contaminated sites and 40 potentially contaminated, but also 182 remedied / greened sites. In Mehedinți County there are 4 contaminated sites, of which three of this nature of the pollution source is represented by mineral waste and for one site household waste. In Olt County it has a number of 43 contaminated sites, of which 4 have been greened. And Teleorman County has 58 contaminated sites and for 57 of them the generating activity is represented by the extractive industry and for one site the chemical industry. And Teleorman County has 58 contaminated sites and for 57 of them the generating activity is represented by the extractive industry and for one site the chemical industry. There are also three potentially contaminated sites.

According to data from the annual regional reports on the state of the environment for the Bulgarian part of the program territory, in the recent years there has been a tendency to reduce land and soil pollution. The content of harmful substances in the soil is generally below the permissible minimum.

Potentially dangerous sites and sources for local soil contamination are sites with BB cubes and warehouses for storage of unusable plant protection products. They are under the constant control of the experts from Regional Inspectorates of Environment and Water (RIEW), Regional Directorates of Fire Safety and Protection of the Population (RD FSPP) and the municipalities.

In 2020, in the village of Koynare (Pleven district) (around a warehouse for unsuitable plant protection products) chemical pollution with heavy metals (copper and zinc) was found.

Unregulated pollution with household and construction waste has been found in the lands of the municipalities.

In 2020, in the town of Cherven Bryag (Pleven district), where waste was found, the presence of damaged soils as a result of chemical contamination of the soil above the maximum

³⁰ Regional report on the state of the environment in 2020, RIEW-Veliko Turnovo

³¹ Agenția Națională de Protecția Mediului - Raport privind starea mediului în România, anul 2019



permissible amounts with heavy metals (cadmium, lead, copper, zinc, chromium and nickel) has been established.

3.1.4.4. Land uses

The program area consists mainly of agricultural areas and artificial areas. Partly in the west there are forests and semi-natural areas. And on smaller areas of the program area are found water bodies and wetlands.

The figure below shows the land use in the program area, according to CLC 2018.



Figure no. 3-36 CLC legend



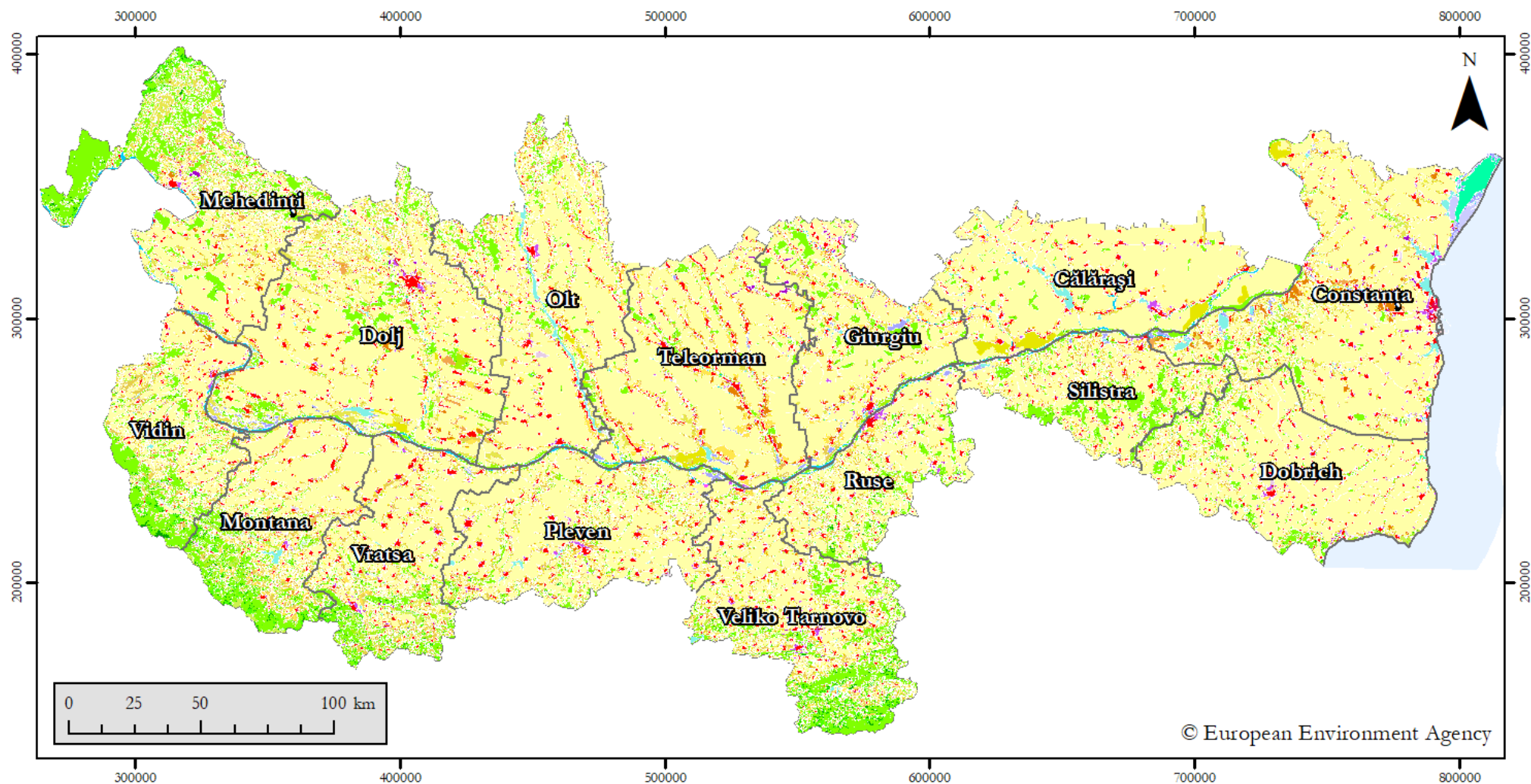
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Figure no. 3-37 CLC - Corine Land Cover 2018



3.1.4.5. Geology

Romania

From a geological point of view, gravels and sands are predominant (**qh2**) in the program area of Romania. In addition to these, there are also (**qp1 / 2**) sands, gravels, boulders and loessoid deposits, (**qp2 / 2-3**) loessoid deposits. Also, in the western part of the program from a geological point of view were identified (**Mv**) Sericito-chlorite schists, (**Ma**) Micașturi and Paragneise and (**omega**) Gabbrouri, diorites.

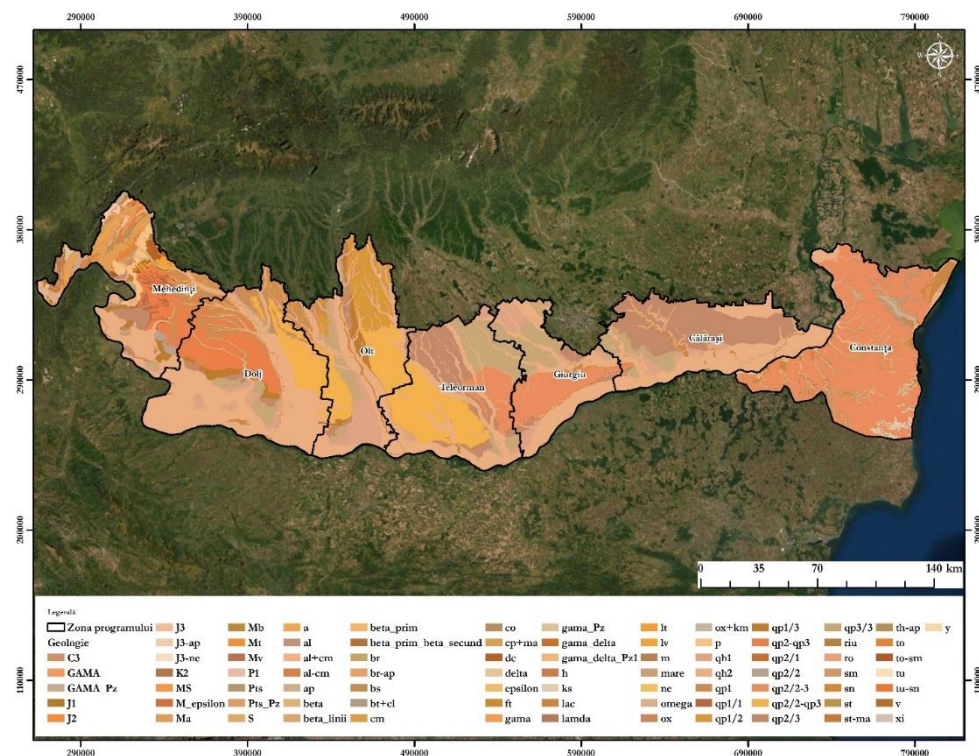


Figure no. 3-38 Geological structure in the program area in Romania

The program area is exposed to a high seismic risk, especially in the eastern part, due to the epicentric area of Vrancea, which has an influence both on the Romanian sector and on the northern part of Bulgaria.

Bulgaria

In terms of geology and tectonics, the Bulgarian part of the program area falls within the Moesian platform. The geological structure is platform, with a clearly defined foundation and superstructure. The base is built of old folded Paleozoic metamorphic rocks. Above it is located the geologically younger superstructure, composed of thick sedimentary layers of Mesozoic and Neozoic age. On the surface, most of the superstructure is covered by Quaternary deposits - loess and alluvial materials. Two main geostructures have been formed - North Bulgarian bulge (antecline), characterized by slow uplift of the earth layers and their destruction under the influence of external earth forces and Lom depression (syncline), characterized by slow minimal sinking and thickening of the layer of deposits.

In general, the Bulgarian part does not have significant natural resources of fuels (oil, natural gas), ore minerals and favorable geological conditions for coal mining (lignite and ferrous) from existing



deposits. The area is characterized by very good mineral non-metallic resources for the building materials industry (cement, lime, gypsum, ceramics, glass, faience).

The seismic regions that are connected to the Bulgarian part of the program area include the Gornooryahovskaya seismic zone (expected magnitude on the Richter scale up to 7.5, intensity of the 9th and higher degree on the Medvedev-Sponhoer-Karnik scale), Shabla zone (maximum magnitude to 8th, intensity at least from the 9th degree along the Black Sea coast), Dulovo zone (maximum magnitude 7.5, due to the relatively large depth of the outbreak, the maximum impact is with intensity above 8th degree).

3.1.5. WATER

3.1.5.1. *Surface water quality*

The Danube River represents the border between Romania and Bulgaria. It has a length of 221,700 km² being on the Romanian territory (27.5% of the entire basin) and 46,930 km² on the Bulgarian one (5.8% of the entire basin).

The program area in Romania overlaps partially or completely over 6 Water Basin Administrations - ABA Argeş-Vedea, ABA Banat, ABA Buzău-Ialomița, ABA Dunăre-Litoral, ABA Jiu and ABA Olt.

In Bulgaria the districts of Vidin, Vratsa, Montana, Pleven, Veliko Tarnovo, Ruse and Silistra and the municipalities of Dobrich, Krushari and part of General Toshevo and Dobrichka (Dobrich district) fall within the territorial scope of the Danube Region Basin Directorate, with center in Pleven. Dobrich District (the municipalities of Dobrich, Krushari and part of General Toshevo and Dobrichka) falls within the scope of the Black Sea Region Basin Directorate, with center in Varna.

Following the monitoring of the quality elements of the surface water bodies, from 2016-2019, it was found that in generally their condition is good.

The ecological status of the water bodies included in the program area is predominantly good and moderat. And the chemical condition is predominantly good, except for certain areas in the east of the program area.

The description of the water bodies in the program area, according to the Basin Administrations, can be found in Annex 14.2.



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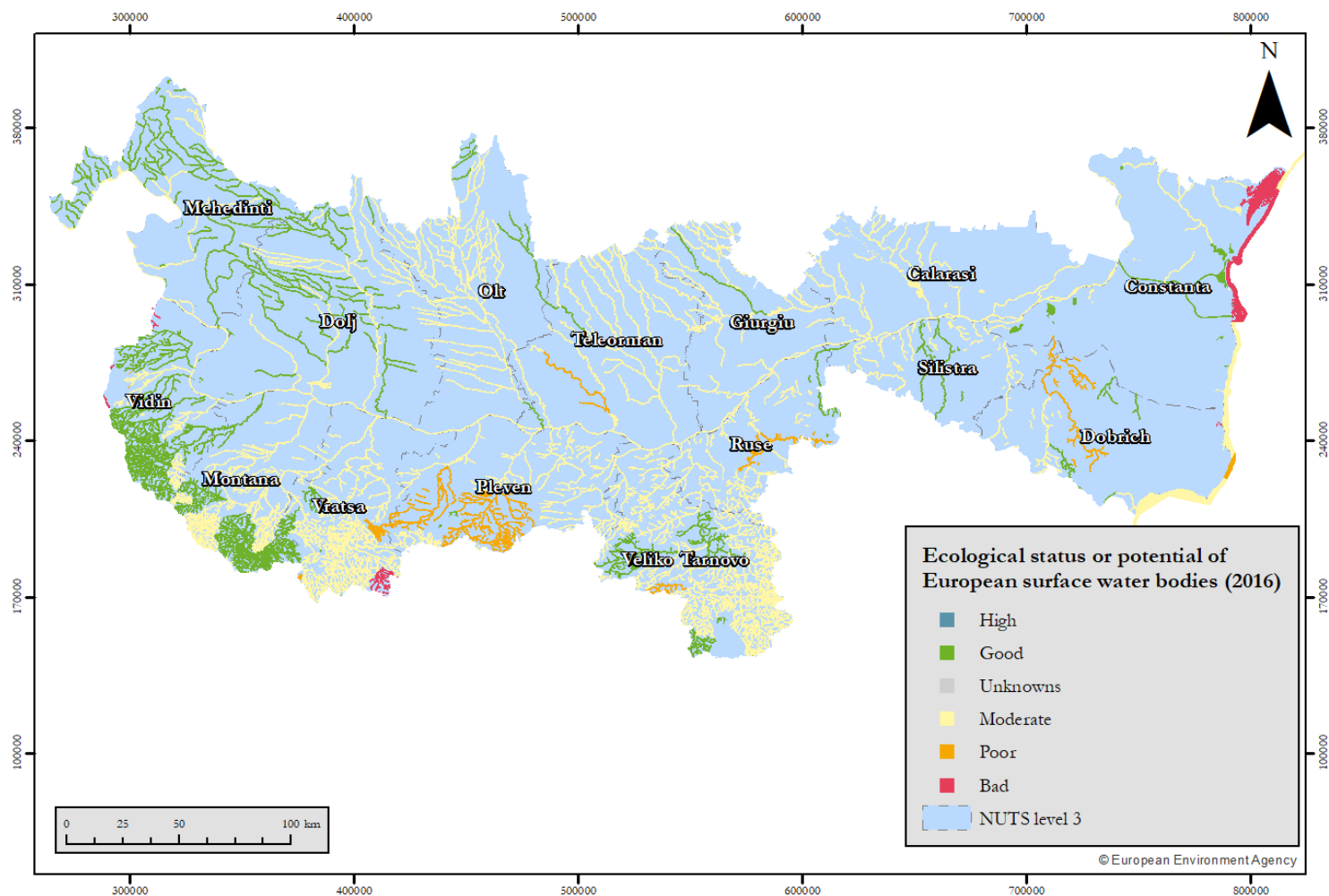


Figure no. 3-39 Ecological status or potential of surface water bodies from program area



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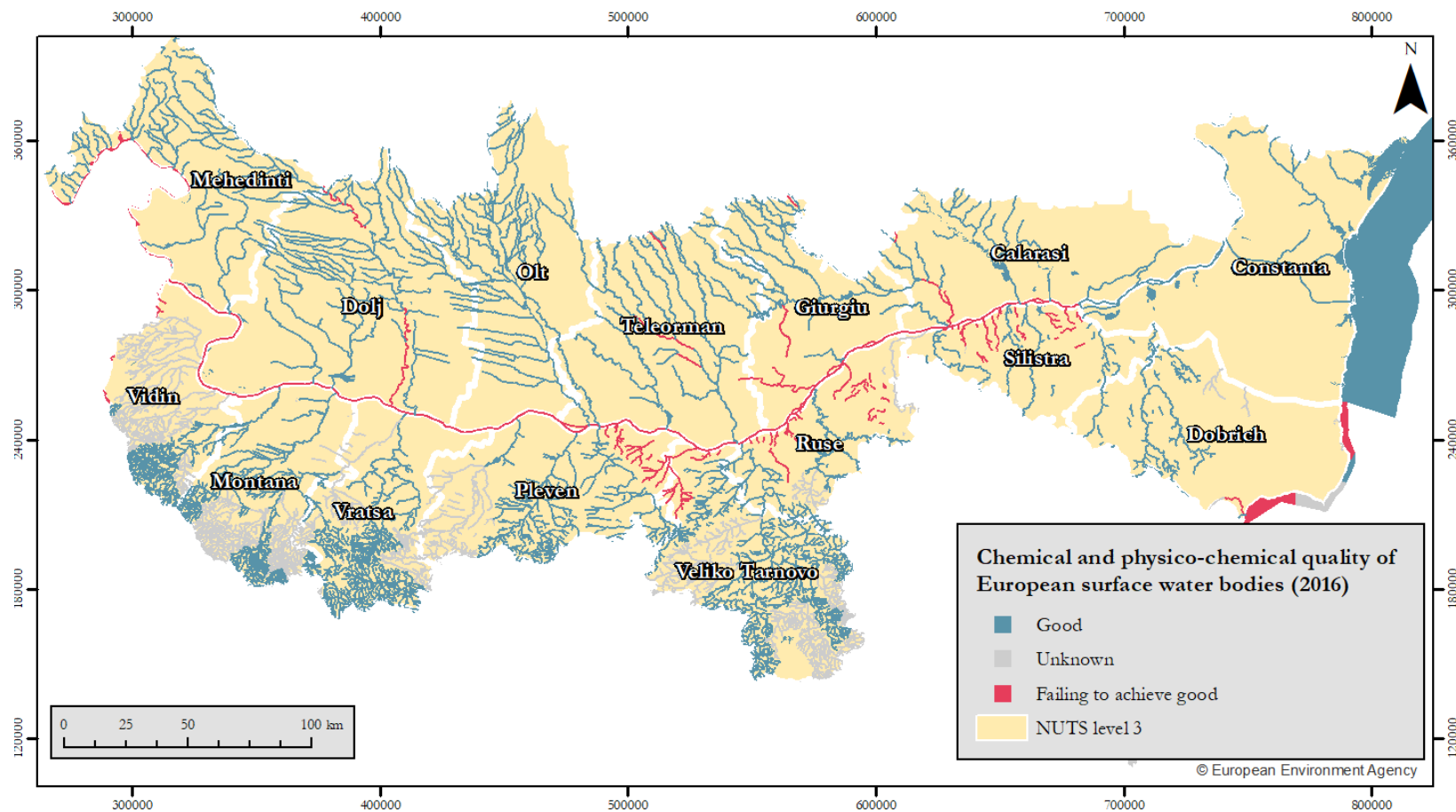


Figure no. 3-40 Chemical status of water bodies in the program area



Romania, with its inland waters and the sea coast is in connection with other sea basins through the Danube, this river that collects almost all inland waters on the territory of Romania together with the Black Sea forms a macro - geosystem with particular characteristics. The Danube and its connecting channels, especially the Rhine-Main-Danube canal, are a direct and fast way for the exchange of species between the Black Sea and the North Sea, and from here, in other marine basins.

In the period 2012-2017, the number of accidental pollutions registered in the Jiu, Olt, Argeş-Vedea, Dobrogea-Litoral and Buzău-Ialomita basins decreased. These pollutants mainly affected inland rivers, with 9 accidental oil pollution on the Danube.

Coastal waters

In the area of the Romanian program in Constanța County at the level of Coastal Waters there are 4 coastal water bodies, of which two are natural coastal water bodies and two strongly modified coastal water bodies. Coastal water monitoring is done in shore monitoring sections / stations as well as offshore sections at isobaths of 5 m, 10 m, 20 m and 12 nautical miles³².

The four coastal water bodies in the program area registered in the period 2018 - 2020 a poor ecological status / bad ecological potential, the determining qualitative element being macroalgae and angiosperms, while the chemical state, for all 4 water bodies, registered a good condition³³.

Table 3-2 Coastal water in the program area

Name of water body	Code	Chemical condition	Ecological status / Ecological potential
Periboina - Cap Singol	ROCT01	Good	Poor ecological condition
Eforie Nord - Vama Veche	ROCT02	Good	Poor ecological condition
Cap Singol - Eforie Nord	ROCT02	Good	Poor potential
Mangalia	ROCT01	Good	Poor potential

Coastal waters in Bulgaria:

o Coastal Sea waters "from Durankulak to Shabla" with code BG2BS000C001, defined in moderate ecological status and not achieving good chemical status.

o Coastal Sea waters "from Shabla to Kamen Bryag" with code BG2BS000C002, defined in moderate ecological condition and good chemical status.

o Coastal Sea waters "from Kamen Bryag to Kaliakra" with code BG2BS000C1003, determined in moderate ecological status and unknown chemical status.

o Coastal Sea waters "from Kaliakra to Kavarna" with code BG2BS000C1004, determined in moderate ecological status and unknown chemical status.

o Coastal Sea waters "from Kavarna to Galata" with code BG2BS000C1013, defined in moderate ecological condition and not achieving good chemical condition.

Marine strategy

³² Planul de Management al Fluviului Dunărea, Deltei Dunării, Spațiul Hidrografic Dobrogea și Apelor Costiere

³³ Sinteza calității apelor din România în perioada 2018-2020



The main goal of the Directive 2008/56/EC of the European Parliament and of the Council of 17 June 2008 establishing a framework for community action in the field of marine environmental policy (Marine Strategy Framework Directive) is to maintain or achieve good state of the marine environment by 2020. In this regard, the Marine Strategy of the Republic of Bulgaria and a program of measures to it have been developed. (2016-2021). The strategy refers to the coastal sea waters, the territorial sea waters and the exclusive economic zone of the Republic of Bulgaria, as in the coastal sea waters it supplements the Plan for management of the river basins in the Black Sea region.

In accordance with MSFD 2008/56 / EC, the entire Black Sea basin is considered as one region. At Member State level, the MSFD is mandatory for territorial waters and the Executive Economic Zones. By definition, the Exclusive Economic Zone (EEZ) is the maritime space of up to 200 nautical miles outside the area adjacent to the territorial sea in which the coastal State exercises its rights and sovereignty for the purpose of exploration and exploitation, conservation and management of natural resources. or inanimate, the seabed, and the waters that cover it. The EEZ is 200 nautical miles from the straight lines from which the territorial sea is measured, in accordance with Articles 55, 56 and 57 of the United Nations Convention on the Law of the Sea (UNCLOS). In 2000 the Law on Maritime Areas, Inland Waterways and Ports of the Republic of Bulgaria was adopted, which regulates the legal regime of maritime spaces, inland waterways and ports of the Republic of Bulgaria and which areas cover inland waters, territorial sea, adjacent zone, the continental shelf and the exclusive economic zone. In maritime areas, inland waterways and ports, Bulgaria exercises sovereignty, certain sovereign rights, jurisdiction and control, in accordance with generally accepted principles and norms of international law and international treaties to which Bulgaria is a party.

Table below provides updated information on marine environmental assessment areas, name, area and coverage.

Table 3-3 Updated information on marine environmental assessment areas, name, area and coverage

Nr.		Updated marine environmental assessment areas for the period of 2012-2017		Area, km ²		
1.	Executive economic zone of Republic of Bulgaria	Coastal sector	Cape Sivriburun - Cape Kaliakra	157	2685	35 600
2.			Cape Kaliakra - Cape Galata	821		
3.			Cape Galata - Cape Emine	698		
4.			Cape Emine - Cape Maslen	857		
5.			Cape Maslen - Rezovo	153		
6.		Shelf			9 933	
7.		Open sea			22 982	

Article 9 of the Marine Strategy Framework Directive (MSFD) requires Member States to define a set of environmental performance characteristics on the basis of the descriptors in Annex I. The definition of the characteristics of the Good Environmental Status - Marine - Environment (GES) should be based on the criteria set out in Decision 2017/848 / EU of the Commission and to be guided by the indicative list of elements provided in Annex III of the MSFD. These characteristics should make it possible to determine progress and success in the implementation of the Directive.



Below are data from a draft national report of Bulgaria for Update of the first part of the Marine Strategy, according to Art. 8, Art. 9 and Art. 10 (2012-2017):

Descriptor 1 Biodiversity

Seabirds

Definition of Descriptor 1.4 Seabirds: Good status will be achieved when the population characteristics (species composition, distribution, numbers, health status and dynamics, habitat status) of the target bird species are stable, even steadily increasing, without significant fluctuations in these population characteristics in the medium and long term.

Two types of birds are included in the monitoring program by Descriptor Seabirds:

1. The migratory species Mediterranean Puffinus (*Puffinus yelkouan*), listed in Annex I of the Wild Birds Directive 2009/147 / EC and Annex II of the Berne Convention as a conservation priority species and identified as vulnerable ("VU") under the Red List of International Union for Conservation of Nature (IUCN) list 2016-1.
2. The medium-bodied cormorant (*Gulosus aristotelis desmarestii*), listed in Annex I of the Wildlife Conservation Directive 2009/147 / EC and Annex II of the Berne Convention as a species with conservation priority status and defined as non-endangered ("LC") according to the International Union for Conservation of Nature (IUCN) Red List 2016-1.

During the period 2012-2017, no assessment of the condition of the two species was performed. The 2016 report provides some summaries of the status of the species: • Hooded cormorant - the birds found in the monitoring in 2016 are almost twice less than in the previous 2015. This may be due to a number of factors such as: later surveillance (end of June), the presence of food in the sea, where the birds feed far from the shore, inappropriate daylight to illuminate the interior of coastal caves and rocks, which will make the nests and the birds themselves better visible to observers. For this reason, the number of birds found by both methods, as well as the number of cormorants in 2015 and 2016, should not be considered as an absolute maximum, nor should it be interpreted as a decrease in the number of colonies. Observations made in 2016 on both the southern and northern Black Sea coasts suggest stability in the number of the species, as well as in the location and boundaries of the colonies. Monitoring is needed annually to assess the individual criteria for the descriptor, and in particular D1C2 and D1C3, which are key to assessing the development of the species population.

Mediterranean petrel - the species was not registered in 2016, which may be due to a number of reasons and especially the lack of fish passages (which petrels follow) during the study period. The non-registration of the species should not be interpreted as an indicator of a change in the number of migratory birds of this species. • No sources of pollution or threat to the two target bird species were identified during the vessel monitoring.

Marine mammals

General definition of GES by Descriptor 1 - Biodiversity (marine mammals): Good status will be achieved when all three species of marine mammals do not change their range, are common not only in remote areas but also near sources of pressure (coastal cities, seaside resorts and ports)



and show signs of stable or growing populations. Cases of mammals killed by human activities (fishing and shipping) are extremely rare.

The three species of cetaceans inhabit the Bulgarian waters of the Black Sea permanently and the updated assessment covers all three species. Thresholds are determined only on the basis of criteria D1C2 and D1C4, for which an assessment has been made, and for the other criteria no assessment can be made due to insufficient data. In accordance with the "Guidance on assessment under Article 8 of the MSFD", the result of the assessment by criteria must be integrated in order to form the final assessment of the status of each species and for the group as a whole. The method of integration for species is based on the "One Out All Out (OAAO)" principle. The results show that only the species *P.p. relictus* is in good condition, but the function group is in poor condition, as the other two species are in poor condition.

Fish - species that are not covered by industrial fishing

General definition of GES under Descriptor 1 - Biodiversity (Fish species not subject to industrial fishing): populations of non-industrial fish species and groups of species are characterized by unchanged or increasing range, the number / biomass of species is high and stable, the demographic characteristics of populations are not adversely affected by anthropogenic pressures, and rare and endangered species included in existing legislation and international conventions are protected to the required level.

The updated assessment for the period 2012 - 2017 covers the three groups of fish - coastal, demersal and pelagic shelf species. A total of 29 fish species are subject to evaluation. Thresholds are set only on criteria D1C2 and D1C3 for some species and fishing gear, and the other criteria cannot be assessed due to insufficient data or lack of thresholds. The results show that there are no species in "Good", and one species is not evaluated and its condition is "Unknown". The final assessment of the descriptor shows that the fish that are not subject to commercial catch are in "Bad" condition and for the period 2012-2017, the GES has not been achieved.

These results should be interpreted with caution as they are based on data that are not collected regularly and do not have the same time and space span.

Pelagic habitats

Descriptor 1, 4 "Pelagic Habitats" addresses the contribution of biodiversity and the food webs of communities in the water column to the overall goal of achieving good marine environmental status. Descriptor 1 - biodiversity is maintained, habitat quality, distribution and species abundance are in line with prevailing physiographic, geographical and climatic conditions. With regard to Descriptor 4 - the diversity of trophic guilds, their relative numbers and the balance between them are not adversely affected by anthropogenic pressures.

The assessment of the state of the marine environment in the Bulgarian Black Sea area for the period 2012-2017, based on the phytoplankton indicators "Phytoplankton Biomass" and "Phytoplankton abundance" by marine assessment areas shows:

- Achieved GES in the region of Cape Maslen - Rezovo;
- Achieved GES in the region of Cape Emine - Cape Masled on the indicator "Phytoplankton Biomass";



- Achieved GES in the region of Cape Sivriburun - Cape Kaliakra, Cape Kaliakra - Cape Galata, Cape Galata - Cape Emine on the indicator "Biomass of phytoplankton" in the winter, spring and summer seasons, and on the indicator "Number of phytoplankton" in the summer season.
- Achieved GES in the shelf area on the indicator "Phytoplankton Biomass".

Assessment of the zooplankton community by region:

- Cape Sivriburun - Cape Kaliakra - Based on the three applied indicators and the principle for giving the final assessment of the OAAO approach, the region does not achieve good ecological status for the period 2012-2017;
- Cape Kaliakra - Cape Galata - The assessment of the area, following the approach of the OAAO is not achieving the GES, although it approximates the norms.
- Cape Galata - Cape Emine - The assessment of the region is not an achievement of the GES, but it is close to the norms for that.
- Cape Emine - Cape Maslen - The general assessment of the condition of the area in terms of pelagic habitats - zooplankton is that the GES has not been achieved.
- o. Cape Maslen - Rezovo - The general assessment of the condition of the area with regard to the zooplankton component in the pelagic habitat is that the GES has not been achieved.
- Shelf assessment area - The overall assessment of the status of the shelf area in relation to the mesozooplankton community is that the GES has not been achieved.
- Open seas assessment area - A general assessment of the state of the open seas region with regard to the mesozooplankton community has not been made.

Gulland (1987) notes changes in the balance of small pelagic fish species due to changes in competition imposed as a result of selective fishing. However, similar fluctuations have been observed in the absence of fishing activities.

Benthos habitats

The contribution of benthic habitats and the integrity of the seabed to the overall goal of achieving good marine environmental status is addressed by MSFD Descriptors 1 and 6.

Descriptor 1 Biodiversity: Biodiversity is maintained. The quality and distribution of habitats, as well as the distribution and abundance of species correspond to the prevailing physiographic, geographical and climatic conditions.

Descriptor 6 Seabed integrity: The integrity of the seabed is at a level that ensures the preservation of the structure and functions of ecosystems, in particular benthic ecosystems are not adversely affected.

The bottom habitats in three areas are most strongly affected by physical disturbances from fishing activities: Cape Sivriburun - Cape Kaliakra (between Shabla and Kaliakra) Cape Kaliakra - Cape Galata (southwest of Kaliakra) and Cape Emine - Cape Maslen (big Burgas bay).

The presumed pressure in these areas is from beam trawling for *Rapana venosa* as well as bottom pelagic trawl for sprat (*Sprattus sprattus*).



Traces on soft bottoms due to trawling may remain for several years and may be characterized by altered benthic communities dominated by species capable of colonizing disturbed habitats; the net effect is altered biodiversity in these areas.

The least affected areas are the coastal area of Cape Maslen - Rezovo and the shelf area. In the shelf area there is a high pressure strip at a depth of 40-60 m, which is typical for sprat fishing.

Among the habitats, the highest proportion of adverse effects is determined in the circulatory muds and mixed sediments. Damage to coastal habitats, in particular infralittoral sand, where unregulated white mussel dredging is carried out, is considered underestimated in all assessment areas, but the pressure is invaluable due to the lack of a monitoring system for the majority of fishing boats with length <12 m. The sources of uncertainty in the estimates are related to the assessment of physical pressure, as well as the medium to high level of security in the maps of the modeled broad types of bottom habitats in the Black Sea, defined as medium to low (EuSeaMap 3, 2019). The results of the assessment under criterion D6C3 for the spatial range of adverse impacts for each habitat type in each assessment area participate in the preparation of the assessment under criterion D6C5.

Descriptor 2 Non - native species

Descriptor 2: Non-native species introduced by human activities are at levels that do not cause adverse changes in the ecosystem.

In the assessment period 2012-2017, two newly introduced non-native species belonging to the bottom invertebrate macrofauna were identified in the national marine waters, as follows:

o *Eurypanopeus depressus* (Smith, 1869). M

o *Arcuatula senhousia* (Benson, 1842).

Of the seven regions, only in one of the coastal regions - Cape Emine - Cape Maslen good condition has not been achieved due to the identified 2 newly introduced species, which exceeds the threshold value for coastal waters of 1 species.

Descriptor 3 Fish and shellfish species subject to commercial fishing

General definition of GES under Descriptor 3 - Biodiversity (Non-commercial fisheries): The populations of all commercial fish and shellfish species are within safe biological limits, the breeding biomass of the stock is at a level that could provide maximum sustainable yield or higher and each population has a size-age structure that is indicative of a healthy population.

Fishing activities shall be carried out in a manner and on a scale that does not exceed the maximum sustainable yield, does not lead to a systematic reduction in exploited populations and their reproductive capacity, does not damage their habitats (especially damage to bottom habitats due to trawling) and does not reduce use of fish stocks by future generations.

The updated assessment for the period 2012-2017 assesses the status of a total of nine species of fish and one species of white mussel. Threshold values by criteria have been set for some species, while the rest cannot be assessed due to insufficient data or lack of threshold values. The results show that there are no species in "Good" condition, and two species have not been evaluated and their condition is "Unknown". The final assessment of the descriptor shows that the fish that are



subject to industrial catch are in "Poor" condition and in the period 2012-2017, the GES was not achieved.

Descriptor 5. Eutrophication

Definition of GES for Descriptor 5: Good Environmental Status - Marine Environment (GES) in relation to Descriptor 5 will be achieved when human-induced eutrophication is minimized, especially its adverse effects such as biodiversity loss, degradation of ecosystems, harmful algae blooms and lack of oxygen in bottom waters.

The integrated assessment of the state under D5 was made only for the coastal sea regions, due to insufficient assessments of the state of the individual indicators in the shelf and the outlying sea. The assessment in the coastal zone was performed in a GIS environment as an arithmetic mean of the rasters corresponding to the areas in the GES and non-GES according to the trophic index TRIX (Vollenweider et al. (1998)), combining indicators D5C1, D5C2 and D5C5 in the pelagic and raster the state of the marine environment obtained by interpolation of the EQR index M-AMBI (n) (Sigovini et al., 2013).

Descriptor 6 Physical loss and physical disturbances on the seabed

In general, the physical pressure from fishing activities covers more than two thirds (73%) of the seabed area at a depth of less than 200 m off the Bulgarian coast, with an average pressure intensity ranging from very low - SAR = 0.000001 to high - SAR = 0.62.

Estimates of the spatial extent of physical pressure from fishing activities are characterized by some uncertainty, which stems from the following sources: - Lack of a monitoring system on most fishing vessels <12 m long. These boats operate in the nearby coastal zone at a depth of <15 m. Therefore, physical disturbances at the bottom, for example from illegal dredging for the extraction of white mussel *Donax trunculus*, remain outside the scope of the assessment. Thus, physical disturbances in the nearby coastal zone are considered underestimated. - Lack of information about the fishing gear and its technical parameters (width, effective disclosure) during the specific fishing operations, due to the incoherence of the Satellite Monitoring System with electronic logs. This could lead to both underestimation and overestimation of the trawled area, depending on the actual size of the fishing gear. - Uncertainty about the start and end of the fishing operation, which in the current assessment is determined on the basis of the speed appropriate for fishing.

Descriptor 7 Changes in hydrographic conditions

The definition of Good Environmental State - Marine Environment (GES) under Descriptor 7 (D7), according to Art. 9 of the MSFD (Directive 2008/56 / EC) states that permanent changes in hydrographic conditions resulting from human activities in the marine environment (individual and cumulative) do not have a significant adverse effect on the biotic and abiotic structure of broad types bottom habitats and their functions.

The condition of the macrozoobenthos in all studied areas in the vicinity of the hydrotechnical facilities near Chernomorets, Sarafovo and Primorsko is poor and this is probably due to the changes in hydrodynamic parameters characterizing the excitement due to the presence of the



facilities. The worst situation is in the port of Sarafovo, where complete defaunization of bottom sediments has been established.

In addition to the changed hydrographic conditions, other types of pressure, such as pollution, are allowed there. In the other ports the fauna has up to twice lower species wealth compared to the reference values and pronounced dominance of opportunistic species characteristic of environmental stress.

Descriptor 8 Pollutants in the marine environment

Chemical pollution of surface waters poses a threat to the aquatic environment with consequences such as acute and chronic toxicity to aquatic organisms, accumulation of pollutants in the ecosystem and loss of habitats and biodiversity, and poses a threat to human health.

EU Member States in relation to Descriptor 8 must monitor the presence of priority substances and specific pollutants in the marine environment (water, sediment and biota), for which established annual averages and / or maximum permissible concentrations, as a quality standard the environment at European, regional or national level.

The indicators from the UPBT group reach a maximum of 50% GES, with the lowest percentage being 33% for two MROs - Cape Emine - Cape Maslen the high seas.

The main reasons for the lack of good environmental status in marine areas for evaluation are the high content of mercury, tributyl tin compounds, cadmium and lead in water, as well as mercury, brominated diphenyl ethers and the amount of dioxins and dioxin-like compounds in biota. The species of biota in which the maximum amounts of pollutants have been established are: for mercury - strongil (*Neogobius melanostomus*), horse mackerel (*Trachurus mediterraneus ponticus*), shark (*Squalus acanthias*). Elevated concentrations of brominated diphenyl ethers were observed in all biota samples, with maximum levels in turbot (*Psetta maxima maeotica*) and mullet (*Mugil cephalus*). Only in the shark, in addition to mercury and brominated diphenyl ethers, elevated concentrations of dioxins and dioxin-like compounds have been found. The indicators from the non-UPBT group reached the FPGA in two maritime assessment areas of Cape Galata - Cape Emine and the high seas. In other MROs, the percentage of those who have achieved good environmental status varies between 91-95%. The main reason for this is the increased concentrations of cadmium in the five MROs, as well as lead in the Cape Emine - Cape Maslen.

Descriptor 9 Contaminants in fish and other seafood

In relation to Descriptor 9, EU Member States must monitor the possible presence of substances for which maximum levels have been established at European, regional or national level in the edible parts of fish, crustaceans, molluscs, etc. caught or collected from the wild for human consumption. The current approach to monitoring fish and other marine food products in line with the levels established for public health is different from monitoring flora and fauna for environmental purposes. Existing monitoring programs for fish and seafood for public health generally focus on assessing consumer exposure rather than assessing the environmental condition (Report on the formulation of GES ..., 2013).

Exceedance of the threshold value for the sum of dioscins and dioxino-like was found in the sample of carrion (*Alosa immaculata*) caught in Cape Emine - Cape Maslen - 6.77 mg / kg at a threshold



value of 6.5 mg / kg. In the sample of shark (*Squalus acanthias*) caught on the high seas, the threshold was doubled to 13.9 mg / kg. In the same sample, the concentration of polychlorinated biphenyls (PCBs) - 864 mg / kg exceeds the threshold value of 200 mg / kg four times.

It is concluded that in the studied samples the indicators that do not reach good ecological status are cadmium and the number of dioxins and dioxino-like. The concentrations of mercury and polychlorinated biphenyls in the sample of shark (*Squalus acanthias*) caught on the high seas are also at the limit. Species in which elevations have been identified are *Rapana venosa*, *Mullus barbatus ponticus*, *Alosa immaculata* and *Squalus acanthias*. Of the marine areas, only three achieve good status: Cape Sivriburun - Cape Kaliakra, Cape Galata - Cape Emine and Cape Maslen - Rezovo.

Descriptor 10 Marine litter

Definition of GES under Descriptor 10: There is no or negligible marine litter accumulated on beach / coastal strips floating on the sea surface and deposited on the seabed, as well as near coastal hotspots, waste sources, estuaries, urban areas, public beaches and seaports, and in open sea waters. There are no cases of entangled, injured and / or dead marine mammals, seabirds and fish species found as a result of imported waste into the marine environment.

Although the improved monitoring program under Descriptor 10 (D10) (2016) does not define specific quantitative thresholds for individual indicators, but those for monitoring the overall trend of quantities over a 6-year period, the data collected report high levels of waste. along the observed beaches. Therefore, an initial conclusion can be made about the situation for this two-year period as unfavorable.

A smaller amount of waste on the beaches is registered in less populated areas (lack or small settlements), wooded areas, beaches, part of protected areas or declared for nature tourism.

The generated waste is mainly from the local population and tourists visiting the observed beaches during the summer season in Bulgaria (May 31 - September 30).

By category of waste, all beaches are dominated by various polymer wastes, mainly those related to food and beverages (plastic bottles, cups, corks, caps, utensils, packaging, bags, straws), cigarette butts and filters, pieces of plastic of different sizes, styrofoam, polyurethane foam for insulation, ropes, twine, fishing nets or pieces thereof.

The subcategory cigarette butts and filters (G27) is found in significant quantities in all campaigns in the period 2015-2017.

There are no waste containers near the monitored beaches, which is a good reason for the large amounts of registered waste on the coast.

At this stage, baseline and threshold values for the amount of waste according to criterion D10C1 cannot be determined. Further research and development of thresholds is needed. Given that the environmental target under criterion D10C1 has been set for a certain period of time (6 years), the current update of Article 9 of the MSFD has not assessed whether the definition of the GES has been met.



The 2015-2016 surveys and the 2017 monitoring program under criterion D10C1 confirmed that the drivers of marine litter are tourism, urbanization, ports, shipping, commercial and recreational fishing. No adverse effects were observed on the beaches, sea surface and bottom from the accumulation of waste, resulting in habitat loss, loss of biodiversity, injured and / or dead marine mammals and birds due to entanglement in nets, waste collection and / or their degradation in mammals and birds. This does not mean that there are none, and efforts should be made to identify these threats to the marine environment in the coming years of monitoring.

Descriptor 11 Sea noise

Definition for GES under Quality Descriptor 11 according to Art. 9 of the MSFD: The introduction of energy, including underwater noise, should be at levels that do not adversely affect marine animal populations.

The updated assessment of the state of the marine environment with regard to underwater noise is based on criteria D11C1 (pulsed sound) and D11C2 (continuous low frequency sound):

Anthropogenic impulse sound in water (D11C1)

The updated assessment based on criterion D11C1 provides a baseline for 2013-2017. It describes the current state of Bulgarian seawater in terms of the introduced anthropogenic impulse noise. This assessment does not demonstrate an assessment of the situation or trends, as thresholds for the impact of this pressure on marine animal populations have not yet been set, insufficient data are available and no assessment has been carried out in the first cycle of Directive 56/2008 / EU.

Anthropogenic constant low frequency sound in water (D11C2)

The updated assessment based on criterion D11C2 provides baseline levels of constant low-frequency noise in Bulgarian marine waters in 2016-2017. This assessment does not demonstrate an assessment of the status or trends, as thresholds for the impact of this pressure on marine populations are still have not been identified, there are insufficient data and no evaluation has been carried out during the first cycle of implementation of Directive 2008/56/EC of the European Parliament and of the Council of 17 June 2008 establishing a framework for community action in the field of marine environmental policy (Marine Strategy Framework Directive) .

Based on the updated assessment, environmental objectives have been defined by descriptors (according to Article 10 of the MSFD).

3.1.5.2. Ground water quality

In most of the program area the aquifer is a high productive porous layer, which means that a significant flow of groundwater is allowed, or the extraction of a sufficient amount of groundwater. Aquifer karst is also present, where groundwater flow is more concentrated and faster.

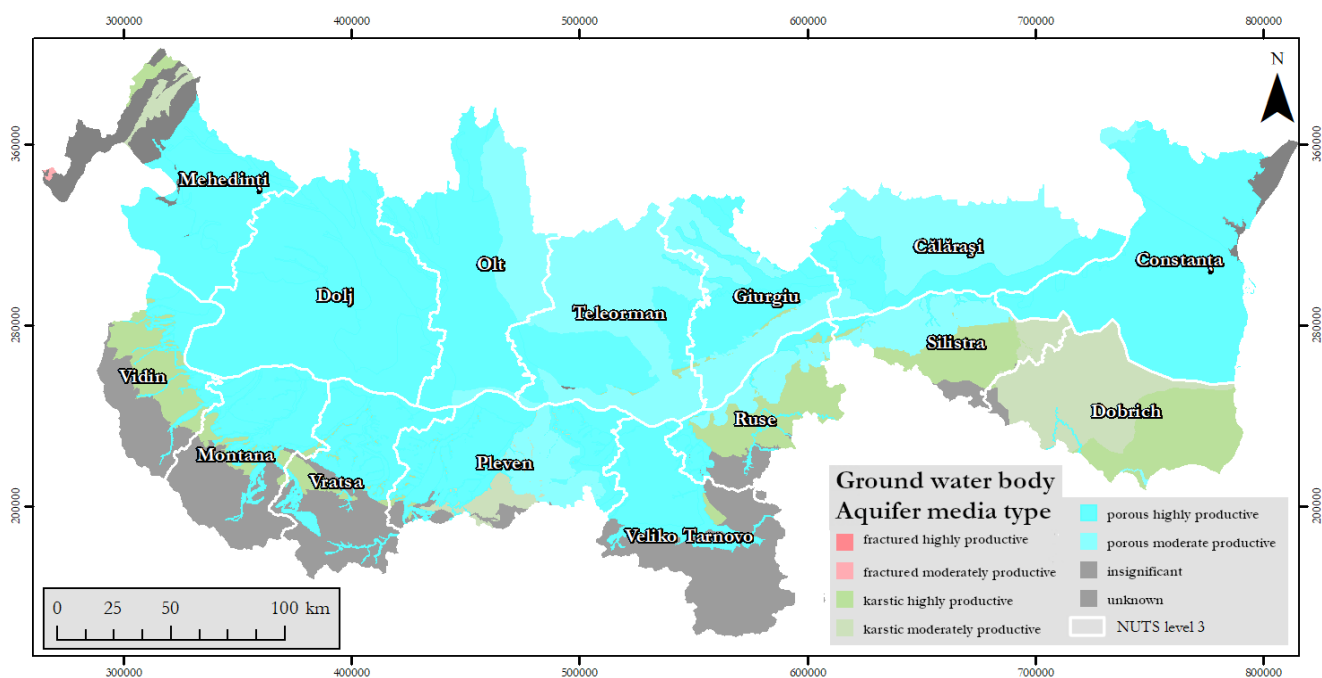


Figure no. 3-41 Ground water - aquifer media type

The chemical status of the groundwater in the eastern part of the program are in poor condition, and partly in the northwest. The chemical deterioration of groundwater are generally caused by point pollution, generated by landfills, but also by diffuse pollution such as sewage leaks, use of fertilizers, pesticides, etc.

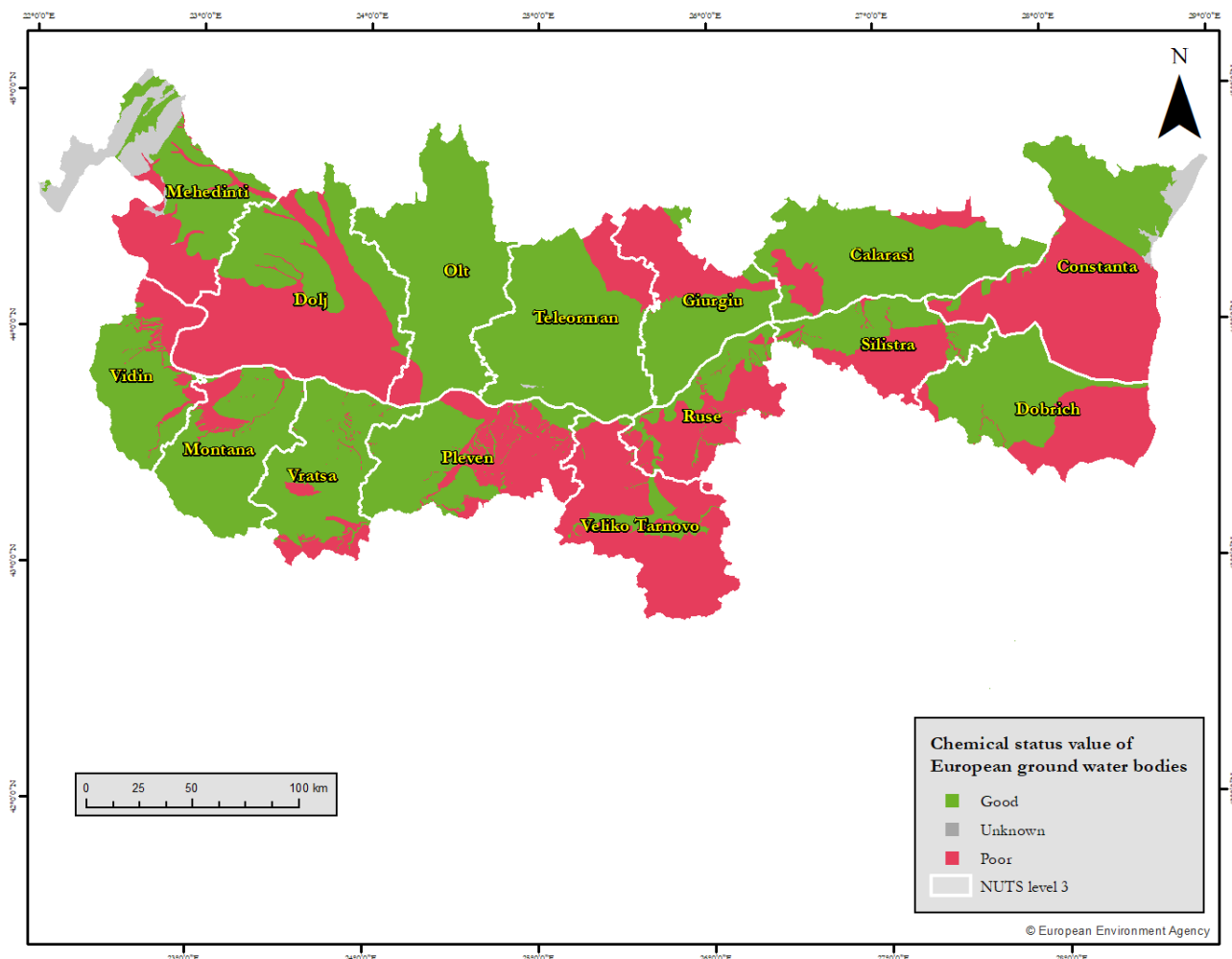


Figure no. 3-42 Chemical status of ground water bodies

In Bulgaria according to data from the RBMP 2016-2021, 45 of the groundwater bodies are in good ecological condition, in moderate ecological condition are 47 groundwater bodies, 15 are in bad, 3 are in very bad, 9 groundwater bodies are in good to excellent ecological condition, and for 14 it is unknown. In Annex 14.2 is presented the complete list of underground water bodies and their condition.

Of the groundwater bodies 24 pcs. are in good chemical condition and the other 16 are in poor chemical condition.

3.1.5.3. Drinking water quality and bathing water

Romania

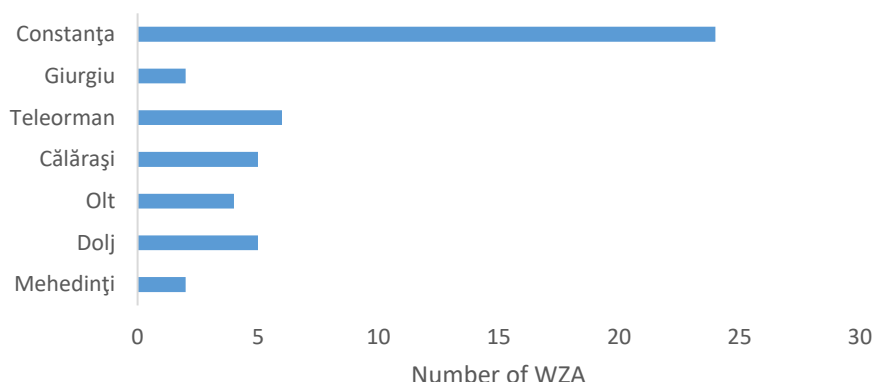
Drinking water quality

According to the 2019 Health and Environment Report³⁴, in 2019 the total number of water supply area - WZA (areas in which more than 1,000 m³ of water are supplied per day and/or more than

³⁴ Institutul Național de Sănătate Publică - Centru Național de Monitorizare a Riscurilor din Mediul Comunitar - Raportul pentru Sănătate și Mediu 2019



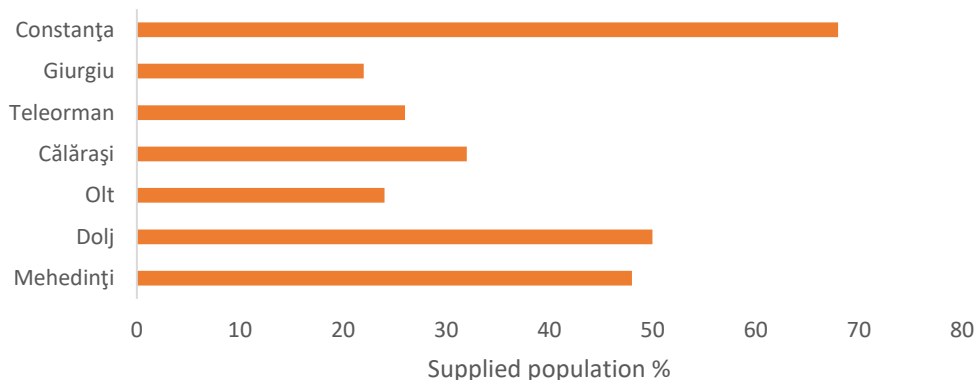
5,000 inhabitants are supplied) from the program area in Romania was 48 areas, representing approximately 14% of the total areas in Romania. At the country level, there is an increase in WZA, from 298 in 2011 to 343 in 2019.



Source: National Institute of Public Health - Romania

Figure no. 3-43 Total number of large WZA - 2019

The percentage of the population supplied from WZA in the program area is present in the figure below. It can be seen that Constanța County has the highest degree of supply, but it also has the most WZA in the program area.



Source: National Institute of Public Health - Romania

Figure no. 3-44 Percentage of supplied population

Regarding the analyzes performed per year for monitoring the water quality parameters, from the total of the analyzes performed at the level of Romania, Dolj county occupies the first place.

The degree of compliance of the drinking water quality parameters with the values established in Law no. 458/2002 on drinking water quality, republished and subsequent additions for 2019, in the program area is:

- Manganese parameter: Olt County, presented a degree of compliance of approximately 75%;
- Nitrates parameter: Calarasi County presented a degree of compliance of approximately 98% and Constanța County of 88.5%;



- Ammonium parameter: Olt County presented a degree of compliance of approximately 50% and Teleorman County 42%;
- Nitrite parameter: Olt County showed a degree of compliance of approximately 58%;

Parameter Free residual chlorine: Olt County registered a degree of compliance of approximately 6%.

In the counties that were not mentioned, there were no non-conformities for the analyzed parameters. The percentage of up to 100% for the parameters presented above, assumes that non-conformities have been registered with the allowed values of the parameters.

Bulgaria

In the program territory in Bulgaria the total number of water supply zones according to the Reports of the Districtal Health Inspections (RHI) by districts is 512 water supply zones. The total number of water supply areas - WZA (areas where more than 1000 m³ of water is supplied per day and / or more than 5000 inhabitants are supplied) is 34. Data on the distribution of water supply zones by districts is presented in Figure below.

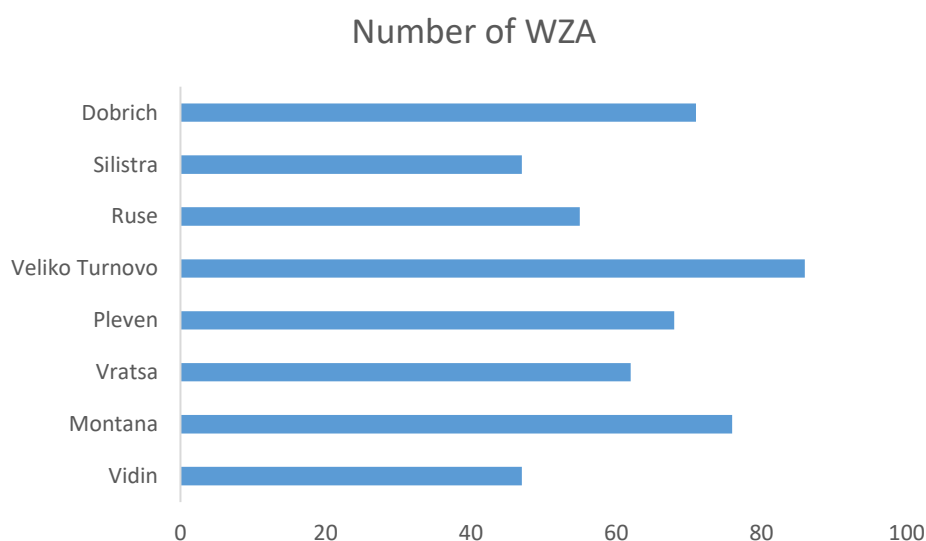


Figure no. 3-45 Total number of large WZA- 2020

99.4% of the country's population has access to drinking water through group settlement water supply systems (2019). According to this indicator, Bulgaria is in a favorable position compared to some other European countries

In all water supply areas, monitoring points have been designated in accordance with the regulations. The quality of drinking water is assessed by microbiological, organoleptic, physicochemical, chemical and radiological indicators, regulated by Ordinance № 9 of 2001 on the quality of water intended for drinking and household purposes. The review of the summarized data from the control monitoring of drinking water conducted by RHI in 2019 shows that the



general compliance with the requirements remains at a relatively high level, comparable to that in previous years.

Inconsistencies were found in the studied areas as follows:

Physicochemical parameters

Discrepancies are observed in the following districts: Vidin district, Montana district (1.4% discrepancy), Vratsa district (4.6% discrepancy) and Veliko Tarnovo district (22.49% discrepancy), Ruse district³⁵ (2% discrepancy), Silistra district³⁶, Dobrich district³⁷ (5.24% discrepancy)

nitrites - Vratsa district³⁸: the village of Banitsa, the village of Mramoren, the village of Durmantsi, the village of Malo Peshtene and the village of Golyamo Peshtene and the village of Kriva bara;

Veliko Tarnovo district: Nikyup, Sagittarius, Usoi, Batak, Varzulitsa, Patresh, St. Stambolovo, Ivancha, Orlovets, Karantsi, Klimentovo, P. Senovets, Strahilovo, Alekovo, Alexandrovo, G. Studena, Delyanovtsi, Kozlovets, Ovcha Mogila, Oresh, Sovata, H. Dimitrovo, Chervena, Kamen, Lozen, N. Varbovka, Suhindol, Koevtsi;

Rousse district - the settlements in the municipality of Slivo Pole, some villages in the municipalities of Rousse, Byala and Vyatovo;

Silistra district: in four of the water supply zones: water zone (WZ) "Popina" and WZ "Polyana", WZ "Iskra" and WZ "Pozharevo"³⁹.

iron - Veliko Tarnovo district: B. Slivovo

calcium - Veliko Tarnovo district: Sagittarius, Paisii, D. Shivachevo, Slivovitsa

free chlorine - Vratsa district, Ruse district, Silistra district

Radiological indicators

total alpha activity: Vidin district⁴⁰; Dobrich district

Microbiological indicators:

Montana District (3.9% discrepancy)⁴¹: Vulchedrum and Brusartsi municipalities; Vratsa district (3.7%); Veliko Tarnovo district (2.8% discrepancy): Nikyup, Raykovtsi, Kozlovets and Mirovo; St. Stambolovo; Alekovo, Kozlovets; Silistra District, Ruse District (1.8% discrepancy), Dobrich District (2.8% discrepancy)

Discrepancies are most often sporadic. They are observed mainly in smaller settlements - an indication of poor water supply practice, resp. irregular maintenance of facilities and inefficient

³⁵ Report on the quality of water from central water supply intended for drinking and household purposes, monitored by RHI-Silistra in 2020

³⁶ Report on the quality of water from central water supply intended for drinking and household purposes, monitored by RHI-Silistra in 2020

³⁷ Analysis on the quality of drinking water in the region of Dobrich in 2020;

³⁸ Summarized annual report on water quality, submitted for drinking and household purposes in 2020 in the region of Vratsa

³⁹ Report on the quality of water from the central water supply, intended for drinking and domestic use, monitored by RHI-Silistra in 2020

⁴⁰ Report on the quality of water for drinking and household purposes in Vidin district for the period 2017 - 2019.

⁴¹ <https://bg.rzi-montana.org/index.php/2020-07-15-18-57-40/2020-07-15-18-58-34>



water disinfection regime, including in areas with depreciated water distribution network and frequent accidents

Bathing water

At the level of the program area, 48 natural bathing areas are available in Constanta County, which are reported to the European Commission (in the coastal area of the Black Sea and Lake Ciuperca in Tulcea County), from the point of view of the bathing water quality. In the period 2015-2019 the quality of bathing waters has been improved. For example, in 2015, out of the 48 bathing areas, one falls into the Unsatisfactory category and 11 into the Satisfactory category, and in 2019 the Excellent category is predominant and only 10 areas fall into the Good category⁴².

In addition to these areas, other bathing areas have been identified in the program area, which are not reported to the European Commission. They are located in the following counties:

Calarasi County: 2 areas developed and authorized and water quality is within the values in the guide and the mandatory values;

Constanța County: 2 undeveloped areas and water quality is within the mandatory values;

Dolj County: 1 undeveloped area - water quality does not meet the mandatory values;

Olt County: 2 undeveloped areas - water quality does not meet the mandatory values and are pleasant warnings with prohibited bathing.

Bulgaria

In the districts of Vidin, Montana, Vratsa, Veliko Tarnovo, Pleven, Ruse and Silistra there is no officially designated bathing area⁴³.

Dobrich District: There are 20 bathing areas, 8 of which are in good condition and 12 in excellent⁴⁴.

3.1.5.4. Wastewater treatment, sewage and discharge system

At the level of the program area, human agglomerations of more than 2,000 equivalent inhabitants (l.e.) are identified, on 3 types of size (1,000 - 10,000 l.e., 10,001-100,000 l.e. and > 100,001 l.e.). These are shown in the figure below.

⁴² Institutul Național de Sănătate Publică - Centru Național de Monitorizare a Riscurilor din Mediul Comunitar - Raportul pentru Sănătate și Mediu 2019

⁴³ SECTION 3 Update of the register of water protection zones

⁴⁴ http://www.rzi-dobrich.org/files/upload/zdraven-kontrol/kontrol-na-faktori-na-sredata/vodi/vodi-za-kupane/morski/vodi_kypane_2021/kategorizatsiya_zoni_kypane-pril__1.xls

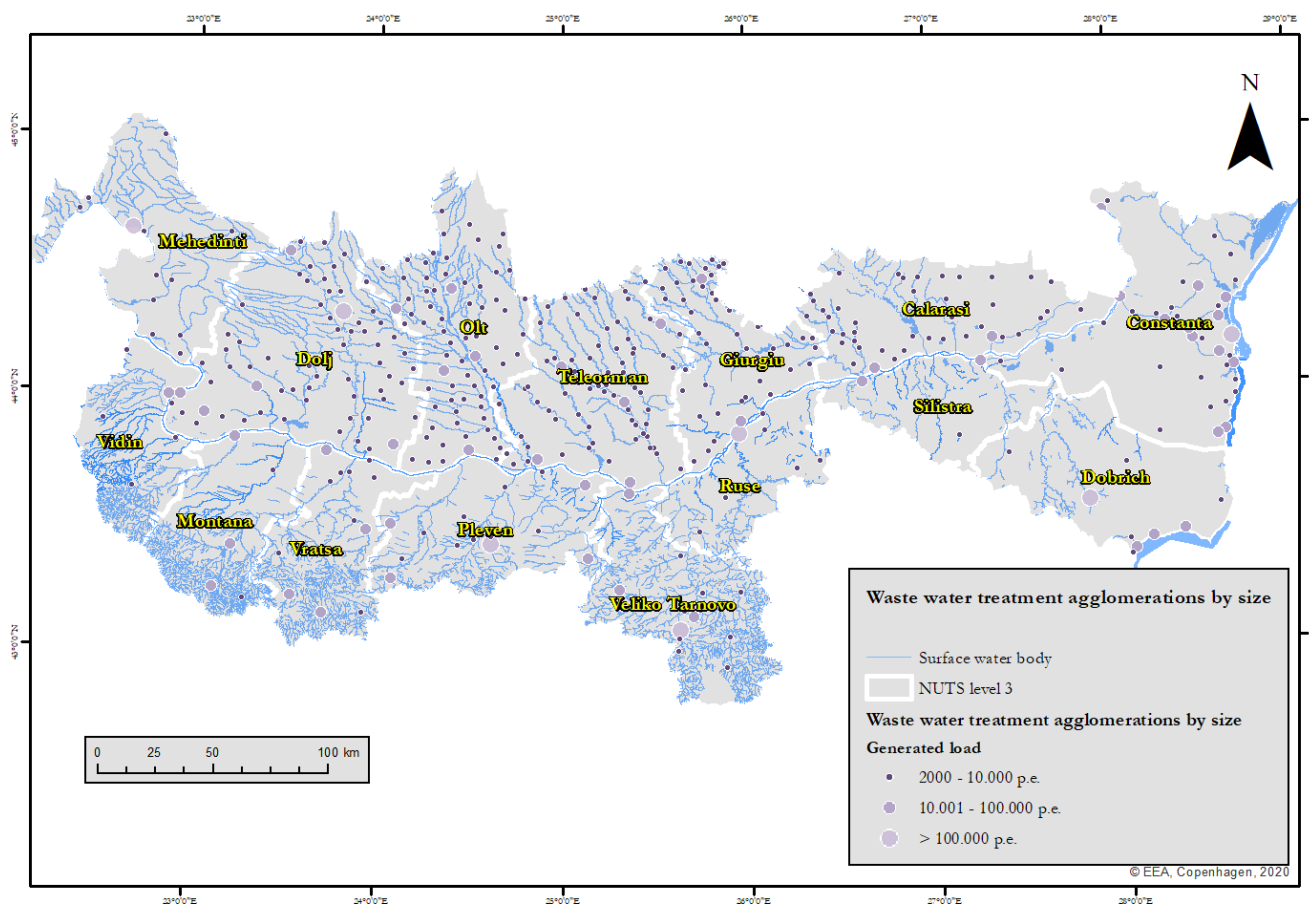


Figure no. 3-46 Wastewater treatment agglomerations by size

Sanitary protection zones

In Romania water catchments for drinking purposes are made from water bodies that supply on average more than 10 m³ / day or that serve more than 50 people and are protected to avoid deterioration of their quality and to reduce the level of treatment in the process. production of drinking water, by establishing protection zones.

Specific national legislation is represented by:

- Government Decision no. 930/2005 regarding the character and size of the sanitary protection areas;
- Government Decision no. 100/2002 for the approval of the Quality Norms that must be met by the surface waters used for drinking water and of the Norm regarding the measurement methods and the frequency of sampling and analysis of the samples from the surface waters destined for the production of drinking water, with the subsequent modifications and completions;
- Minister's Order (M.O) no. 1278/2011 for the approval of the Instructions regarding the delimitation of the sanitary protection zones and of the hydrogeological protection perimeter;

According to the legislation in force, the following sanitary protection areas are materialized in the field, with different degrees of risk compared to pollution factors: sanitary protection



zone with severe regime, sanitary protection zone with restricted regime, hydrogeological protection perimeter.

The sanitary protection zones with severe regime for water catchments are determined according to the local characteristics of the riverbed and have the following minimum dimensions: 100 m on the upstream direction of the outlet, 25 m on the downstream direction of the last component works of the outlet, 25 m side on either side of the socket.

In the case of groundwater abstraction, for severely restricted and restricted sanitary protection areas, the sizing is usually done using the criterion of the transit time underground of a hydrodynamically active water particle, using in calculations the characteristics and hydrogeological parameters of the aquifer.

The hydrogeological protection perimeter is established only for groundwater catchments and includes the area between the fields of supply and discharge to the surface and / or underground of groundwater through natural emergencies (springs), drains and groundwater drilling and has the role of ensuring protection against highly degradable or non-degradable pollutants and regeneration of the flow taken through the capture works.

In order to prevent the risk of contamination or pollution of the water as a result of human activity, measures to prohibit certain activities and restrictive use of land are required in protected areas.

At the national level, in 2019, 3,884 water intakes were inventoried for drinking water. Depending on the water supply they resulted:

- 361 water intakes from surface sources for drinking (of which 352 for water supply to the population and 9 for water supply to the food industry);
- 3,523 water intakes from underground sources for drinking water (of which 3,140 for water supply to the population and 383 for water supply to the food industry). The total volume of drinking water captured from surface sources was 1,187.30 million m³, and that from underground sources was 970.21 million m³.

In Bulgaria within the territorial scope of the BDDR falling within the programme territory, as of 01.10.2021, 307 sanitary protection zones have been established, in accordance with the requirements of Ordinance No 3/16.10.2000 on the terms and conditions for the exploration, design, validation and operation of sanitary and security zones around the water sources and facilities for drinking-bit water supply and around the water sources of mineral waters used for healing, preventive, drinking and hygienic needs (SG 88/000).

The number of sanitary protection zones within the territorial scope of the programme, falling within the Black Sea Region is 31 pcs.

Water protection zones

Bulgaria

A) Zones for the protection of water, according to Art. 119a, para. 1, item 1 of the Water Act

The target areas of the Danube region:



Surface water bodies with codes: BG1DSWIS1123, BG1DSWIS1222, BG1DSWNV1101, BG1DSWNV1102, BG1DSWOG1106, BG1DSWOG1206, BG1DSWOG1016, BG1DSWOG1103, BG1DSWOG1203, BG1DSWOG1101, BG1DSWOG1201, BG1DSWWO1108, BG1DSWWO1212, BG1DSWWO1312, BG1DSWWO1412, BG1DSWWO1512, BG1DSWYN1019 are defined as areas for protection of drinking water, according to art. 119a, para. 1, item 1 of the Water Act

Underground water bodies with codes: BG1DGW0000QAL018, BG1DGW0000QP027, BG1DGW0000QAL009, BG1DGW0000QAL008, BG1DGW0000QAL017, BG1DGW0000QAL006, BG1DGW0000QAL015, BG1DGW0000QAL007, BG1DGW0000QAL005, BG1DGW0000QAL014, BG1DGW0000QAL003, BG1DGW0000QAL004, BG1DGW0000QAL013, BG1DGW0000QAL010, BG1DGW0000QAL011, BG1DGW0000QAL012, BG1DGW0000QAL002, BG1DGW0000QPL024, BG1DGW0000QAL020, BG1DGW0000QAL016, BG1DGW0000QAL019, BG1DGW0000QPL026, BG1DGW0000QAL021, BG1DGW0000QPL023, BG1DGW0000QPL025, BG1DGW0000QAL001, BG1DGW0000N2034, BG1DGW0000N1035, BG1DGW0000N049, BG1DGW000N1BP036, BG1DGW0000K2S037, BG1DGW0000K2M047, BG1DGW0000TJ046, BG1DGW000K1HB50, BG1DGW0000K1B041, BG1DGW0000TJK045, BG1DGW000K1AP043, BG1DGW0000K1040, BG1DGW0000TJK044, BG1DGW0000J3K051 are defined as areas for protection of drinking water, according to art. 119a, para. 1, item 1 of the Water Act.

The target areas of the Black Sea region:

Groundwater bodies with codes BG2DGW000000N018, BG2DGW000000N044, BG2DGW000000PG026, BG2DGW000J3K1040 and BG2DGW000J3K1041 are defined as zones for protection of drinking water, according to art. 119a, para. 1, item 1 of the Water Act;

B) Bathing areas, according to art. 119a, para. 1, item 2 of the Water Act

The target areas of the Black Sea region:

Table 3-4 The target areas of the Black Sea region bathing areas

1	Durankulak - North 1 with code BG3322924102008001	11	Mermaid - Central beach with code BG3321765543008006
2	Durankulak - North 2 with code BG3322924102008002	12	Bolata with code BG3321707257008007
3	Krapets North with code BG3322939493008003	13	Kavarna - Central with code BG3321735064008008
4	Camping "Dobrudja" with code BG3322983017008004	14	Bozhurets - Poplar with code BG3321705009008009
5	Mermaid - Big beach with code BG3321765543008005	15	Ikantalka with code BG3321772693008010
6	SBA with code BG3321772693008011	16	Tuzla with code BG3320302508008012
7	Robinson-2 with code BG3320302508008013	17	Balchik - Central with code BG3320302508008014
8	New Beach with code BG3320302508008015	18	Balchik - the palace with code BG3320302508008016
9	Fish-Fish with code BG3320353120008018	19	Albena with code BG3320353120008019
10	Kranevo - Central with code BG3320339459008020	20	Kranevo - South with code BG3320339459008021

C) Areas where water is sensitive to nutrients



Romania: Considering both Romania's positioning in the Danube river basin and the Black Sea basin, as well as the need for environmental protection in these areas, Romania has declared its entire territory as a nutrient-sensitive area. This decision is based on the fact that, in order to ensure the protection of the environment from the negative effects of urban waste water discharges, agglomerations with more than 10,000 equivalent inhabitants must provide an infrastructure for urban wastewater treatment that allows advanced treatment, especially in regarding the nutrients nitrogen and phosphorus (according to the provisions of GD no. 188/2002 for the approval of some norms regarding the conditions of discharge in the aquatic environment of the wastewater, with the subsequent modifications and completions, art. 3 (1)). Regarding the degree of purification, secondary purification (biological stage) is a general rule for agglomerations of less than 10,000 equivalent inhabitants.

Bulgaria: In the process of implementing the Nitrates Directive, Codes of good agricultural practices and Action Programs were elaborated and applied, according to the provisions of GD no. 964/2000 on the approval of the Action Plan for the protection of waters against nitrate pollution from agricultural sources, as subsequently amended and supplemented. Starting with June 2013, the decision was taken to apply the Action Program on the entire territory of Romania, in accordance with art. 3 para. 5 of the Nitrates Directive. Thus, according to the mentioned provisions, Romania no longer has the obligation to designate areas vulnerable to nitrates from agricultural sources, as the action program is applied without exception on the entire territory of the country.

The target areas of the Danube region:

According to Order № RD 970 / 28.07.2003 of the Minister of Environment and Water, all water bodies in the Danube catchment area on the territory of the Republic of Bulgaria are sensitive areas.

The target areas of the Black Sea region: The territory falls into a sensitive zone and a nitrate vulnerable zone, according to Art. 119a, para. 1, item 3 of the Water Act.

D) Areas for the protection of economically important aquatic species

Romania

In Romania, the definition of areas for the protection of economically important aquatic species has been achieved by identifying watercourses with fish species that have economic potential and areas where commercial fishing is practiced, as well as marine areas suitable for breeding and exploitation molluscs.

The most important legislative acts in the field at national level are represented by:

- Government Decision no. 202/2002 for the approval of the Technical Norms regarding the quality of surface waters that need protection and improvement in order to sustain the fish life, with the subsequent modifications and completions (GD no. 563/2006, GD no. 210/2007) updated;
- Government Decision no. 201/2002 for the approval of the Technical Norms regarding the water quality for molluscs, with the subsequent modifications and completions (GD no. 467/2006, GD no. 859/2007, GD no. 210/2007) updated;



- Minister's Order (MO) no. 1950/2007/38/2008 of the Minister of Environment and Sustainable Development and of the Minister of Agriculture and Rural Development for the delimitation and cataloging of marine areas suitable for the growth and exploitation of molluscs, with subsequent amendments (O.M. no. 983/1699/2015);
- Government Emergency Ordinance. no. 23/2008 on fishing and aquaculture with subsequent amendments and completions;
- Regulation (EC) no. Regulation (EC) No 2371/2002 on the conservation and sustainable exploitation of fisheries resources under the Common Fisheries Policy.

The areas where commercial fishing is practiced have been identified based on information on significant catches for economically important fish species found in the cyprinid area, reported by the National Agency for Fisheries and Aquaculture in 2019, being represented by the Danube River. Considering the fact that our country is a country bordering the Black Sea, as well as the characteristics of the related coastal area, 3 areas were delimited for their growth and exploitation located between Perisor and Mangalia, with a total area of approx. 425 Mm². The species of molluscs of economic interest for human consumption are *Mytilus sp.* and *Rapana sp.*, whose commercial fisheries recorded significant catches in 2019.

Bulgaria

According to Art. 119a, para. 1, item 4 of the Law on Waters, Inland Surface Waters and Coastal Sea Waters are defined as:

Areas for protection of commercially valuable fish species with codes:

The target areas of the Danube region: BG1FSWU000R001, BG1FSWIS100R1024, BG1FSWYN600L1019, BG1FSWYN600R1021, BG1FSWYN600R1125, BG1FSWOG600R1106, BG1FSWOG700R1203, BG1FSWOG789R1301.

The target areas of the Black Sea region: BG2FSWBS000C001, BG2FSWBS000C002, BG2FSWBS000C1003, BG2FSWBS000C1004, BG2FSWBS000C1013, BG2FSWDO700L0173, BG2FSWDO700L018, BG2FSWDO700L0171, BG2FSWDO700L0172.

Waters, providing conditions for life and reproduction of shell organisms:

- „N. Ekrene - n. Ikantalak ”with code BG2SFW91, n. Ikantalak - Kaliakra Reserve "with code BG2SFW92 and" n. Kavaklar - N. Ekrene “BG2SFW09:

Waters capable of providing conditions for shellfish organisms:

- "Tuzla - Krapets nose" with code BG2SFW93 and "Krapetski nose - n. Sivriburun" with code BG2SFW94.

E) Protected territories and zones designated or declared for protection of habitats and biological species, in which the maintenance or improvement of the condition of the waters is an important factor for their protection according to Art. 119a, para. 1, item 5 of the Water Act:

The target areas of the Danube region: 6 reserve; 43 natural landmarks; 5 maintained reserves; 4 nature parks; 57 protected areas; 73 protected areas under the Directive for the protection of natural habitats and of wild flora and fauna; 29 protected areas under the Wild Birds Directive; 4 protected areas under both Directives.



The target areas of the Black Sea region: 7 protected areas under the Directive for the protection of natural habitats and of wild flora and fauna.

According to Eurostat data, in the cross-border area, equipment and infrastructure systems in terms of water supply and waste water are insufficient compared to other regions of Europe: waste water from households and industry is under great pressure on the environment due to loads of organic substances and nutrients, as well as dangerous substances. The following environmental changes have been identified: lack of adequate infrastructure for the collection and treatment of waste water, pollution of surface water and groundwater (organic, nutrients, hazardous substances); hydro morphological changes (interruption of river and habitat continuity, interruption of connections with adjacent flood areas/ wetlands, hydrological change).

3.1.6. AIR

3.1.6.1. *Main air pollutant emission sources*

In Romania, the main areas that are important sources of air pollution are energy, industry, transport and agriculture.

In Bulgaria the main source of pollution is domestic heating of solid fuels such as coal and wood, combustion of coal for the production of electricity and heat from thermal power stations, road transport, industry, construction and repair activities. Depending on the area, there are different types of pollution, for example in areas near coal-fired power plants, the level of SO₂ is higher, compared to areas away from industrial centers.

3.1.6.2. *Air quality in the programme area*

Air quality at European level is regulated by Directive 2008/50/EC on ambient air quality and cleaner air for Europe, Directive 2004/107/EC of the European Parliament and of the Council relating to arsenic, cadmium, mercury, nickel and polycyclic aromatic hydrocarbons in ambient air and Directive 2015/1480 amending several annexes to Directives 2004/107/EC and 2008/50/EC of the European Parliament and of the Commission laying down rules on reference methods, validation of data and location of sampling points for the assessment of ambient air quality.

These European regulations have been transposed into national law in Romania and Bulgaria. In Bulgaria is transposed into national law by Ordinance № 12 (2010) and in Romania was transposed in law № 104 (2011). In Romania, air quality is monitored by the National Air Quality Monitoring Network (R.N.M.C.A) through automatic stations. Their number at national level was 148, of which 27 are in the program area.

In Bulgaria works a system for monitoring the air quality based on monitoring points. The system of air quality monitoring it is connected with the regional laboratories in Sofia, Plovdiv, Pleven, Stara Zagora, Varna and Ruse⁴⁵. According to the Clean Air Act the main indicators characterizing the air quality at ground level are: suspended particulates, particulate matter, sulphur dioxide, nitrogen dioxide and / or nitrogen oxides, carbon monoxide, ozone, lead, benzene, polycyclic aromatic hydrocarbons and heavy metals (cadmium, nickel arsenic and mercury).

⁴⁵ <https://www.iqair.com/bulgaria>



When it comes to assessing air quality, the air pollutants analyzed are: SO₂, NO₂, NO_x, PM₁₀, PM_{2.5}, Pb, C₆H₆, CO, O₃, As, Cd, Ni, Benzo(a)pyrene.

The following pollutants were analyzed in the program area: PM_{2.5}, PM₁₀, NO₂, SO₂, O₃ and CO.

Following the analysis of the values of the pollutants in the program area, it is found that there were partial exceedances in 5 of the 6 pollutants analyzed, depending on the period analyzed for each one.

- The PM_{2.5} indicator in 2017 exceeded the annual allowable limit of 25 µg / m³ in the south of Vrasta district, and on a smaller area in Montana and Veliko Tarnovo.
- The PM₁₀ indicator exceeded the annual allowable limit of 40 µg / m³, also in the south of Vrasta district.
- In the analyzed period 2013-2019, the NO₂ indicator registered two exceedances of the annual limit value of 40 µg / m³, in the Pleven district, registering the values of 43.88 µg / m³ and 41.64 µg / m³. Also in Romania, the annual limit was exceeded, in 2017 in Dolj County reaching the annual value of 41.01 µg / m³. In general, high concentrations of NO₂ in the air are caused by the road transport sector, and in urban areas they are more intense, so the population is exposed to environmental concentrations of NO₂.
- The O₃ indicator registered in 2017 exceedances of the average daily value of 8 hours of 20 µg / m³ in the north of Mehedinți county, in the north and partially in the south of Dolj county, but also on a small area in the northeast of Constanța county. In the area of the program in Bulgaria there were overruns only in the southeast of the Veliko Tarnovo district. At European level, the concentration of O₃ in the atmosphere increases from north to south, which is why in the south of Europe there are higher values, because to increase the concentration of O₃ lighter is needed. And compared to other pollutants, ozone has a higher concentration in rural areas compared to urban ones. The highest values for ozone are recorded on days characterized by solar radiation and high temperatures. According to the "Plan for Maintaining Air Quality in Dolj County 2020-2025", no specific sources of pollution leading to the formation of O₃ have been identified. In 2017 there were two exceedances of the limit value, and in the following year only one exceedance
- In the analyzed period 2013-2019, the CO indicator exceeded the maximum daily value of 8-hour averages of 10 mg / m³, in 2014 registering in the Ruse district 10.31 mg / m³, in 2015 in Giurgiu County 12.14 mg / m³, Dolj 10.78 and in the Pleven district 11.10 mg / m³, and in 2016 it reached a concentration of 10.08 mg / m³. In general, the increase of CO concentration is found in urban areas at peak hours or depending on the wind direction in industrial areas.



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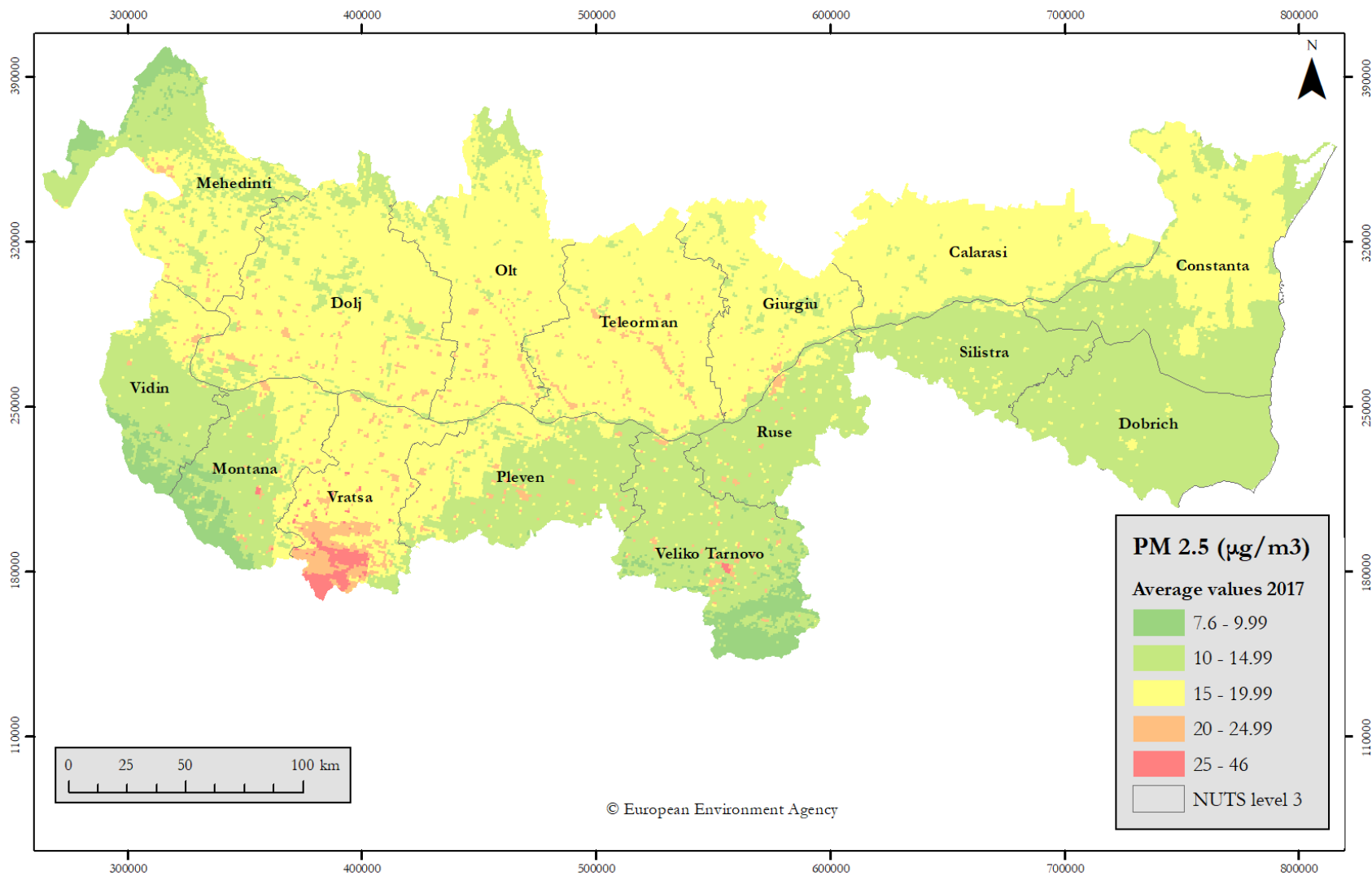


Figure no. 3-47 Annual average for the PM2.5 indicator in 2017

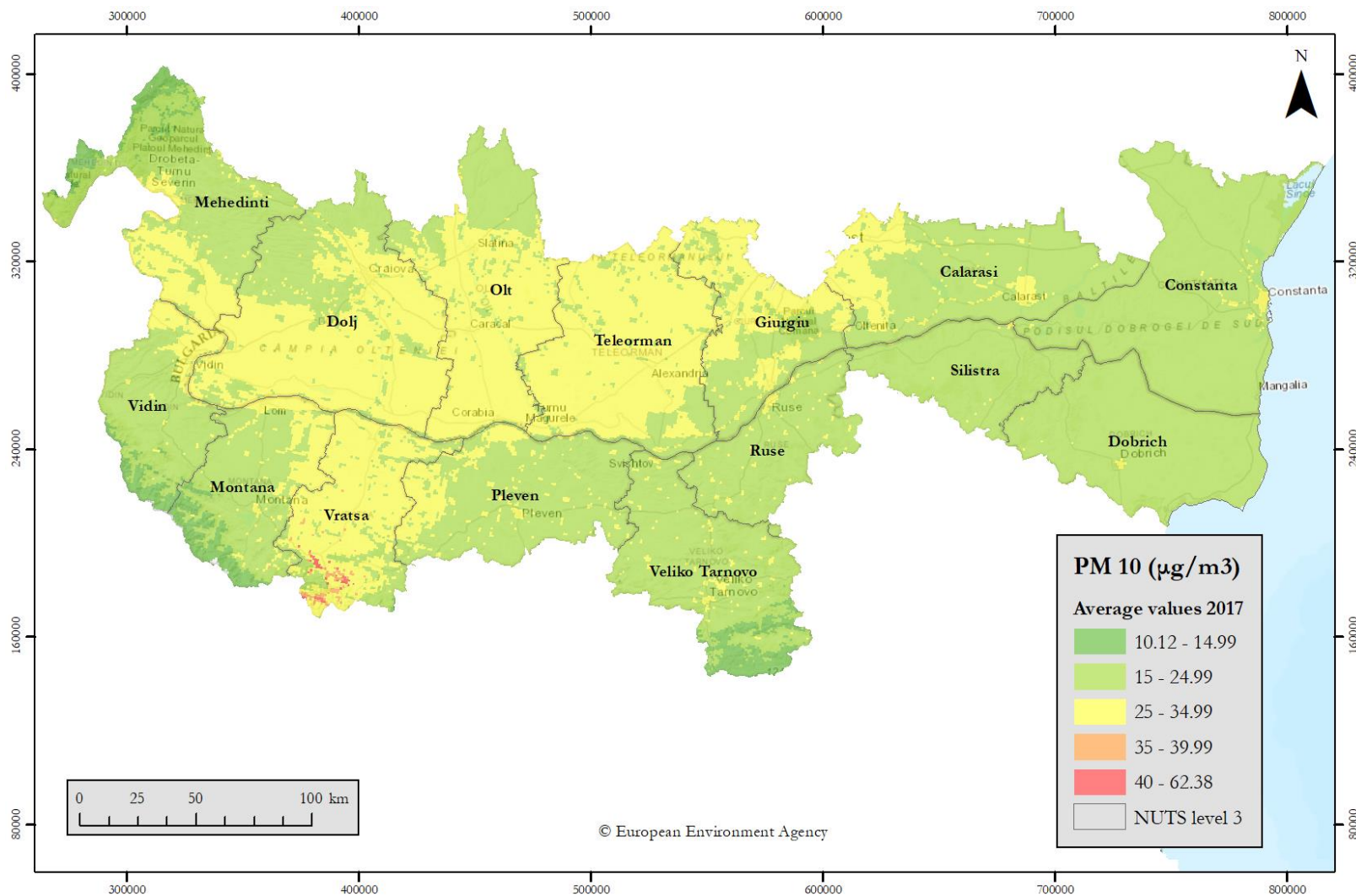


Figure no. 3-48 Annual average for the PM10 indicator in 2017

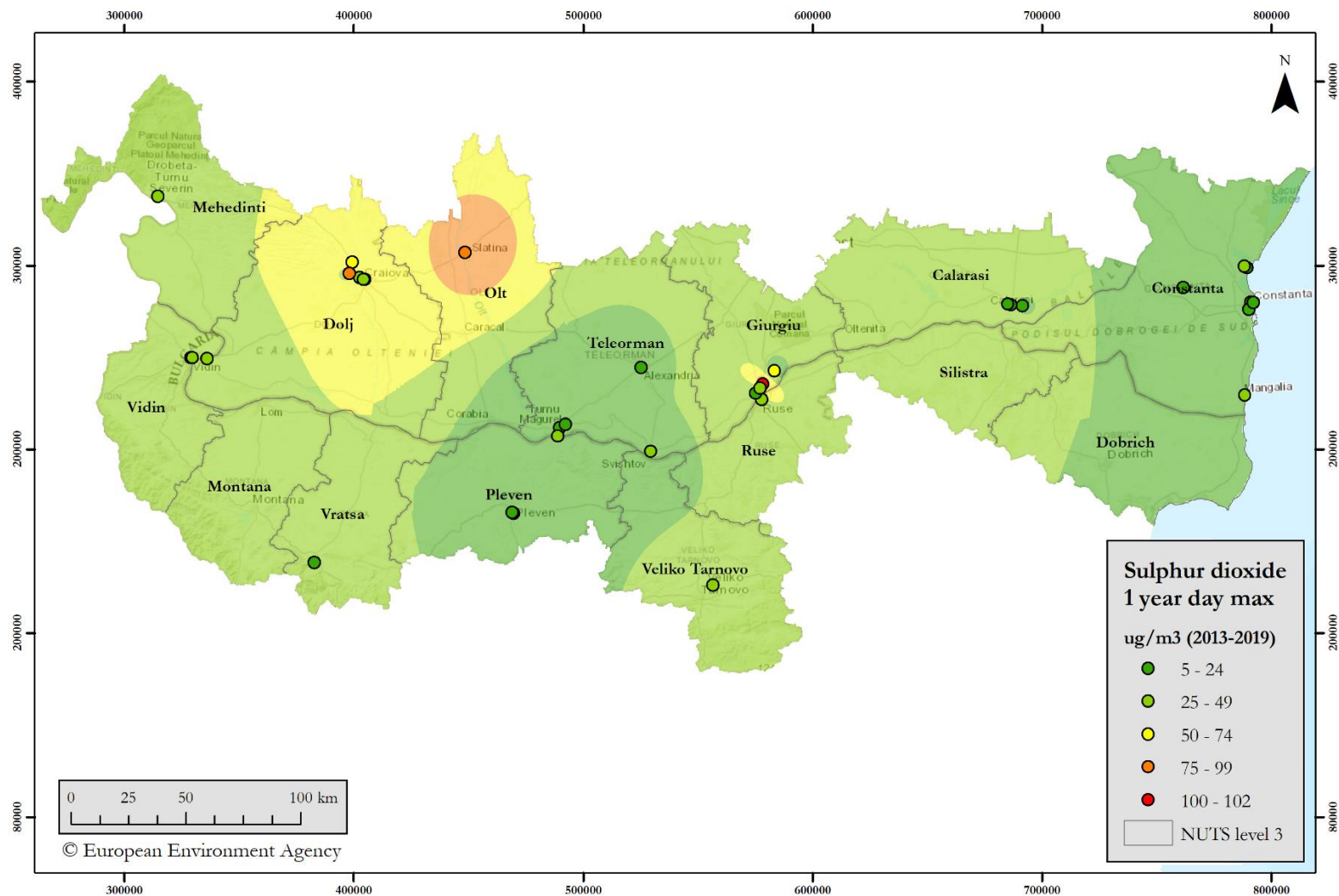


Figure no. 3-49 Daily average for the SO₂ indicator in 2013-2019



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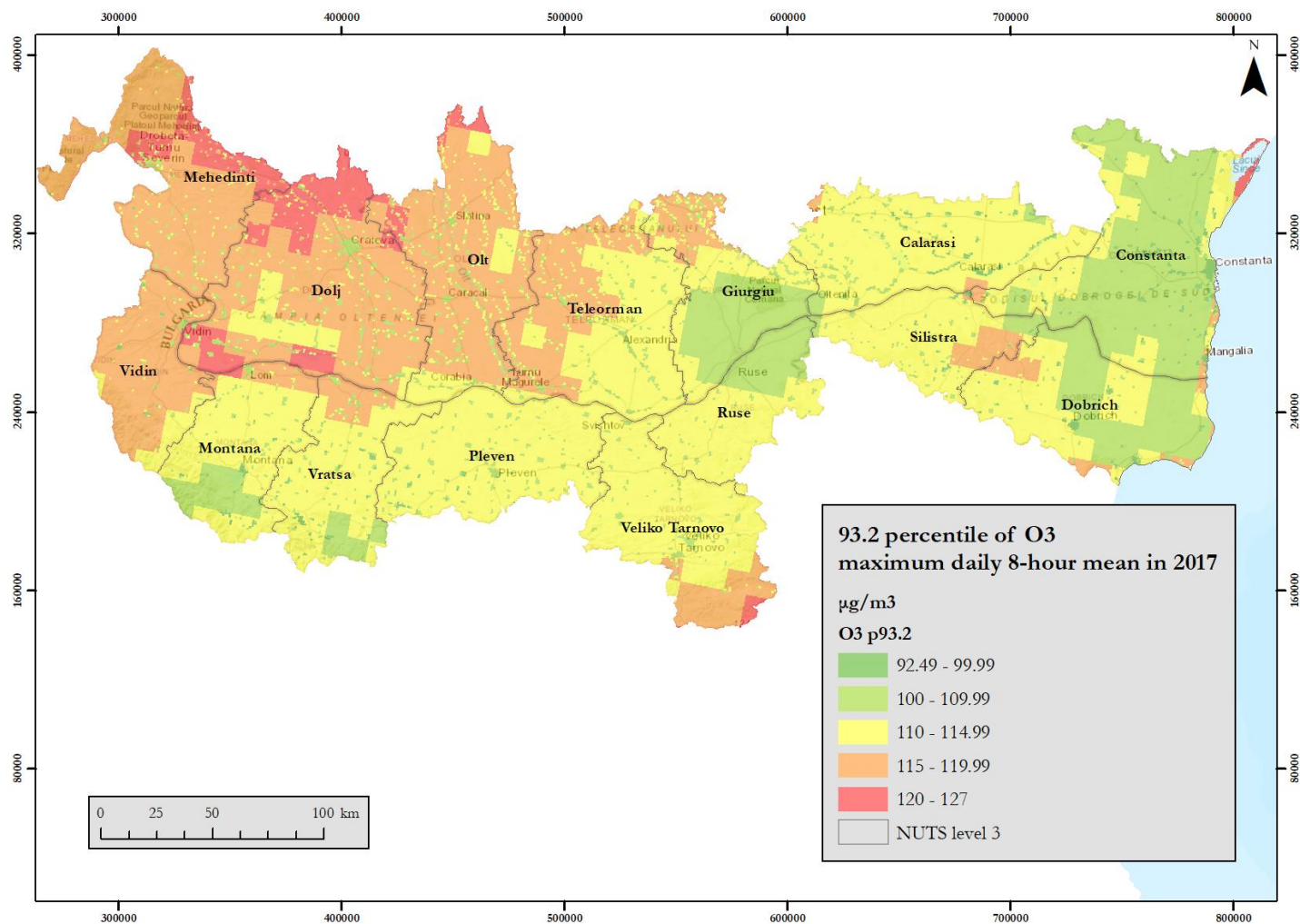


Figure no. 3-50 Maximum daily 8 hour mean for the O3 indicator in 2017



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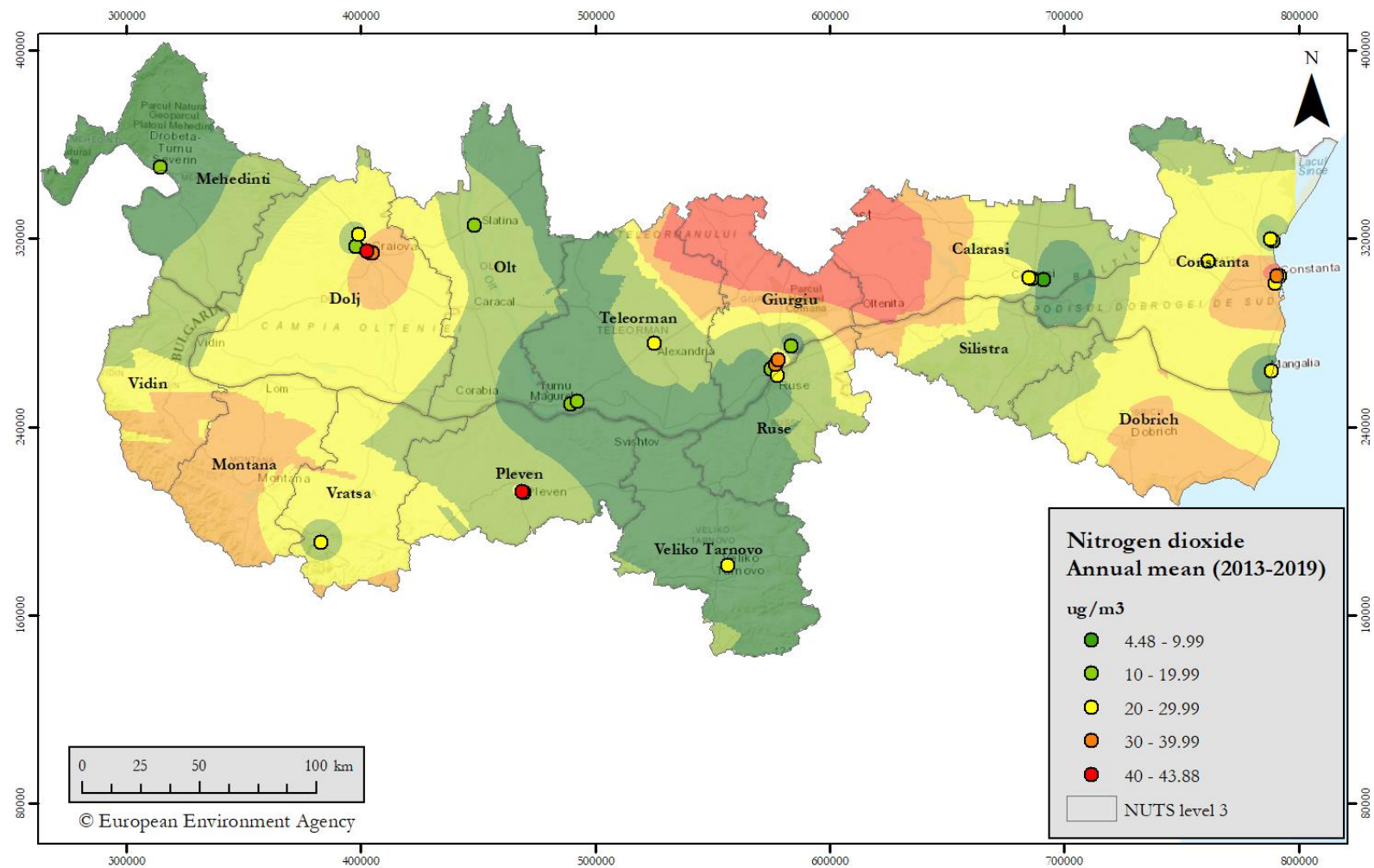


Figure no. 3-51 Annual average for the NO₂ indicator in 2013-2019

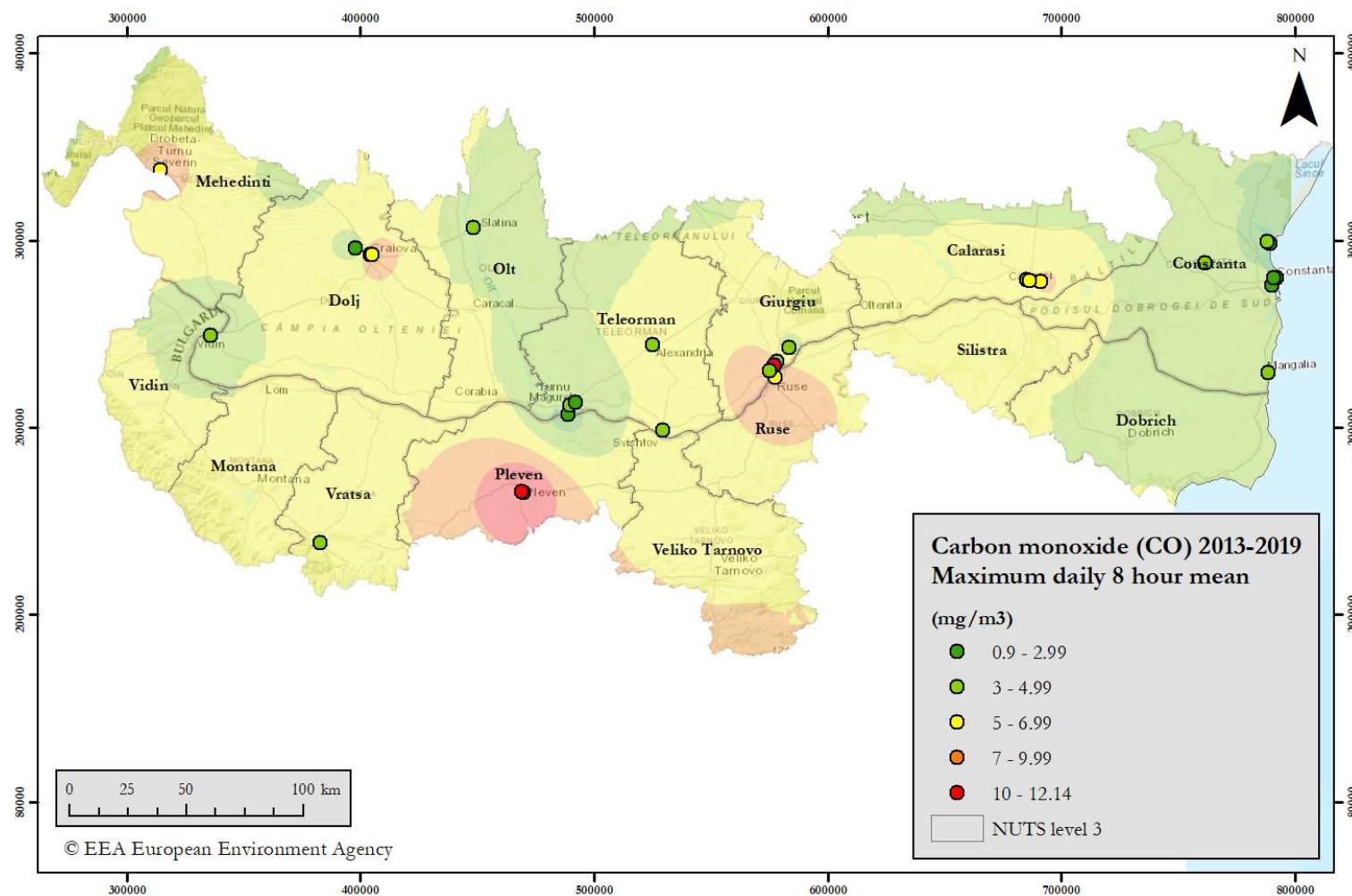


Figure no. 3-52 Maximum daily 8 hour mean for the CO indicator in 2013-2019 period



Air quality in programm area of Romania

In the 7 counties analysed in the program area, at least one air quality monitoring station is present.

Analysing the registration values of air pollutants described above in the period 2014-2020, from the Reports on air quality in Romania, it was found that there were exceedances to Ozone (O₃), especially the target value for the protection of human health.

In 2015, there were over 25 exceedances, being the maximum threshold, at the stations from Dolj, DJ3- Craiova (69 overtaking) and DJ5 - Craiova (61 overtaking), as well as in Olt OT-1- Slatina (47 overtaking). In 2019, the information threshold was exceeded 3 times at the DJ-5 Craiova station and once at the DJ-3 Craiova station, it should be mentioned that DJ-3 and OT-1 are located in an urban area and the emissions are industrial type, and DJ-5 is in a rural area and monitors the influence of human settlements on air quality.

In 2017, there were exceedances of the annual limit value for human health of nitrogen dioxide in Dolj at DJ-3 Craiova, being in 2017 a traffic station.

In 2018 there were again exceedances of the target value for the protection of human health, regarding the Ozone concentration, this time in Călărași county, at the CL-2 Călărași station with 27 exceedances, the station is located in a sub-urban area, and the effect that human settlements have on air quality is analyzed. In 2019, exceeding the information threshold at the same station.

In the case of the other air pollutants, there were no exceedances of the air quality value in the program area, in the analyzed period, respectively 2014-2020.

At the level of each county included in the program area, air quality maintenance plans have been developed.

Air quality in program area of Bulgaria

The current state of the air in the Bulgarian part of the program territory is analyzed on the basis of the data from the Regional Reports on the State of the Environment in 2020. The analysis shows the following:

PM2.5 : In 2020 on the territory of the districts of Ruse, Silistra and Dobrich no excess of PM2.5 was registered. For the reporting year the samples taken for the territory of Veliko Tarnovo district are insufficient and do not cover the requirements of the law for minimum registered data (90%). The indicator is not measured in the districts of Montana, Vidin, Plevan and Vratsa.

PM10: For the part of the cross-border territory that falls within the borders of Bulgaria, no exceedances of the PM10 indicator for 2020 are established.

Sulfur dioxide (SO₂): In 2020 on the territory of the districts of Montana, Vidin, Veliko Tarnovo, Dobrich, Ruse, Silistra, Plevan and Vratsa no excess of sulfur dioxide (SO₂) was registered.

Nitrogen dioxide (NO₂): For the part of the cross-border territory that falls within the borders of Bulgaria, no exceedances of indicator NO₂ for 2020 are established.



Carbon monoxide (CO): In 2020, no excess of carbon monoxide (CO) was registered on the territory of the districts of Dobrich, Ruse, Silistra, Pleven and Vratsa. The indicator is not measured in the districts of Montana, Vidin and Veliko Tarnovo.

Ozone (O₃): In 2020, no ozone (O₃) excess was registered on the territory of the districts of Veliko Tarnovo, Dobrich, Ruse, Silistra, Pleven and Vratsa. The indicator is not measured in the districts of Montana and Vidin.

Lead (Pb aerosol): In 2020, no excess of lead (Pb aer.) was registered on the territory of Veliko Tarnovo district. The indicator is not measured in the districts of Montana, Vidin, Dobrich, Ruse, Silistra, Pleven and Vratsa.

Benzene (C₆H₆): In 2020, no excess of benzene (C₆H₆) was registered on the territory of the districts of Veliko Tarnovo, Ruse and Pleven. The indicator is not measured in the districts of Montana, Vidin, Dobrich, Silistra and Vratsa.

Polycyclic aromatic hydrocarbons (PAH): In 2020 on the territory of the districts of Montana and Pleven an excess of PAH was registered. In the district of Montana, the average annual concentration of PAH - 1 ng/m³ is exceeded more than twice - 2.36 ng/m³. These increased values are reported mainly in the autumn-winter period (January-March and October-December), which is due to the incomplete combustion of solid fuels in the household sector and diesel fuel in car engines. In 2020, in Pleven district the average annual concentration for PAH is 1.15 ng/m³ (average annual rate - 1 ng/m³); there is, also, a clear seasonal dependence on combustion processes in the household sector. In 2020, on the territory of Veliko Tarnovo district for the PAH indicator no excess was registered. The indicator is not measured in the districts of Vidin, Dobrich, Ruse, Silistra and Vratsa.

Cadmium (Cd aerosol): In 2020, no excess of cadmium (Cd aer.) was registered on the territory of Veliko Tarnovo district. The indicator is not measured in the districts of Montana, Vidin, Dobrich, Ruse, Silistra, Pleven and Vratsa.

Nickel (Ni): In 2020, no excess of nickel (Ni) was registered in the territory of the district of Montana. The indicator is not measured in the districts of Vidin, Veliko Tarnovo, Dobrich, Ruse, Silistra, Pleven and Vratsa.

Arsenic (As aerosol): In 2020, no excess of arsenic (As aer.) was registered on the territory of Veliko Tarnovo district. The indicator is not measured in the districts of Montana, Vidin, Dobrich, Ruse, Silistra, Pleven and Vratsa.

The municipalities of Ruse, Silistra, Veliko Tarnovo, Pleven, Montana, Vratsa and Vidin have developed and implement Municipal programs for air quality management under Art. 27 of the Clean Air Act.

3.1.7. CLIMATE CHANGE

Climate change has a negative effect not only on the environment, but also on the economic sector, human health and well-being. Analyzing the economic sector in the period 1980-2016, at



European level there were economic losses caused by extreme meteorological and climatic phenomena, of over 436 billion EURO. Romania and Bulgaria also contributed to these losses⁴⁶.

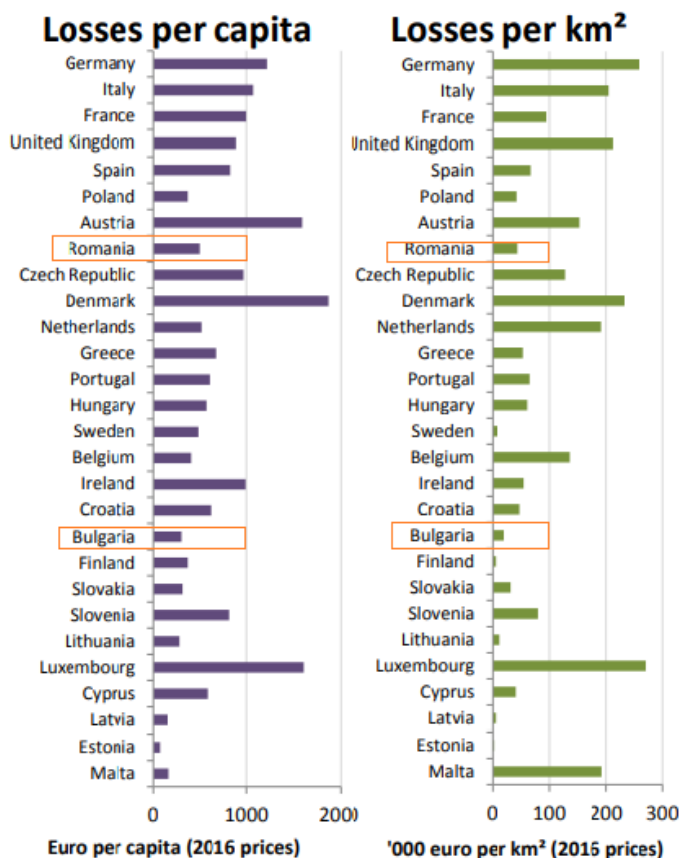


Figure no. 3-53 Economic losses due to climate change

Analyzing the average annual temperatures and rainfall amounts in Romania, from 2014-2019, we find a gradual increase in temperature, 2019 being the warmest in the 1990-2019 period. In 2019, the highest average annual temperatures were recorded at altitudes below 250 m, for example in Constanța where the highest average annual temperature of the country of 14.4 °C.

By comparing the thermal anomalies in 2019 with the median of the respective reference interval 1981-2010, it is found that the thermal regime was extremely hot throughout the country.

According to the WordClim database, in 2050 it is estimated an increase in the western part of the program area, starting from Giurgiu and Ruse by approximately 5-6 °C in July, compared to the current recorded temperatures. In the eastern part of the program area, the increase of temperatures will be registered gradually, so in Călărași and Silistra it is estimated increases by up to 4-5 °C, but also lower than 4 °C in the area close to Constanța and Dobrich and including their territory.

⁴⁶ Report from the Commission to the European Parliament and the Council on the implementation of the EU Strategy on adaption to climate change, COM(2018) 738



Regarding the increase of the minimum temperature in January 2050, the most significant increases of over 3.5°C, will be registered entirely in Giurgiu and Ruse, and partially in Teleorman, Veliko Tarnovo, Silistra and Călărași. Increases between 3-3,5°C will be partially recorded in Dolj, Olt, Plevne, Veliko Tarnovo, Silistram Dobrich, Calarasi and Constanta. In the rest of the areas included in the program, the increase of the minimum temperature in January is estimated to be lower than 3°C.



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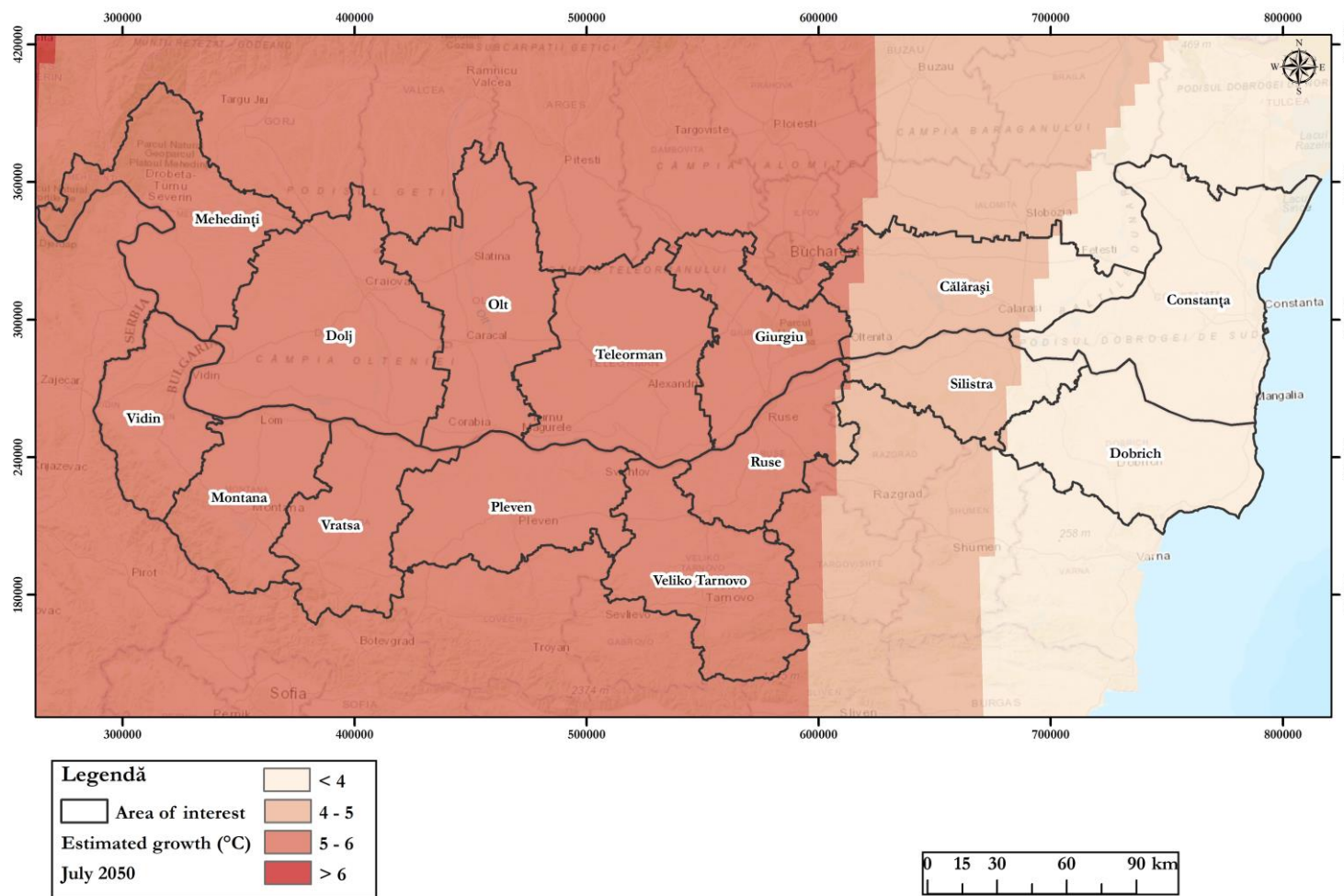


Figure no. 3-54 Temperature increases estimated in July at 2050



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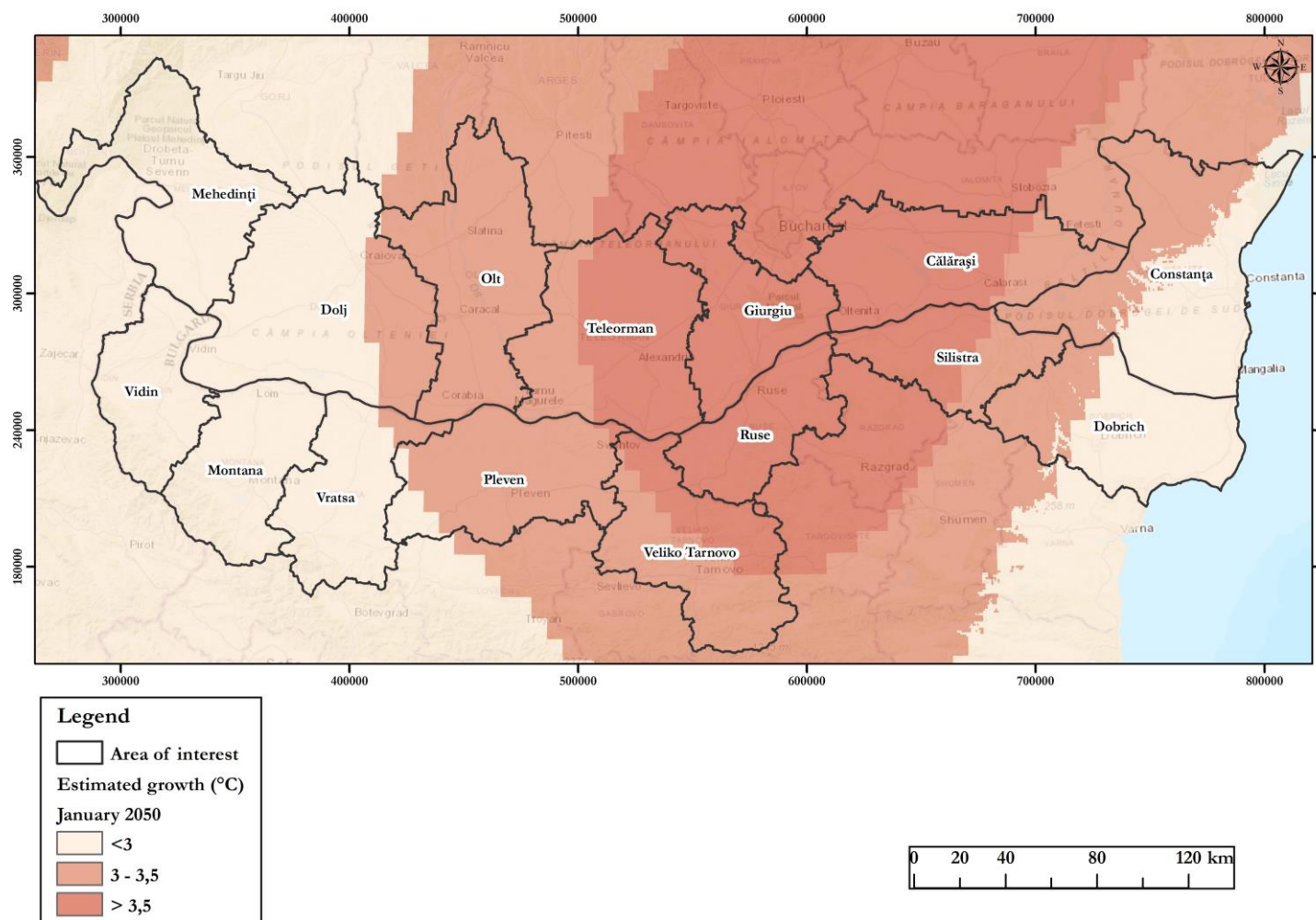


Figure no. 3-55 Temperature increases estimated in January at 2050

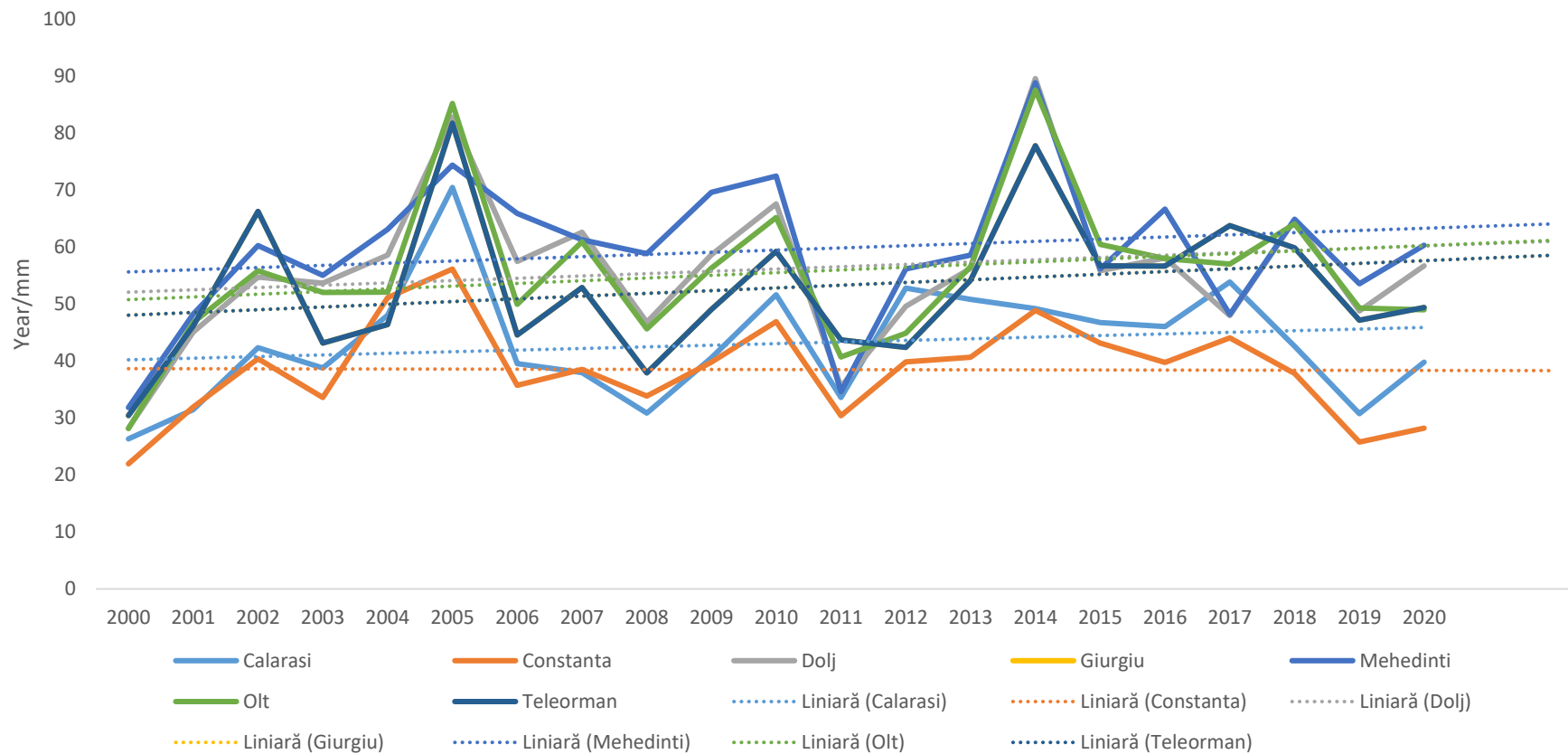


Regarding the average rainfall in 2019, compared to the climate norm 1981-2010, there were only 3% lower in the Romania country. The lowest annual quantities were recorded in Dobrogea, eastern Muntenia, as well as in the plain and plateau areas, at altitudes below 550-600 m. Classification by severity classes of precipitation anomalies in 2019 in correlation with the median of the reference interval (1981-2010), also included the Dobrogea area that the precipitation regime being deficient and very deficient.

Analyzing the average annual rainfall from 2000-2020 in Romania, the lowest rainfall was registered in the counties of Călărași, Constanța, Teleorman and Giurgiu. The driest year in the 7 counties was 2011, and in 2018 Constanța and Călărași recorded even lower rainfall compared to 2011. It should be noted that the data for Teleorman and Giurgiu counties are identical according to the data source used, namely EDO-European Drought Observatory - European Commission.

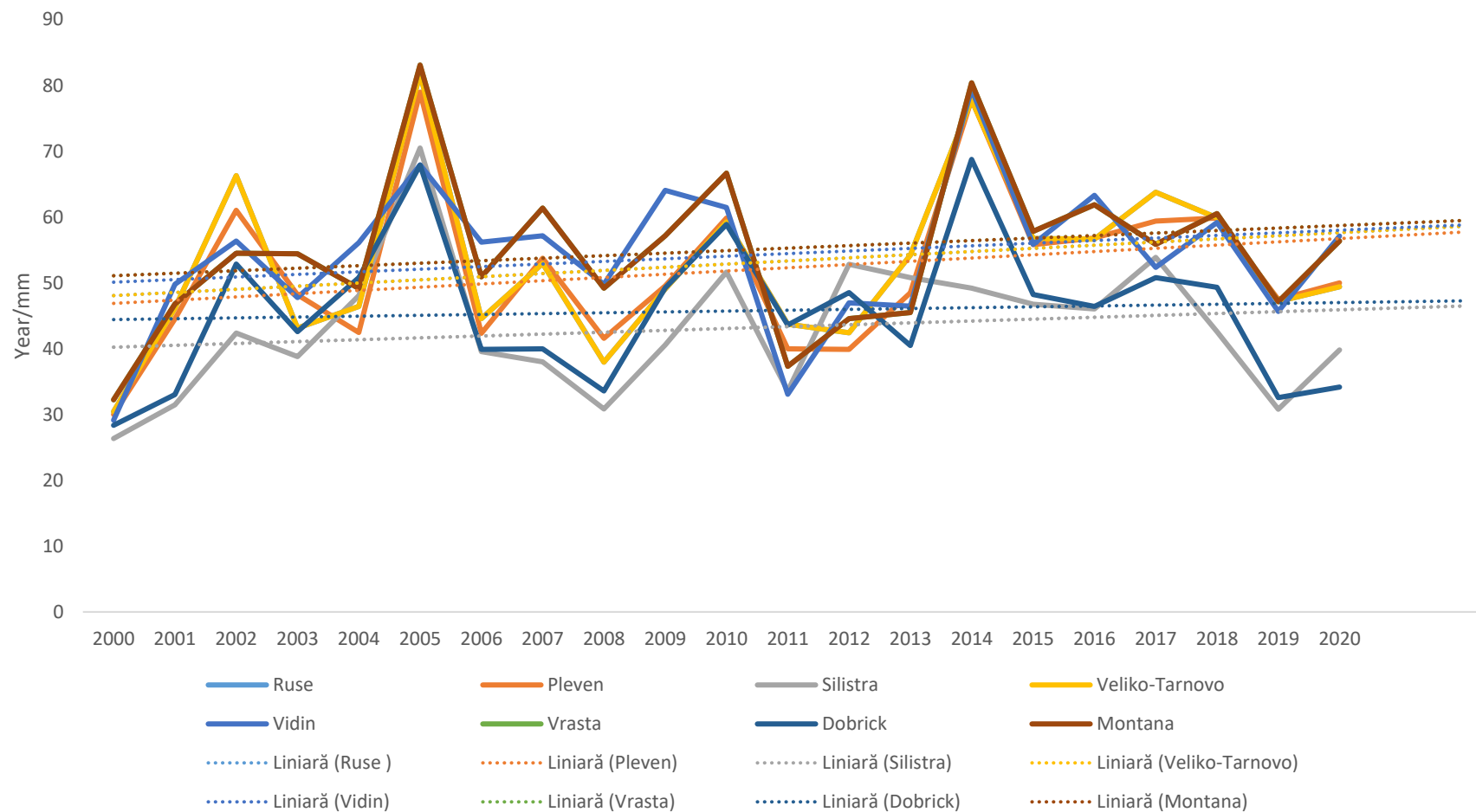
In Bulgaria, the districts with the lowest rainfall are Silistra, Dobrich, Veliko Tarnovo and Ruse. As in the case of Romania, 2011 was the problematic year, in terms of rainfall. In 2019 Silistra and Dobrich districts recorded the lowest rainfall in the period 2000-2020, being a significant difference between these two districts and the others included in the program.

In conclusion, the lowest rainfall is recorded in the eastern part of the program. Correlating these data with the precipitation standardization index, it can be said that Constanța, Călărași counties and Silistra and Dobrich districts are prone to meteorological drought.



Source of data: European Commision - EDO -European Drought Observatory

Figure no. 3-56 Annual average rainfall - RO



Source of data: European Commission - EDO -European Drought Observatory

Figure no. 3-57 Annual average rainfall - BG



Regarding the future precipitations according to the WordClim database, in 2050, an increase of the average annual precipitations is noticed. However, the amounts of precipitation are maintained in different areas such as Constanța, Călărași.

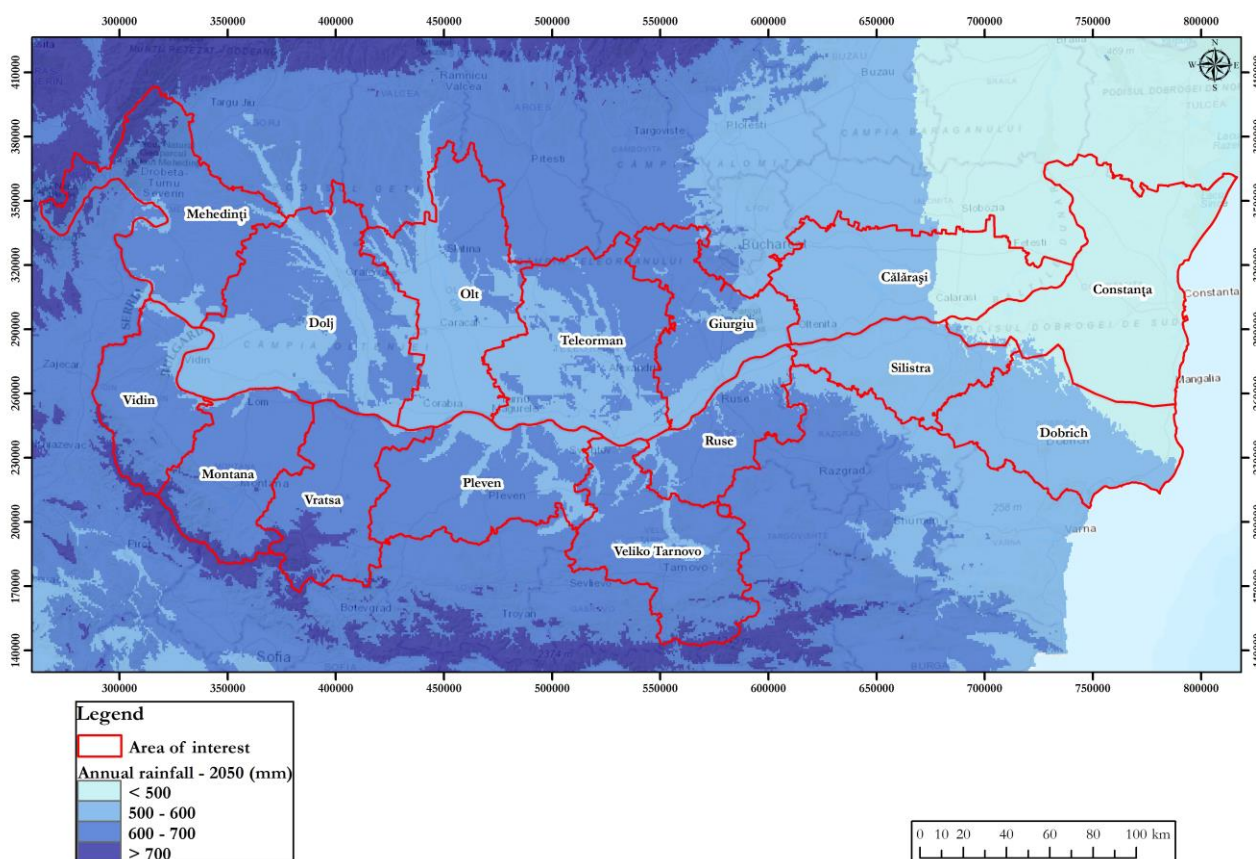
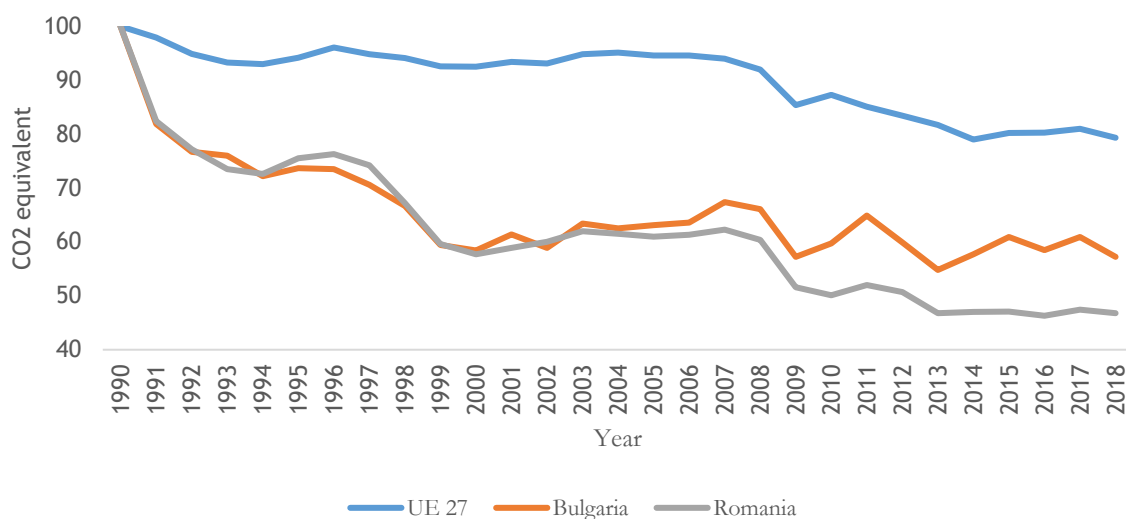


Figure no. 3-58 Annual rainfall 2050, in the programm area

3.1.7.1. Greenhouse gases emission- trends and projections

Greenhouse gases (GES) are the result of human activity and industrial activities mainly since 1989. Their quantity has decreased so far, but it is not enough, the target of the European Union to reduce them by 2030 being 55% compared to 1990.

The trends of GHG emissions in Romania and Bulgaria from 1990-2018, compared to the European average, there is a decrease in all three cases, compared to the reference year 1990. In Romania the decrease in GHG emissions was more intense, compared to Bulgaria, which in 2018 reached 47 CO₂ equivalent.



Source of data: Eurostat

Figure no. 3-59 Emission GHG

The main sectors responsible for greenhouse gas emissions, at international level are transport, buildings, agriculture, industry, waste and other.

In Romania, the most important source of emissions from those listed is industry. In the period 2005-2012 there was a decrease in emissions from this sector, but subsequently there were various fluctuations.

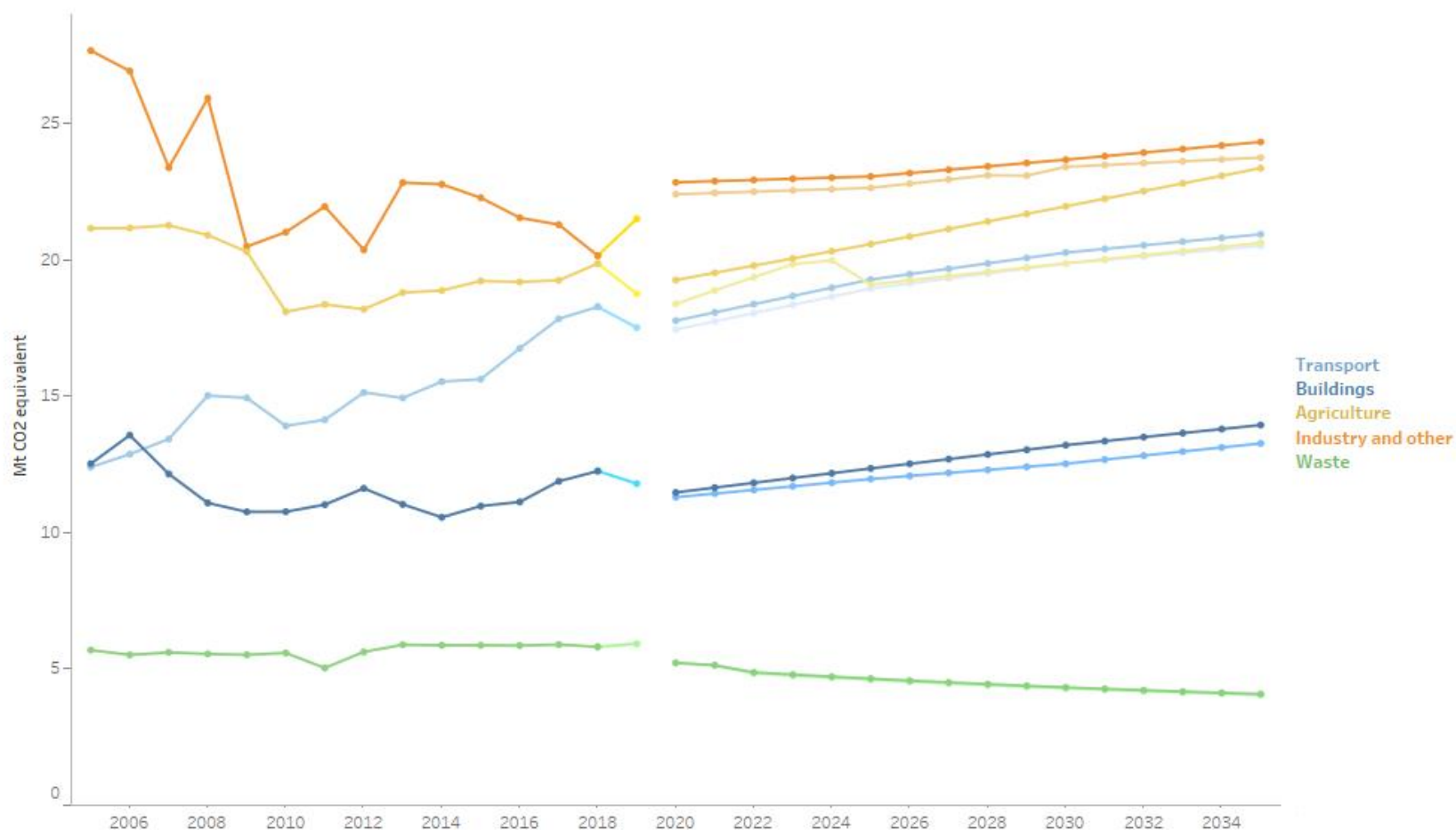
In Bulgaria, the sector that contributes the most to GHG emissions is transport. It showed various fluctuations in the period 2005-2012, but since 2013 it is increasing.

Analysing the projections for 2020-2035 period, in Romania it is observed that in the case of the industry and other, agriculture and transport an increase in emissions is expected, without taking additional measures but only applying the existing ones.

Bulgaria will have the highest increase in GHG emissions in the transport sector with the application of existing measures. In the case of the other sectors, a decrease in emissions is expected.

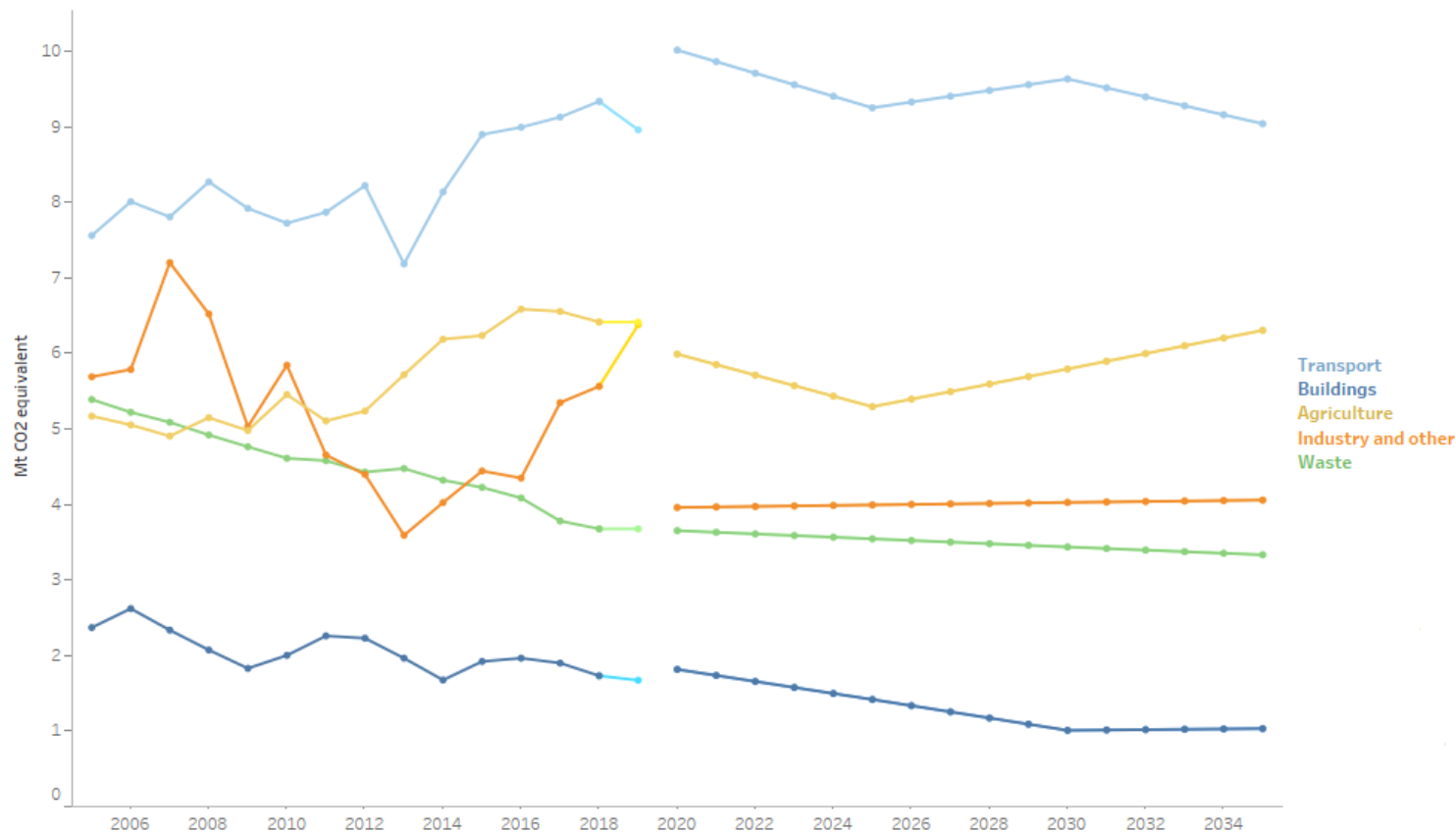
It should be mentioned that the values for 2019 are preliminary estimates. The projections for the period 2020-2035 for Romania are made on the basis of two scenarios, namely one in which the current measures are maintained, and the second in which additional measures are applied. In the case of Bulgaria, the projections are made only in the scenario in which the current measures are maintained.

Considering this information is not available at county / district level, climate projections have been presented at the country level, taking into account that any change at the country level also affects the program area.



Source of data: European Environment Agency

Figure no. 3-60 Greenhouse gas emission trends and projections under the scope of the Effort Sharing - Romania



Source of data: European Environment Agency

Figure no. 3-61 Greenhouse gas emission trends and projections under the scope of the Effort Sharing - Bulgaria



3.1.8. MATERIAL ASSEST

Material assets are generally divided into short-term (raw materials, goods, production, incomplete production) and long-term (land, objects, infrastructure, machinery, production equipment). For the purposes of Interreg VI-A Romania-Bulgaria Program 2021-2027 the assets affected by the program are analyzed, including:

- ***Lands and land use - the analysis of the condition is made to item 3.4 of the Environmental Assessment Report;***
- ***Objects and infrastructure***

As the objectives, priorities and eligible activities of the program are determined on the basis of the explicitly prepared for this purpose Territorial Analysis for the Romania-Bulgaria Cross-border Region, the analysis of the condition of tangible assets is based on the cited document.

3.1.8.1. Material assets in the Economic development

The analysis of the development of the main economic sectors (agriculture and forestry, industry and services) for 2016 shows the following distribution:

- The most common sector acting in distribution of Gross Value Added (GVA) in Romania is the „Service “. The GVA at the Service Sector ranges from 28.4% in Constanta (where the largest GVA share is those of sectors „Industry“and „Other activities“) to 63.2% in Giurgiu. The average value of the country is 42.1%. Second place in Romania takes the sector of „Industry “- from 9.2% share of the GVA in Giurgiu to 38.4% in Constanta. The avarege value of the country is 26.8%. Third place takes the sector of „Other activities “(the GVA varies from 19% to 32.1%). The avarege value of the country is 26.6%. The fourth place takes the „Agriculture and Forestry “- the GVA varies from 3% to 18.1%, average of the country is 4.5%.

- For the territory within the scope of the Republic of Bulgaria the service sector is the most represented, as the percentage of GVA from it varies from 43.1% for Vratsa district to 67.4% for Vidin district, with an average share for the country - 67%. In second place is the industrial sector (the percentage of GVA varies from 15.3% for Vidin district to 36.8% for Ruse district, with an average value for the country - 28.3%). Respectively, in third place is the sector of agriculture and forestry - the percentage of GVA varies from 6.9% for Rousse district to 23.5% for Silistra district, with an average value for the country - 4.7%;

SMEs

SMEs development represent a key pillar in fostering a competitive and sustainable socio-economic environment by generating added value and employment opportunities in the regions.

Since 2013, the number of enterprises has increased in the cross-border area by 6.1%, yet less than the national value in Romania, of 14.2%. There were 120.4 thousand companies in the cross-border area in 2017, of which more than half (51.2%) located in the Romanian side. Overall, the number of enterprises increased more in the Romanian side (9.1%) increase compared to 2013, than in the Bulgarian side (3.2%).

At the county/district level, enterprises tend to be located in the eastern part of the area, especially in the Bulgarian side, or in more developed regions, as it is the case of Dolj, which accommodates a large urban area and economic centre - Craiova. With the exception of Vidin,



there has been a positive evolution in the number of enterprises in all counties and districts, most notably in Dolj, Olt and Giurgiu.

In the Romania-Bulgaria cross-border area, SMEs face a series of challenges regarding lower accessibility, high dependence on specific sectors, and a relatively immature **innovation and entrepreneurship ecosystem** in which to thrive. Usually, such peripheral regions depend on neighbouring cities for the **provision of general services** and face a rather unfavourable legislative and administrative support to maximize the use of EU funding dedicated to SMEs growth.

Trade

Overall, at the national level, the trade values for Romania are superior to those in Bulgaria in all years of the analysis (2012-2018). Both imports and exports are almost three times higher in Romania than in Bulgaria

Both countries had a positive evolution of trade, with both imports and exports increasing between 2012 and 2018. However, Romania's trade increased more, with 50% in the case of exports and 51% in the case of imports, while Bulgaria increased its trade value with 26% (imports) and 38% (exports).

On the main categories of traded products, Romania has a trade deficit, except for Vehicles, aircraft, and vessels, Optical, photographic equipment, as well as wood products³¹ and shoes. While the former indicates a potential area for specialization in high and medium high technological products, the latter support the fact that Romania remains cost competitive in the light industry due to its low wages and low skilled labour force. This situation calls for **policies supporting innovation and the upgrade of skills in order for the manufacturing sector to deliver higher quality products**, able to compete on the global market.

In Bulgaria, the main categories of products where there is a trade surplus are base metals and vegetable products, indicating in the first case a **lack of sophistication and reliance on basic resources**, and a **potential area for specialization in agriculture**, in the second case. Bulgaria is a net importer of machinery and vehicles, **questioning its ability to support an industrial sector** that can deliver high value-added products to the European and global markets. New advancements supported by technological discoveries can support even the agriculture sector, to make it more efficient and effective for both workers (income) and employers (profit), as it is the case with **precision farming, Internet of Things (IoT), and automatization**.

Competitiveness

For the 2018-2019 edition, Bulgaria ranks 49th out of 141 countries analysed, advancing from 51st place in the previous edition, while Romania ranks 51st, advancing one position compared to the previous year. Compared to 2012-2013, both countries improved their performance: Bulgaria advanced 13 positions and Romania 27 positions. The two countries rank poorly among the EU28 countries for example, but Bulgaria seems to perform better, yet Romania achieved more progress.

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.



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. ICT adoption remains one of the few variables on which both countries position relatively well (rank 32nd and 30th).

In the Romania-Bulgaria cross-border area, the observation are as following:

- Agriculture is a developing sector in three Bulgarian neighbouring districts (Vidin, Vratsa and Montana) and one Romanian county (Călărași). In most counties, however, this sector claims support measures since it has a specialization potential despite its lower growth compared to the national evolution, being a sector in transition in most Bulgarian districts and in Constanta. In Giurgiu, Teleorman and Dolj, Agriculture became less competitive between 2012 and 2017, having a low growth and a low concentration of employees.
- Except for Vratsa, the Manufacturing sector is largely a sector in transition or in decline, claiming for policies supporting the industrial transition, modernization and adaptation to the global demand. There are also territorial differences in the specialization potential between the two sides of the cross-border area: while in Bulgaria this sector has a Location Quotient (LQ) >1, due to the higher concentration of employees, in Romania the Location Quotient (LQ) is lower than 1, suggesting that there is lower concentration of employees. However, in Giurgiu, Mehedinți and Olt, the Differential Variation (DV)>0 there is a need for further attention to the Manufacturing sector, since it increased its workforce along the 2012-2017 period.
- In the Services sector, there are only Bulgarian districts in the developing sectors category, for example Veliko Tarnovo in Information and communication, and there are no regions where professional, scientific and technical activities have become developing or prospective sectors. Instead, most counties show a declining trend in their competitiveness in such activities, while in Pleven, Veliko Tarnovo and Ruse, they are in transition, with a higher specialization and a slower growth rate.

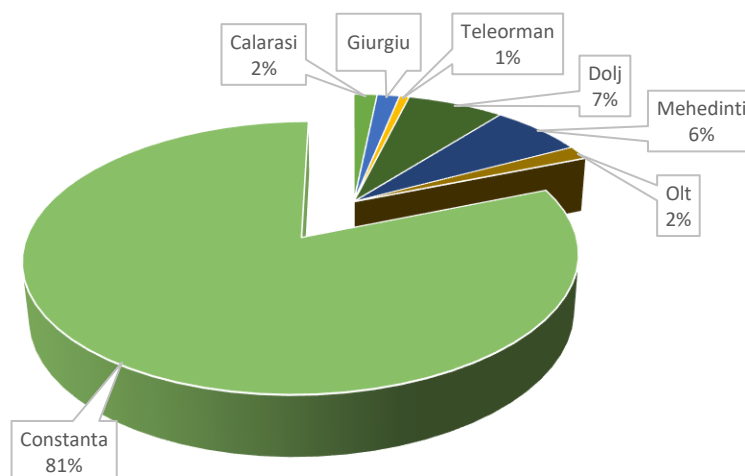
Research and Innovation

The counties in the cross-border area display some of the lowest values of expenditure on R&D in Romania, with a few exceptions, such as Olt, Dolj and Constanta, with the latter two having large universities and research institutes within their territory, while in Olt, there is a large manufacturing company investing massively in R&D activities. In Bulgaria, in Pleven there is a medical university, and in Veliko Tarnovo a university centre, which might explain the territorial differences.

Tourism

Tourism is an essential activity both for the capitalization of the cultural heritage and for the value material of the population. Due to the presence of the Danube River, each of the areas included in the program have special features that can be highlighted.

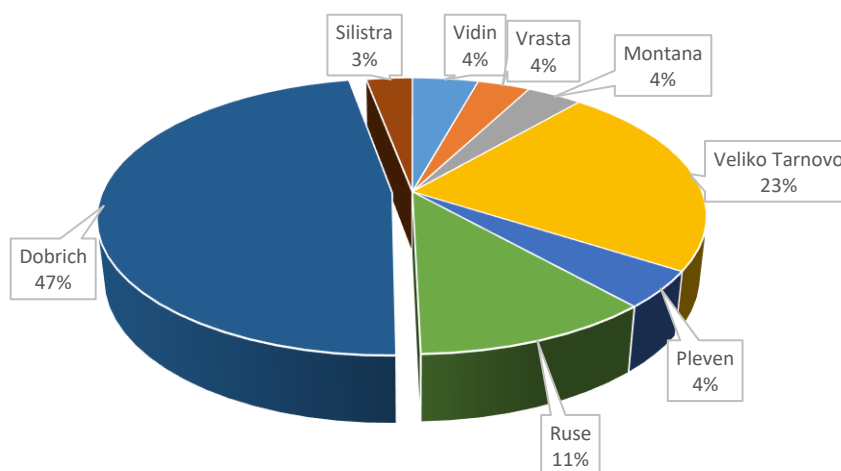
Analyzing the situation of tourists in 2019 from the accommodation units available in the program area, it is found that in Romania, Constanta County is the most preferred by tourists, one of the reasons being the seaside. The rest of the counties have a lower occupancy rate of accommodation units, the reason for this difference could be the lack of promotion of the areas.



Source of data: National Institute of Statistic - Romania

Figure no. 3-62 The situation of tourists in the programm area - Romania 2019

In Bulgaria, by analyzing the occupancy of available accommodation, tourism is more widespread, more districts being preferred by tourists. The districts of Dobrich, Veliko Tarnovo and Ruse are the most visited in the area of the program, due to their antiquity.



Source of data: National Institute of Statistic - Bulgaria

Figure no. 3-63 The situation of tourists in the programm area - Bulgaria 2019

The cross-border area has a high tourism potential which is insufficiently developed in many of the analysed counties and districts. There is potential to develop all types of tourism, due to both natural and anthropic heritage. There are various tourist attractions (**natural and cultural assets**) for each county/district, as well as different possibilities for tourism development.

The greatest number of beds can be found on the coast, Constanta and Dobrich, the first one with a decrease in the number of beds in 2017, and a recovery phenomenon in 2018, and Dobrich with a significant increase in 2017 (almost 5000 beds). It can be observed that the two counties/districts mentioned above are polarising the tourist activities, Constanța has 90% of the accommodation



capacity for the Romanian area and Dobrich has 71% of the Bulgarian one. Only Veliko Tarnovo touches 12% for Bulgaria on the second place and Dolj (3%) for Romania.

The analysis of the number of foreigners visiting the cross-border area shows that the Bulgarian side leads in terms of overnights spent by foreigners - almost 80% of the tourists coming to Dobrich are foreigners. This is the result of the well-implemented tourism strategy in the previous years (National Strategy for Sustainable Development of Tourism in Bulgaria 2009-2013), competitive prices, but also good services which attract people from abroad. The access is also enabled by the presence of the Varna airport (almost 1.94 million passengers in 2017) at about 50 km.

On the other side, in Constanța only 3.83% of the total number of nights are spent by foreigners. The area focuses more on national tourists, who come mainly for shorter stays, especially due to the good accessibility from the capital city and the municipality of Constanța. The existence of the airport in Constanța (only 127,635 passengers in 2017) could help attracting more foreign tourists, by increasing the number of international flights during the summer season, at affordable prices.

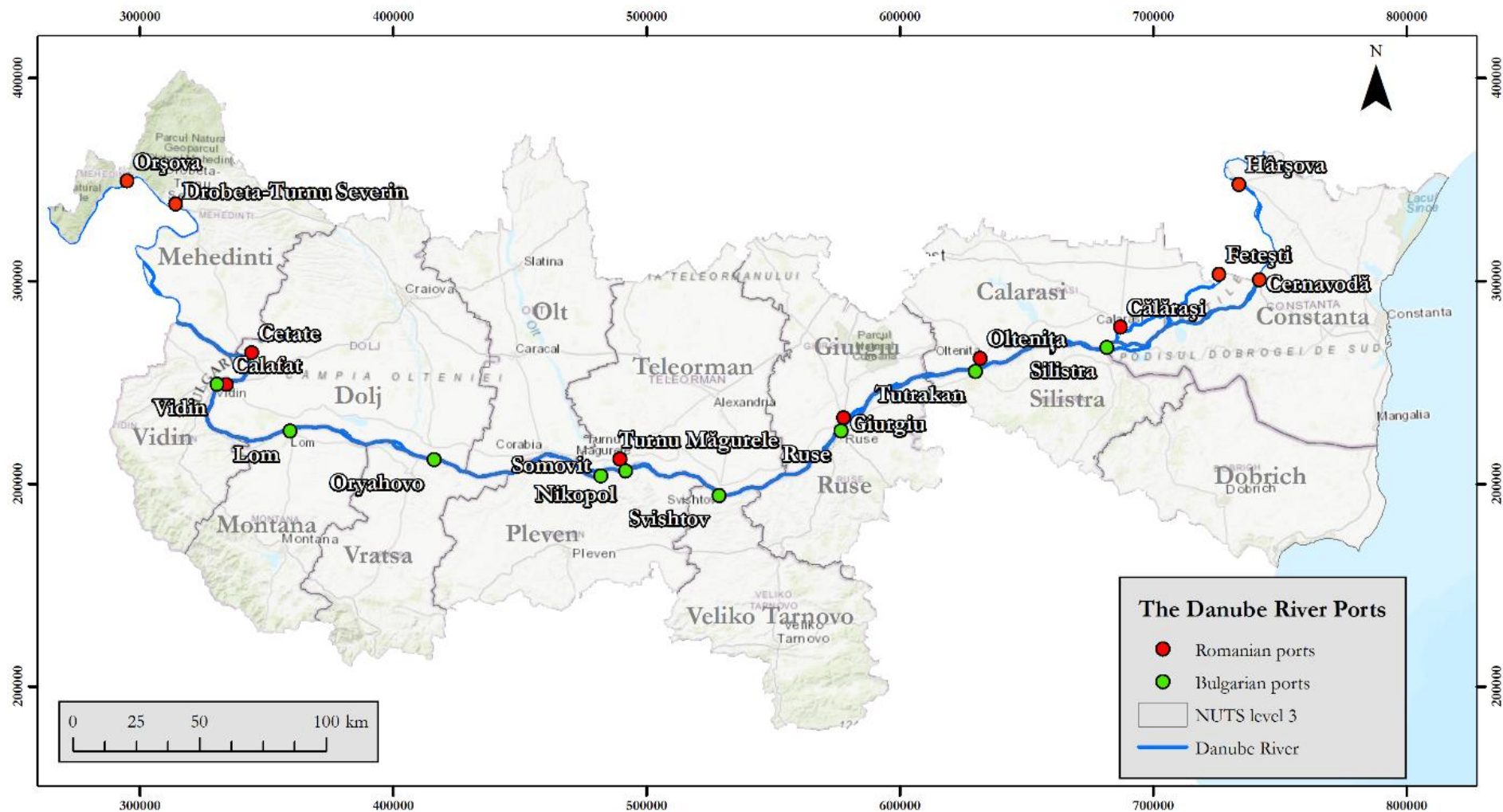


Figure no. 3-64 Turist ports in program area



Cruise tourism in the Danube region can offer a number of benefits to the population of the two countries, especially the increase of material values, by capitalizing on tourism. Romania owns 20% and Bulgaria 9% of the total ports along the Danube. But these two countries are among the ports with a low density, 2 times lower than the average density for the Danube with 53.75 km Romania and 52.33 Bulgaria. The parts of the Lower and Middle Danube are the least developed in terms of their density, which makes cruise tourism difficult. These ports are also below the average capacity of the Danube ports⁴⁷.

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The Black Sea coast concentrates the highest number of tourists; however, it is mostly attractive during the summer season. During the rest of the year, the statistics show a worrying decrease, indicating a lack of policies for supporting extra-seasonal tourism. In the other counties and districts of the area, there are tourist attractions, but they are not valorised at their real potential and the touristic offer is fragmented. There were initiatives for cross-border cooperation for the marketing of the cross-border attractions, but the lack of connectivity translated into a stagnation of the tourism phenomenon.

Conclusions:

The analysis of the state of the economic sector and the main economic activities in the cross-border area within the scope of the program, in terms of tangible assets, identifies the following main problems relevant to innovation and business, related to insufficient investment capital:

- Insufficient information and knowledge
- Low degree of interaction between companies and the research sector:
- Low R&D costs;
- Critically low share of researchers and innovators;
- High share of micro and SMEs;
- Reducing production;
- Low level of entrepreneurship.

The main problems associated with poor labor market conditions are:

- High level and increase of inequalities;
- Migration;

⁴⁷ Study of the development of the cruise tourism in the Danube Region - Finaly report, 2019

⁴⁸ Study of the development of the cruise tourism in the Danube Region - Finaly report, 2019



- Low mobility of employees;
- High unemployment;
- High level of informal economic activities;
- Low productivity

3.1.8.2. Physical and digital connectivity

Transport

TEN-T Network

The Romania-Bulgaria cross-border area is served by two main corridors of the TEN-T network:

- The Orient East-Med corridor links northern Germany (Hamburg-Berlin) to Eastern Europe (Prague-Bratislava, Budapest-Timișoara-Craiova-Sofia) and South Eastern Europe (Thessaloniki and Athens). The corridor is built on multiple roads, rail and an inland waterway links. The inland waterway represented by the Elbe River stops after passing Prague.
- The Rhine-Danube corridor is built around Europe's most important Inland waterway linking Central Europe (Frankfurt am Main, Strasbourg or Vienna) with Eastern Europe (Bratislava, Budapest, Timișoara, Craiova, Bucharest and Constanța). Together, the Rhine-Danube and Rhine-Alpine corridors link the Black Sea ports of Constanța and Sulina with the main Nord Sea ports.

In addition to the TEN-T network the two countries are also crossed by two Euro Velo corridors:

- Eurovelo 13 - The Iron Curtain, starting in northern Finland passing near the Baltic Sea, Germany, Czech Republic, Slovakia-Bratislava, Romania-Drobeta Turnu Severin and ending in Bulgaria at the small Black Sea town of Rezovo.

Eurovelo 6 - Atlantic-Black Sea, starting from Nantes passing Konstanz and continuing along the Danube up to Constanța at the Black Sea.

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 Romania and Bulgaria are developed or at least signalised.

The territorial accessibility is to a large extent ensured by the quality and capacity of the transport infrastructure forming the TEN-T Network (core and comprehensive). As the capacity and quality of road and rail infrastructure is rather low, the potential accessibility by road in the Romania-Bulgaria cross-border region is between 20 and 40% of ESPON average. The case is even worse in terms of potential accessibility by rail where most of Bulgarian districts in the region rank below 20% of ESPON average⁴⁹. Starting from the TEN-T outline for road infrastructure, potential accessibility for 2030 should reach close to 60% of ESPON average in most of Bulgarian districts (except Vratsa and Montana which remain below 60%) while most of Romanian counties will remain under 60%, except for Giurgiu which could improve to 60%.

⁴⁹ Territorial analysis, p. 169



Performance of railways will keep potential accessibility by rail below 40% of ESPON average, while eastern districts or counties like Constanța, Dobrich, Silistra or Razgrad will remain even below 20%. Giurgiu, Ruse, Pleven and Montana might reach close to 40% of ESPON average.

Regional transport network

Due to a lack of connectivity and a less dense settlement network the territory along the Danube within the cross-border area has poor access to services of general interest. This is why most counties and districts in the analysed territory are considered inner peripheries in terms of accessibility (access to services of general interest and to urban centres). The only exception is the cross-border urban system of Giurgiu and Ruse together with the Black Sea coast. Inner peripheries, as defined by the ESPON PROFECY project, are territories that face certain challenges when it comes to accessibility to basic services that are of general interest. They are treated as a territorial phenomenon and each of them portrays a unique character, as it is the result of several processes that lead to the specific challenges.

The Romania-Bulgaria cross-border region includes two international airports, both on the Romanian side: Craiova International Airport and Constanța Mihail Kogălniceanu Airport. The territory is also served by the international airports of Bucharest, Varna and Sofia. Because of its large variety of international flights, Bucharest's international airport has a more extended catchment area which also includes several Bulgarian municipalities (most notably, the city of Ruse). The improvement of rail and road infrastructure between Constanța and Bucharest was one of the reasons for the slow decline of the Mihail Kogălniceanu Airport which now only serves two destinations (Istanbul and London), down from 10 in 2018. Craiova's international airport also has a good position and a stable catchment area serving south western Romania but also some municipalities from the north western part of Bulgaria (most notably Vidin). The catchment area of Bulgarian airports (Sofia and Varna) does not reach Romanian cities. Therefore, the most important airports in the region remain those near Craiova, Bucharest and to a lesser extent Constanța (with fewer flights) or Varna and Sofia which are further away.

Roads - Within the settlement structure of the two countries, the Danube still acts as an important barrier. Therefore, major flows of goods and passengers are following the east-west direction, rather than north-south. The six motorways of Bulgaria link the port cities of Varna and Burgas to Sofia (A2 and A1) and continue to Greece (A3 and A4) or Serbia (A6). A similar settlement structure can be identified in Romania, the actual motorway network links the port of Constanța to Bucharest and continues to Pitești with further links to either Craiova (planned express road) or Sibiu (planned motorway) and Timișoara. There are also existing and planned links from Bucharest to the north (Ploiești and Brașov), but no link towards south, to Giurgiu. After the TEN-T thematic corridors were reviewed in 2013, infrastructure links between the two countries lost their priority status. Thus, the Giurgiu - Bucharest Road was not included into a TEN-T core corridor and lost its priority status, thus remaining a simple part of the TEN-T core network.

The main road network that facilitates the cross-border regional links between Romania and Bulgaria is presented below:

- E70 (route linking Serbia - Timișoara - Caransebeș - Drobeta Turnu Severin - Craiova - Alexandria - Bucharest - Giurgiu - Ruse - Razgrad - Shoumen - Varna - Turkey);



- E85 (route linking Ukraine - Siret - Suceava - Sabaoani - Roman - Bacău - Măreșești - Tișița - Buzău - Urziceni - Bucharest - Giurgiu - Ruse - Biala - Veliko Tarnovo - Stara Zagora - Haskovo - Svilengrad - Greece);
- E79 (route linking Hungary - Oradea - Beiuș - Deva - Petroșani - Târgu Jiu - Craiova - Calafat - Vidin - Vratsa - Botevgrad - Sofia - Blagoevgrad - Serai);
- E87 (route linking Ukraine - Galați - Tulcea - Constanța - Vama Veche - Durankulak - Varna - Burgas - Marinka - Malko Tarnovo - Turkey);
- E675 (route linking Agigea - Negru Vodă - Kardam).

There are no motorways passing the Romania-Bulgaria border. All cross-border links are served by national or at least county roads. Just two crossings between the county of Constanța and the districts of Silistra and Dobrich are served by communal / local roads.

In terms of freight, the main east-west corridors remain valid as they are used to link ports with main cities and nearby industrial sites. According to the UNECE E-road census, the main transport routes passing the Romania-Bulgaria cross-border region are:

- E772 / A2 linking Varna (port) and Sofia
- E70 / A2 linking Varna (port), Giurgiu and Bucharest
- A2 / A1 (E81) / E85 linking Constanța (port) with Bucharest and continuing to either Pitești (major industrial city in Romania) or Giurgiu and further on towards Bulgaria.

Finishing the A4 motorway between Sofia and Nis could strengthen the Varna - Sofia transport corridor and facilitate a better access to Central Europe. The most important border crossing for freight remains the Giurgiu-Ruse bridge, while the Vidin-Calafat bridge and Vama Veche-Durankulak crossing remain secondary links.

In the cross-border area, the most developed road network is still on the Romanian side. Olt, Dolj and Constanța counties have the longest network of national and county roads. In Bulgaria the longest network of category I, II and III roads belongs to Veliko Tarnovo district, a value exceeding only the lowest ranked county from Romania.

Even if the density and quality of roads may be satisfying, in several districts or counties many cities lack a proper beltway. This forces transit traffic to pass through cities which reduces road safety, quickly degrades road infrastructure and makes it difficult to develop infrastructure for sustainable urban mobility like cycling lanes. Such issues can be seen especially within cities like: Silistra, Giurgiu, Slatina or Turnu Măgurele.

In the cross-border region the number of road accidents increased by 6.4% between 2012 and 2018. The highest increase was visible in the Bulgarian districts (10.8%). In the period between 2012-2018 the number of road accidents in the Romanian part increased by 5.1%. On the other hand, the number of reported road accidents is much higher in the Romanian counties compared to the Bulgarian counterpart.

The main issues regarding road safety in the cross-border region are related to:

- A low number of motorways



- Many cities still miss ring roads / bypass roads
- Insufficient traffic calming measures
- Non segregated roads - low protection for cyclists from road traffic.

Taking into account the large gap between Bulgaria and Romania and the rest of EU countries in terms of road safety, measures for improving the current situation should be given a high priority.

Railways - In both Romania and Bulgaria, the modal split for railway transport of passengers and freight tends to decline between 2012 and 2017. This is mostly related to the still low level of investment in maintaining, modernizing and further developing of the railway network. Continuous investments in the road network, modernisation of national and county / district roads, the development of new motorways and the increase in car ownership resulted in an increase in trips made with passenger cars but also freight transported by road.

There are just 3 lines crossing the Romanian-Bulgarian border:

- Line 803 Medgidia - Negru Vodă - Dobrich (line 228);
- Line 902 Bucharest - Giurgiu - Ruse - Veliko Tarnovo (line 400);
- Line 913 Craiova - Calafat - Vidin - Vraca - Sofia (strong delays due to the non-electrified segment between Craiova and Calafat).

All 3 lines reaching the border from the Romanian side are simple and not electrified.

According to the transport masterplans of Romania and Bulgaria several railway projects for modernization are planned for the cross-border region, incl. electrification of the existing railways.

Waterways - Main issues that reduce the performance of the Danube in terms of waterborne transport are several bottlenecks, the river depth and the capacity of ports (including their hinterland connections). Most critical points in terms of river depth are on the Romania-Bulgaria border, especially in the sections between Turnu Măgurele and Călărași. In these places due to drought the height of the Danube goes beyond the 2.5m mark.

The Romania-Bulgaria cross-border area encompasses several ports, all of them developed along the Danube. The most developed Danube ports in terms of freight handled are still on the Romanian part. In terms of capacity, freight handled and hinterland accessibility, the port of Constanța is the most developed port in the region, acting as an essential link between the Danube and the Black Sea. The other Romanian ports along the Danube remain important regional nodes of trade, most of them showing a steady growth in goods loaded and unloaded.

The largest river port of Bulgaria, developed along the Danube, is the port of Ruse followed by the port of Vidin. The port of Vidin, together with the port of Calafat are also linked to the Orient/East - Med TEN-T corridor (road and rail) while the port of Ruse and the port of Giurgiu lie on the Pan European corridor IV (partially overlapping with the TEN-T Core network). The secondary ports on the Bulgarian are either focusing on general cargo or bulk cargo (Lom, Somovit and Oryahovo) or on the transport of passengers and Ro-Ro services (Silistra, Nikopol or Svishtov).



The Danube remains an important trade route with a large, still unlocked potential. Main challenges in strengthening the role of the Danube remain several points with a low river depth, the capacity of ports and their hinterland connectivity.

Intermodality - The intermodal transport in the Romania-Bulgaria cross-border area is to a large extent associated to the port areas. It has been also analysed within the Intermodal CBC project, funded by the current Interreg Romania-Bulgaria Programme, aiming at better connections between secondary nodes and the TEN-T infrastructure in the cross-border region. The project included an analysis on the current state of the intermodal transport system in the cross-border area, as well as a common strategy for optimizing the capacity of the intermodal nodes located here.

Several cities along the border were identified as key points for the intermodal transportation system of the cross-border region:

- Romania:
 - Constanța;
 - Calafat and Giurgiu (commercial transport);
 - Corabia, Turnu Măgurele, Oltenița, Călărași (touristic transport);
- Bulgaria: Ruse, Vidin and Gorna Oriahovitsa.

Digital connectivity

The weaknesses of the both countries are human capital, use of internet services and integration of digital technology and not digital connectivity.

In the last years digital connectivity has slightly improved in both countries, but the EU 2020 targets have not been reached yet. In mid-2018 more than 92% of Bulgarian and approximately 87% of Romanian homes had access to fixed broadband. Both, Romania and Bulgaria still encounter issues with broadband access in rural areas (approx. 80% coverage).

When analysing ultrafast broadband Romania is between the few countries that had over 45% of households with a subscription to ultrafast broadband (over 100Mbps) in mid-2018 while Bulgaria was still struggling at 10%.

Progress has been made in the last years in terms of digital connectivity in both Romanian and Bulgarian parts of the cross-border region. While fixed broadband coverage should be still slightly below the 2020 targets, ultrafast broadband, mostly accessible in major cities, is advancing fast. Unfortunately, rural areas, with a low density of population still face issues in terms of broadband coverage. Investments in better, more reliable and faster connectivity would help to attract higher value-added businesses and are a prerequisite for improving the level of digitisation. Both countries are preparing for the launch of 5G. Romania adopted a national 5G strategy while Bulgaria teamed up with Greece and Serbia to develop a 5G cross-border corridor for the testing of autonomous vehicles. Securing ultra-high-speed connectivity is an important enabler for innovation and the rise of smart cities within the region but also for the provision of digital public services.



3.1.8.3. Material assets related to the Environment, including Climate change

From the point of view of the environment, material assets can be considered in two aspects - environmental assets and assets related to environmental protection. The third aspect is the impact of the environment on assets, and in particular the effects of climate change.

Environmental assets

For the cross-border region, the main asset, part of the environment, is the Danube River, which divides the cross-border region into two characteristic parts. The importance of the Danube is great in terms of the need to protect the specific biodiversity and ecosystems of the region, and in terms of its use as a transport route and connection between the two countries.

Underground natural resources are another environmental asset represented in the cross-border area.

The Romanian side of the territory holds several natural resources such as coal, marble, limestone, stone, and siderite. In the present, coal mining is carried out mainly on the surface. However, the process was once carried out in the mining areas of Livezile, Zegujani and Husnicioara. These locations are now in a process of closure. The production output has substantially decreased in the past period.

In Bulgaria, there are insignificant sources of crude oil near Shabla (Dobrich district) and Dolni Dubnik (Pleven district). There is a considerable black coalfield near Balchik and Kavarna (6000-7000 kcal/kg) but exploitation is difficult due to its depth (1500-2700 m) and the five different water horizons that exist in the region. The region is rather rich in minerals. 88% of Bulgaria's gypsum resources are found in Vidin district. High-quality limestone can be found near Ruse and Vratsa. The main fields of kaolin in Bulgaria are situated near the village of Senovo, Ruse district, with one of the biggest quarries and plants of the Balkans producing kaolin, limestone, dolomite, silica sand, flourspar, and chamotte.

Agriculture remains a traditional sector both in Bulgaria and in Romania, directly impacting the socio-economic processes in the two countries. In 2013, 74.18% (5,362,561 ha) of the total area of the cross-border region (7,229,089 ha) was represented by agricultural land. Most of the agricultural area (3,071,699 ha, that is 57.28%) is located on the Romanian side of the cross-border territory, while the rest of 2,290,862 ha is on the Bulgarian side. Compared to the European average (42% of all EU land area is covered by agricultural lands), the CBC area has a higher percentage of agricultural land.

In terms of **forestry**, the entire CBC area sums up over 20%, with notable differences between the two countries (Romanian side - 15.97% and the Bulgarian side - 25.84%). The forestry areas remain constant over time or even increase in counties such as Constanța. Even though there is a general decreasing trend at national level, these areas seem to preserve one of their main resources, especially to protect them against landslides and floods. Illegal logging has been identified as a problem, especially in Romania.

Protected areas and zones are analyzed in item 3.3.4 of the SEA report, where the main problems and challenges for their protection are indicated.

Assets related to environmental protection



These are mainly assets invested in order to prevent pollution and deterioration of the quality of the environment - wastewater / polluted water and gas treatment facilities, waste management facilities and infrastructure, energy efficiency activities - including the development of renewable energy sources, transition to a circular economy, etc. They are presented in the relevant subsections of item 3: „Relevant aspects concerning the current environmental condition and its probable development if the programme is not implemented“ of the SEA report (item 3.6 Water, item 3.12. Energy efficiency and 3.14. Circular economy), and based on the analysis conclusions are made on the main problems (related to direct water and air pollution, inefficient waste management - low share of waste recycling, leading to loss of waste, biodiversity, health problems for the population and climate change).

Environmental impact on assets

The main impacts arising from the environment on assets are related to natural disasters - floods, earthquakes, landslides. The occurrence of such phenomena is associated with significant negative consequences for tangible assets such as buildings, facilities, natural areas.

Climate change impact on the material assets

The negative outcomes of climate change could be more pronounced in vulnerable regions, where economic, social or environmental issues are already present, as in the case of the regions in the proximity of the lower Danube from Romania and Bulgaria, in the cross-border territory. According to CORINE database, 74.18% of this area is covered by agricultural land (Romania - 57.28%), out of which 81.5% is represented by non-irrigated arable land (Romania - 53.87%; Bulgaria - 27.69%). In this context, the evolution of the climate change process and its effects may jeopardise the main economic activity taking place in the region since agricultural activities are extremely vulnerable to climate changes. Taking into consideration the fact that these activities represent the main economic sector and food source, coherent strategies and efficient investments should be implemented for mitigating the potential chain effects generated by crop loss.

Except the **floods**, 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.

The climate for southern Romania and northern Bulgaria is moderately continental, but this general feature has specific characteristics due to the peculiarities of the landforms, altitudes and atmospheric circulation. According to the existing data, the analysed region is characterized by a slightly higher drought frequency, duration or severity than other parts of the two countries. For the southern part of Romania, the longest meteorological and hydrological droughts occurred between 1980 and 1995 and it is believed that, in the context of global warming, longer drought periods will take place. A similar situation is anticipated for the northern part of Bulgaria, where the frequency of dry years registered in the Danube Plain and the Thracian Lowland increased, while rainy years are not significantly present anymore.

Extreme weather events generate also significant material losses because human settlements in general, and the household architecture in particular, are not designed to resist to such phenomena. Thus, there is a need to adapt the planning regulations in order to also include measures and guidelines that specifically tackle the mitigation of extreme weather effects. This



is particularly important for vulnerable areas exposed to different natural hazards that could occur at the same time, as it is the case in the cross-border area.

The **rising of seawater levels** is another effect as a result from the climate change - according to the European Commission, in the last 35 years, the entire shoreline in Europe has retreated between 180 to 300 meters and 80 ha/year of the beach territory has been lost. Coastal erosion is not only expected to threaten the tourism industry in the summer season, but it might also endanger the safety of housing and public welfare. The European Commission underlines the importance of erosion that is expected to become a more and more significant challenge, mainly because of the impacts of climate change and Sea Level Rise (SLR), but also on account of the lack of effective coastal planning regulations (for example, numerous constructions have been built near the shoreline or even on the beach). Erosion, together with storm events and rivers draining in low-lying coastal areas, are important factors triggering coastal flood-risk. The coastal erosion also represents a threat not only to households or economic activities, but also to the biodiversity conservation.

Regarding the outcomes of climate change, a research study conducted by Stahl et. Al⁵⁰ in 2016 emphasized that in the South-Eastern Europe countries, impacts generated by drought (e.g. crop losses, freshwater availability, increase in prices etc.) are extremely complex. Comparing to the European situation, Romania has reported a number of impacts generated by droughts above the European average (155), while Bulgaria indicated a number of impacts below the average (60). Romania has recorded impacts over agriculture and livestock farming (reduced productivity of annual crop cultivation, reduced productivity of permanent crop cultivation, agricultural yield losses $\geq 30\%$ of normal productivity, reduced productivity of livestock farming, forced reduction of stock, regional shortage of feed/water for livestock), while Bulgaria recorded impacts on agriculture and livestock farming (mainly reduced productivity of annual crop cultivation and increased costs/economic losses), public water supply (mainly limitation of water supply to households in urban areas) and water quality (impairment of ecological status of surface water and problems with drinking water quality).

Based on the analyses the climate change will have serious effects both on urbanized areas and on the cross-border protected areas network. Therefore, climate change adaption should be set as a priority in policy making and territorial planning in the area in the next decades.

The status of material assets related to the program shows:

- Obsolete assets and low level of modernization in production;
- Low level of innovation in economic activities;
- Untapped tourist potential, with excl. on the Black Sea coast;
- Insufficient transport connections between the two countries, low levels of road safety, insufficiently developed intermodal facilities;

⁵⁰ Stahl, Kerstin & Kohn, Irene & Blauhut, Veit & Van Loon, Anne & Melsen, L.A. & Van Lanen, Henny. (2016). Impacts of European drought events



- Insufficient wastewater treatment, air pollution, low level of waste recycling - high levels of fine dust particles, high vulnerability to climate change (including the presence of enterprises with risk potential in areas at risk of floods), low capacity to respond to natural disasters.

3.1.8.4. Technological risks

There are over 95 locations in the program area which are the subject of the Directive 2012/18/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 4 July 2012 on the control of major-accident hazards involving dangerous substance, amending and subsequently repealing Council Directive 96/82/EC. Their location is presented in the following figure and the description of each location can be found in Annex 14.3.

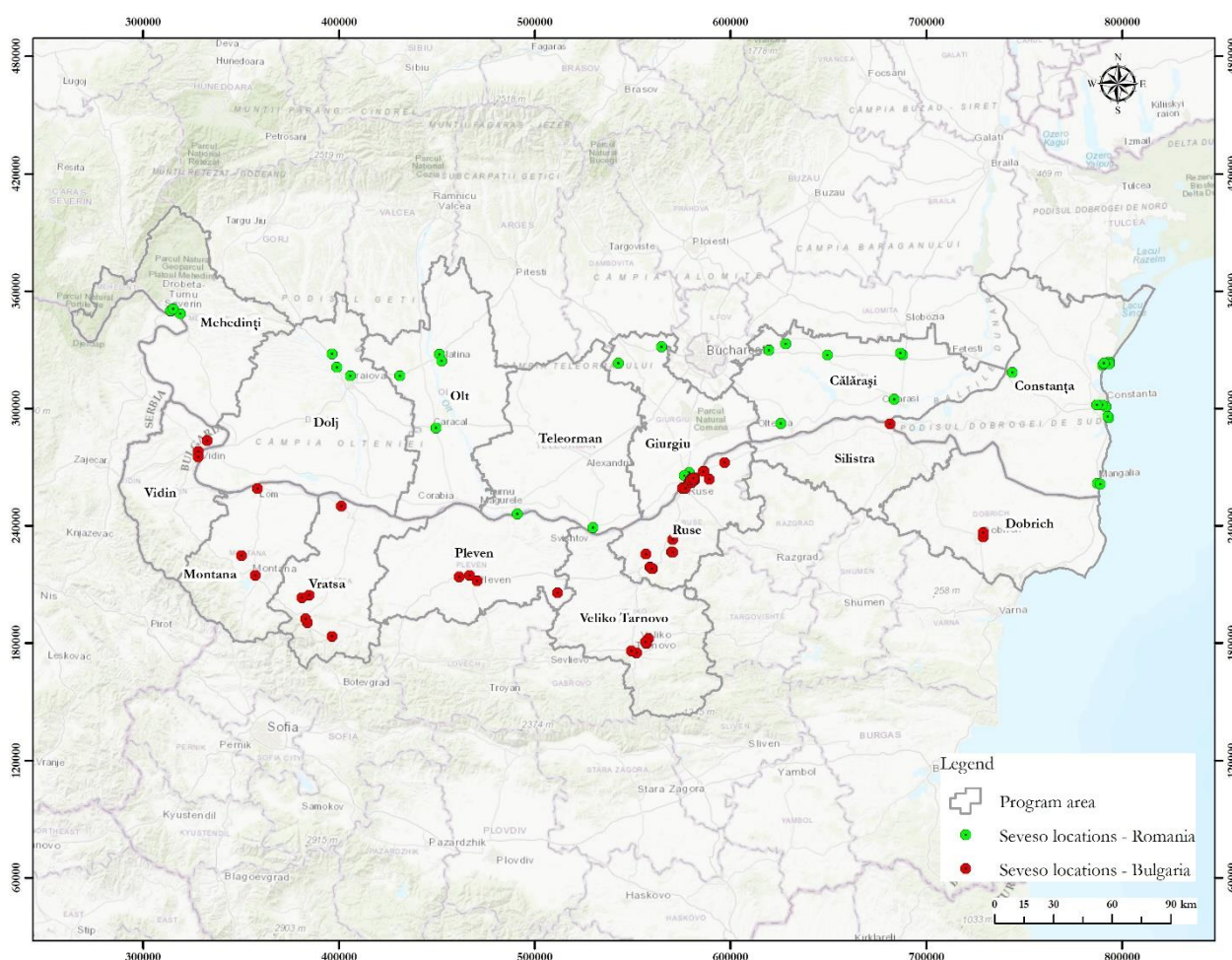


Figure no. 3-65 Seveso location in the program area

3.1.9. RISK MANAGEMENT

According to the International Commission for the Protection of the Danube River (ICPDR), all localities in the Danube floodplain are at risk of flooding. Compared to the other countries that are crossed by the Danube, the Romania-Bulgaria cross-border territory would have a lower



number of affected persons in case of floods with high and medium probability, but a higher number of affected persons in the case of low probability floods⁵¹.

The significant floods caused by the Danube River took place in January 1998, April 2006 and June 2010. It should be noted that significant historical events were selected on the basis of hydrological criteria and criteria for the negative effects of floods on human health, the environment, cultural heritage and economic activity⁵². According to historical data, there is a 1% probability of occurrence of average floods, which can occur on average once every 100 years, in areas included in the program and especially along the Danube both in Romania and in Bulgaria. They mainly affect the population.

Romania

Romania is predisposed to floods caused overflow of watercourses (river floods) which cause the most significant damage.

In the program area of Romania, the areas most exposed to floods are in Mehedinti County, as they could be affected by floods on the Drincea I River and the Jiu Basin. Another area exposed to flood risk is in Giurgiu County with the Neajilov River and its tributaries. In Constanța County, there is an extreme particular situation with the Casimcea and Urluia Rivers, due to the torrential flow regime⁵³.

Extreme weather events can cause significant damage and even natural disasters. In 2019, 205 extreme meteorological phenomena took place in Romania, such as:

- 140 floods by river overflows or from runoff from slopes
- 12 events caused by melting snow or frost-thaw phenomenon
- 1 coastal erosion event on the Black Sea coast
- 27 extreme events caused by heavy rainfall
- 14 extreme events caused by extreme rainfall and hail
- 11 extreme events caused by heavy rainfall and wind⁵⁴.

Floods represent the most frequent meteorological phenomenon, thus analyzing the statistical data from 2010-2019 it is found that in 2016 most events of this type took place, of which 18 were significant events. Most urban localities were affected in 2018, at a number of 164 floods, but no data are available on the share of significant events.

The program area in Romania overlaps partially or completely over 6 Water Basin Administrations - ABA Argeș-Vedea, ABA Banat, ABA Buzău-Ialomița, ABA Dunăre-Litoral, ABA Jiu and ABA Olt. In the period 2010-2016, several extreme events (floods) were registered in the Banat Basin Administration in 2016, but the program area overlaps with this on a small area. There is also an increase in floods in 2014⁵⁵.

⁵¹ Common Strategy for Sustainable Territorial Development of the cross-border area Romania-Bulgaria Analysis and diagnosis of the current situation in the cross-border area

⁵² Planul de management al riscului la inundații - Fluviul Dunărea

⁵³ Common Strategy for Sustainable Territorial Development of the cross-border area Romania-Bulgaria Analysis and diagnosis of the current situation in the cross-border area

⁵⁴ Raport privind starea mediului în România - anul 2019

⁵⁵ Raport privind starea mediului județul Mehedinți - 2019

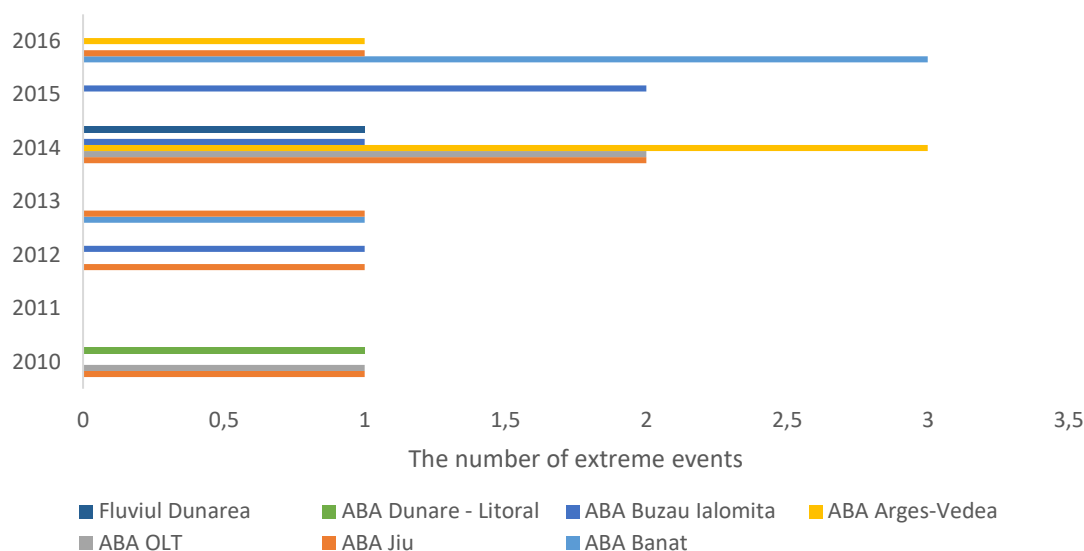


Figure no. 3-66 Floods in Romania

According to the Flood Risk Management Plans of the Water Basin Administration (ABA) there are many areas that have a significant potential for flood risk. The list of areas with significant potential risk of floods in the program area - Romania, is presented in the following table.

Table 3-5 Areas at significant risk of flooding in the program area

Nº	Water Basin Administration (ABA)	Name of area with significant potential risk of flooding	Flood source
1.	Fluviul Dunărea	Dunărea - locality Drobeta Turnu Severin	river floods
2.	Dobrogea-Litoral	Locality Cernavodă	Rainwater, Artificial dam - defense infrastructure
3.		Localities Constanța, Eforie, Costinești	
4.		Locality Corbu	
5.		Sector litoral Locality Mangalia - Locality Costinești	
6.	Argeș-Vedea	Sector litoral Locality Mamaia - lacul Razelm	river floods
7.		r. Vedea - av. loc. Făgetelu, sect. îndig	
8.		r. Plapcea - av. loc. Constantinești	
9.		r. Dorofei - av. loc. Bacea	
10.		r. Tecuci - av. ac. Tecuci	
11.		r. Burdea - av. loc. Burdeni	
12.		r. Tinoasa - av. loc. Ciurari	
13.		r. Teleorman - av. loc. Tătăraștii de Sus	
14.		Clanița - av. loc. Scurtu-Slăvești - am. ac. Băbăița	
15.		r. Milcovăț - av. loc. Coșoaia	
16.		r. Sericu - av. loc. Siliștea Mică	
17.	Olt	Moara din Groapă	river floods
18.		Râul Pesceana - aval confluență Gușoianca (Nevrăpeasa)	
19.		Râul Strehăreți - aval confluență V. Coadă Lungă	
20.		Râul Dirjov - aval Locality Buicești	
21.		Râul Călui - Locality Călui	



No	Water Basin Administration (ABA)	Name of area with significant potential risk of flooding	Flood source
22.		Râul Geamărtălui - aval confluență Pârâul Mijlociu	
23.		Râul Iminog - aval Locality Bălteni	
24.		Râul Ciocârlia - Locality Coteana	
25.		Râul Teslui - aval Locality Motoci	
26.		Râul Caracal - floods from rain	
27.	Jiu	Râul Coșuștea - aval Locality Ilovăț	Rainwater, Artificial dam - defense infrastructure
28.		Râul Hușnița - aval confluență Zegaia	
29.		Râul Argetoaia (Salcia) - aval Locality Iordăchești	
30.		Râul Amaradia - aval confluență Pârâul Boarna - localitatea Negoiești	
31.		Râul Raznic - aval Locality Busu	
32.		Râul Bahna - aval Locality Gornenți	
33.		Râul Jidoștița - aval confluență V. Mare	
34.		Râul Topolnița - aval confluență Clîșevăț	
35.		Râul Pleșuva - aval Locality 23 August	
36.		Râul Desnățui	
37.		Pleșuva - aval Locality 23 August	
38.	Banat	r. Eșelnița - loc. Eșelnița	river floods

Their location in the program area is shown in the following figure.

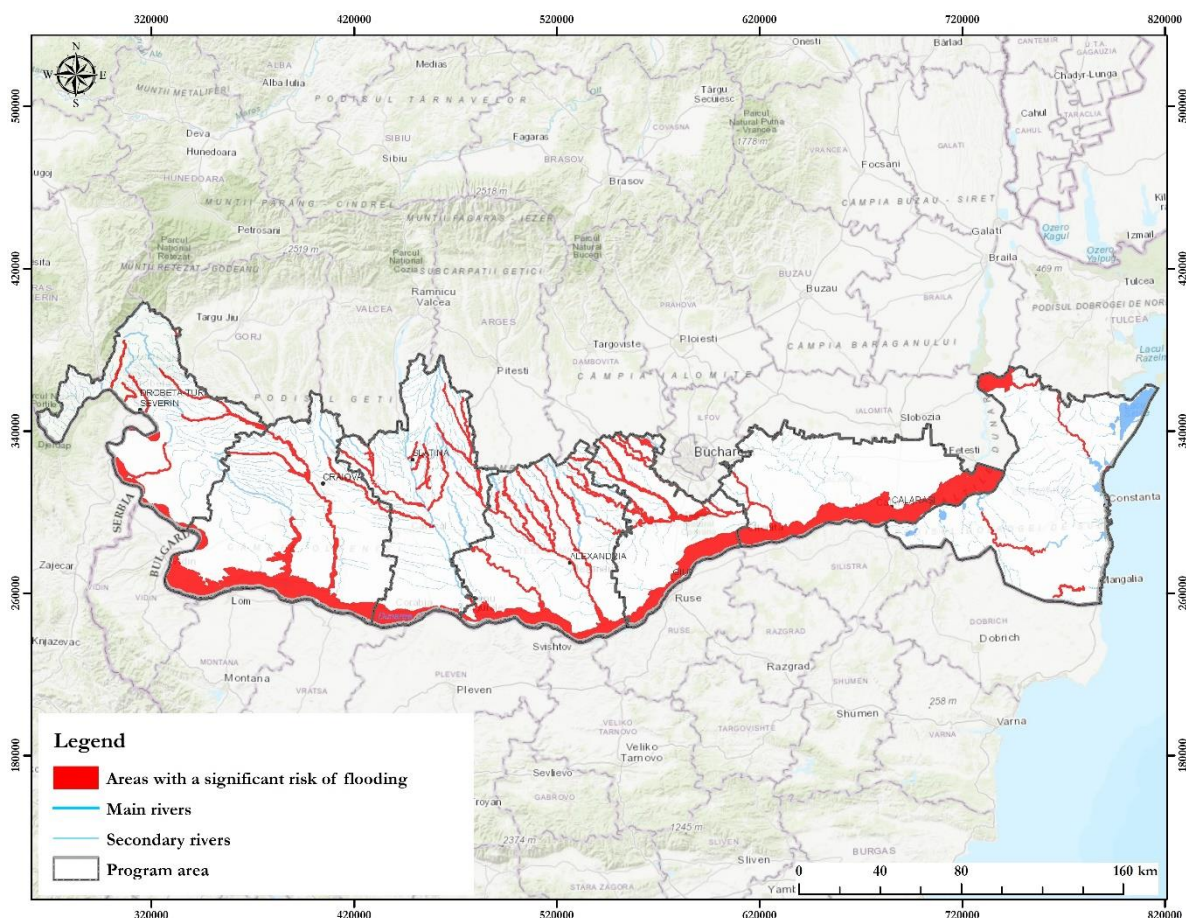


Figure no. 3-67 Locating areas with a potential significant risk of flooding



Bulgaria

The flood risk management in Bulgaria is determined according to the Flood Risk Management Plan (FRMP) for the respective Basin Region (2016-2021). FRMP are prepared in accordance with Art. 146o, para 3 of the Water Act, coordinated with the update of the River Basin Management Plan. The implementation of the FRMP Update Project, second cycle 2022-2027, is currently underway. In the implementation of the Project, a Preliminary Flood Risk Assessment (PFRA) has been carried out, 2021.

All Basin Directorates on the territory of the country have prepared Preliminary flood risk assessments for their regions. The extent of floods is determined at maximum annual water quantities with security: 5%, 1% and 0.1% or recurrence once every 20 years, 100 years and 1,000 years. In each FRMP are the defined Areas with significant potential flood risk (ASPR) in Bulgaria, pursuant to Art. 146 of the Water Act. The areas have been approved by the Minister of Environment and Water.

ASPRs are classified into three levels of risk in terms of human health, economic activity, environment, and cultural and historical heritage - low, medium and high.

The area considered by the program is submitted in the Territory of Two Basin Directorates (BD) - BD "Danube Region" and BD "Black Sea Region" - as follows:

- BD "Danube Region" - Vidin, Montana, Vratsa, Pleven, Veliko Tarnovo, Ruse, Silistra;
- BD "Black Sea Region" - Dobrich.

The total number of registered floods in the Period 2010-2020 in the program area according to the data of the National Statistical Institute is 471⁵⁶. The distribution of floods by area is presented in the figure below.

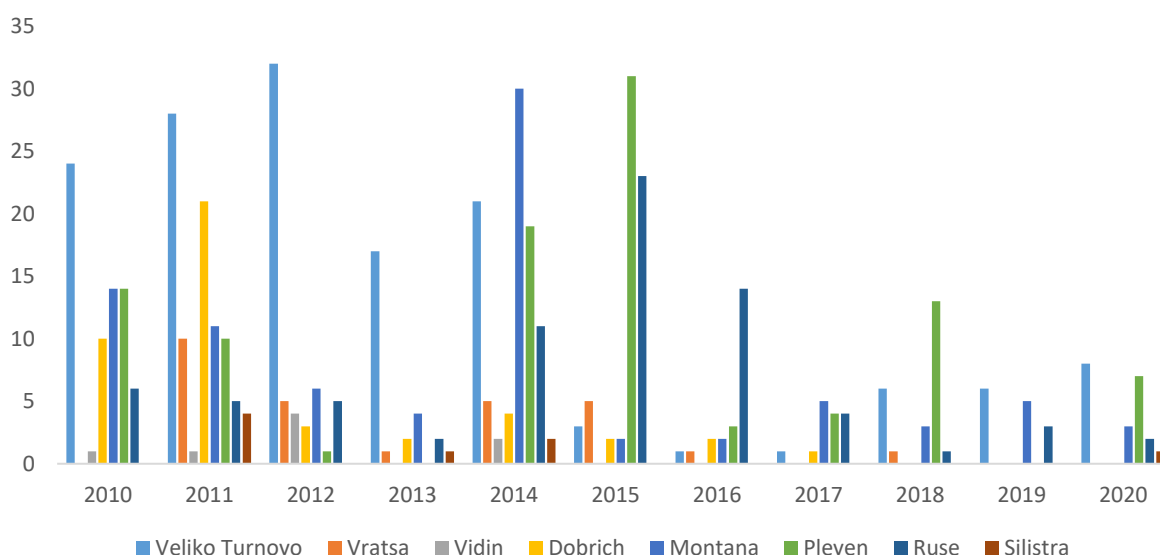


Figure no. 3-68 Floods in programm area from Bulgaria

⁵⁶<https://www.nsi.bg/bg/content/2915/%D0%BD%D0%B0%D0%B2%D0%BE%D0%B4%D0%BD%D0%B5%D0%BD%D0%B8%D1%8F>



Areas with significant potential flood risk identified under the RMP are as follows:

- BD Danube Region

The analysis of the sources of floods in BDDR shows that about 60% of the registered floods in DBDR are due to torrential rains and less than 30% - to the overflow of rivers. As part of Preliminary flood risk assessment, 2021 prior to the development of the RMP and in accordance with the requirements of Art. 146d of the Water Act defines the Areas with significant potential flood risk determined according to the RMP (2016-2021) as follows:

R. Danube

Significant floods from the Danube River were observed in January 1998, April 2006 and June 2010⁵⁷.

Results of the risk assessment for the APSFR as part of the RBMP (2016-2020) for the Danube River show that within the defined flood limits of floods with a low probability (0.1%) of occurrence - 111,679 people fall. According to data from the RMP (2016-2021) potentially affected areas for different types of land use (in thousands of km²) are as follows:

Table 3-6 Potentially affected areas for different types of land use (thousands of km²)

Type of territory	Probability of flooding		
	Hight	Average	Low
Agricultural lands	0,1302	0,7313	0,7484
Industrial territories	0,0041	0,0245	0,0290
Urbanized areas	0,0032	0,0427	0,0486
Others	0,0223	0,0691	0,0702

The flood risk maps made as part of the RFBR show that the share of potentially endangered urban and industrial areas is significantly smaller than the endangered agricultural lands. The results of the maps show that despite the fact that almost along the entire length of the Danube there is a system of dikes and walls for flood protection, some riparian areas have a relatively low level of protection. The condition of the protective equipment in the future should also be analyzed. However, the effectiveness of this system was demonstrated during the Great Flood in 2006, when floods were recorded in a few places in protected areas.

Some of the existing flood defenses are in poor condition. Reported problems include erosion of the body, ridge deformities and damage to the structure of the dikes. Some of the drainage control gateways are also in poor condition. They serve to drain the riparian lowlands, and during high waters in the Danube are closed to prevent water from entering the river.

Some riparian areas have a relatively low level of protection. More than 400 buildings were flooded during the great flood from the Danube River in 2006 in Bulgaria.

According to the RMP 2016-2021, measures for dealing with the floods are envisaged as follows: repair of the dikes (Measure DAN_B.3.2.4), construction and rehabilitation of the regulating facilities for discharge of water behind the dikes (Measure DAN_B.3.2.2), construction of new dikes and walls (Measure DAN_B.3.1.1) - for areas with a low degree of protection, conservation and

⁵⁷ Flood Risk Management Plan for the Danube River Basin District



improvement of wetlands along the Danube (Measure DAN_A.1.1.9), which is a very high priority measure due to the ecological importance of these areas⁵⁸.

Internal APSFR

In the Bulgarian area, the risk of flooding, outside the Danube meadow, is in the Montana district due to the Tsibritsa and Ogostia river basins. Areas in the Vit river basin have also been identified in the Pleven district. Veliko Tarnovo District includes areas of the Yantro River Basin, a tributary of the Rositsa. Also, according to research conducted at the Institute of Oceanography in Varna, two areas at risk of flooding have been identified in the Dobrich district: Durankulak and Ezeretz.

According to the Preliminary flood risk assessment, 2021 with Order RD-804 / 10.08.2021⁵⁹. new Areas with significant potential flood risk have been identified. A list of APSFR on the territory of BDDR is presented in Table below.

Table 3-7 List of Areas with significant potential flood risk in BDDR

No	APSFRs code	Name of RZPRN	Length , km	Valley	Populated place	WAIT	Municipality	District	Type of flood
1	BG1_APSFR_WO_051	Archar River near the town of Dimovo	5	Rivers west form Ogosta River	Byala	3263	Dimov	Vidin	river floods
					Dimovo	21097			
					Shipot	83239			
2	BG1_APSFR_OG_100	Skat River between the towns of Byala Slatina and Mizia	86	Ogosta	Byala Slatina	07702	Byala Slatina	Vratsa	river - rain - sudden flood
					Tarnava	73643	Byala Slatina		
					Altimir	00401	Byala Slatina		
					Galiche	14406	Byala Slatina		
					Lipitsa	43774	Mizia		
					Krushovitsa	40200	Mizia		
					Voyvodino	11853	Mizia		
					Mizia	48043	Mizia		
					Saraevo	65396	Mizia		
					Glozhene	18505	Kozloduy		
					Harlets	77548	Kozloduy		
3	BG1_APSFR_OG_012	Varteshnits River near to village s.Beli izvor.	6	Ogosta	Beli izvor Vlasatitsa	03438	Vratsa	Vratsa	river floods
						11555			
4	BG1_APSFR_OG_061	Berkovska River near the town of. Berkovitsa	7	Ogosta	Berkovitsa	03928	Berkovitsa	Vratsa	river floods
5	BG1_APSFR_OG_101	Dalgodelska River between the towns of Dalgi del	23	Ogost	Dalgi del	24534	Georgi Damyanovo	Montana	river floods
					Melyane	47771			
					Govezhda	15299			
					Elovitsa	27348			

⁵⁸ Flood risk management plan, Danube region (2016 - 2021)

⁵⁹ http://www.bd-dunav.org/uploads/content/files/upravljenje-na-vodite/PURN-2022-2027/PORN_Final/Zapoved.pdf



Nº	APSFRs code	Name of RZPRN	Length , km	Valley	Populated place	WAIT	Municipality	District	Type of flood
		and Gavril Genovo			Gavril Genovo	14283			
					Georgi Damyanovo	14773			
6	BG1_APSFR_IS_011	Iskar River near the town of Roman	21	Iskar	Roman	62997	Roman	Vratsa	river floods
					Hubavene	77493	Roman		
					Radovene	61488	Roman		
					Staro selo	69050	Mezdra		
					Dolna Beshovitsa	22023	Roman		
					Strupets	69972	Roman		
7	BG1_APSFR_IS_033	R. Iskar River between the towns of Vlado Trichkovo and s. Zverino	98	Iskar	Eliseyna	27317	Mezdra	Vratsa	river - rain - sudden flood
					Ochindol	54506	Mezdra		
					Oselna	54047	Mezdra		
					Ignatitsa	322281	Mezdra		
8	BG1_APSFR_IS_100	Iskar River near the town of Cherven Bryag	15	Iskar	Ruptsi	63361	Cherven bryag	Pleven	river floods
					Cherven bryag	80501			
					Radmirtsi	61580			
					Gornik	16540			
9	BG1_APSFR_VT_011	Vit River near the town of. Pleven	72	Vlt	Yasen	87597	Pleven	Pleven	river - rain - sudden flood rain-city flood
					Tarnene	73674	Pleven	Pleven	
					Bivolare	03993	Dolna Mitropolia	Pleven	
					Dolna Mitropolia	22215	Dolna Mitropolia	Pleven	
					Bozhuritsa	5013	Dolna Mitropolia	Pleven	
					Opanets	53583	Pleven	Pleven	
					Pleven	56722	Pleven	Pleven	
					Disevitsa	24935	Pleven	Pleven	
					Brestovets	06495	Pleven	Pleven	
					Todorovo	72566	Pleven	Pleven	
					Kartozhabene	40974	Pleven	Pleven	
					Petarnitsa	56201	Dolni Dabnik	Pleven	
					Gortalovo	17258	Pleven	Pleven	
					Gorna Mitropolia	16345	Dolna Mitropolia	Pleven	
					Riben	62596	Dolna Mitropolia	Pleven	
					Podem	57025	Dolna Mitropolia	Pleven	
10	BG1_APSFR_VT_100	Barata River - Sadovets	7	Vit	Sadovets	65070	Dolni Dabnik	Pleven	river - rain - sudden flood
11	BG1_APSFR_OS_011	Osam River - gr. Letnitsa	19	Osam	Asenovtsi	00761	Levski	Pleven	river floods
12	BG1_APSFR_OS_012	LomyaRiver Butovo	5	Osam	Nedan	51295	Pavlikeni	V.Tarnovo	river floods



No	APSFRs code	Name of RZPRN	Length, km	Valley	Populated place	WAIT	Municipality	District	Type of flood
					Butovo	7123	Pavlikeni	V.Tarnovo	
13	BG1_APSFR_YN_011	Yantra River between the towns of Polski Trambesh and Byala	42,8	Yantra	Radanovo	61279	Polski Trambesh	V.Tarnovo	river - rain - sudden flood
					Byala	7603	Byala	Ruse	
					Polski Trambesh	57354	Polski Trambesh	V.Tarnovo	
					Dolna Studena	22277	Tsenovo	V.Tarnovo	
					Karantsi	36405	Polski Trambesh	V.Tarnovo	
					Polsko Kosovo	57368	Byala	Ruse	
					Petko Karavelovo	65471	Polski Trambesh	V.Tarnovo	
					Starmen	70130	Byala	Ruse	
					Ivancha	32175	Polski Trambesh	V.Tarnovo	
					Klimentovo	41246	Polski Trambesh	V.Tarnovo	
14	BG1_APSFR_YN_021	Rositsa River near the town of Resen	32	Yantra	Vodoley	11795	Veliko Tarnovo	V.Tarnovo	river floods
					Nikyup	51740	Veliko Tarnovo	V.Tarnovo	
					Polikraishte	57217	Veliko Tarnovo	V.Tarnovo	
					Resen	62517	Veliko Tarnovo	V.Tarnovo	
					Samovodene	65200	Gorna Oryahovitsa	V.Tarnovo	
15	BG1_APSFR_YN_022	Golyamata River near the town of Strazhitsa	12,4	Yantra	Strazhitsa	69633	Strazhitsa	V.Tarnovo	river floods
16	BG1_APSFR_YN_023	Yantra River between the towns of Veliko Tarnovo and Gorna Oryahovitsa	82,6	Yantra	Kilifarevo	36837	Veliko Tarnovo	V.Tarnovo	river - rain - sudden flood
					Debelets	20242	Veliko Tarnovo	V.Tarnovo	
					Veliko Tarnovo	10447	Veliko Tarnovo	V.Tarnovo	
					Gorna Oryahovitsa	16359	Gorna Oryahovitsa	V.Tarnovo	
					Dolna Oryahovitsa	22232	Gorna Oryahovitsa	V.Tarnovo	
					Shemshevo	83586	Veliko Tarnovo	V.Tarnovo	
					Ledenik	43253	Veliko Tarnovo	V.Tarnovo	
					Samovodene	65200	Veliko Tarnovo	V.Tarnovo	
					Parvomaytsi	59094	Gorna Oryahovitsa	V.Tarnovo	
					Pisarevo	56472	Gorna Oryahovitsa	V.Tarnovo	
					Gabrovtsi	14235	Veliko Tarnovo	V.Tarnovo	
					Natsovtsi	51175	Veliko Tarnovo	V.Tarnovo	
					Pravda	57981	Gorna Oryahovitsa	V.Tarnovo	
					Lyaskovets	44793	Lyaskovets	V.Tarnovo	



№	APSFRs code	Name of RZPRN	Length , km	Valley	Populated place	WAIT	Municipality	District	Type of flood
17	BG1_APSFR_YN_061	Elenska River near the town of Elena	8	Elena	Elena	27190	Elena	Veliko Tarnovo	river floods
18	BG1_APSFR_RL_100	rCherni Lom - River between the towns of. Tabachka and Koshov	25	Rusenski Lom	Koshov	39205	Ivanovo	Ruse	river floods
					Tabachka	72028	Ivanovo	Ruse	
					Cherven	80443	Ivanovo	Ruse	
19	BG1_APSFR_RL_101	r. Beli Lom - ot s. Pisanetsdos. Nisovo	26	Rusenski Lom	Nisovo	51768	Ivanovo	Ruse	river floods
					Shtraklevo	84049	Ivanovo	Ruse	
					Pisanets	56441	Vetovo	Ruse	
20	BG1_APSFR_RL_014	p. Rusenski Lom River between the towns of s.Bozhichen to the mouth of the river	32	Rusenski Lom	Bozhichen	04981	Ivanovo	Ruse	river floods
					Krasen	39520	Ivanovo	Ruse	
					Basarbovo	02796	Ruse		
					Ruse	63427	Ruse		
21	BG1_APSFR_DB_100	Dobrichka River-Dobrich	19	Suhareka	Dobrich	72624	Dobrich	Dobrich	river - rain - sudden flood
22	BG1_APSFR_DU_001	Reka Dunav	468	Dunav	The settlements along the coast from the village of Novo Selo to the town of Silistra		Vidin; Dimovo; Lom; Valchedram; Kozloduy; Mizia; Oryahopvo; Dolna Mitropolia; Gulyantsi; Nikopol; Belene; Svishtov; Tsenovo; Borovo; Ivanovo; Ruse; Slivopole; Tutrakan; Glavinitsa; Sitovo; Silistra	Vidin, Vratsa, Pleven, V. Tarnovo, Ruse, Silistra	river floods

- BD Black Sea Region

Also, according to research conducted at the Institute of Oceanography in Varna, two areas at risk of flooding have been identified in the Dobrich district: Durankulak and Ezeretz. According to



Annex 10 of the PFRA⁶⁰, 2021 a list of Areas with significant potential flood risk in BDBSR has been determined. The List of Areas with significant potential flood risk in BDBS are presented in Table below.

Table 3-8 List of Areas with significant potential flood risk in BDBR

APSFRs code	Name of APSFR	Length, km	Type of flood
BG2_APSFR_BA_100	r. Batova - s. Kranevo	15.24	river, sea floods
BG2_APSFR_BS_01	Black sea - the village of Durankulak iand the village of Vaklino	19.36	sea, rain-torrential, rising level of Durankulak Lake. from inflowing rivers (flooding)
BG2_APSFR_BS_02	Black sea -the town of Shabla; Shablenska River- from village of Rakovski to the town of Shabla	31.2	sea, rain-torrential, rising level of Shabla Lake. from inflowing rivers (flooding)
BG2_APSFR_BS_101	Black sea - the town of Balchik	14.5	sea, rain-torrential

According to RMFP (2016-2021) data in the Black Sea Dobrudzha rivers for a period of 100 years a total of 70 floods are known, and the types of floods are as follows:

- River floods - 49. - 70.00%
- Stingray floods - 19 pcs. - 27.14%
- Sea flood - 2 pcs. - 2.86%⁶¹

Seismic risk

According to the **seismic risk** the cross-border area is exposed to high seismic risk. The Vrancea epicentre area has a predominant influence over the Romanian territory and is can also be felt in the northern part of the Bulgarian territory (Dobrogea, Veliko Tarnovo and Shabla-Kaliakra Cape).

The Romanian side mainly overlaps the Romanian Plain where the earthquakes are recorded associated with the Intramoesic rift and a secondary rift system. The seismic activity is marked by superficial earthquakes with depths of up to 5 km and normal earthquakes between 5 and 40km deep⁶².

⁶⁰ Flood risk management plan, Black Sea region (2016 - 2021)

⁶¹ Flood risk management plan, Black Sea region (2016 - 2021)

⁶² Territorial Analysis for the Romania-Bulgaria Cross-Border Region



Figure no. 3-69 Risk of earthquakes in the program area (Source: Territorial Analysis for the Romania-Bulgaria Cross-Border Region)

According to the Romania-Bulgaria Cross-Border Territorial Analysis, the program area has a degree of landslide susceptibility comparable to that of southern Europe. This aspect should be considered when creating Soil Thematic Strategies that consider inventory, susceptibility, hazard and risk at various scales.

The Romanian counties are as affected and as susceptible to landslides as the Bulgarian districts. Landslides can also affect mine waste tips and tailings dams and landfills, causing fatalities and contaminating soils and surface and ground water. In areas affected by landslides, these are a major source of soil erosion and sediment yield to valleys and rivers, and hence of reservoir silting.

The landslide risk is lower on the Romanian border compared to the Bulgarian one where we can find higher altitudes corresponding to the hilly and plateau area.

There are three categories of areas in the Romania-Bulgaria cross-border territory, depending on their exposure to landslides:

- Low risk of landslides - Olt, Teleorman, Giurgiu, Călărași;
- Medium risk of landslides - Mehedinți, Vidin, Montana, Vratsa, Veliko Tarnovo, Ruse and Silistra;
- High risk of landslides - Dolj, Constanța, Plevan and Dobrich.

Some of the landslides are activated due to the river erosion of the Danube, which crosses 470 km from the territory of the two countries in the program area, so that many landslides have been



observed, especially during periods of seismic activity. In addition, the Danube Plain is fragmented in a south-north direction by the rivers Iskar, Vit, Osum and Yantra and landslides are created⁶³.

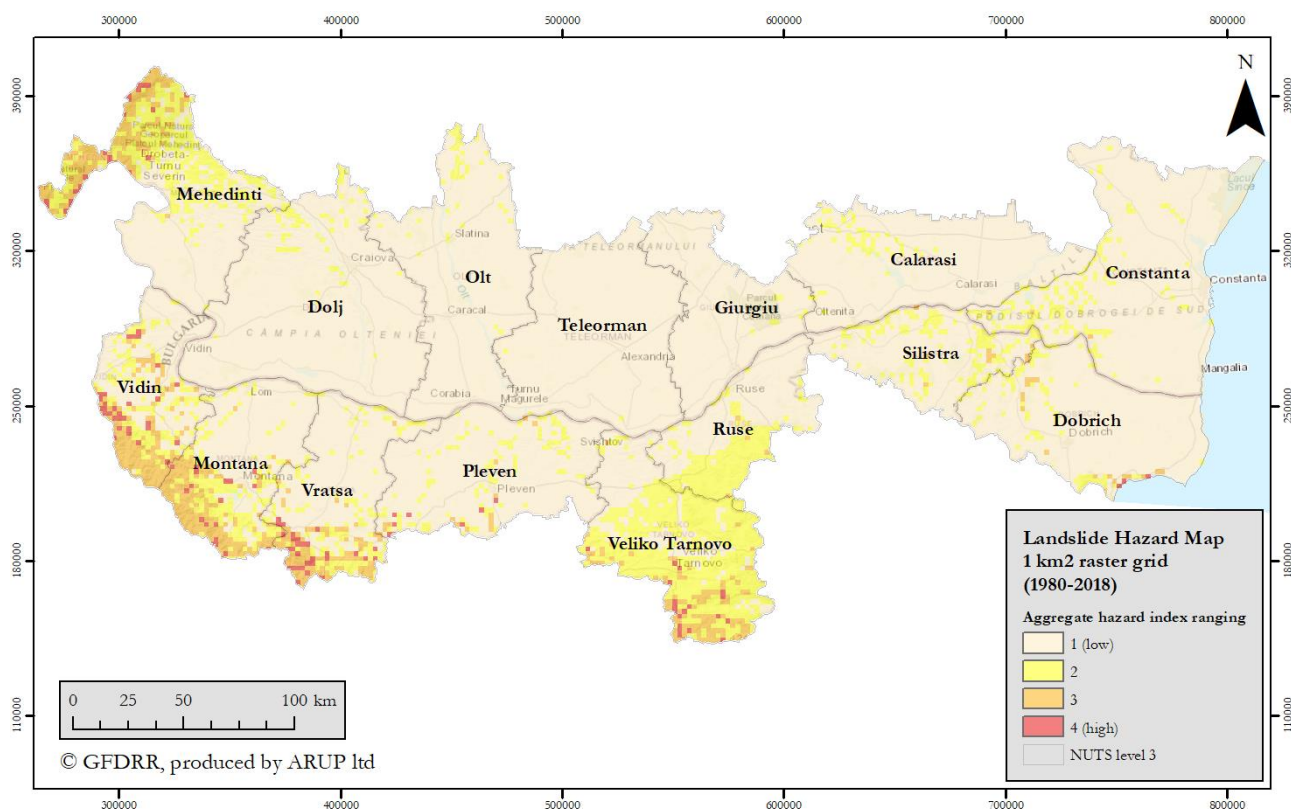


Figure no. 3-70 Landslide in the program area

3.1.10. CULTURAL HERITAGE

Cultural heritage is of three main categories: real estate - historical monuments, movable (paintings, mobile sculptures, furniture or products) and intangible (traditions, knowledge held by certain categories of people).

3.1.10.1. Immobile cultural heritage in the programme area

The updated list of historical monuments, approved by the Ministry of Culture in 2015 contains around 30,000 entries, classified into the categories of monuments (usually - single construction or several buildings built with the same destination), ensembles (coherent groups of constructions) and sites land with vestiges) - by reference to the relation of the constructions or vestiges with the afferent land or with the neighboring constructions, grouped in four categories by reference to their function

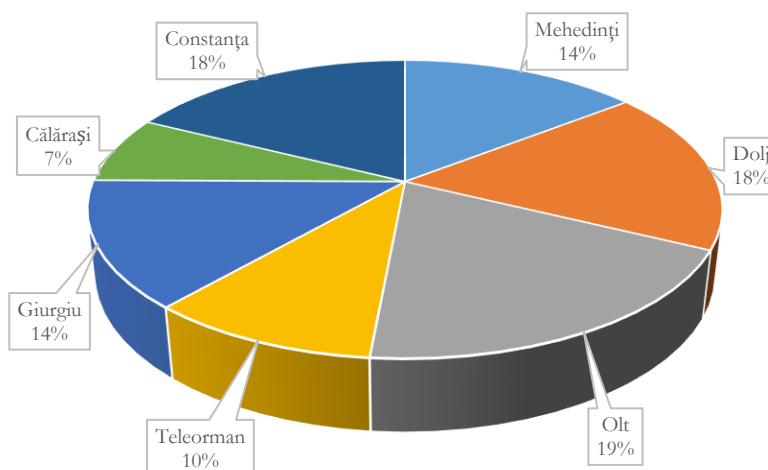
- Archaeological monuments - category I
- Architectural monuments - category II
- Public monuments - category III

⁶³ Territorial Analysis for the Romania-Bulgaria Cross-Border Region



- Memorial monuments and funerals - category IV

In terms of value, they are divided into monuments of national and universal value⁶⁴ (group A) and monuments representative of the local cultural heritage (group B). Many of them are located in rural areas.



Source of data: National Heritage Institute

Figure no. 3-71 Historical monuments in program area - Romania

In the area of action of the program most historical monuments (depending on the total number) are found in Olt, Dolj and Constanta counties, on the opposite side is Calarasi County.

The statistical situation from 2015 for the 7 counties concerned is presented in the following table.

Table 3-9 Historic monuments in the program area by category - Romania

	Total number	Category I Archeology	Category II Architecture	Category III For public	Category IV Memorials and funerals
Mehedinti	570	164	368	9	29
Dolj	700	98	556	23	23
Olt	758	130	598	13	17
Teleorman	393	83	299	8	3
Giurgiu	540	228	280	11	21
Calarasi	285	110	144	-	31
Constanta	694	476	158	43	17
TOTAL	3940	1289	2403	107	141

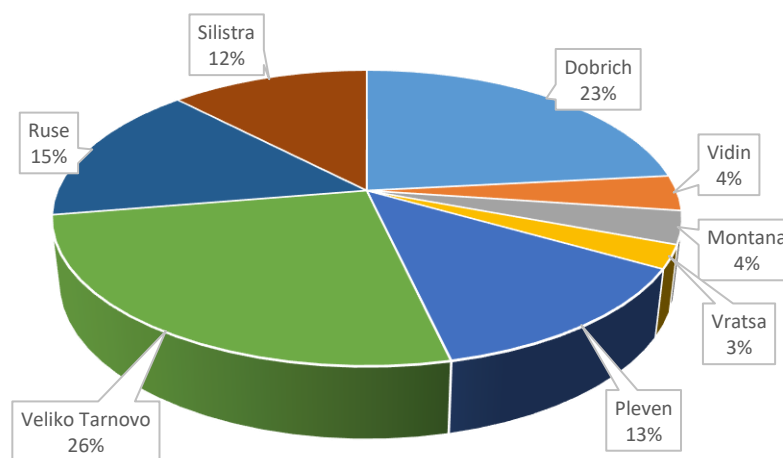
In the 7 counties in the cross-border area there are hundreds of objectives belonging to the cultural heritage, including architectural monuments, in a percentage of about 60% of the total number and archeological - in a percentage of about 30% of the total number. Some of these are

⁶⁴ The term is used from Law 422/2001, art. 8, para. 1, letters a and b. - Romania

important tourist attractions. In addition to the cultural heritage of the area there are many places of worship of various denominations, especially the Christian Orthodox, some of which are important centers of pilgrimage and religious tourism.

In Bulgaria, according to the Register of National Cultural Valuables (NCV) to the National Institute for Immovable Cultural Heritage of Bulgaria, the total number of all types of NCV is over 40,000, among which 13,500 are archaeological. Most of the historical monuments are found in Veliko Tarnovo, Dobrich and Ruse district. Also, these areas are the most visited by tourists.

The archaeological NCVs are relatively evenly distributed throughout the country and are largely outside the settlements.



Source of data: National Institute for Immovable Cultural Heritage

Figure no. 3-72 Historical monuments in program area - Bulgaria

The wine route of the Roman emperors and the Danube passes through the program area, which includes 20 archaeological sites and 12 wine regions. It covers four countries, Croatia, Serbia, Bulgaria and Romania. This route connects the archeological sites with their individual histories, which are monuments with the leadership of the Roman emperors in the introduction of the Roman culture along the northern border of the Empire. In the Danube region, wine as a key theme is combined with the introduction of Roman cultures and social morals⁶⁵.

The program area consists of 19 RAMSAR sites, these being located partially or totally in the area of interest. In addition, the areas included in the program in the two countries benefit from a higher popularity because in Romania out of 20 sites present in the country, 14 are in the program area, and in Bulgaria out of the 11 in the country, 5 are in the program area. Their location is shown in the following figure.

At a general level, one of the pressures exerted on the elements of the cultural heritage is the air pollution. This can damage the properties of the materials, which can lead to the loss of significant buildings. Increases in O₃ concentrations can degrade and discolor the colors of historic monuments, and suspended particles can intensify dirt. According to research conducted by the

⁶⁵ "Cultural Route of the Council of Europe" certified in 2015 <https://www.coe.int/en/web/cultural-routes/the-roman-emperors-and-danube-wine-route>



United Nations Educational, Scientific and Cultural Organization (UNESCO), it has been identified that for example PM10 together with NO₂ and SO₂, is a risk factor for the corrosion process, and dirt from limestone and glass⁶⁶. Given that in the program area there were overruns for both NO₂ and O₃, over time the elements of cultural heritage could be affected.

⁶⁶ EEA Report, NO10/2019, Air quality in Europe - 2019 Report

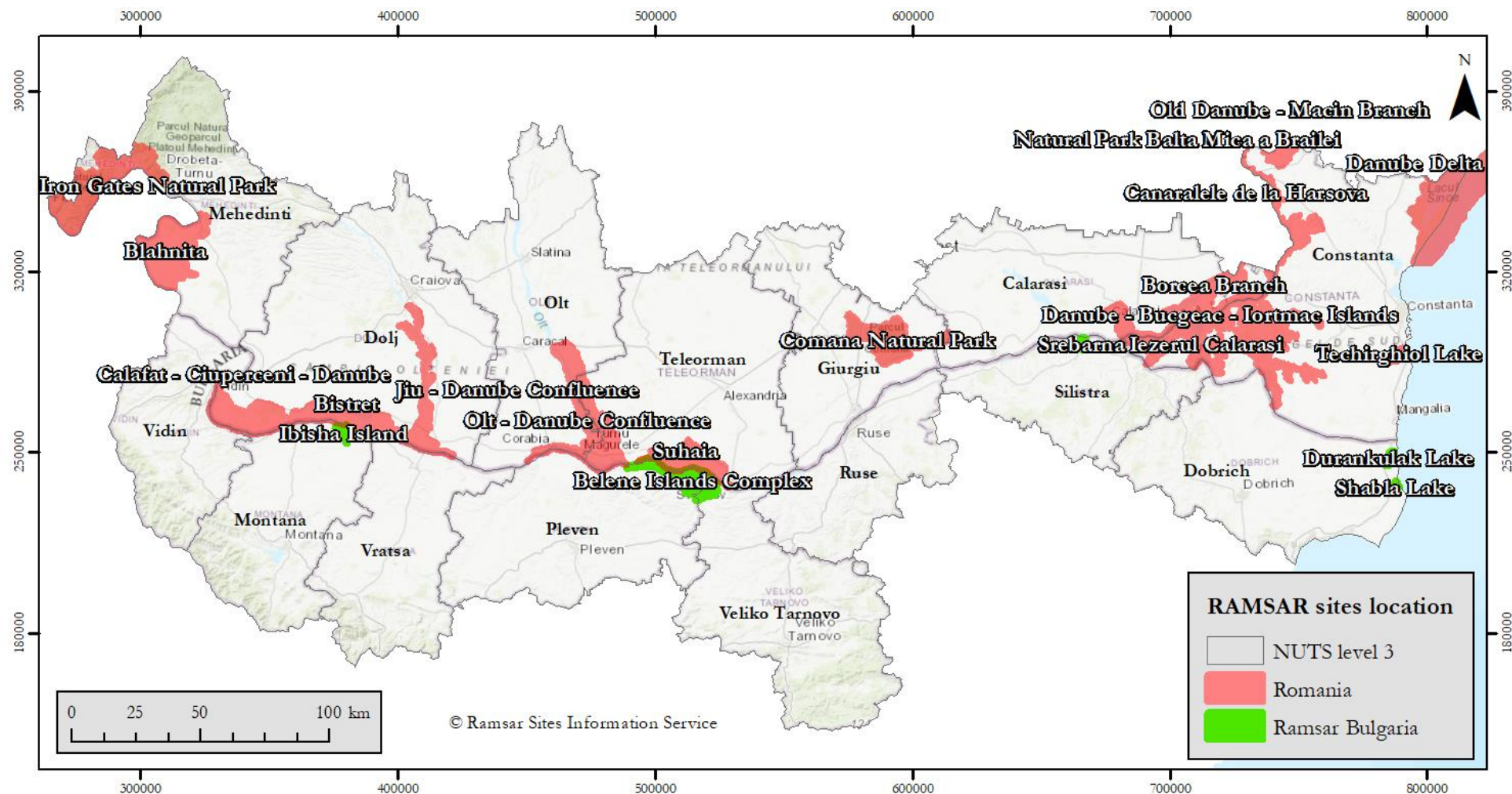


Figure no. 3-73 Ramsar sites on the programm area

Museums and collections

The movable heritage is characterized by the possibility of transporting and it is found in museums, collections, religious historical monuments or memorial houses: paintings, objects of worship, artifacts, icons, historical handicrafts.

- Mehedinti - two museums in buildings classified as historical monuments, the Iron Gates Regio Museum and the Drobeta Turnu-Severin Art Museum;
- Dolj - two museums in Craiova at Constantin Mihail Palace (today the Art Museum and the Central School for Girls, today the Oltenia Museum);
- Olt - six museums located in buildings classified as historical monuments;
- Teleorman - three museums located in buildings classified as historical monuments;
- Giurgiu - five museums;
- Călărași - one museum, the Oltenița Archaeological Museum;
- Constanța - four museums, all of them located in the city of Constanța.

Joint RO-BG exhibitions (on archeology - artifacts, modern art or other topics of interest) could contribute to the development of sustainable tourism and cross-border social cohesion.

3.1.10.2. *Traditions*

Traditions and customs in Romania are mainly related to winter holidays, but also to Easter, of which the most representative are:

- Carolling is one of the most common customs of winter holidays;
- Martisor, which celebrates the coming of spring;
- Wedding preparation ceremonies;
- St. Andrew is a special event based on ancient traditions, perhaps pre-Christian, intended to ensure the protection of people, animals and households.

The Romanian holidays culinary traditional recipes, especially in the rural environment, are well preserved and can be researched and capitalized, having a great tourist potential. In Bucharest, in recent years, there have been at least three weekend or temporary fairs in which traditional food products are promoted: in the USAMV courtyard - University of Agronomic Sciences and Veterinary Medicine in Bucharest, Ministry of Culture and at the National Defense University base at Cotroceni neighbourhood.

The main customs and traditions of Bulgaria are particularly represented by folk manifestations, which are part of the Bulgarian culture, a mixture of pagan beliefs and Christian practices. The most popular are those related to the Easter and Christmas holidays, but there are also specific traditions, such as:

- TRIFON ZAREZAN, the feast of vineyards and wine;
- KUKERII, games with masks, held at the end of winter, as a celebration of the arrival of spring, reminiscent of the cult of Dionysus;



- NESTINARSTVO, an event in which people dance barefoot on the embers, in a trance, with the icon of St. Constantine in their hands;
- LAZARUVANE, spring tradition in which young girls are adorned with flowers, dance and sing, symbolizing the awakening of nature to life.

3.1.11. LANDSCAPE

According to LANMAP 2 the predominant landscape types in the program area are Continental-Hills-Sediments-Arable land. In the east and northeast, we identify the type of landscape Steppic-Hills-Sediments-Arable land.

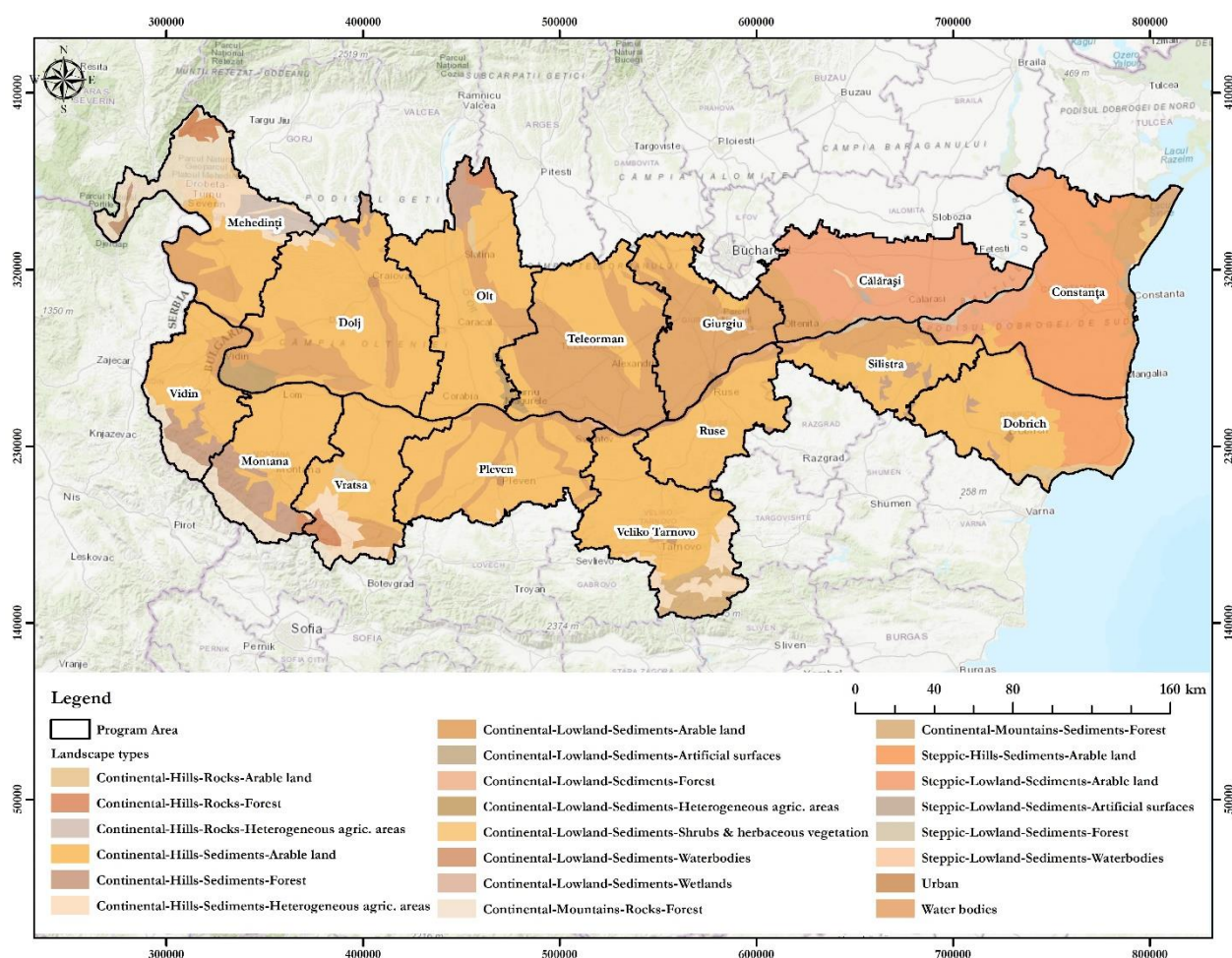


Figure no. 3-74 Landscape types in the programm area

The cross-border region is characterised by an exceptional biological diversity and by valuable natural landscapes which are uneasily accessible and endangered by climate change.

In the framework of the European Landscape Convention, the study “Increasing the value of the Romania-Bulgaria cross-border area landscapes” aimed at providing first elements to encourage public authorities to adopt policies and measures at local, regional and cross border level for protecting, managing and planning landscapes so as to maintain and improve landscape quality and bring the public, institutions and local and regional authorities to recognise the value and



importance of landscape and to take part in related public decisions. The integration of the landscape dimension in the preparation of spatial management policies, both general and sectorial, will lead to a better protection and management of natural heritage in the cross-border area.

On the Romanian side there are a variety of landscapes, of about 45 landscapes with mountains with gorges and canyons, hills and plateaus, plains and river plains, rivers and lakes⁶⁷.

In point of landscape, Mehedinți County is characterised by the grand landscape of the Danube River and its canyon, the mountainscape diversity, the presence of remarkable flora and fauna elements, many of which have been included in scientific reserves.

Dolj County is characterised by a variety of landscapes such as hills (Dealul Amaradiiei), plains (Câmpia Romana, Lunca Dunării), rivers (the Jiu, the Danube); lakes (Bistret, Fantana Banului, Maglavit, Golenti, Ciuperceni), which are all tourist attractions, along with the natural reserve of remarkable landscape value.

Natural attractions of Olt County, include The Danube Valley, with its islands and beaches, offering valuable landscapes of recreational value, The Olt Valley, looking like a garland of lakes after the now operational hydropower developments were put in place, attracting by the beauty of the images created by the vast water surfaces, forests, with a variety of tree species, which create outstanding landscapes throughout the vegetation stages.

It is said of Călărași County that the Danube creates fairy-tale landscapes like Ostrovul Haralambie and Ostrovul Șoimul are only some of the areas that deserve full attention. Sarulesti, a community on the left bank of Mostiștea River and Valea Roșie Lake, in the commune of Mitreni, is remarkable, as a naturally occurring Salt Lake.

Giurgiu County is renowned for the landscapes in and around the commune of Comana. The Comana forest reserve is a natural monument, a paradise of flora and fauna specific to the Danube Plain.

Teleorman County is characterised by a variety of landscapes of planins (Lunca Dunării), rivers (the Olt, Danube) and lakes (Bercelu, Balta Roșie).

Constanța County is renowned for its outstanding natural landscapes in 26 nature reserves, including Cheile Dobrogei, Nature reserve Obantul Mare and Movile Cave, The Chalky Walls at Petroșani.

According to the landscape zoning of Bulgaria (Petrov, 1997), the program area falls within the boundaries of two areas: North Bulgarian zonal area of the Danube plain and Balkan area. The first area is divided into 4 sub-areas and the program area falls within the following 3: Northern Danube sub-regional area (parts of districts of Vidin, Montana, Vratsa, Plevna, Veliko Tarnovo, Ruse and Silistra), Southern Danube sub-regional area (parts of districts of Vidin, Montana, Vratsa, Plevna,

⁶⁷ Landscape Atlas - Landscape identification and character assessment in the Romania-Bulgaria cross border area, 2014

Veliko Tarnovo) and South Dobrudzha sub-regional area (parts of the districts of Ruse, Silistra and Dobrich).

Of the sub-areas included in the scope of the Balkan area, only 2 falls into the program area: Western Balkan sub-regional area (parts of the districts of Vidin, Montana and Vratsa) and Central Balkan sub-regional area (parts of the districts of Vratsa and Veliko Tarnovo).

- According to the regional differentiation of the landscapes in Bulgaria (Velchev, Todorov, Penin, 2003) the territory of Bulgaria falls into three large landscape provinces of Eurasia: Alpine, Eastern Mediterranean and Pontic. The target area covers part of the Alpine and Pontic provinces.

The Alpine province is divided into the Moesian and Stara Planina (Balkan) subprovinces. Each has two landscape areas.

Moesian sub-province

- Danube-Dobrudzha area (parts of the districts of Vidin, Montana, Vratsa, Pleven, Veliko Tarnovo, Ruse, Silistra, Dobrich). The most important characteristics of this area are: covers the northern part of the Danube plain and Dobrudzha; steppe and forest-steppe complexes predominate; flat-hilly relief; along the Danube river and its tributaries are developed azonal hydromorphic and subhydromorphic landscapes; significant changes that have occurred under the human influence - anthropogenized landscapes; two nature parks: Persina and Rusenski Lom, and Srebarna Biosphere Reserve.

- South Danube-Ludogorska area (parts of the districts of Vidin, Montana, Vratsa, Pleven, Veliko Tarnovo, Ruse, Silistra, Dobrich). The most important features in this area are: conditional border with the Danube-Dobrudzha area; a clear border with the Pre-Balkans to the south; greater fragmentation of the relief; formation of forest and forest-steppe landscapes; hilly relief; strongly anthropogenically changed; two nature parks, one of which falls within the target area (Rusenski Lom)

Balkan sub-province

- Pre-Balkan area (parts of the districts of Vidin, Montana, Vratsa, Veliko Tarnovo). The most important characteristics of this area are: occupies the foothills of Balkan; transitional nature of all landscape components; strongly fragmented relief in vertical and horizontal relation; $\frac{3}{4}$ the area is occupied by hilly relief; karst landscapes give a specific look; in the eastern parts natural forests of Tertiary and Pleistocene relics are preserved.

- From the Pontic province, the program area falls only within one sub-province (West Pontic) and one area (Black Sea area - part of the district of Dobrich). The most important characteristics of this area are: separated due to the specific influence of the Black Sea; landscapes, other than inland.

In accordance with the above classification, on the Bulgarian side there are unique rock formations, plains and rivers, variety of waterfalls and canyons.



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The region of Vidin is characterized by the presence of unique geomorphological and rock formations as well as remarkable caves. Some of them are: „the Belogradchishki Rocks“, „the Magurata Cave“, „Borov rock“, „Levi and desni suhi pech“, „the Venetsa Cave“, etc.

The region of Vratsa is characterized by a variety of caves, waterfalls and interesting rock formations. The most famous among them are the Ledenika Cave, the Vratsata Pass, the Skaklya Waterfall, the Borov Kamak Waterfall, and the God's Bridge near the village of Lilyache and the Vratsa Balkan National Park.

The region of Montana is characterized by variety of landscapes, such as plain that changes into mountains. The presence of medium and high mountain hypsometric belt in the southern part of the region is a prerequisite for the formation of waterfalls.

There is a variety of canyons, valleys and caves in the region of Pleven - among them - the Karst canyon valley of the Chernelka River, Tertiary fossil deposit, caves.

Unique natural formations are placed in the region of Veliko Turnovo. Among them - the Emen canyon, ancient Roman city, geocomplex Zarapovo.

In the region of Ruse there are many interesting natural formations, historical landmarks, eco-trails, parks and monasteries.

On the territory of Silistra is the National Architectural and Archaeological Reserve Durostorum-Drustar-Silistra. It contains unique restored monuments from the Roman Empire, as well as from the medieval Bulgarian state.

The region of Dobrich is characterized by the Canyon of Suha Reka which together with its surrounding areas is a natural and archaeological monuments. Another natural monument is the Alexandryiska Forest which represents the only natural locality of coppice linden plantations within the region. The area has unique caves, declared as archeological monuments. These are Gyaurler Rock Monastery (Nevernishki Zhilishta), Kara Kaya Cave Colony (Cherna Skala) and Balaban Kaya Cave Colony (Golyama Skala). Gyaurler is one of the earliest rock monasteries not only in the Bulgarian lands, but also in Europe.

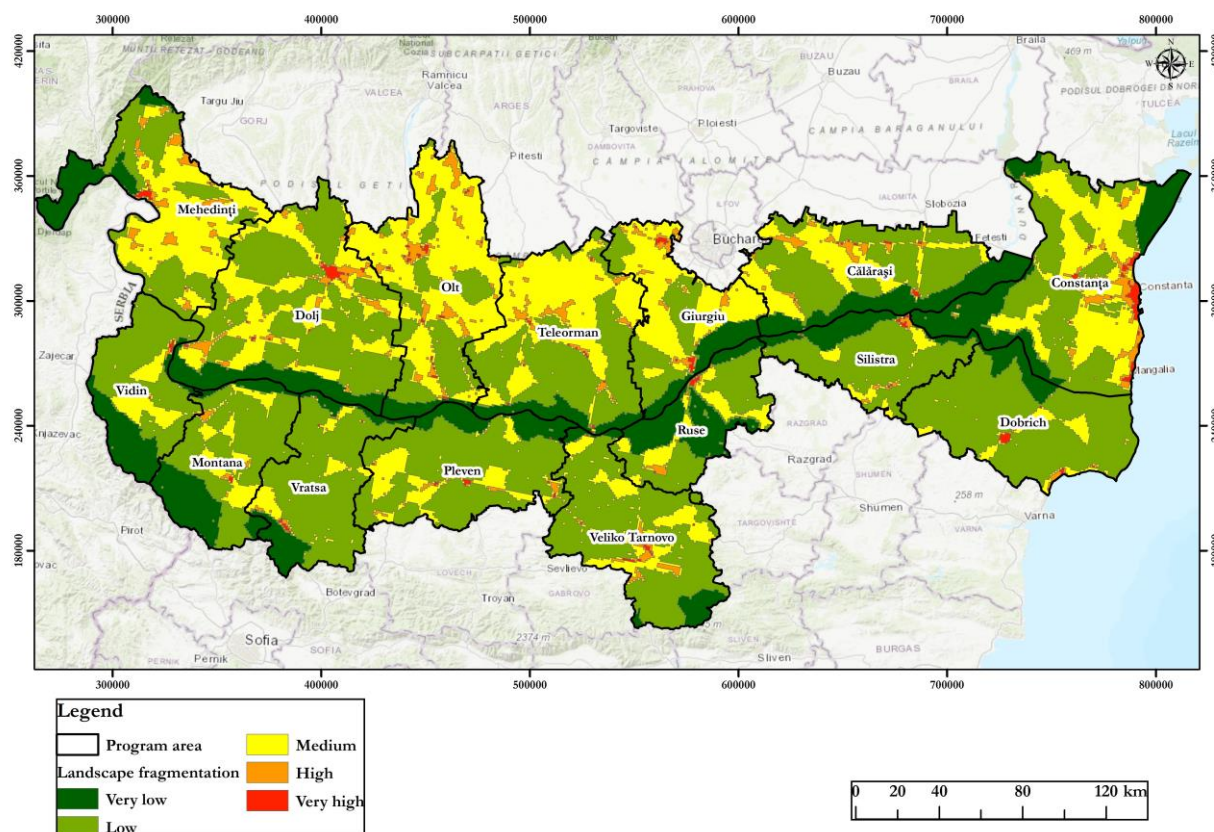


Figure no. 3-75 Variability of landscape fragmentation in the programm area

Urban and infrastructure development is a pressure on the landscape, especially when this development is very intense. In the program area, the fragmentation of the landscape is largely low, except in the more developed areas where the fragmentation of the landscape is medium and in the area of large cities it is high or very high.

3.1.12. ENERGY EFFICIENCY

The consumption of electricity and heat by final consumers, except for the consumption of energy used for transport, at European level in the period 2000-2018 showed various fluctuations, and in 2018 it was in a slight decrease compared to the last 2 years. The two countries in the program area are below the European average. But there is a slight difference between the two, Romania registering a higher consumption, and in a slight increase in the period 2013-2018. Bulgaria also showed various fluctuations during the analyzed period, but in 2018, consumption was decreasing compared to 2017.

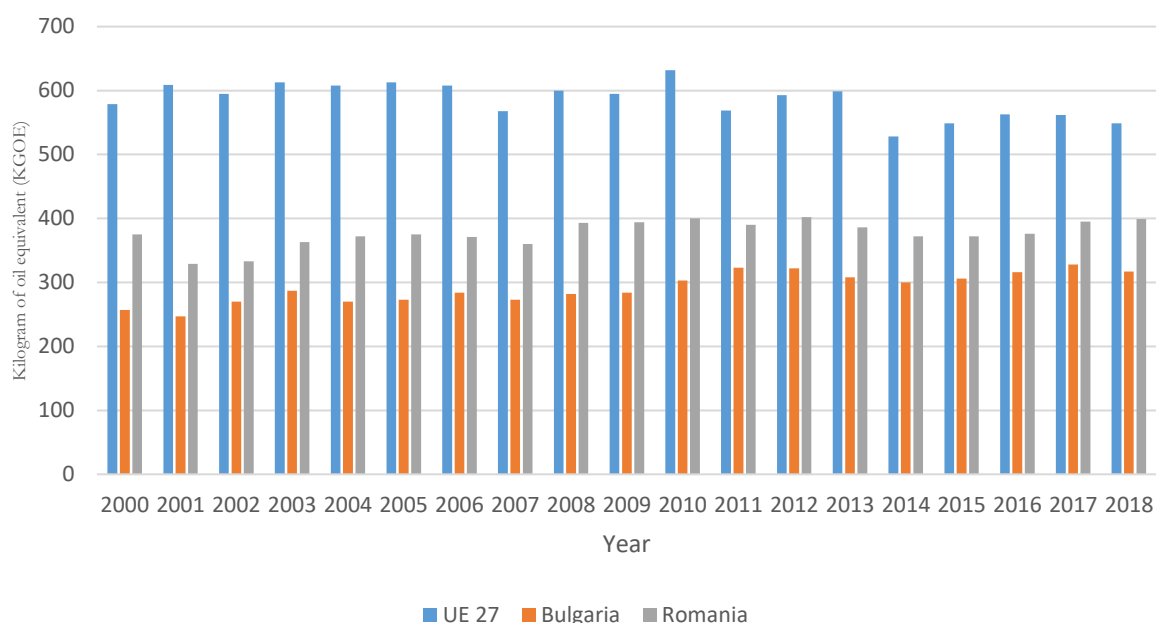


Figure no. 3-76 Final energy consumption in households per capita

Each country has set its target for 2020, depending on the European level, on the percentage of renewable energy used in final energy consumption. Both countries in the program area have met their target, even exceeding it.

This indicator contributes to Sustainable Development Goal 13 „Take urgent action to combat climate change and its impacts”.

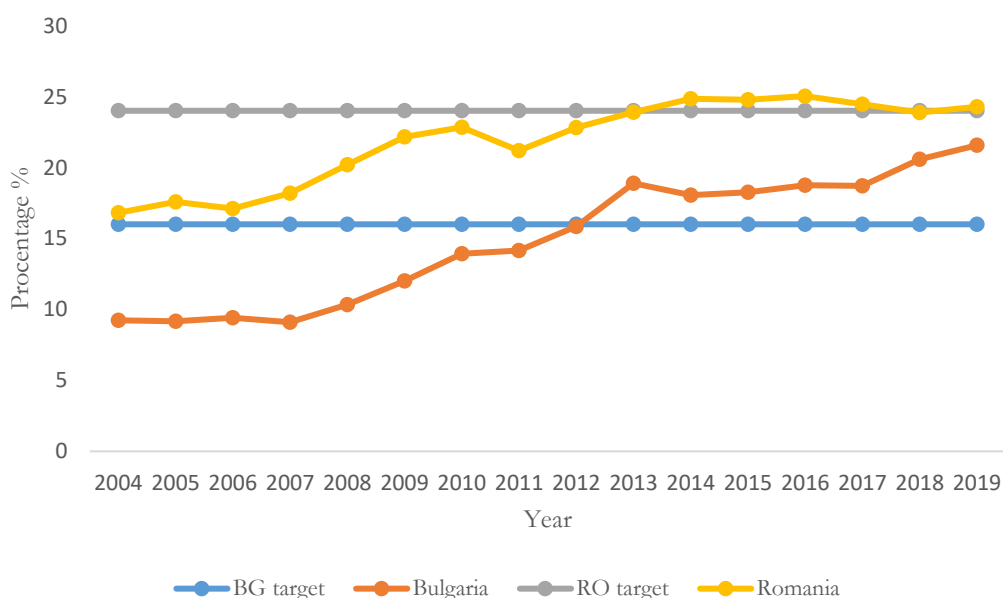


Figure no. 3-77 Share of renewable energy in gross final energy consumption

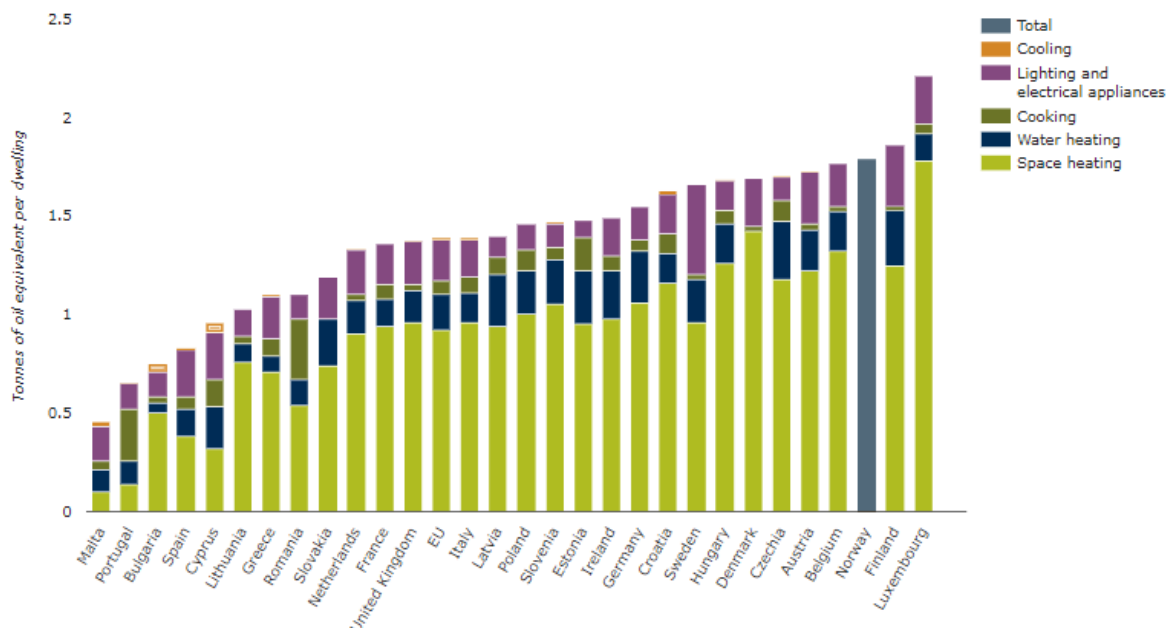


Figure no. 3-78 Energy consumption by end use per dwelling, 2016

Regarding the countries in the program area, Romania and Bulgaria, the values of average energy consumption are relatively close, which makes the difference between the two countries is energy consumption for water heating and cooking, being a higher consumption in Romania. These differences are explained mainly by different climatic conditions.

Bulgaria

The need to improve energy efficiency in Bulgaria is one of the main priorities of the Bulgarian government.

Bulgaria has significant potential for the implementation of energy efficiency measures. Increasing energy efficiency will contribute to limiting emissions of carbon dioxide and other greenhouse gases and therefore help prevent climate change.

One of the measures that the Bulgarian government has taken to increase energy efficiency is the Energy Efficiency Act. It introduces the requirements of Directive 2006/32/EC and regulates public relations relating to the conduct of public policy to increase energy efficiency in final energy consumption and the provision of energy services.

Below we present the strengths and weaknesses of the state of energy efficiency for the target areas of the Bulgarian part. The current state of the target areas is no different from that in the country as a whole.

There is an energy-intensive structure. Much of the technology, machinery and equipment is morally obsolete, energy-intensive. There are no systems for monitoring and controlling energy consumption in the municipal building stock, unfavorable energy balance, which is associated with strong preponderance of fuel imports over the use of local resources lacks strategic documents at

regional and municipal level. Another part that relates to the main difficulties in energy efficiency conversions is the lack of monitoring and analysis practices, lack of targeted financial resources, lack of coordinated action between institutions. energy efficiency.

Positives for the areas of the target groups of the Bulgarian part are for the presence of energy efficiency units at municipal and regional level, positive attitude and commitment of local authorities on the implementation of energy efficiency measures.

Romania

At the level of Romania in 2020, the Energy Strategy of Romania 2020-2030 was adopted, with the perspective of 2050, being obtained the environment approval no. 53 from 04.11.2020.

According to the Energy Strategy of Romania 2020-2030 with the perspective of 2050, Romania has the necessary resources to grow the energy system. Energy efficiency in Romania has continuously improved in recent years. Between 1990 and 2013 recording the highest average rate of decrease in energy intensity in the EU, of 7.4% amid the restructuring of industrial activity.

Two of the counties in the Dolj and Mehedinți program area were considered by the European Commission as possible areas where the Fund's intervention for a fair transition would be justified. It focuses on the regions and sectors most affected by the transition, as they depend on fuels fossil or processes with significant carbon dioxide emissions.

Romania has rich and varied resources of renewable energy: biomass, hydropower, geothermal potential, respectively for wind and photovoltaic energy, they are distributed throughout the country. It has a high potential for hydropower resources. Out of a total of the theoretical linear potential of approximately 70.0 TWh / year, the theoretical potential of inland watercourses is approximately 51.6 TWh / year, and that of the Danube (only the Romanian part) is estimated at approx. 18,4 TWh/year. Due to its geographical position, Romania has the possibility to capitalize on wind energy in the area of Dobrogea, Bărăgan and Moldova, and the program area overlaps over the south of the area of Dobrogea and Bărăgan in Constanța and Călărași counties.

Regarding solar energy, its distribution in Romania is relatively uniform, but the maximum values are recorded in Dobrogea, eastern Baragan and southern Oltenia, and the program area partially overlaps with these areas, for example southern Oltenia in Mehedinti, Dolj and Olt.

In conclusion, certain sections of the program area in Romania have a high potential for capitalizing on wind and solar energy.

3.1.13. SUSTAINABLE TRANSPORT

3.1.13.1. Rail transport

The development of transport, from the point of view of environmental protection are found primarily in the carbon footprint. Transport activities are currently responsible for a significant share of total greenhouse gas emissions. Which is why the main goal is to use sustainable transport. The use of rail transport is a less polluting option.



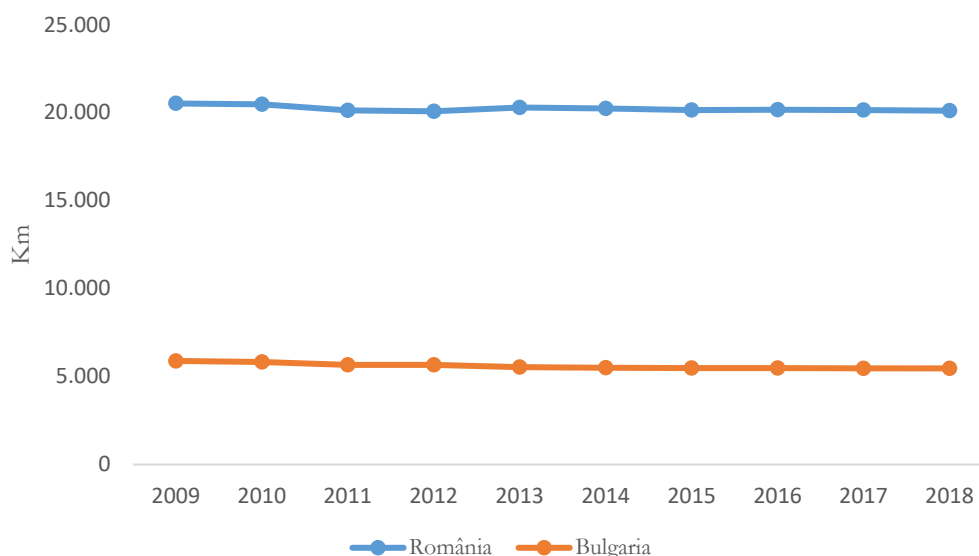
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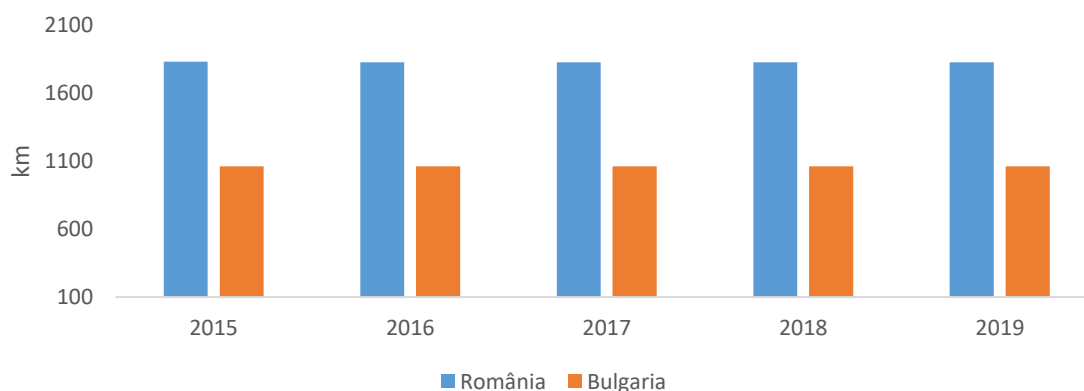
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Source: National Institute of Statistics RO and BG

Figure no. 3-79 The situation of the railway lines at the level of the two countries

In the area of the program, in the two countries, Romania and Bulgaria, in the period 2015-2019, the length of the railway lines was constant, with the exception of Romania in 2015 when it registered a higher value, compared to the rest of the period. Only the counties and districts in the program area were taken into account.



Source: National Institute of Statistics RO and BG

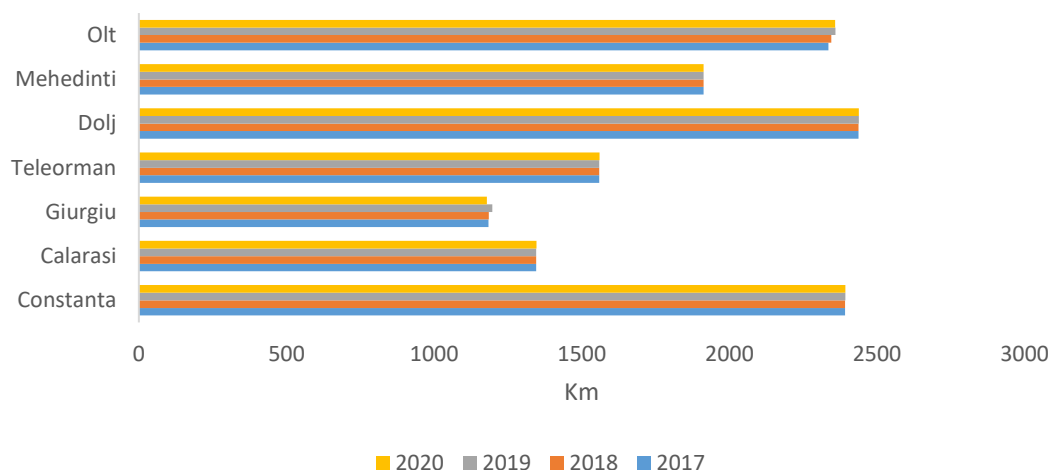
Figure no. 3-80 The situation of the railway lines in the programm area

3.1.13.2. Road transport

Road traffic is one of the most used types of transport, because it has the largest infrastructure, but sometimes it is also the most polluting. The road traffic in the two countries 86791 km long in 2018 in Romania and 19917 km in Bulgaria.



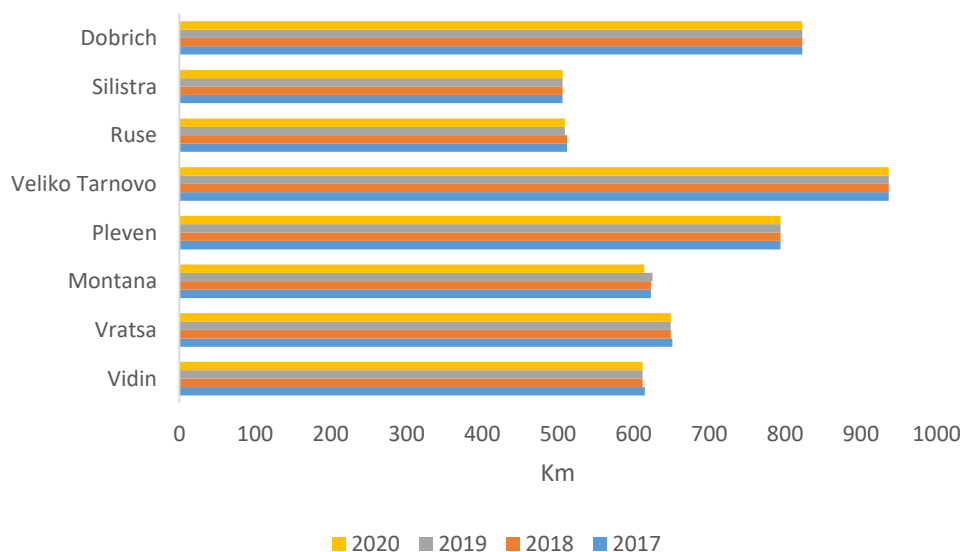
In Romania, the category of public roads includes national and county roads, communal roads. The county with the longest public roads is Dolj, and with the smallest number is Giurgiu County. During the analyzed period in almost all counties, the length of the roads was constant, with the exception of Olt County, where there is a gradual increase and a slight increase in Giurgiu county in 2019. County and communal roads are predominant.



Source: National Institute of Statistics RO

Figure no. 3-81 Road infrastructure in the programm area - RO

The following road categories can be found in the area of the program in Bulgaria is category I roads designed for long-distance transit traffic, category II designed for medium-distance transit traffic and category III roads within the built-up areas that are part of higher category roads. Category III roads are predominant. The district with the longest road length is Veliko-Tarnovo and with the lowest number of km of roads is Silistra. During the analyzed period, small changes were registered regarding the road infrastructure in the Ruse, Montana Vratsa and Vidin Districts.

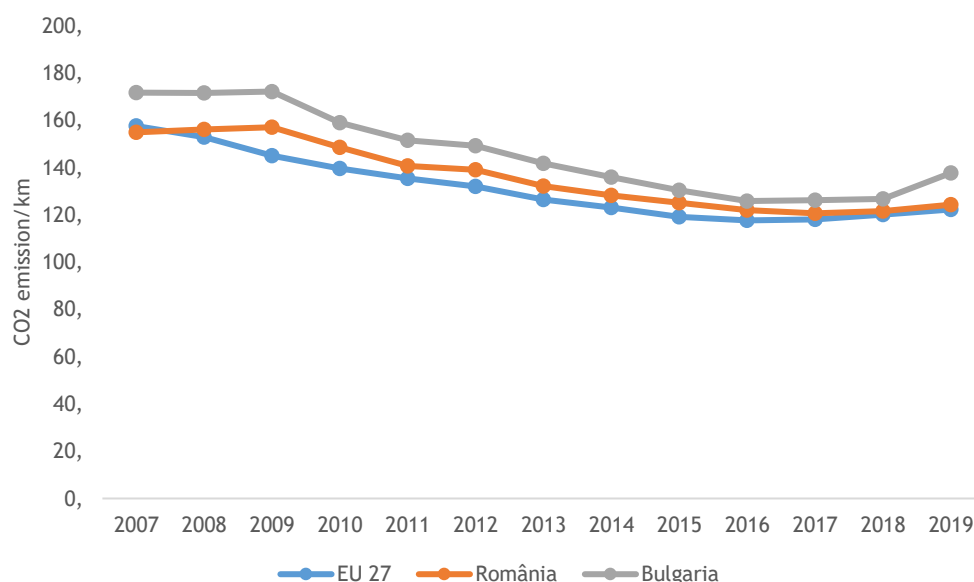


Source: National Institute of Statistics BG

Figure no. 3-82 Road infrastructure in the program area - BG

The average emissions of CO₂/km from new cars in the period 2009-2017 are on a downward trend, following a relatively stagnant period, and in 2018-2019 being recorded a slight increase. This analysis is valid both for the two countries included in the program and at European level. Bulgaria and Romania are above the average emissions of CO₂ / km, coming from new cars, at European level, in the analyzed period. This indicator contributes to the characterization of the objective of sustainable development number 12 - Responsible consumption.

As this information is not available at county / district level, CO₂ emissions from new cars are presented at the country level, taking into account that any change at the country level also affects the program area.



Source: Eurostat

Figure no. 3-83 Average CO₂ emissions per km from new passenger cars

Car fleet

In Bulgaria to measure the renewal of the fleet of motor vehicles for the transport of goods and passengers, national statistics use the indicator "share of newly registered and registered new vehicles". This indicator covers the most active part of the car fleet, which produces the largest volume of greenhouse gases and thus has a significant impact on the environment and society, as well as on road safety. Bulgaria has provided to Eurostat only data on the total number of cars driven in the country. However, for the share of cars by age, there is no data. The highest values of newly registered cars (a car registered for the first time in the country) were reported in 2006, 2007 and 2008 according to the National Statistical Institute. In 2007 they reached 16.8 percent of the total number of registered vehicles. Then there is a decline in values, as in 2016 the total number of registered vehicles was 7.6%. The number of registered new cars (Vehicles which have travelled no more than 6 000 km or have been delivered within six months of the date of their first registration) also increased in 2006 and 2007. In 2007, new passenger cars accounted for 2.1%



of the total number of registered vehicles. In other years, the trend is relatively the same, with percentages ranging between 0.5 and 0.6 percent of the total number of registered vehicles.

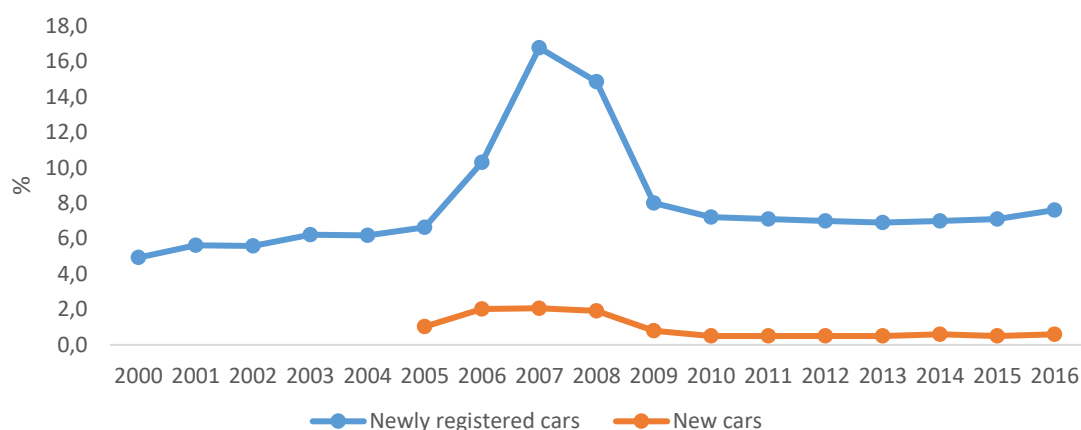


Figure no. 3-84 Share of newly registered and registered new vehicles of the respective type

Regarding the situation of the car fleet in the program area in Romania, the number of registrations in the program area in 2018 and 2020 were analyzed. In the figure below it can be seen that cars with an age between 16-20 years and over 20 years are predominant. Regarding the vehicles with an age of 0-2 years, it can be noticed that they are in very small number compared to the rest of the age categories, but an important aspect is that their number is on an ascending trend.

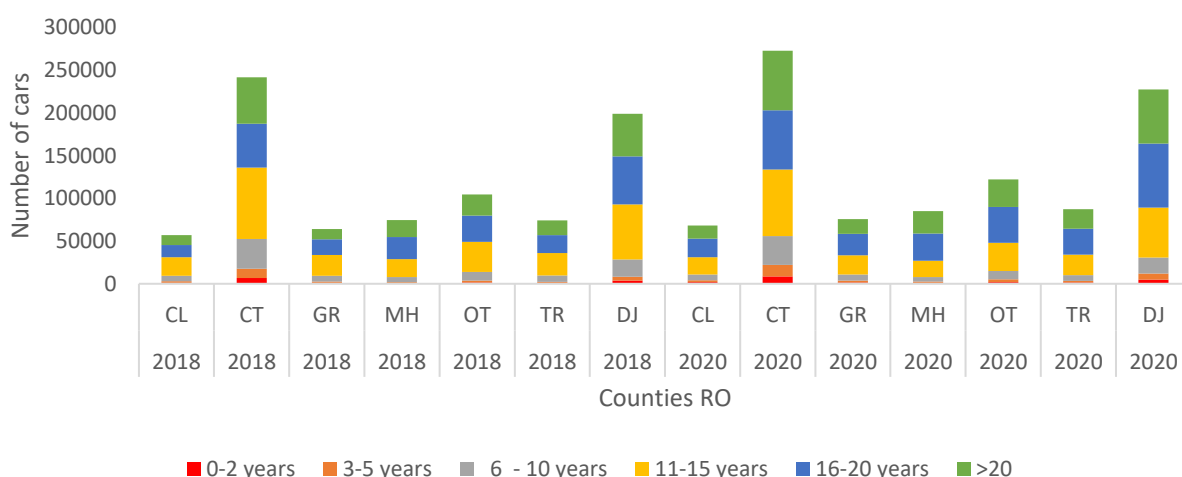


Figure no. 3-85 The age of the cars in the program area from Ro

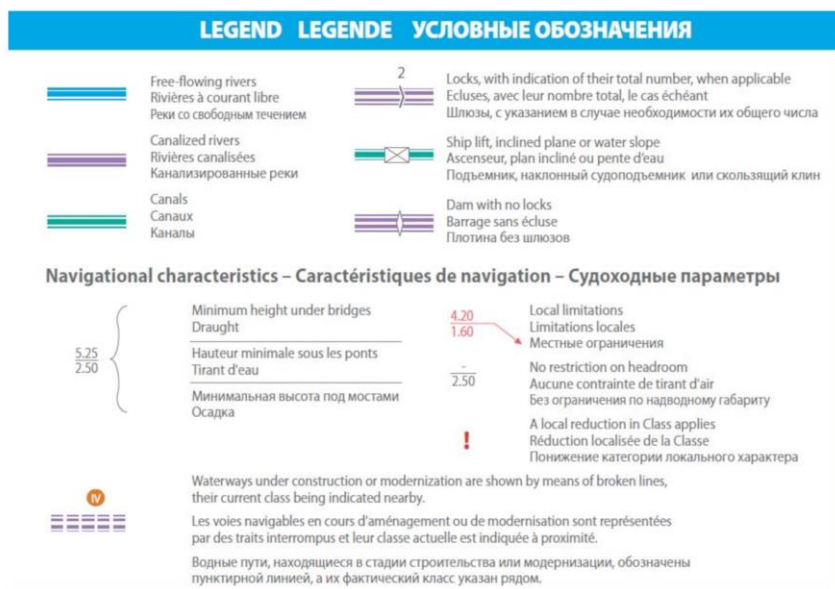
3.1.13.3. Inland waterway transport and ports

Inland waterway transport is a competitive alternative to road and rail transport. In particular, it offers an environment-friendly alternative in terms of both energy consumption and noise



emissions. Its energy consumption per km/ton of transported goods is approximately 17 % of that of road transport and 50 % of rail transport. In addition, inland waterway transport ensures a high degree of safety, in particular when it comes to the transportation of dangerous goods. Finally, it contributes to decongesting overloaded road networks in densely populated regions (EC, 2021).

The program area includes one of the most important waterways, being the second largest river in Europe.



Source: UNECE 2018

Figure no. 3-86 Inland waterway network

On the Romanian territory, the Danube River crosses on a distance of 1075 km, having 13 ports. The Danube basin occupies 29.9%, being the largest share in its entire course. On the territory of Bulgaria, the Danube basin occupies 5.2%, and has 7 ports.

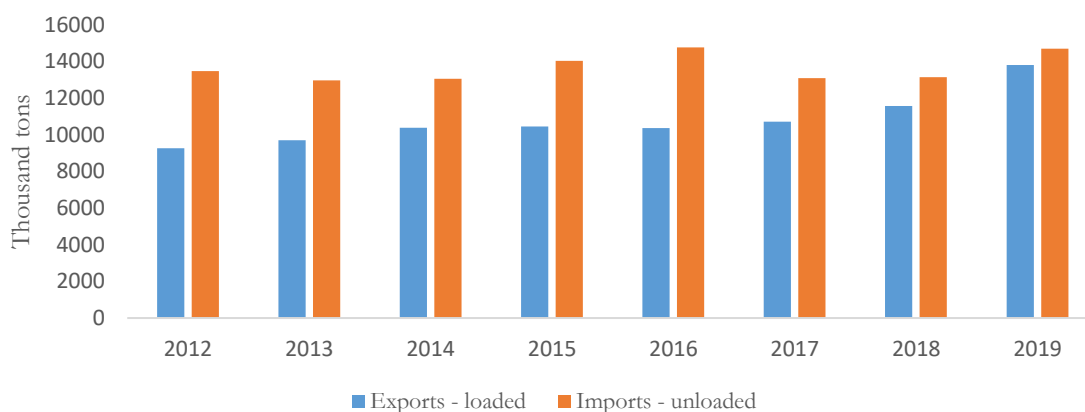


Table 3-10 Ports along the Danube River

Port	Km
Romania	
Moldova Noua	1048
Orșova	954
Drobeta Turnu-Severin	931
Calafat	795
Bechet	679
Turnu Măgurele	597
Zimnicea	554
Giurgiu	493
Oltenița	430
Brăila	170
Galați	150
Cernavodă	300
Tulcea	70
Bulgaria	
Vidin	793
Lom	752
Somovit	608
Svishtov	554
Ruse-Vest	496
Ruse-Est	490
Silistria	380

Source: .danubecommission.org/

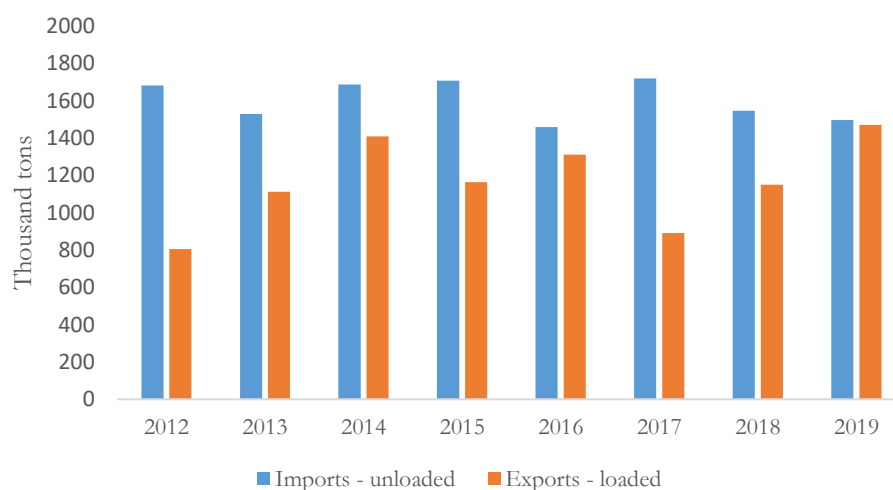
The trade realized on the waterways in Romania in the period 2012-2019, presented different fluctuations. Exports were mainly in an upward phase, and imports different periods of increase-decrease.



Source: National Institute of Statistics RO

Figure no. 3-87 Loaded and unloaded goods in river harbours - RO

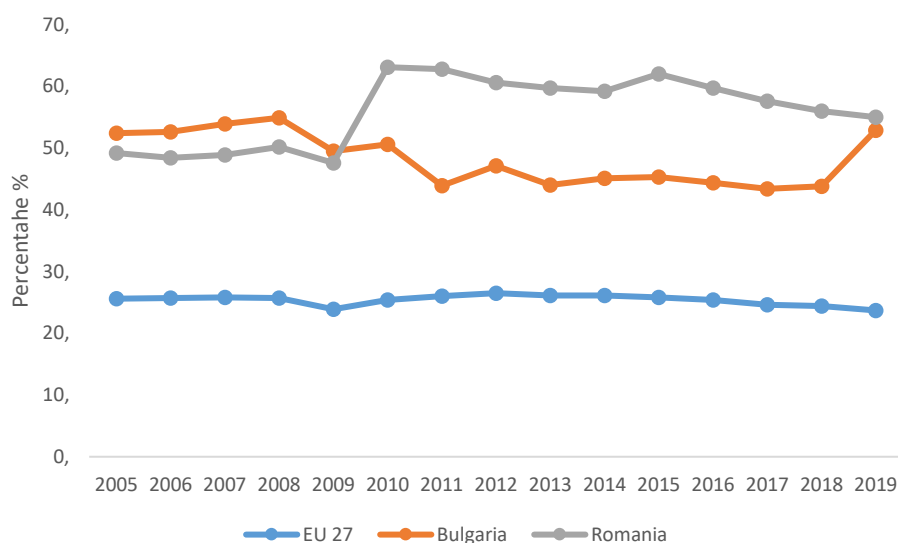
Regarding exports and imports made on waterways in Bulgaria in the period 2017-2019 there is an increase in exports and a decrease in imports, and in the period 2012-2016 there were various fluctuations.



Source: National Institute of Statistics RO and BG

Figure no. 3-88 Loaded and unloaded goods in river harbors - BG

Sustainable Development Goal number 9 „Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation”, has one of the international targets „Develop quality, reliable, sustainable and resilient infrastructure, including regional and transborder infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all”. Thus, analyzing its application in Romania and Bulgaria, by the share of land railways on inland waterways in total freight transport, it is found that both countries are above the European average. As this information is not available at the level of the program area, it was presented at the level of the two countries.



Source: Eurostat

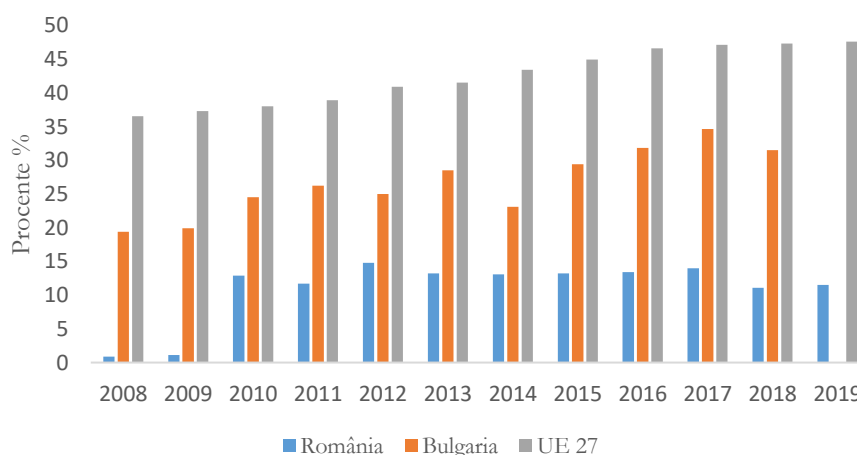
Figure no. 3-89 Share of rail land inland waterways in total freight transport

3.1.14. CIRCULAR ECONOMY

3.1.14.1. Current waste generation and management situation

The recycling rate of municipal waste in Romania in 2012 recorded the highest rate of 14.8%, after this period there were various fluctuations, reaching 11.5% in 2019. The main responsibility for waste collection and management lies with the municipalities.

Regarding the recycling rate in Bulgaria, there was an increase in the periods 2008-2013 and 2014-2017. In 2014 and 2018 there was a slight decrease, and for 2019, currently no data are available. Both countries in the program are below the recycling rate of EU27, to be mentioned in this case is that for 2019, it is an estimated value.

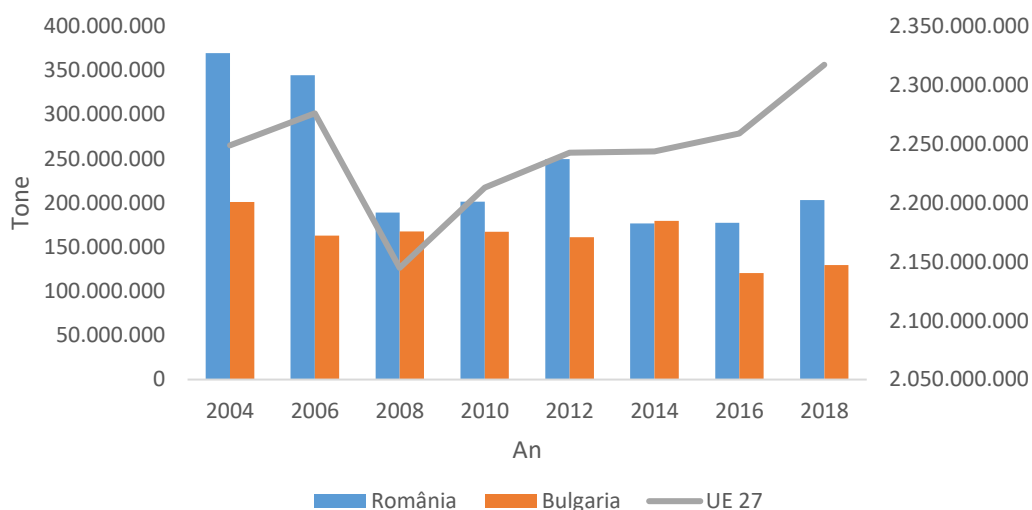


Source: EUROSTAT

Figure no. 3-90 Recycling rate during the period 2008-2019



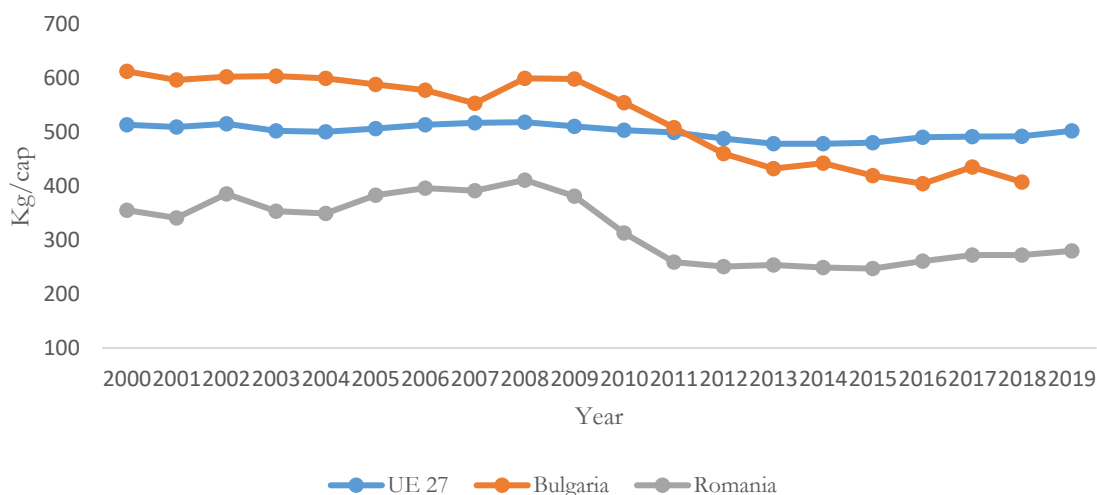
In Romania in terms of the amount of hazardous and non-hazardous waste generated in the period 2004-2018, there is a significant decrease in the period 2004-2008, followed by fluctuations, while Bulgaria in the period 2004-2014 is relatively constant, followed by a decrease since 2014. Also in the case of this indicator, the two countries are below the EU27 average.



Source: EUROSTAT

Figure no. 3-91 The amount of waste generated during the period 2004-2018 (amount of waste for EU27 read on the right-hand axis)

The amount of municipal waste per capita in the countries of the program area is decreasing in 2018, compared to the reference year, 2000. In Bulgaria, until 2011, the amount of waste per capita was above the European average, and for the year 2019, the data have not yet been reported. As for Romania, it has always been below the European average and since 2009 it is on a downward slope.



Source: EUROSTAT

Figure no. 3-92 Generation of municipal waste per capita

Romania

The degree of connection to the sanitation service in the program area has registered a gradual increase in recent years. According to the information from the Reports on the state of the environment at the level of the counties in the program area, it is found that the degree of connection of the population to salubrity services is over 50%, it should be mentioned that for Dolj, Călărași and Giurgiu counties these informationthis information.

In Mehedinți county in the period 2012-2018 it registered an increase from 50.11% to 64.69%, the most significant being in rural areas. In Dolj County, the degree of connection of the population to sanitation services, in 2017, was only 55.75%, it should be mentioned that in 2009, the degree was 33.01%. In Dolj County, the degree of connection of the population to sanitation services, in 2017, was only 55.75%, it should be mentioned that in 2009, the degree was 33.01%. Olt County has a degree of coverage with sanitation services in urban areas of 100%, but rural areas have a share of only 12%. These data are consecutive in the period 2015-2018. In Constanța County In the period 2015-2019 the degree of connection to the sanitation service in urban areas was 100%, and in rural areas it reached 91% in 2019, resulting in a county degree of connection to sanitation service of 97 %. In Constanța County In the period 2015-2019 the degree of connection to the sanitation service in urban areas was 100%, and in rural areas it reached 91% in 2019, resulting in a county degree of connection to sanitation service of 97 %. The largest amount of waste generated is represented by municipal waste. Landfills are the current environmental problem, with a negative impact on environmental factors. At the level of the program area, the existential problems are the non-selective collection of household waste, the storage of waste on open ground, the lack of compostable and transferable stations, as well as the fact that not all landfills where the activity was stopped in the past, have not was closed according to the procedures. Regarding the fulfillment of the recycling / recovery objectives, they cannot be evaluated at county level, considering the fact that the waste collected from one county can be treated in another county or even outside the country. For example, in Constanța County, the recycling rate of municipal waste collected in 2019 was 5.22%, and the recovery rate was 13.92%.

Bulgaria

In 2018 the amount of generated municipal waste in the Bulgarian part of the program territory is 503,945 tons. In the period 2015-2018 the amount of generated waste in the Bulgarian part is fluctuating, with a decrease in 2018 compared to 2015 by 2.78%.

On the other hand, there is a slight increase in the amount of waste generated per capita, which in 2015 was 365.81 kg/h/year, and in 2018 was 371.97 kg/h/year.

There is a positive trend in terms of the amount of waste directly disposed of per capita. While in 2015 this amount was 297.42 kg /h/y, in 2018 it was 131.70 kg/h/y or the share of landfilled household waste per capita decreased by 55.72%.

The total amount of recycled waste in 2018 is 37,964 tons, which represents 7.53% of the total generated waste. In line with the above trend is the indicator for the amount of recycled waste

per person from the Bulgarian part of the program area. In 2015, this amount was 19.10 kg/h/y, while in 2018 it increased to 28.02 kg/y/y, which is an increase by 31.83%.

All of the municipalities within the 8 Bulgarian districts have Waste Management Programmes until 2020 as some of them are updated for the next programme period.

Almost 100% of the population in the Bulgarian part is covered by the system for organized garbage collection. Exceptions are the regions of Dobrich and Veliko Tarnovo, where by 2018 this share is 94.7% and 99.8%, respectively. Municipal administrations have prepared schedules for the periodicity of the collection of household waste in the different settlements. The companies which collect and transport household waste to the respective regional landfills, obtain the necessary registration documents and keep records.

There are 9 regional waste management associations within the Bulgarian part of the territory. These are: Ruse, Silistra, Vidin, Pleven, Levski, Montana, Dobrich, Veliko Turnovo and Vratsa. Each regional waste management associations obtain and use common infrastructure for waste treatment. With this regard there are:

- 9 regional landfills;
- 7 separator installation;
- 4 composting installation.

There are sites for free delivery of separately collected waste from households, incl. bulky waste, hazardous waste and others in the cities with a population over 10,000 inhabitants.

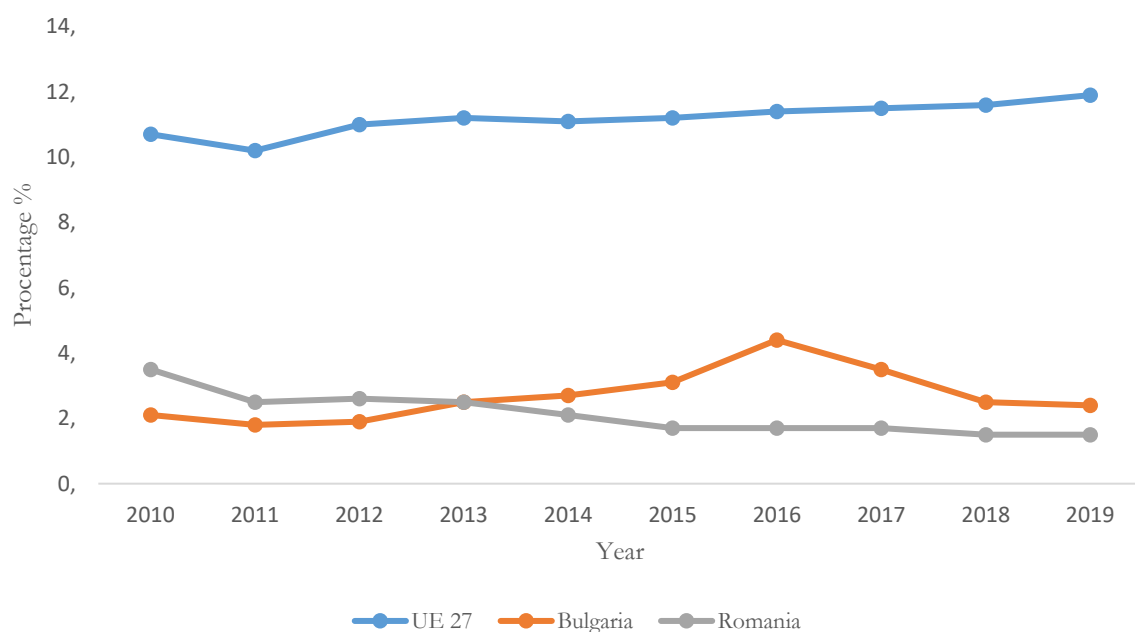
Sludge is generated from the following treatment plants - Ruse, Dobrich, Silista, Pleven, Veliko Turnovo, Gorna Oryahovitsa, Pavlikeni, Svishtov.

The main problems related to the waste management are:

- application of the waste management hierarchy -Landfilling remains the main method of waste treatment. The difficulties come mainly from the insufficient waste reduction measures received for landfilling and the fulfillment of the requirements for separate waste collection;
- Lack of economic instruments related to waste prevention.

3.1.14.2. Natural resource

The share of materials recovered and reused in the economy, thus saving the extraction of raw materials, in the period 2010-2019 both countries were below the European average. Romania's rate decreased in 2019 compared to 2010. In Bulgaria, however, this rate increased. A higher circularity rate indicates that more secondary materials replace primary materials, thus reducing the environmental impact of primary material extraction.



Source: EUROSTAT

Figure no. 3-93 Circular material use rate

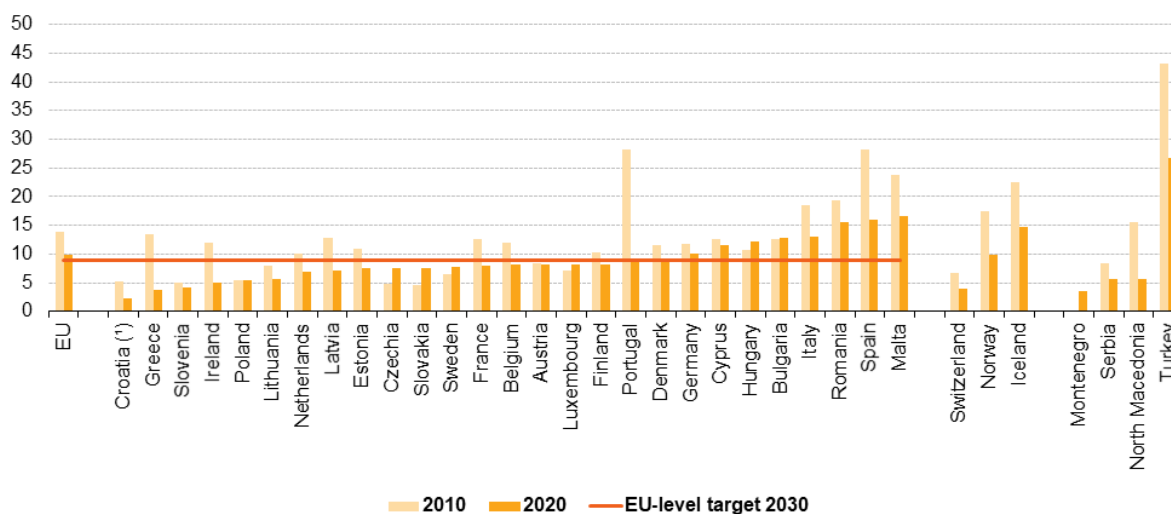
3.1.15. POPULATION AWARENESS

Regarding the human factor, at European level all the indicators that refer to the education process indicate that this region faces deep challenges. The level of basic education in higher education and lifelong learning is below the EU average. In addition, the cross-border area has seen a high number of emigrations of people with educational qualifications in science and technology in recent decades⁶⁸.

The effects of school dropout are felt on the unemployment rate, social exclusions, poverty but also health problems⁶⁹. At European level, Romania and Bulgaria are among the countries with a high dropout rate. Compared to 2010 in 2020 there was a decrease in school dropout in Romania and in Bulgaria a slight increase and by 2030 they should significantly reduce this phenomenon of school dropout.

⁶⁸ Border Orientation Paper - Romania-Bulgaria

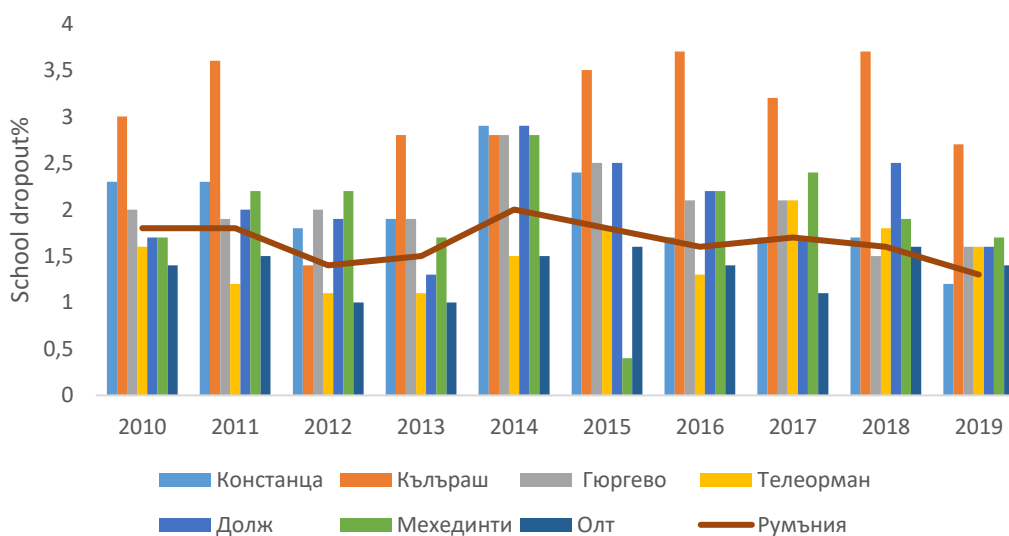
⁶⁹ https://ec.europa.eu/assets/eac/education/experts-groups/2011-2013/esl/esl-group-report_en.pdf



Source: Eurostat Statistics Explained

Figure no. 3-94 Early leavers from education and training, 2010 and 2020

The counties included in the program area in Romania are above the national average. The county with the highest dropout rate is Calarasi, which registered various fluctuations in the analyzed period 2010-2019.



Source: National Institute of Statistic - Romania

Figure no. 3-95 School dropout in programm area - Romania

Early school leavers in Bulgaria, as well as in the areas covered by the program, vary over the years. The last 3 years have generally reported lower levels, which, however, are due to the fact that until the school year 2016/2017 the statistics cover students from first to eighth grade, and then primary education covers grades from first to seventh. A positive trend is that for most districts the indicator shows a positive trend compared to the national average and generally decreases (for 2019/2020 compared to 2009/2010 school years). At the end of the period, only

one district dropped out of primary education above the national average - Pleven district, while at the beginning of the period above average for the country were Vratsa, Vidin, Ruse and Dobrich.

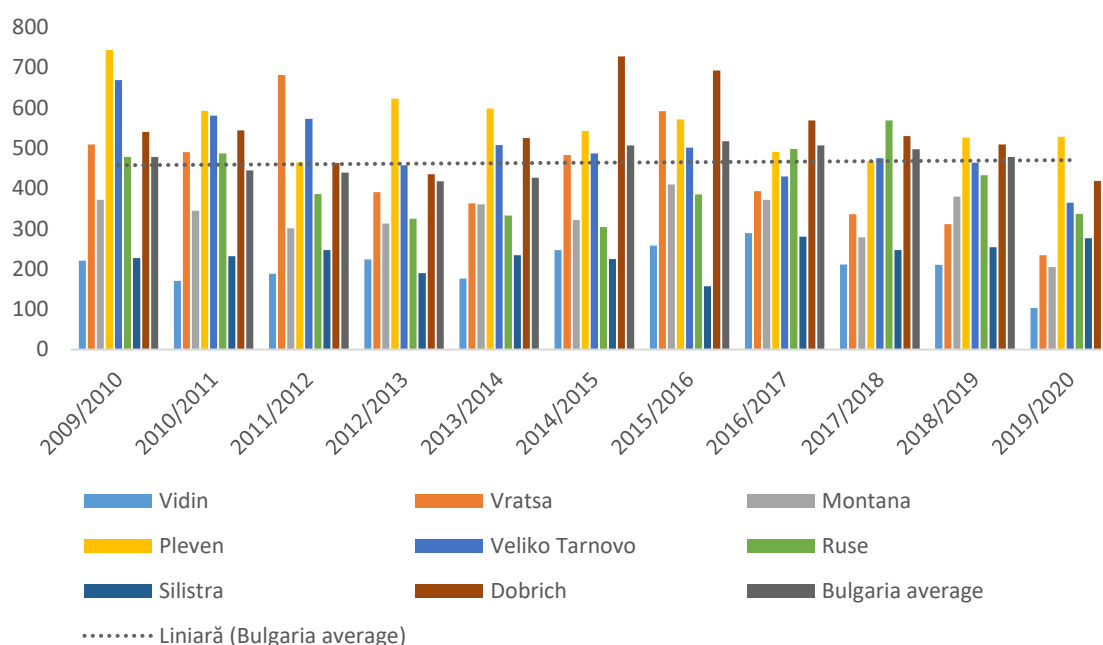
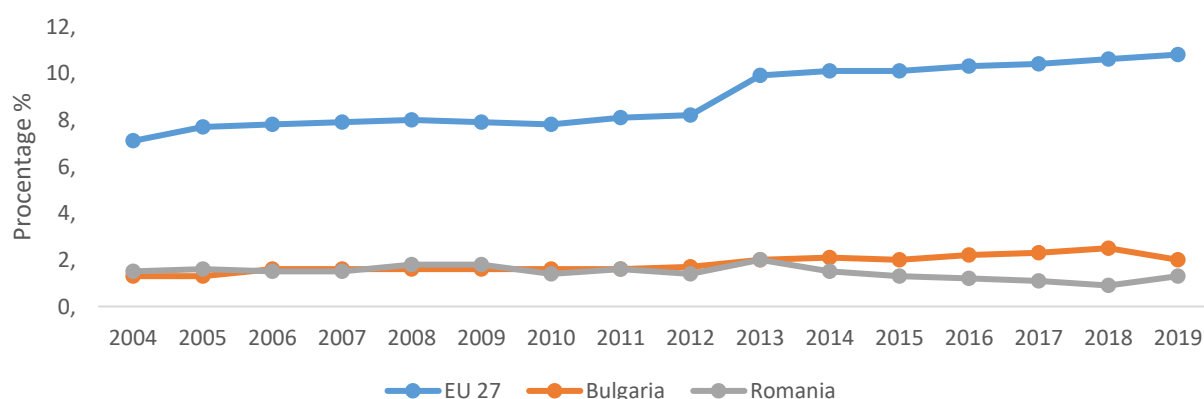


Figure no. 3-96 Left primary education from schools, number, NSI

Continuing the general and professional training, formal or non-formal of the population aged between 25 and 64, is a method by which economic growth can take place and at the same time integration or reintegration into society. A gradual increase can be observed at European level in the analyzed period 2004-2019, but Romania and Bulgaria are below the European average in this period. It should be noted that adult learning generally refers to learning activities after the end of initial education. This activity contributes to the achievement of objective 4 “Quality education” from the 17 objectives for sustainable development.

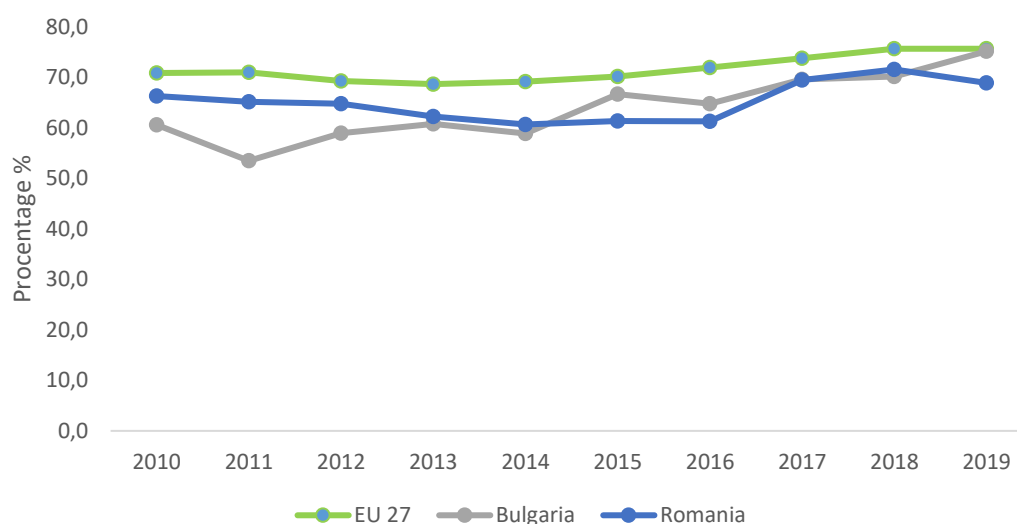


Source: Eurostat

Figure no. 3-97 Adult participation in learning



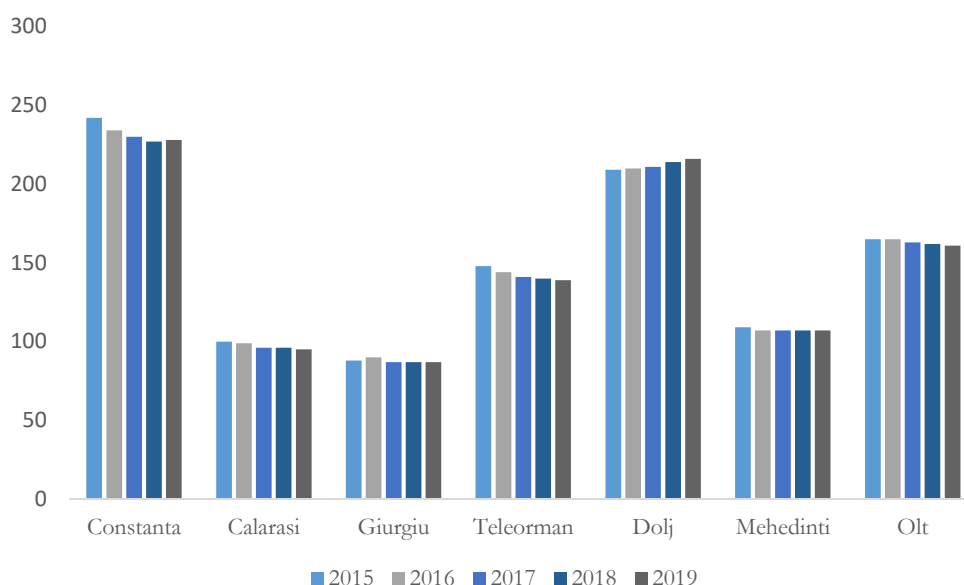
The integration of the young population, aged between 15 and 35, who have not continued their studies, for various reasons and do not attend specialization courses, is an opportunity for both the population concerned and the labour market. Their integration rate at European level is in a successive increase, in the analyzed period, respectively 2010-2019. As for Romania and Bulgaria, they are below the European average, but this rate is increasing but with small fluctuations.



Source: Eurostat

Figure no. 3-98 Employment rates of young people not in education and traing

In the classification of school units from the 7 counties in the program area, all categories of school units are included, both public and private property. The counties with the highest number of school units are registered in the counties of Constanța, Dolj and Olt, but these are also the counties with the highest number of populations. In the period 2015-2019 in 6 of the 7 counties there was a more significant or less significant decrease in school units. The exception to this change is Dolj County.



Source: National Institute of Statistic - Romania

Figure no. 3-99 School units in Romania

In the classification of school units from the 7 counties in the programme area, all categories of school units are included, both public and private property. The counties with the highest number of school units are registered in the counties of Constanța, Dolj and Olt, but these are also the counties with the highest number of populations. In the period 2015-2019 in 6 of the 7 counties there was a more significant or less significant decrease in school units. The exception to this change is Dolj County.

In Bulgaria in the period 2015-2019 there is a decrease in the number of schools, as at the beginning of the period the decrease is more significant, and then more smoothly and insignificantly.

Compared to the average number for the country - 86 schools per district, the graph shows that in the 2019/2020 school year only Pleven district has a value above the average - with 103 schools.

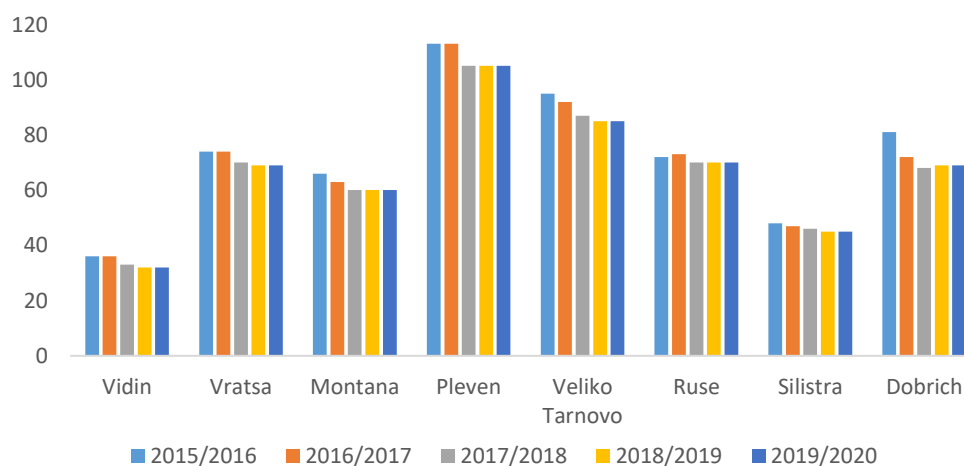


Figure no. 3-100 Number of schools, Bulgaria, NSI



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Education is a key tool for achieving medium and long-term climate change and environmental goals and targets (2030 and 2050). Education can influence how people interact with the environment, preventing activities that have a negative impact on it, such as generating greenhouse gases, generating and managing waste, destroying ecosystems or depleting natural resources. Education can raise public awareness of various issues and stimulate involvement in community initiatives. Well-informed citizens can ask environmental policy makers to understand certain environmental policies and accept that pollution has costs to bear.

Romania is committed at international and national level to increase, through education, the population awareness on climate change and environmental issues. According to the Doha Program, Romania should develop a national strategy for involving Action for Climate Empowerment (ACE), to integrate climate change into the school curriculum, to implement the 6 elements of ACE (education, training / education, awareness, public participation, public access to information, international cooperation), to support the participation of all stakeholders in implementation and to report every two years on the results of this strategy⁷⁰.

Raising the level of education and awareness on climate change is one of the objectives of the National Strategy for Sustainable Development of Romania 2030 and was also provided in the National Strategy on Climate Change and Economic Growth based on Low Carbon for the period 2016 - 2020 (CRESC) and in its 2016-2020 Action Plan (these are being updated).

In order to increase the awareness of the population regarding the environment protection and the effects of climate change, various awareness campaigns have been carried out both in the program area in Romania and in the country, among which are the following.

⁷⁰ Presidential Administration of Romania - Education on climate change and the environment in sustainable schools



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Table 3-11 Environmental protection awareness campaign in Romania

Campaign		Source
Under the slogan “STOP! Today the car is standing still!”, This campaign encourages the use of alternative transport by employees of public institutions in order to reduce pollution and, implicitly, carbon emissions.		http://www.mmediu.ro/articol/comunicat-de-presa-vinerea-verde-campania-care-incurajeaza-utilizarea-transportului-alternativ-pentru-deplasarea-la-si-de-la-serviciu-se-lanseaza-maine/4072
Greenpeace is campaigning for an energy revolution that eliminates the use of fossil fuels (coal, oil, gas) from energy production to limit the disastrous effects of climate change.		https://www.greenpeace.org/romania/campanii/



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National afforestation campaign, spring stage - During the event, hundreds of acacia seedlings were planted near Dăbuleni (Dolj County), known as one of the most affected areas of the country by the phenomenon of desertification.



<http://www.mmediu.ro/articol/comunicat-de-presa-ministerul-mediului-apelor-si-padurilor-continua-lupta-impotriva-desertificarii/4099>

Greenpeace Romania is launching the "Green Barrier", a campaign for the planting of forest curtains and protection forests in the plain areas.



<https://www.youtube.com/watch?v=VtS4AyjGV4I>

https://greenpeace.barieraverde.ro/?_ga=2.216623379.40879328.1643788572-1109311521.1643788572



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The aim of the Clean Waters project is to generate an intervention to **reduce the amount of plastic in the Danube waters**, an action that will aim at both historical pollutions, through activities of collecting existing plastic in the riverbed, and the identification and application of prevention measures. and combating future spills.



<https://cuapelecurate.ro/de-spre-noi/>

The aim of the campaign is to help increase the level of awareness and information of Romanian consumers about environmental protection, sustainable consumption, selective collection and better money management by reducing waste.



<https://infocons.ro/campania-nationala-inchidestingerecicleaza-fii-un-exemplu/>

Overall, there is a growing awareness of climate change in Bulgaria, but less awareness of the specific issues of climate change adaptation, both among the public and other stakeholders. With regard to awareness-raising activities, the Ministry of Environment and Water (MoEW), together with its subordinate institutions, implements a special policy in order to raise public awareness on environmental issues and ensure public participation in the decision-making process.

In addition, it disseminates information on environmental issues to inform about decisions taken and actions taken. There are several mechanisms for involving and raising the awareness of non-governmental organizations (NGOs), academia, business and other stakeholders, such as the National Expert Council on Climate Change at the Ministry of Environment and Water, established in 2013. A number of initiatives have been taken to raise public awareness and participation in the preparation of the National Adaptation Strategy (NSA), including workshops with government bodies, academia, NGOs and other stakeholders.

The National Climate Change Adaptation Strategy noted the need to raise awareness of climate change adaptation. This includes raising public awareness and awareness of climate change adaptation issues and the need for adaptation actions to be implemented in Bulgaria in order to achieve public support and participation in adaptation policies and actions. The Action Plan to the Strategy includes various measures such as early awareness raising in schools, public access and dissemination of information.

In Romania, the cultural heritage is recognized at national level as, along with contemporary creation, the main field of interest of national cultural actions and policies. Also, more and more local authorities recognize culture as an essential element of development and make investments in cultural infrastructure and cultural and creative services that can activate this potential. However, this is a relatively recent phenomenon, with the interest of local authorities being less focused on culture in the early 2000s, with a few exceptions. This fact, along with the negative effects it has, is noticed by the authors of Study 21 - "Cultural Infrastructures", developed in 2014 in order to substantiate SDTR. They noted that there was a significant cultural gap between urban and rural areas, which they explained by the "absence of public policies for the education and culturalization of the rural population, which led to the emergence of rural-urban disparities in the cultural field, consisting in the almost total absence of the cultural offer from the rural area, which gradually led to the degradation of the cultural infrastructure premises"⁷¹.

At the level of the program area, National Tourist Information and Promotion Centres are available, most of which are located in Constanța County⁷².

In Bulgaria, awareness of cultural heritage is provided mainly through Tourist Information Centers. Currently, there are 97 tourist information centers in the country, incl. there are also those falling within the scope of the program. The main services they offer are: providing tourist information, promoting tourist sites, consulting services for local business, organizing thematic meetings and discussions, organizing trainings and seminars, implementing educational programs, working with children and students, providing professional guides, etc.

⁷¹ National Strategy for Culture and National Heritage 2016-2022

⁷² <http://turism.gov.ro/web/autorizare-turism/>

3.2. EVOLUTION OF THE STATE OF ENVIRONMENT WITHOUT IMPLEMENTATION OF THE PROGRAMME

The analysis of the evolution of the state of the environment without the implementation of the programme represents a requirement of the SEA Directive 2001/42/EC. It has been transposed into national legislative act as follows: in Romania the Government Decision no. 1076/8.07.2004 for setting up the environmental assessment procedure of certain plans „Manual on the completion of the environmental assessment for plans and programmes” - 2006, approved by Ministerial Order no. 117/2006 and in Bulgaria Environmental Protection Act (EPA) - Prom. SG. 91/25 Sep 2002, last amendment SG. 36/3 May 2019 SEA Ordinance (SEA-O) for the conditions and the order for implementing ecological assessment of plans and programmes - Prom. SG. 57/2 Jul 2004, last amend. SG. 67/23 August 2019.

In order to analyze the evolution of the state of the environment in the situation of non-implementation of the program, the evaluation classes presented in the table below were used.

Table 3-12 Classes for assessing the current state of environmental issues and "Alternative 0"

↑	Environmental state is improving
→	Maintaining the environmental state
↓	Environmental state is decreasing

The analysis of the perspectives was performed based on the trends identified following the analysis of the current situation.

The analysis of the current state of the environment and Alternative 0 was done individually for Romania and Bulgaria, because the current environmental conditions may be different. These are shown in the tables below.



Table 3-13 Current state of environmental issues and Alternative 0 - Romania

Environmental aspect		The current situation	Perspectives	Alt „0”
Biodiversity	Conservation status	Existence of species and habitats of community interest that have an unfavorable conservation status	Conservation status is maintained in the absence of ambitious biodiversity conservation / ecological reconstruction projects	→
Population and human health	The population density	Decreasing population numbers.	The same trend of declining population will be maintained.	↓
	Natural growth	Recording a negative natural increase (the number of deaths is higher than the number of births) for a consecutive period of time.	The same natural increase will be maintained.	→
	Life conditions	Decrease in employment by more than 25% compared to 2000.	The same trend will continue.	→
	Number of deaths	Increasing the number of deaths caused by diseases of the circulatory and digestive system.	The trend of increasing the number of deaths caused by these diseases is maintained.	→
Soil and land use	Contaminated sites	Existence of contaminated sites.	Maintaining contaminated site surfaces.	→
	Soil erosion	The presence of soil erosion	The phenomenon of soil erosion will continue.	→
Water	Chemical condition	Existence of surface and groundwater bodies that are not in good chemical condition.	The chemical state of the water bodies could be maintained.	→
	Ecological potential / ecological status	Existence of surface water bodies that do not have the ecological potential / good ecological status.	The ecological potential / ecological status could be maintained	→
Air	Exceeding the limit values of air pollutants	Exceeding the limit values of NO ₂ and O ₃ concentrations.	There is a possibility of maintaining the same trend in the value of air pollutant concentrations.	→
Climate changes	Exposure to climatic factors	Increasing the level of temperatures and rainfall	Rising temperatures and precipitation will continue.	→
	GHG emissions	Although there has been a decrease in GHG emissions compared to the pre-industrial level, in the last period (2013-2018) their level is constant and the level of emissions is still high.	There has been a sharp increase in GHG emissions in the absence of the implementation of ambitious measures	↓



Environmental aspect		The current situation	Perspectives	Alt „0”
Material asset	Material assets in the Economic activities	According to the analysis of the state of tangible assets in the economic activities in the program area, outdated equipment and technologies and a low degree of introduction of innovations and technologies to save resources are identified.	The current state will be maintained	
	Physical and digital connectivity	The transport network is relatively well developed. The problems are: <ul style="list-style-type: none"> • A low number of motorways; • Many cities still miss ring roads / bypass roads • Insufficient traffic calming measures • Non segregated roads - low protection for cyclists from road traffic 	The condition and risks of accidents will remain.	→
	Material assets related to the Environment, incl. climate change	The main problems are related to direct water and air pollution, inefficient waste management - low share of waste recycling, leading to loss of waste). biodiversity, health problems for the population and climate change.	The current state will remain.	→
	Technological risks	Presence of technological risks (SEVESO sites).	There will be no technological changes.	→
Risk management	Risk of flooding	The area is exposed to the probability of flooding.	The current state will be maintained	→
	Seismic risk	Part of the program area is exposed to high seismic risk.	The current state will be maintained	→
	Landslides	There are three categories of risk of landslides: low, medium, high.	The current state will be maintained	→
Cultural heritage	Historical monuments	The presence of a large number of historical monuments.	The number of historical monuments will increase.	↑



Environmental aspect		The current situation	Perspectives	Alt „0”
Landscape	The degree of fragmentation of the landscape	The degree of fragmentation of the landscape is low, and in the area of large cities it is medium or high.	The degree of fragmentation may intensify	↓
Energy efficiency	Use of renewable energy sources	Achieve the country-wide target for the use of renewable energy in final energy consumption.	There is a possibility to reach the set target in the next period.	↑
	Energy potential	Presence of areas with potential for capitalizing on wind and solar energy.	Maintaining areas with potential for renewable resources.	↑
	Final energy consumption in households	Final energy consumption in households is slightly increasing.	Maintaining or increasing	↓
Sustainable transport	The age of the car park	Cars over 10 years old predominate.	It is possible to maintain the same trend.	→
Circular economy	Recycling rate and the degree of connection of the population to sanitation services.	Registration of low rates of recycling and separate collection as well as a low degree of connection of the population to sanitation services.	The situation could improve as a result of the implementation of waste management plans (uncertain time horizon).	→
Public awareness	Informing the population about environmental protection	The population is informed about environmental protection through campaigns, school education, etc.	The current situation will continue	→



Table 3-14 Current state of environmental issues and Alternative 0 - Bulgaria

Environmental aspect		The current situation	Perspectives	Alt „0”
Biodiversity	Fauna and flora	There are localities and habitats of protected, rare and / or endemic species of wild flora and fauna for Bulgaria, the Balkan Peninsula or the world. Among the most important impacts and threats with a significant impact on biodiversity are: agriculture (in all areas), forestry and urbanization, housing and commercial development (in 6 out of 8 areas).	It is possible to deepen the impact of threats.	↓
	National Protected areas	The national protected areas in the target territory in Bulgaria are a total of 194. They are divided into 5 of the six categories (excl. national parks) according to the Bulgarian national legislation. Usually, construction is forbidden in the protected areas and that is why they are preserved and in good status.	The number of protected natural areas could be maintained.	→
	Natura 2000 sites	Existence of habitats with unknown conservation status (almost 30%) as well as such in moderate and poor conservation status. Almost 40% of the species by taxonomic groups are in bad conservation status. The main objective of the conservation status of species and habitats is to achieve the "favorable" conservation status. The main risk is taking of areas from the sites for the purpose of urbanization and various activities.	Conservation status is maintained in the absence of ambitious biodiversity conservation / ecological reconstruction projects	→
Population and human health	Air pollution	The deteriorating air quality in some municipalities is a problem. The monitoring data show a reduction	Atmospheric air quality, as one of the environmental risk factors for the human health, could be improved due to the implementation of the Municipal programs	↑



Environmental aspect		The current situation	Perspectives	Alt „0”
		in the concentrations of PM (as a major pollutant) within the permissible limits.	for air quality management under Art. 27 of the Clean Air Act.	
	Quality and quantity of drinking water	Risks to the health of the cross-border area are the registered deviations from the drinking water quality indicators.	The main reasons for the registered deviations - poor water supply practice, resp. irregular maintenance of facilities and inefficient water disinfection regime, including in areas with depreciated water distribution network and frequent accidents will be maintained.	→
	Bathing water	12 out of a total of 20 established bathing areas in the Bulgarian territory are in poor condition, which poses a risk to the health of the population and especially visitors / vacationers.	The current state will be maintained.	→
	Soils	No soil problems have been identified that pose a risk to human health.	The current state will be maintained.	→
	Waste	Although waste management in the Republic of Bulgaria uses landfilling as the main method, the new regional landfills have not created a risk to human health. The problem is the illegal dumping and incineration of waste.	The current state will be maintained.	→
	Noise/Radiation/Ionizing and non-ionizing radiation	The problem is the increased noise levels, which are observed in all district cities and some smaller cities in the districts within the scope of the program on Bulgarian territory.	It is expected to maintain the deviations or to worsen further.	→
Soil and land use	Degradation processes	There are no serious problems in terms of water erosion. The district of Dobrich is at very high risk of wind erosion and Silistra and Ruse districts are at high risk.	The tendency of wind erosion and landslides will be maintained.	→



Environmental aspect		The current situation	Perspectives	Alt „0”
		There are areas with high and medium risk of landslides. In the recent years there has been a tendency to reduce land and soil pollution. The content of harmful substances in the soil is generally below the permissible minimum.		
	Land use	The agricultural area represents 33.32% of the total programe area. The main risk is taking of agricultural areas for the purpose of urbanization and various activities.	The agricultural land are a priority of conservation and the tendency of their large share will be maintained.	→
	Geology - Natural resource	There are no significant natural resources of fuels (oil, natural gas), ore minerals and favorable geological conditions for coal mining (lignite and ferrous) from existing deposits. The area is characterized by very good mineral non-metallic resources for the building materials industry (cement, lime, gypsum, ceramics, glass, faience).	The perspective is without change in the state and type of natural resources.	→
	Geology - Seismicity	The seismic regions that are connected to the Bulgarian part of the program area include the Gornooryahovskaya seismic zone (expected magnitude on the Richter scale up to 7.5, intensity of the 9th and higher degree on the Medvedev-Sponhoer-Karnik scale), Shabla zone (maximum magnitude to 8th, intensity at least from the 9th degree along the Black Sea coast), Dulovo zone (maximum magnitude 7.5, due to the relatively large depth of the outbreak, the maximum impact is with intensity above 8th degree).	The intensity of the seismic regions will keep the same.	→



Environmental aspect		The current situation	Perspectives	Alt „0”
Air	Air quality	In 2020 no excess was registered per PM2.5, PM10, SO ₂ , CO, O ₃ , Pb, C ₆ H ₆ . In 2020 on the territory of the districts of Montana and Pleven an excess of PAH was registered. This due to the incomplete combustion of solid fuels in the household sector and diesel fuel in car engines.	Atmospheric air quality could be improved due to the implementation of the Municipal programs for air quality management under Art. 27 of the Clean Air Act.	↑
Water	Surface water	Some of the surface water bodies are in poor chemical condition. Durankulak Lake is in a very poor ecological condition. Household and industrial wastewater puts great pressure on water bodies. The following environmental problems have been identified: lack of adequate infrastructure for collection and treatment of wastewater, pollution of surface and groundwater (organic, nutrient, hazardous substances); hydro morphological changes (disruption of the continuity of rivers and habitats, disconnection of neighboring floodplains / wetlands, hydrological change).	The environmental problems, causing deviations in the surface water quality will be maintained.	→
	Ground water	All groundwater bodies are in good quantitative condition. In terms of chemical status, 20 of the groundwater bodies have been assessed as in poor chemical status.	The current situation will be maintained.	→
	Water protection zones	There are different in type and number zones for water protection in accordance with Art. 119a of the Water Act within the Bulgarian part of the programme territory, respectively of the Water Law no. 107/1996 with the subsequent amendments and the specific national legislation, in the Romanian part	The current situation will be maintained.	→



Environmental aspect		The current situation	Perspectives	Alt „0”
		<p>The main risk is of pollution (from point and diffuse sources) and non-compliance with the requirements (for example for the bathing water).</p> <p>The pressures are connected with physical changes and climate change.</p>		
	Drinking water	<p>The total number of water supply zones, according to RHI Reports by districts is 512 water supply zones. The review of the summarized data from the control monitoring of drinking water conducted by RHI in 2019 shows that the general compliance with the requirements remains at a relatively high level, comparable to that in previous years.</p> <p>Discrepancies are most often sporadic. They are observed mainly in smaller settlements - an indication of poor water supply practice, resp. irregular maintenance of facilities and inefficient water disinfection regime, including in areas with depreciated water distribution network and frequent accidents.</p>	<p>The main reasons for the registered deviations - poor water supply practice, resp. irregular maintenance of facilities and inefficient water disinfection regime, including in areas with depreciated water distribution network and frequent accidents will be maintained.</p>	→
	Bathing water	<p>In the districts of Vidin, Montana, Vratsa, Veliko Tarnovo, Pleven, Ruse and Silistra there is no officially designated bathing area.</p> <p>Dobrich District: There are 20 bathing areas, 8 of which are in good condition and 12 in poor.</p>	<p>The current state will be maintained.</p>	→
Climate change	Climate change	<p>Silistra and Dobrich districts are prone to meteorological drought.</p> <p>The area is at very high risk of flooding and landslides, consequences of climate change.</p>	<p>It is possible to deepen the effects of the climate change.</p>	↓



Environmental aspect		The current situation	Perspectives	Alt „0”
	Adaptation to the effects of climate change/ Climate resilience	<p>In 2050 it is estimated an increase in the western part of the program area, starting from Giurgiu and Ruse by approximately 5-6°C in July, compared to the current recorded temperatures. In the eastern part of the program area, the increase of temperatures will be registered gradually, so in Călărași and Silistra it is estimated increases by up to 4-5°C, but also lower than 4°C in the area close to Constanța and Dobrich and including their territory.</p> <p>Regarding the increase of the minimum temperature in January 2050, the most significant increases of over 3.5°C, will be registered entirely in Giurgiu and Ruse, and partially in Teleorman, Veliko Tarnovo, Silistra and Călărași. Increases between 3-3,5°C will be partially recorded in Dolj, Olt, Plevne, Veliko Tarnovo, Silistra, Dobrich, Calarasi and Constanta. In the rest of the areas included in the program, the increase of the minimum temperature in January is estimated to be lower than 3°C.</p> <p>The problem is the low adaptation of the infrastructure to the consequences of climate change and mainly droughts, floods, landslides.</p>	It is possible to deepen the problem of low adaptation of the infrastructure to the consequences of climate change and mainly droughts, floods, landslides.	↓
	Greenhouse gas emissions	In Bulgaria, the sector that contributes the most to GHG emissions is transport. It showed various fluctuations in the period 2005-2012, but since 2013 it is increasing.	The increasing of GHG emissions generation from the transport could proceed and get higher.	↓
Material assest	Material assets in the Economic activities	According to the analysis of the state of tangible assets in the economic activities in the program area, outdated equipment and technologies and a low degree of introduction of innovations and technologies to save resources are identified.	The current state will be maintained.	→



Environmental aspect		The current situation	Perspectives	Alt „0”
	Physical and digital connectivity	The transport network is relatively well developed. The problems are: <ul style="list-style-type: none"> • A low number of motorways; • Many cities still miss ring roads / bypass roads • Insufficient traffic calming measures • Non segregated roads - low protection for cyclists from road traffic. 	The condition and risks of accidents will remain.	→
	Material assets related to the Environment, inclusive climate change	The main problems are related to direct water and air pollution, inefficient waste management - low share of waste recycling, leading to loss of waste). biodiversity, health problems for the population and climate change.	The current state will remain.	→
	Technological risks	Presence of technological risks (SEVESO sites).	There will be no technological changes.	→
Risk management	Risk of flooding	The area is exposed to the probability of flooding.	The current state will be maintained	→
	Seismic risk	Part of the program area is exposed to high seismic risk.	The current state will be maintained	→
	Landslides	There are three categories of risk of landslides: low, medium, high.	The current state will be maintained	→
Cultural heritage	Cultural heritage and traditions	The area is characterized by extremely high variety of historical monuments and traditions, insufficiently exploited	The cultural heritage is maintained in the same way, in the absence of opportunity for valorization and promotion.	→



Environmental aspect		The current situation	Perspectives	Alt „0”
Energy efficiency	Energy efficiency	<p>There is an energy-intensive structure. Much of the technology, machinery and equipment is morally obsolete, energy-intensive. There are no systems for monitoring and controlling energy consumption in the municipal building stock, unfavorable energy balance, which is associated with a strong preponderance of fuel imports over the use of local resources lacks strategic documents at regional and municipal level. Another part that relates to the main difficulties in energy efficiency conversions is the lack of monitoring and analysis practices, lack of targeted financial resources, lack of coordinated action between institutions.</p> <p>Positives for the target areas of the Bulgarian part are for the presence of energy efficiency units at municipal and regional level, positive attitude and commitment of local authorities on the implementation of energy efficiency measures.</p>	<p>It is possible the perspective to be improved, mainly due to the implementation of the local programmes for energy efficiency.</p>	↑
Sustainable transport	Sustainable transport	<p>Transport activities are currently responsible for a significant share of total greenhouse gas emissions. Which is why the main goal is to use sustainable transport.</p>	<p>The increasing of GHG emissions generation from the transport could proceed,</p>	→
Circular economy	Waste management	<p>Landfilling remains the main method of waste treatment. The difficulties come mainly from the insufficient waste reduction measures received for landfilling and the fulfillment of the requirements for separate waste collection.</p>	<p>The current situation will be maintained.</p>	→



Environmental aspect		The current situation	Perspectives	Alt „0”
		There is a lack of economic instruments related to waste prevention.		
Public awareness	Informing the population about environmental protection	The population is informed about environmental protection through campaigns, school education, etc.	The current situation will continue	→

Romania

Following the analysis of the perspectives (Alternative 0) for most of the analyzed environmental aspects, the state of the environment will be maintained (→). An improvement in the state of the environment (↑) has been identified for the environmental aspect of energy efficiency (use of renewable energy sources, energy potential). A worsening of the state of the environment has been identified for the environmental aspect of the population and human health (population density), climatic factors (GHG emissions) and landscape (degree of fragmentation of the landscape).

The following figure shows the results of the analysis of the evolution of the state of the environment in the situation of non-implementation of the Romania program (Alternative 0).

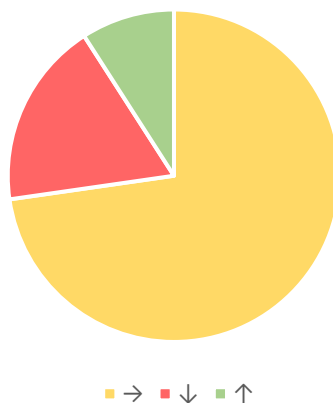


Figure no. 3-101 Assessment classes identified - Alternative 0 (Romania)

Bulgaria

In the case of the Bulgarian program area for most environmental aspects, the state of the environment will be maintained (→). An improvement in the state of the environment (↑) was identified for the environmental aspect: population and human health (air pollution) and air (air quality) because by implementing municipal air quality management programs according to art. 27 of the Clean Air Act, atmospheric air quality could be improved, and the environmental aspect energy efficiency.

A worsening of the state of the environment has been identified for the following environmental aspects: biodiversity (flora and fauna), climatic factors (climate change, adaptation to the effects of climate change / climate resilience, GHG emissions).

The following figure shows the results of the analysis of the evolution of the state of the environment in the situation of non-implementation of the Bulgaria program (Alternative 0).

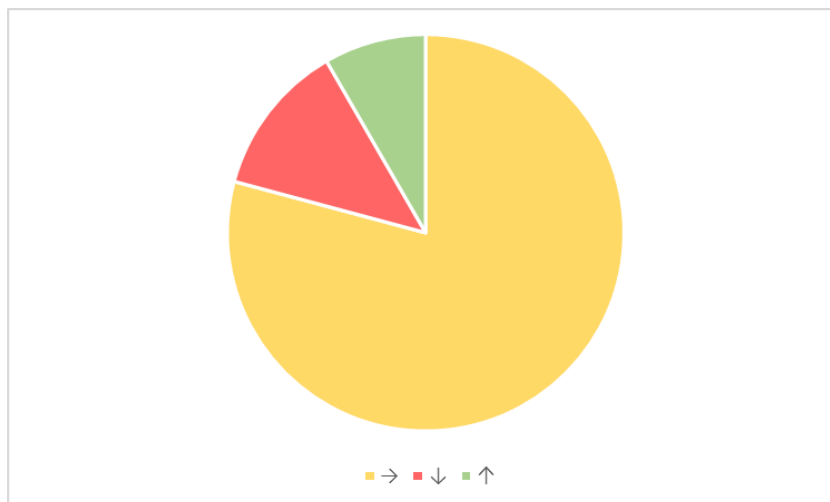


Figure no. 3-102 Assessment classes identified - Alternative 0 (Bulgaria)

It can be concluded that the state of the environment in the event of non-implementation of the program will, for the most part, be maintained.

4. ENVIRONMENTAL CHARACTERISTICS OF THE AREA LIKELY TO BE SIGNIFICANTLY AFFECTED BY THE PROGRAMME IMPLEMENTATION

The maximum level of detail at which the evaluation of the Interreg VI-A Romania-Bulgaria 2021-2027 Programme is made is represented by the types of actions. The analysis of the types of actions proposed in the program did not lead to the identification of significant negative effects (Chapter 7). For this reason, no areas have been identified at this time that could be significantly affected by the implementation of the program.

It should be noted that for each of the projects aimed at investing in activities with potential impact on the environment (in the sense given by national law) environmental impact assessment studies will be conducted. Only these assessments will be able to identify, at an appropriate spatio-temporal scale and for concrete projects, the environmental characteristics that can be significantly affected.

Aspects that must be taken into account when analysing the opportunity to carry out projects that could have negative effects:

- ✿ It is important that the decision on the execution of such works is taken only after conducting detailed studies on the long-term impact and distance of projects from protected natural areas;
- ✿ Any analysis (technical, economic, impact) must consider several alternatives. The priority alternative must be considered the one that allows to achieve the proposed goal with the lowest environmental costs.

A correct cost-benefit analysis (an integral part of a feasibility study) will need to consider appropriate measures to reduce and offset the effects as the impact is generated, including the full (structural and functional) restoration of the affected environmental systems.

For Bulgarian part, the projections of the Programme are consistent with the analyzed and modelled scope in a 20-year probability scenario, presented in the Flooding Risk Management Plans of the Black Sea River Basin Directorate and the Danube River Basin Management Directorate.

5. ENVIRONMENTAL PROBLEMS RELEVANT TO THE PROGRAMME

This chapter presents the main environmental issues relevant for the Interreg VI-A Romania Bulgaria 2021-2027 Programme. The extensive analysis of the current state of the environment at the level of administrative units is presented in Chapter 3.1 of this report.

Following the analysis of the current state of the environment and their perspectives, it can be concluded that the main environmental aspects in the program area that require special concern are the following:

Romania

- The population, because there is a decrease in their number;
- Climatic factors, as in the absence of ambitious measures the level of GHG emissions could increase;
- Landscape, because at this moment the degree of fragmentation of the landscape in the big cities and in their vicinity is high or very high, following the intensification of the urbanization process, the degree of fragmentation would intensify;
- Energy efficiency, because the final energy consumption in households is slightly increasing.

Bulgaria

- Biodiversity, because the pressures on it could intensify;
- Water, because of deviations from the drinking water quality indicators; some of the surface water bodies and ground water bodies are in poor chemical condition;
- Climate factors, as their effects are likely to intensify, adaptation of infrastructure to the effects of climate change is reduced and GHG emissions from the transport sector could increase;
- Waste - insufficient waste reduction and non-compliance with the requirements for separate waste collection.



Table 5-1 Existing environmental issues relevant to the Romania-Bulgaria Interreg VI-A Programme 2021-2027

Environmental aspect	The main environmental issues identified	
	Romania	Bulgaria
Biodiversity	Existence of species and habitats of community interest that have an unfavorable conservation status.	Among the most important impacts and threats with a significant impact on biodiversity are: agriculture (in all areas), forestry and urbanization, housing and commercial development (in 6 out of 8 areas).
		Existence of species and habitats of community interest that have an unfavorable conservation status.
Population and human health	Decreasing population numbers.	The deteriorating air quality in some municipalities is a problem.
	Recording a negative natural increase (number of deaths is higher than births) for a consecutive period of time.	Risks to the health of the cross-border area are the registered deviations from the drinking water quality indicators.
	Decrease in employment by more than 25% compared to 2000.	12 out of a total of 20 established bathing areas in the Bulgarian territory are in poor condition.
	Increasing the number of deaths caused by diseases of the circulatory and digestive system.	The problem on human health is the increased noise levels, which are observed in all district cities and some smaller cities in the districts within the scope of the program on Bulgarian territory.
Human health risk factors including environmental risk factors	There are an exceedances of noise levels connected with rail and air transport.	At most checkpoints, the measured equivalent noise levels exceed the limit values. Non-compliant in terms of radiological indicators total alpha activity of drinking water (of natural origin) in the districts of Vidin and Dobrich.
Soil and land use	Existence of contaminated sites.	The district of Dobrich is at very high risk of wind erosion and Silistra and Ruse districts are at high risk. There are areas with high and medium risk of landslides.
	The presence of soil erosion.	The main risk is taking of agricultural areas for the purpose of urbanization and various activities.
Water	Existence of surface and groundwater bodies that are not in good chemical condition.	Some of the surface water bodies are in poor chemical condition
	Existence of surface water bodies that do not have the ecological potential / good ecological status.	In terms of chemical status, 20 of the groundwater bodies have been assessed as in poor chemical status.
	There is a risk of flooding.	There is a risk of flooding



Environmental aspect	The main environmental issues identified	
	Romania	Bulgaria
Air	Exceeding the limit values of NO ₂ and O ₃ concentrations.	In 2020 on the territory of the districts of Montana and Pleven an excess of PAH was registered
Climate changes	Increasing the level of temperatures and rainfall.	Silistra and Dobrich districts are prone to meteorological drought
	Although there has been a decrease in GHG emissions compared to the pre-industrial level, in the last period (2013-2018) their level is constant and the level of emissions is still high.	Increasing the level of temperatures and rainfall
Material assets	The condition of tangible assets in the economic activities in the region shows outdated equipment and technologies and a low degree of introduction of innovations and resource-saving technologies.	
	The transport network is relatively well developed. The problems are: A low number of motorways; Many cities still miss ring roads / bypass roads; Insufficient traffic calming measures; Non segregated roads - low protection for cyclists from road traffic.	
	The main problems are related to direct water and air pollution, inefficient waste management - low share of waste recycling, leading to loss of waste). biodiversity, health problems for the population and climate change.	
	Presence of technological risks (SEVESO sites).	
Risk management	The area is exposed to the probability of flooding.	
	Part of the program area is exposed to high seismic risk.	
	There are three categories of risk of landslides: low, medium, high.	
Cultural heritage	The area is characterized by extremely high variety of historical monuments and traditions. The tourist potential of the area is not exploited to its true value.	
Landscape	The degree of fragmentation of the landscape is low, and in the area of large cities it is medium or high.	
Energy efficiency	Final energy consumption in households is slightly increasing.	There is an energy-intensive structure. Much of the technology, machinery and equipment is morally obsolete, energy-intensive. There are no systems for monitoring and controlling energy consumption in the municipal building stock, unfavourable energy balance, which is associated with a strong preponderance of fuel imports over the use of local resources lacks strategic documents at regional and municipal level.



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Environmental aspect	The main environmental issues identified	
	Romania	Bulgaria
Sustainable transport	Cars over 10 years old predominate.	Transport activities are currently responsible for a significant share of total greenhouse gas emissions.
Circular economy	Registration of low rates of recycling and separate collection as well as a low degree of connection of the population to sanitation services.	The difficulties come mainly from the insufficient waste reduction measures received for landfilling and the fulfilment of the requirements for separate waste collection.
Population awareness	The population is informed about environmental protection through campaigns, school education, etc.	



6. ENVIRONMENTAL PROTECTION OBJECTIVES SET AT NATIONAL, COMUNITARY OR INTERNATIONAL LEVEL RELEVANT TO THE PROGRAMME

In order to choose the relevant environmental objectives, the objectives of sustainable development established at national level in Romania and Bulgaria were mainly taken into account. They are also supported by various objectives set out in European legislation, such as the Biodiversity Strategy for 2030. The Sustainable Development Goals set at national level were based on the global goals.

According to the “Sustainable Development Report 2021”, the performance of Romania and Bulgaria in meeting the objectives of sustainable development is presented in the following table, following a global analysis. It is worth mentioning that only the first and last three places are presented, in order to highlight the position of the two countries in the top of the ranking.

Table 6-1 The degree of achievement of the goals of sustainable development worldwide

Rank	Country	Score
1.	Finlanda	85,9
2.	Sweden	85,6
3.	Germany	84,9
39.	Romania	75
45.	Bulgaria	73,8
163.	Chad	40,9
164.	South Sudan	39,9
165.	Central African Republic	38,3

The levels and trends for each of the 17 SDGs (sustainable development goals), according to the Sustainable Development Report 2021, for Eastern Europe and Central Asia, are presented in the figure below. It can be observed that both in Romania and in Bulgaria there is a decrease in the tendency to achieve objective 4 - Quality education. As for the rest of the Sustainable Development Goals, they are either in a stagnant stage, which means that the trend towards the targets is stagnant or increasing by less than 50%, making it impossible to meet the targets by 2030. Moderate growth, which means that the degree of achievement of the objectives increases by more than 50%, but not enough to meet the objectives by 2030, as well as the increase of the score to the level necessary to meet the objectives by 2030 or even the performance to exceed the proposed threshold.

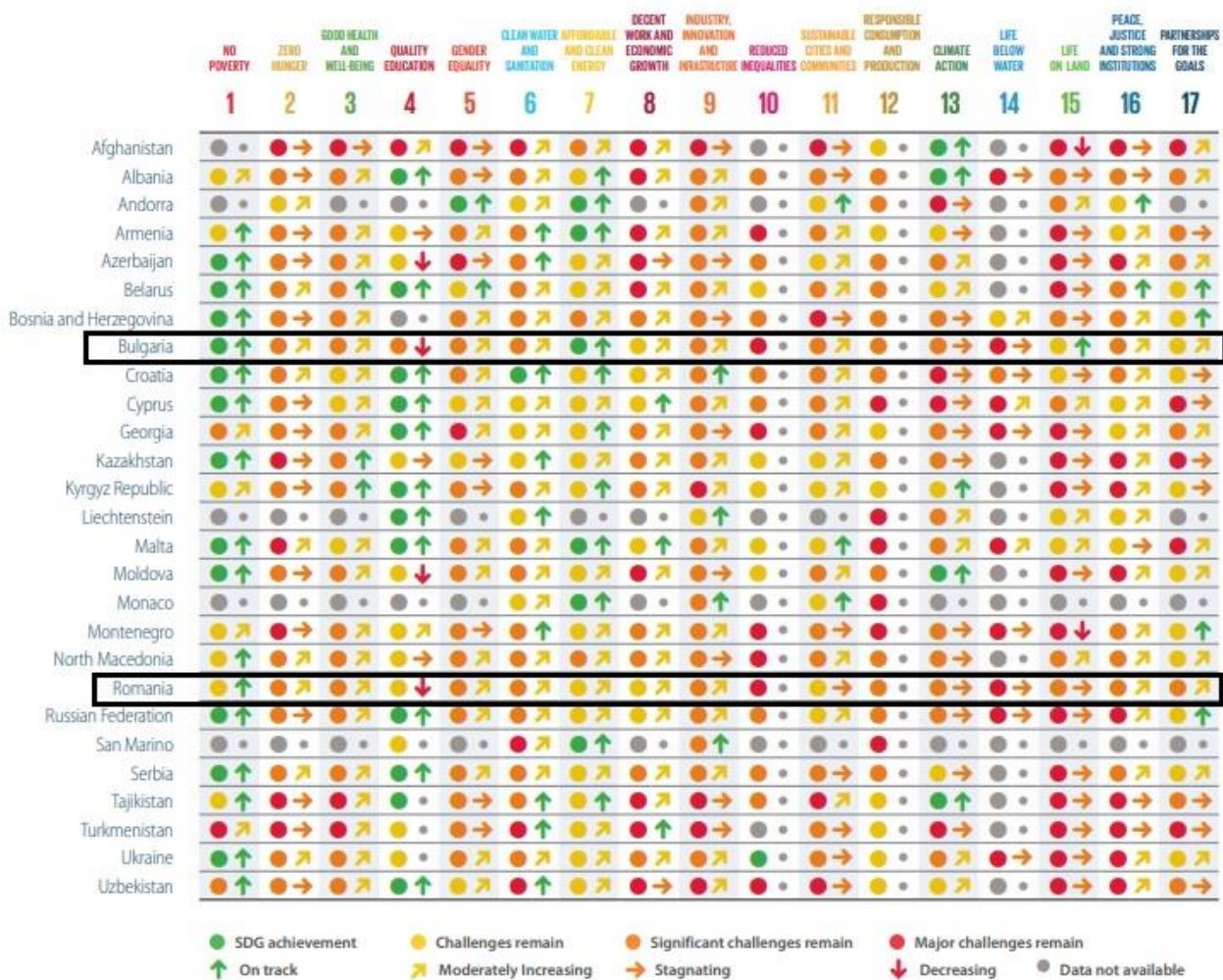


Figure no. 6-1 Levels and trends for SDGs

The official documents from the two countries regarding the objectives of sustainable development were analyzed, respectively the National Strategy for Sustainable Development of Romania 2030 and the Bulgaria 2030 National Development Program. As their wording, and the targets set by each country are not achieved in a unitary way, the relevant environmental objectives were formulated, taking into account the requirements of the two countries, but in a general way. The following table presents the objectives that formed the basis for formulating the relevant environmental objectives.



Table 6-2 Objectives set at European and national level

Environmental Aspects	UN Sustainable Development Goals ⁷³	EU Objectives	Source (EU objectives)	Objectives RO ⁷⁴	Objectives BG ⁷⁵
Biodiversity	15. Life on land	<ul style="list-style-type: none"> - Legal designation of new protected areas and integration of green corridors - Restoring degraded ecosystems, especially those with the greatest potential for carbon capture and storage, and preventing and reducing the impact of natural disasters. - Managing existing invasive species and reducing by 50% the number of species on the red list that they threaten - Prevent, minimize and mitigate the adverse effects of invasive alien species on biodiversity and these services of the system, as well as on human health and safety, and to reduce their social and economic impact 	<p>EU Biodiversity Strategy for 2030</p> <p>Regulation (EU) no. 1143/2014 on the prevention and management of the introduction and spread of invasive alien species</p>	<ul style="list-style-type: none"> - Development of green infrastructure and use of the services provided by natural ecosystems (especially in the Danube meadows, its tributaries and in the Delta) through integrated river basin and wetland management - Ensuring the conservation of mountain ecosystems, including their biodiversity, in order to enhance their capacity to deliver essential benefits for sustainable development - Supporting research and development institutions and infrastructures of national and European interest for the study, management, protection and conservation of the diversity of the natural heritage - Sustainable forest management, elimination of illegal logging, development of an integrated information system for monitoring timber exploitation and transport, including at border crossings, ensuring afforestation and reforestation of forest lands and those degraded or subject to desertification, development of scheduled planting forest curtains for the protection of 	<ul style="list-style-type: none"> - Biocapacity deficit, global hectares per capita (target value: remain below the EU average)

⁷³ European Commission - Sustainable Development Goals

⁷⁴ Strategia Națională pentru Dezvoltarea Durabilă a României 2030

⁷⁵ Bulgaria 2030 National Development Program



Environmental Aspects	UN Sustainable Development Goals ⁷³	EU Objectives	Source (EU objectives)	Objectives RO ⁷⁴	Objectives BG ⁷⁵
				agricultural crops and infrastructure in order to limit the impact of climate change	
Population and human health	<ul style="list-style-type: none"> 3. Good health and well-being 2. Zero hunger 11. Sustainable cities and communities 4. Quality education 	<ul style="list-style-type: none"> - Achieving a high level of protection of human health and the environment as a whole by reducing harmful industrial emissions across the EU - Improve and protect human health, and support the modernization of Europe's health systems 	<ul style="list-style-type: none"> Directive 2010/75/EU on industrial emissions (the Industrial Emissions Directive or IED) Strategic Plan 2016-2020 DG Health & Food Safety 	<ul style="list-style-type: none"> - Ensuring universal access to information, education and counseling services to promote prevention and adopt a risk-free lifestyle; - Complete digitization of the health system and, implicitly, the elimination of printed documents and registers on paper, in order to streamline and facilitate medical interventions, to ensure rapid access to quality medical services, treatments and medicines and to effectively monitor needs; - Complete digitization of the health system and, implicitly, the elimination of printed documents and registers on paper, in order to streamline and facilitate medical interventions, to ensure rapid access to quality medical services, treatments and medicines and to effectively monitor needs; - Reduce maternal and neonatal mortality so that it is below the EU average; - Increase vaccine coverage to the minimum level recommended by the WHO for each vaccine, by developing a common platform for collaboration between authorities, doctors, patients, international organizations with experience in this field, representatives of companies in the field, as well as other stakeholders; - Promoting awareness of mental illness, reducing stigma and creating an 	<ul style="list-style-type: none"> - Healthy life years (target value 67,5 (f) and 64 (m)). - Unmet need for medical care,% (target value: reaching the average EU (2%)) - Share of the population who do not exercise or play sports,%, (target value: reaching the average EU (46%)) - Share of early leavers from education and training, % (target value 7%) - Population (25-64 years of age), involved in education and training, % (target value 7%) - Share of low performers in the Programme for International Student Assessment (PISA) (average for the three subjects of the study) (target value 25%)



Environmental Aspects	UN Sustainable Development Goals ⁷³	EU Objectives	Source (EU objectives)	Objectives RO ⁷⁴	Objectives BG ⁷⁵
				<p>environment in which affected citizens feel accepted and where they can ask for help;</p> <ul style="list-style-type: none">- Stopping tuberculosis and fighting hepatitis and other communicable diseases- One-third reduction in premature mortality from non-communicable diseases through prevention and treatment and the promotion of mental health and well-being;- Reducing the mortality caused by chronic diseases;- Reducing the consumption of harmful substances;- Eradicate malnutrition and keep the obesity rate below 10%, similar to the level recorded in 2014.- Substantially reduce the number of deaths and illnesses caused by hazardous chemicals and air, water and soil contamination.- Reducing the rate of early school leaving;- Modernization of the education system by adapting teaching-learning methodologies to the use of information technologies and increasing the quality of the educational act;- Organizing vocational and technical education in specially designed and equipped campuses; training of well-qualified teachers; curriculum development according to labor market requirements through the development of partnerships, including with the business environment;	



Environmental Aspects	UN Sustainable Development Goals ⁷³	EU Objectives	Source (EU objectives)	Objectives RO ⁷⁴	Objectives BG ⁷⁵
		<p>adopting sustainable soil management practices.</p> <ul style="list-style-type: none"> - Protection and sustainable use of soil - Ensuring that the operation of an installation does not lead to a deterioration of the quality of soil and groundwater. 	<p>Thematic Strategy for Soil Protection</p> <p>Industrial Emissions Directive</p>	<ul style="list-style-type: none"> - Increasing the share of organic farming in total agricultural production; - Maintaining and making profitable traditional occupations and methods of capitalizing on medicinal plants and berries in the mountain area. Maintaining local traditions by increasing the number of products with specific characteristics in terms of geographical origin. 	
Water	6. Clean Water and Sanitation	<ul style="list-style-type: none"> - Achieving good status/potential for all surface and groundwater bodies. - Restoring freshwater ecosystems and the natural functions of rivers, removing mainly obsolete barriers and the restoration of floodplains and wetlands 	<p>Water Framework Directive</p> <p>EU Biodiversity Strategy for 2030</p>	<ul style="list-style-type: none"> - Substantially increase the efficiency of water use in industrial, commercial and agricultural activities; extending the rational reuse of treated and recycled water with a view to achieving the objectives of the circular economy; - Substantially increase water efficiency in all sectors and ensure a sustainable process for capturing and supplying drinking water to address water scarcity; - Connecting at least 90% of households in towns, communes and compact villages to the drinking water and sewerage network; - Increasing access to safe drinking water for vulnerable and marginalized groups; - Improving water quality by reducing pollution, eliminating waste storage and minimizing hazardous chemicals and materials, reducing the proportion of 	<ul style="list-style-type: none"> - Population connected to at least secondary wastewater treatment, % (target value 73,9)



Environmental Aspects	UN Sustainable Development Goals ⁷³	EU Objectives	Source (EU objectives)	Objectives RO ⁷⁴	Objectives BG ⁷⁵
				untreated wastewater and substantially increasing safe recycling and reuse.	
Air	<p>11. Sustainable cities and communities</p> <p>3. Good health and well-being</p> <p>13. Climate action</p>	Air quality status should be maintained where it is already good, or improved.	Directive 2008/50/EC Air Quality	<ul style="list-style-type: none"> - Reducing the effects of air pollution on human health and the environment by paying special attention to air quality; 	<ul style="list-style-type: none"> - Population exposed to PM10 contamination levels above the emission limit values, % (target value 0)
Climate change	<p>13. Climate action</p> <p>7. Affordable and clean energy</p> <p>8. Good jobs and economic growth</p> <p>12. Responsible consumption</p>	Net zero greenhouse gas emissions by 2050. Target for 2030: reducing greenhouse gas emission by at least 55% compared to levels in 1990.	European Climate Law	<ul style="list-style-type: none"> - Strengthening Romania's resilience and capacity to adapt to climate and natural disaster risks - Improving the ability to react quickly to extreme weather events of high intensity - Improving human and institutional education, awareness and capacity on climate change mitigation, adaptation, impact reduction and early warning - Intensify Romania's efforts to make the transition to a "green" economy with low carbon emissions, resilience to climate change and to integrate climate change adaptation measures into vulnerable economic, social and environmental sectors, in line with EU policies 	<ul style="list-style-type: none"> - Change in greenhouse gas levels outside the ETS range compared to 2005, % (target value, 0).



Environmental Aspects	UN Sustainable Development Goals ⁷³	EU Objectives	Source (EU objectives)	Objectives RO ⁷⁴	Objectives BG ⁷⁵
Material values	<p>8. Good jobs and economic growth</p> <p>11. Sustainable cities and communities</p>			<p>Maintaining a higher GDP growth rate than the EU average in order to support the effort to reduce the gaps compared to the advanced European countries, while applying the principles of sustainable development and constantly improving the living standards of the population;</p> <p>Promoting development-oriented policies that support productive activities, create decent jobs, start-up entrepreneurship, creativity and innovation, and encourage the formalization and growth of micro, small and medium-sized enterprises, including access to financial services;</p> <p>Achieve higher levels of productivity through diversification, technological modernization and innovation, including by focusing on high value-added sectors and labor-intensive use;</p> <ul style="list-style-type: none"> - Strengthen the capacity of domestic financial institutions to encourage and expand access to banking, insurance and financial services for all. 	<ul style="list-style-type: none"> - Income ratio of the poorest and the richest 20% of households (target value 5,5%); - Population at risk of poverty or social exclusion, % (target value 25%); - Variation in the employment rate by region, % (target value: reaching the EU average (5,3%))
	<p>11. Sustainable cities and communities</p>	<p>Ensuring a higher level of protection and resilience in the event of disasters by preventing or reducing their effects and by promoting a culture of prevention.</p>	<p>Decision No 1313/2013/ EU - Union Civil Protection Mechanism</p>	<ul style="list-style-type: none"> - Significantly reduce the economic losses caused by floods and landslides, improve the collective response and strengthen the capacity to adapt and return to function as soon as possible after the event, reduce the impact of floods or pollution caused by floods and landslides on ecosystems, including by constantly improving the legislative framework; - Educating and making the population responsible for seismic risk situations; 	



Environmental Aspects	UN Sustainable Development Goals ⁷³	EU Objectives	Source (EU objectives)	Objectives RO ⁷⁴	Objectives BG ⁷⁵
Cultural heritage	8. Good jobs and economic growth 11. Sustainable cities and communities 12. Responsible consumption	The social dimension - capitalizing on the potential of culture and cultural diversity for social cohesion and well-being.	Commission's communication on a new European agenda for culture COM (2018)267.	- Achieving a long-term competitive tourism, developing agrotourism, ecotourism, rural, spa and cultural tourism and improving Romania's image as a tourist destination; Strengthening efforts to protect and safeguard the cultural and natural heritage, the elements of the urban and rural landscape	- Share of the population participating at least once a year in cultural or sport activities, % (target value 40%) - Average bed occupancy rate in tourism accommodation, % (target value 50%).
Landscape	11. Sustainable cities and communities	Promoting landscape protection, management and planning and organizing European cooperation on landscape issues.	European Landscape Convention	- Strengthening efforts to protect and safeguard the cultural and natural heritage, the elements of the urban and rural landscape.	
Energy efficiency	7. Affordable and clean energy	By 2030 at European level, the proposed target for energy efficiency is to reduce primary energy consumption by 26% and final energy consumption by 20% compared to 2005 levels. Energy efficiency is key to achieving the 2050 climate neutralization target.	Directive on energy efficiency	- Extend the transmission and distribution networks for electricity and natural gas to ensure that domestic, industrial and commercial consumers have access to secure energy sources at affordable prices - Ensuring the cyber security of the monitoring platforms of the production, transmission and distribution networks of electricity and natural gas - Decoupling economic growth from resource depletion and environmental degradation by significantly increasing energy efficiency (by at least 27% compared to the status quo scenario) and expanding the use of the EU ETS under predictable and stable market conditions - Ensuring a stable regulatory framework and transparency in the field of	- Renewable energy in gross final energy consumption, % (target value 27 %)



Environmental Aspects	UN Sustainable Development Goals ⁷³	EU Objectives	Source (EU objectives)	Objectives RO ⁷⁴	Objectives BG ⁷⁵
				energy efficiency in order to attract investment - Strategic support for the share of electricity in total domestic, industrial and transport consumption by establishing performance standards for installations and equipment;	
Sustainable transport	7. Affordable and clean energy 11. Sustainable cities and communities 3. Good health and well-being 9. Innovation and infrastructure	Moving to more sustainable transport means putting users first and providing them with more affordable, accessible, healthier and cleaner alternatives. A key objective is to significantly increase the absorption of clean vehicles and alternative fuels, thus reducing GHG emissions by 90% by 2050.	Commission's communication - Sustainable and Smart Mobility Strategy COM (2020)789	- Ensuring access to safe, fair, affordable and sustainable transport systems for all, in particular by expanding public transport networks, paying particular attention to the needs of those in vulnerable situations, women, children, people with disabilities and the elderly; - Increasing the share of renewable energy sources and low-carbon fuels in the transport sector (electric vehicles), including alternative fuels; - Modernize and develop quality, reliable, sustainable and strong infrastructure, including regional and cross-border infrastructure, to support economic development and people's well-being, with a focus on broad and equitable access for all; - Improving road safety;	- Efficiency of train services, GCR (target value 3,7%). - Completion of the TEN-T Road Core network, % (target value 100%). - Number of road traffic fatalities per 100,000 inhabitants (target value: reaching in the EU (4,9%)).
Circular economy	12. Responsible consumption and production	Design and promote circular economy processes by encouraging sustainable consumption and ensuring that the resources used in the EU economy are maintained for as long as possible.	EU Circular Economy Action Plan	- Staged transition to a new development model based on the rational and responsible use of resources with the introduction of elements of the circular economy, the elaboration of a roadmap; - Halving per capita food waste at retail and consumption level and reducing food losses along production and supply chains, including post-harvest losses;	- Recycling of municipal waste, % (target value 55%);



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Environmental Aspects	UN Sustainable Development Goals ⁷³	EU Objectives	Source (EU objectives)	Objectives RO ⁷⁴	Objectives BG ⁷⁵
				<ul style="list-style-type: none">- 55% recycling of municipal waste by 2025 and 60% by 2030;- 65% recycling of packaging waste by 2025 (plastics 50%; wood 25%; ferrous metals 70%, aluminum 50%, glass 70%, paper and cardboard 75%) and 70% by 2030 (materials plastics 55%, wood 30%, ferrous metals 80%, aluminum 60%, glass 75%, paper and cardboard 85%);- Separate collection of hazardous household waste by 2022, bio-waste by 2023 and textile by 2025;- Establishing mandatory extended producer responsibility schemes for all packaging by 2024;	



Following the analysis of the above, the following relevant environmental objectives have been established. The relevant environmental objectives were presented and agreed during the meeting of the Working Group set up for the environmental assessment of the Interreg VI-A Romania Bulgaria 2021-2027 Programme.

Table 6-3 Relevant environmental objective

Environmental Aspects	Relevant Environmental Objectives
Biodiversity	REO 1. Conservation and protection of biodiversity, including maintenance / improvement of the conservation status of species and habitats
Population and human health	REO 2. Improving the living conditions and health of the population by improving the quality of the environment (reduction of all forms of pollution, including noise levels) ⁷⁶
	REO 3. Promoting health and health education with an impact on improving environmental behavior and encouraging sustainable practices ⁷⁷
Soil and land use	REO 4. Improving soil quality and maintaining productive capacity, as well as reducing its negative impact
Water	REO 5. Improving and maintaining the ecological status / ecological potential and chemical status of surface and groundwater bodies, rational use of water resources and stopping pollution
Air	REO 6. Improving air quality and reducing emissions of air pollutants
Climate change	REO 7. Reducing GHG emissions (mitigation) and adapting to the effects of climate change
Material assets	REO 8. Promoting sustainable use and management of material assets
Risk management ⁷⁸	REO 9. Preventing and reducing the risk of natural disasters, as well as minimizing their effects
Cultural heritage	REO 10. Protection and promotion of cultural heritage, including the preservation of local traditions and customs
Landscape	REO 11. Protection, improvement and promotion of natural landscapes
Energy efficiency	REO 12. Increasing energy efficiency and the use of renewable energy
Sustainable transport	REO 13. Reduction of environmental externalities related to transport activities.
	REO 14. Facilitating the infrastructure for providing electric and non-motorized transport ⁷⁹
Circular economy	REO 15. Maintaining the value of products, materials and resources; prevention of waste generation, promotion of efficient waste

⁷⁶ The relevant objective has been reformulated in accordance with the request of the Romanian Ministry of Environment, Forests and Forests

⁷⁷ The relevant objective has been reformulated in accordance with the request of the Ministry of Environment, Waters and Forests and INSP - National Center for Risk Monitoring of the Community Environment in Romania

⁷⁸ The environmental aspect was introduced following the request of the Romanian Ministry of Water Environment and Forests

⁷⁹ The environmental objective was introduced following the request of the Romanian Ministry of Environment, Waters and Forests



Environmental Aspects	Relevant Environmental Objectives
	management on: collection, selection, recycling and recovery of waste ⁸⁰
Population awareness	REO 16.Acquiring the knowledge and skills needed to promote sustainable development (education for sustainable development and sustainable lifestyle), as well as raising awareness and encouraging public participation ⁸¹

⁸⁰ The relevant objective has been reformulated in accordance with the request of INSP - the National Center for Monitoring the Risks in the Community Environment - Romania

⁸¹ The relevant objective has been reformulated in accordance with the request of the Romanian Ministry of Environment, Forests and Forests



7. POTENTIAL SIGNIFICANT EFFECTS ON THE ENVIRONMENT

7.1. ASSESSMENT METHODOLOGY

The principle of the method used is to identify the potential effects of the actions of the program on the relevant environmental objectives. Specifically, it will be evaluated how the implementation of the types of actions of the program contributes, prevents / does not prevent the achievement of the objectives set for each environmental aspect. The following figure shows the classes for assessing potential significant effects on the environment.

Possible effect	Description
Significant negative effect	
Nonsignificant negative effect	
No effects	
Nonsignificant positive effect	
Significant positive effect	

Figure no. 7-1 Assessment classes

The main advantages of the methodology are the following:

1. Represents a guarantee of the use of a unitary approach to assessing the effects for any of the relevant environmental aspects / objective of the analyzed environment;
2. It is an effective tool for communicating the results of the evaluation to both specialists and the general public

Of course, the proposed methodology also has a number of limitations, the most important of which is that not always the effect of an action can be assessed so accurately as to fall into one of the categories presented. In order to avoid this aspect, where due to lack of data and information a high degree of uncertainty is maintained, a cautious approach is used: classification in a more disadvantageous class.

Scoring (assigning a colour) is done for each type of action proposed in the program, even if some of these actions may in turn include several actions / projects / interventions. In this case, the grade awarded corresponds either to the potential cumulative effect (if applicable) or to the action / project likely to produce the highest level of adverse effects.



7.2. ENVIRONMENTAL POTENTIAL EFFECTS GENERATED BY THE PROGRAMME IMPLEMENTATION

7.2.1. ANALYSES REGARDING THE PROGRAMME OBJECTIVES

The 5 specific objectives of the program aim at joint investments in the following areas:

- Connectivity
- Climate change adaptation and environment protection
- Human capital - education
- Integrated territorial development

The specific objectives of the program are:

- OS 2.4. Promoting climate change adaptation and disaster risk prevention, resilience, taking into account ecosystem-based approaches
- OS 2.7. Enhancing protection and preservation of nature, biodiversity and green infrastructure, including in urban areas, and reducing all forms of pollution
- OS 3.2. Developing and enhancing sustainable, climate resilient, intelligent and intermodal national, regional and local mobility, including improved access to TEN-T and cross-border mobility
- OS 4.2. 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
- OS 5.2 Fostering the integrated and inclusive social, economic and environmental local development, culture, natural heritage, sustainable tourism and security, in areas other than urban areas.

The motivation for choosing the policy objectives and their detail can be found in chapter 2.5 of this report.

7.2.2. THE ASSESSMENT OF THE COMPATIBILITY BETWEEN THE PROGRAMME OBJECTIVES AND THE RELEVANT ENVIRONMENTAL OBJECTIVES (SEA OBJECTIVES)

The purpose of assessing the compatibility between the objectives of the program and the objectives of the SEA is to identify possible synergies or inconsistencies between the two sets of objectives.

This assessment was carried out in accordance with the Environmental Assessment Guidelines for Plans and Programs, developed in the framework of EuropeAid / 121491 / D / SER / RO (PHARE 2004/016 - 772.03.03) “Strengthening the institutional capacity for the implementation and implementation of the Directive SEA and the Reporting Directive”.

Within the matrix, the compatibility relationship was analysed as follows:



- “+” if the objectives are compatible;
- “-” if the objectives are not compatible;
- “?” when it is considered that the determination of compatibility depends on certain uncertainties;
- “=” if the objectives are identical or almost identical;
- If no link was identified between the two objectives analyzed, the box was left empty.

The following table shows the compatibility assessment between the two sets of objectives, it should be noted that the table presents the objectives in the form of a space-saving code, the detailed presentation of the objectives of the program is presented in Chapter 2.4 and the relevant environmental objectives are presented in Chapter 6.

Table 7-1 Compatibility assessment matrix between Interreg VI-A RO-BG objectives and relevant environmental objectives

Relevant environmental objectives Specific objectives	RE01	RE02	RE03	RE04	RE05	RE06	RE07	RE08	RE09	RE010	RE011	RE012	RE013	RE014	RE015	RE016
SO 2.4.	+	+	+	+	+	+	=	?	+		+					+
SO 2.7.	=	+	+	+	+	+	+	+			+					+
SO 3.2	?	+		?	?	+	+	+					+	+	?	
SO 4.2.		+	+									?				+
SO 5.2	?	+	+	?		?	?	?	+	=	+	+			?	+

Evaluation of specific objectives The Interreg VI-A Romania-Bulgaria 2021-2027 Programme indicates a degree of addressability of the relevant environmental objectives of approx. 58 %.

For 42 % of the objectives of the Romania-Bulgaria Interreg VI-A Programme 2021-2027, it was not possible to establish relations with the relevant environmental objectives (SEA objectives). The lack of a relationship between the objectives of the programme and SEA should not be considered as a negative aspect of it, as the objectives of the Interreg VI-A Romania-Bulgaria 2021-2027 Programme address issues related to promoting equal access to education and encouraging local development, non-urban areas, with positive effects on economic growth, not necessarily having a direct influence on relevant environmental objectives.

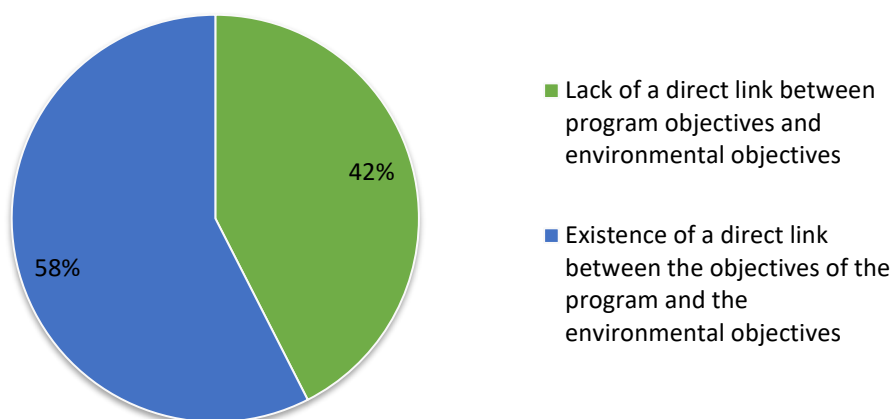


Figure no. 7-2 The link between the specific objectives and the relevant environmental objectives of the programme

Of the 58% for which a link was identified between the objectives of the programme and the relevant environmental objectives (SEA), 40% of the cases, the objectives are compatible. The relevant environmental objectives are identical to the objectives of the programme in proportion of 4%, and for 14% the compatibility depends on other uncertainties.

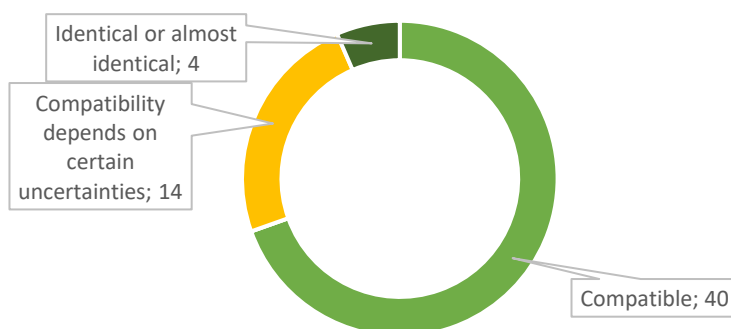


Figure no. 7-3 Assessment of the compatibility between the objectives of the Interreg VI-A RO-BG Programme and the relevant environmental objectives (SEA) (percentage)

7.2.3. ASSESSMENT OF THE COMPATIBILITY BETWEEN THE SECTORAL OBJECTIVES OF THE PROGRAMME

The purpose of the evaluations is to identify the compatibility between the 5 specific objectives of the Romania-Bulgaria Interreg VI-A Programme 2021-2027. The specific objectives have been coded / abbreviated for space saving (see section 2.5 for a detailed presentation).

The method of checking the compatibility between the objectives of the program is:

- ⚙ “+” if the objectives are concordance;
- ⚙ “x” if they are in contradiction;



⚙️ “?” if the connection between the objectives is not clear.

It should be noted that if no link was identified between the analyzed objectives, the case was released.

The following table shows the compatibility between the specific objectives of the programme.

Table 7-2 Matrix for assessing the compatibility between the objectives of the Interreg VI-A programme RO-BG 2021-2027

	SO 2.4			
SO 2.7	+	SO 2.7		
SO 3.2	?	?	SO 3.2	
SO 4.2				SO 4.2
SO 5.2		?	+	

The assessment of the objectives of the Interreg VI-A Romania-Bulgaria 2021-2027 programme indicates a degree of concordance between them of 50%, and for 50% of the objectives, it did not identify a link between the objectives. For 20% of the objectives, it was established that they are compatible and for 30% the connection is not clear. The fact that not all objectives are compatible does not represent a negative aspect, but an aspect of complementarity, encompassing a wide range of issues.

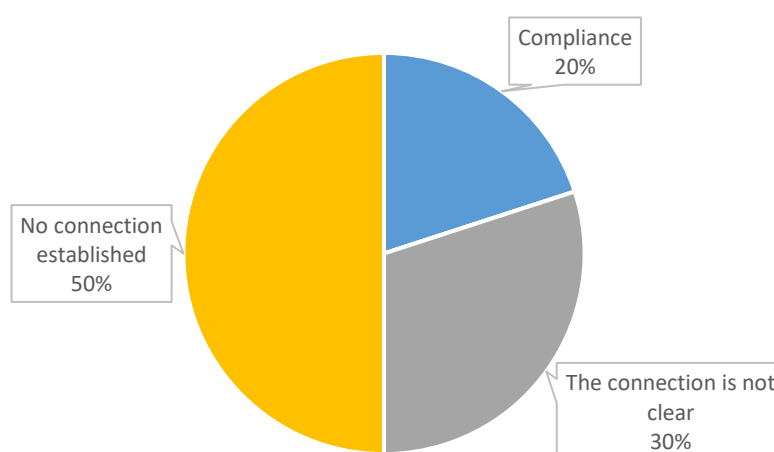


Figure no. 7-1 Assessing compatibility between objectives



7.2.4. ASSESSMENT OF TYPES OF INTERVENTIONS/ PROJECTS PROPOSED FOR THE PROGRAMME IMPLEMENTATION

The types of actions identified in the Interreg VI-A Romania-Bulgaria 2021-2027 Programme were grouped according to the similarity of the theme in order not to duplicate the evaluation, thus resulting in a number of 14 types of actions.

The maximum level of detail of the evaluation is represented by the types of actions proposed within the 4 priorities of the programme. Thus, they were evaluated in terms of the potential to generate negative and positive effects on the relevant environmental objectives established according to the methodology presented in Chapter 7.1.

The types of actions grouped by topic are presented in the following table.



Table 7-3 Types of actions proposed under the Programme

Priority	Specific objective	Code	Action
P1. A well-connected region	3.2. Developing and enhancing sustainable, climate resilient, intelligent and intermodal national, regional and local mobility, including improved access to TEN-T and cross-border mobility	A1.	Actions enhancing rail connectivity and mobility across the Danube <ul style="list-style-type: none"> - Elaboration of feasibility studies for the electrification and digitalization of the railway infrastructure; - Designing and implementing sustainable transport tools and solutions for better connectivity and mobility in the cross-border area, for the railway transport, including, but not limited to: safety, territorial deployment, reliability, efficiency, real-time knowledge of schedules, traffic and ticketing etc.; - Identifying and addressing the missing links and bottlenecks in rail and river crossing infrastructure: studies, strategies, joint solutions, joint tools etc.; - Improving and expanding rail transport: studies regarding traffic safety, awareness campaigns, connectivity/mobility studies for understanding freight and passenger flows, commuting etc.; - Designing and implementing integrated solutions for supporting mobility and connectivity in time of crisis; - Designing and implementing sustainable transport solutions for better connectivity and mobility in the area; - Modernization, upgrading and expanding the rail infrastructure: <ul style="list-style-type: none"> • Works for railway modernization (including electrification of the railway lines and introduction of the ERTMS / ETCS railway signalling system); • Works for modernization, reconstruction and construction of railway stops and stations.
		A2.	Actions improving the navigation conditions and safety on the Danube and Black Sea in order to enhance the mobility and connectivity in the cross-border area <ul style="list-style-type: none"> - Reducing administrative burden and other types of bottlenecks: studies, analyses, solutions, tools; - Developing and implementing joint co-ordinated strategies, tools and pilot applications to improve the navigation conditions on Danube and Black Sea (e. g, joint feasibility studies, engineering planning documents, morphological and hydrodynamic studies in establishing the sediment accumulation conditions etc.);



Priority	Specific objective	Code	Action
			<ul style="list-style-type: none"> - Developing and implementing integrated measures to improve the navigation conditions for the common sector of the Danube and the Black Sea in the cross-border area (e.g. integrating the marking systems on Danube, equipment, signaling etc.).
P2. A greener region	2.4. Promoting climate change adaptation and disaster risk prevention, resilience, taking into account ecosystem-based approaches	A3.	The disaster risk prevention and resilience taking into account ecosystem-based approaches <ul style="list-style-type: none"> - Improving risk prevention and intervention capacity in the cross-border region, by developing joint operational centers and joint intervention plans, - Increasing the capacity of intervention and reaction through investments in equipment and vehicles, IT systems etc. - Developing common training curricula and deployment of joint exercises, including the voluntary response services. - Improving cross-border coordination and capacity for adaptation to climate change and its associated risks (floods, fires, hydrological droughts, pollution). - Developing joint methodologies for risk assessment and risk monitoring in the cross-border area (risk of floods, including torrential floods, risk of drought).
		A4.	Climate change adaptation actions (Ecosystem-based disaster risk reduction (Eco-DRR) solutions) <ul style="list-style-type: none"> - Supporting behavioural change, by raising awareness, building networks of communities and stakeholders and implementing educational activities on how to adapt to the negative effect of the climate change, especially among the local communities, tourists and forest owners; - Developing joint methods and tools to improve the planning, decision-making and intervention capacity of relevant stakeholders, including public engagement, in the adaptation to climate change (e.g. identification, assessment of needs, designing and implementing joint cross-border strategies, action plans, procedures, methodologies, policies, tools, monitoring systems etc.);



Priority	Specific objective	Code	Action
			<ul style="list-style-type: none"> - Developing methods and tools to support adaptation planning and decision-making on climate change adaptation measures; - Identifying, assessing and reducing the negative implications of climate change on socio-economic activities in the area (e.g. development and implementation of joint strategies, tools, plans, solutions, joint support activity); - Implementing joint ecosystem-based measures for climate change adaptation, for example: <ul style="list-style-type: none"> o Reforestation, conservation and forest protection measures, including implementing community-based forest monitoring systems related to climate change; o Preventing and reversing desertification through integrated management of land and water (e.g. protecting the vegetative cover, planting trees, establishing seed banks, enriching the soil with nutrients, reintroducing selected species, building green "buffer areas"); o Supporting water and land management through green solutions (for example: swales, creek restoration and nature scaping, green solutions for drainage systems, naturalized storm-water ponds, etc.).
	2.7. Enhancing protection and preservation of nature, biodiversity and green infrastructure, including in urban areas, and reducing all forms of pollution	A5.	Reducing all types of pollution by supporting investments in monitoring and data collection on air, soil and water pollution <ul style="list-style-type: none"> - Improving pollution control by supporting investments in monitoring and data collection on air, soil and water pollution, particularly in urban areas, including through setting up tools for measuring the air, soil and water quality and providing real-time data (e.g., networks of sensors and applications and platforms to allow reporting by the public).
		A6.	Supporting the development of green infrastructures, including by developing and protecting green areas in human settlements and raising awareness of the benefits of green spaces <ul style="list-style-type: none"> - Protection and restoration of nature and biodiversity, located within and near settlements through appropriate joint solutions, including through the creation of ecological corridors, green bridges, eco- passages, green infrastructure, ecoducts, etc. to reconnect artificially fragmented natural areas;



Priority	Specific objective	Code	Action
			<ul style="list-style-type: none"> - Developing green infrastructures and supporting biodiversity and protecting nature in human settlements, including by: roofing and facade greening, gardening, promoting green eco-friendly solutions for replacing pesticides and herbicides in urban areas etc.; - Developing green areas, including connections between green spaces (urban parks, green sport facilities, forests, riverbank greens).
		A7.	<p>Enhancing biodiversity conservation, recovery and sustainable use and protection of natural heritage, including Natura 2000 and RAMSAR sites</p> <ul style="list-style-type: none"> - Promoting, facilitating and encouraging citizens engagement in protecting biodiversity, including its conservation and sustainable use; - Conservation of biodiversity and habitats through application of best practices from government agencies, research institutes, non-governmental organizations, as well as active participation of civil society; - Supporting data collection and information sharing in respect to biodiversity between the two sides of the border; - Joint evaluation, enhancement and promotion of ecosystem services on local and regional level in a cross-border context; - Developing ecosystem services to support biodiversity and reduce pollution; - Sharing good practices and implementing eco-friendly and innovative solutions that address invasive alien species and strengthen sustainable environment management practices (e.g., pollinator-friendly management, management of water bodies, forests etc.); - Supporting the establishment of seed banks, restocking of soil organic matter and organisms that promote higher plant establishment and growth, and reintroduction of selected species; - Raising awareness of the benefits of green spaces, including in urban areas, encouraging local actions for greener settlements and rehabilitation of brownfields, driving behavioural change in respect to enhancing nature and biodiversity protection and preservation, and reducing pollution.
P3. An educated region	4.2. Improving equal access to inclusive	A8.	<ul style="list-style-type: none"> - Development of extensive and structured language-learning schemes, as a vector for building trust across the border, for creating the basis for future exchanges and also as an employment-boosting factor;



Priority	Specific objective	Code	Action
	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		- Development of joint cross-border education and training schemes - on-site in areas where accessibility is not a hindrance or online, using digitised learning tools and methods, if physical presence is not an option.
		A9.	- Development of cross-border internship or placements and student exchange programmes for young graduates/students; - Development of joint initiatives supporting adult education and learning (LLL), including facilitating learning mobility; - Development of partnerships between secondary and higher education establishments and businesses, in order to improve the market orientation and the quality aspect of education and offer young students the possibility to train and/or study on the other side of the border. Long-term exchanges are particularly envisaged.
		A10.	- Development of partnerships between education and training institutions and stakeholders, at all education levels (early to tertiary), to support mutual learning and exchange of practices between teachers and trainers on both sides of the border; - Development of joint initiatives and actions to support access to quality inclusive education and training, including LLL, to vulnerable or marginalized groups, including disabled persons, SEN ('Special educational needs' is a legal definition and refers to children with learning problems or disabilities that make it harder for them to learn than most children the same age), Roma ethnic group etc. - Joint measures for improving the link between the labour market and the education and training system.
		A11.	- Investments in the infrastructure of educational facilities (e.g., learning spaces such as classrooms, labs, libraries, workshops, gyms, outdoor learning spaces but also other facilities) for all education levels and educational activities (including remedial and after-school), technical and vocational training and LLL etc.; special attention will be given to promoting accessible and inclusive learning for all persons; - Investments in ensuring proper endowment for joint learning facilities with focus on digitalization: equipment, tools, etc., especially those that support the development of practical and/or digital skills and remote learning, such as computers, videoconferencing/distance education equipment VR learning etc.



Priority	Specific objective	Code	Action
P4. integrated region	An 5.2 Fostering the integrated and inclusive social, economic and environmental local development, culture, natural heritage, sustainable tourism and security, in areas other than urban areas.	A12.	Developing the Eurovelo 6 cycling route <ul style="list-style-type: none"> - Developing the necessary cycling infrastructure, including safety measures, first aid and service points, signalling etc. Priority will be given to projects ensuring connection to tourist attractions - cultural, natural heritage sites and to other means of transport. Connecting infrastructure (incl. new, reconstruction or modernization of relevant road sections) is also considered, , in duly justified cases and in line with the list of operations; - Ensuring road safety for the sections overlapping the EuroVelo Route, in view of complying with standards related to traffic signalling systems and/or additional development of infrastructure dedicated to cyclists and pedestrians, such as tunnels, bypasses, bridges, overpasses and walkways and protected cycling paths; - Ensuring effective connections with and access to and from other means of transport, including ports and rail stations - adapting infrastructure; - Ensuring availability of public transportation in connection to the cycling route; - Ensuring appropriate services along the EuroVelo Route, such as: accommodation, food, drink and rest and recreation areas, services including Bike Pit-Stops, information, bookable offers, other assistance; - Ensuring communication and information, online and along the route, including mobile/e-applications for cyclists, etc.
		A13.	Supporting tourism activities, connected sectors and industries <ul style="list-style-type: none"> - Investments in economic competitiveness of local businesses including, but not limited to: construction/modernisation of productive facilities; supply of relevant equipment; adoption of digital technologies etc; - Set-up of natural sites for economic use: trails / paths, waste disposal, security, signalling, camp sites, other open-air attractions etc; - Supporting sites with tourist potential: construction, modernization/restoration of castles, fortresses, churches, monasteries, palaces, archaeological sites, private/public museums, libraries, art collections/galleries, exhibitions places, wineries, agro-farms (e.g.; lavender farms/fields; roses farms/fields, traditional oil factories, sheepfolds), adventure parks, open air attractions etc;



Priority	Specific objective	Code	Action
			<ul style="list-style-type: none">- Creating common historical, natural and cultural heritage products and services, expanding and improving services, targeting new markets and creating jobs in the cross-border area, including by setting up on-site and on-line shops, especially for traditional / local products (local food, bread, wine, cheese, rose, lavender, honey etc.), including the related tourist infrastructure, access and links to the tourist sites;- Support for local and regional actors to valorise potentially valuable touristic objectives /sites / experiences, including by creating sustainable tourism trails, or developing quality labels for excellence in services, promoting and marketing the touristic offer etc. taking advantage of social media trends - such as “insta-tourism”, is also encouraged;- Training of staff, particularly digital skills.
		A14.	Support for implementing the integrated territorial strategy <ul style="list-style-type: none">- Developing the stakeholders ‘capacity to implement the integrated territorial strategy;- Support for implementing and monitoring the integrated territorial strategy

The following table presents the analysis of the positive or negative effects of the types of actions (summarized) on the relevant environmental objectives.



Table 7-4 Assessment of the types of actions

Code	Action	SEA objectives	REO1	REO2	REO3	REO4	REO5	REO6	REO7	REO8	REO9	REO10	REO11	REO12	REO13	REO14
A1.	Actions enhancing rail connectivity and mobility across the Danube.															
A2.	Actions improving the navigation conditions and safety on the Danube and Black Sea in order to enhance the mobility and connectivity in the cross-border area															
A3.	The disaster risk prevention and resilience taking into account ecosystem-based approaches.															
A4.	Climate change adaptation actions (Ecosystem-based disaster risk reduction (Eco-DRR) solutions).															
A5.	Reducing all types of pollution by supporting investments in monitoring and data collection on air, soil and water pollution.															
A6.	Supporting the development of green infrastructures, including by developing and protecting green areas in human settlements and raising awareness of the benefits of green spaces.															
A7.	Enhancing biodiversity conservation, recovery and sustainable use and protection of natural heritage, including Natura 2000 and RAMSAR sites.															
A8.	Development of extensive and structured language-learning schemes; Development of joint cross-border education and training schemes.															
A9.	Development of cross-border internship or placements and student exchange programmes for young graduates/students; Development of joint initiatives supporting adult education and learning (LLL); Development of partnerships between secondary and higher education establishments and businesses.															



Code	Action	SEA objectives													
		REO1	REO2	REO3	REO4	REO5	REO6	REO7	REO8	REO9	REO10	REO11	REO12	REO13	REO14
A10.	Development of partnerships between education and training institutions and stakeholders; Development of joint initiatives and actions to support access to quality inclusive education and training; Joint measures for improving the link between the labour market and the education and training system.														
A11.	Investments in the infrastructure of educational facilities; Investments in ensuring proper endowment for joint learning facilities with focus on Digitalization.														
A12.	Developing the EuroVelo 6 cycling route.														
A13.	Supporting tourism activities, connected sectors and industries.														
A14.	Support for implementing the integrated territorial strategy.														

Following the assessment of the types of actions of the programme, no significant negative effects were identified. The number of types of effects identified are shown in the following figure.

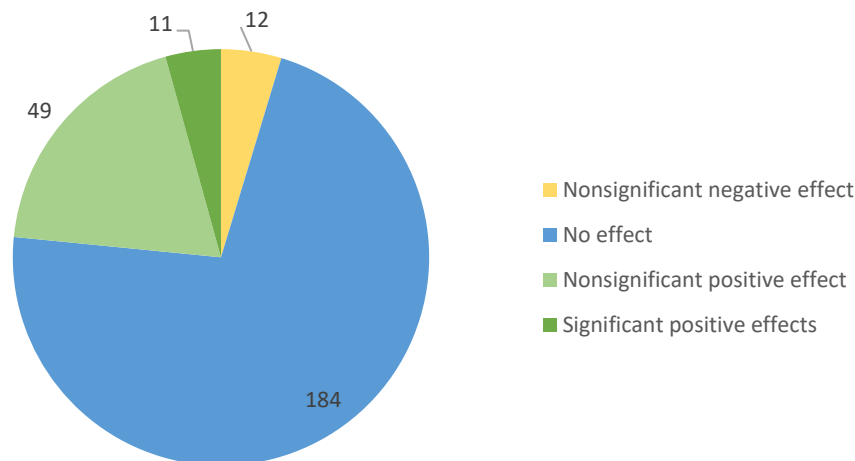


Figure no. 7-4 Number of effects identified

For all relevant environmental objectives, effects (positive or negative) were identified following the implementation of the Interreg VI-A Romania Bulgaria 2021-2027 Programme. Nonsignificant adverse effects have been identified for the relevant environmental objectives REO1, REO4, REO6 and REO15 for which prevention and mitigation measures have been proposed and the justification for attributing the nonsignificant adverse effect can be found in the table below.

Through the implementation of the Programme, positive effects (significant or nonsignificant) were identified for all relevant environmental objectives, except REO15.

According to the figure below, it can be seen that the implementation of the Interreg VI-A Romania Bulgaria 2021-2027 Programme makes a positive contribution (significant positive effect) to the achievement of the following relevant environmental objectives:

- REO1 - Biodiversity, through action A7 which includes measures to increase biodiversity;
- REO4 - Soil and land use, the A4 action implements a proper soil management for reducing some of the pressures on it;
- REO7 Climate changes, action A1 improves rail transport, which is a less polluting transport alternative (reduced greenhouse gas emissions) compared to road transport; action A4 proposes actions to adaption to the effects of climate change;
- REO9 Material assets, Action A4 contributes to the achievement of the relevant environmental objective on the risk of natural disasters, in particular through reforestation;
- REO10 Cultural heritage, the A13 action proposes the activity of restoration and promotion of the different elements of the cultural heritage, thus there being a direct contribution to the fulfilment of the relevant environmental objective;
- REO13 and 14 Sustainable transport, action A1 supports less polluting alternative to road transport which has a negative impact on the environment (contributions to REO13), action



A12 supports the development of the EuroVelo6 cycling route which is a clean means of transport (contributions to REO14);

- REO16 - Acquiring the knowledge and skills needed to promote sustainable development, through Actions A4 and A7, which include measures to raise public awareness of various environmental issues, such as the effects of climate change, biodiversity protection and the increased utility of green spaces.

In conclusion, although the implementation of the program may generate nonsignificant negative effects on biodiversity, soil, air and the circular economy, it also generates positive effects on all environmental aspects, except the circular economy.



Figure no. 7-5 Share of identified effects on relevant environmental objectives

Justification for the assessment of the effects on the environment for the types of actions proposed by the program is presented in the following table, taking also in consideration the request of the Watershed Directorates and the Ministry of Health from Bulgaria related to the assessment of the effects on waters (surface and ground water bodies, coastal water bodies, areas for water protection) and the quality of drinking and bathing water.

Table 7-5 Justification for the assessment of the effects on the environment for the types of actions proposed by the programme

Action code	Assessment justification
A1	From a strategic point of view, the support of the program for the development of rail transport as a preferable alternative (with a lower level of environmental impact) to road transport was considered in the evaluation. Consequently, the contribution of the program was considered to be positively significant for the relevant environmental objectives REO7 and REO13.



Action code	Assessment justification
	<p>Secondly, the potential negative effects associated with the implementation of the proposed actions were considered, mainly those aimed at modernizing and expanding the railway, the reconstruction and construction of railway stations.</p> <p>Currently, there are 3 secondary and un-electrified railway lines crossing the border (Medgidia - Negru Vodă - Dobrich; Bucharest - Giurgiu - Ruse - Veliko Tarnovo; Craiova - Calafat - Vidin - Vraca - Sofia). In two of these three areas (Giurgiu-Ruse and Calafat-Vidin), there are Natura 2000 sites designated for birds' protection (SPAs), located in the vicinity of the railways. The electrification works, as well as the increase of the railway traffic, may lead to negative effects on the Sites-Specific Conservation Objectives.</p> <p>The impact on habitats can be manifested by:</p> <ul style="list-style-type: none"> • habitat losses, for those habitats in the vicinity of the railway lines for which extensions are proposed; • habitat alteration, by favouring the penetration of invasive species and as a result of the development of construction works; • disturbance of species activity (increase in noise level, artificial lighting, etc.); - mortality of individuals as a result of the increase in collision risk (due to the increase in train speeds). <p>Railway infrastructure modernization projects also represent opportunities to address and solve existing environmental problems (e.g., disruption of ecological connectivity).</p> <p>It is not expected that the proposed types of actions to generate significant effects on the status of surface, underground and coastal water bodies, as well as on the areas for water protection and on the quality of the drinking and bathing waters.</p> <p>Railway rehabilitation works can generate significant amounts of waste, including, where the case, amounts of contaminated soil. Some of the materials collected during rehabilitation can be reused / recycled to avoid becoming waste.</p>
A2	<p>Projects to improve navigation conditions on the Danube could generate significant negative impacts on biodiversity components. Removing support for hard measures (e.g., dredging) from the program entitles us to consider that the remaining proposed actions cannot have a significant negative impact. However, it was considered precautionary to assess as a potentially nonsignificant negative impact on REO1 (Biodiversity).</p> <p>The proposed activities have a nonsignificant positive impact on the objective on material values (REO8) as a result of the improvement of the safety conditions of the naval traffic. A positive impact was also considered in the case of REO6 and REO13, considering that the implementation of the actions can lead to the reduction of road freight traffic.</p> <p>It is not expected that the proposed signalling works to lead to the deterioration of the surface and ground water bodies status, as they do not require extensive construction works. They will also not influence the areas for water protection. The interventions do not require discharges that could affect the quality of water bodies, drinking water or bathing waters.</p>



Action code	Assessment justification
A3	<p>The implementation of disaster risk prevention and resilience solutions is necessary and expected. However, the soft nature and the volume of investment considered justify the assessment of a positive but nonsignificant impact on several objectives. Negative effects (allocated to REO4 - Soil) were considered only for the newly proposed constructions of the operational centers.</p> <p>The actions included here cannot generate a significant effect on waters, due to their soft character (capacity building, trainings, trans-border coordination, etc), and an insignificant positive effect on ORM3</p>
A4	<p>A4 includes a set of ambitious actions that directly address several relevant environmental objectives for which the contribution has been considered positively significant (REO16, 4, 5, 7 and 9). Other positive effects were considered, including on biodiversity (REO1) as a result of proposals for reforestation, conservation and monitoring of forests, as well as support for the implementation of green solutions.</p> <p>For these actions, which also include sustainable water and land management through green solutions, it was considered that they can have significant positive effects for the improvement of water bodies status.</p> <p>No adverse effects associated with this set of actions were identified.</p>
A5	<p>The specific action to reduce all forms of pollution has a nonsignificant positive impact on environmental factors (REO4, REO5, REO6) because monitoring can identify and solve problems in a timely manner. Also, by providing this information to the population, it would be aware of the environmental problems to which it is exposed.</p>
A6	<p>The set of actions to support the development of green infrastructure has a nonsignificant positive effect on REO1, as they contribute to maintaining/improving the conservation status of species and habitats. They have the same level of effects on the population (REO2) because living conditions are improved, as well as on the soil (REO4) because the development of green infrastructure reduces negative impacts on soil quality. At the same time, these actions contribute to the improvement and protection of the landscape (REO11). The impact on water resources (REO5) is a positive one, due to the contribution of the actions to increase the rainwater retention in cities and to reduce water bodies contamination by pesticides and herbicides.</p>
A7	<p>The action for enhancing biodiversity conservation may lead to significant positive effects on REO1. Though most of the proposed actions are soft ones, they are addressing critical issues for both countries, like: application of best practices and knowledge sharing. The actions are also including specific measures for enhancing biodiversity, particularly by addressing the subject of invasive alien species, pollinators-friendly management and management of natural resources like waters and forests.</p> <p>The proposed actions are also expected to generate significant positive effects on REO3, due to the targeting of behavioural change in relation to biodiversity conservation and sustainable use.</p>



Action code	Assessment justification
	Nonsignificant positive effects were assessed for: REO2 - the results of the actions will directly contribute to the improvement of the living conditions and will indirectly address the improvement of the human health; REO4 - there are proposed measures which address the improvement of soil quality and its productive capacity; REO5 - solutions will be developed and implemented to strengthen sustainable environmental management practices, including water body management. Indirectly, the actions addressing biodiversity will be beneficial for air quality, landscape and the sustainable use of material assets.
A8	These two types of actions (A8 and A9) contribute to the educational and vocational training of the population. This aspect may contribute to the acquisition of the knowledge and skills necessary for sustainable development and therefore it was considered a nonsignificant positive effect for REO3. No negative effects associated with this set of actions were identified.
A9	
A10	As in the case of the previous types of actions (A8 and A9), for A10 it was considered that it can contribute to the development of knowledge and skills related to sustainable development (REO16). It was also considered that joint initiatives may aggregate along the common natural values and human traditions generated by the Danube, a common element which may positively influence the sustainability of these actions. Considering the joint measures for improving the link between the labour market and the education and training system, it was also assessed a nonsignificant positive effect for the sustainable use and management of material assets (REO8).
A11	Considering the investments in infrastructure and proper endowment for joint learning facilities, for this type of actions it was assessed a nonsignificant positive effect for the sustainable use and management of material assets (REO8). Potential positive effects on REO16 were not considered, to avoid a redundant assessment with previous actions (A8 - A10). No negative aspects were identified for these actions, since the programme is not proposing investments in constructions, but mostly on digitalisation.
A12	Encouraging bicycle-based tourism is certainly a sustainable action that can have positive effects. It was considered that the positive effects will be primarily relevant to the public perception of promoting sustainable development (REO16), for contributing to the reduction of atmospheric emissions of pollutants (REO6), for the sustainable promotion of cultural heritage (REO10), and last but not least for the sustainable alternative of tourism activities through a sustainable mode of transport (REO14). However, the cycling route is not designed to represent an alternative to the main existing transportation routes and as a consequence it was not considered as having a significant positive impact on any relevant environmental objective. Some negative effects associated with the implementation of the Eurovelo 6 project were considered in the case of biodiversity (REO1), soil (REO4) and waste management (REO14), as a



Action code	Assessment justification
	<p>result of the proposed investments in the construction, arrangement, modernization of existing road infrastructure to allow the implementation of the cycling route.</p> <p>The EuroVelo 6 route also intersects the territory of several Natura 2000 sites. The cycling route is associated with the existing road infrastructure, so it was considered very unlikely to significantly affect some Natura 2000 habitats and / or species as a result of the project implementation. Solutions for connecting existing infrastructure to the future cycling route will need to be carefully considered at the project level to avoid / reduce impacts on biodiversity.</p> <p>No potential effects associated with the implementation and operation of Eurovelo 6 have been identified, leading to deterioration of the status / potential (as the case) of surface and groundwater bodies.</p>
A13	<p>The set of activities addresses directly the protection and capitalization of the cultural heritage, proposing in this sense sustainable approaches that have been assessed as having a potential significant positive impact on the REO10.</p> <p>A positive (nonsignificant) impact was considered in the case of the objective on population and human health (REO2) as a result of the support of measures that can lead to the increase of the living standard of the citizens through the development of sustainable activities.</p> <p>The rehabilitation of cultural objectives and the development of sustainable tourist trails are able to positively influence the landscape in the area of tourist attractions and to represent an alternative for today's tourism. For this reason, it was considered that the proposed actions could have a positive (nonsignificant) effect on REO11. Rehabilitation of cultural objectives also has a positive effect on REO8 and implicitly can contribute to improving energy efficiency in the buildings targeted by the program (REO12).</p> <p>However, construction work (including modernization, restoration) can also have negative effects. These (nonsignificant) effects were considered in the case of biodiversity (many of the tourist destinations are located in areas valuable for biodiversity, including protected natural areas), soil, air and waste, due to the construction works, as well as the increased number of tourists that can lead to increased traffic levels and increased waste quantities in the touristic areas.</p>
A14	<p>The assessment for this action has been included mainly in action 12 (Eurovelo 6). The reason for this choice is that independently, no effects associated with the activities proposed for the development, implementation and monitoring of the Strategy were identified. Also, the backbone of the strategy is the development of the Euro Velo 6 Route.</p>

As regards the contribution of the Programme to the achievement of the relevant environmental objectives, the following statements can be made:

- Biodiversity: the Programme is addressing the main identified environmental problem, with a significant contribution to maintaining/improving the conservation status of habitats and species;



- Population and human health: the Programme does not have a significant contribution to the aspects related to human health and population size, however a limited positive contribution is expected regarding the living conditions/ standard of living;
- Soil: the Programme does not address the main environmental problems identified for soil in the Programme area, but nevertheless it is not in the position to prevent the objective to be achieved;
- Water: the Programme has a consistent and significant contribution to all identified environmental problems, increasing the chances of water relevant environmental objectives to be reached;
- Air: the Programme addresses the existing environmental problems and has a positive reduced contribution to the achievement of the relevant environmental objective;
- Climate change: the Programme has a significant contribution in addressing the existing environmental problem and proposed environmental objective;
- Material assets: the Programme has a positive and significant contribution to some of the relevant environmental problems and to the achievement of the relevant environmental objective;
- Risk management: the Programme has a positive and significant contribution to some of the relevant environmental problems and to the achievement of the relevant environmental objective;
- Cultural heritage: the Programme addresses the existing relevant problems, with a potential significant contribution for reaching the environmental objective;
- Landscape: no significant contribution was identified within the Programme's actions to the relevant environmental problems;
- Energy efficiency: the Programme has a low, but positive contribution to the relevant environmental objective;
- Sustainable transport: the Programme has a significant positive contribution to the relevant environmental problems and environmental objective;
- Circular economy: the Programme has no contribution to the relevant environmental problems and environmental objective;
- Population awareness: the Programme has a positive and significant contribution to some of the relevant environmental problems and to the achievement of the relevant environmental objective.

Also, the types of actions of the Program were evaluated according to the DNSH principle (do no significant harm). The assessment was carried out in accordance with the European Commission's Technical Guidelines on Integration of the Principle of "No Substantial Harm" under the Mechanism for Recovery and Sustainability Regulation, and the impacts were analyzed against the six environmental objectives covered by the Taxonomy Regulation. The assessment represents a

separate document, and a summary of the conclusions is presented below. Applying the DNSH principle involves two steps. The first step involves passing each type of action through a filtering of the six environmental objectives, in order to identify those that require a substantive assessment, in the event that an assessment is not required, a justification will be presented.

The environmental objectives are represented by:

- Climate change mitigation;
- Climate change adaptation;
- The sustainable use and protection of water and marine resources;
- The circular economy, including waste prevention and recycling;
- Pollution prevention and control to air, water or land;
- The protection and restoration of biodiversity and ecosystems.

The second stage involves providing a substantive assessment according to the DNSH principle for the environmental objectives that require it.

- Climate change mitigation: Is the measure expected to lead to significant GHG emissions?
- Climate change adaptation: Is the measure expected to lead to an increased adverse impact of the current climate and the expected future climate, on the measure itself or on people, nature or assets?
- The sustainable use and protection of water and marine resources: Is the measure expected to be detrimental: (i) to the good status or the good ecological potential of bodies of water, including surface water and groundwater; or (ii) to the good environmental status of marine waters?
- The transition to a circular economy, including waste prevention and recycling: Is the measure expected to: (i) lead to a significant increase in the generation, incineration or disposal of waste, with the exception of the incineration of non-recyclable hazardous waste; or C 58/10 EN Official Journal of the European Union 18.2.2021 (ii) lead to significant inefficiencies in the direct or indirect use of any natural resource at any stage of its life cycle which are not minimized by adequate measures; or (iii) cause significant and long-term harm to the environment in respect to the circular economy?
- Pollution prevention and control: Is the measure expected to lead to a significant increase in the emissions of pollutants into air, water or land?
- The protection and restoration of biodiversity and ecosystems: Is the measure expected to be: (i) significantly detrimental to the good condition and resilience of ecosystems; or (ii) detrimental to the conservation status of habitats and species, including those of Union interest?

All 14 types of actions in the program to evaluate the conformity of stage 1, and in the end of the two stages of the stage to evaluate 5 types of actions (A1, A2, A11, A12 and A13) final conclusion of the evaluation and evaluation of the types of actions Proposals in the Interreg Program VI-A Romania - Bulgaria 2021-2027 are in accordance with the DNSH principle.



8. POTENTIAL SIGNIFICANT EFFECTS ON THE ENVIRONMENT AND HEALTH IN A TRANSBOUNDARY CONTEXT

8.1. GENERAL ASPECTS

The types of actions from the Interreg VI-A Romania - Bulgaria Programme are not included in Annex 1 of Law no. 22/2001 ratifying the Convention on Environmental Impact Assessment in a Transboundary Context, adopted at Espoo on 25 February 1991 (Official Gazette, Part I no. 105 of 01/03/2001).

No significant adverse effects on the environment and health were identified, nor in the local context, nor in the cross-border context.

There is every reason that the effects of the implementation of the Romania-Bulgaria Interreg VI-A Program will mainly generate a positive cross-border impact due to the fact that the strategic objectives refer to interconnection actions between the two countries, and future actions / projects will have to be developed either in partnership two countries, or involving a process of consultation with the authorities and stakeholders in the neighboring country during the development of the projects.

8.2. CUMULATIVE EFFECTS

The effects generated by the program, both positive and negative, can be combined with the effects of other plans and programs, as well as other projects.

Based on the analysis of the relationship with other plans and programs of the Interreg VI-A Romania-Bulgaria 2021-2027 Program (see section 2.5), no situations were identified that could lead to the occurrence of significant negative cumulative effects.

Situations have been identified in which the analyzed program contributes to the fulfillment of the objectives of some plans, programs or strategies, thus resulting in potential positive cumulative effects.

Following the implementation of the types of actions of the program, a cumulative positive effect on environmental aspects is expected: population and human health, water, climatic factors, material assets, risk management, landscape, sustainable transport and public awareness.



9. MEASURES PROPOSED TO PREVENT, REDUCE AND COMPENSATE ANY POSSIBLE ADVERSE EFFECTS ON THE ENVIRONMENT DUE TO IMPLEMENTATION OF THE PROGRAMME

Directive 2001/42/EC on Strategic Environmental Assessment (SEA) requires the establishment of "measures to prevent, reduce and offset significant environmental effects resulting from the implementation of the program".

As no significant adverse effects have been identified, the set of measures proposed here addresses the insignificant adverse effects identified as well as the preventive measures. No compensatory measures have been proposed because no potential significant effects on Natura 2000 sites have been identified.

The process of identifying and formulating measures to avoid and reduce the impact also took into account the following two hypotheses:

- All subsequent projects RO-BG 2021-2027 will be implemented in full compliance with the requirements of the environmental legislation in force. Therefore, no measures to reduce compliance with the law were considered;
- Considerations regarding the maximization of the positive effects on the environment of the projects to be implemented will be taken into account in all stages of the implementation of the program. As a result, no measures were considered to be aimed solely at maximizing the positive effects.

The set of avoidance and mitigation measures is presented in the following table. The implementation of these measures will lead to an insignificant level of residual effects. The assessment of the significance of the residual effects is carried out by implementing the monitoring program (see Chapter 11).



Table 9-1 Avoidance and reduction measures

Code	Environmental objective ⁸²	Significance of identified effects ⁸³	Measure	Addressability of measures ⁸⁴
M1	REO 1	Nonsignificant negative	All projects aimed at modernizing railway infrastructure will implement solutions designed to avoid / reduce the impact on biodiversity. Solutions should include: reducing the risk of wildlife collision with train sets, maintaining / restoring ecological connectivity, controlling invasive species, reducing the risk of collision and / or electric shock to birds with railway electrical infrastructure, reducing noise and ensuring lighting systems which does not disturb the activity of wildlife.	A1
M2	REO 1	Nonsignificant negative	The Danube River and the Black Sea include sensitive ecosystems that host many protected habitats and species. Projects aimed at improving the navigation conditions will be based on environmental analysis to assess the impact of different implementation options on biodiversity components, especially protected habitats and species as well as migratory species if the legal provisions request such analysis. In the case of Natura 2000 sites, the assessment will be based on the requirements of the Conservation Objectives specific to each of the potentially affected sites.	A2
M3	REO 1	Nonsignificant negative	Prior to the start of renovation work on the existing buildings, an identification of the possible presence of bats and birds as well as the presence of their shelters and nests will be identified, in line with the legal provisions. The activities will be carried out by certified experts (Register of certified experts for the elaboration of environmental studies - Types of studies: Monitoring of biodiversity "MB"). If the presence of certain species is identified, the decision will be taken to	A1 and A13, optional for A3 and A11

⁸² The name of the relevant environmental objective has been abbreviated.

⁸³ See section 7.2.5 of this Report

⁸⁴ Code of actions under which the measures will be implemented



Code	Environmental objective ⁸²	Significance of identified effects ⁸³	Measure	Addressability of measures ⁸⁴
			postpone the interventions until the end of the nesting / rearing period or to relocate the individuals in compliance with the legal requirements in force (obtaining a derogation according to national legislation ¹). In the case of buildings where shelters / nests have been decommissioned, solutions for the installation of artificial shelters / nests will be adopted, preferably using durable solutions (long life) such as built-in shelters ⁸⁵ . It is recommended that the measure of installing artificial shelters be considered in the case of new buildings built with financial support from the Program.	
M4	REO 1	Nonsignificant negative	Avoiding implementing new constructions related to Eurovelo 6 cycling route development that may affect Natura 2000 habitats and species.	A12
M5	REO 4	Nonsignificant negative	Projects aimed at construction and landscaping will ensure the implementation of those project alternatives that ensure the minimum level of artificialization of soil surfaces and the maximum level of maintenance / development of green space surfaces ⁸⁶ .	A1, A3, A12 and A13
M6	REO 6	Nonsignificant negative	Consideration of the inclusion of charging stations for electric vehicles in projects aimed at arranging sites with tourist potential to facilitate the transport of electricity to these destinations.	A13
M7	REO 14	Nonsignificant negative	Elaboration at the level of each project of a waste management plan to ensure the compliance of the waste hierarchy and the integration of the principles of the circular economy, in accordance with Circular economy	A1, A12 și A13

⁸⁵ Integrated solutions in construction such as bird nests and bat shelters. Some illustrative examples can be viewed here <https://www.wildcare.co.uk/wildlife-nest-boxes.html>

⁸⁶ Minimum level of artificialization = minimum footprint of the buildings, platforms, internal roads.



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Code	Environmental objective ⁸²	Significance of identified effects ⁸³	Measure	Addressability of measures ⁸⁴
			action plan ⁸⁷ . In order to ensure proper management of construction and demolition waste, which are generated during the implementation of subsequent projects, supporting documents will be required on waste traceability (handing them over to entities authorized by law to manage this type of waste).	
M8	REO 1	Nonsignificant positive	All projects that provide for the planting of grass, shrub or arboreal species will consider the exclusive use of non-invasive native species, characteristic of the natural habitat types in the implementation areas.	A4, A6
M9	REO 12	Nonsignificant positive	Projects aimed at the rehabilitation of existing buildings and / or the construction of new buildings will consider the implementation of solutions to improve energy efficiency as well as the use of renewable sources of electricity / heat.	mainly A1 and A3

⁸⁷ https://ec.europa.eu/environment/strategy/circular-economy-action-plan_en



The following requirements must be respected by the Bulgarian partners, in line with the national provisions, at the implementation of the Programme's subsequent projects (proposed by the River Basin Directorates - Bulgaria):

1. The implementation of projects and intentions that provide for the use and / or abstraction of surface and groundwater resulting from the implementation of the Programme to be agreed on eligibility for environmental objectives and planned measures to achieve good water status in the River Basin Management Plans, as well as the objectives of flood risk management and the measures provided for in the Flood Risk Management Plans for the relevant period of action.
2. The activities arising from the implementation of the Programme shall comply with the restrictions and prohibitions regulated in (Bulgarian legislation):
 - Ordinance № 3 from 16.10.2000 for the conditions and the order for research, design, approval and operation of sanitary protection zones around the water sources and the facilities for drinking and household water supply and around the water sources of mineral waters, used for medical, prophylactic, drinking and hygienic needs.
 - Art. 118a from the Water Act - for conservation of the ground water from pollution, direct and indirect discharge of pollutants into groundwater is prohibited.
 - In accordance with the provisions of Article 116 of the Water Act, all waters and water bodies should be protected from pollution and damage. When implementing the Programme to provide measures to prevent deterioration of surface and groundwater.
 - Art. 131 of the Water Act - in case of emergency, creating preconditions for water pollution, the owner or the person operating the site - source of pollution, including tailings, sludge and embankments, is obliged to take the necessary measures to limit or eliminate the consequences of pollution, according to a pre-prepared emergency plan and immediately notify the basin directorates.
 - According to Art. 7, para 1 of the Water Act, except a principle in relations related to the ownership of water bodies is the exercise of property without violating the integrity and unity of the hydrological cycle and the natural water system
 - The requirements of Article 134 of the Water Act to prohibit the construction of farm and residential buildings and the disposal, storage and treatment of waste in coastal floodplains and lands belonging to reservoirs.
 - The requirements of Art. 143, according to which in order to protect against the harmful effects of water it is prohibited to disturb the natural condition of beds, river banks and coastal floodplains, reduce the conductivity of river beds, use river beds as landfills, land and rock masses, as well as construction over covered river sections.
 - The prohibitions of Art. 146 of the Water Act for construction in the flooded terraces of the rivers and the easement of the hydrotechnical facilities;



- The requirements of Art. 125 of the Water Act that the inclusion of new quantities of wastewater should take into account the capacity and efficiency of the existing sewerage system;
 - In the absence of a sewerage system, given Art. 132 of the Water Act, the persons from the economic activity of which wastewater is formed, are obliged to build treatment facilities in accordance with the requirements for discharge into a water body;
 - The requirements of Art. 44 and Art. 46 of the Water Act, in case of water abstraction and / or use of a water body, including art. 46, para 4 with regard to the discharge of domestic and faecal waters.
 - For activities located in properties bordering or close to the Black Sea coast, it is necessary to comply with the relevant prohibitions and restrictions arising from the Black Sea Coast Development Act on wastewater discharge. Do not obstruct the free access to the water body - the Black Sea.
 - The prohibitions and restrictions of art. 11, para. 2 and Art. 10, para 2 of the Black Sea Coast Development Act;
 - For activities in certain areas with a significant potential risk of flooding in the floodplain, measures should be taken to protect against the harmful effects of water. The National Catalog of Flood Risk Management Measures can be used when planning measures
3. The activities and measures under the Programme related to the construction of infrastructure sites need to comply with the existing enterprises with high / low risk potential on the territory of the Republic of Bulgaria, within the scope of the programme.



10. REASONS THAT LED TO SELECTING THE PROGRAMME ALTERNATIVES

Following the Territorial Analysis, the socio-economic field was identified as a key area with potential of the area, including transport infrastructure, tourism, environment, human capital and governance. The RO-BG cross-border area is a territory of contrasts, with a number of negative aspects. The population is declining and the development of infrastructure and public services is progressing slowly, paralleling the trend of economic growth. The quality of environmental factors is deteriorating, while there is a high potential for sustainable energy. Cross-border cooperation parallels the lack of trust in the administration, as well as the presence of language barriers.

The conclusion of the Territorial Analysis states that investment is needed in all areas, and the aim of the program should be to increase cooperation to ensure the socio-economic development of the region, responsibly capitalizing on territorial specifications and resources offered by the Danube River and the Black Sea Coast.

Following these analyzes, the Joint Programming and Strategic Planning Group for the Romania-Bulgaria Cross-Border Cooperation Programme 2021-2027, selected 4 policy objectives:

- A greener, low-carbon Europe (PO2);
- A more connected Europe - mobility and regional ICT connectivity (PO3);
- A more social and inclusive Europe [implementing the European Pillar of Social Rights] (PO4);
- A Europe closer to citizens (PO5).

A first difference between the first version of the program and the final version is the number of policy objectives chosen for funding. The following table shows the differences between the first and last version of the program.

Tabel 10-1 The main differences between the initial and the final version of the program

Program components	Version „November 2020”	Versions „August 2021 and January 2022”	Observation
Policy objective	PO3. A more connected Europe - mobility and regional ICT connectivity	PO3. A more connected Europe - mobility and regional ICT connectivity	Following the decision of the Joint Group of 23.02.2021, 2 more policy objectives were selected for financing. Being currently chosen 4 out of 5 policy objectives, specific to the programme, solving the problems in the fields of transport infrastructure,
		PO2 A greener, low-carbon Europe	
	PO5. A Europe closer to citizens	PO4. A more social and inclusive Europe [implementing the European Pillar of Social Rights]	
		PO5. A Europe closer to citizens	
Specific objective	3.3. Developing sustainable, climate resilient, intelligent and intermodal national, regional and local mobility,	3.2. Developing and enhancing sustainable, climate resilient, intelligent and intermodal national, regional and local mobility, including improved access to TEN-T and cross-border mobility	
		2.4. Promoting climate change adaptation and disaster risk prevention, resilience, taking into account ecosystem-based approaches	



Program components	Version „November 2020”	Versions „August 2021 and January 2022”	Observation
Priority	including improved access to TEN-T and cross-border mobility	2.7. Enhancing protection and preservation of nature, biodiversity and green infrastructure, including in urban areas, and reducing all forms of pollution	tourism, environment and human capital, and not only the fields related to PO 3 and 5 as initially selected.
	5.2. Fostering the integrated social, economic and environmental local development, cultural heritage and security, including for rural and coastal areas also through community-led local development	4.2. 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 online education and training	
		5.2. Fostering the integrated and inclusive social, economic and environmental local development, culture, natural heritage, sustainable tourism and security, in areas other than urban areas	
Priority	A well-connected region	A well-connected region	
		A green region	
	An integrated region	An educated region	
		An integrated region	

From the first to the last version of the program, various changes were made to the types of actions that will be financed by the Interreg VI Romania 2021-2027 Programme. Some of these changes are represented by:

- Eliminating the types of actions that involve the improvement and expansion of road infrastructure;
- Replacing the types of actions that involve dredging activities on some parts of the Danube, with actions that propose the integration of marking systems on the Danube, equipment, signalling, etc.;
- Eliminating the action “Promoting efficient waste management: waste separation and recycling; raising awareness of sustainable waste management”.

The first two changes lead to the avoidance of significant negative effects, particularly on biodiversity (REO1) and air quality (REO6). Expansion of road infrastructure and support of hard interventions for navigability purposes could also have led to potential significant effects on Natura 2000 sites.

The elimination of the action on waste management excludes the possibility of the Programme to address the environmental relevant objective related to Circular economy. However, contributions for circular economy can be integrated at the level of individual subsequent projects (see Chapter 9, measure M7).

Comparing alternative 0 (the situation in which the program is not implemented) and the variant in which the program is implemented, it can be concluded that choosing option 0 loses the opportunity to invest and improve the current state of the environment and meet the relevant environmental objectives (potential significant and insignificant positive effects



identified following the evaluation of the types of actions of the program). The most suggestive opportunities (potentially significant positive effect) are presented in the following table.

Environmental aspect	Alternative 0	Selected alternative
Biodiversity	In the program area there are different species and habitats that do not have a favorable conservation status	<p>The implementation of Action A7 aims to improve biodiversity conservation, revitalization and sustainable use and the protection of natural heritage, including Natura 2000 and Ramsar sites.</p> <p>The implementation of the action contributes to the achievement of the relevant environmental objective REO1.</p>
Soil and land use	The phenomenon of soil erosion is maintained in the program area.	<p>Action set A4 proposes to implement common ecosystem-based measures by adapting to climate change, for example: reforestation, conservation and protection of forests, prevention and reversal of desertification through integrated soil and water management and support of water and land management through green solutions.</p> <p>These actions make a significant contribution to meeting the relevant environmental objective REO4.</p>
Water	Good chemical / quality status is not reached for some surface and groundwater bodies. Also, for some water bodies the good ecological status / potential will not be reached.	<p>Action set A4 proposes to implement common ecosystem-based measures by adapting to climate change, for example: preventing and reversing desertification through integrated soil and water management and supporting green water and land management through green solutions.</p> <p>These actions make a significant contribution to achieving the relevant environmental objective REO5.</p>
Climatic factors	Although there has been a decrease in GHG emissions compared to the pre-industrial level, recently (2013-2018) their level is constant and the level of emissions is still high. Failure to implement ambitious measures could lead to a sharp increase in GHG emissions.	<p>Action A1 improves rail mobility, which is a means of transport with low GHG emissions, and Action A4 proposes the implementation of measures to adapt to climate change.</p> <p>The implementation of the two actions contributes to the achievement of the relevant environmental objective REO 7.</p>
Risk management	At the level of the program area, the risk of floods, earthquakes and landslides is maintained. These are expected in different areas of the program and of different intensities.	<p>Action A4 proposes measures to adapt to climate change (Ecosystem-based disaster risk reduction solutions (Eco-DRR)).</p> <p>These actions make a significant contribution to meeting the relevant environmental objective REO9.</p>
Sustainable transport	Transport activities are currently responsible for a significant part of total greenhouse gas emissions, and the situation could be maintained.	<p>Action A1 improves rail mobility, which is a means of transport with low GHG emissions.</p> <p>Action A13 supports the development of the EuroVelo6 route (cycling) which is also a low-GHG mode of transport.</p>
Public awareness	The population is informed about the protection of the environment by	The A3 set of actions supports the development of joint training programs and the conduct of joint exercises,



Environmental aspect	Alternative 0	Selected alternative
	carrying out campaigns, school education, etc., and the situation could be maintained.	including voluntary response services, and the A4 supports support for behavioral change by raising awareness, developing communities and stakeholders and implementing educational activities with on the negative effect of climate change, especially among local communities, tourists and forest owners. By implementing these actions, a significant contribution is made to the achievement of the relevant environmental objective REO16 by increasing the awareness of the population about the environment.

In conclusion, by choosing the alternative to implement the program, significant positive contributions are made to the following environmental aspects: biodiversity, soil and land use, water, climate factors, risk management, sustainable transport and public awareness.



11. MEASURES FOR MONITORING THE SIGNIFICANT EFFECTS OF THE PROGRAMME IMPLEMENTATION

As with the proposed measures to prevent, reduce and offset as far as possible any adverse effects on the environment, in terms of the requirements of applicable law, this section is intended to describe the measures to monitor the significant environmental effects of the implementation of the program.

The proposed set of indicators is correlated with the proposed avoidance and reduction measures, which are mainly addressed as preventive measures for the identified insignificant adverse effects, and will allow the assessment of the significance of the residual effects.

The program for monitoring the effects of the implementation of the programme aims at identifying, respectively preventing the potential negative effects on the environmental components and allows the proposal of additional actions to reduce the impact on the environment or to remedy the possible affected areas. This monitoring program is based on the relevant environmental objectives considered in this Environmental Report, which represent the environmental aspects that may be negatively (significantly and insignificantly) influenced by the implementation of the operational program. Thus, the impact on the environment generated by the implementation of the operational program will be monitored based on the extent to which these objectives could be influenced.

The monitoring program aims to:

- The way in which the relevant environmental objectives are achieved through the implementation of the program: obtaining and recording information on the significant effects on the environment generated following the implementation of PORBI 2021-2027, monitoring including all types of effects;
- Validity of predictions regarding the assessment of potential effects on the environment and the conclusions of the Strategic Environmental Assessment;
- The correct implementation of the proposed measures to avoid / reduce the effects on the environment, as well as the verification of their efficiency;
- Identification of unforeseen adverse events and the possibility of appropriate remedial action.

Proposed monitoring system

Given that there are several authorities and institutions involved in the sectors covered by the program, the programme owner will collect data on the proposed indicators based on the results of the implemented projects, its main responsibility being to centralize and present the proposed indicators in an appropriate way. The bodies responsible for monitoring are represented by the implementing bodies of the program, for example the managing authority, the national authorities, the territorial environmental authorities, the ministries relevant to environmental issues, etc.



The programme holder must submit, according to the legal provisions, an annual monitoring report, before the end of the first quarter of the year following the monitoring.

Indicators will be calculated based on the results of individual monitoring at the level of each project. The necessary information and data will be provided by the project owners, according to the information requested by the Programme documents.

The following table shows the environmental indicators, which address both the results of the program, respectively the verification of the way in which the different elements of it were implemented in reality, as well as the effects on the environment.



Table 11-1 Proposed indicators for monitoring the effects of the programme

Environmental objective	Indicator		Actions to be monitored	Target	Unit of measurement	Observations
General	MON1	The share of environmental measures costs in the total value of projects	All actions, particularly A1	> 0 %	Percentage	Environmental measures represent M1-M9 (see Table 9-1 above)
REO 1 Biodiversity	MON2	Number of environmental analyses to assess the impact of different options for the implementation of navigability project	A2	> 0	Number	To ensure that any decision is based on an environmental analysis
	MON3	Share of rehabilitated buildings for which the presence of nests / shelters of birds and bats was previously verified	A1, A13, optional A3 and A11	100 %	Percentage	Applies only to the projects started after the programme approval
	MON4	Number of situations in which it was necessary to protect / relocate nests / shelters of birds and bats and / or to install artificial shelters / nests		> 0	Number	-
REO 4 Soil	MON5	Total soil area lost as a result of the implementation of the proposed actions	A1, A3, A12 and A13	As small as possible	Square meters	It is equal with the total new constructed area
	MON6	The total area of newly created green spaces as a result of the implementation of the proposed actions		As large as possible	Square meters	It is equal with the total area with vegetation inside each project site
REO 6 Air	MON7	Number of charging stations for electric vehicles carried out within the projects aimed at arranging sites with tourist potential	A13	> 0	Number	-
REO 14 Circular economy	MON8	Share of projects in which Waste Management Plans have been developed	A1, A12 and A13	> 0 %	Percentage	From the total number of projects containing construction works



12. DIFFICULTIES IN SEA ANALYSIS

The following difficulties were encountered in the preparation of the Environmental Report for the Interreg VI-A Romania-Bulgaria Program 2021-2027:

- Existence of differences between the level of detail of the available data on the current state of the environment between Romania and Bulgaria;
- Lack of data from the two countries from the same time periods;
- The existence of certain information on the current state of the environment only at national level and not at the level of the program area, more specifically at the level of counties, districts;
- Different presentation of the Sustainable Development Goals (SDGs) in Romania⁸⁸ and Bulgaria⁸⁹. The following figure shows an example between the two countries for SDG 15 Life on Land.

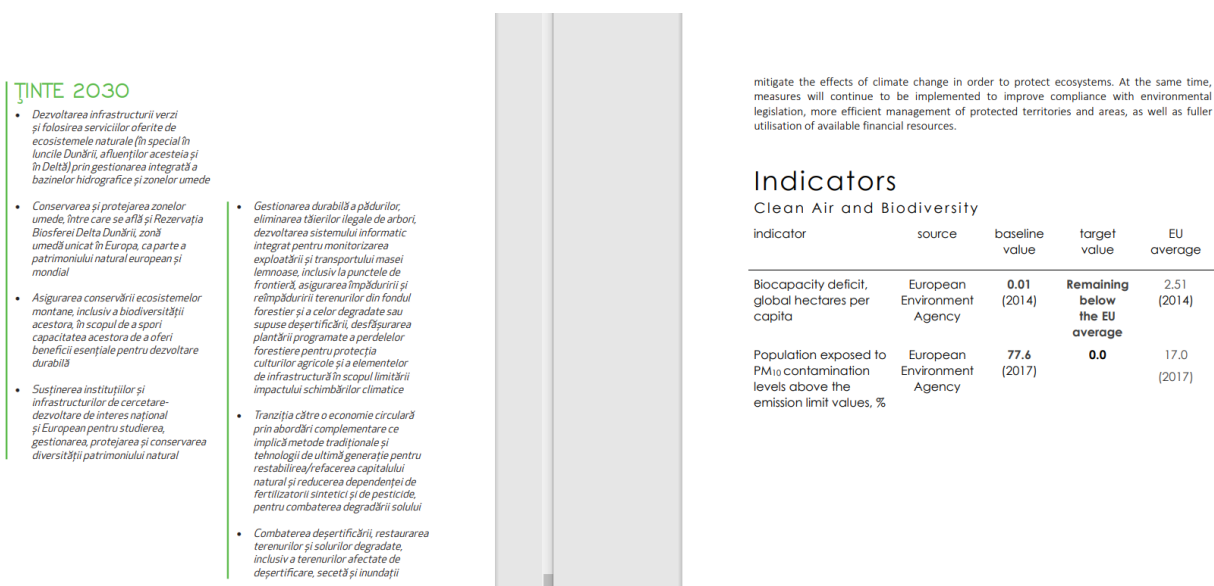


Figure no. 12-1 Differences between the presentation of the Sustainable Development Goals (SDGs) - left Romania, right Bulgaria

The level of detail of the actions proposed in the program, and for this in the situation where there were certain uncertainties regarding the effect generated by their implementation, the cautious approach was used.

⁸⁸ Romania 's National Strategy for Sustainable Development 2030

⁸⁹ Bulgaria 2030 National Development Program



13. NON-TECHNICAL SUMMARY

This document presents the **Environmental Report** for the Strategic Environmental Assessment of the **Interreg VI-A Romania-Bulgaria Programme 2021-2027**. It has been developed in accordance with the Directive *2001/42/CE Assessment of the certain effects of plans and programmes on the environment (SEA)*, this being transposed into the national legislation of Romania in *Government Decision no. 1076/8.07.2004 for setting up the environmental assessment procedure of certain plans and programmes*, and in Bulgaria in *SEA Ordinance (SEA-O) for the conditions and the order for implementing ecological assessment of plans and programmes - Prom. SG. 57/2 Jul 2004, last amend. SG. 67/23 August 2019*.

The Interreg VI-A Romania-Bulgaria 2021-2027 programme is a continuation of the previous programme. The drafting of the Interreg VI-A Romania-Bulgaria Programme started with a Territorial analysis, which represents the first step in designing the Programme and it had as a starting point the Interreg V-A Romania-Bulgaria Programme for 2014-2020 period.

Interreg VI-A Romania-Bulgaria Programme vision focuses on the reinforcement of the socio-economic dimension of the Romania-Bulgaria cross-border territory, through developing and retaining human capital, creating opportunities for personal and professional development, providing an attractive, safe and sustainable living environment and supporting innovation and entrepreneurship.

The program is addressed to 15 administrative units (NUTS 3). In Romania includes seven counties in the south of the country, namely Mehedinți, Dolj, Olt, Teleorman, Giurgiu, Calarasi, Constanta, and Bulgaria includes eight districts in the north of the country, such as Vidin, Vratsa, Montana, Pleven, Veliko-Tarnovo, Ruse, Silistra and Dobrich. The area occupied by the program is the 69.285 km², two thirds being located in Romania and one third being located in Bulgaria (according to RO-BG programme), thus covering 19.8% of the total area of the two countries and counting more than 4 million inhabitants.

According to the latest version of the Interreg VI-A Romania Bulgaria 2021-2027 Programme, it includes 4 policy objectives, 5 specific objectives and 4 priorities

The policy objectives of the Interreg VI-A Romania - Bulgaria Programme are represented by:

- PO 3 A more connected Europe - mobility and regional ICT connectivity;
- PO 2 A greener, low-carbon Europe;
- PO 4. A more social and inclusive Europe [implementing the European Pillar of Social Rights];
- PO 5 A Europe closer to citizens.

The specific objectives of the Interreg VI-A Romania - Bulgaria Programme are represented by:

- S.O.3.2 Developing and enhancing sustainable, climate resilient, intelligent and intermodal national, regional and local mobility, including improved access to TEN-T and cross-border mobility;



- S.O.2.4. Promoting climate change adaptation and disaster risk prevention, resilience, taking into account ecosystem-based approaches;
- S.O.2.7. Enhancing protection and preservation of nature, biodiversity and green infrastructure, including in urban areas, and reducing all forms of pollution;
- S.O.4.2 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 online education and training;
- S.O.5.2 Fostering the integrated and inclusive social, economic and environmental local development, culture, natural heritage, sustainable tourism and security, in areas other than urban areas.

The priority of the Interreg VI-A Romania - Bulgaria Programme are represented by:

- P1. A well-connected region;
- P2. A greener region;
- P3. An educated region;
- P4. An integrated region.

For the elaboration of the Environmental Report, several steps were taken which were based on the application of the national legislation for its preparation.

The first stage was the analysis of the current state of the environment at the level of the administrative units (NUTS 3) included in the programme, but also at the level of the two countries, depending on the availability of information. Relevant aspects of the current state of the environment considered and agreed in the working group are: biodiversity, population and human health, soil and land use, water, air, climate change, material assets, cultural heritage, landscape, energy efficiency, sustainable transport and circular economy.

The second stage involved the analysis of the trend of the state of the environment in case of non-implementation of the program (alternative "0").

The environmental aspects for which a downward trend has been identified in the case of Alternative 0, taking into account the current situation and perspectives are represented by:

Romania

- The population, because there is a decrease in their number;
- Climatic factors, as in the absence of ambitious measures the level of GHG emissions could increase;
- Landscape, because at this moment the degree of fragmentation of the landscape in the big cities and in their vicinity is high or very high, following the intensification of the urbanization process, the degree of fragmentation would intensify;
- Energy efficiency, because the final energy consumption in households is slightly increasing.

Bulgaria

- Biodiversity, because the pressures on it could intensify;
- Water, because of deviations from the drinking water quality indicators; some of the surface water bodies and ground water bodies are in poor chemical condition;



- Climate factors, as their effects are likely to intensify, adaptation of infrastructure to the effects of climate change is reduced and GHG emissions from the transport sector could increase;
- Waste - insufficient waste reduction and non-compliance with the requirements for separate waste collection.

It should be mentioned that in the case of Alternative 0, environmental aspects were also identified that will register a constant or ascending trend both in the programme area in Romania and in Bulgaria.

The third stage was the analysis of the compatibility between the specific objectives of the programme and the relevant environmental objectives as well as between the objectives of the programme.

Following the analysis of the compatibility between the objectives of the programme and the objectives of the SEA, it was established that in 42% of cases no link could be established between the sets of objectives and the degree of addressability of the programme to the relevant environmental objectives is 58%.

Of the 58% for which a link was identified between the objectives of the programme and the relevant environmental objectives (SEA), 40% of the cases, the objectives are compatible. The relevant environmental objectives are identical to the objectives of the programme in proportion of 4%, and for 14% the compatibility depends on other uncertainties.

The analysis of the compatibility between the objectives of the programme showed that they are 20 % concordance, for 30 % of cases the link is not clear and for 50 % of them a link could not be established.

The fact that not all objectives are compatible does not represent a negative aspect, but an aspect of complementarity, encompassing a wide range of issues.

Subsequently, it was evaluated how the implementation of the types of actions of the programme contributes, prevents or does not influence the achievement of the objectives set for each environmental aspect, in order to identify the potential significant effects on the environment following the implementation of the programme. The types of actions identified in the Interreg VI-A Romania-Bulgaria Programme were grouped according to the similarity of the theme in order not to duplicate the evaluation, thus resulting in a number of 14 types of actions.

For all relevant environmental objectives, effects (positive or negative) were identified following the implementation of the Interreg VI-A Romania - Bulgaria Programme. An important aspect is that no significant adverse effects were identified following the evaluation of the types of actions of the programme.

Insignificant effects have been identified for the relevant environmental objectives REO1, REO4 and REO6 and REO 14, by implementing the types of actions that refer to:

- A1. Actions enhancing rail connectivity and mobility across the Danube;
- A2. Actions improving the navigation conditions and safety on the Danube and Black Sea;



- A3. The disaster risk prevention and resilience taking into account ecosystem-based approaches;
- A12. Developing the EuroVelo 6 cycling route;
- A13. Supporting tourism activities, connected sectors and industries.

The insignificant negative impact on REO1 was assigned taking into account the following aspects: *habitat losses*, for those habitats in the vicinity of the railway lines for which extensions are proposed; *habitat alteration*, by favoring the penetration of invasive species and as a result of the development of construction works; *disturbance of species activity* (increase in noise level, artificial lighting, etc.); *mortality of individuals* as a result of the increase in collision risk (due to the increase in train speeds). In the case of the second action, the impact on REO 1 was attributed using a cautious approach.

In the case of the A12 action, the insignificant negative impact on biodiversity was attributed because there is the possibility of disturbing the elements of biodiversity, and for the A13 it was attributed because there will be constructions / modernizations / restorations of some buildings and there is the possibility that within them to nest different species of birds or bats.

The insignificant negative impact on the relevant environmental objective REO 4 has been attributed because some land areas will be permanently occupied.

The insignificant negative impact on the relevant environmental objective REO 6 has been attributed because by popularizing the area (tourism development) would make an insignificant negative contribution on air quality.

The insignificant negative effect on the relevant environmental objective OR14 was attributed because the implementation of the above-mentioned types of actions contributes to the increase of waste quantities.

Positive effects (significant or insignificant) were identified for all types of actions. Most significant positive effects were identified for the relevant environmental objectives REO16 Population awareness and REO7 Climate change.

As regards the contribution of the Programme to the achievement of the relevant environmental objectives, the following statements can be made:

- Biodiversity: the Programme is addressing the main identified environmental problem, with a significant contribution to maintaining/improving the conservation status of habitats and species;
- Population and human health: the Programme does not have a significant contribution to the aspects related to human health and population size, however a limited positive contribution is expected regarding the living conditions/ standard of living;
- Soil: the Programme does not address the main environmental problems identified for soil in the Programme area, but nevertheless it is not in the position to prevent the objective to be achieved;
- Water: the Programme has a consistent and significant contribution to all identified environmental problems, increasing the chances of water relevant objectives to be reached;



- Air: the Programme addresses the existing environmental problems and has a positive reduced contribution to the achievement of the relevant environmental objective;
- Climate change: the Programme has a significant contribution in addressing the existing environmental problem and proposed environmental objective;
- Material assets: the Programme has a positive and significant contribution to some of the relevant environmental problems and to the achievement of the relevant environmental objective;
- Risk management: the Programme has a positive and significant contribution to some of the relevant environmental problems and to the achievement of the relevant environmental objective;
- Cultural heritage: the Programme addresses the existing relevant problems, with a potential significant contribution for reaching the environmental objective;
- Landscape: no significant contribution was identified within the Programme's actions to the relevant environmental problems;
- Energy efficiency: the Programme has a low, but positive contribution to the relevant environmental objective;
- Sustainable transport: the Programme has a nonsignificant positive contribution to the relevant environmental problems and environmental objective;
- Circular economy: the Programme has no contribution to the relevant environmental problems and environmental objective;
- Population awareness: the Programme has a positive and significant contribution to some of the relevant environmental problems and to the achievement of the relevant environmental objective.

The **fourth step** involved formulating a set of measures to prevent, reduce and compensate any adverse effects on the environment following the implementation of the Programme. The proposed set of measures is mainly addressed to insignificant negative effects but also to preventive measures. No compensatory measures have been proposed because no potential significant effects on Natura 2000 sites have been identified.

In order to monitor the effects of the implementation of the programme on the environment in the **last step**, a set of monitoring indicators was established to allow the evaluation of the effectiveness of the measures proposed in the previous stage.

In conclusion, we appreciate that the final alternative of the Interreg VI-A Romania-Bulgaria Programme 2021 - 2027 may have a positive and significant contribution to most of the environmental relevant objectives and therefore, a positive contribution to the sustainable development of the cross-border area between Romania and Bulgaria, which have as common point the Danube River.



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15. ANNEXES

15.1. Relation with other relevant plans, programs and strategies

No. crt.	PPS's name	Timeframe	Brief Description of Document	The relationship of the PPS with the Interreg VI-A RO-BG
The main strategic documents at European level				
1.	The European Green Deal	2020-2050	The Green Deal is the new EU growth strategy, supported by investments in green technologies, sustainable solutions and new businesses. The Green Deal supports the transition of the EU 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. Crucial for its success is the involvement and commitment of the public and of all stakeholders.	<p>According to the European Green Deal, the major challenges for the next decade, translated into 7 policy areas⁹⁰, are referred to:</p> <ul style="list-style-type: none"> • Clean energy; • Sustainable industry; • Building and renovating; • Sustainable mobility; • Biodiversity; • From farm to fork; • Eliminating pollution; • Sustainable agriculture; • Climate action. <p>A substantial contribution of the EU's budget through all programmes directly relevant to the transition will be ensured, in order to implement the Green Deal, as well as other funds such as the European Regional Development Fund (ERDF) and the European Social Fund Plus.</p> <p>Among the priorities of the Ro-Bg 2021-2027 program are "A well-connected region" and "A green region". They contribute to the achievement of policy objectives.</p>
2.	Reflection Paper Towards a Sustainable Europe by 2030 - contribution to the SDGs	2020-2030	The Paper outlines a number of policy foundations for a sustainable future, encouraging actors in the EU to	This Reflection Paper ⁹¹ is intended to inform the debate among citizens, stakeholders, governments and institutions and offers a view to inspire the preparation of the future Interreg VI-A RO-BG Programme.

⁹⁰ https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal_en

⁹¹ https://ec.europa.eu/commission/sites/beta-political/files/rp_sustainable_europe_30-01_en_web.pdf



No. crt.	PPS's name	Timeframe	Brief Description of Document	The relationship of the PPS with the Interreg VI-A RO-BG
			<p>prioritise the sustainability transition toward:</p> <ul style="list-style-type: none"> • from linear to circular economy; • sustainability from farm to fork; • future-proof energy, buildings and mobility; • Ensuring a socially fair transition. 	<p>According to the Europe Sustainable Development Report, 2019⁹², Romania and Bulgaria are at the bottom of the European ranking (Romania position 27 out of 28 and Bulgaria position 26 out of 28) concerning the progress in achieving the SDGs:</p> <ul style="list-style-type: none"> • Romania is still facing major challenges regarding: SDG1 No poverty, SDG4 Quality education, SDG6 Clean water and sanitation, SDG9 Industry, innovation and infrastructure, SDG11 Sustainable cities and communities, SDG12 Responsible consumption and production and SDG15 Life on land; • Bulgaria is still facing major challenges related to: SDG9 Industry, innovation and infrastructure, SDG12 Responsible consumption and production, SDG13 Climate change and SDG16 Peace, justice and strong institutions. <p>Thus, the report provides key recommendations for EU, that could inspire the strategy Interreg VI-A RO-BG Programme, some of them referring to:</p> <ul style="list-style-type: none"> ➤ An EU-wide strategy to: fully decarbonise the energy system by 2050; strengthen the circular economy and promote sustainable land-use and food systems by 2050; ➤ To increase public and private investments in sustainable infrastructure, including power and transport; ➤ To increase investments in education, job skills and innovation; ➤ To put SDGs at the center of its diplomacy and development cooperation. <p>Some selected policy objectives for the implementation of the program, as well „ Developing and enhancing sustainable, climate resilient, intelligent and intermodal national, regional and local mobility, including improved access to TEN-T and cross-border mobility”, „Promoting climate change adaptation and disaster risk prevention, resilience, taking into account ecosystem-based approaches” and “Improving equal access to</p>

⁹² https://s3.amazonaws.com/sustainabledevelopment.report/2019/2019_europe_sustainable_development_report.pdf



No. crt.	PPS's name	Timeframe	Brief Description of Document	The relationship of the PPS with the Interreg VI-A RO-BG
				inclusive and quality services in education, training, and lifelong learning through developing accessible infrastructure, including by fostering resilience for distance and online education and training", supporting performance SDGs.
3.	The revised Territorial Agenda	2030	<p>The aim of the strategic document "Territorial Agenda 2030"⁹³ for Europe, its regions and communities, it's to provide 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. Also, his role is to contribute to the sustainable and inclusive development of Europe and to the achievement of the SDGs.</p> <p>The revised "Territorial Agenda 2030" is currently being elaborated and it starts from the premise that Europe consist of different types of places, that show a great variety of development potential and challenges.</p>	<p>Within the revised "Territorial Agenda 2030", two corresponding overarching objectives were defined: a Just Europe and a Green Europe, split into six priorities for the development of the European territory as a whole and all its places:</p> <ul style="list-style-type: none"> • A Just Europe - that offers future perspectives for all places and people: <ul style="list-style-type: none"> ➢ Balanced Europe; ➢ Functional regions; ➢ Integration beyond borders. • A Green Europe - that protects our common livelihoods and shapes societal transition processes: <ul style="list-style-type: none"> ➢ Healthy environment; ➢ Circular economy; ➢ Sustainable connections. <p>The second objective is also one of the priorities of the program.</p>
4.	EU Strategy for the Danube Region (EUSDR, 2020)	2020-2030	<p>The revised EUSDR Action Plan⁹⁴ aims to maximize the potential of the Danube region and to develop coordinated policies and actions in the area of the river basin, reinforcing the commitments of the Europe 2020 strategy towards the smart, sustainable and inclusive growth.</p>	<p>The revised EUSDR Action Plan is based on five strategic objectives:</p> <ul style="list-style-type: none"> • Countering climate change; • Stimulating sustainable development; • Establishing and enforcing knowledge society, stimulating the economy and fight poverty; • Improving mobility and connectivity;

⁹³ https://territorialagenda.eu/files/agenda_theme/agenda_data/Revisions%20-%20Draft%20documents/Revision_191211-public.pdf

⁹⁴ <https://danube-region.eu/wp-content/uploads/2020/04/EUSDR-ACTION-PLAN-SWD202059-final.pdf>



No. crt.	PPS's name	Timeframe	Brief Description of Document	The relationship of the PPS with the Interreg VI-A RO-BG
			Through the main joint actions are included: building networks, mutual learning, striving for harmonization, aligning policies, building capacities, strengthening civil society and voluntary service and more - actions that can be realized with little resources, but with great impact on the Danube region.	<ul style="list-style-type: none"> Enhancing democracy, sound administration and strong involvement of civil society and youth. <p>These five strategic objectives match with the principles of the five policy objectives of ERDF and the Interreg-specific objectives.</p> <p>The four Pillars proposed in the EUSDR to tackle the current challenges of the region also fit to the above-mentioned objectives:</p> <ol style="list-style-type: none"> Connecting the Danube Region - smart and sustainable; Protecting the Environment - clean and green; Building Prosperity - smart, social and innovative; Strengthening the Danube Region - effective, sound and safe. <p>The future Interreg VI-A RO-BG Programme will consider those actions from the Danube Strategy that also contribute to the specific objectives of the cross-border region. Thus, the proposed list of strategic actions will be considered.</p>
5.	Danube River Basin Management Plan (update 2015)	2015-2021	The management plan of the Danube River Basin District is aimed at improving the condition of all waters and preventing their deterioration and sustainable use. It includes a program of measures for the Danube countries for the period 2015-2021. It integrates different principles and approaches for river basin management.	<p>DRBMP integrates the requirements of the Water Framework Directive for achievement of the following environmental objectives:</p> <ol style="list-style-type: none"> good ecological/chemical status of surface water bodies; good ecological potential and chemical status of HMWBs and AWBs; good chemical/quantitative status of groundwater bodies. <p>DRBMP basin-wide management objectives:</p> <ol style="list-style-type: none"> describe the measures that need to be taken to reduce/eliminate existing significant pressures for each SWMI and groundwater on the basin-wide scale and help to bridge the gap between measures on the national level and their agreed coordination on the basin- wide level to achieve the overall WFD environmental objective. <p>The future Interreg VI-A RO-BG Program complies with the objectives of the Water Framework Directive and the Plan, and also provides for support for pollution control activities,</p>



No. crt.	PPS's name	Timeframe	Brief Description of Document	The relationship of the PPS with the Interreg VI-A RO-BG
				adaptation to climate change, sustainable development of activities, which will contribute to achieving these goals.
6.	Flood Risk Management Plan for the Danube River Basin District	2016-2021	The Flood risk management plan for DRBD sets out appropriate objectives for the management of flood risk on the level of the international river basin district covering the whole Danube catchment. It highlights the objectives and issues relevant for the basin-wide perspective and as such it is complementary to the national flood risk management plans, which provide all necessary information on measures, flood maps and other national activities in the sector of flood protection, prevention and mitigation in a more detailed way.	<p>FRMP Objectives:</p> <ol style="list-style-type: none"> 1. Avoidance of new risks 2. Reduction of existing risks 3. Strengthening resilience 4. Raising awareness 5. Solidarity principle <p>The plan provides measures to the stated objectives. The future Interreg VI-A RO-BG Program shall comply with the objectives and measures included in the plan, and the activities of the program shall not conflict with them. The program provides financing of activities leading to climate change mitigation, adaptation to climate change and climate resilience, which have a direct contribution to achieving the objectives of the Plan.</p>
7.	Border Orientations: The Border Orientation Paper for the Romania-Bulgaria cross-border area	2021-2027	The Border Orientation Paper for the Romania-Bulgaria cross-border area ⁹⁵ establish the key characteristics of the cross-border territory and outlines options and orientations for the next programming period of the Interreg VI-A RO-BG Programme. Its main objective is to serve as a basis for a constructive and strong dialogue both within cross-border regions and with the European Commission for the 2021-2027 Interreg VI-A RO-BG Programme.	<p>According to the paper, the main guidelines needed for the cross-border region in the two countries are:</p> <ul style="list-style-type: none"> • Territorial dimension; • Growth, competitiveness and connectivity; • Greener economy, with low carbon emissions; • Employment, education, health and inclusion; • Govern. <p>The main obstacles and potential (needs) for development and growth in cross-border regions are also identified. Thus, the obstacles covered by the study are socio-economic, physical, cultural and related to regulatory and institutional barriers, while the growth potential is related to competitiveness, market integration and the presence of social and human capital, service provision and natural resource management.</p>

⁹⁵ <http://interregrobg.eu/images/fisiere/Future%20programme/CE%20Orientation%20Paper%20RO-BG.pdf>



No. crt.	PPS's name	Timeframe	Brief Description of Document	The relationship of the PPS with the Interreg VI-A RO-BG
				Thus, depending on the selected policy objectives, types of actions have been proposed to partially or totally solve some of the problems mentioned above.
8.	EU Biodiversity Strategy for 2030	2020-2030	The EU Biodiversity Strategy for 2030 ⁹⁶ aims to put Europe's biodiversity on a path to recovery by 2030 with benefits for people, the climate and the planet: to build our societies' resilience to future threats such as climate change impacts, forest fires, food insecurity or disease outbreaks, including by protecting wildlife and fighting illegal wildlife trade.	<p>The strategy contains specific commitments and actions to be fulfilled by 2030, including:</p> <ul style="list-style-type: none"> • Creating a wider EU-wide network of protected areas on land and at sea; • An EU nature restoration plan: restoring ecosystems on land and sea; • A set of measures to allow the necessary transformative change; • Measures to address the global biodiversity challenge. <p>The EU's 2030 Biodiversity Strategy is part of the European Green Agreement. Thus, the Interreg Program VI-A RO-BG 2021-2027 through the specific objective "Enhancing protection and preservation of nature, biodiversity and green infrastructure, including in urban areas, and reducing all forms of pollution", with the types of specific actions contributes to fulfillment of the commitment by 2030.</p>
9.	Convention on Cooperation for the Protection and Sustainable use of the Danube River ⁹⁷	-	<p>The main objective of the Danube River Protection Convention (DRPC) is to ensure that surface waters and groundwater within the Danube River Basin are managed and used sustainably and equitably⁹⁸.</p> <p>This involves:</p> <ul style="list-style-type: none"> • the conservation, improvement and rational use of surface waters and groundwater; 	<p>The two countries of the Interreg VI-A RO-BG Programme, Romania and Bulgaria, signed the Convention on June 29 1994, in Sofia, Bulgaria, which came into force in October 1998, when it was ratified by the ninth signatory.</p> <p>The signatories to the DRPC have agreed to co-operate on fundamental water management issues by taking all appropriate legal, administrative and technical measures to at least maintain and where possible improve the current water quality and environmental conditions of the Danube river and of the waters in its catchment area, and to prevent and reduce as far as possible adverse impacts and changes occurring or likely to be caused.</p>

⁹⁶ https://ec.europa.eu/info/sites/info/files/communication-annex-eu-biodiversity-strategy-2030_en.pdf

⁹⁷ <https://www.icpdr.org/flowpaper/app/services/view.php?doc=DRPC%20English%20ver.pdf&format=pdf&page={page}&subfolder=default/files/>

⁹⁸ <https://www.icpdr.org/main/icpdr/danube-river-protection-convention>



No. crt.	PPS's name	Timeframe	Brief Description of Document	The relationship of the PPS with the Interreg VI-A RO-BG
			<ul style="list-style-type: none"> preventive measures to control hazards originating from accidents involving floods, ice or hazardous substances; measures to reduce the pollution loads entering the Black Sea from sources in the Danube River Basin. 	
10.	Pan-European Action Plan for Sturgeons	2019-2029	The Pan-European Action Plan for Sturgeons ⁹⁹ is intended to serve as a guiding framework on the Pan-European level. It shall not replace national or regional plans in existence; on the contrary, it shall serve as a guiding framework for their development or renewal. National and/or regional plans on the level of river basins can provide more detailed analysis of threats, countermeasures to be taken as well as milestones, addressing progress on specific results. They can also address and incorporate the roles of responsible organizations in more detail.	The document is referring also to the sturgeon species from the Lower Danube River, including Romania and Bulgaria. The Interreg VI-A RO-BG 2021-2027 Programme aims are referring beside to reducing risks in the cross-border area by identifying, tackling, monitoring and resolving disaster risks and improving early warning, as well as improving the protection and sustainable use of natural and cultural heritage and resources, in order to ensure a sustainable development of the cross-border area.
11.	Proposal for a Decision of the European Parliament and of the Council on a General Union Environment Action Programme to 2030 - COM(2020) 652 final	2020-2030	The overall objective of WFP 8 is to accelerate the Union's transition to a climate-neutral, resource-efficient, clean and circular economy, in a fair and inclusive manner, and to achieve the environmental objectives of the Agenda. 2030 of the United Nations and its Sustainable Development	The 8 th EAP has the following six thematic priority objectives : (a)irreversible and gradual reduction of greenhouse gas emissions and enhancement of removals by natural and other sinks in the Union to attain the 2030 greenhouse gas emission reduction target and achieve climate neutrality by 2050; (b)continuous progress in enhancing adaptive capacity, strengthening resilience and reducing vulnerability to climate change;

⁹⁹ <https://rm.coe.int/pan-european-action-plan-for-sturgeons/16808e84f3>



No. crt.	PPS's name	Timeframe	Brief Description of Document	The relationship of the PPS with the Interreg VI-A RO-BG
			Goals, fully confirming the environmental and climate objectives of the European Green Pact	<p>(c)advancing towards a regenerative growth model that gives back to the planet more than it takes, decoupling economic growth from resource use and environmental degradation, and accelerating the transition to a circular economy;</p> <p>(d)pursuing a zero-pollution ambition for a toxic free-environment, including for air, water and soil, and protecting the health and well-being of citizens from environment-related risks and impacts;</p> <p>(e)protecting, preserving and restoring biodiversity and enhancing natural capital, notably air, water, soil, and forest, freshwater, wetland and marine ecosystems;</p> <p>(f)promoting environmental sustainability and reducing key environmental and climate pressures related to production and consumption, in particular in the areas of energy, industrial development, buildings and infrastructure, mobility and the food system.</p> <p>The Interreg VI-A RO-BG 2021-2027 Programme includes objectives and activities for reduction of greenhouse gas emissions, increase adaptation and resilience to climate change, reduction of pollution and sustainably develop economic activities in the region. In this regard, the Interreg VI-A RO-BG 2021-2027 Programme will contribute to achieving the objectives of the 8th EAP.</p>
12.	Regulation (EU) 2021/694 of the European Parliament and of the Council of 29 April 2021 establishing the Digital Europe Programme and repealing Decision (EU) 2015/2240	2021-2027	Regulation (EU) 2021/694 establishes the Digital Europe Program for the period 2021-2027 and sets out the objectives of the program, the budget, the forms of funding from the European Union and the rules for granting such funding.	<p>With a total budget of € 7.588 billion, the program will provide funding for projects to implement cutting-edge technologies in 5 key areas:</p> <ul style="list-style-type: none"> - High-performance computing technologies: EUR 2.2 billion; - Artificial intelligence: EUR 2 billion; - Cybersecurity and trust: EUR 1.6 billion; - In-depth digital skills: EUR 577 million; <p>Implementation, best use of digital capacity and interoperability: € 1 billion.</p>
13.	Communication from the Commission “A Clean Planet for all” A European	till 2050	The aim of the document, which is a long-term strategy, is to reaffirm Europe's commitment to play a leading	The road to a net-zero greenhouse gas economy could be based on joint action along a set of seven main strategic building blocks:



No. crt.	PPS's name	Timeframe	Brief Description of Document	The relationship of the PPS with the Interreg VI-A RO-BG
	strategic long-term vision for a prosperous, modern, competitive and climate neutral economy, COM(2018) 773 final		role in global climate action and to present a vision that can lead to zero net greenhouse gas emissions by 2050 through socially just transition in a cost-effective way.	<ol style="list-style-type: none"> 1. Maximise the benefits from Energy Efficiency including zero emission buildings 2. Maximise the deployment of renewables and the use of electricity to fully decarbonise Europe's energy supply 3. Embrace clean, safe and connected mobility 4. A competitive EU industry and the circular economy as a key enabler to reduce greenhouse gas emissions 5. Develop an adequate smart network infrastructure and inter-connections 6. Reap the full benefits of bio-economy and create essential carbon sinks 7. Tackle remaining CO2 emissions with carbon capture and storage.
14.	Communication from the the commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the regions - Forging a climate-resilient European - the new EU Strategy on Adaption Climate Change COM(2021)82	2050	The communication provides types of measures, activities and methods for adapting to the effects of climate change, but also for mitigating these.	The Interreg VI-A Romania - Bulgaria Programme through the specific objective "Promoting climate change adaptation and disaster risk prevention, resilience, taking into account ecosystem-based approaches", contributes to the application of those recommended in the communication.
15.	Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions Updating the 2020 New Industrial Strategy: Building a stronger Single	-	The updated strategy reinforces the priorities set out in the March 2020 Communication, published the day before the World Health Organization announced the COVID-19 pandemic. At the same time, it is an expression of the lessons learned from the crisis in order to boost recovery and strengthen the EU's open strategic autonomy. It proposes new measures	The strategy addresses the need for better knowledge of our dependencies in key strategic areas and presents a set of tools to address them. New measures are also being proposed to accelerate the environmental and digital transition. The key importance of the circular economy is emphasized, as well as investment in skills.



No. crt.	PPS's name	Timeframe	Brief Description of Document	The relationship of the PPS with the Interreg VI-A RO-BG
	Market for Europe's recovery, COM/2021/350 final		to strengthen the adaptability of our single market, especially in times of crisis.	
16.	Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions Pathway to a Healthy Planet for All EU Action Plan: 'Towards Zero Pollution for Air, Water and Soil, COM/2021/400 final	2050	<p>The zero-pollution ambition is a cross-cutting objective contributing to the UN 2030 Agenda for Sustainable Development and complementing the 2050 climate-neutrality goal in synergy with the clean and circular economy and restored biodiversity goals</p> <p>The zero-pollution vision for 2050: a Healthy Planet for All - Air, water and soil pollution is reduced to levels no longer considered harmful to health and natural ecosystems and that respect the boundaries our planet can cope with, thus creating a toxic-free environment.</p>	<p>The zero pollution targets for 2030 20</p> <p>Under EU law, Green Deal ambitions and in synergy with other initiatives, by 2030 the EU should reduce:</p> <ol style="list-style-type: none"> 1. by more than 55% the health impacts (premature deaths) of air pollution; 2. by 30% the share of people chronically disturbed by transport noise; 3. by 25% the EU ecosystems where air pollution threatens biodiversity; 4. by 50% nutrient losses, the use and risk of chemical pesticides, the use of the more hazardous ones, and the sale of antimicrobials for farmed animals and in aquaculture; 5. by 50% plastic litter at sea and by 30% microplastics released into the environment; 6. significantly total waste generation and by 50% residual municipal waste.
17.	Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions A new Circular Economy Action Plan For a cleaner and more competitive Europe, COM/2020/98 final		The Circular Economy Action Plan provides a future-oriented agenda for achieving a cleaner and more competitive Europe in co-creation with economic actors, consumers, citizens and civil society organizations. It aims at accelerating the transformational change required by the European Green Deal, while building on circular economy actions implemented since 2015 . The plan will ensure that the regulatory framework is streamlined and made fit for a sustainable future, that the new opportunities from the transition are	<p>The plan presents a set of interrelated initiatives to establish a reliable and coherent framework in the following areas for key actions (described in the plan attached):</p> <ul style="list-style-type: none"> ○ A policy framework for sustainable products (electronics and ICT, batteries and vehicles, packaging, plastics, textiles, construction and buildings, food, water and nutrients); ○ Key chains for creating value for products; ○ less waste, more value (waste reduction targets, harmonized model for separate waste collection and labeling, minimization of hazardous substances in recycled materials, harmonized waste information systems, "end-of-waste" criteria, revision the rules on shipments of waste); <p>□ reaping the benefits of the circular economy for people, regions and cities - one of the areas is: supporting the transition to a</p>



No. crt.	PPS's name	Timeframe	Brief Description of Document	The relationship of the PPS with the Interreg VI-A RO-BG
			maximised, while minimising burdens on people and businesses.	circular economy through cohesion policy funds, the fair transition mechanism and urban initiatives; □ Leading position in global efforts - global agreements on plastics, natural resource management, free trade; □ monitoring of progress.
18.	Strategic Action Plan for the Environmental Protection and Rehabilitation of the Black Sea, Adopted in Sofia, Bulgaria, 17 April 2009		SAP integrates the common desire of the Black Sea coastal States share for the sustainable management of the natural resources and biodiversity of the Black Sea and recognize their role and responsibility in conserving the global value of these resources.	The plan presents a set of interrelated initiatives to establish a credible and coherent framework in the following areas for key actions (described in an annex to the plan): □ Policy framework for sustainable products (electronics and ICT, batteries and vehicles, packaging, plastics, textiles, construction and buildings, food, water and nutrients); □ Key chains for creating value for products; □ Less waste, more value (waste reduction targets, harmonized model for separate waste collection and labeling, minimization of hazardous substances in recycled materials, harmonized waste information systems, "end-of-waste" criteria, revision the rules on shipments of waste); □ Reaping the benefits of the circular economy for people, regions and cities - one of the areas is: supporting the transition to a circular economy through cohesion policy funds, the fair transition mechanism and urban initiatives; □ Leading position in global efforts - global agreements on plastics, natural resource management, free trade; □ Monitoring of progress.
19.	Cross-border Maritime Spatial Planning for Black Sea, Bulgaria and Romania (MARSPLAN-BS II), incl. <i>Maritime spatial plan for the cross-border area Mangalia - Shabla</i>	2019-2020	The project MARSPLAN-BS II it foresees the further development of Maritime Spatial Plans in Bulgaria and Romania, as well as the development of a common cross-border strategy between the two countries.	Identification and arrangement of the maritime space, allows an integrated and cross-border approach. By using an ecosystem approach, it contributes to promoting sustainable development and the sustainable use of maritime and coastal resources. The Interreg RO-BG 2021-2027 program contributes to the promotion of sustainable development objectives. The maritime planning should be taken into account during the implementation of the Interreg RO-BG 2021-2027 program activities



No. crt.	PPS's name	Timeframe	Brief Description of Document	The relationship of the PPS with the Interreg VI-A RO-BG
20.	Black Sea Marine Litter Regional Action Plan	-	The overall objective of the BS ML RAP is to consolidate, harmonize and implement necessary environmental policies, strategies and measures for sustainable integrated management of marine litter issues in the Black Sea region.	<p>The main objectives of the BS ML RAP are to:</p> <p>(a) Prevent and reduce to the minimum marine litter pollution in the Black Sea and its impact on ecosystem services, habitats, species, in particular the endangered species, public health and safety;</p> <p>(b) Remove to the extent possible already existent marine litter by using environmentally respectful methods;</p> <p>(c) Enhance knowledge on marine litter;</p> <p>(d) Achieve that the management of marine litter in the Black Sea is performed in accordance with accepted international standards and approaches as well as those of relevant regional organizations and as appropriate in harmony with programmes and measures applied in other seas;</p> <p>(e) Contribute to the full implementation of the Joint Work Plan on Marine Litter between UNEP/MAP and the BSC PS in order to achieve synergistic effects through coordinating activities; and</p> <p>(f) Contribute to the full implementation of the Memorandum of Understanding between the UNEP/MAP-Barcelona Convention and the BSC PS with the objective to consolidate and intensify their cooperation in order to achieve their common goals and objectives.</p>
National plans, programmes and strategies in Romania				
1.	Romania's National Strategy for Sustainable Development Horizons 2013-2020-2030	2013 - 2020-2030	This strategy presents 3 timelines, respectively in 2013, 2020 and 2030 that consider the following: the organic incorporation of the principles and practices of sustainable	<p>The areas of the National Strategy for Sustainable Development of Romania relevant to Interreg VI-A RO-BG Programme are:</p> <ul style="list-style-type: none"> • Climate change and clean energy; • Sustainable transport; • Sustainable consumption and production;



No. crt.	PPS's name	Timeframe	Brief Description of Document	The relationship of the PPS with the Interreg VI-A RO-BG
			development into all public programmes and policies of the country, as EU member state, reaching the current average level of the EU countries regarding the main indicators of sustainable development, namely the significantly proximity of Romania to the average level of EU countries in terms of sustainable development indicators.	<ul style="list-style-type: none"> • Conservation and management of natural resources; • Public health; • Social inclusion, demography and migration; • Global poverty and sustainable development challenges. <p>This strategy proposes a number of national targets for each of the 3 time frames (2013, 2020 and 2030) for each of the above areas.</p> <p>The policy objectives of the Interreg VI-A RO-BG Program are largely in line with the guidelines set by the national targets for the last period of time, for each relevant area of Romania's National Strategy for Sustainable Development. Relevant for the Interreg VI-A RO-BG Program is the time period for Horizon 2030: Romania's significant approach to the average level of EU countries in that year.</p>
2.	Romania's Territorial Development Strategy SDTR) Polycentric Romania 2035 - Territorial cohesion and competitiveness, development and equal opportunities for people	2014 - 2035	Romania's Territorial Development Strategy is a document that underpins the entire system of national spatial planning (spatial and urban planning) and represents the basis for the regional, county and local strategic documents (territorial development strategies, spatial planning, regional development plans), operational documentation (urban plans) and other national development strategies of territorial relevance and impact.	<p>The vision of development of the national territory is strongly anchored in the changes that take place in the society and in the spatial dynamics.</p> <p>There are two main directions of action that constitute landmarks in the process of configuring the development vision:</p> <p>At European level:</p> <ul style="list-style-type: none"> • intensifying relations with the European West; • Establishing an area of integrated southern European growth. <p>At national level:</p> <ul style="list-style-type: none"> • supporting the development with priority of urban areas with economic potential and connecting them with the rest of the territory; • Ensuring a complete equipping of the territory with the basic infrastructure, as well as the access of all citizens to the services of general interest. <p>Thus, through the proposed policy objectives, Interreg VI-A RO-BG 2021-2027 also takes into account the specific directions mentioned above.</p>



No. crt.	PPS's name	Timeframe	Brief Description of Document	The relationship of the PPS with the Interreg VI-A RO-BG
3.	National strategy on climate change and economic growth based on low-carbon emissions 2016 - 2030, complemented by the National Action Plan 2016-2020 for the implementation of the strategy	2016-2030-2050	The strategy guides Romania's actions related to climate change and development with low carbon emissions by 2030, representing an update and an extension of the National Strategy on Climate Change 2013-2020, made in the light of recent developments. The strategy sets out a roadmap to 2050.	The main objective of the Strategy is to mobilize and enable private and public actors to reduce greenhouse gas (GHG) emissions from economic activities in line with EU targets and to adapt to the impact of both current climate change, as well as future ones. In terms of reducing the impact of climate change, the key factor is to meet the 2030 target of a 40% reduction in greenhouse gas emissions from 1990 levels and a 27% improvement in energy efficiency, in accordance with Romania's obligations to the European Union. Thus, through the policy objectives, the program contributes to the fulfillment of these goals.
4.	Romania's energy strategy 2019-2030, with the perspective of 2050	2019-2030	The general objective of the Strategy is to increase the energy sector in conditions of sustainability. The eight strategic objectives that structure the entire analysis and planning approach for the period 2019-2030 with a view to 2050, respecting the national, European and global landmarks that influence and determine energy policies and decisions will also contribute to the achievement of the general objective.	The objectives of the Energy Strategy are divided into 8 fundamental strategic objectives: - Clean energy and energy efficiency; - Ensuring access to electricity and heat for all consumers; - Protecting the vulnerable consumer and reducing energy poverty; - Competitive energy markets, the basis of a competitive economy; - Modernization of the energy governance system; - Increasing the quality of education in the field of energy and continuous training of human resources; - Romania, regional energy security provider; - Increasing Romania's energy contribution on regional and European markets by capitalizing on national primary energy resources. The new Interreg RO BG 2021-207 program, through its objectives, completes the achievement of some objectives of the Energy Strategy.
5.	National Waste Management Plan	2018-2025	Through the National Waste Management Plan was characterize the current situation in the field (quantities of waste generated and managed, existing facilities), identify	The National Waste Management Plan's assumed objectives are: • Storage only of waste previously subjected to treatment operations - 2025; • Increasing the degree of energy recovery - to at least 15%, by the end of 2025.



No. crt.	PPS's name	Timeframe	Brief Description of Document	The relationship of the PPS with the Interreg VI-A RO-BG
			problems that cause inefficient waste management, set objectives and targets based on legal provisions, and identify investment needs. The PNGD is to be revised according to the new targets set by the "circular economy" legislative package.	Through the proposed political objectives, the Interreg VI-A RO-BG 2021-2027 program provides for various actions for waste management resulting from the investments made.
6.	National Strategy and National Plan for the Management of Contaminated Sites in Romania	2015 - 2020 - 2050	The strategy aims to provide guidelines for action to investigate the land affected by pollution and adjacent areas, to decide the degree of contamination of the site and to determine the manner in which the corrective actions and validation of the corrected land shall be regulated. The aim of the strategy is to establish on short-term (2015) the principles in the management of contaminated sites and solving the problem of contaminated sites that require urgent action on the medium term (until 2020), and this action shall continue on long term until 2050.	This strategy offers several actions that can lead to reduced area occupied by contaminated sites so as to achieve an acceptable level of risk to human health and the environment, on each of the sites addressed, and can thus be reintroduced into the economic circuit for recovery. Specific environmental objectives: A. Reduction of the area occupied by contaminated sites; B. Improving the quality of environmental factors in the location areas and implementing a unitary management at national level. The program aims to reduce all forms of pollution.
7.	Priority Action Framework (PAF) for Natura 2000, Summary of priority funding needs for the period 2021-2027	2021-2027	PAF is a multi-annual strategic planning instrument aimed at providing a comprehensive overview of the measures needed to implement the Natura 2000 network at EU level and its associated green infrastructure, specifying the funding needs for these measures and linking them to adequate EU funding. The document presents a summary of priority funding needs for biodiversity, for the period 2021-2027:	Each Member State must submit estimates of the level of co-financing from the European Union that it considers necessary in order to be able to fulfill the following Natura 2000 obligations: <ul style="list-style-type: none"> • adopting the necessary conservation measures, including, as appropriate, appropriate management plans, special or included in other development plans; • the establishment of appropriate administrative acts or contractual clauses in accordance with the ecological needs of the natural habitat types in Annex I or of the species in Annex II present in the territory of those sites.



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			<ul style="list-style-type: none"> Horizontal measures and administrative costs related to Natura 2000; Measures to maintain and restore Natura 2000 sites for species and habitats; Measures for additional green infrastructure outside Natura 2000 areas (increasing the coherence of the Natura 2000 network, including in a cross-border context); Additional measures specific to species not related to specific ecosystems or habitats. 	Through the specific objectives proposed, the Interreg VI-A RO-BG 2021-2027 program contributes to the protection and conservation of biodiversity.
8.	National Afforestation Programme	2010-2035	This programme aims at expanding the forest areas, in order to reduce the impact generated by the climate change and the potential risk of desertification. In this regard, the programme envisages the increase of areas covered with forest vegetation in particular through afforestation of degraded lands and the establishment of protective forest.	<p>The National Afforestation Programme implies the increase of areas under forest with an area of 442,000 ha in the period 2010-2035, meaning:</p> <ul style="list-style-type: none"> reducing the impact of climate change and desertification risk; improving the runoff status; diminishing the risk of floods, landslides, erosion, clogging of reservoirs; introducing large areas of land into the economic cycle; improving soil and climatic conditions for agricultural crop (the creation of alternative resources for population and employment); creating ecological corridors in the areas covered by protective forest. <p>One of the priorities of the program is "A greener, low-carbon Europe", from which actions are developed to protect forest ecosystems and even implement afforestation activities in the program area.</p>



No. crt.	PPS's name	Timeframe	Brief Description of Document	The relationship of the PPS with the Interreg VI-A RO-BG
9.	National strategy for medium- and long-term flood risk management	2010-2035	The present strategy aims to define the framework for the coordinated, inter-sectoral orientation of all actions, in order to prevent and reduce the consequences of floods on socio-economic activities, human life and health and the environment. It aims at an integrated management of water and adjacent resources: land use planning and urban development, nature protection, agricultural and forestry development, protection of transport infrastructure, buildings and tourist areas, individual protection etc.	The main goal of the National strategy for medium and long term flood risk management is: to reduce all the consequences of floods to acceptable levels. The environmental objectives aim that through the development of the flood management strategy, to achieve the socio-economic objectives by maintaining the balance between the economic and social development and the environmental objectives. Thus, through the proposed policy objectives, Interreg VI-A RO-BG 2021-2027, actions are developed for the common management of flood risks.
10.	Master Plan "Protection and rehabilitation of the coastal area"	short term: 2011 - 2013; medium term: 2014 - 2020; long term: 2021 - 2041	The Master Plan presents the current state of protection works, the continuous process of erosion, the potential effect of extreme storms and climate changes to establish the forecasts related to future effects of erosion and risks to land use in order to identify the critical areas exposed to erosion.	General objectives of the Master Plan: • to protect and improve the quality of the environment and the living standards of local communities along the Romanian Black Sea coast and • to increase safety in the southern part of the coast, seriously threatened by the destructive effects of the coastal erosion process.
11.	National Renewable Energy Action Plan (NREAP)	2010 - 2020-2030	This plan examines all areas of economic and social life, presenting the objectives for the following horizons: 2013, 2020 and 2030. The main objective is to ensure energy security of the country, based on an efficient supply of primary resources. Production, transport, distribution and supply ensuring continuous supply of all consumers in terms of accessibility, availability and	According to the NREAP, some of the proposed measures aimed at increasing the production of electricity from renewable sources by producing it in hydroelectric plants of maximum 10 MW, wind, solar or biogas plants. The Romania-Bulgaria cross-border area can offer a big potential for renewable sources of energy, given its micro-climate and environmental features. This is valid especially for the solar energy and biomass, considering the highly agricultural



No. crt.	PPS's name	Timeframe	Brief Description of Document	The relationship of the PPS with the Interreg VI-A RO-BG
			affordability of prices, taking into account the developments in environmental quality.	development of the region. Hydro power seems to have, as well, a great potential in the area ¹⁰⁰ .
12.	Master Plan for National Tourism in Romania	2007 - 2026	The objective of the Master Plan for National Tourism in Romania is formulating an overall policy framework for the development and sustainable management of the tourism industry in terms of natural and cultural resources, and presenting this objective in the form of a Master Plan for long-term Tourism Development (the period 2007 - 2026).	<p>According to the Master Plan for National Tourism in Romania, it is anticipated that Romania's population will benefit from tourism development by:</p> <ul style="list-style-type: none"> • Increased foreign exchange earnings; • Bringing the Romanian economy and society to the level in EU countries; • Improved quality of life; • The growth and incentives for investment in all areas adjacent to tourism; • Stimulating job creation; • Stimulating development; • Strengthening the enhancement and preservation of cultural heritage; • Contributing to the development and preservation of physical and natural resources throughout the country; • Distributing the benefits of tourism in all regions of Romania. <p>The development of tourism is an important area in the RO-BG 2021-2027 program through the specific objective "Encouraging local development, culture, natural heritage, tourism and sustainable integrated social, economic and environmental security in areas other than urban areas", being proposed a series of actions specific to the tourism field.</p>
13.	National Strategy Sludge Management	2012-2040	The overall objective of the strategy is the long-term sustainable improvement of quality environmental factors, by minimizing the adverse effects of inadequate management of	The strategy presents an action plan with a set of 7 core objectives that take into account the following: improving the treatment of wastewater and sludge used in different ways, to be developed at local, regional and national level, and improving

¹⁰⁰ Territorial Analysis for Romania-Bulgaria Cross-border region, 2020, page 145



No. crt.	PPS's name	Timeframe	Brief Description of Document	The relationship of the PPS with the Interreg VI-A RO-BG
			sludge. It proposes feasible options for the recovery and use of sludge (especially in agriculture).	control over industrial discharges into sewers, or the ability to analyze sludge at regional and national operators. The implementation of the program proposes the reduction of all forms of pollution and does not prevent the achievement of the objectives presented in the strategy.
14.	Food Sector Strategy for medium and long term	2014 -2020 - 2030	Agri-food sector development strategy, on medium and long term, aimed at smart and sustainable exploitation of the agri-food potential and rural development, being a visionary support document that sustains the progress of agriculture and rural development Romania.	The main strategic directions of the food sector strategy are: A. Increasing the competitiveness of the agri-food sector; B. Ensuring the sustainable management of natural resources; C. Improving living standards in rural areas; D. Stimulating knowledge-based agriculture. A number of strategic objectives are presented for each of these strategic directions. Through the implementation of the program, measures are provided for the promotion of local products.
15.	National Reform Programme (NRP) 2020	2017-2027	The NRP is a framework for defining reform measures that meet the priorities set at EU level, the Country Specific Recommendations and certain challenges pointed out by the EC in its annual analysis, named Country Report.	The main key directions on environment and climate change established in the PNR for Romania are: • Building a low carbon economy; • Reducing GHG emissions from the energy and transport sectors; • Mitigating the effects of climate change; • Improving waste management, including hazardous waste; • Supporting sustainable development and improving the quality of the environment, nature protection and biodiversity conservation. The Interreg VI-A RO-BG 2021-2027 program will contribute to some directions within the NRP through the objectives: 1. Promoting adaptation to climate change and disaster risk prevention, resilience, taking into account ecosystem-based approaches 2. Improving the protection and conservation of nature, biodiversity and ecological infrastructure, including in urban areas, and reducing all forms of pollution
16.	Updated national management plan for national portions of the Danube international	2016 - 2021	This plan aims the balanced management of water resources and aquatic ecosystems protection, primarily concerned with achieving	The main measures stated under this plan cover: • Measures to implement the European legislation for water protection;



No. crt.	PPS's name	Timeframe	Brief Description of Document	The relationship of the PPS with the Interreg VI-A RO-BG
	River Basin - Summary of updated management plans at the level of river basins / areas		the good status of surface water and groundwater.	<ul style="list-style-type: none"> Measures on recovery of specific activities cost for water management and services of water supply and sewerage; Measures to protect bodies of water used or to be used for the abstraction of water intended for human consumption; Measures to control samples from water sources for uses; Measures to reduce pollution from point sources and for other activities with an impact on water status; Measures to reduce pollution with priority substances; Measures to prevent and reduce the impact of accidental pollution; Measures for water bodies at risk of not achieving the environmental objectives. Additional measures to achieve environmental objectives; Measures to reduce pollution in marine waters. <p>Some of them were started in 2013-2015 and continued in 2016-2021. It is expected that they will be continued in the next period, until 2027 when all water bodies will reach good condition.</p>
17.	Operational Programme for Fisheries and Maritime Affairs (OPFMA)	2015-2020-2023	OPFMA role is to harmonize the policies objectives and the national community instruments (EMFF measures) with the current situation and needs of the operators, and the fisheries sector in Romania.	Interreg VI-A RO-BG Programme will contribute to the OPFMA's objectives in particular through its priorities of promoting sustainable and quality jobs and supporting the labor mobility of joint local initiatives, information and joint advisory and training services.
18.	Large Infrastructure Operational Programme (LIOP)	2014-2020-2023	LIOP meets Romania's development needs identified in the Partnership Agreement 2014 - 2020, and in line with the Common Strategic Framework and the Position Paper of the European Commission services. LIOP 2014 - 2020 is a strategic programming document that covers the transport, environment and risk management, namely energy and energy efficiency, its objective being	The objectives of the Interreg VI-A Romania-Bulgaria program support and complement the LIOP objectives. They have about the same areas of activation, such as climate change, social inclusion, environment protection, etc.



No. crt.	PPS's name	Timeframe	Brief Description of Document	The relationship of the PPS with the Interreg VI-A RO-BG
			to contribute to the European Union Strategy for smart, sustainable and inclusive growth, taking into account the specific thematic objectives and priorities selected based on the of national, regional and local needs.	
19.	Regional Operational Programme (ROP)	2021-2027	ROP 2021 - 2027 aims to ensure the continuity of the strategic vision on regional development in Romania, by completing and developing the directions and priorities of regional development in previous programs.	<p>Some examples of the domain covered in the ROP 2021-2027 are represented by: competitiveness and innovation, digitalization, energy efficiency, urban development, mobility and connectivity, biodiversity, educational infrastructure, tourism and culture / cultural heritage. Some of them are also targeted in the future Interreg RO-BG 2021-2027 program.</p> <p>The program area in Romania partially overlaps with the area of action of 3 three Regional Operational Programs:</p> <ol style="list-style-type: none"> 1. South-West Oltenia Regional Operational Program (includes the following counties in the program area: Dolj, Olt and Mehedinți), which has the following priorities: competitiveness through innovation and dynamic enterprises, digitization for the benefit of citizens, energy efficiency and green infrastructure, sustainable urban mobility, accessibility and regional connectivity, modern and inclusive education and sustainable territorial development; 2. The South-East Regional Operational Program (includes Constanța County in the program area) and has the following priorities: A competitive region through innovation, digitalization, dynamic enterprises and smart city; A region with environmentally friendly localities and more resilient to risks; A low carbon region; An accessible region; An educated region; An attractive region. 3. The South Muntenia Operational Program (includes the following counties in the program area: Călărași, Giurgiu and Teleorman) and has the following priorities: A competitive region through innovation, digitalization and dynamic enterprises; A region with environmentally friendly cities; A



No. crt.	PPS's name	Timeframe	Brief Description of Document	The relationship of the PPS with the Interreg VI-A RO-BG
				region with sustainable urban mobility; A more accessible region; An educated region; An attractive region; The three programs have common priorities with those of the analyzed program.
20.	General Transport Master Plan of Romania	2014 - 2020 - 2030	The purpose of the Master Plan is to identify the projects and policies that will best meet the transport needs of Romania, for all modes of transport, and thus constituting a sound and analytical basis in choosing these policies. Thus, this Master Plan includes: projects for the Operational Programme 2014 - 2020 - 2030, major projects of national importance, maintenance and overhaul, modernization, etc.	According to the General Transport Master Plan of Romania, the following immediate results will occur with its implementation: <ul style="list-style-type: none"> • A long-term plan for 2020-2030, which will contribute to Romania's economic development in a sustainable manner; • More efficient use of financial resources in the transport sector; • Improved connections and thus an improved trade with neighbouring countries; • A high productivity for industry and services in Romania and, therefore, a more pronounced growth and improved living standards; • A durable transport system (sustainable). The General Transport Master Plan shall include projects for the Operational Programme 2014 - 2020 - immediate priority. These results are in line with the policy objectives of the Interreg VI-A RO-BG Programme for the sector "Transport", but not only.
21.	Integrated National Plan in the field of Energy and Climate Change	2021-2030	This integrated national plan contributes primarily to achieving the objectives set out in the Paris Agreement on Climate Change. Thus, at Romanian level, an energy efficiency target was set, so as to meet the target set at European level.	Through the implementation of the program, the promotion of adaptation to climate change will be intensified.
22.	Romania's recovery and resilience plan	2021-2027	The main purpose of this plan is to provide support to the Member States of the European Union, in order to face the challenges generated by the Covid-19 Crisis and its economic consequences.	The plan is structured on 15 components covering 6 important pillars, such as green transition, digital transformation, smart, sustainable and inclusive growth, social and territorial cohesion, health, as well as economic, social and institutional resilience and policies for the new generation. Some of the areas in which it will act overlap with those of the Interreg Romania-Bulgaria 2021-2027 program, these being



No. crt.	PPS's name	Timeframe	Brief Description of Document	The relationship of the PPS with the Interreg VI-A RO-BG
				represented by the protection of biodiversity, sustainable transport, tourism and culture, digitalization, education, EuroVelo Route 6. This plan and the RO-BG programme are complemented for the objectives of the mentioned fields, and for their improvement.
National and regional plans, programmes and strategies in Bulgaria				
1.	National Regional Development Strategy of the Republic of Bulgaria (NRDS)	2012-2022	The NRDS for the period 2012-2022 is the fundamental document defining the strategic framework of the government policy for attaining balanced and sustainable development of the country's regions and for overcoming the intra- and interregional disparities, in the context of the all-European policy of cohesion and achieving smart, sustainable and inclusive growth.	<p>Through the main objectives of the NRDS during the period 2012-2022 are the following:</p> <ul style="list-style-type: none"> To define the requirements for the territorial focus of sectoral policies of regional impact and provide the territorial basis for their effective coordination in the regions; To establish a clear strategic framework for the development of the planning and programming documents for regional development at the other territorial levels; To coordinate the regional development and spatial planning policies with a view to achieving a balanced territorial development; To enlist all stakeholders as partners in the implementation of the policies defined in the NRDS. <p>These objectives are in line with the Interreg VI-A RO-BG Programme vision, which focuses on the reinforcement of the socio-economic fabric of the Romania-Bulgaria cross-border territory, supporting the creation of an attractive, safe and sustainable living environment for the people in the region.</p>
2.	National Concept for Spatial Development of the Republic of Bulgaria for the period 2013 - 2025	2013 - 2025	National Spatial Development Concept for the period 2013 - 2025 is a midterm strategic document that provides basic guidelines for territorial governance of national territory, including aquatory, and its protection. In co-ordination with the National Regional Development Strategy 2012 - 2022, it acts as a key document in	<p>The Strategic goals of the National Concept for Spatial Development of the Republic of Bulgaria are:</p> <ul style="list-style-type: none"> Strategic goal 1 Integration into the European space; Strategic goal 2 Polycentric



No. crt.	PPS's name	Timeframe	Brief Description of Document	The relationship of the PPS with the Interreg VI-A RO-BG
			legislation for integrated planning and sustainable spatial, economic and social development of the country.	<p>spatial development;</p> <ul style="list-style-type: none"> • Strategic goal 3 Spatial cohesion and access to services; • Strategic goal 4 Preserved natural and cultural heritage; • Strategic goal 5 Stimulated development of specific areas; • Strategic goal 6 Competitiveness through growth and innovation zones. <p>These objectives are in line with the Interreg VI-A RO-BG Programme vision, which focuses on the reinforcement of the socio-economic fabric of the Romania-Bulgaria cross-border territory, supporting the creation of an attractive, safe and sustainable living environment for the people in the region.</p>
3.	Europe 2020: National Reform Programme (NRP) - Updated 2020	2021-2027	The update of the NRP for 2020 was prepared in the framework of the enhanced monitoring of economic policies in the EU. The document takes into account the finding of the 2020 Country Report for Bulgaria, the Annual Strategy for Sustainable Growth 2019 and the Alert Mechanism Report, launching the European Semester for 2020 and strengthening	The Interreg VI-A RO-BG Programme will mainly contribute to efforts to create a climate-neutral economy, improve employment and administrative capacity.



No. crt.	PPS's name	Timeframe	Brief Description of Document	The relationship of the PPS with the Interreg VI-A RO-BG
			the focus on the new EU initiative, the Green Deal, to make the EU a sustainable and climate-neutral economy by 2030.	
4.	Bulgaria's National Development Program	2030	The National Development Program envisages that, by 2030, Bulgaria will have a high standard of living and a competitive low-carbon economy.	<p>The document sets out 3 strategic goals for Bulgaria in 5 areas of development with 13 national priorities. The goals are: technological transformation, demographic rise and reduction of inequalities. The first objective requires increasing resource efficiency and making up for the lag in digitalization. The second objective states that if demographics did not improve, opportunities for sustainable growth will fail. In order to reduce social and regional inequalities, there are plans for accelerated growth.</p> <p>These objectives are in line with the Interreg VI-A RO-BG Programme vision, which focuses on the reinforcement of the socio-economic fabric of the Romania-Bulgaria cross-border territory, supporting the creation of an attractive, safe and sustainable living environment for the people in the region.</p>
5.	Bulgaria's recovery and resilience plan		The main objective of the recovery and sustainability plan is to help economic and social recovery from the crisis caused by the COVID-19 pandemic. In pursuit of this goal, the government grouped a set of measures and reforms that do not just recover the growth potential of the economy but also to develop it by ensuring sustainability of negative external impacts. This will allow the long-term achievement of the government's strategic goal for the convergence of the economy and income to the Middle of European. At the same time, the plan lays the foundations for green and digital transformation of the	<p>The plan is structured in four pillars: Innovative Bulgaria, Green Bulgaria, Connected Bulgaria and Fair Bulgaria, including measures (reforms / investments) in areas / sectors: education and skills, research and innovation, smart industry, low carbon economy, biodiversity, sustainable agriculture, digital connectivity, transport connectivity, local development, business environment, social inclusion, healthcare.</p>



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GOVERNMENT OF ROMANIA



GOVERNMENT OF BULGARIA

No. crt.	PPS's name	Timeframe	Brief Description of Document	The relationship of the PPS with the Interreg VI-A RO-BG
			economy, in the context of the ambitious goals of the Green Deal.	
6.	Partnership Agreement 2021-2027 (under elaboration)	2021-2027	The Partnership Agreement is the national strategic document outlining the framework for management of European funds in Bulgaria during the programming period 2021-2027.	Table 7 of the draft Agreement shows the Bilateral Program for Cross-Border Cooperation at the External Borders of the European Union between the Republic of Romania and the Republic of Bulgaria. The Interreg VI-A RO-BG Program is prepared in compliance with the Partnership Agreement, incl. in order to demarcate the activities with those under the other programs for the period 2021-2027.
7.	National Strategy for Poverty Reduction and Promotion of Social Inclusion 2030	2020-2030	The strategy puts the following vision: By 2030 Bulgaria is a country where social inequalities and poverty are limited, prerequisites and conditions for inclusive and sustainable growth and opportunities for improving the quality of life of vulnerable groups.	The main goal of the strategy is: Improving the quality of life of vulnerable groups in Bulgarian society and creating conditions for their full realization through adequate income support, including the labor market and access to quality services. The specific objectives are: - Prevention of poverty and social exclusion through the inclusion in employment and training of persons from vulnerable groups on the labor market - Promoting the social and solidarity economy with a view to improving access to employment, training and social inclusion - Reducing the transmission of poverty and social exclusion between generations (with a focus on child poverty and social exclusion) - Ensuring equal access to quality services in order to prevent social exclusion and overcome its consequences - Increasing the adequacy and sustainability of the social protection system - Improve coordination and interaction and promote social innovation with a view to actively involving vulnerable groups
8.	National Disaster Risk Reduction Strategy 2018-2030	2018-2030	The strategy identifies the vision of reducing disaster risk on the territory of the Republic of Bulgaria by outlining a coherent framework for adequate reduction of existing risks and preventing the emergence of new,	



No. crt.	PPS's name	Timeframe	Brief Description of Document	The relationship of the PPS with the Interreg VI-A RO-BG
			improving readiness and response capabilities and rapid recovery, subject to the principle "Yes build again but better".	
9.	National Strategy for Small and Medium Enterprises 2021-2027		The National Strategy is a key strategic document for the next programming period, which sets the vision for public policy in support of SMEs and reflects EU policy towards small and medium-sized enterprises.	6 areas of impact have been identified (Entrepreneurship, Market Access, Access to Finance, Digitalisation and Skills, Better Regulation and the Environment). In the area of impact 3 Access to finance as a measure 3.5., is encouraged support for small projects, promoting interregional cooperation of SMEs, where activities financed under the cross-border programs Interreg are defined - support for the implementation of small interregional projects; support for events, meetings, conferences, workshops and business meetings between Bulgarian and foreign SMEs; support for international cooperation of SMEs in national and regional priority sectors. In addition, the overall operational programs set out to fund policies in response to the COVID-19 crisis.
10.	Updated National Strategy for Sustainable Development of Tourism in the Republic of Bulgaria 2014-2030		The main goal defined in the Strategy is sustainable development of tourism in Bulgaria. The following strategic goals / priorities / have been set for its achievement: 1. Creating a favorable environment and business environment for the development of sustainable tourism 2. Development of a competitive tourism sector 3. Successful positioning of Bulgaria on the world tourist market 4. Balanced development of tourist areas	The goals set in the strategy are taken into account in identifying the activities for sustainable tourism in Priority 4 of the program.
11.	Integrated transport strategy until 2030	2017-2030	The strategy outlines the main directions for the development of the national transport system in the period until 2030.	The strategic priorities in the development of transport are: Effective maintenance, modernization and development of transport infrastructure



No. crt.	PPS's name	Timeframe	Brief Description of Document	The relationship of the PPS with the Interreg VI-A RO-BG
			<p>The integrated transport strategy in the period up to 2030 has been developed in compliance with the principles of consistency, continuity and synergy with the national and European strategic documents.</p> <p>The strategic goals of the transport policy until 2030 are:</p> <ul style="list-style-type: none"> Increasing the efficiency and competitiveness of the transport sector Improving transport connectivity and accessibility (internal and external) Limiting the negative effects of the development of the transport sector. 	<p>Improving the management of the transport system</p> <p>Development of intermodal transport</p> <p>Improving the conditions for applying the principles of liberalization of the transport market</p> <p>Reducing fuel consumption and increasing the energy efficiency of transport</p> <p>Improving the connectivity of the Bulgarian transport system with the single European transport area</p> <p>Providing quality and affordable transport in all regions of the country</p> <p>Limiting the negative impact of transport on the environment and human health</p> <p>Improving the security and safety of the transport system.</p> <p>The Interreg VI-A RO-BG Program envisages activities relevant to the strategy in Priority 1 Well-Connected Region, integrating the need to develop sustainable mobility in terms of limiting greenhouse gas emissions and resilience of infrastructure to the effects of climate change.</p>
12.	National Strategy for Road Safety in the Republic of Bulgaria with horizon 2021 - 2030 and Action Plan for implementation for the period 2021 - 2023 Strategy and Action Plan for transition to a circular economy of the Republic of Bulgaria for the period 2021-2027 (under elaboration)	2021-2030	The strategic document also reviews the implementation of measures to increase road safety over the last decade. Our country has achieved a 19% reduction in the number of victims of road accidents and 22% of those seriously injured in road accidents in the period 2010-2019. No country in the EU is able to meet the overall target of a 50% reduction in road accident victims, with the average European reduction rate for the decade to 2018 being around 21%.	The main objective of the Recovery and Sustainability Plan is to facilitate economic and social recovery from the crisis caused by the COVID-19 pandemic. In pursuit of this goal, the government has grouped a set of measures and reforms that will not only restore the potential for economic growth, but also develop it by ensuring resilience to negative externalities. This will allow in the long run to achieve the strategic goal of the government for convergence of the economy and incomes to the Central European ones. At the same time, the Plan lays the foundations for a green and digital transformation of the economy, in the context of the ambitious goals of the Green Deal.
13.	Strategy and action plan for transition to a circular economy of the Republic of Bulgaria for the period	2021-2027	The country's policy for transition to a circular economy will be implemented by setting the following strategic goals in the draft Strategy for transition to a	Contribution to the transition to a circular economy will have eligible activities under Specific Objective 2.4. Promoting Climate Change Adaptation and Disaster Risk Prevention,



No. crt.	PPS's name	Timeframe	Brief Description of Document	The relationship of the PPS with the Interreg VI-A RO-BG
	2021-2027 (under elaboration).		circular economy: green and competitive economy; less waste and more resources; consumer economy.	Resilience, Taking Into Account Ecosystem Based Approaches to Priority 2 of the Program
14.	National Air Pollution Program (2020 - 2030)	2020-2030	The program was developed and adopted in order to fulfill the commitments of the Republic of Bulgaria to achieve national ceilings for total annual emissions of certain air pollutants for 2020 and 2030, and in particular for pollutants - sulfur dioxide (SO ₂), nitrogen oxides (NO _x), non-methane volatile organic compounds (NMVOCs), ammonia (NH ₃) and fine particulate matter (PM _{2.5}), relative to emissions for the base year 2005 in accordance with Directive (EU) 2016/2284.	The eligible activities under specific objective 3.2 to Priority 3 for Climate Sustainable Mobility, as well as the activities under Priority 2 of the program related to the reduction of all forms of pollution will have a direct contribution to the reduction of emissions of harmful substances into the air.
15.	National program for improving air quality 2018-2024	2018-2024	Due to non-compliance with air quality standards, the Bulgarian government is currently subject to infringement proceedings before the Court of Justice. In particular, this applies to twenty-eight municipalities in which the requirements of the Clean Air Directive for Europe (CAFE Directive) with regard to PM ₁₀ are observed. The program proposes a package of measures to be implemented by the end of 2024 in order to comply with the requirements of the Cleaner Air Directive for Europe in terms of PM ₁₀ levels. The measures are targeted at reducing emissions from the two main sectors that are sources of PM ₁₀	Similar to the previous program.



No. crt.	PPS's name	Timeframe	Brief Description of Document	The relationship of the PPS with the Interreg VI-A RO-BG
			emissions, namely domestic heating and transport.	
16.	The National Strategy for Adaptation to Climate Change and the Action Plan until 2030	untill 2030	The strategy analyzes climate risks and vulnerabilities by sectors of the economy, sets goals and provides opportunities for adaptation.	The common strategic goals are: o Inclusion and integration of adaptation to climate change; o Building institutional capacity for adaptation to climate change; o Raising awareness of climate change adaptation.
17.	Integrated plan in the field of energy and climate of the Republic of Bulgaria 2021 - 2030	2021-2030	The Integrated Energy and Climate Plan of the Republic of Bulgaria 2021-2030 defines the main objectives and measures for the implementation of national energy and climate policies to implement European legislation, principles and priorities for energy development in order to achieve Binding EU climate and energy targets for 2030	The main objectives of the integrated plan of the Republic of Bulgaria are as follows: - stimulating low-carbon economic development; - development of competitive and secure energy; - reducing dependence on imports of fuels and energy; - guaranteeing energy at affordable prices for all consumers.
18.	National Program for Protection, Sustainable Use and Restoration of Soil Functions 2020-2030	2020-2030	The general strategic goal of the country, related to the protection, sustainable use and restoration of soil functions is: Sustainable land use, ensuring a high level of conservation of soil functions, high productivity, maintenance of ecosystems and welfare of society.	The National Program is not directly reflected in the Interreg VI-A RO-BG Program, but the implementation of investment activities related to the construction / impact of soil cover should be implemented in compliance with the objectives and guidelines for sustainable land use and soil protection. .
19.	National Strategy for Development of the Forest Sector 2013-2020	2013-2020	The National Strategy for Development of the Forest Sector is the main document that defines the strategic framework of the state policy for achieving long-term and sustainable management of living and productive multifunctional forests and increasing competitiveness of the forest sector as a basis for better living	Contribution to the transition to a circular economy will have eligible activities under Specific Objective 2.4. Promoting Climate Change Adaptation and Disaster Risk Prevention, Resilience, taking Into Account Ecosystem based on aproaches to Priority 2 of the Program.



No. crt.	PPS's name	Timeframe	Brief Description of Document	The relationship of the PPS with the Interreg VI-A RO-BG
			standards, especially in mountain and rural areas. As a result of the implementation of the Strategy, the ecological, social and economic functions of forests are expected to be preserved and enriched.	
20.	National Waste Management Plan 2021-2028	2021-2028	Three main objectives are formulated: Objective 1: Reducing the harmful effects of waste by preventing their formation and promoting re-use Objective 2: Increasing the quantities of recycled and recovered waste Objective 3: Reduction of quantities and risk of landfilled waste	Contribute to achieving the objectives of the plan, and specifically to reducing the harmful effects of waste has a specific objective 2.7. of the Interreg VI-A RO-BG Program, and in its part for the reduction of all forms of pollution
21.	National Plan for Conservation of the Most Significant Wetlands in Bulgaria 2013-2022	2013-2022	The national plan shall prioritize the 11 wetlands listed in the Ramsar Convention. There are another 28 wetlands not included in the Ramsar list, but for which there is information that they cover one or more of the announcement criteria or have great potential for conservation and recovery. Based on the analysis, horizontal and specific measures are set to be implemented in the 10-year implementation period.	The territorial scope of the Interreg VI-A RO-BG Program includes wetlands and potential wetlands, as considered in the plan. For the infrastructure measures under the program, which are likely to affect territorially or as an impact wetlands, the relevant measures of the National Plan for protection of the most important wetlands in Bulgaria should be observed.
22.	Priority National Framework for Action for Natura 2000	2021-2027 (under elaboration)	Main objective: Meeting the requirements of Article 8 (1) of the Habitats Directive, under which Member States are required to submit to the Commission their estimates of the European Union's financial contribution which they consider necessary for the fulfilment	Thus, through the proposed policy objectives, the Interreg VI-A RO-BG 2021-2027 Programme will have also to contribute to addressing the requirements regarding the Natura 2000 network established for the NPAF 2021 - 2027.



No. crt.	PPS's name	Timeframe	Brief Description of Document	The relationship of the PPS with the Interreg VI-A RO-BG
			<p>of their obligations related to the Natura 2000 network.</p> <p>Expected results:</p> <ul style="list-style-type: none"> • Developed measures to maintain and improve the conservation status of species and natural habitats subject to conservation in Natura 2000 sites; • Assessed the amount of financial resources required for the implementation of the developed measures, as well as the source for their funding; • Elaborated a system for monitoring, reporting and updating of NPAF 2021 - 2027; • Completed NPAF format 2021 - 2027; • Carried out process for discussion and alignment of NPAF 2021 - 2027; • Ensured consistency with the priorities of EU funds and other financial instruments. 	
23.	National Strategy for Biodiversity Conservation	1998-	The aim of the strategy is to protect, restore and sustainably manage the biological diversity in the country, as well as to limit the loss of biological diversity.	The activities under Priority 2 of the Interreg VI-A RO-BG Program have a direct contribution to the conservation of biological diversity, and indirectly the other priorities, integrating sustainable development for mobility, tourism and appropriate training.
24.	Biodiversity Strategy in the Republic of Bulgaria 2030 (under elaboration, 2021	2021-2030	The draft Strategy sets out the following vision: By 2050, biodiversity, a national and world natural heritage, is protected, restored, assessed,	The strategy identifies 3 priorities: Priority 1 - Conservation, sustainable use of biological diversity and fair and equitable distribution of benefits arising from the use of genetic resources.



No. crt.	PPS's name	Timeframe	Brief Description of Document	The relationship of the PPS with the Interreg VI-A RO-BG
			sustainably and equitably exploited through long-term and strategic policies and approaches, integration into other national sectoral policies, participation and involvement of state, scientific, educational institutions, non-governmental organizations and initiatives, business and civil society.	Priority 2 - Preservation and restoration of ecosystems and preservation of the services and benefits they provide. Priority 3 - Maintenance and effective management of the National Ecological Network. The activities under Priority 2 of the Interreg VI-A RO-BG Program have a direct contribution to the conservation of biological diversity, and indirectly the other priorities, integrating sustainable development for mobility, tourism and appropriate training.
25.	Strategy for development and management of the water supply and sanitation sector in the Republic of Bulgaria	2014-2023	The main objective of this strategy is to improve management in the water and wastewater sector and to improve the quality of water and sewerage services by providing comprehensive measures to achieve them.	The Strategy defines four objectives that create the implementation premises: 1) Creating the conditions for an effective management of the sector and an integrated approach to problem solving; 2) Creating the conditions for the involvement of the private sector, the interests of society; 3) Applying a structural management approach, taking into account regional planning and ensuring economies of scale; 4) Improving the quality of water and sanitation services and achieving the levels and standards of these services in the European Union.
26.	National Strategy for Management and Development of the Water Sector (NSMDWS) in Bulgaria	2037	The country's long-term strategic goal in the water sector is "Sustainable use of water resources, ensuring optimal levels for the present and future needs of the population and the economy and aquatic systems." The main objectives of NSMDWS are: 1) Ensuring the supply of water for domestic and commercial consumption from the perspective of climate change that causes drought; 2) Maintaining and improving the condition of surface and groundwater; 3) Improving performance in integrated water management as an economic resource; 4) Reducing the risk of flood damage.	The Interreg VI-A RO-BG 2021-2027 Programme will contribute to them mainly through its priorities of reducing risks in the cross-border area by identifying, tackling, monitoring and resolving disaster risks and improving early warning, as well as improving the protection and sustainable use of natural and cultural heritage and resources, in order to ensure a sustainable development of the cross-border area.



No. crt.	PPS's name	Timeframe	Brief Description of Document	The relationship of the PPS with the Interreg VI-A RO-BG
27.	River basin management plan in the Danube region and a Black Sea region (2016-2021) and updating for the period 2022-2027 (UNDER ELABORATION)	2016-2021 2022-2027	The main objectives of the RBMP are to achieve long-term sustainable water management based on a high level of protection of the aquatic environment. The defined general goal to be achieved for all water bodies is to achieve good status / potential by introducing the principle of preventing further deterioration of the status.	In implementing the Interreg VI-A RO-BG 2021-2027 Program, the activities comply with the current RBMPs and water protection measures should be applied. The Interreg VI-A programming period RO-BG 2021-2027 Program coincides with the period of updating, preparation and implementation of the third River Basin Management Plans (RBMP 2022-2027).
28.	Flood risk management plans in the Danube and Black Sea region (2016-2021) and updated Preliminary flood risk assessment for the period 2022-2027 and RMP for the period 2022-2027	2016-2021 2022-2027	FRMPs contain the established framework for flood risk assessment and management and reduction of their adverse effects on human health, the environment and cultural heritage.	In the implementation of PTGS and TSIM, the activities need to take into account the rules in force and measures should be applied to flood risk assessment and risk assessment. The programming period of the PTGC and TSIM coincides with the update period, the preparation and implementation of the second RBM for the period 2022-2027 at the time of preparation of this TEC, the projects of preliminary flood risk assessments (PFRAs) with updated areas with significant potential Risk of floods (RNPP), and new RSPPs, are in line with "lead" of the report.
29.	The Maritime Strategy of the Republic of Bulgaria and a program of measures to it	2016-2021	The main objective of the Maritime Strategy Framework Directive 2008/56 / EC (RDMC) is the maintenance or achievement of good maritime environment (DSEM) by 2020. The strategy applies to coastal marine waters, territorial marine waters and the exclusive economic zone of the Republic of Bulgaria and in coastal marine water complements the river basin management plan in a Black Sea region. The Maritime Strategy is aimed at preserving and improving the state of the marine environment and existing or expected adverse impacts.	The objectives of the strategy are as follows: <ul style="list-style-type: none"> ▫ achieving and maintaining "good state" of the marine environment; ▫ Protection and storage of the marine environment, preventing its deterioration or, when practically impossible, restore marine ecosystems in territories that have been adversely affected; ▫ Prevention and reduction in the introduction and release of substances from anthropogenic origin in the environment in order to phase pollution and ensuring the lack of substantial impact or danger to human health, the biodiversity of marine ecosystems and the lawful use of the sea.



No. crt.	PPS's name	Timeframe	Brief Description of Document	The relationship of the PPS with the Interreg VI-A RO-BG
30.	Marine Spatial Plan of the Republic of Bulgaria 2021-2035 (UND ELABORATION)	2021-2035	The plan is being developed in response to increased pressure on marine areas, the deterioration of the marine environment and the loss of biodiversity, necessitating the implementation of an integrated maritime policy and the obligation to implement the EU Water Framework Directives (2000/60 / EC). , on the Marine Strategy (2008/56 / EC) and on Maritime Spatial Planning (2014/89 / EU).	<p>The main goal of the Maritime Spatial Plan of the Republic of Bulgaria is to create conditions for sustainable growth of the maritime economy, to achieve stable development of the Bulgarian Black Sea region through efficient use of natural resources in accordance with the requirements for integrated protection of the marine environment. The task of the plan is to reconcile existing and future activities on the use of maritime areas without conflict, taking into account the measures for achieving good status of the marine environment of the Program of measures to the Maritime Strategy of the Republic of Bulgaria. In this regard, the plan proposes zoning of marine areas. The specific objectives of the Maritime Spatial Plan comply with the requirements of Directive 2014/89 / EU and the Law on Maritime Areas, Inland Waterways and Ports in the Republic of Bulgaria and determine the tasks to be performed:</p> <ul style="list-style-type: none"> (i) analysis of the state of maritime spaces on the basis of available information; (ii) analysis of resources in marine areas (biological, mineral, material); (iii) analysis of activities and uses in maritime areas, conflict points and areas and potential for conflict-free integration; (iv) development of forecast scenarios and selection of a preferred option with a combination of economic, social and environmental objectives; v) setting a vision and strategic goals for development to the selected horizons - short-term until 2024 and long-term until 2035; and (vi) developing procedures for implementation, management, implementation, monitoring and control.
31.	Integrated Territorial Strategy for Development of the North-West Region of Level 2 for the period 2021-2027 (under elaboration)	2021-2027	For the North-Western region the vision for development from the period 2014-2020 has been adopted: The North-West region is significantly overcoming the socio-economic backwardness and serious structural	<p>Four of the districts in the North-West region fall within the scope of Interreg VI-A RO-BG 2021-2027 Program - Vidin, Vratsa, Montana and Pleven. Intelligent transport systems set the following priorities for the development of the region:</p> <ol style="list-style-type: none"> 1. Accelerate growth and the regional economy



No. crt.	PPS's name	Timeframe	Brief Description of Document	The relationship of the PPS with the Interreg VI-A RO-BG
			and demographic problems through appropriate investments in connecting infrastructure and strengthening the growth potential, creating preconditions for catching up development on a national and European scale.	2. Preservation and development of human capital. 3. Territorial cohesion, sustainable development and reduction of inequalities.
32.	Integrated Territorial Strategy for Development of the North Central Region from level 2 for the period 2021-2027 (under elaboration)	2021-2027	The vision for development from the period 2014-2020 has been adopted for the North Central Region: A rapidly and sustainably developing European region, an integral part of the Danube area, where young people see their future and personal realization.	Three of the districts in the North-Central region fall within the scope of the Interreg VI-A RO-BG 2021-2027 Program - Veliko Tarnovo, Ruse and Silistra. An integrated transport strategy sets the following priorities for the development of the region: 1. Economic growth and transformation 2. Development of human potential and achievement of social growth. 3. Sustainable territorial development and connectivity. The Interreg VI-A RO-BG 2021-2027 Program will contribute to the achievement of all three priorities of the Plan, as it envisages activities under each of them.
33.	Integrated Territorial Strategy for Development of the Northeast Region from Level 2 for the period 2021-2027 (under elaboration)	2021-2027	The vision for development from the period 2014-2020 has been adopted for the Northeast region: Open to the Black Sea and the holy Bulgarian territory, preserved rich history and material culture, fertile land, human capital, developed infrastructure, tourist image and directed its specific potential to achieve overall economic progress and improved quality of life	One of the districts of the Northeast region falls within the scope of Interreg VI-A RO-BG 2021-2027 Program - Dobrich district. An integrated transport strategy sets the following priorities for the development of the region: 1. Increasing the dynamism of the region on a global scale 2. Achieving equal access to quality education, healthcare and social services. Social inclusion. 3. Territorial development and cohesion. The Interreg VI-A RO-BG 2021-2027 Program will contribute to the achievement of all three priorities of the Plan, as it envisages activities under each of them.
34.	Plans for integrated development of municipalities 2021-2027 in areas:	2021-2027	The plans for integrated development of a municipality for the period 2021-2027 combine within one document the elements of the municipal development plans (ODA) and the	Plan for integrated development of a municipality as part of the system of strategic documents integrates regional and spatial development and serves to identify current problems, needs and potentials for development of regions, municipalities and settlements, which are taken into account in the development of



No. crt.	PPS's name	Timeframe	Brief Description of Document	The relationship of the PPS with the Interreg VI-A RO-BG
	<ul style="list-style-type: none"> o Vidin: for the municipalities of Boynitsa and Ruzhintsi; o Vratsa: for the municipalities of Borovan, Vratsa, Kozloduy, Krivodol; o Montana: for municipalities Boychinovtsi, Vulchedrum, Georgi Damyanovo, Montana; o Pleven: for the municipalities of Dolni Dabnik, Kneja, Levski, Pordim; o Veliko Tarnovo: for the municipalities of Veliko Tarnovo, Lyaskovets, Pavlikeni, Svishtov, Strazhitsa, Suhindol; o Ruse: for the municipalities of Dve Mogili, Ivanovo, Slivo Pole, Tsenovo; o Silistra: for the municipalities of Glavinitsa, Tutrakan; o Dobrich: for the municipalities of Balchik, Dobrichka (under elaboration) and the town of Dobrich. 		<p>integrated plans for urban reconstruction and development (IPGVR), which were in force for the period 2014-2020.</p> <p>The goals and priorities of PIRO are determined in accordance with the goals and priorities of the strategic documents for regional and spatial development at higher levels, and are linked to the achievement of results for the territory of the municipality.</p> <p>The goals of the plan should reflect local development potentials and focus on solving the specific problems of the municipality.</p>	<p>investment programs and financial instruments, including co - financed by European Union funds. In line with them is the planning and implementation of integrated approaches to territorial and urban development and local initiatives contributing to the achievement of national goals and priorities for regional and local development.</p> <p>In preparing the Interreg VI-A RO-BG 2021-2027 Program, the prepared PIROs have been taken into account.</p> <p>The approval and implementation of project proposals under Interreg VI-A RO-BG 2021-2027 Program should comply with the PIRO of the respective municipality on whose territory the project is envisaged, in order to ensure compliance and avoid contradictions.</p>



15.2. Water bodies in the program area

Romania

Code	Name	Water Basin Administrations
Rivers		
ROLW10.1.23.11.7_B1	CONTINUA : ISMAR (IAZURI + AC. BILA)	I Argeş-Vedea
ROLW10.1.23.9_B1	CONTINUA: ILFOVAT : IZVOR - CONFLUENTA NEAJLOV (AC. GRADINARI + AC. FACAU)	I Argeş-Vedea
ROLW10.1.25.17_B1	CONTINUA - COLENTINA : INTRARE AC. BUFTEA - CONFLUENTA DAMBOVITA	I Argeş-Vedea
ROLW14.1.31.3_B1	CONTINUA : URLUI: AC. URLUI II + SALBA IAZURI	I Argeş-Vedea
ROLW14.1.34_B1	CONTINUA - ZBOIUL: SALBA LACURI (INCLUSIV AC. CATALOIU)	I Argeş-Vedea
ROLW9.1.14_B1	CONTINUA - NANOV : AC. COADA CALULUI SI SUITA IAZURI PISCICOLE	I Argeş-Vedea
ROLW9.1.16_B1	CONTINUA: IZVOARELE (CU AC.PIATRA II)	I Argeş-Vedea
RORW10.1_B4_A	ARGES/ILFOVAT (CA1)	I Argeş-Vedea
RORW10.1_B4_B	CA2-ADMINISTRARE S.N.I.F.	I Argeş-Vedea
RORW10.1_B4a	ARGES: SECTOR AVAL AC. ZAVOIUL ORBULUI - AV. AC. FRONTALA OGREZENI	I Argeş-Vedea
RORW10.1_B5	ARGES: SECTOR AVAL AC. FRONTALA OGREZENI - INTRARE AC. MIHAILESTI	I Argeş-Vedea
RORW10.1_B5_A	ARGES - ILFOVAT	I Argeş-Vedea
RORW10.1_B5_B	ARGES/SABAR	I Argeş-Vedea
RORW10.1_B5_C	AG/D-TA (C, DESC-CRIVINA-ROSU)	I Argeş-Vedea
RORW10.1_B6	ARGES: SECTOR AVAL AC. MIHAILESTI - AMONTE CONFLUENTA DAMBOVITA	I Argeş-Vedea
RORW10.1_B7	ARGES: SECTOR AMONTE CONFLUENTA DAMBOVITA - CONFLUENTA DUNARE	I Argeş-Vedea
RORW10.1.23_B2	NEAJLOV: CONFLUENTA NEAJLOVEL II - VADU LAT	I Argeş-Vedea
RORW10.1.23_B3	NEAJLOV: VADU LAT - INTRARE BALTA COMANA	I Argeş-Vedea
RORW10.1.23_B4	NEAJLOV: AVAL BALTA COMANA - CONFLUENTA ARGES	I Argeş-Vedea
RORW10.1.23.11_B1	CALNISTEA: IZVOR - CONFLUENTA RAIOSUL (ILEANA)	I Argeş-Vedea
RORW10.1.23.11_B2	CALNISTEA: CONFLUENTA RAIOSUL (ILEANA) - CONFLUENTA NEAJLOV	I Argeş-Vedea
RORW10.1.23.11.1_B1	CALNISTEA (MOSTENI)	I Argeş-Vedea
RORW10.1.23.11.10_B1	IORDANA	I Argeş-Vedea
RORW10.1.23.11.4a_B1	LETCA	I Argeş-Vedea
RORW10.1.23.11.6_B1	RAIOSUL (ILEANA)	I Argeş-Vedea
RORW10.1.23.11.8_B1	GLAVACIOC : IZVOR - AM. EAVCUARE PUBLISERV VIDELE	I Argeş-Vedea
RORW10.1.23.11.8_B2	GLAVACIOC : AM. EAVCUARE PUBLISERV VIDELE - CONFLUENTA CALNISTEA	I Argeş-Vedea



Code	Name	Water Basin Administrations
RORW10.1.23.11.8.4_B1	MILCOVAT (MILCOV)	I Argeş-Vedea
RORW10.1.23.11.8.4.1_B1	BRATILOV	I Argeş-Vedea
RORW10.1.23.6_B1	BARACU	I Argeş-Vedea
RORW10.1.23.8_B3	DAMBOVNIC: AMONTE CONFLUENTA GLIGAN - CONFLUENTA NEAJLOV	I Argeş-Vedea
RORW10.1.23.8.6_B1	JIRNOV	I Argeş-Vedea
RORW10.1.24_B2	SABAR: DERIVATIE POTOP/ARGES - VARTEJU	I Argeş-Vedea
RORW10.1.24_B3	SABAR: VARTEJU - CONFLUENTA ARGES	I Argeş-Vedea
RORW10.1.24.8_B1	CIROGARLA: IZVOR - AMONTE EVACUARE VITAL GAZ MAGURELE	I Argeş-Vedea
RORW10.1.24.9_B1	COCIOC	I Argeş-Vedea
RORW10.1.25_B5_D	D - TA/ARGES (BREZOAIELE)	I Argeş-Vedea
RORW10.1.25_B6	DAMBOVITA : AMONTE NOD HIDROTEHNIC BREZOAIELE - AVAL STATIE DE TRATARE ARCUDA	I Argeş-Vedea
RORW10.1.25_B7	DAMBOVITA : AVAL STATIE DE TRATARE ARCUDA - INTRARE AC. LACUL MORII	I Argeş-Vedea
RORW10.1.25_B7_D	DAMBOVITA/CIROGARLA	I Argeş-Vedea
RORW10.1.25_B9	DAMBOVITA : AMONTE EVACUARE APA NOVA (GLINA) - CONFLUENTA ARGES	I Argeş-Vedea
RORW10.1.25.16_B3	ILFOV : AMONTE DERIVATIE MIRCEA VODA - CONFLUENTA DAMBOVITA	I Argeş-Vedea
RORW10.1.25.18_B1	PASAREA SI AFLUENTII	I Argeş-Vedea
RORW10.1.25.19_B1	CALNAU	I Argeş-Vedea
RORW10.1.26_B1	RASA	I Argeş-Vedea
RORW10.1.27_B1	LUICA	I Argeş-Vedea
RORW10.1.28_B1	MITRENI	I Argeş-Vedea
RORW14.1_B3	DUNAREA PORTILE DE FIER 2-CHICIU	I Argeş-Vedea
RORW14.1.30_B1	SIU - IZVOARE - CONFLUENTA DUNARE	I Argeş-Vedea
RORW14.1.31_B2a	CALMATUI: INTRARE AC. CRANGENI - AVAL CONFLUENTA CALMATUIUL SEC	I Argeş-Vedea
RORW14.1.31_B3	CALMATUI: AVAL CONFLUENTA CALMATUIUL SEC - INTRARE AC. SUHAIA	I Argeş-Vedea
RORW14.1.31_B3_D	GARLA IANCULUI - SUHAIA	I Argeş-Vedea
RORW14.1.31.4_B1	DUCNA	I Argeş-Vedea
RORW14.1.32_B1	PARAPANCA (SALBA LACURI) SI AFLUENTII	I Argeş-Vedea
RORW14.1.33_B1	ONCESTI (SALBA LACURI)	I Argeş-Vedea
RORW8.1.174_B1	IMINOG - IZVOARE - CONFLUENTA OLT	I Argeş-Vedea
RORW9.1_B2	VEDEA : CONFLUENTA VEDITA - AMONTE CONFLUENTA COTMEANA	I Argeş-Vedea
RORW9.1_B3	VEDEA : CONFLUENTA COTMEANA - AMONTE EVACUARE ROSIORI DE VEDE	I Argeş-Vedea



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GOVERNMENT OF BULGARIA

Code	Name	Water Basin Administrations
RORW9.1_B4	VEDEA : AMONTE EVACUARE ROSIORI DE VEDE - CONFLUENTA PARAUŁ CAINELUI	I Argeş-Vedea
RORW9.1_B5	VEDEA : CONFLUENTA PARAUŁ CAINELUI - AMONTE EVACUARE ALEXANDRIA	I Argeş-Vedea
RORW9.1_B6	VEDEA : AMONTE EVACUARE ALEXANDRIA - AMONTE CONFLUENTA TELEORMAN	I Argeş-Vedea
RORW9.1_B7	VEDEA : CONFLUENTA TELEORMAN - LOCALITATE BUJORU	I Argeş-Vedea
RORW9.1_B8	VEDEA : LOCALITATE BUJORU - CONFLUENTA DUNARE	I Argeş-Vedea
RORW9.1.11_B2	BRATCOV: AC. MALDAENI - CONFLUENTA VEDEA	I Argeş-Vedea
RORW9.1.12_B1	BURDEA	I Argeş-Vedea
RORW9.1.12a_B1	BARACEA	I Argeş-Vedea
RORW9.1.13_B1	PARAUŁ CAINELUI	I Argeş-Vedea
RORW9.1.14_B1	NANOV : IZVOR - INTRARE AC. COADA CALULUI	I Argeş-Vedea
RORW9.1.14.1_B1	VALEA CALULUI	I Argeş-Vedea
RORW9.1.15_B3	TELEORMAN : AMONTE CONFLUENTA NEGRASI - CONFLUENTA VEDEA	I Argeş-Vedea
RORW9.1.15.10_B1	VAJISTEA	I Argeş-Vedea
RORW9.1.15.11_B1	GABUR	I Argeş-Vedea
RORW9.1.15.12_B1	VALEA LUI MIHALACHE	I Argeş-Vedea
RORW9.1.15.6_B1	PARAUŁ DOBREI (VALEA DOBRULUI)	I Argeş-Vedea
RORW9.1.15.7_B1	BUCOV	I Argeş-Vedea
RORW9.1.15.7_B1_D	BUCOV/TELEORMAN	I Argeş-Vedea
RORW9.1.15.8_B1	TELEORMANEL SI AFLUENTII	I Argeş-Vedea
RORW9.1.15.9_B1	CLANITA: IZVOR - AVAL CONFLUENTA VIROSI SI AFLUENTII	I Argeş-Vedea
RORW9.1.15.9_B2	CLANITA: AVAL CONFLUENTA VIROSI - CONFLUENTA TELEORMAN	I Argeş-Vedea
RORW9.1.5_B2	PLAPCEA: CONFLUENTA PLAPCEA MICA - CONFLUENTA VEDEA	I Argeş-Vedea
RORW9.1.5.3_B1	OSICA	I Argeş-Vedea
RORW9.1.9_B1	TECUCI	I Argeş-Vedea
RORW14.1.10_B1	STRENICA	II Banat
RORW14.1.11_B1	LUT	II Banat
RORW14.1.12_B1	TISOVITA	II Banat
RORW14.1.13_B1	HLUBOTINA	II Banat
RORW14.1.14_B1	PLAVISEVITA	II Banat
RORW14.1.15_B1	VALEA MORILOR	II Banat
RORW14.1.16_B1	VALEA SATULUI	II Banat
RORW14.1.17_B1	MRACONIA + AFLUENTI	II Banat
RORW14.1.18_B1	VALEA SATULUI	II Banat
RORW14.1.19_B1	MALA	II Banat
RORW14.1.20_B1	ESELNITA	II Banat



Code	Name	Water Basin Administrations
RORW14.1.9_B1	POLOSEVA (ELISEVA)	II Banat
RORW6.2_B2	CERNA - AC. VALEA LUI IOVAN - AC. HERCULANE	II Banat
RORW6.2.11_B1	PRISACINA	II Banat
RORW6.2.6_B2	CRAIOVA - AV. CAPT. SECUNDARA	II Banat
RORW6.2.7_B1	IAUNA (IAUNA MARE)	II Banat
RORW6.2.8_B1	ARSACA	II Banat
BG1DJ109R001	SENKYOVITSA DJRWB01	III Buzău-Ialomița
BG1DJ109R1017	DJRWB1017	III Buzău-Ialomița
BG1DU000R001	DUNAV DURWB001	III Buzău-Ialomița
ROLW14.1.34_B1	CONTINUA - ZBOIUL: SALBA LACURI (INCLUSIV AC. CATALOIU)	III Buzău-Ialomița
RORW10.1_B7	ARGES: SECTOR AMONTE CONFLUENTA DAMBOVITA - CONFLUENTA DUNARE	III Buzău-Ialomița
RORW14.1_B3	DUNAREA PORTILE DE FIER 2-CHICIU	III Buzău-Ialomița
RORW14.1_B4	DUNAREA CHICIU-ISACCEA	III Buzău-Ialomița
RORW14.1.35_B1	MOSTISTEA_IZVOR_COADA ACUMULAREA FUNDULEA_VALEA LIVEZILOR	III Buzău-Ialomița
RORW14.1.35_B2	CANAL LEGATURA DUNARE-IEZER-MOSTISTEA-DOROBANTU	III Buzău-Ialomița
RORW14.1.35.3_B1	BELCIUGATELE	III Buzău-Ialomița
RORW14.1.35.4_B1	CORATA	III Buzău-Ialomița
RORW14.1.35.5_B1	VANATA_SI_AFLUENTII	III Buzău-Ialomița
RORW14.1.35.6_B1	ARGOVA_CUCUVEANU	III Buzău-Ialomița
RORW14.1.36_B1	BERZA_IZVOR_LAC GALATUI	III Buzău-Ialomița
RORW14.1.36_B2	CANAL BERZA-DUNARE	III Buzău-Ialomița
BG1DJ345R1109	SUHA REKA DJRWB1109	V Dunăre-Litoral
RORW14.1_B4	DUNAREA CHICIU-ISACCEA	V Dunăre-Litoral
RORW14.1.37_B1	ALMALAU	V Dunăre-Litoral
RORW14.1.47_B1	TOPOLOG	V Dunăre-Litoral
RORW15.1.10_B1	CASIMCEA 1	V Dunăre-Litoral
RORW15.1.10_B3	CASIMCEA 2	V Dunăre-Litoral
RORW15.1.10.1_B1	RAMNIC	V Dunăre-Litoral
RORW15.1.10.2_B1	CARTAL	V Dunăre-Litoral
RORW15.1.10.6_B1	GURA DOBROGEI	V Dunăre-Litoral
RORW15.1.10B_B1	CDMN 1	V Dunăre-Litoral
RORW15.1.10B_B2	CDMN 2 - CPAMN	V Dunăre-Litoral
RORW15.1.10B.5_B1	AGICABUL	V Dunăre-Litoral
RORW15.1.6_B1	SARURI	V Dunăre-Litoral
RORW15.1.7_B1	NUNTASI	V Dunăre-Litoral
BG1DU000R001	DUNAV DURWB001	VI Jiu



Code	Name	Water Basin Administrations
BG1WO600R015	LOM WORWB015	VI Jiu
BG1WO800R1016	TSIBRITSA WORWB1016	VI Jiu
RORW14.1_B3	DUNAREA PORTILE DE FIER 2-CHICIU	VI Jiu
RORW14.1.21_B151_1	TAROVA -IZVOR-CONFL. DUNAREA	VI Jiu
RORW14.1.21_B151_2	BAHNA - IZVOR - CF. DUNAREA SI AFL.RACOVAT, CAMANA	VI Jiu
RORW14.1.21a_B152	VODITA - IZVOR - CF. DUNAREA	VI Jiu
RORW14.1.22_B153	JIDOSTITA - IZVOR - CF. DUNAREA	VI Jiu
RORW14.1.23_B154_1	TOPOLNITA - IZVOR - LOC. IZVORUL BARZII SI AFL. BALTA II, SUSITA II	VI Jiu
RORW14.1.23_B154_2	NEAGONEA -IZVOR- CF. TOPOLNITA	VI Jiu
RORW14.1.23_B155	TOPOLNITA - LOC. IZVORUL BARZII - CF. DUNARE SI AFL. PLESUVA	VI Jiu
RORW14.1.23.7_B156	CRIHALA - IZVOR - CF. TOPOLNITA	VI Jiu
RORW14.1.23a_B157	BARAN - IZVOR - CF. DUNAREA	VI Jiu
RORW14.1.24_B158	BLAHNITA (ROGOVA) - IZVOR - CF. DUNAREA	VI Jiu
RORW14.1.24.1_B159	PORONITA - IZVOR - CF. BLAHNITA	VI Jiu
RORW14.1.24.2_B160	OREVITA - IZVOR - CF. BLAHNITA	VI Jiu
RORW14.1.25_B161_1	DRINCEA 1 - IZVOR - LOC. CUJMIR SI AFL. DOBRA, DRINCEA 2	VI Jiu
RORW14.1.25_B161_2	SARACOV - IZV.- CONFL. DRINCEA 2	VI Jiu
RORW14.1.25_B165	DRINCEA 1 - LOC. CUJMIR - CF. DUNAREA	VI Jiu
RORW14.1.26_B166	BALASAN - IZVOR- AVAL LOC. BAILESTI	VI Jiu
RORW14.1.26_B167	BALASAN - AVAL LOC. BAILESTI- CF. DUNAREA	VI Jiu
RORW14.1.26.1_B168	FANTANA FATULUI - IZVOR - CF. BALASAN	VI Jiu
RORW14.1.27_B169_1	DESNATUI -IZVOR - AC. FANTANELE SI AFL. OLTEANCA, GARBOV, BURDUHOSU, CETATUIA, PUTINEI	VI Jiu
RORW14.1.27_B169_2	CIUTURA - IZVOR - AC. FANTANELE	VI Jiu
RORW14.1.27_B172	DESNATUI -AC. FANTANELE - AC. BISTRET	VI Jiu
RORW14.1.27_B184	DESNATUI -AC. BISTRET- CF. DUNARE	VI Jiu
RORW14.1.27.4_B171_1	TERPEZITA- IZVOR - AC. FANTANELE SI AFL. BALACASANCA, VARVOR	VI Jiu
RORW14.1.27.4_B171_2	GABRU -IZVOR - CONFL. TERPEZITA	VI Jiu
RORW14.1.27.5_B173	VALEA REA III - IZVOR - CF. DESNATUI SI AFL. PANAGHINA	VI Jiu
RORW14.1.27.6_B174	BANAGUIU - IZVOR - CF. DESNATUI	VI Jiu
RORW14.1.27.7_B175	BALDAL (JIVAN) - IZVOR - CF. DESNATUI	VI Jiu
RORW14.1.27.8_B176	BUZAT - IZVOR - CF. DESNATUI	VI Jiu
RORW14.1.27.9_B177	BABOIA (ERUGA) - IZVOR - AC. CORNU	VI Jiu
RORW14.1.27.9_B179	BABOIA (ERUGA) - AC. CORNU-AC. CARAULA SI AFL. TEIUL	VI Jiu
RORW14.1.27.9_B182	BABOIA (ERUGA) -AC. CARAULA - CF. DESNATUI SI AFL. CIOROIASI	VI Jiu
RORW14.1.27.9.2_B180	CARAULA (ORODEL) - IZVOR - CF. BABOIA	VI Jiu



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Code	Name	Water Basin Administrations
RORW14.1.28_B185	JIET (JIUL VECHI)- IZVOR - CF. DUNARE SI AFL. GIOROCEL, VALEA PREDESTILOR	VI Jiu
RORW7.1_B121	JIU ACUM. ISALNITA- BRATOVOIESTI	VI Jiu
RORW7.1_B148	JIU BRATOVOIESTI-CONFL. DUNAREA	VI Jiu
RORW7.1_B57	JIU ACUM. TURCENI-ACUM. ISALNITA	VI Jiu
RORW7.1_CA_B200	CANAL ADUCTIUNE AC. ISALNITA - PLATFORMA INDUSTRIALA DE EST CRAIOVA	VI Jiu
RORW7.1.33a_B59	CEPLEA - IZVOR - CF. JIU	VI Jiu
RORW7.1.34.17_B84	VALEA IEPII - IZVOR - CF. GILORT	VI Jiu
RORW7.1.36_B100	MOTRU-CONFL.JIROV CONF.JIU	VI Jiu
RORW7.1.36_B91	MOTRU - CF. BREBINA -CF. LUPOAIA (AM. LOC. MOTRU) SI AFL. BREBINA, CRAINICI, IUPCA, VALEA MARE II	VI Jiu
RORW7.1.36_B93	MOTRU - CF. LUPOAIA (AM. LOC. MOTRU) - CF. JIROV	VI Jiu
RORW7.1.36.10_B102	COTOROAIA - IZVOR - CF. MOTRU	VI Jiu
RORW7.1.36.11_B104a	HUSNITA - CF. ZEGAIA - CF. MOTRU SI AFL. GARNITA SI PESTEANA II	VI Jiu
RORW7.1.36.12_B109	SLATINIC - IZVOR - CF. MOTRU	VI Jiu
RORW7.1.36.13_B111	TALAPAN-CF. VALEA PARLITEI-CF. MOTRU	VI Jiu
RORW7.1.36.14_B112	STANGACEAUA - IZVOR - CF. MOTRU	VI Jiu
RORW7.1.36.2_B89	MOTRUL SEC - IZVOR - CF. MOTRU SI AFL. CAPRA	VI Jiu
RORW7.1.36.2.2_B90	MOTRUSOR - IZVOR - CF. MOTRU	VI Jiu
RORW7.1.36.7_B96	PESTEANA I - IZVOR - CF. MOTRU SI AFL. CAINICENI, GARDOAIA, VALEA SCROAFEI	VI Jiu
RORW7.1.36.7a_B97	LUPSA IZV.-CONFL. MOTRU	VI Jiu
RORW7.1.36.8_B98	COSUSTEA - IZVOR- CF. GARBOVAT SI AFL. VALEA VERDE, VALEA GAINII, COSUSTEA MICA, VALEA REA II	VI Jiu
RORW7.1.36.8_B99	COSUSTEA - CF. GARBOVAT - CF. MOTRU SI AFL. GARBOVAT, GOVODARVA	VI Jiu
RORW7.1.36.9_B101	JIROV - IZVOR - CF. MOTRU	VI Jiu
RORW7.1.36a_B113	FRATOSTITA - IZVOR - CF. JIU	VI Jiu
RORW7.1.36b_B114	BALTA I - IZVOR - CF. JIU	VI Jiu
RORW7.1.37_B115	CARNESTI - IZVOR - CF. JIU	VI Jiu
RORW7.1.38_B116	RACOVITA - IZVOR - CF. JIU	VI Jiu
RORW7.1.39_B117	RACARI - IZVOR - CF. JIU	VI Jiu
RORW7.1.40_B118	ARGETOAIA (SALCIA) - IZVOR - CF. JIU SI AFL. TANTAR, MALUMIC, GARCOTIN	VI Jiu
RORW7.1.41_B119	BRADESTI- IZV.-CF. JIU	VI Jiu
RORW7.1.42_B122	AMARADIA II - IZVOR - CF. PLOSTINA II SI AFL., STRAMBA, NEGRENI, PLOPUL, VALEA HARTANULUI, GAGAI, AMARAZUIA, ORGA, SLAVUTA, PLOSCA	VI Jiu
RORW7.1.42_B126	AMARADIA II - CF. PLOSTINA - CF. JIU	VI Jiu



Code	Name	Water Basin Administrations
RORW7.1.42.10_B123	VALEA BOULUI - IZVOR - CF. AMARADIA II	VI Jiu
RORW7.1.42.12_B124	VALEA MUIERII - ZVOR - CF. AMARADIA II	VI Jiu
RORW7.1.42.14_B127	BREBINA - IZVOR - CF. AMARADIA II	VI Jiu
RORW7.1.42.15_B128	VALEA MANASTIRII - IZVOR - CF. AMARADIA	VI Jiu
RORW7.1.42.16_B129	VALEA SARPELUI - IZVOR - CF. AMARADIA II	VI Jiu
RORW7.1.43_B130a	RAZNIC (OBEDEANCA) - CONFL. MERETEL - CF. JIU SI AFL. MERETEL, BRABOVA, URDINITA, RACHITA, PLESOI SI BREASTA	VI Jiu
RORW7.1.44_B138	TEJAC - IZVOR - CF. JIU	VI Jiu
RORW7.1.44a_B139	ULM (PALILULA) - IZVOR - CF. JIU	VI Jiu
RORW7.1.44b_B140	PRODILA - IZVOR - CF. JIU	VI Jiu
RORW7.1.45_B142	PREAJBA - IZVOR - CF. JIU (PRIN CANAL CRAIOVITA)	VI Jiu
RORW7.1.46_B143	LUMAS - IZVOR - CF. JIU	VI Jiu
RORW7.1.47_B144	LEUL (STIUBEI) - IZVOR - CF. JIU	VI Jiu
RORW7.1.47a_B145	VALEA BISERICII - IZVOR - CF. JIU	VI Jiu
RORW7.1.48_B146	DALGA - IZVOR - CF. JIU	VI Jiu
RORW7.1.49_B147	VALEA VISTIERIEI - IZVOR - CF. JIU	VI Jiu
RORW7.1.50_B149	GIOROC - IZVOR - CF. JIU	VI Jiu
RORW7.1.51_B150	LIVADIA (PUTUROASA) - IZVOR - CF. JIU	VI Jiu
RORW8.1.175_B1	TESLUI - IZVOARE - CONFLUENTA LANGA SI AFLUENTUL LANGA	VI Jiu
BG1DU000R001	DUNAV DURWB001	VIII Olt
RORW14.1_B3	DUNAREA PORTILE DE FIER 2-CHICIU	VIII Olt
RORW14.1.28_B185	JIET (JIUL VECHI) - IZVOR - CF. DUNARE SI AFL. GIOROCEL, VALEA PREDESTILOR	VIII Olt
RORW14.1.30_B1	SIU - IZVOARE - CONFLUENTA DUNARE	VIII Olt
RORW8.1_B12	OLT - AVAL ACUMULARE IZBICENI - CONFLUENTA DUNARE	VIII Olt
RORW8.1.156_B1	GEAMANA - GEAMANA SI AFLUENTII DEJEASCA, BOLOVAN	VIII Olt
RORW8.1.158_B1	CUNGRA - CUNGRA SI AFLUENTII LUNGOT, CIRGREA	VIII Olt
RORW8.1.160_B1	CEPTURARU - IZVOARE - CONFLUENTA OLT	VIII Olt
RORW8.1.161_B1	PESCEANA - SI AFL. OLTEANCA, NEMOIU, GUSOIANCA, BURDALESTI, NEGRAPITA, VERDEA	VIII Olt
RORW8.1.162_B1	CUNGRISOARA - SI AFL. ALBESTI, CUNGREA, VALEA CERBULUI	VIII Olt
RORW8.1.165_B1	TESLUI - IZVOARE - CONFLUENTA OLT	VIII Olt
RORW8.1.165a_B1	CANALUL OPORELU - IZV - AV CONF DALGA CU AFL DALGA, PUTREDA SI BAZAVAN	VIII Olt
RORW8.1.165a_B2	CANALUL OPORELU - AVAL CONFLUENTA DALGA - CONFLUENTA OLT	VIII Olt
RORW8.1.165a.2_B1	MAMU - MAMU SI AFLUENTII SILEA, CERNISOR	VIII Olt
RORW8.1.165a.3_B1	BEICA - BEICA SI AFLUENTII BAISOARA, BALSOARA, GARLA MARE	VIII Olt
RORW8.1.167_B1	STREHARETI - STEHARETI SI AFLUENTUL STREANGUL	VIII Olt



Code	Name	Water Basin Administrations
RORW8.1.169_B1	MILCOV (URLATURA) - IZVOARE - CONFLUENTA OLT	VIII Olt
RORW8.1.170_B1	OBOGA - IZVOARE - CONFLUENTA OLT	VIII Olt
RORW8.1.171_B1	DARJOV - DARJOV SI AFL.GOTA, VALEA PARVULUI, TURIA, CHIARA, JID	VIII Olt
RORW8.1.173_B2	OLTET - AVAL CFL TARAIA - AMONTE EVACUARE BALS	VIII Olt
RORW8.1.173_B3	OLTET - AMONTE EVACUARE BALS- CONFLUENTA OLT	VIII Olt
RORW8.1.173.11_B1	LALOS - IZVOARE - CONFLUENTA OLTET	VIII Olt
RORW8.1.173.12_B1	CALUI - CALUI SI AFLUENTUL CALUIET	VIII Olt
RORW8.1.173.13_B1	GEAMARTALUI (GEMARTALUI) - IZVOARE - CONFLUENTA OLTET	VIII Olt
RORW8.1.173.13.1_B1	PARAUL MIJLOCIU - IZVOARE- CONFLUENTA GEAMARTALUI	VIII Olt
RORW8.1.173.13.2_B1	HOREZU (FRATILA, BULZESTI) - IZV.-CONFL.GEAMARTALUI	VIII Olt
RORW8.1.173.13.3_B1	BALASITA - IZVOARE- CONFLUENTA GEAMARTALUI	VIII Olt
RORW8.1.173.14_B1	BARLUI (BURLUI, BARLUI) - BARLUI SI AFLUENTUL GENGEA	VIII Olt
RORW8.1.173.15_B1	BOBU - IZVOARE - CONFLUENTA OLTET	VIII Olt
RORW8.1.173.16_B1	BALTA DASCALULUI - BALTA DASCALULUI SI AFL OLTISOR, VOINICESTI, VASLUI, JUGALIA	VIII Olt
RORW8.1.174_B1	IMINOG - IZVOARE - CONFLUENTA OLT	VIII Olt
RORW8.1.174.1_B1	CLEJA (BALOMIR) - IZVOARE - CONFLUENTA IMINOG	VIII Olt
RORW8.1.174.2_B1	MILOVEANU - IZVOARE - CONFLUENTA IMINOG	VIII Olt
RORW8.1.174.2.1_B1	CIOCARIA - IZVOARE - CONFLUENTA MILCOVEANU	VIII Olt
RORW8.1.175_B1	TESLUI - IZVOARE - CONFLUENTA LANGA SI AFLUENTUL LANGA	VIII Olt
RORW8.1.175_B2	TESLUI - CONFL LANGA- CONFL OLT SI AFLUENTI SCHEAUA, VLASCA, POTOPIN	VIII Olt
RORW8.1.175.2.1_B1	VALEA VIILOR - IZVOARE - CONFLUENTA VLASCA	VIII Olt
RORW8.1.175.3_B1	BRANCOVEANCA - IZVOARE - CONFLUENTA TESLUI	VIII Olt
RORW8.1.175.5_B1	FRASINET - IZVOARE - CONFLUENTA TESLUI SI AFLUENTUL VALEA LUNGENILOR	VIII Olt
RORW8.1.176_B1	CARACAL (MARIOARA) - IZVOARE - CONFLUENTA OLT	VIII Olt
RORW8.1.176.1_B1	GOLOGAN (ALESTEU) - IZVOARE - CONFLUENTA CARACAL	VIII Olt
RORW8.1.177_B1	VLADILA - VLADILA SI AFLUENTUL REDEA	VIII Olt
RORW8.1.178_B1	SUHAT - SUHAT SI AFLUENTUL VALEA GRADINILOR	VIII Olt
RORW8.1.179_B1	CRUSOV - CRUSOV SI AFLUENTUL OBARSIA	VIII Olt
Lakes		
Code	Name	Water Basin Administrations
ROLW14.1_B8	LACUL ZMEICA	V Dunăre-Litoral
ROLW14.1_N1	LAC CIOCANESTI	III Buzău-Ialomița
ROLW14.1_N2	LAC IEZERUL CUZA VODA	III Buzău-Ialomița
ROLW14.1.24_B188	ROTUNDA	VI Jiu



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Code	Name	Water Basin Administrations
ROLW14.1.27_B170	ACUMULARE FANTANELE	VI Jiu
ROLW14.1.27_B183	ACUMULARE BISTRET	VI Jiu
ROLW14.1.27.9_B178	ACUMULARE CORNU	VI Jiu
ROLW14.1.27.9_B181	ACUMULARE CARAULA	VI Jiu
ROLW14.1.31_B2	SUHAIA	I Argeş-Vedea
ROLW14.1.35_B1	ACUMULARI VALEA MOSTISTEA	III Buzău-Ialomița
ROLW14.1.36_B1	LAC GALATUI	III Buzău-Ialomița
ROLW14.1.37_B1	LACUL BUGEAC	V Dunăre-Litoral
ROLW14.1.39_B1	LACUL IORMAC	V Dunăre-Litoral
ROLW14.1.39.1_B1	LACUL OLTINA	V Dunăre-Litoral
ROLW14.1.39a_B1	LACUL DUNARENI	V Dunăre-Litoral
ROLW14.1.40_B1	LACUL VEDEROASA	V Dunăre-Litoral
ROLW14.1.43_B1	LACUL TIBRIN	V Dunăre-Litoral
ROLW14.1.43.2_B1	LACUL DOMNEASCA	V Dunăre-Litoral
ROLW14.1.47_B1	LACUL HAZARLAC	V Dunăre-Litoral
ROLW15.1_B1	LACUL TECHIRGHIOI DULCE	V Dunăre-Litoral
ROLW15.1_B2	LACUL TECHIRGHIOI SARAT	V Dunăre-Litoral
ROLW15.1_B4	LACUL NUNTASI	V Dunăre-Litoral
ROLW15.1_B5	LACUL CORBU	V Dunăre-Litoral
ROLW15.1_B6	LACUL TASAUL	V Dunăre-Litoral
ROLW15.1_B7	LACUL SIUTGHIOI	V Dunăre-Litoral
ROLW15.1_B8	LACUL TABACARIE	V Dunăre-Litoral
ROLW15.1_B9	LACUL TATLAGEAC	V Dunăre-Litoral
ROLW7.1_B120	ACUMULARE ISALNITA	VI Jiu
ROLW7.1_B186	LACUL MIC VICTORIA GEORMANE	VI Jiu
ROLW8.1_B10	OLT - AC.IONESTI, ZAVIDENI, DRAGASANI, STREJESTI, ARCESTI, SLATINA, IPOTESTI, DRAGANESTI-OLT SI AVAL FRUNZARU	VIII Olt
ROLW8.1_B11	OLT - ACUMULARE RUSANESTI SI IZBICENI	VIII Olt
ROLW9.1.11_B1	MALDAIENI	I Argeş-Vedea
RORW14.1_B1	DUNAREA PORTILE DE FIER 1	II Banat
RORW14.1_B2	DUNAREA PORTILE DE FIER 2	VI Jiu
ROTT02_B1	LACUL SINOE	VI Jiu
ROCT01_B1	PERIBOINA-CAP SINGOL	V Dunăre-Litoral
ROCT01_B2	MANGALIA	V Dunăre-Litoral
ROCT02_B1	CAP SINGOL-EFORIE NORD	V Dunăre-Litoral
ROCT02_B2	EFORIE NORD-VAMA VECHE	V Dunăre-Litoral
ROLW10.1_B7	MIHAILESTI	V Dunăre-Litoral



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Code	Name	Water Basin Administrations
ROLW10.1.23_B1	COMANA	I Argeş-Vedea
ROLW14.1_B187	BRAT DUNAREA VECHE	I Argeş-Vedea
ROLW14.1_B189	BALTA GRUII	VI Jiu
ROLW14.1_B190	BALTA GARLA MARE	VI Jiu
ROLW14.1_B191	BALTA FANTINA BANULUI	VI Jiu
ROLW14.1_B192	BALTA CIUPERCENI	VI Jiu
ROLW14.1_B193	BALTA MAGINITA	VI Jiu
ROLW14.1_B194	BURICLIU	VI Jiu
ROLW14.1_B195	BALTA RADI	VI Jiu
ROLW14.1_B196	BALTA PASARICA	VI Jiu
ROLW14.1_B197	BALTA LATA	VI Jiu
ROLW14.1_B198	BALTA TAROVA	VI Jiu
ROLW14.1_B199	BALTA VRATA	VI Jiu
Groundwater		
Code	Name	Water Basin Administrations
ROBA14	CERNA-CAMPUSEL	II Banat
ROBA15	GODEANU	II Banat
ROBA17	BIGAR	II Banat
RODL03	HARSOVA-GHINDARESTI	V Dunăre-Litoral
RODL04	COBADIN-MANGALIA	V Dunăre-Litoral
RODL06	PLATFORMA VALAHA	V Dunăre-Litoral
RODL07	LUNCA DUNARII (HARSOVA-BRAILA)	V Dunăre-Litoral
RODL08	CASIMCEA	V Dunăre-Litoral
RODL09	DOBROGEA DE NORD	V Dunăre-Litoral
RODL10	DOBROGEA DE SUD	V Dunăre-Litoral
ROIL11	LUNCA DUNARII (OLTENITA-HĂRSOVA)	III Buzău-Ialomița
ROIL13	LUNCA IALOMITEI	III Buzău-Ialomița
ROIL14	GIMBASANI-SUDITI	III Buzău-Ialomița
ROIL17	FETESTI	III Buzău-Ialomița
ROJI02	CLOSANI-BAIA DE ARAMA	VI Jiu
ROJI04	VARCIOROVA-NADANOVA-PONOARELE	VI Jiu
ROJI05	LUNCA SI TERASELE JIULUI SI AFLUENTILOR SAI	VI Jiu
ROJI06	LUNCA SI TERASELE DUNARII-CALAFAT	VI Jiu
ROJI07	OLTENIA	VI Jiu
ROOT08	LUNCA SI TERASELE OLTULUI INFERIOR	VIII Olt
ROOT09	LUNCA DUNARII (BRCHET-TURNU MAGURELE)	VIII Olt



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Code	Name	Water Basin Administrations
ROOT13	VESTUL DEPRES.VALAHE	VIII Olt
ROAG02	CAMPIA TITU	I Argeş-Vedea
ROAG03	COLENTINA	I Argeş-Vedea
ROAG05	LUNCA SI TERASELE RAULUI ARGES	I Argeş-Vedea
ROAG08	PITESTI	I Argeş-Vedea
ROAG09	LUNCILE RAURILOR VEDEA, TELEORMAN SI CALMAT	I Argeş-Vedea
ROAG10	LUNCA DUNARII (TURNU MAGURELE-ZIMNICEA)	I Argeş-Vedea
ROAG11	BUCURESTI-SLOBOZIA(NISIPURILE DE MOSTISTEA)	I Argeş-Vedea
ROAG12	ESTUL DEPRES.VALAHE	I Argeş-Vedea



BULGARIA - Surface water body

Surface water body code	Along of the river	Area	Geographical description of the surface water body	Length of the rivers, km / Area of the dam, km ²	Catchment area, km ²	SMVT / IVT	Ecological condition / potential	Chemical condition
BG1DJ109R001	Danube Dobrudzha rivers	Silistra	Senkovic river from spring to confluence in the Danube River at Popina	43.291	557.281	0	2	2
BG1DJ109R1017	Danube Dobrudzha rivers	Silistra	Swallow hole waters from from Clement to Vetren	22.867	717.27	0	2	2
BG1DJ149R1002	Danube Dobrudzha rivers	Silistra	Tsaratsar River with tributaries Ludnya River and Chairlek River from spring to confluence with Dunabe River near Tutrakan	68.99	1073.452	0	2	2
BG1DJ345R1109	Danube Dobrudzha rivers	Silistra	River Suha from the confluence of the river Dobrichka to the mouth	29.774	698.974	0	4	2
BG1DJ900R1008	Danube Dobrudzha rivers	Silistra	Harsovska River and Ruzhichka River	33.5	1970.335	0	3	2
BG1DJ900R1016	Danube Dobrudzha rivers	Silistra	Topchiyska River from its source to its confluence with the Danube River	12.142	727.506	0	U	U
		Ruse						
BG1DU000L1001	Dunabe	Montana	Asparuhov Val dam	2.06	78.978	AWB	4	U
		Vratsa						
BG1DU000L1002	Dunabe	Silistra	Antimovo dam	1.037	16.521	AWB	3	U
BG1DU000L1003	Dunabe	Silistra	Lake Srebarna	2	23.702	0	3	2
BG1DU000R001	Dunabe	Vidin	Danube river from the border at Novo Selo to the border at Silistra	681.816	4211.654	HMW B	3	3
		Montana						
		Vratsa						
		Veliko Tarnovo						
		Silistra						



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Surface water body code	Along of the river	Area	Geographical description of the surface water body	Length of the rivers, km / Area of the dam, km ²	Catchment area, km ²	SMVT / IVT	Ecological condition / potential	Chemical condition
		Pleven						
		Ruse						
		Silistra						
BG1IS100R025	Iskar	Vratsa	Gostilya river from its source to its confluence with the Iskar river near Stavertsi and Staroseltsi	37.831	349.13	0	3	U
		Pleven						
BG1IS100R1024	Iskar	Pleven	Zlatna Panega River from Zlatna Panega to the confluence with the Iskar River near Cherven Bryag, incl. the tributaries - Dabenska, Batulska and Belyanska	36.056	353.443	0	3	U
BG1IS100R1027	Iskar	Vratsa	Iskar River from the confluence of the Gostilya River near Stavertsi to its mouth	30.42	421.235	HMW B	1-2	2
		Pleven						
BG1IS135R1026	Iskar	Vratsa	Iskar River from the confluence of the Gostilya River near Stavertsi to its mouth	54.448	626.226	0	4	U
		Pleven						
BG1IS135R1126	Iskar	Vratsa	Iskar River from the confluence of the Malak Iskar River near Roman to the confluence of the Zlatna Panega River near Cherven Bryag	37.085	345.108	0	3	U
		Pleven						
BG1IS135R1226	Iskar	Vratsa	Iskar River from the confluence of the Gabrovnitsa River near the Elysee to the confluence of the Malak Iskar River near Roman	58.647	644.657	0	3	2
BG1IS135R1326	Iskar	Montana	Iskar River from the confluence of the Batuliyska River near Rebrovo to the confluence of the Gabrovnitsa River near the Elysee, incl. tributary of the river Treskavets	40.767	326.355	0	4	U
		Vratsa						
BG1IS200R1023	Iskar	Vratsa	Malak Iskar river from the confluence of the Bebreish river at Svide to the mouth at Roman, incl. the	23.481	123.428	0	5	2



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			tributary of the Batulska River without the Beeving Dol drinking area; Svode					
BG1IS200R1043	Iskar	Vratsa	Malak Iskar River from the confluence of a tributary near the village of Malak Iskar to the confluence of a tributary near Kalugerovo	25.929	222.729	0	U	U
BG1IS200R1123	Iskar	Vratsa	River catchment "Govezhdi dol"; Svode	4.002	8.44	0	2	2
BG1IS200R1142	Iskar	Vratsa	A tributary of the Bebreash River after the Milkovitsa River	16.881	75.644	0	U	U
BG1IS200R1222	Iskar	Vratsa	River catchment "Old River"; Rashkovo	3.689	4.001	0	2	2
BG1IS300R019	Iskar	Vratsa	Gabrovnitsa River from its source to its confluence with the Iskar River near Gabrovnitsa	19.674	99.209	0	2	2
BG1IS300R1018	Iskar	Montana	Gabrovnitsa River from its source to its confluence with the Iskar River near Gabrovnitsa	20.245	259.147	0	3	U
BG1NV200R1001	Nishava	Montana	Nishava (Ginska) from spring to state border, Visochka River (Srebarna) without drinking zone River catchment "Srebarna-Ginski" and Gaberska River from spring to state border	52.041	659.26	0	2	2
BG1NV200R1101	Nishava	Montana	River catchment "Srebarna-Ginski" 12 pieces and river catchment "Cherna" (Tsarna) on the river Visochka (Srebarna), Kamarska, Sredna and Kuratska	9.334	41.7	0	2	2
BG1NV200R1102	Nishava	Montana	River catchment "Perachkata bara"; land Brakyovtsi	2.879	21.931	0	2	2
BG1OG100R014	Ogosta	Vratsa	Ogosta River from the confluence of the Skat River near Sarajevo to the mouth	3.787	34.661	HMW B	3	2



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GOVERNMENT OF ROMANIA



GOVERNMENT OF BULGARIA

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BG1OG200R008	Ogosta	Vratsa	Skat River from a spring to Barkachevo	53.085	352.549	0	2	2
BG1OG200R1011	Ogosta	Vratsa	Barzina River from its source to its confluence with the Skat River near Lipnitsa	36.19	246.841	HMW B	1-2	2
BG1OG200R1113	Ogosta	Vratsa	Skut River from the confluence of the Barzina River to the confluence with the Ogosta River near Sarajevo	25.112	206.196	0	3	2
BG1OG200R1413	Ogosta	Vratsa	Skat River from Barkachevo to the confluence of the Barzina River	50.296	264.082	0	3	2
BG1OG307R1013	Ogosta	Montana	Ogosta River from the confluence of the Ribene River near Beli Brod to the confluence of the Skat River near Sarajevo	40.121	558.273	0	2	U
BG1OG307R1213	Ogosta	Montana	Ogosta river after Ogosta dam to the confluence of Botunya river near Boychinovtsi	19.549	167.183	0	3	2
BG1OG307R1313	Ogosta	Montana	Ogosta River from the confluence of the Botunya River near Boychinovtsi to the confluence of the Ribene River near Beli Brod	25.222	247.062	0	2	2
		Vratsa						
BG1OG400R1019	Ogosta	Montana	Ribene River after the inflow of a tributary at Lesura to the confluence with the Ogosta River at Beli Brod	14.547	40.877	0	2	U
		Vratsa						
BG1OG400R1119	Ogosta	Vratsa	A tributary of the Ribene River from its source to its confluence with the Ribene River near Lesura	13.349	95.876	0	U	U
BG1OG400R1219	Ogosta	Vratsa	Ribebe River from spring to influx at Lesura incl. Trikladentsi Dam	25.646	129.886	HMW B	1-2	U
BG1OG600L1015	Ogosta	Vratsa	Dabnika dam	1640	4.028	AWB	U	U



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GOVERNMENT OF ROMANIA



GOVERNMENT OF BULGARIA

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BG1OG600R007	Ogosta	Montana	Varteshnitsa River from its source to its confluence with the Botunya River near Krivodol	35.732	284.462	0	3	2
		Vratsa						
BG1OG600R1006	Ogosta	Montana	Botunya River from Varshets to the confluence of the Cherna River near Dolno Ozirovo, incl. tributaries - White and Black	14.187	107.145	0	U	U
		Vratsa						
BG1OG600R1018	Ogosta	Montana	Botunya River from the confluence of the Varteshnitsa River near Krivodol to the confluence with the Ogosta River near Boychinovtsi	23.238	113.989	0	3	2
		Vratsa						
BG1OG600R1106	Ogosta	Montana	River catchemnt "Krushechka bara"; river catchemnt "Old River"; river catchemnt "Relkyov dol"; river catchemnt "Dragieva bara"; river catchemnt "Orloshtitsa 1"; river catchemnt "Orloshtitsa 2"; Botunya River near Varshets	9.507	42.809	0	2	2
BG1OG600R1118	Ogosta	Montana	Botunya River from the confluence of the Cherna River near Dolno Ozirovo to the confluence with the Varteshnitsa River near Krivodol	25.941	107.396	0	2	U
		Vratsa						
BG1OG600R1206	Ogosta	Montana	River cathment "Chegorila"; Cherna River to Gorno Ozirovo	10.463	73.344	0	2	2
		Vratsa						
BG1OG700L1004	Ogosta	Montana	Ogosta Dam	23600	66.108	HMW B	3	U



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GOVERNMENT OF ROMANIA



GOVERNMENT OF BULGARIA

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BG1OG700L1016	Ogosta	Montana	Srechenska bara dam	0,840	2.226	AWB	1-2	2
BG1OG700R005	Ogosta	Montana Vratsa	Shugavitsa River from its source to its confluence with the Ogosta River near Dolno Belotintsi	42.166	220.113	0	2	U
BG1OG700R1002	Ogosta	Montana	Zlatitsa River from the spring to the Ogosta Dam	19.202	137.151	0	2	U
BG1OG700R1003	Ogosta	Montana	Barzia River from Barzia to Ogosta Dam, incl. tributaries - Vreshtitsa River and Berkovska River from river catchment near Berkovitsa	26.329	108.107	0	2	2
BG1OG700R1103	Ogosta	Montana	River catchment "Prashkovitsa"; river catchment "Gavanishtitsa"; river catchment "Sadina bara"; river catchment "Shirina" of the rivers Barzia, Ribna bara, Golyama Sadina bara and Malka Sadina bara	10.724	53.774	0	2	2
BG1OG700R1203	Ogosta	Montana	River catchment "Shabovitsa"; River catchment "Beli Effendi"; River catchment "Golyama River"; River catchment "Malka river "	7.949	46.442	0	2	2
BG1OG789R1001	Ogosta	Montana	Ogosta River from the confluence of the Dalgodelska River near Gavril Genova to the Ogosta Dam near Gorno Tserovene	4.084	50.843	0	3	2
BG1OG789R1101	Ogosta	Vidin Montana	РВ "Лекия", РВ "Горна лука" - р. Превалска Ogosta до вливане в р. Ogosta при Белимел	18.386	91.671	0	2	2



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GOVERNMENT OF ROMANIA



GOVERNMENT OF BULGARIA

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BG1OG789R1201	Ogosta	Montana	River catchment "Shtavlyaka" and river catchment "Kozaritse" - Ogosta river from spring to Chiprovtsi	9.217	36.537	0	2	2
BG1OG789R1301	Ogosta	Montana	Dalgodelska River from its source to its confluence with the Ogosta River	31.826	252.746	0	3	U
BG1OG789R1401	Ogosta	Montana	Ogosta river from the confluence of the Prevalska river Ogosta near Belimel to the confluence of the Dalgodelska river near Gavril Genovo	7.53	55.104	0	U	U
BG1OG789R1501	Ogosta	Montana	Ogosta river from Chiprovtsi to the confluence of Prevalska Ogosta river near Belimel	10.68	43.005	0	U	U
BG1OG789R1601	Ogosta	Vidin	Martinovska River from its source to its confluence with the Ogosta River	11.858	41.803	0	3	2
		Montana						
BG1OS130R1015	Osam	Pleven	Osam River from the confluence of the Mechka River near Debovo to the mouth	16.283	165.029	HMW B	3	2
BG1OS130R1115	Osam	Veliko Tarnovo	Osam River from the confluence of the Lomya River near Levski to the confluence of the Mechka River near Debovo; incl. tributary - the river Mechka	50.087	667.038	HMW B	3	2
		Pleven						
BG1OS400R010	Osam	Veliko Tarnovo	Lomya River from its source to its confluence with the Osam River	35.478	168.945	0	3	2
		Pleven						



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GOVERNMENT OF ROMANIA



GOVERNMENT OF BULGARIA

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BG1OS600R1005	Osam	Pleven	Bara River from its source to its confluence with the Osam River	32.472	142.799	HMW B	3	2
BG1OS700R1001	Osam	Pleven	Osam River from the confluence of the Cherni Osam and Beli Osam rivers near Troyan to the confluence of the Bernitsa River near Alexandrovo, incl. tributaries - Komanska, Suha, Driplya and Bernitsa	86.572	933.402	0	3	2
BG1OS700R1011	Osam	Veliko Tarnovo	Osam River from the confluence of the Bernitsa River near Alexandrovo to the confluence of the Lomya River, incl. a tributary of the Gradezhnitsa River	30.007	276.2	HMW B	3	2
		Pleven						
BG1RL120R1013	Rusenski Lom	Ruse	Rusenski Lom river from the confluence of the rivers Cherni Lom and Beli Lom to the mouth	41.304	121.97	0	3	2
BG1RL120R1113	Rusenski Lom	Ruse	Beli Lom River from the confluence of the Malki Lom River near Nisovo to the confluence with the Rusenski Lom River	10.15	21.458	0	4	2
BG1RL120R1213	Rusenski Lom	Ruse	Cherni Lom river from the confluence of the Baniski Lom river near Shirokovo to the confluence with the Rusenski Lom river	42.007	157.112	0	4	2
BG1RL200L1002	Rusenski Lom	Veliko Tarnovo	Boyka Dam	0,740	35.888	HMW B	4	U
		Ruse						
BG1RL200L1004	Rusenski Lom	Ruse	Baniska dam	1410	9.348	HMW B	U	U



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GOVERNMENT OF ROMANIA



GOVERNMENT OF BULGARIA

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BG1RL200R003	Rusenski Lom	Veliko Tarnovo	Baniski Lom river to Baniska dam, incl. tributaries - Dulgerdere and Kayadzhik after Boyka dam	31.962	331.284	0	3	2
		Ruse						
BG1RL200R1005	Rusenski Lom	Ruse	Baniski Lom river after Baniska dam to the confluence with Cherni Lom, incl. a tributary of the Kurukanarka River	17.238	223.898	HMW B	3	U
BG1RL200R1007	Rusenski Lom	Ruse	Cherni Lom river from the confluence of the Yalma (Seyacheska) river to the confluence of the Baniski Lom river near Shirokovo, incl. tributary of the river Popovski Lom	53.404	470.096	HMW B	3	2
BG1RL900R1012	Rusenski Lom	Ruse	Beli Lom river after Beli Lom dam to the confluence of Dolapdere river near Pisanets, incl. a tributary of the Nalovska River	75.877	673.885	HMW B	4	2
BG1RL900R1112	Rusenski Lom	Ruse	Beli Lom river after the confluence of the Dolapdere river near Pisanets, incl. a tributary of the Dolapdere River	35.184	152.779	0	4	2
BG1RL900R1212	Rusenski Lom	Ruse	Malki Lom River from Lomtsi Dam to its confluence with Beli Lom River near Nisovo	39.186	242.931	0	3	2
BG1VT100R009	Vit	Pleven	Vit River from the confluence of the Tuchenitsa River near Opanets to the mouth	33.943	595.728	HMW B	3	2



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GOVERNMENT OF ROMANIA



GOVERNMENT OF BULGARIA

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BG1VT200R008	Vit	Pleven	Tuchenitsa River from its source to its confluence with Vit River near Opanets	26.365	211.053	0	4	2
BG1VT300L1010	Vit	Pleven	Telish Dam	2320	13.894	HMW B	U	U
BG1VT300L1012	Vit	Pleven	Gorni Dabnik dam	11800	60.129	HMW B	1-2	U
BG1VT307R1007	Vit	Pleven	Vit River from the confluence of the Kamenka River near Bezhanovo to the confluence of the Tuchenitsa River near Opanets, incl. tributary of the Bara River after Gorni Dabnik Dam	39.836	688.876	0	4	2
BG1VT307R1107	Vit	Pleven	Vit River from the confluence of the Kalnik River near Peshterna to the confluence of the Kamenka River near Bezhanovo	30.36	204.646	0	U	2
BG1VT600R006	Vit	Pleven	Kamenka River from its source to its confluence with Vit River, incl. tributaries - Katunetska River with Miryova and Eleshnitsa and Sopotska River with Luga and Batanska	51.204	491.901	0	2	2
BG1WO100R001	West of Ogosta	Vidin	Timok River from Bregovo to the mouth	16.25	132.54	0	5	3
BG1WO200L1003	West of Ogosta	Vidin	Kula dam on the Topolovets river	1567	58.946	HMW B	4	2



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GOVERNMENT OF ROMANIA



GOVERNMENT OF BULGARIA

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BG1WO200R004	West of Ogosta	Vidin	Topolovets river after Kula dam to the mouth, incl. tributaries - Deleinska River and Rabrovska River with Polyanska River	42.447	507.858	0	2	U
BG1WO300L018	West of Ogosta	Vidin	Rabisha dam	3246	5.545	HMW B	3	U
BG1WO300L1006	West of Ogosta	Vidin	Poletkovtsi dam on the Voinishka river	1648	70.285	HMW B	4	2
BG1WO300R1007	West of Ogosta	Vidin	Voinishka River after Poletkovtsi Dam to the mouth, incl. tributaries - Koromanitsa and Smrydla	33.762	199.944	0	3	U
BG1WO300R1008	West of Ogosta	Vidin	Piver Vidball from the protection zone: BG1DSWWO01 - river catchment "White water" at Rakovitsa to the mouth, incl. tributary - the river Hramadska	51.432	307.595	0	2	U
BG1WO300R1108	West of Ogosta	Vidin	River catchment "Byala water" on the river Vidbol	6.371	18.795	0	2	2
BG1WO400R1009	West of Ogosta	Vidin	Archar River from spring to estuary, incl. tributaries - Salashka and Gradska rivers	57.388	365.751	0	2	U
BG1WO500R011	West of Ogosta	Vidin	Skomlya river from spring to estuary	38.344	161.304	0	3	U
		Montana						
BG1WO600L1014	West of Ogosta	Vidin	Hristo Smirnenski Dam on the Nechinska Bara River	0,975	98.096	HMW B	4	U



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GOVERNMENT OF ROMANIA



GOVERNMENT OF BULGARIA

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		Montana						
BG1WO600R015	West of Ogosta	Vidin	Lom River from the confluence of the Nechinska Bara River to the mouth	24.189	154.314	0	2	2
		Montana						
BG1WO600R1013	West of Ogosta	Vidin	Lom River from the confluence of the Stakevska River to the confluence of the Nechinska Bara River	38.056	260.334	0	2	2
		Montana						
BG1WO600R1014	West of Ogosta	Vidin	Nechinska bara river after Hristo Smirnenski dam	13.782	134.163	0	2	2
		Montana						
BG1WO600R1112	West of Ogosta	Vidin	Lom River from the confluence of the Cucumber River near Gorni Lom to the confluence of the Stakevska River	15.1	95.399	0	2	U
		Montana						
BG1WO600R1212	West of Ogosta	Vidin	River catchment "Stakevska reka" on the river Stakevska	3.105	14.88	0	2	2
BG1WO600R1312	West of Ogosta	Vidin	River catchment "Golyama reka" on the river Chuprenska	5.054	18.97	0	2	2
BG1WO600R1412	West of Ogosta	Vidin	River catchment "Golyama reka" on the river Krastavichka	2.646	8.677	0	2	2



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EUROPEAN REGIONAL DEVELOPMENT FUND
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GOVERNMENT OF ROMANIA



GOVERNMENT OF BULGARIA

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BG1WO600R1512	West of Ogosta	Vidin	River catchment "Gorni Lom river"	4.252	6.225	0	2	2
BG1WO600R1612	West of Ogosta	Vidin	Lom River from River catchment "Gorni Lom River" to the confluence of Krastavichka River near Gorni Lom	3.616	50.435	0	2	2
		Montana						
BG1WO600R1712	West of Ogosta	Vidin	Krastavichka River from the river catchment "Golyama Reka" to the confluence with the Lom River near Gorni Lom	8.387	23.406	0	2	2
BG1WO600R1812	West of Ogosta	Vidin	Chuprenska River from the river catchment "Golyama Reka" to the confluence with the Stakevska River	20.102	100.869	0	2	2
BG1WO600R1912	West of Ogosta	Vidin	Stakevska river from river catchment "Stakevska river" to confluence with Lom river	29	193.865	0	2	2
BG1WO800L021	West of Ogosta	Montana	Kovachitsa dam	1120	40.366	AWB	3	U
BG1WO800L1020	West of Ogosta	Montana	Rasovo-1 dam	0,641	67.225	HMW B	5	U
BG1WO800R1016	West of Ogosta	Montana	Tsibritsa river from spring to estuary, incl. tributary - the river Tsibar	80.897	814.787	0	3	2
BG1YN130R1029	Yantra	Veliko Tarnovo	Yantra River from the confluence of the Eliyska River at Polski Trambesh to the mouth	59.759	572.105	HMW B	3	2
		Ruse						



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EUROPEAN REGIONAL DEVELOPMENT FUND
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GOVERNMENT OF ROMANIA



GOVERNMENT OF BULGARIA

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BG1YN200R028	Yantra	Veliko Tarnovo	Studena River from its source to its confluence with the Yantra River near Novgrad	46.065	423.021	HMW B	3	2
		Ruse						
BG1YN300R026	Yantra	Veliko Tarnovo	Eliyska River from its source to its confluence with the Yantra River near Polski Trambesh	31.885	261.738	0	3	U
BG1YN307R1027	Yantra	Veliko Tarnovo	Yantra River from the confluence of the Rositsa River near Krusheto to the confluence of the Eliyska River near Polski Trambesh	16.938	182.592	HMW B	U	2
BG1YN307R1127	Yantra	Veliko Tarnovo	Yantra river from the confluence of the Lefedja river near Gorski dolen Trambesh to the confluence of the Rositsa river near Krusheto	16.836	117.892	HMW B	1-2	2
BG1YN400L1009	Yantra	Veliko Tarnovo	Alexander Stamboliyski Dam on the Rositsa River	10860	85.654	HMW B	1-2	U
BG1YN400R007	Yantra	Veliko Tarnovo	Magar River from a spring to Alexander Stamboliyski Dam	16.75	89.068	0	3	U
BG1YN400R010	Yantra	Veliko Tarnovo	Negovanka River from its source to its confluence with the Rositsa River near Resen	40.36	173.493	0	3	U
BG1YN400R011	Yantra	Veliko Tarnovo	Bohat River from its source to its confluence with the Rositsa River	31.828	97.704	0	3	2



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EUROPEAN REGIONAL DEVELOPMENT FUND
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GOVERNMENT OF ROMANIA



GOVERNMENT OF BULGARIA

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BG1YN400R1012	Yantra	Veliko Tarnovo	Rositsa River from Alexander Stamboliyski Dam to the confluence of the Negovanka River near Resen	48.7	395.34	0	U	U
BG1YN400R1112	Yantra	Veliko Tarnovo	Rositsa River from the confluence of the Negovanka River near Resen to the confluence with the Yantra River	23.385	109.111	0	2	2
BG1YN600L1019	Yantra	Veliko Tarnovo	Yovkovtsi dam on the Veselina river	5745	217.29	HMW B	1-2	2
BG1YN600R022	Yantra	Veliko Tarnovo	Lefedja River from a spring to Zaichari	22.432	341.599	0	2	U
BG1YN600R1020	Yantra	Veliko Tarnovo	Veselina River after Yovkovtsi Dam to its confluence with Zlatarishka River, incl. a tributary of the Kazaldere River	26.4	163.923	0	2	U
BG1YN600R1021	Yantra	Veliko Tarnovo	Zlatarishka River from a spring to Darlevtsi, incl. a tributary of the Maryanska River	50.319	290.52	0	U	U
BG1YN600R1025	Yantra	Veliko Tarnovo	Biyukdere river after Yastrebinno dam to the confluence with Lefedja river, incl. a tributary of the Kazaldere River	59.415	446.682	0	3	2
BG1YN600R1034	Yantra	Veliko Tarnovo	Lefedja River from Zaichari to the confluence of Dzhulyunitsa River near Dzhulyunitsa, incl. a tributary of the Karadere River	57.974	479.153	0	2	U
BG1YN600R1125	Yantra	Veliko Tarnovo	Dzhulyunitsa river from the confluence of the Zlatarishka river near Zlataritsa confluence with the	18.269	224.366	0	3	2



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GOVERNMENT OF ROMANIA



GOVERNMENT OF BULGARIA

Surface water body code	Along of the river	Area	Geographical description of the surface water body	Length of the rivers, km / Area of the dam, km ²	Catchment area, km ²	SMVT / IVT	Ecological condition / potential	Chemical condition
			Dzhulyunitsa river near Dzhulyunitsa and a tributary - Bebrovska river					
BG1YN600R1134	Yantra	Veliko Tarnovo	Lefedja River from the confluence of the Dzhulyunitsa River near Dzhulyunitsa to the confluence with the Yantra River near Gorski Dolen Trambesh	9.886	37.287	HMW B	1-2	2
BG1YN700R1017	Yantra	Veliko Tarnovo	Yantra river from the confluence of the Belitsa river near Veliko Tarnovo to the confluence of the Lefedja river near Gorski dolen Trambesh	53.754	330.191	0	3	2
BG1YN800R1016	Yantra	Veliko Tarnovo	Dryanovska River from Tryavna to its confluence with the Belitsa River near Debelets	42.363	226.786	0	3	2
BG1YN800R1033	Yantra	Veliko Tarnovo	Belitsa River from the confluence of the Raykovska River at Voneshta Voda to the confluence with the Yantra River at Veliko Tarnovo incl. tributary - the river Enyovitsa	33.5	233.855	0	3	2
BG1YN800R1133	Yantra	Veliko Tarnovo	Belitsa River from its source to the confluence of the Raykovska River at Voneshta Voda, incl. tributary - Raikovska River	19.418	168.289	0	2	2
BG1YN900R1015	Yantra	Veliko Tarnovo	Yantra River from the confluence of the Kozlyata River near Gabrovo to the confluence of the Belitsa River near Veliko Tarnovo	59.086	311.814	0	4	2

Legend:

Ecological condition/potential: 1 - Excellent; 2 - Good; 3 - Moderate; 4 - Bad; 5 - Very bad; U - Unknown.

Chemical Condition: 2- Good; 3 - Not reaching good condition; U - Unknown.



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GOVERNMENT OF BULGARIA

BULGARIA- Ground water

№	Groundwater body code	Name of a groundwater body	Name Area _	General assessment of the chemical status of a groundwater body
1.	BG1G0000QP027	Pore water in the Quaternary - Vratsa torrential cone	Vratsa	Good
2.	BG1G0000QAL001	Pore water in the Quaternary - Bregovo-Novoselska lowland	Vidin	Bad
3.	BG1G0000QAL002	Pore waters in the Quaternary - Vidin lowland	Vidin	Bad
4.	BG1G0000QAL003	Pore waters in the Quaternary - Archar-Orsoyska lowland	Vidin	Good
			Montana	
5.	BG1G0000QAL004	Pore waters in the Quaternary - Ciber lowland	Montana	Bad
6.	BG1G0000QAL005	Pore waters in the Quaternary - Kozloduy lowland	Vratsa	Good
7.	BG1G0000QAL006	Pore waters in the Quaternary - Ostrovska lowland	Vratsa	Good
8.	BG1G0000QAL007	Pore waters in the Quaternary - Karaboazka lowland	Pleven	Bad
9.	BG1G0000QAL008	Pore waters in the Quaternary - Belensko-Svishtovska lowland	Veliko Tarnovo	Good
			Pleven	
10.	BG1G0000QAL009	Pore waters in the Quaternary - Vardim-Novgrad lowland	Veliko Tarnovo	Good
			Ruse	
11.	BG1G0000QAL010	Pore waters in the Quaternary - Brashlyanska lowland	Silistra	Good
			Ruse	
12.	BG1G0000QAL011	Pore waters in the Quaternary - Popinsko-Garvanska lowland	Silistra	Bad
13.	BG1G0000QAL012	Pore waters in the Quaternary - Aydemir lowland	Silistra	Good
14.	BG1G0000QAL013	Pore waters in the Quaternary - Lom River	Vidin	Bad
			Montana	
15.	BG1G0000QAL014	Pore waters in the Quaternary - Tsibritsa river	Montana	Good
16.	BG1G0000QAL015	Pore waters in the Quaternary - Ogosta River	Montana	Good
			Vratsa	
17.	BG1G0000QAL016	Pore waters in the Quaternary - the Scut River	Vratsa	Good



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GOVERNMENT OF BULGARIA

No	Groundwater body code	Name of a groundwater body	Name Area _	General assessment of the chemical status of a groundwater body
18.	BG1G0000QAL017	Pore waters in the Quaternary - Iskar river	Vratsa	Good
			Pleven	
19.	BG1G0000QAL018	Pore waters in the Quaternary - Vit river	Pleven	Bad
20.	BG1G0000QAL019	Pore waters in the Quaternary - Osam river	Veliko Tarnovo	Bad
			Pleven	
21.	BG1G0000QAL020	Pore waters in the Quaternary - Yantra river	Veliko Tarnovo	Good
			Ruse	
22.	BG1G0000QAL021	Porous waters in the Quaternary - Rusenski Lom river and its tributaries	Ruse	Good
23.	BG1G0000QPL023	Pore waters in the Quaternary - between the rivers Lom and Iskar	Montana	Good
			Vratsa	
			Pleven	
24.	BG1G0000QPL024	Porous waters in the Quaternary - between the rivers Iskar and Vit	Pleven	Good
25.	BG1G0000QPL025	Pore waters in the Quaternary - between the rivers Vit and Osam	Pleven	Bad
26.	BG1G0000QPL026	Porous waters in the Quaternary - between the rivers Osam and Yantra	Veliko Tarnovo	Bad
			Pleven	
			Ruse	
27.	BG1G00000N2034	Pore waters in the Neogene - Lom-Pleven depression	Vidin	Bad
			Montana	
			Vratsa	
			Pleven	
28.	BG1G00000N1035	Pore waters in Neogen - Ruse region - Silistra	Silistra	Good
			Ruse	
29.	BG1G00000N049	Karst-pore waters in Neogene - Sarmat - Dobrudja	Silistra	Good
30.	BG1G000N1BP036	Karst waters in the Lom-Pleven depression	Vidin	Good
			Montana	
			Vratsa	
			Pleven	



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GOVERNMENT OF ROMANIA



GOVERNMENT OF BULGARIA

No	Groundwater body code	Name of a groundwater body	Name Area _	General assessment of the chemical status of a groundwater body
31.	BG1G0000K2S037	Karst waters in the Fore-Balkans	Montana	Good
			Vratsa	
			Pleven	
32.	BG1G0000K2M047	Karst waters in the Lom-Pleven basin	Pleven	Good
33.	BG1G00000K1040	Karst waters in the Lovech-Tarnovo massif	Veliko Tarnovo	Bad
			Pleven	
34.	BG1G00000TJ046	Karst waters in the Godech massif	Vratsa	Good
35.	BG1G0000K1B041	Karst waters in the Ruse formation	Silistra	Bad
			Ruse	
36.	BG1G0000TJK044	Karst waters in the Western Balkans	Vidin	Good
			Montana	
			Vratsa	
37.	BG1G0000TJK045	Karst waters in the Central Balkans	Vratsa	Bad
			Veliko Tarnovo	
38.	BG1G000K1AP043	Karst waters in the Marmara Massif	Vratsa	Bad
39.	BG1G000K1HB050	Karst waters in the Razgrad formation	Veliko Tarnovo	Bad
			Silistra	
			Ruse	
40.	BG1G0000J3K051	Karst waters in the Malm-Wallachian basin	Veliko Tarnovo	Good
			Silistra	
			Ruse	



15.3. SEVESO location in the program area

Bulgaria

No	Name of the enterprise	Operator	Risk potential	Address
1.	Oberöstereichische Biodiesel Bulgaria Ltd. - Chemical installation for production of methyl esters of fatty acids (biodiesel) and glycerin	"Oberösterreichische Biodiesel Bulgaria" Ltd. 202451089	Low	Ruse, the plan of Heavy Machinery AD - Ruse
2.	Agrochemicals Ltd.	Agrochemicals Ltd. 124025753	Low	Dobrich, 1 Batak Street
3.	Kozloduy NPP EAD	Kozloduy NPP EAD 106513772	High	Vratsa, Kozloduy
4.	B contact Ltd.	B contact Ltd. 117515529	Low	Ruse, Byala, 23 Nikola Petkov Str
5.	Base for storage of petroleum products	Bulmarket DM Ltd. 124077052	Low	Ruse, Tutrakan Blvd. № 100
6.	Bent Oil AD-Petroleum Base	Bent Oil AD 200852966	Low	Pleven, Western Industrial Zone, territory "Plama Refinery" AD
7.	Bulgartransgaz EAD - Chiren Underground Gas Storage	Bulgartransgaz EAD 175 203 478	High	Vratsa, Chiren village, Chiren underground gas storage
8.	STATE AGENCY "STATE RESERVE AND WAR-TIME STOCKS" Veliko Tarnovo, Polikraishte Oil Base	STATE AGENCY "STATE RESERVE AND WAR-TIME STOCKS" 831913661	High	Veliko Tarnovo, Gorna Oryahovitsa, Polikraishte village,
9.	Depot for light oil products Saksa, Ruse	Saxa Ltd. 131245283	High	Ruse, Eastern Industrial Zone
10.	GTA PETROLEUM LTD	Oil base - town of Byala of GTA PETROLEUM Ltd. UIC 200871895	Low	Ruse, Byala, town of Byala, residential complex WHITE STATION, 43 Vasil Aprilov Str., OIL BASE
11.	E. Miroglia EAD	"E. Miroglia EAD 119603547	High	Veliko Tarnovo, Svishtov, Svishtov, Western Industrial Zone
12.	Midzhur Plant	Widex AD 030271954	High	Vidin, Chuprene, village of Gorni Lom, land number 001424
13.	SUGAR FACTORIES AD	SUGAR FACTORIES AD 104051737	Low	Veliko Tarnovo, Gorna Oryahovitsa, town of Gorna Oryahovitsa,
14.	INAKEM SOLUTIONS LTD	INAKEM SOLUTIONS Ltd. UIC 117 615 771	Low	Ruse, 125 Bulgaria Blvd.
15.	Silistra Industrial Park - Plant for construction sealants	Silistra Industrial Park AD BG202484228	Low	Silistra, Haralampi Jamdzhiev Str. A 22A
16.	INSA PORT Ltd.	INSA OIL LTD • 115624227	Low	Ruse, 100 Tutrakan Blvd.
17.	Kamibo Ltd.	"Kamibo" Ltd. 131157890	High	Vratsa, TP "Himenergo"
18.	Oil factory, village of Pokrayna	Olimex Ltd. 815145899	Low	Vidin, village of Pokrayna
19.	MONBAT AD	MONBAT AD UIC: 111028849	High	Montana, Northern Industrial Zone
20.	Organica Bulgaria Ltd.	Organica Bulgaria Ltd. 117 612 907	Low	Ruse, Dve Mogili, Batishnitsa village, 2A Dunav Street
21.	Orgachim AD	Orgachim AD 117001047	Low	Ruse, Western Industrial Zone, 21 Treti Mart Blvd.
22.	Orgachim Resins AD	Orgachim Resins AD 202723137	High	Ruse, Western Industrial Zone, 21 Treti Mart Blvd.



No	Name of the enterprise	Operator	Risk potential	Address
23.	Oil terminal of OMV Bulgaria Ltd.	OMV BULGARIA Ltd. 121759222	Low	Vidin, Southern Industrial Zone
24.	Petroleum Terminal Rompetrol Bulgaria	Rompetrol Bulgaria EAD 117 599 032	Low	Ruse, 100 Tutrakan Blvd.
25.	Oil base - Litex, Levski	Litex AD 110060025	Low	Pleven, Levski, Industrial zone
26.	Vratsa oil base	DMV Ltd. 117679603	High	Vratsa, Vratsa, Promishlena Zona quarter, 9 Hristo Smirnenki Str.
27.	Marten oil base	DMV Ltd. 117679603	Low	Ruse, town of Marten, town of Marten, municipality Ruse, region Ruse, Marten Oil Bas
28.	Placement supply base Ruse	Lukoil Bulgaria Ltd. 121699202	High	Ruse, 100 Tutrakan Blvd.
29.	Plant for production of vegetable oils	MARITSA OLIO AD UIC: 112 052 785	Low	Pleven, Yasen village, Azmanskoto locality
30.	Production base of GLOBE INDUSTRIES Ltd.	GLOBE INDUSTRIES Ltd. 160059125	Low	Ruse, Dve Mogili, Batishnitsa village, 2A Dunav Street
31.	Reservoir for storage of petroleum products	PLAMA REFINERY AD 200608912	High	Pleven, Western Industrial Zone, land number №000100 and № 204015, on the land of the villages of Tarnene and Disevitsa, municipality of Pleven
32.	Ruse Chemicals AD	Ruse Chemicals AD UIC 202723124	Low	Ruse, Eastern Industrial Zone, 133 Bulgaria Blvd.
33.	SAFIK-ALKAN HIMSNAB AD	SAFIK-ALKAN HIMSNAB AD 203 597 506	Low	Ruse, 3 Akademik Mihail Arnaudov Str.
34.	SVILOTSEL EAD	SVILOTSEL EAD 104645362	Low	Veliko Tarnovo, Svishtov, Svishtov, Western Industrial Zone
35.	Warehouse for plant protection products	"999- IV. ASENOV" Ltd. 115810534	Low	Ruse, Byala, town of Byala, republican road 1-5 Ruse-Veliko Tarnovo, land property 279081
36.	Warehouse for plant protection products	"Oyrolog" Ltd. 131438866	High	Ruse, 9 Tez Iztok Str.
37.	Warehouse Livadski dol	Widex Engineering EAD 203275014	High	Montana, Nikolovo, land property 000291
38.	Methanol storage base	"INAKEM SOLUTIONS" LTD UIC 117 615 771	Low	use, Eastern Industrial Zone, 125 Bulgaria Blvd.
39.	Storage base for mineral fertilizers	"BOREALIS L.A.T. Bulgaria "Ltd., 201470332	High	Montana, Lom, Lom, land property 44238.507.215," Industrial zone "Lom
40.	Propane-butane storage base, town of Gorna Oryahovitsa	Gaztrade AD BG121847398	High	Veliko Tarnovo, Gorna Oryahovitsa, town of Gorna Oryahovitsa, 86 St. Knyaz Boris I Str.
41.	Warehouse for storage of explosives for civil purposes	NICAS - Ltd. 831329998	Low	ratsa, Lilyache,
42.	Warehouse for storage of mineral fertilizers	BOREALIS L.A.T. Bulgaria "EOD, 201470332	High	Ruse, Tsenovo, village of Dolna Studena, Regulated plot I-503, quarter 41
43.	Warehouse for storage of petroleum products	"TM TECHNOLOGY" AD	Low	Ruse, 100 Tutrakan Blvd.
44.	Continvest warehouse - town of Gorna Oryahovitsa	"Continvest" Ltd. 040967273	Low	Veliko Tarnovo, Gorna Oryahovitsa, town of Gorna Oryahovitsa, 66 Makedonia Str., Eastern Industrial Zone
45.	Storage farm for propane-butane gas town of Byala	Bulmarket DM OOD 124077052	High	Ruse, Byala, town of Byala, land property 711 and land property 712



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No	Name of the enterprise	Operator	Risk potential	Address
46.	Storage farm for propane-butane gas and light fuels - Byala Station, Byala	Bulmarket DM OOD 124077052	Low	Ruse, Byala, Byala, 43 Vasil Aprilov Str., LPR XXI - 148 sq.44 according to the zoning plan of Byala Station
47.	Storage farm for propane-butane	Toplivo AD 831924394	High	Dobrich, 4 Voyvodata Dimitar Kalachliyata Str.
48.	Warehouse for storage of propane-butane	Toplivo AD 831924394	High	Ruse, 9 Potsdam Str.
49.	The storage farm for diesel fuel and liquefied gas propane butane	Petar Karaminchev AD BG11700099	High	Ruse, Iztochna Promishlena Zona quarter, 71 TPP Iztok Str.
50.	Terminal for storage of liquefied natural gas (LNG)	"Bulmarket DM" Ltd. 124077052	High	use, Blvd. "Tutrakan" № 100, property XLIX according to the plan of TM AD - Ruse
51.	Toplofikacia - Ruse EAD	Toplofikacia Ruse EAD 117 005 106	Low	Ruse, Eastern Industrial Zone, 1 TPP Iztok Str.
52.	Toplofikatsiya - Pleven EAD	Toplofikatsiya Pleven EAD 114005624	Low	Pleven, 128 Iztochna Industrialna Zona Str.
53.	F + S-Agro OOD	F + S-Agro OOD 117 535 581	High	Ruse, Dve Mogili, Dve Mogili, Chernomore Str.
54.	Sunflower oil factory - Extraction workshop of Faustina Group Ltd.	FAUSTINA GROUP Ltd. 106622177	Low	Montana, Doctor Yosifovo village, Zaeshko Pole area / current 139003
55.	Fibran - Bulgaria AD	Fibran - Bulgaria AD 121291243	Low	Ruse, Eastern Industrial Zone 100 Tutrakan Blvd.
56.	Chemical installation for production of methyl esters of fatty acids (biodiesel) and glycerin	"Astra Bioplant" EOOD UIC: 117650594	Low	Ruse, Slivo pole, Slivo pole, LPR VII-1158-PP, quarter 119, Regulated plot VIII-1158, quarter 119 and Regulated plot V-1158, quarter 137 according to the plan of the town of Slivo Pole, 23 Bulgaria Blvd.

Romania

County	No	Denumire amplasament	Address
Olt	1.	ALRO S.A. Slatina	Slatina, str. Pitesti, 116
	2.	S.C. ADE GAZ OIL GAZ COMPANY S.R.L.	Caracal, str. 1 Decembrie 1918, 150A
	3.	S.C. BULROMGAS IMPEX	Bals, str. Nicolae Balcescu, 227
	4.	Pirelli Tyres Romania S.R.L.	Slatina, str. Draganesti, 35
Constanta	5.	S.C. O.M.V. Ptrom S.A - Sectia Terminal Midia	Corbu, str. Petromarului, 2
	6.	S.C. Butan Gas Romania S.A. - Sucursala Navodari	Navodari, DJ 226, KM 22
	7.	S.C. Santierul Navala Constanta S.A.	Constanta, incinta port 1
	8.	S.C. Damen Shipyards Mangalia S.A.	Mangalia, Portului 1
	9.	S.C. Chimpex S.A.	Constanta, incinta port
	10.	S.C. Rompetrol Rafinare S.A	Navodari, str. Navodari, 215
	11.	S.C. Oil Terminal S.A. - S.P. Nord	Constanta, str. Caraiman, 2
	12.	S.C. Oil Terminal S.A. - S.P. Sud	Constanta, str. Caraiman, 2
	13.	S.C. Oil Terminal S.A. - S.P. Port	Constanta, str. Caraiman, 2



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	14.	S.C. Octogon Gas & Logistics S.R.L.	Navodari, Port Midia, Parcela 4
	15.	S.C. Callatis Gas S.R.L.	Mangalia, Incinta Port Digul de sud
	16.	S.C. Milenium Gas S.R.L.	Constanta, str. Industriala, 9
	17.	S.C. Uzina Termoelectrica Midia S.A.	Navodari, B-dul Navodari
	18.	SNN Sucursala CNE Cernavoda	Cernavoda, str. Medgidiei, 2
	19.	S.C. Schenker Logistics Romania S.R.L. - Sucursala mol 1 Constanta Sud	Constanta
Calarasi	20.	S.C. CONPET S.A. - SECTOR CALARETI, STATIA CALARETI	Com. Tamadau Mare, Sat Calareti, str. D.N.3
	21.	S.C. BUNGE BIOCOMBUSTIBIL S.R.L.	Lehliu gara, str. Lisabona, 3
	22.	S.C. DELTA GAS COV S.R.L.	Calarasi, Varianta Nord, 1
	23.	S.C. SIAD ROMANIA S.R.L.	Calarasi, Prelungirea Bucuresti
	24.	S.C. Oscar downstream S.R.L.	Fundulea, str. Muncii, 47A
	25.	S.C. Biochem S.R.L.	Dragalina, str. Complexului 7
	26.	S.C. AZOCHIM S.R.L.	Dragalina, str. Liceului, 1
	27.	S.C. Belchim crop protection S.R.L.	Chirnogi, str. Radovani, 8
Giurgiu	28.	S.C. AZOCHIM S.R.L.	Giurgiu, str. Plantelor, 3
	29.	S.C. H ESSERS LOGISTICS S.R.L.	Com. Bolintin Deal, Str. DC 147, 2
	30.	S.C. VIXON GAS S.R.L.	Giurgiu, sos. Portului, 1-2
	31.	S.C. CONPET S.A.	Com. Roata de Jos
	32.	S.C. MOL ROMANIA PETROLEUM PRODUCTS S.R.L.	Giurgiu
	33.	S.C. DELTA GAS LNC S.R.L.	Giurgiu, Sos. Sloboziei, KM 4
Teleorman	34.	S.C. Donau Chem S.R.L.	Mun.Turnu Măgurele, str. Portului, nr.1
	35.	S.C.Bio Fuel Energy S.R.L.	Oraşul Zimnicea, str. Portului, nr.38
Dolj	36.	S.C. Energetic Oltenia S.A.	Craiova, str. Bariera Valcii, 195
	37.	S.C. ROMPETROL DOWNSTREAM S.R.L.	Localitatea Almaj, DE 70, KM241
	38.	SC OMV PETROM SA	Işalniţa, Mihai Eminescu, 105
	39.	SC BOREALIS LAT România SRL	Işalniţa, Mihai Eminescu, 105A
Mehedinti	40.	SC FONTEGAZ ROCCADASPIDE SRL - Filiala Şimian	Mehedinti, Simian, E 70
	41.	S.C. ASTRA Rail Industries S.R.L.	Drb. Tr. Severin, str. Dunarii, 3
	42.	S.C. SECOM S.A.	Drb. Tr. Severin, B-dul Carol I 53
	43.	SC Combinatul de CELULOZA şi HARTIE SA	Drb. Tr. Severin, B-dul Nicolae Iorga, 2

Source: ISU

15.4. Protected natural areas

Table 15-1 National protected areas in the program area

National protect areas	Name	Surface (ha)
Bulgaria		
Nature Park	Persina	21618.1
Nature Park	Rusenski Lom	3408
Nature Park	Vrachanski Balkan	30 129.9



National protect areas	Name	Surface (ha)
Strict Nature Reserve	Kaliakra	866.2696
Strict Nature Reserve	Gornata Korja	161
Strict Nature Reserve	Byala krava	93.4634
Strict Nature Reserve	Chuprene	1451.9935
Strict Nature Reserve	Kitka	27.586
Strict Nature Reserve	Vrachanski karst	1438.9
Strict Nature Reserve	Milka	38.8974
Managed Reserve	Srebarna	892.0519
Managed Reserve	Savchov chair	103.4978
Managed Reserve	Haydushki chukar	31.781
Managed Reserve	Baltata	204.6865
Managed Reserve	Persinski blata	404.1186
Managed Reserve	Ibisha	34.4716
Protected Site	Kaylaka	999.8
Protected Site	Karstovata dolina na r. Petarnishka bara v mestnostta Peshterite	19.9973
Protected Site	Kaykusha	155.4
Protected Site	Eliyata	30
Protected Site	Daneva mogila	4.9
Protected Site	Stariyat dab	98.2787
Protected Site	Nahodishte na redki ptitsi i rastitelni vidove - Rechka	94.1
Protected Site	Slona	13.6679
Protected Site	Meshovata gora	5.9552
Protected Site	Karakuz	74.0739
Protected Site	Shablensko ezero	510.8
Protected Site	Ostrov Pozharevo	71
Protected Site	Kalimok - Brashlen	5952.342
Protected Site	Durankulashko ezero	446.54
Protected Site	Orlova mogila	42.7
Protected Site	Yaylata	45.3
Protected Site	Komitskite dupki	1
Protected Site	Zhelezarts	31.2
Protected Site	Nikolinski kladenets	0.2
Protected Site	Preobrazhenski manastir	17.1
Protected Site	Manastirskoto	21.3
Protected Site	Bogdanov dol	3.1051
Protected Site	Bozhurluka	3.8947
Protected Site	Bozhur polyana	19.7709
Protected Site	Dzholyun gyol	19.1135
Protected Site	Kosovo	180.7864
Protected Site	Derventa	15.3
Protected Site	Vezhdara	62.6
Protected Site	Vola	101.7
Protected Site	Borovanska mogila	198.8
Protected Site	Kozloduy	10
Protected Site	Borov kamak	164.6
Protected Site	Koritata	2
Protected Site	Kochumina	2.5
Protected Site	Gola bara	2
Protected Site	Kalugerski grad - Topolite	0.2
Protected Site	Tepeto	6
Protected Site	Plavala	28.1
Protected Site	Cheveniyat bryag	0.3309
Protected Site	Kiselets	11.947
Protected Site	Lagat - Dramkata	40.8199
Protected Site	Cholashki orman	86.303
Protected Site	Gendzhov orman	26.0942
Protected Site	Persin iztok	718.9



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GOVERNMENT OF BULGARIA

National protect areas	Name	Surface (ha)
Protected Site	Bulin dol	0.9024
Protected Site	Cheshmata	0.2
Protected Site	Brestnishko branishte	11.8356
Protected Site	Dalgata bara - pametnika	1.6
Protected Site	Ornitsite	50
Protected Site	Taraklaka	34.0194
Protected Site	Garvanitsa	31.0719
Protected Site	Shtarka	1
Protected Site	Katinata	28.0003
Protected Site	Gushtera	6.4214
Protected Site	Palaza	0.5245
Protected Site	Pozhara	0.4627
Protected Site	Ormana	2
Protected Site	Pipra - kaleto	1.1
Protected Site	Valchitranskata gora	25.1181
Protected Site	Turiyata	162.2746
Protected Site	Goliyat vrah	7
Protected Site	Drenovitsa	20
Protected Site	Vrashka chuka	68.2794
Protected Site	Lipaka	13.3719
Protected Site	Rakovishki manastir	28.0707
Protected Site	Nahodishte na obiknoven sladnik	0.2865
Protected Site	Gornata koria	7.0918
Protected Site	Ribarnitsite	51.1872
Protected Site	Garvanski blata	280
Protected Site	Medzhit Tabia	17.2
Protected Site	Pametnika	33.8
Protected Site	Saya Kulak	1.8
Protected Site	Blatoto kray s. Malak Preslavets	154.9425
Protected Site	Kompleks " Aleko-Telika"	206
Protected Site	Loznitsa	405.4131
Protected Site	Bezhanovo	121.7015
Protected Site	Rositsa	213.1275
Protected Site	Botanicheska gradina - Balchik	17.4604
Protected Site	Ostrov Malak Boril	99.0742
Protected Site	Rusalka	213
Protected Site	Malak Kanagyol	369.9641
Protected Site	Lesoparka	100.1563
Protected Site	Estestveno nahodishte na Krimska kakula (Salvia scabiosifolia)	3.5093
Protected Site	Ostrov Kutovo	118.3348
Protected Site	Suha reka	2307.9176
Protected Site	Pelikanite	420.0056
Protected Site	Lomia	277.5119
Protected Site	Stepite	135.4899
Protected Site	Markov buk	182
Protected Site	Glavite	291
Protected Site	Belokravishtnitsa	226.8
Protected Site	Padinite	623
Protected Site	Chuprenski buki	553.0604
Protected Site	Doychov ostrov	16.0482
Protected Site	Ostrovi Bliznatsite	11.237
Protected Site	Koridorite	27.4902
Protected Site	Midzhur	159.3092
Protected Site	Blatno kokiche	148.8445
Protected Site	Nahodishte na balgarska garlitsa	3.9981
Protected Site	Vyatarnitsa	52.7821
Protected Site	Reka Veselina	98.6221
Protected Site	Persin	551.3



National protect areas	Name	Surface (ha)
Protected Site	Nahodishte na balgarski sarpets	27.6008
Protected Site	Nahodishte na Uehtritsova uroka - s. Ostritsa	36.5777
Protected Site	Nahodishte na Ruzhevidna povetitsa	1.4308
Protected Site	Nahodishte na balgarska garlitsa - s. Karamanovo	1.6142
Protected Site	Aromatna matiola	19.9072
Protected Site	Nahodishte na proletno boturche - Brenitsa	3.1925
Protected Site	Kalna matnitsa	22.5712
Protected Site	Stalpishte	37.8339
Protected Site	Libichevo usoe	24.4856
Protected Site	Sredno porechie na reka Negovanka	52.1865
Protected Site	Serapionova peshtera	0.221
Natural Monument	Ritlite	123.3
Natural Monument	Belogradchishki skali	652.3612
Natural Monument	Peshterata Magurata	84.3768
Natural Monument	Ledenika	102.3
Natural Monument	Tektonski greben "kaletu"	57.4
Natural Monument	Peshtera mishin kamak	0.5001
Natural Monument	Novata peshtera	0.5
Natural Monument	Orlova chuka	82.232
Natural Monument	Ponora	17.2
Natural Monument	Vrattsata	2
Natural Monument	Bozhite mostove	15
Natural Monument	Vodopad momin skok	0.2
Natural Monument	Kapinovski vodopad	0.2
Natural Monument	Haydushki vodopadi	1.0384
Natural Monument	Skalno obrazuvanie Chervenitsa	3
Natural Monument	Vodopadat na r. Miykovska	3.3724
Natural Monument	Skalno obrazuvanie Chuklite	1
Natural Monument	Skalno obrazuvanie Kamarata	1
Natural Monument	Gininata peshtera	2.5
Natural Monument	Skalnite kukli v m. Pladnishteto	64.4158
Natural Monument	Kupenite	4.3
Natural Monument	Musina - peshtera	0.3
Natural Monument	Peshtera Galabarnika	3.5
Natural Monument	Peshteri Samuilitsa edno i dve	3.5
Natural Monument	Peshtear Govedarnika	2.5
Natural Monument	Skalno obrazuvanie kuklite v m. Uleya	14.7605
Natural Monument	Nahodishte na tertsierni /tortonski/ vkamenelosti	419.9491
Natural Monument	Studenets	361.1373
Natural Monument	Skalen most sedlarkata v m. Ezeroto	0.5
Natural Monument	Vodopada v mestnostta Kaya bunar	8
Natural Monument	Peshterata venets v mestnost chukara	1.0004
Natural Monument	Mramornata peshtera	16.2229
Natural Monument	Dikili tash	1.7528
Natural Monument	Mamula	0.8915
Natural Monument	Opanski bair	53
Natural Monument	Peshterata Razbititsa	0.5
Natural Monument	Karstovo zhdrelo chernelka	449.2
Natural Monument	Levi i desni suhi pech - peshteri	0.2
Natural Monument	Boroviyat kamak	1.2937
Natural Monument	Vodopad na reka Stakevska v mestnostta Belata voda	1.0672
Natural Monument	Nahodishte na okremenni stabla i panove ot vekovna iglolistna gora ot sem. Taksodievi	1.5



National protect areas	Name	Surface (ha)
Natural Monument	Nahodishte na okremenni stabla i panove ot vekovna iglolistna gora ot sem. Taksodievi	5.0485
Natural Monument	Skalni i peshterni obrazuvania po porechieto na r. Topchiysko dere	72
Natural Monument	Vodopad skoka na r. Belilkata	0.2
Natural Monument	Haydushkata peshtera	0.3
Natural Monument	Grupa vekovni darveta v stopanski dvor	0.2
Natural Monument	Durshin vodopad	0.1
Natural Monument	Aleksandriyskata gora	71
Natural Monument	Vodnia skok	0.1423
Natural Monument	Kanyona na reka negovanka	25.6
Natural Monument	Ponorite	0.2
Natural Monument	Arboretuma	3.8
Natural Monument	Ostrata kanara	2.6454
Natural Monument	PETROV tserak - VODOPAD	0.2005
Natural Monument	Fosilno nahodishte na badenska fauna v m. Mosta na reka Vit	3.2217
Natural Monument	Vratata	2.4026
Natural Monument	Peshterata	8.1263
Natural Monument	Dryankov halm	8.9376
Natural Monument	Peshtera Nanin kamak	2.6
Natural Monument	Skalnata tsarkva	1
Natural Monument	Ostrata skala	35.6902
Natural Monument	Gardata	0.8973
Natural Monument	Skalniyat most	0.2424
Natural Monument	Peshtera Dedova dupka	1.5
Natural Monument	Peshtera Cherniyat izvor	1.4765
Romania		
Scientific reserve	Vama Veche - 2 Mai (Acvatoriul litoral marin)	105900.6458
Scientific reserve	Insulele Prundu cu Păsări	52163.1974
Scientific reserve	Insula Ceaplace	25103.98757
Nature reserve	Rezervatia Domogled	7962.076171
Nature reserve	Iauna - Craiova	2493.904874
Nature reserve	Padurea Ciornuleasa	2001.991141
Nature reserve	Grindul Chituc	1902.028525
Nature reserve	Grindul Lupilor	933.4753464
Nature reserve	Cetatea Histria	850.698697
Natural monument	Peretii calcarosi de la Petrosani	737.3878875
Natural monument	Locul fosilifer Aliman	730.1476271
Natural monument	Reciful neojurasic de la Topalu	718.1104471
Natural monument	Locul fosilifer Credinta	716.0801625
Natural monument	Locul fosilifer Cernavoda	657.0782014
Natural monument	Locul fosilifer Seimenii Mari	639.3207538
Natural monument	Pestera La Adam	497.4674407
Natural monument	Pestera Gura Dobrogei	475.7477901
Nature reserve	Valu lui Traian	469.9528633
Nature reserve	Padurea Hagieni	434.3385924
Nature reserve	Padurea Dumbraveni	432.6002456
Nature reserve	Recifii jurasici Cheia	392.3380387
Nature reserve	Padurea Canaraua Fetii	385.3900717
Nature reserve	Fântânița - Murfatlar	377.2862041
Nature reserve	Padurea Esecioi	311.0365992
Nature reserve	Dunele marine de la Agigea	297.4490477
Nature reserve	Dealul Alah Bair	269.3511968
Nature reserve	Lacul Agigea	248.7414437
Nature reserve	Canarelele din Portul Hârsova	233.1276639
Scientific reserve	Obanul Mare si Pestera Movile	230.6208043
Nature reserve	Izvorul de la Corbii Ciungi	222.4744122



National protect areas	Name	Surface (ha)
Nature reserve	Poiana Bujorului din padurea Plenita	193.4677246
Nature reserve	Valea Rea - Radovan	193.3517481
Nature reserve	Dunele Dabuleni ("La Cetate")	186.2926085
Nature reserve	Pajistea halofila Gighera	170.4722362
Nature reserve	Pajistea Cetate (din Lunca Dunarii)	163.243155
Nature reserve	Pajistea Gogosu - Stefanel	162.3749886
Nature reserve	Locul fosilifer Bucovat	156.8591124
Nature reserve	Locul fosilifer Dranic	151.236264
Nature reserve	Ciuperceni - Desa	149.7925135
Nature reserve	Complexul lacustru Preajba - Facai	141.1478382
Nature reserve	Balta Cilieni - Bailesti	117.7265349
Nature reserve	Lacul Ionele	110.4886657
Nature reserve	Balta Neagra	107.450661
Nature reserve	Balta Lata	106.2924055
Nature reserve	Râurile Desnatui si Terpezita amonte de Fântânele	105.3797643
Nature reserve	Lacul Caraula	79.27477306
Nature reserve	Padurea Oloaga - Gradinari	78.43558434
Nature reserve	Padurea Padina Tatarului	77.84043701
Nature reserve	Padurea Manafu	71.70332968
Nature reserve	Rezervatia Tesila	69.13143475
Nature reserve	Padurea Gorganu	65.71086924
Scientific reserve	Pestera Epuran	64.92172766
Natural monument	Izvorul si stâncariile de la Cămana	62.09210175
Nature reserve	Gura Vaii - Vârciorova	60.80580379
Nature reserve	Valea Oglanicului	59.97198322
Nature reserve	Lunca Vânjului	59.56861434
Nature reserve	Padurea de liliac Ponoarele	59.55942434
Nature reserve	Tufarisurile mediteraneene de la Isverna	56.76227673
Nature reserve	Vârful lui Stan	56.2182536
Nature reserve	Valea Tesna	55.92156241
Nature reserve	Padurea Borovat	53.80053559
Nature reserve	Padurea Bunget	50.23040182
Nature reserve	Padurea Draghiceanu	42.37443786
Nature reserve	Dealul Duhovnei	40.71029799
Nature reserve	Dealul Varanic	36.7431588
Nature reserve	Cazanele Mari si Cazanele Mici	35.98984592
Nature reserve	Locul fosilifer Svinita	35.56949439
Nature reserve	Locul fosilifer Bahna	34.14458259
Nature reserve	Padurea Stârmina	32.90077463
Natural monument	Complexul carstic de la Ponoarele	30.97213482
Nature reserve	Peretii calcarosi de la Izvoarele Cosustei	29.74596512
Nature reserve	Cheile Cosustei	28.46716152
Nature reserve	Cornetul Babelor si Cerboanei	25.12839465
Nature reserve	Cornetul Piatra Încalcată	21.76524007
Scientific reserve	Cheile Topolnitei si Pestera Topolnitei	18.8383015
Nature reserve	Cornetul Baltii	17.27984201
Nature reserve	Cornetul Vaii si Valea Manastirii	13.15316046
Nature reserve	Cracul Gaioara	11.81361292
Nature reserve	Cracul Crucii	10.48249044
Nature reserve	Fata Virului	6.677973264
Nature reserve	Padurea Seaca Optasani	5.94814133
Nature reserve	Padurea Branistea Catârilor	5.642066842
Nature reserve	Casa Padurii din Padurea Potelu	4.256280371
Nature reserve	Rezervatia de bujori a Academiei	3.793116293
Nature reserve	Rezervatia de arborete de gârnița	3.093890334
National park	Domogled - Valea Cernei	2.864675361
Natural park	Portile de Fier	2.156872952
Natural park	Balta Mica a Brailei	0.943590057
Natural park	Comana	0.354791648



National protect areas	Name	Surface (ha)
Natural park	Geoparcul Platoul Mehedinti	0.31307854

Table 15-2 Natura 2000 Sites

№	Code	Name sites	Surface, ha
Natura 2000 Sites designated under the Birds Directive			
Bulgaria			
1.	BG0000237	Ostrov Pozharevo	975.79
2.	BG0000240	Studenets	27946.08
3.	BG0000241	Srebarna	1448.22
4.	BG0000332	Karlukovski karst	14210.79
5.	BG0002006	Ribarnitsi Orsoya	475.43
6.	BG0002007	Ostrov Ibisha	399.32
7.	BG0002008	Ostrov do Gorni Tsibar	218.43
8.	BG0002009	Zlatiyata	43498.73
9.	BG0002017	Kompleks Belenski ostrovi	7009.77
10.	BG0002018	Ostrov Vardim	1167.55
11.	BG0002024	Ribarnitsi Mechka	2582.34
12.	BG0002025	Lomovete	33451.32
13.	BG0002029	Kotlenska planina	99299.77
14.	BG0002030	Kompleks Kalimok	9429.22
15.	BG0002031	Stenata	79.73
16.	BG0002039	Harsovska reka	35428.63
17.	BG0002048	Suha reka	25437.79
18.	BG0002053	Vrachanski Balkan	30879.74
19.	BG0002062	Ludogorie	91389.06
20.	BG0002064	Garvansko blato	324.27
21.	BG0002065	Blato Malak Preslavets	372.22
22.	BG0002067	Ostrov Golya	414.56
23.	BG0002069	Ribarnitsi Zvanichevo	1570.55
24.	BG0002070	Ribarnitsi Hadzhi Dimitrovo	446.53
25.	BG0002074	Nikopolsko plato	22246.40
26.	BG0002083	Svishtovsko-Belenska nizina	5439.80
27.	BG0002085	Chairya	1451.57
28.	BG0002090	Berkovitsa	2799.94
29.	BG0002091	Ostrov Lakat	1260.94
30.	BG0002095	Gorni Dabnik - Telish	3398.51
31.	BG0002096	Obnova	5422.21
32.	BG0002104	Tsibarsko blato	909.76
33.	BG0000156	Shablenski ezeren kompleks	3174.93
34.	BG0002002	Zapaden Balkan	146832.47
35.	BG0002050	Durankulashko ezero	3355.98
36.	BG0002051	Kaliakra	16171.78
37.	BG0002061	Balchik	1560.03
38.	BG0002082	Batova	38149.52
39.	BG0002097	Belite skali	4163.06
40.	BG0002115	Bilo	8620.61
Romania			
41.	ROSPA0106	Valea Oltului Inferior	43559.38843
42.	ROSPA0102	Suhaia	4514.606116
43.	ROSPA0060	Lacurile Taşaul - Corbu	2731.538004
44.	ROSPA0055	Lacul Gălăţui	813.9513304
45.	ROSPA0054	Lacul Dunăreni	1268.966453
46.	ROSPA0036	Dumbrăveni	1902.028525
47.	ROSPA0031	Delta Dunării şi Complexul Razim - Sinoie	48811.32837
48.	ROSPA0019	Cheile Dobrogei	10908.64969
49.	ROSPA0013	Calafat - Ciuperceni - Dunăre	29364.69361
50.	ROSPA0010	Bistreţ	2056.726917
51.	ROSPA0026	Cursul Dunării - Baziaş - Porţile de Fier	4186.923428



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№	Code	Name sites	Surface, ha
52.	ROSPA0017	Canaralele de la Hrșova	1343.473929
53.	ROSPA0011	Blahnița	43471.97151
54.	ROSPA0024	Confluența Olt - Dunăre	20478.27858
55.	ROSPA0023	Confluența Jiu - Dunăre	19525.12471
56.	ROSPA0022	Comana	24978.95956
57.	ROSPA0021	Ciocănești - Dunăre	800.9387736
58.	ROSPA0008	Băneasa - Canaraua Fetei	6098.173812
59.	ROSPA0007	Balta Vederoasa	2138.298813
60.	ROSPA0012	Brațul Borcea	5199.238172
61.	ROSPA0005	Balta Mică a Brăilei	160.437213
62.	ROSPA0161	Lunca Mijlocie a Argeșului	634.4734471
63.	ROSPA0146	Valea Clniștei	2574.654789
64.	ROSPA0166	Plopeni - Chirnoveni	137.044507
65.	ROSPA0039	Dunăre - Ostroave	16235.18831
66.	ROSPA0040	Dunărea Veche - Brațul Măcin	4241.161932
67.	ROSPA0038	Dunăre - Oltenița	5926.381522
68.	ROSPA0002	Allah Bair - Capidava	8827.197505
69.	ROSPA0001	Aliman - Adamclisi	18895.70263
70.	ROSPA0122	Lacul și Pădurea Cernica	9.417703244
71.	ROSPA0053	Lacul Bugeac	1384.702896
72.	ROSPA0108	Vedea - Dunăre	22397.24984
73.	ROSPA0105	Valea Mostiștea	6613.52849
74.	ROSPA0066	Limanu - Herghelia	880.1642813
75.	ROSPA0101	Stepa Saraiu - Horea	4124.952861
76.	ROSPA0057	Lacul Siutghiol	1856.983862
77.	ROSPA0056	Lacul Olțina	3308.107402
78.	ROSPA0035	Domogled - Valea Cernei	12318.98232
79.	ROSPA0061	Lacul Techirghiol	2947.519823
80.	ROSPA0155	Goicea - Măceșu de Sus	1603.884059
81.	ROSPA0151	Ciobănița-Osmancea	211.1363153
82.	ROSPA0154	Galicea Mare - Băilești	6161.507133
83.	ROSPA0148	Vitănești - Răsmirești	1107.080901
84.	ROSPA0100	Stepa Casimcea	93.71684272
85.	ROSPA0136	Oltenița - Ulmeni	12401.42332
86.	ROSPA0137	Pădurea Radomir	1244.303243
87.	ROSPA0135	Nisipurile de la Dăbuleni	11005.40595
88.	ROSPA0094	Pădurea Hagieni	1413.207324
89.	ROSPA0090	Ostrovu Lung - Gostinu	2543.469402
90.	ROSPA0080	Munții Almăjului - Locvei	47976.27398
91.	ROSPA0076	Marea Neagră	1158.995518
92.	ROSPA0074	Maglavit	3641.16293
93.	ROSPA0046	Gruia - Grla Mare	2962.86555
94.	ROSPA0051	Iezerul Călărași	5006.747381
Natura 2000 Sites designated under the Habitats Directive			
Bulgaria			
95.	BG0000107	Suha reka	62528.73
96.	BG0000118	Zlatni pyasatsi	1373.44
97.	BG0000119	Trite bratya	1021.99
98.	BG0000130	Kraymorska Dobrudzha	6657.49
99.	BG0000166	Vrachanski Balkan	35981.25
100.	BG0000169	Ludogorie - Srebarna	5223.80
101.	BG0000171	Ludogorie - Boblata	4836.45
102.	BG0000180	Boblata	3216.87
103.	BG0000181	Reka Vit	5717.17
104.	BG0000182	Orsoya	2949.41
105.	BG0000199	Tsibar	2971.73
106.	BG0002018	Ostrov Vardim	1167.55
107.	BG0000213	Tarnovski visochini	4434.61
108.	BG0000216	Emen	490.37



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№	Code	Name sites	Surface, ha
109.	BG0000231	Belenska gora	5041.85
110.	BG0000232	Batin	2691.05
111.	BG0000233	Studena reka	5301.57
112.	BG0000239	Obnova - Karaman dol	10750.81
113.	BG0000240	Studenets	27946.08
114.	BG0000241	Srebarna	1448.22
115.	BG0000247	Nikopolsko plato	18503.18
116.	BG0000275	Yazovir Stamboliyski	9353.25
117.	BG0000279	Stara reka	146.17
118.	BG0000280	Zlatarishka reka	67.69
119.	BG0000281	Reka Belitsa	117.26
120.	BG0000282	Dryanovska reka	183.16
121.	BG0000334	Ostrov	3918.60
122.	BG0000335	Karaboaz	13659.86
123.	BG0000336	Zlatia	3194.78
124.	BG0000339	Rabrovo	910.82
125.	BG0000340	Tsar Petrovo	1908.74
126.	BG0000374	Bebresh	6821.91
127.	BG0000377	Kalimok - Brashlen	7550.18
128.	BG0000382	Shumensko plato	4490.62
129.	BG0000396	Persina	25684.19
130.	BG0000432	Golyama reka	7451.74
131.	BG0000487	Bozhite mostove	33.12
132.	BG0000497	Archar	808.65
133.	BG0000498	Vidbol	1305.14
134.	BG0000500	Voynitsa	3107.14
135.	BG0000503	Reka Lom	1441.13
136.	BG0000507	Deleyna	2257.54
137.	BG0000508	Reka Skat	408.59
138.	BG0000509	Tsibritsa	962.68
139.	BG0000516	Chernata mogila	13.07
140.	BG0000517	Portitovtsi - Vladimirovo	664.38
141.	BG0000518	Vartopski dol	987.42
142.	BG0000519	Mominbrodsko blato	26.61
143.	BG0000521	Makresh	2061.25
144.	BG0000522	Vidinski park	1578.79
145.	BG0000523	Shishentsi	572.85
146.	BG0000524	Orizishteto	475.74
147.	BG0000525	Timok	494.97
148.	BG0000526	Dolno Linevo	17.63
149.	BG0000527	Kozloduy	125.38
150.	BG0000528	Ostrovska step - Vadin	301.29
151.	BG0000529	Marten - Ryahovo	1172.74
152.	BG0000530	Pozharevo - Garvan	6304.92
153.	BG0000532	Ostrov Bliznatsi	606.24
154.	BG0000533	Ostrovi Kozloduy	909.04
155.	BG0000534	Ostrov Chayka	504.17
156.	BG0000552	Ostrov Kutovo	118.33
157.	BG0000569	Kardam	918.92
158.	BG0000570	Izvorovo - Kraishite	1082.27
159.	BG0000572	Rositsa - Loznitsa	1811.98
160.	BG0000576	Svishtovska gora	1917.20
161.	BG0000587	Varkan	0.69
162.	BG0000591	Sedlarkata	0.80
163.	BG0000593	Bilernitsite	64.51
164.	BG0000594	Bozhia most - Ponora	227.90
165.	BG0000601	Kalenska peshtera	377.38
166.	BG0000605	Bozhkova dupka	1.60
167.	BG0000609	Reka Rositsa	1440.86



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№	Code	Name sites	Surface, ha
168.	BG0000610	Reka Yantra	13899.88
169.	BG0000611	Yazovir Gorni Dabnik	2539.29
170.	BG0000613	Reka Iskar	9458.01
171.	BG0000614	Reka Ogosta	1365.74
172.	BG0000621	Ezero Shabla - Ezerets	2623.53
173.	BG0001014	Karlukovo	28841.93
174.	BG0001037	Pastrina	3551.58
175.	BG0001042	Iskarski prolom - Rzhana	22693.26
176.	BG0000106	Harsovska reka	36756.70
177.	BG0000168	Ludogorie	59447.46
178.	BG0000211	Tvardishka planina	38649.28
179.	BG0001040	Zapadna Stara planina i Predbalkan	219753.26
180.	BG0000102	Dolinata na reka Batova	18459.24
181.	BG0000154	Ezero Durankulak	5050.80
182.	BG0000573	Kompleks Kaliakra	48336.28
183.	BG0000627	Konunski dol	779.06
184.	BG0000631	Novo selo	815.91
Romania			
185.	ROSCI0403	Vnju Mare	2170.923278
186.	ROSCI0206	Porțile de Fier	51340.09004
187.	ROSCI0366	Rul Motru	1294.310337
188.	ROSCI0281	Cap Aurora	112.9949745
189.	ROSCI0225	Seaca - Optășani	2119.130987
190.	ROSCI0215	Recifii Jurasici Cheia	5650.207169
191.	ROSCI0172	Pădurea și Valea Canaraua Fetii - Iortmac	13628.87092
192.	ROSCI0140	Pădurea Călugărească	676.6759498
193.	ROSCI0138	Pădurea Bolintin	5638.595515
194.	ROSCI0442	Vlădaia - Oprisor	101.2401858
195.	ROSCI0432	Prunișor	1900.229591
196.	ROSCI0433	Seaca	107.366251
197.	ROSCI0423	Pădurea Dorobanțul	647.2317966
198.	ROSCI0426	Pădurea Ștorobăneasa	417.654641
199.	ROSCI0405	Dealurile Strehaia - Btlanele	803.8370195
200.	ROSCI0422	Pădurea Dandara - Corneanca	546.7033915
201.	ROSCI0420	Oprănești	1339.481086
202.	ROSCI0412	Ivrinezu	410.8654827
203.	ROSCI0386	Rul Vedea	9153.54226
204.	ROSCI0376	Rul Olt ntre Mărunței și Turnu Măgurele	12215.44319
205.	ROSCI0372	Dăbuleni - Potelu	986.4251667
206.	ROSCI0353	Peștera - Deleni	2547.361047
207.	ROSCI0398	Straja - Cumpăna	1098.697394
208.	ROSCI0354	Platforma Cotmeana	66.25982185
209.	ROSCI0343	Pădurile din Silvestepa Mostiștei	2114.992762
210.	ROSCI0341	Pădurea și Lacul Stolnici	30.60596319
211.	ROSCI0340	Cuiugiuc	138.8886715
212.	ROSCI0319	Mlaștina de la Fetești	1386.838468
213.	ROSCI0308	Lacul și Pădurea Cernica	8.399865241
214.	ROSCI0299	Dunărea la Grla Mare - Maglavit	9484.123147
215.	ROSCI0306	Jiana	13252.059
216.	ROSCI0269	Vama Veche - 2 Mai	59.56864978
217.	ROSCI0296	Dealurile Drăgășaniului	785.4088007
218.	ROSCI0293	Costinesti - 23 August	29.44955766
219.	ROSCI0288	Băilești	96.26336854
220.	ROSCI0273	Zona marină de la Capul Tuzla	44.91720604
221.	ROSCI0202	Silvestepa Olteniei	9293.690784
222.	ROSCI0198	Platoul Mehedinți	51250.84888
223.	ROSCI0201	Podișul Nord Dobrogean	93.71684272
224.	ROSCI0197	Plaja submersă Eforie Nord - Eforie Sud	33.39670682
225.	ROSCI0177	Pădurea Topana	876.6534904



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Nr	Code	Name sites	Surface, ha
226.	ROSCI0191	Peștera Limanu	21.42274826
227.	ROSCI0173	Pădurea Strmina	2779.157514
228.	ROSCI0166	Pădurea Reșca Hotărani	1647.507606
229.	ROSCI0157	Pădurea Hagieni - Cotul Văii	3675.901375
230.	ROSCI0179	Pădurea Troianu	78.67997262
231.	ROSCI0183	Pădurea Vlădila	406.753879
232.	ROSCI0168	Pădurea Sarului	6749.268955
233.	ROSCI0149	Pădurea Eșechioi - Lacul Bugeac	2941.320232
234.	ROSCI0131	Oltenița - Mostiștea - Chiciu	11517.94172
235.	ROSCI0129	Nordul Gorjului de Vest	0.956300617
236.	ROSCI0114	Mlaștina Hergheliei - Obantul Mare și Peștera Movilei	231.3941176
237.	ROSCI0106	Lunca Mijlocie a Argeșului	634.4734471
238.	ROSCI0094	Izvoarele sulfuroase submarine de la Mangalia	44.78965427
239.	ROSCI0083	Fntnița Murfatlar	577.0273837
240.	ROSCI0088	Gura Vedei - Șaica - Slobozia	10134.84319
241.	ROSCI0071	Dumbrăveni - Valea Urluia - Lacul Vederoasa	18011.34148
242.	ROSCI0073	Dunele marine de la Agigea	11.81361292
243.	ROSCI0069	Domogled - Valea Cernei	7962.076171
244.	ROSCI0066	Delta Dunării - zona marină	326.9738498
245.	ROSCI0065	Delta Dunării	29912.081
246.	ROSCI0053	Dealul Alah Bair	193.3517481
247.	ROSCI0039	Ciuperceni - Desa	39540.83004
248.	ROSCI0012	Brațul Măcin	1396.102738
249.	ROSCI0011	Braniștea Catrilor	311.0365992
250.	ROSCI0045	Coridorul Jiului	53519.82669
251.	ROSCI0044	Corabia - Turnu Măgurele	8351.647557
252.	ROSCI0043	Comana	26576.07906
253.	ROSCI0006	Balta Mică a Brăilei	55.92156241
254.	ROSCI0174	Pădurea Studinița	66.40885542
255.	ROSCI0022	Canaralele Dunării	19809.89222
256.	ROSCI0266	Valea Oltețului	1568.471732