

**Romania – Republic of Moldova Joint Operational
Programme 2014 ÷ 2020**

**Strategic Environmental Assessment
ENVIRONMENTAL REPORT**

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ABBREVIATIONS

MRDPA	Ministry of Regional Development and Public Administration
MMAF	Ministry of Environment, Water and Forest
MFE	Ministry of European Funds
MAE	Ministry of Foreign Affairs
CE	European Commission
UE	European Union
SM	Member State
ENI	European Neighbourhood Instrument
ENPI	European Neighbourhood and Partnership Instrument
CBC	Cross Border Cooperation
CCP	Joint Programming Committee
MA	Managing Authority of the Programme
SME	Small and Medium Enterprises
PA	Partnership Agreement with EU
NRP	National Reform Programme
TO	Thematic Objective
SWOT	Strengths, Weaknesses, Opportunities, Threats Analysis
Ro	Romania
Md	Republic of Moldova
Ua	Ukraine
WG	Working Group
LPI	Large Infrastructure Project
GDP	Gross Domestic Product
NSCC	National Strategy on Climate Change 2013 ÷ 2020
NFRMS	National Flood Risk Management Strategy on medium and long term (2010 ÷ 2035)
PPMD	Plans for prevention, protection and mitigation of damages caused by floods
NWMS	National Waste Management Strategy
NWMP	National Waste Management Plan
RWMP	Regional Waste Management Plan

1. INTRODUCTION

The Strategic Environmental Assessment is carried out based on the requirements of the SEA Directive (European Council Directive no. 2001/42/EC on the assessment of effects of certain plans and programmes on the environment). The main elements recommended to be followed in such environmental assessments by law or guidelines are as follows:

- Description of key environmental aspects to be addressed;
- Description of the reference range of environmental values to be submitted for analysis in the SEA report;
- Ways to identify the environmental impact of the plan/programme implementation;
- Assessment of capacities to address the challenges, risks and their prevention on the environment.

The methodology used in the strategic environmental assessment includes the requirements of the above-mentioned documents and of the following methodological recommendations:

“Guidance notes on Strategic Assessment in the context of ENI CBC” developed by INTERACT ENPI for specific situation of **Joint Operational Programs financed under the European Neighbourhood Policy 2014 ÷ 2020**.

Considering the extent to which the Joint Operational Programme *“Romania – Republic of Moldova” 2014 ÷ 2020* provides a framework for future projects and other activities, development of its first version will be notified to the environmental competent authorities, for estimation of its impact on environmental factors. In this procedure it is necessary **to finalize the Programme in parallel with developing Environmental Report**.

The Environmental Report is a part of the **Programme** documentation that identifies, describes and evaluates the likely significant environmental effects of its implementation and reasonable alternatives, taking into account the objectives and the related geographical area.

Performing the strategic environmental assessment procedure is mandatory, the European Commission requiring the for approval of the CBC program *“Romania - Republic of Moldova” 2014 ÷ 2020* also the point of view in this respect of responsible environmental authority of the Republic of Moldova, in terms of conducting the environmental assessment in compliance with national, european and international legislation in force.

In accordance with the SEA Directive (2001/42/EC), the environmental assessment involves the following steps:

- Identification of environmental authorities of all countries involved (Romania, Republic of Moldova);
- The decision on whether SEA is required or not,

and if yes:

- Determining the SEA scope and development of the Environmental Report;
- Consultation of environmental authorities and the public;
- Inclusion of findings and results of consultations in the Environmental Report;
- Adequate monitoring of recommendations;
- Notification of the authorities consulted and the public on the programme approval.

The Environmental assessment is mandatory when programmes include projects covered by the EIA Directive in the sectors covered by Article 3.2 (energy, industry, transport, waste management, water management, telecommunications, tourism, town and country planning, land use, etc.) and projects with significant environmental impact in other sectors, under Article 3.4.

ENI CBC Programmes with Large Infrastructure Projects should perform a SEA procedure.

The development of the **Environmental Report** involves pursuing the following relevant steps:

- Review of the **environmental status at national level** (geographical areas specified), relevant aspects for the Ro-Md Programme, respectively, taking into account existing data and information;
- Characterisation of the current state of the environment and identification of a set of **environmental matters and environmental issues** that are relevant to the concerned area that can be addressed directly through the cooperation programme. For the identified environmental matters and environmental issues, **relevant environmental objectives** will be established which should be addressed by the Ro-Md Programme;
- The possible development of the environmental status (of those environmental aspects identified), while not implementing the objectives of the Ro-Md Programme, **(Alternative "0")**;
- **Assessment the environmental effects** of implementing the Ro-Md Programme, respectively, by analysing how its objectives and proposed measures contribute to achieving the relevant environmental objectives;
- Development a **cumulative assessment** that can provide an overview of possible future developments of the environmental status in case of implementation of the Ro-Md Programme;
- A list of indicators proposed for monitoring the Programme effects on the environment will be provided;
- A set of recommendations to prevent, reduce or offset any potential adverse environmental impact associated with program implementation Ro-Md, will be provided.

Environmental assessment of the Romania - Republic of Moldova 2014 ÷ 2020 will be performed under national law upon notification to the competent authority of the Environment - Ministry of Environment of the Republic of Moldova. As yet there is no

specific legislation for the SEA Directive or one that comply with all provisions of the EIA Directive, the embodiment of the strategic environmental assessment will be done in line with the requirements of the SEA Protocol , signed by Republic of Moldova.

The main steps in the Strategic Environmental Assessment performed for the Ro-Md Programme in Republic of Moldova are:

- receiving the Notification of the Managing Authority regarding the need for performing the strategic environmental assessment, notification accompanied by the Scoping Report and Preliminary Environmental Report ;
- The Ministry of Environment of the Republic of Moldova informs and takes into consideration the views/ opinions of central government authorities concerned and of the public about the Ro–Md, Scoping Report and preliminary Environmental Report and submit its opinion on the documents received to the Managing Authority;
- Managing Authority submits the final Environmental Report together with the Operational Programme for consultation with the Moldovan authorities and public consultation;
- Ministry of Environment of the Republic of Moldova displays on the website the final version of Ro-Md Programme and the Environmental Report for public consultation and submit their point of views.

The development of of the SEA procedure for the Programme in Romania and Republic Moldova is presented in Annexe 2, including the public and authority consultation. A short description on how the comments and observations to the SEA Draft Environmental Report were taken into consideration is shown, too.

2. SUMMARY OF THE CONTENT, MAIN OBJECTIVES OF THE PROGRAMME AND RELATIONSHIP WITH OTHER RELEVANT PLANS AND PROGRAMMES

2.1 Baseline information

Cross border cooperation at the external borders of the EU continues to represent a top priority for the European Union during the 2014 ÷ 2020 programming period. The ENI CBC aims to create *“an area of shared prosperity and good neighbourliness between EU Member States and their neighbours”*. To this purpose, the ENI has three strategic objectives:

- (A) Promote economic and social development in regions on both sides of common borders;
- (B) Address common challenges in environment, public health, safety and security;
- (C) Promotion of better conditions and modalities for ensuring the mobility of persons, goods and capital.

Crossborder Cooperation Programmes have to address at least one of the strategic objectives and order to generate a significant impact for the border area each programme has to focus its strategic intervention in the area on a maximum of four thematic objectives from the following:

- TO1. Business and SME development (Strategic objective: A);
- TO 2. Support to education, research, development and innovation (Strategic objective: A);
- TO 3. Promotion of culture and preservation of local historical heritage (Strategic objective: A);
- TO 4. Promotion of social inclusion and fight against poverty (Strategic objectives: A, B, C);
- TO 5. Support to local & regional good governance (Strategic objectives: A, B, C);
- TO 6. Environmental protection, climate change adaptation (Strategic objective: B);
- TO 7. Improvement of accessibility to the regions, development of transport and communication networks and systems (Strategic objective: C);
- TO 8. Common challenges in the field of safety and security (Strategic objective: B);
- TO 9. Promotion of energy cooperation (Strategic objective: B);
- TO 10. Promotion of border management and border security (Strategic objective: C);

In the general framework created by the Programming document for the EU Support to ENI Cross-Border Cooperation 2014-2020 (henceforth Programming document), EU Regulation 232/2014 establishing a European Neighbourhood Instrument and of the Commission Regulation no 897/2014 laying down specific provisions for the implementation of cross-border cooperation programmes financed under Regulation 232/2014, the programme partners have cooperated in order to identify the needs of the programme area and have selected the thematic objectives and priorities that are most relevant to the programme area.

Within this context, the partner countries nominated the Ministry of Regional Development and Public Administration from Romania as Managing Authority and created the Joint Programming Committee (JPC) as decisional body for the programming process. Additionally, two working groups were created, one for the identification of Large Infrastructure Projects and one for the Management and Control structures.

The Joint Operational Programme Romania – Republic of Moldova provides the legal framework for the financing of cross-border cooperation projects between the two countries during 2014 ÷ 2020. The methodology for the elaboration of the Romania-Moldova Joint Operational Programme included stakeholder consultations, socio economic analysis (SWOT) and multi criteria analysis, as well as a review of the lessons learnt from the Joint Operational Programme Romania-Ukraine-Republic of Moldova 2007 ÷ 2013. The main steps of the development of the Ro-Md Programme were:

- Territorial Analysis;
- Socio-economic and SWOT analyses;
- Preliminary consultations: interviews, focus groups, online survey;
- Coherence analysis and multi-criteria analysis;
- Public consultations on the first JOP draft;
- Elaboration of SEA Report;
- Public consultation on SEA;
- Public consultation on the final draft of JOP.

On October 2014 were selected and approved by the Joint Programming Committee the following thematic objectives:

- TO2: Support to education, research, development and innovation (strategic objective: A);
- TO 3: Promotion of the local culture and preservation of historical heritage (strategic objective: A);
- TO 7: Improvement of accessibility to the regions, development of transport and communication networks and systems (strategic objective: C);
- TO 8: Common challenges in the field of safety and security (strategic objective: B).

The Joint Programming Committee has decided to award large infrastructure projects without a call for proposals. In this respect, a joint Working Group (WG) was designated with the role to identify, select and prioritize the list of Large Infrastructure Projects. The joint WG included representatives nominated by the central and regional institutions from the following fields of interest: energy, transport, environment, internal affairs (emergency situations/ border police) and custom.

The projects were discussed and prioritised in the WG during two meetings (12th May and 18th September 2014). The Joint Programming Committee approved the list of the proposed Large Infrastructure Projects (including the reserve list) to be selected through the direct award procedure following the JPC meeting from 4h meeting, on 13th of March 2015 in accord with the subsequent written consultations from the period of May – June 2015.

2.2 Programme Area

The Joint Operational Program Romania – Republic of Moldova 2014 ÷ 2020 shall cover the following area:

Romania: 4 counties: *Botosani, Iasi, Vaslui and Galati;*

Republic of Moldova: the whole country.

The central eligible area of the programme covers a total area of 54,092 km², from which:

- Romanian territory 20,246 km² (Botoşani 4,986 km², Iaşi 5,476 km², Vaslui 5,318 km², Galaţi 4,466 km²);
- Republic of Moldova's territory 33.846 km².

For Romania, the four counties in the eligible area represent 8.5% of the country.

Due to the rural character of the eligible area the settlements network consists of a limited number of cities, of which only five have more than 100,000 inhabitants: Iasi, Galati, Botosani, Chisinau, Bender, Balti and Tiraspol municipalities.

The border shared by the two countries represents the border of the European Union, and its status plays an important role in the development of border infrastructure Romania – Republic of Moldova.

Romania – Republic of Moldova border

The border total length of the eligible is of 681.4 km (by Romanian measurements, 684.3 km by Moldovan measurements). The two countries share 8 land border crossing points, accessible by car and train:

- Albiţa - Leuşeni auto;
- Galaţi – Giurgiuleşti auto & rail;
- Sculeni - Sculeni auto;
- Stîncă - Costeşti auto;
- Iaşi - Ungheni rail;
- Rădăuţi Prut - Lipcani auto;
- Oancea - Cahul auto;
- Fălciu - Stoianovca rail - not operational.



The **core eligible** area has a total of 5,676,181 inhabitants, out of which 37.3% reside on the Romanian side of the border, while 62.7% on the Moldovan. A large part of the population lives in high-density urban centres, as for instance Iași, Galați, and Chișinău municipalities. Furthermore, 56.75% of the population in the core eligible area lives in rural areas and 43.25% in urban areas. It is relatively young, 40.8 % were up to 30 years. The eligible area can be characterized by the following:

- Low birth rates, with a slight recovery in rural areas;
- Migration significant internally from rural to urban centers and external to other Member States.

Especially in rural areas the health infrastructure is poorly developed.. Iasi County, due to the fact that Iasi is constituted as a regional center has a health infrastructure above the national average .

The changes in the **structure of the population** affect the development of the **labour market**. The active population in the area represents 36% of the total population. Out of the active population 93.89% are in employment and 6.11% are unemployed. There is a constant decrease in unemployment, especially for the Republic of Moldova.

The largest employed population (31.84%) in area works in the **agricultural sector**. Territorial differences are significant, as on the Romanian side 39.90% of employment is in agricultural sector while on the Moldovan side only 26.45%. Other significant sectors by number of employed population are: *public administration, education, health and social work, constructions and commerce, hotels, restaurants*.

The **average gross monthly earnings** in the area are some of the lowest in both Romania and at EU level. In 2012, the four Romanian counties reached an average of only €383, while Republic of Moldova €218. The agricultural sector is the largest sector in terms of employed population; however, earnings in this sector are some of the lowest, registering values below the averages.

The core eligible area of the programme has one of the lowest **development levels** in comparison with the other neighbouring countries and regions. The low level of competitiveness is a major issue for the core eligible area. The reasons for the existence of this situation are the following:

- agriculture as the main economic activity

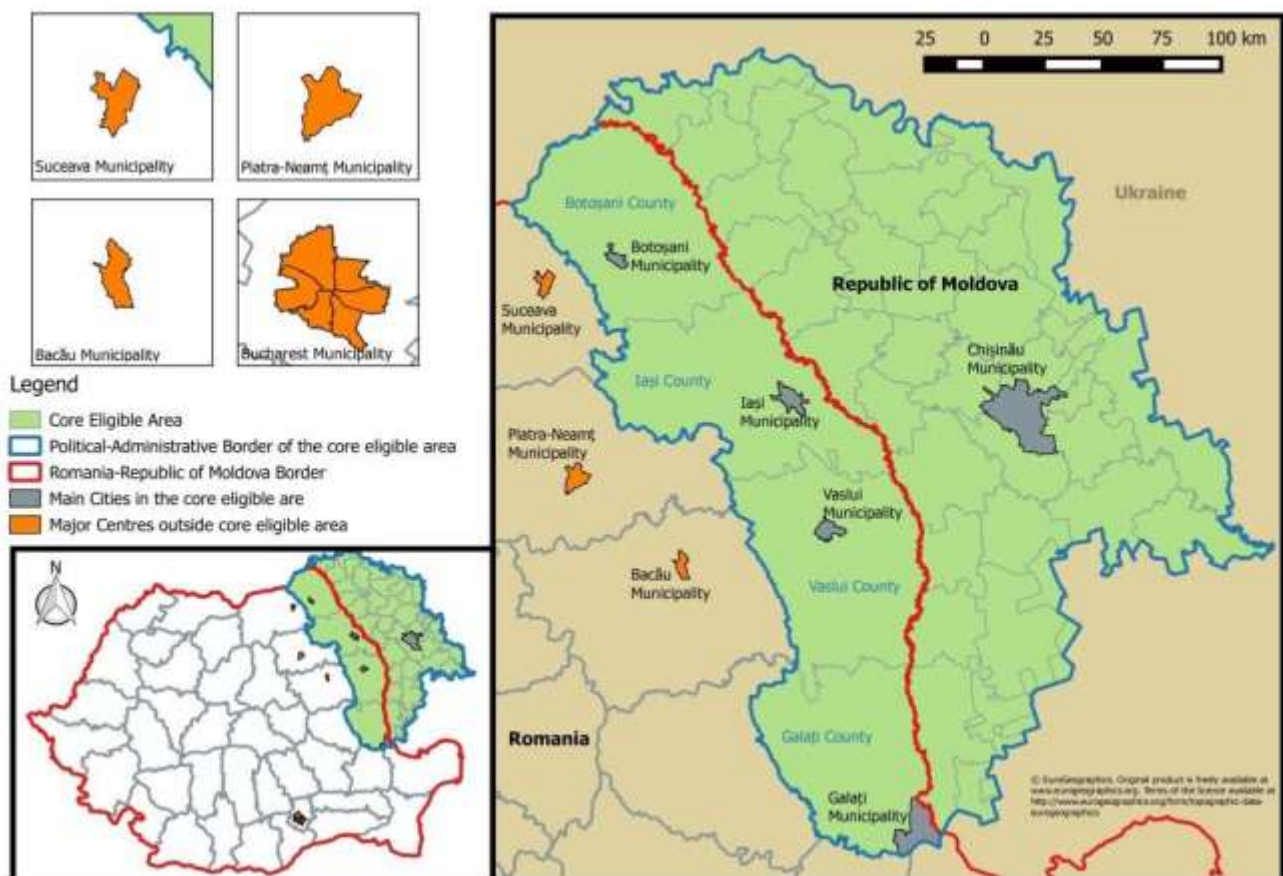
- the lack of a truly diverse economy
- the low level of investments in Research & Development
- low accessibility due to the poor quality of the transport infrastructure and the underdeveloped public utilities infrastructure

The road network is quite dense, but varies in quality depending on the level of traffic importance. National and European roads are permanently rehabilitated and modernized, while the local roads do not lead to investment, and the process for accessing public funds is excessively bureaucratic.

As regards the railway network there is a technical problem, the two countries have built railway networks with different track, requiring a transfer time at the border.

The **state of the public utilities and services infrastructure** serving the urban and rural localities in the area raises a number of problems. There are several localities that are not connected to the drinking water supply, the sewage systems or the gas network. In addition, these infrastructures are old and cannot insure the required quality standards, most of them being developed before 1989.

Internet access is low in the area, as the North-East region in Romania has one of the lowest numbers of subscribers. The rural localities are poorly connected to the internet infrastructure, making the urban centres the main consumers of internet.



Major social, economic and cultural centers

The programme decided to make use of the art. 8 (3) of the *Regulation no 232/2014 of the European Parliament and of the council establishing a European Neighbourhood Instrument* provisions, and included 4 major social, economic and cultural centres in the programme area: Bucharest, Suceava, Bacău and Piatra Neamț.

Article 41 of Commission Regulation 897 from 2014, permits to include in the programme a list of large infrastructure projects. In this context, the need to include Bucharest city in the programme area as major social, economic and cultural centre was identified, as most of the relevant institutions for LIPs are located in the capital city.

In order to achieve the objectives of the Program , the contributions and benefits have been listed as centers of social, economic and cultural cities of Bacau, Piatra Neamt and Suceava.

Bacău Municipality is located in Bacău County, in the East of Romania and in the Southern area of the North-East Development Region.

Bacau municipality has a population of 144,307 inhabitants (2011) , being the 15th largest urban center in the country, a city of national interest and a development pole of regional interest with potential for education and research. Thus, the municipality has two higher education institutions focused on research and technology transfer: University "Vasile Alecsandri" and the economy - University "George Bacovia" . Both universities have long standing relationships with similar institutions at national and European level and enjoys international recognition in the fields of expertise.

In the North - East Region, Bacau is in terms of population employed in research and development in third place after Iasi and Galati . Also, Bacau County is ranked fourth in terms of direct investment in this area . Bacău is an important academic center , with relevant results in education. It will bring significant added value for program participation can make an important contribution to capitalizing on investment in education accessibility. Therefore, the inclusion of Bacău as major center is essential for achieving in a sustainable manner OT2 - Supporting education, research, development and innovation. Organizations in Bacau may participate as partners (not as project leaders) in projects implemented under this thematic objective. **Piatra Neamț Municipality** is located in Neamț County, in the North-East of Romania, in the centre of the North-East Development Region, and to the West of the core eligible area with a total population of 85,055 inhabitants, making it the 24th largest city in Romania.

In the case of Piatra Neamț Municipality, among the most important fields in terms of cooperation are culture and heritage. Several branches of major universities from Iași and Bucharest are located in Piatra Neamț Municipality. In addition to the varied natural resources in the area, there are several important historical, architectural, and religious sites, which are included in the national patrimony and attract large numbers of national and international tourists.

Due to the long experience of cooperation with entities of central, regional and local authorities in Republic of Moldova Piatra Neamt will make an important contribution to achieving the objectives set by the Joint Operational Program in eligible area.

Consequently, organizations located in the City of Piatra Neamț may participate as partners (not lead partners) in projects implemented under the *TO2 Support to education, research, development and innovation of the programme and TO3 Promotion of local culture and preservation of historical heritage*.

Suceava Municipality is located in Suceava County, in the North of Romania, in the Northern area of the North-East Development Region, and to the West of the core eligible area. Suceava Municipality is one of the oldest cities in Romania and was the capital city of the historical Moldova.

In 2011 Suceava Municipality population was of 92,121 inhabitants. Suceava Municipality has one higher education unit that concentrates a large number of students. In 2013 its student population reached 6830 students, representing almost 7.5% of its total population. Partly, Suceava University's popularity is due to its varied fields of education and research and its social and economic position within the area existing 13 research & development and excellence centres located in Suceava Municipality. Suceava County is the 2nd biggest employer in research and development in the North-East Development Region and it is the second county at regional level in terms of direct expenses in the sector of research and development.

Suceava has a long tradition regarding education and offers various opportunities for developing educational and research programs. Common cultural elements of the whole North - East Development Region and historical links between its main cities single out Suceava as important for the possibilities of joint development of cultural projects and historical heritage .

In this context, the Suceava city would strongly contribute to the achievement of the Programme's objectives, as the municipality is a member in cross border cooperation organizations (such as Upper Prut Euro-region).

Consequently, organizations located in the City of Suceava may participate as partners (not lead partners) in projects implemented under the *OT2 Support to education, research, development and innovation of the programme and OT3 Promotion of local culture and preservation of historical heritage*.

MAJOR CENTERS	COMMON CONDITIONS	SPECIFIC CONDITIONS
Bucharest	N/A	Organization involved in Large Infrastructure Projects Thematic Objective 7 & 8
Bacău city	-within the limit of 10% of Programme budget, - participation only as partners, but not as Lead Partners	Thematic Objective 2
Piatra Neamț city		Thematic Objectives 2 & 3
Suceava City		Thematic Objectives 2 & 3

2.3 Programme Description

The general objective of the Romania-Republic of Moldova Joint Operational Programme is to enhance the economic development and to improve the quality of life of the people in the Programme area through joint investments in education, economic development, culture, cross border infrastructure and health while ensuring the safety and security of the citizens in the two countries.

Four specific thematic objectives were identified within the Ro-Md Programme for which the activities and the beneficiaries are presented below.

TO2 - SUPPORT TO EDUCATION, RESEARCH, DEVELOPMENT AND INNOVATION:

Objective 1: *Develop competencies and support research, development and innovation by facilitating the cooperation at local, regional and central levels*

Priority 1.1 - Institutional cooperation in the educational field for increasing education and quality of education

Indicative activities

- Joint planning and joint development of educational plans, policies and strategies;
- Exchanges of experience, teacher exchanges, transfer of good practices, development of joint training centres for increasing the effectiveness of education through the diversification of professional training programs for employees in the education system in areas such as:
 - school development, school management, developing the relation between schools and communities;
 - developing and applying innovative educational methods, for increasing teaching skills to facilitate and motivate students to perform;
- Developing joint/ common programs of entrepreneurship education, programs that stimulate creativity, innovation and active citizenship;
- Improving the educational quality and participation through rehabilitation/modernization/ extension/ endowment of infrastructure of the educational infrastructure and equipment procurement;
- Development and implementation of partnerships between educational institutions to:
 - prevent and correct early school leaving phenomenon through integrated programs (including awareness campaigns) for prevention of school dropout, encourage school attendance and reintegration of those who have left school early;
 - developing after school programs and extra-curricular activities;
- Development and implementation of joint actions in support of disadvantaged groups, e.g.:
 - Integrated support actions addressing children and youth with parents living abroad (which may include inter alia guidance, counselling, after school programmes, educational and cultural activities);
 - Support¹ actions meant to facilitate the social and work integration of people (children, youth and adults) with disabilities
- Support for youth (including educational campaigns) for the prevention of drug use, human trafficking, alcohol abuse, etc.
- Development and implementation of cross programmes and actions for enhancing/ improving/ facilitation of job qualifications and competencies².

¹ Only activities that do not provide an economical advantage for the beneficiary will be supported

² These activities should be carried out in the framework of educational campaigns and in cooperation with education institutions in order to be eligible.

Indicative Beneficiaries:

- National/ regional/ local public administration and other public institutions;
- Education institutions;
- NGOs / professional teachers associations/ other relevant associations;
- Health organizations acting to prevent and cope with alcohol and drug abuse³;

Priority 1.2 - Promotion and support for research, development and innovation**Indicative activities:**

- Development of partnerships/networking between universities and research centres for the purpose of creating a favourable environment for know-how transfer and business.
- Dissemination, cooperation and networking between programmes and organizations from the two states acting in the field of research and innovation.
- Joint research actions and studies including those in the field of environment (climate change challenges, preservation of biodiversity, renewable energy and resource efficiency etc.).
- Promotion and support for research and innovation through rehabilitation/ modernization/extension of the specific infrastructure including the procurement of related equipment.
- Exchange of experience and best practices among relevant authorities on cluster development and establishment.

Indicative Beneficiaries:

- Universities;
- Research institutes/ organizations;
- National/ regional/ local public administration and other public institutions;
- NGOs/ Professional/ entrepreneurial associations.

TO 3 - PROMOTION OF THE LOCAL CULTURE AND PRESERVATION OF HISTORICAL HERITAGE

Objective 2: *Preservation of the cultural and historical heritage in the eligible area, support the developing of local culture, specific cultural identities and the cultural dialog*

Priority 2.1 – Preservation and promotion of the cultural and historical heritage**Indicative activities:**

- Construction, extension, instalment, restoration, conservation, consolidation, protection, security of cultural and historical monuments, archaeological sites (including the corresponding access roads), museums, objects and art collections and their promotion based on relevant cross-border strategies/concepts;

³ These beneficiaries are eligible in the context in which they work in association with education institutions.

- Preservation, security, and joint valorisation of cultural and historical monuments and objects;
 - Cultural institutions networks aiming at the promotion of the cultural and historical heritage;
 - Support for specific and traditional craftsman activities, important for preserving local culture and identity.
 - Promotion of specific and traditional activities in the eligible area (including cross border cultural events);
 - Preserving, promoting and developing the cultural and historical heritage, mainly through cultural local events with a cross-border dimension;
- Valorisation of the historical and cultural heritage through developing joint promotion strategies, common tourism products and services

Indicative Beneficiaries:

- Museums, cultural, religious/cult institutions;
- National/ regional/ local public authorities and other public institutions;
- NGOs, cultural and tourism associations;
- Local business associations in the domain of traditional and craftsmen activities.

TO 7 - IMPROVEMENT OF ACCESSIBILITY TO THE REGIONS, DEVELOPMENT OF TRANSPORT AND NETWORKS AND COMMUNICATIONS SYSTEMS:

Objective 3: *Improve public transport services, infrastructure and ITC cooperation and networking*

Priority 3.1 - Development of cross border transport and ITC infrastructure

Indicative activities:

- Construction, rehabilitation, modernization of cross-border transport infrastructure systems;
- Development of environmentally friendly (carbon-proofed) cross-border transport initiatives and innovative solutions;
- Improvements of multimode transport (road/ water) facilities of cross-border interest;
- Construction, rehabilitation, widening of cross-border (segments of) roads connecting settlements alongside the border with main road which leads to the border;
- Improvement/restoration/construction of (segments of) access roads to centers of cross-border interest;
- Elaboration of joint strategies/policies/plans for improving the cross-border transport infrastructure;
- Joint investments in ICT infrastructure with cross-border impact; (e.g. optic fibre services);
- Development of cross-border connections, information and integrated communications networks and services;

- Upgrading existing facilities to enable linkages between communities and public services which promote co-operation on a cross-border and wider international basis.

Indicative Beneficiaries:

- National/ regional/ local public administration and other public institutions;
- State owned companies administrating transport and communication infrastructure.

TO 8 - COMMON CHALLENGES IN THE FIELD OF SAFETY AND SECURITY:

Objective 4: *Addressing common challenges in concerning the access to health, management of natural and anthropic risks and emergency situations, cross-border security through joint projects*

Priority 4.1 - Support to the development of health services and access to health;

Indicative activities:

- Joint planning and joint development of plans, policies and strategies for public health and social care;
- Joint activities meant to enhance the access to health in the border area through construction / rehabilitation / modernization of infrastructure of public health services (including through the use of renewable energy etc.);
- Developing labs and mobile labs for the prevention / detection / monitoring of diseases, accidents, incidents and border epidemics;
- Equipping specific public medical service infrastructure (outpatient, emergency room facilities, medical centres, integrated social intervention, etc.);
- Joint training programs and exchange of experience, networking for supporting the functioning of the specific public medical services, telemedicine;
- Exchange of experience, joint activities in order to ensure compatibility of the treatment guidelines;
- Awareness campaigns concerning public education on health, diseases and prevention of epidemics.

Indicative Beneficiaries:

- National/ regional/ local public administration and other public institutions;
- National/regional/local/ institutions acting in the field of health and social policies;
- NGOs, universities and Research organizations;
- Professional medical and patient associations.

Priority 4.2 – Support to joint activities for the prevention of natural and man-made disasters as well as joint activities during emergency situations

Indicative activities:

- Measures for preventing land slide and flooding;

- Joint integrated systems/ structures for efficient monitoring and disaster prevention and for the mitigation of consequences;
- Common strategies and tools for hazard management and risk prevention including joint action plans;
- Elaborating of joint detailed maps and data bases (indicating natural and technological risks, and land use for regional planning authorities, environmental agencies and emergency services);
- Exchanging experience and knowledge, including raising awareness in the field of efficient risk prevention and management in the cross-border area;
- Development of integrated and common standards for the urban planning and risk management;
- Investments and development of common, integrated, emergency management systems/structures;
- Planning coordinated actions of the authorities in emergency situations caused by natural and man-made disasters;
- Investment in construction, renovation or upgrading of the infrastructure and equipment directly related to the monitoring and intervention in emergency situations.

Indicative Beneficiaries:

- National/ regional/ local public administration and other public institutions, including environmental organizations acting in the area of mitigation of disaster risk and effects and emergency situations;
- Research organizations, NGOs.

Priority 4.3 - Prevention and fight against organized crime and police cooperation

Indicative activities:

- Common actions for increasing mobility and administrative capacity of police units (including border police);
- Creating collaborative work platforms in order to increase the efficiency of police, border police and custom structures in the exchange of data and information;
- Joint training of police, border police and custom personnel, exchange of best practices on specific areas of activity (analysis, criminal investigation, organized crime);
- Investment in construction, renovation or upgrading of police and border crossing infrastructure and related buildings;
- Investments in operating equipment and facilities specific for the activity of police/customs/border police/gendarmerie (e.g. laboratories, equipment, detection tools, hardware and software, means of transport);
- Developing common policies and strategies including awareness campaigns, experience exchange for fighting organized crime.

Indicative Beneficiaries:

- Custom services, border police, police, other national/regional/local public institutions acting in the area of crime prevention and police professional associations;
- National/ regional/ local public administration and other public institutions

The list of the large Infrastructure projects preliminary approved by the JPC is presented in Table no. 1.3

Table no. 1.3 Large Infrastructure Projects

Item	LARGE INFRASTRUCTURE PROJECTS (Ro)	THEMATIC OBJECTIVE	FIELD of INTEREST
Main projects			
1.	Communication infrastructure	TO7	Transport
2.	Regional Cooperation for Preventing and Combating Cross-border Crimes between Romania and Republic of Moldova	TO8	Internal Affairs
3.	A safer Romanian – Moldavian cross border area infrastructure through the improvement of the operating infrastructure of the Mobile Emergency Service for Resuscitation and Extrication (SMURD)	TO8	Emergency Situation
4.	Rehabilitation and modernization of customs offices from the border of Romania and Republic of Moldova (customs offices Albița – Leuseni, Sculeni - Sculeni and Giurgiuilesti – Giurgiuilești)	TO 8	Customs
Reserve projects			
5.	Rehabilitation of the facilities from hydro node - Stâncă-Costești Phase I	TO8	Emergency Situation

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

The eligible area of the Programme has several ecological problems, as a result of the aggressive industrialisation process before 1989, but in the international limits of pollution.

The major problems come from four main sources:

- The industrial emissions and the waste resulted from operating and closing the industrial platforms, that have a negative impact on air, soil and waters;
- Reduced management of waste, especially in the rural zones that has a direct effect on environment considering that there are no adequate facilities for their treatment;
- The usage of the chemical fertilizers and improper disposal of agricultural waste, with direct impact on soil and on water quality;
- The urban centres are the main generator of greenhouses gas (CO₂) and have a significant impact on air quality and generally on environment.

There are now in the Program area more than 1300 protected areas of national and international importance and many historical sites.

Generally speaking, the ecological status of the Programme eligible area both in Romania and Republic of Moldova will not be directly influenced by not implementing the projects to be financed under the Ro-Md Programme. The projects that shall be financed under the thematic objectives TO2 and TO3 are generally soft projects focused more on exchange of experience related to education, research & development and innovation or rehabilitation and promotion of the historical heritage; these can have only an indirect impact on environment.

On the other hand, the projects implemented under TO7 and TO8 would have beneficial effects on the environment through the development of an infrastructure development at the border with a significant positive impact compared to the actual situation through prevention of the landslides and flooding with a positive impact, too.

If the Programme Ro-Md will not be implemented, the current status of the environment in the eligible area will stay unchanged and in time will be damaged, affecting almost all the environment factors: air, water, soil, , waste management, archaeological and architectural heritage and natural landscape. In case of certain indicative action of the Programme when they are not performed, the effect can be beneficial to the environmental aspect - biodiversity, particularly in protected areas because it does not intervene in the existing situation with various projects that would lead to a negative impact.

4. THE ENVIRONMENTAL CHARACTERISTICS OF AREAS LIKELY TO BE SIGNIFICANTLY AFFECTED

I. ROMANIA

Characterization of the situation on air, water and soil quality in the four counties of Romania that are in the eligible area of the Programme was based on the environment reports made by Local Environmental Protection Agencies and publishing on their website.

Information on water resources and their quality were taken from the first Management Plan of River Prut Area - Barlad 2009 ÷ 2015 (approved by Government Decision no . 80/2011) and from the draft of the second Management Plan of the Prut Barlad River Area 2016 ÷ 2021 on public consultation , both published on the website of ABA Prut Barlad .

Regarding water resources in the eligible area there are two basins of the rivers Prut and Barlad.

Prut River Basin is located in the north- east of the Danube basin, bordering at the northwest the Tisa River, Siret River to the west and Nistru River at north and east.

The total area of 27,500 km² of the river basin is situated on the territory of three countries: Ukraine, Romania and Republic of Moldova. The second longest tributary of the Danube, Prut River (952.9 km) forms the border between Romania and Ukraine on 31 km and between Romania and Moldova on 711 km.

Barlad river basin, left tributary of the Siret River, is bounded in the north and east of the Prut river basin.

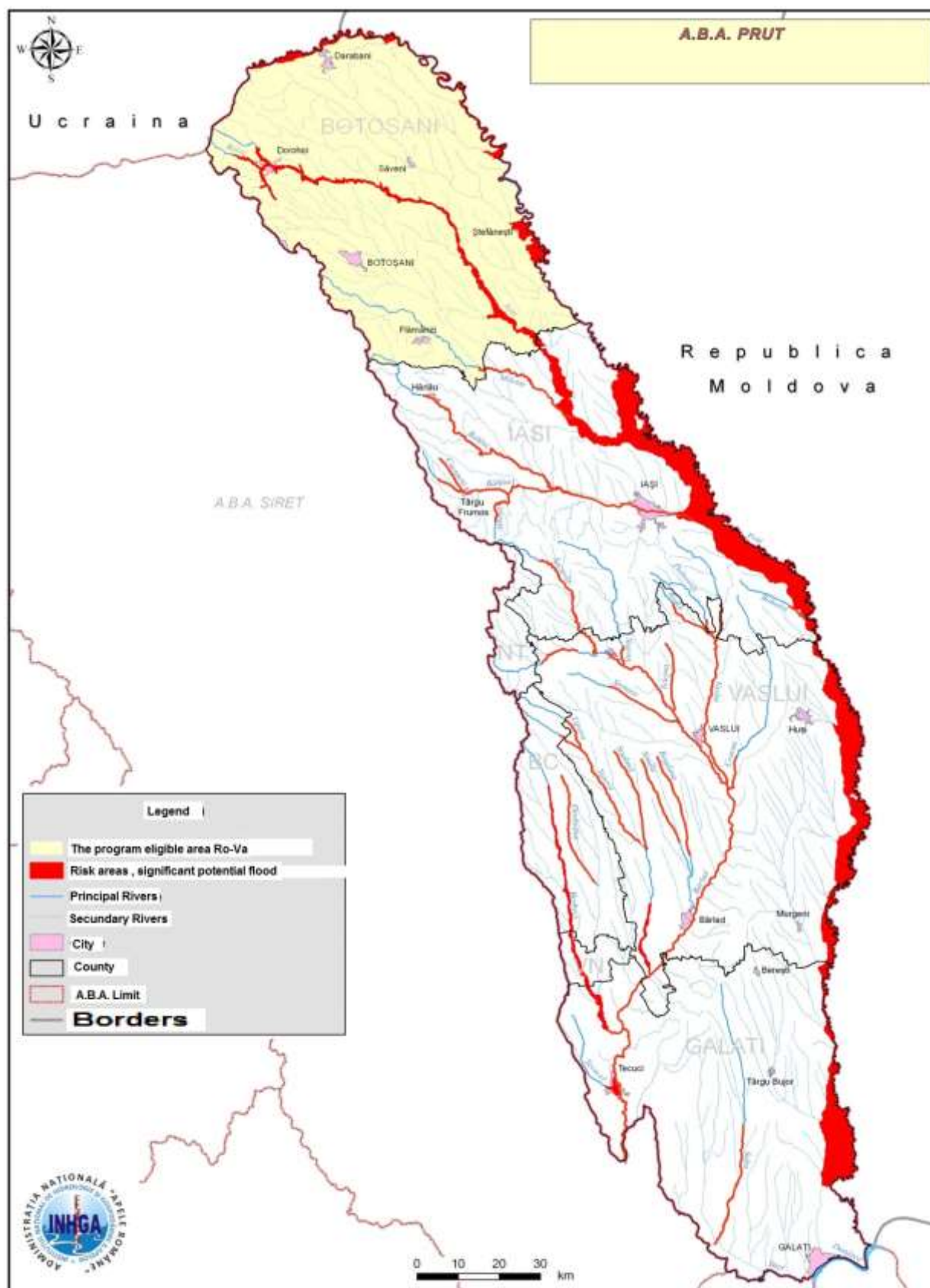


Figure 4.1 - Prut – Bârlad River Bazine

From the administrative point of view, hydrographic space river Prut - Barlad occupies almost all the counties of Botosani, Iasi, Vaslui and Galati and partly counties of Neamt, Bacau and Vrancea.

Hydrography

Prut River Basin has in Romania an area of reception of 10,967 km² (approximative 4.6 % of the country).

The average altitude varies between 130 m in the central area and 2 m at the confluence . The average slope of the basin is 0.2‰.

A feature of the Prut basin is the elongated shape with an average width of about 30 km. Watersheds of the 248 encoded tributaries keeps the same high elongation and orientation parallel to the Carpathians.

Barlad River, the largest left tributary of the Siret, has a catchment area of 7,220 km². The basin has an average altitude of 211 m and an average slope of 5‰.

The upper basin system has a marked asymmetry to the left, and the lower is cvasisimetric. Barlad River gathers 144 encoded tributaries with a total length of 2,639 km .

As a feature of hydrographic space of rivers Prut - Barlad, 80% of the hydrographic network is made up of non-permanent water courses of which 60% are temporary (drying up phenomenon occurring in the upper part due to periods without rainfall) and 18 % are semi-permanent courses, leaking occuring only in periods of rainfall .

Land Use

Use of the land within the hydrographic area Prut - Barlad is influenced by physical and geographical conditions and anthropogenic factors.

Arable land predominates both in the river Prut (54.7%) and in the river Barlad (46%). Forests, occupying 21.4% in the river Prut and in the Barlad river basin 27%, are developed especially in areas of contact with high plateau relief.

Perennial crops have a relatively uniform development occupying 13.3% in the river Prut hydrographic basin and 16.1% in the river Barlad. Other areas occupy much smaller surfaces. The lakes occupy a share of 1.19 % in the river Prut and 0.26 in the river Barlad.

Water resources

Total surface water resources of the Prut - Barlad basin total about 3,661 million m³/year, of which about 960 million are usable m³/year. The stock of 3,661 billion cubic meters/year, represents about 94% of total resources and consists mainly of rivers Prut, Barlad and their tributaries. Water resources of the natural lakes are very small.

In the Prut - Barlad river area, there are 72 main reservoirs (greater than 0.5km²) of which 49 have complex use totaling a volume of 614.85 mil. m³.

Along the course, the multiannual average flow of the river Prut increases from 78.1 m³/s (2,462 mil. m³/year) in Section Radauti, to 86.7 m³/s (2,736 mil.m³/year) in Section Ungheni reaching 105 m³/s (3314 mil. m³/year) to the confluence with the Danube. The contribution of the main tributary, the river Jijia, is 10 m³/s (316 mil. m³/year).

Multiannual average flow of the river Barlad rangies from 9.48 m³/s (300 mil. m³/year) in Section Barlad to 11 m³/s (347 mil. m³/year) to the confluence with Siret. Most important tributaries' intake is 1 m³/s (31.56 mil. m³/year) for both river Vaslui (at Royal Mill) and for Tutova River (Eagle 's Nest accumulation).

Within the hydrographic Prut Barlad the tributaries of the main water flows have reduced water resources: Jijia 1.7 – 2.8 l/s/km², Bahlui in section Iași 2.2 l/s/km², Vaslui in section Royal Mill 2 l/s/km² and Tutova in section Eagle 's Nest accumulation 1.5 l/s/km².

The underground resources of hydrographic space Prut - Barlad are estimated at 460.4 mil. m³ (14.58 m³/s), of which 214.6 mil. m³ (6.8 m³/s) come from groundwater sources and 246.1 mil. m³ (7.8 m³/s) of underground water. Poor appearance is maintained for both groundwater and groundwater on the medium and deep (50 ÷ 300 m). Usable resource is about 251,4 mil. M³ (7.97 m³/s) of which the contribution of groundwater sources is of 34.7 mil. m³ (1.1 m³/s) and the sources of medium and deep sea 216.7 mil. m³ (6.87 m³/s).

Categories of surface water

In the hydrographic space Prut - Barlad there are identified 322 bodies of surface water, classified in the following categories: 228 natural bodies of water: 221 rivers and 7 lakes, 45 rivers heavily modified water bodies, one body of water lakes - water bodies heavily modified, 45 artificial lakes and 3 artificial water bodies .

Rivers

Prut is the rank 1 final tributary of the Danube and confluent with it 150 km upstream of the mouth of the river into the Black Sea .

Prut River flows from the NE slope of the mountain Cernahora at an altitude of 1,580 m from the Carpathian Mountains in Ukraine and flows into the Danube at an altitude of 2 m .

By entering Romania at Oroftiana, Prut river has a length of about 211 km, longitudinal slope of 6.4‰ , a convolution coefficient of 1.18 and a pool of 8,241 km².

Natural lakes

Natural lakes are not an important feature in the hydrographic space Prut- Bârlad . Throughout the area there are 7 natural lakes of which 6 are in Galați County (lower Prut). As surface only Pochina lake exceeds 50 ha.

The following is the evaluation status/ecological potential and chemical status of surface waters in the catchment area Prut - Barlad, as well as qualitative and quantitative status of groundwater, as shown in River Basin Management Plan. The classification and assessment of the ecological status of water bodies has been prepared in accordance with the principles of the Water Framework Directive European guidelines and recommendations.

In the hydrographic space Prut - Barlad were examined and characterized in terms of status/ecological potential a number of 322 water bodies (228 natural and 94 heavily modified/ artificial) of which 75 (32.89%) fixtures water are in good ecological status and 17 (18%) bodies of water in good ecological potential.

Natural rivers

Characterization of the ecological status of water bodies - rivers (221 bodies of water) was conducted on the basis of representative biological elements, physical and chemical general parameters and specific pollutants. Hydromorphological elements were taken into account only when assessing the good condition. Evaluation of the 221 organic

natural water bodies rivers led to the following result: 34% are in good ecological status and 66% are moderate ecological status.

Natural lakes

Characterization of the ecological status of the natural lakes was conducted based on the analysis of the phytoplankton (considered a representative element), on physical and chemical general parameters and on specific pollutants. Within the hydrographic space of Prut-Barlad all 7 water bodies are in moderate ecological status.

Rivers CAPM (heavily modified water bodies) and CAA Rivers (artificial water bodies)

Characterization of the ecological potential of rivers CAPM (45 water bodies) and CAA (3 bodies of water) was based on analysis of the representative biological elements general physico-chemical elements and specific pollutants .

It was found in the hydrographic space Prut - Barlad that out of 45 water bodies heavily modified and three CAA, 2.08% reach good ecological potential .

Reservoirs, lakes and ponds CAPM

Characterization of the ecological potential of reservoirs (45 water bodies), lakes and natural lakes heavily modified (one body of water) was conducted by evaluating representative biological elements , General physic-chemical elements and specific pollutants.

In the Prut – Barlad hydrographic space, in terms of environmental objectives achieved, the situation of the reservoirs (45 water bodies) indicates that 16 water bodies (35.55%) reach good ecological potential.

In terms of chemical status, evaluation and ranking of the 322 existing surface water bodies in the catchment area Prut - Barlad, 311 (96.58%) are in good chemical status and the remaining 11 (3.41%) do not reach good chemical status.

The quantitative status of the seven groundwater bodies bounded at the level of the Prut- Bârlad hydrographic space is good, and in terms of quality, four groundwater bodies achieve good condition, while three of them do not reach good status.

4.1 Botosani County

➤ AIR

Sulphur dioxide (SO₂)

In 2013 total SO_x emissions were 115,603 Mg resulted mainly from residential heating combustion and food cooking (95%), commercial and institutional heating (3%).

SO_x emissions increased in 2013 due to the inclusion in the inventory of a large number of municipalities (10 municipalities in 2012 and 42 in 2013).

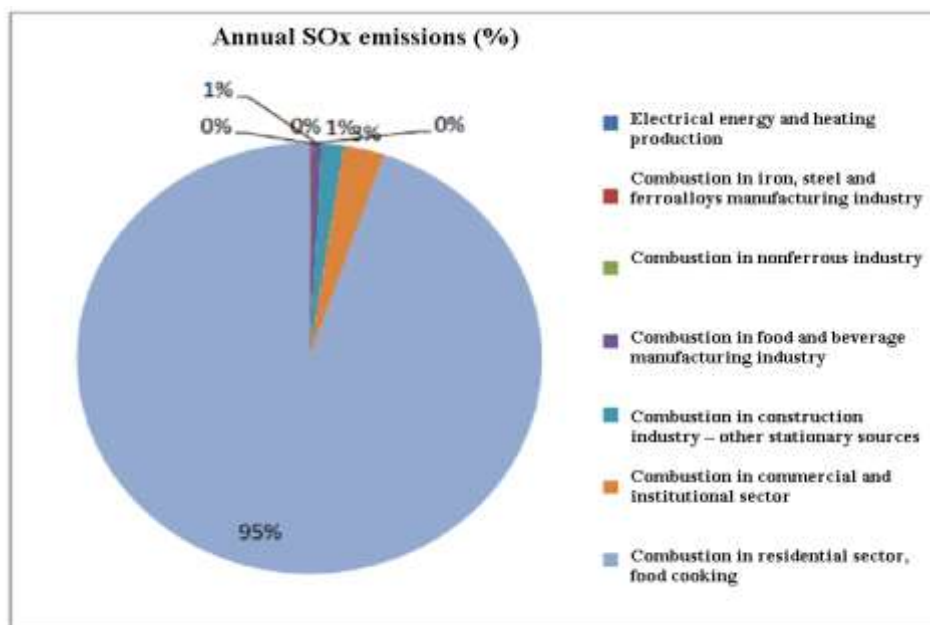


Figure 4.1.1 Annual SOx emissions (%)

Nitrogen oxides (NO_x)

In 2013 the total NO_x emissions were 1335.530 Mg, mainly resulting from road traffic (68%), combustion for residential heating and food cooking (24%), commercial and institutional heating (7%). Total NO_x emissions decreased from the previous year to 53.06% due to lower emissions from road traffic.

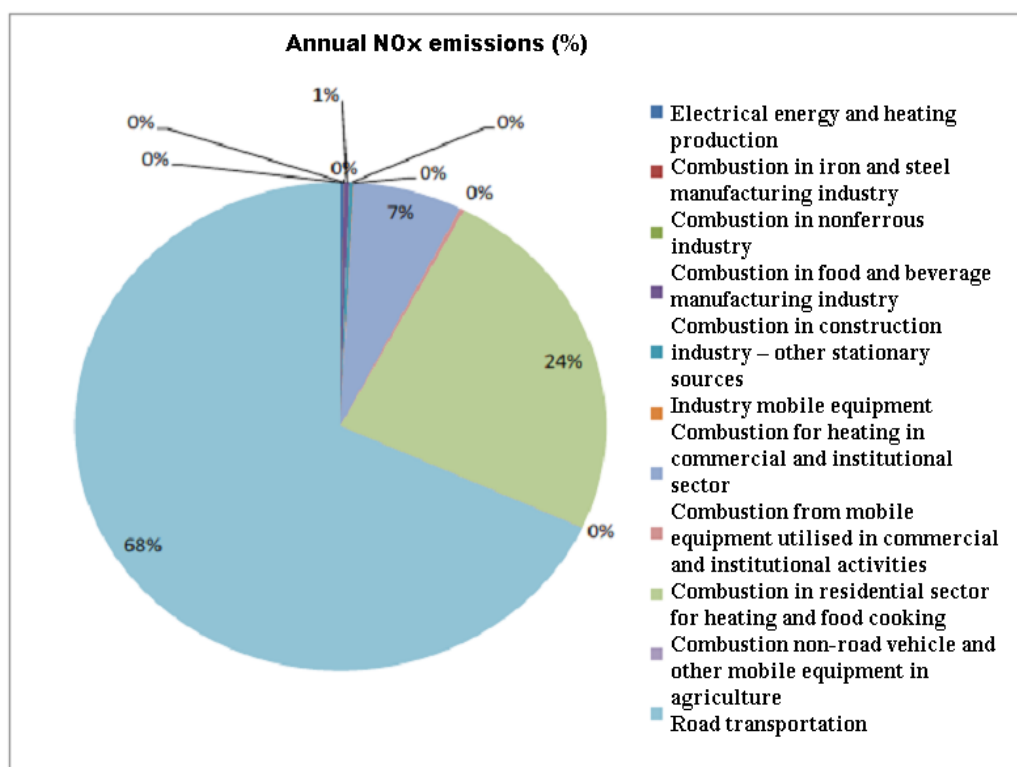


Figure 4.1.2 Annual NO_x emissions

In 2013 the amount of energy produced in cogeneration by SC MODERN CALOR SA was 135,807 MWh of which 73,940 MWh heat and 61,867 MWh electricity.

In the year 2013 air quality monitoring was performed as follows:

- By automatic continuous measurements performed by the urban background exposure station for the following pollutants: SO₂, O₃, BTEX- VOCs and PM₁₀;
- Gravimetric measurements - for particulate matter (PM₁₀ and PM_{2,5});
- Rainfall quality measured in EPA Botosani point, with the following pollutants monitored: pH, conductivity, alkalinity/acidity, hardness, SO₄²⁻, NO₂⁻, NO₃⁻, NH₄⁺, Cl, Ca²⁺ și Mg²⁺.

Urban background exposure station is placed in the residential area with high population density located at a sufficient distance from stationary or mobile sources and is designed to assess air quality.

Nitrogen oxides

No continuous measurements through automatic air quality monitoring stations (in Botosani) were performed in 2013 due to the fact that the NOx analyser was defective.

Sulphur dioxide

According to Law no.104/2011 on air quality, recorded sulphur dioxide values were well below the hourly limit (350 µg/m³) and also in the daily limit value (125 µg/m³) for the protection of human health.

There was no exceeding of the alert threshold of 500 µg/m³ measured for three consecutive hours.

Particulate matter

In 2013, the frequency of exceeding the daily limit value for protection of human health PM₁₀ (50 mg/m³) was 6.86% and 14.09% for PM₁₀ nephelometry. During 2013 there were 23 breaches of particulate matter determined by the gravimetric method.

Encountered exceeding were due to: traffic, road works, thermal plants operation and weather conditions (atmospheric calm), who favored keeping pollutants close to the ground.

In 2013 there were no accidental pollution with major impact on the environment and citizens.

➤ **SOIL**

According to data provided by the Directorate Agriculture and Rural Development Botosani, changes in the distribution of land use categories in the period 2008 ÷ 2013 were as follows:

Table 4.1.1 Distribution's evolution of agricultural land by use

	Category	of	Area (ha)
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	use	2008	2009	2010	2011	2012	2013
1	Arable	298,774	298,762	298,762	298,739	298,747	298,742
2	Grassland	75,381	75,146	75,146	75,146	75,146	75,146
3	Meadows and natural grassland	14,635	14,635	14,635	14,635	14,635	14,635
4	Vineyards	1,690	1,690	1,690	1,690	1,680	1,680
5	Orchards	2,559	2,559	2,559	2,559	2,559	2,559
	Total land	393,039	392,762	392,792	392,769	392,767	392,762

In relation to the suitability of field crops, arable land is grouped in 6 suitability classes which take into account the nature and intensity of restrictive factors for production. Situation in Botosani County in 2013 is presented below:

Table 4.1.2 Division of agricultural lands depending on soil uses in Botoșani county

No.	Specification	Soil Worthiness classes						
		I	II	III	IV	V	VI	
1	Arable	14,379	110,009	119,055	36,973	18,331	0	209,739
2	Grassland	1,503	12,775	8,266	48,845	3,757	0	75,146
3	Meadows	293	2,488	1,609	9,513	732	0	14,635
4	Vineyards	0	0	23	600	1,067	0	1,680
5	Orchards	33	395	11	117	2,003	0	2,556
		16,208	125,667	128,956	96,048	25,890	0	392,769

During 2013, in Botosani County have not occurred major environment pollution accidents leading to soil contamination.

4.2 Galati County

➤ AIR

Sulphur dioxide (SO₂)

The amount of sulfur dioxide SO₂ together with oxides of sulfur emitted into the atmosphere in 2013 in the Galati County was 3,004.70 tons. The following table presents the evolution of SO₂ emissions in the period 2007 ÷ 2013.

Table 4.2.1 The annual quantities of sulfur dioxide, SO₂ (tons/year)

Tone/year	2007	2008	2009	2010	2011	2012	2013
SO ₂	21,285.32	12,365.02	6,824.88	429.83	903.05	239.34	3,004.70

The main activities that generate air emissions of sulfur dioxide in Galati are:

- Production of electricity and heat ;

- Combustion in manufacturing industries and construction (manufacture of iron and steel and ferroalloys production);
- Combustion in manufacturing and construction industries (manufacture of food, beverages and tobacco);
- Combustion in manufacturing and construction industries (stationary sources);
- Commercial/Institutional - heating;
- Commercial/Institutional - residential heating.

Nitrogen oxides (NO_x)

The amount of nitrogen oxides NO_x emitted into the atmosphere in 2013 in the county of Galati was 6,091.64 tons. The following table presents the evolution of NO_x emissions in the period 2007 ÷ 2013.

Table 4.2.2 The annual quantities of nitrogen oxides, NO_x (tons / year)

Tone/year	2007	2008	2009	2010	2011	2012	2013
NO _x	18,827.447	12,613.05	7,221.29	2,868.85	3,801.08	5,035.536	6,091.64

The main activities that generate air emissions of nitrogen oxides in Galati are:

- Production of electricity and heat ;
- Combustion in manufacturing and construction industries (manufacture of iron and steel and ferroalloys production);
- Road transport ;
- Machinery and mobile equipment manufacturing and construction.

In the year 2013, the air quality in Galati County was monitored through automated stations monitoring air quality, which are part of the National Network for Monitoring Air Quality.

The location of air quality monitoring stations in the county Galati:

- 1 traffic station located in street Brăilei, no. 181 so that the pollution level measured to be influenced in particular by emissions from a close street with heavy traffic;
- 2 Industrial type stations located in Galati, Danube Boulevard, no. 8 (area in front of Sidex) and in Tecuci str., Dec. 1, no. 146B, to determine the level of pollution particularly influenced by industrial sources. Due to technical failure, GL5 station did not work in 2013;
- 1 urban background station located in str. Domnească, no. 7 to assess population exposure to pollutants with synergistic combinations;
- 1 suburban station located in str. Traian, nr. 431, to assess the exposure of population and vegetation on the outskirts of the agglomeration;
- 1 outside public information panel located in str. Brăilei c/c Street. G. Coşbuc for regularly display of concentrations of pollutants in ambient air;
- 1 public information board located inside the premises APM Galati for regularly display in of the concentrations of pollutants in ambient air.

According to the concentrations recorded at the automatic monitoring stations no exceedances of the concentrations of pollutants: NO_x, SO₂, dust has occurred.

In 2013 the county had no major environmental accidents affecting air quality.

➤ SOIL

The total area of Galati is 446,632 ha. The productive potential of agriculture is made up of 351 035 hectares, of which 288 828 hectares of arable land, 40,275 ha pastures, hayfields 639 ha, 19,568 ha vineyard heritage, 1716 hectares orchards heritage, 3 hectares massive mulberry plantations and bushes 6 ha .

The evolution of land distribution by categories of uses for the period 2008 ÷ 2013 in Galati County, is presented in Table 4.2.3:

Table 4.2.3 Categories for use in Galati

	Category of use	Area (ha)					
		2008	2009	2010	2011	2012	2013
1	Arable	289,172	289,137	289,065	288,956	288,881	288,828
2	Grassland	40,275	40,275	40,275	40,275	40,275	40,275
3	Meadows and natural grassland	639	639	639	639	639	639
4	Vineyards	19,568	19,568	19,568	19,568	19,568	19,568
5	Orchards	1,716	1,716	1,716	1,716	1,716	1,716
6	Massive mulberry plantation	-	-	-	3	3	3
7	Shrubs	-	-	-	-	6	6
Total land		351,370	351,338	351,263	351,157	351,088	351,035

In 2013, on the territory of Galati County one environmental incident affecting the soil was recorded, according to **table 4.2.4.**

Table 4.2.4 Accidental polutions in Galați County

Location (county/town)	Time and date	Environmental elements influenced	Responsible enterprise	Pollutant	Cause	Measures taken
Hanu Conachi village, National Road 25 (near Hanu Conachi Bridge), Galati County	07.06.2013 11.30 PM	water and soil	Auto tanker with diesel fuel owned by SC SINBAD Chisinau, Republic of Moldova	Diesel fuel	Road accident finalised with overturning of an auto tanker caring 25.2 tons of diesel fuel. The leakage of part of the diesel fuel contaminated a well with drinking water placed on the side of	The polluted soil was removed from the land and was temporarily stored using PVC foil in order to be decontaminated by an authorized specialised firm.

					the road and an area of 250 square meters of land.	
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4.3 Iasi County

➤ AIR

Sulphur dioxide (SO₂)

The amount of sulfur dioxide, SO₂ emitted into the atmosphere in 2013 in the county of Iasi was 2939.76 tons. The following table provides the emission of sulfur oxides situation in Iasi, during 2008 ÷ 2013.

Table 4.3.1 *The annual quantities of sulfur dioxide, SO₂ (tons/year)*

County	2008	2009	2010	2011	2012	2013
Iasi	1,341.5	801.8	1,469.3	2,102.7	1,611.7	2,939.76

The highest SO₂ emissions resulted from :

- fossil fuel combustion in the energy industry - production of electricity and heat from Dalkia Termo Iasi SA SC - CET I and CET II;
- residential combustion plants;
- Combustion activities in manufacturing and construction industries - other stationary sources;
- Commercial and institutional heating .

Nitrogen oxides (NO_x)

The amount of nitrogen oxides, NO_x emitted into the atmosphere in 2013 in the county of Iasi was 4,106.64 tons. The following table presents the situation of nitrogen oxide emissions in Iasi, during 2008 ÷ 2013.

Table 4.3.2 *The annual quantities of nitrogen oxides, NO_x (tons/year)*

County	2008	2009	2010	2011	2012	2013
Iasi	6,010.3	6,061.23	7,822.4	12,981.2	12,743	4,106.64

Particulate matter

The amount of particulate matter emitted into the atmosphere in 2013 in the county of Iasi was: 5,096.78 (TSP), 5,007.91 (PM₁₀), 4,867.77 (PM_{2.5}) 4,106.64 tones. In Table 3.3.4 is presented the situation of particulate emissions in Iasi, during 2008 ÷ 2013.

Table 4.3.3 *The annual quantities of dust (tons / year)*

County	Pollutant	2011	2012	2013
Iasi	TSP	5,176.22	2,026.28	5,096.78
	PM10	5,121.46	1,982.68	5,007.91
	PM2.5	4,805.20	1,899.52	4,867.77

Automated stations monitoring air quality, for Iași are :

- **Station IS-1-Podu Stone** - Bvd.Nicolae Iorga , Iași - traffic station , located in heavy traffic area meet the criteria imposed by the legislation. Pollutants monitored are those specific to the transport activity , namely SO₂ , NO, NO₂, NOx, CO, Pb, Ni-Cd (of PM10), automatically PM10, PM10 gravimetric, benzene, toluene, o- xylene, ethylbenzene, m, p-xylene.
- **Station IS-2-Decebal-Cantemir-Decebal Avenue** no. 10 Iasi - urban background station, located in a residential area away from local emission sources to highlight the exposure of the population to urban pollution levels . Pollutants monitored are SO₂ , NO, NO₂, NOx, PM2.5, benzene, toluene, o-xylene, ethylbenzene, m, p-xylene, correlated with meteorological data and wind speed direction, temperature, pressure, solar radiation, relative humidity, precipitation.
- **Station IS-3-Oancea-Tătărași** - Str . Han Tatar no. 14 Iași - outlines the industrial plant emissions in the industrial area on the pollution level in Tătărași neighborhood. Pollutants monitored are SO₂, NO, NO₂, NOx, O₃, PM10 automatically.
- **Station IS-4-Copou-Sadoveanu-Aleea Sadoveanu** no. 48, Iasi - rural background station, located in the sparsely populated area away from the urban area and local emission sources . Pollutants that are monitored: SO₂ , NO, NO₂, NOx, CO, O₃, Pb-Ni-Cd (in PM10) PM10 weight, correlated with meteorological data and wind speed direction, temperature, pressure, solar radiation, relative humidity.
- **Station IS-5-Tomești- Str. M. Codreanu, Tomești** - suburban station, aims to assess the exposure of the population and vegetation on the outskirts of the agglomeration , to ozone . Pollutants monitored are SO₂ , NO, NO₂, NOx, CO, O₃, PM10 gravimetric, Pb -Ni -Cd (of PM10).
- **Station IS-6-Bosia-Ungheni-Bosia village**, Ungheni County. Iași - urban background station/traffic. Monitored pollutants: SO₂, NO, NO₂, NOx, Pb, Ni-Cd (in PM10) PM10 automatic gravimetric PM10, CO, benzene, toluene, o-xylene, ethyl benzene, m, p-xylene, meteorological parameters (direction and wind speed, temperature, pressure, solar radiation, relative humidity, precipitation).

The results of air quality monitoring for particulate matter in 2013 in Iasi clutter, revealed a total of 65 breaches of the daily limit in the six monitoring stations in Iasi county, of which 33 breaches were recorded at station traffic IS-1 Stone Bridge, 4 overruns at the rural background station IS-4 Copou Sadoveanu, 17 overruns at the suburban station IS-5 Tomești and 11 overruns at fund traffic urban station - IS-6 Bosia Ungheni . For NOx and SO₂ have not been breaches at the automatic stations monitoring air quality.

There was no major accidental pollution, affecting the area.

➤ SOIL

Evolution of Iasi county land fund between 2008 ÷ 2013 (thousand ha) is presented in Table 4.3.4:

Table 4.3.4 Evolution of land in Iasi County

Type	2009	2010	2011	2012	2013
Total	547.6	547.6	547.6	547.6	547.6
Surface such as:	380.2	380.1	380.1	380.090	380.061
Arable	255.5	255.5	255.6	255.731	255.782
Pasture	85.4	85.4	85.4	85.416	85.308
Meadows	22.3	22.3	22.1	22.008	22.036
Vineyards and vine nurseries	11	10.9	10.9	10.947	10.947
Orchards and nurseries	6	6	6	5.988	5.988
Forest and other land with forest vegetation	97.4	97.4	97.4	97.7	-
Waters and pools	13.9	13.9	13.9	13.9	13.9
Other surface	56	56.1	56.2	56	56

In 2013 there were not registered in the county any accidental pollution or major environmental accidents with significant impact on soil.

4.4. Vaslui County

➤ AIR

Sulphur dioxide (SO₂)

In 2013 total SO₂ emissions were 75 tons/year. Changes in emissions of air pollutants over time are presented in Table 4.4.1.

Table 4.4.1 Annual emissions of sulfur dioxide (tons/year)

County	2007	2008	2009	2010	2011	2012	2013
Vaslui	360.5	141.6	91.7	15.5	288.8	730	75

Nitrogen oxides (NO_x)

In 2013 total NO_x emissions were 75 tons/year. Changes in emissions of air pollutants over time are presented in Table 4.4.2:

Table 4.4.2 Annual emissions of nitrogen oxides (tons/year)

County	2007	2008	2009	2010	2011	2012	2013
Vaslui	955	455.8	709.2	1,520.2	1,309.7	3,011.3	3,753.9

In the year 2013 ambient air quality assessment was made permanently in Vaslui County through 2 urban background monitoring stations that are part of the National

Network for Air Quality Monitoring (RNMCA) . Urban background are placed so that the pollution level is influenced by the integrated contribution of all sources.

The two automatic monitoring stations:

- station VS1 - urban background station (str. Stefan cel Mare, no. 56);
- station VS2- urban background station (which works across Huși , str. Recea).

The stations were located in residential area, away from local emission sources to highlight the exposure of the population to urban pollution levels. In both stations the following pollutants are monitored: sulfur dioxide (SO₂), nitrogen oxides (NO_x, NO, NO₂), carbon monoxide (CO), ozone (O₃), benzene, toluene, ethyl benzene, o, m, p-xylenes, particulate matter (PM₁₀ and PM₁₀ gravimetric nephelometry) and meteorological parameters (wind speed and direction, pressure, temperature, solar radiation, relative humidity, precipitation).

Nitrogen oxides (NO_x)

For 2013, average hourly concentrations of NO₂ all automatically measured in both automatic stations in Vaslui or Huși were located below the hourly limit for the protection of human health (200 µg/m³).

The maximum hourly values of measurements for VS1 station was 126 µg/m³ and for VS2 station was 69.2 µg/m³; the hourly maximums occurred in January 2013; higher hourly values were recorded in the winter months due to increased emissions from power plants and individual centralized thermal energy production .

In terms of annual average concentrations of NO₂ they have not exceeded the annual limit value for the protection of human health (40 µg/m³) in any of the monitoring stations being recorded 22.33 µg/m³ for the station VS1, or 11.24 µg/m³ for the VS2 station.

Sulphur dioxide (SO₂)

In the county of Vaslui, in 2013, there were very low values for sulfur dioxide, respectively, the maximum daily values was 11.9 µg/m³ at the station VS1 and 11.6 µg/m³ at the station VS2, compared with the limit value in Law no. 104/2011 125 µg/m³ (daily limit value). Hourly Maxima was 29.79 µg/m³ at the station VS1, respectively 29.50 µg/m³ at the VS2 station, compared to 350 µg/m³ as hourly limit value for human health protection; the hourly maximums occurred in March 2013.

The average annual value for Vaslui was 3.91 µg/m³ and for VS2 station Huși 6.30 µg/m³.

Particulate matter

In 2013 , there were no breaches of this indicator in any of the automatic stations .

In the county of Vaslui representative for the industrial sector are: vegetable oils industry, poultry meat and eggs, textile, milling and baking.

In 2013, they inventoried 23 industrial facilities covered by Directive IED classified as follows:

- mineral industry - installations for the manufacture of ceramic products by firing, in particular roofing tiles, bricks, refractory bricks, tiles: BRICKS SRL SC Vaslui ;
- chemical installations for the production of basic organic chemicals: STEMAR SRL SC Vaslui;
- energy industries - Combustion installations with a rated thermal input exceeding 50 MW: SC TERMICA Vaslui SA - is in preservation as of January 2009;
- plant for processing products from petroleum and petroleum waste SC BLACK BITUMEN FACTORY SRL - Vaslui workstation;
- chemical plant for the production of basic organic chemicals, such as synthetic rubbers FLOMOPOL SRL SC Vaslui;
- plant for manufacturing protein flour and animal waste incinerator - SC SAFIR SRL Văleni - Working point Chițcani, Vaslui county .

In 2013, in the county of Vaslui no accidental pollution has occurred.

➤ SOIL

As for the land , Vaslui county , in terms of the categories of usage, from the total area of 401,721 ha of agricultural land, 72.61% is the arable land , grassland 21.72% 2.83% vineyards, orchards 0.59 % and 1.97% hay.

Table 4.4.3 Evolution of land distribution by types of uses in Vaslui, from 2008 ÷ 2013

No	Type of soil	Area(ha)				
		2009	2010	2011	2012	2013
1.	Arable	291,306	291,992	291,696	291,728	291,711
2.	Grassland	87,533	87,302	87,640	87,574	87,282
3.	Meadows	7,941	7,954	7,923	7,921	7,918
4.	Vineyards	11,901	11,391	11,401	11,401	11,401
5.	Orchards	2,344	2,345	2,379	2,409	2,409
Total		401,025	400,984	401,039	401,033	401,721

Source: Department of Agriculture Vaslui County

It can be seen that the agricultural area shows a small decline because part of this area was intended for construction and another part, due to the degradation of agricultural land rendered unfit for agriculture. At the same time, the trend of slight growth of vineyards and orchards is maintained, there is a high degree of aging of the existing ones and of gradual replacement by replanting.

During 2013 there were no accidental pollution validated in Vaslui .

II. REPUBLIC OF MOLDOVA

Information on existing environmental characterization in Moldova are taken from the documents on the website <http://mediu.gov.md/index.php/starea-mediului/rapoarte>.

➤ **AIR**

The total amount of pollutants emitted into the atmosphere from stationary sources (electro thermal power (CHPs) and industrial enterprises in operation) in 2012 is of **20,664.6 tones**.

Changes in emissions of air pollutants from stationary sources over time is presented in Table 4.5.1:

Table 4.5.1 *Change in emission of pollutants from industrial sources in 2011 ÷ 2012*

Year	Emissions (tone)	CO	Hydrocarbon	NO ₂	SO ₂	Solids	COV	Other substances
2011	23,030.3	7,009.1	3,006.1	2,379.2	1,789.6	4,040.2	1,822.7	2,983.3
2012	20,664.6	6,239.9	2,705.7	2,001.4	1,488.6	4,063.2	1,710.8	2,454.9

Source: Index - Current air quality in the Republic of Moldova in 2013

The amount of emissions of pollutants into the air from thermal power sector in 2012 is of 6,879.4 tons. Of the total amount of pollutant emissions, 10.3 % come from thermoelectric plants.

Changes in emissions of pollutants from thermoelectric plants between 2011 ÷ 2012 are presented in **Table 4.5.2**.

Table 4.5.2 *Changes in emissions of pollutants from thermoelectric plants in the period 2011 ÷ 2012*

	Year	Emissions (tone)	SO ₂	CO	NO ₂	Solids	Other
CET Nord Balti	2011	81.9	3.6	42	26.3	9.7	0.1
	2012	24.9	0	17.8	2.3	4.7	0.001
CET I	2011	78.7	0.04	39.4	38.6	0.5	0.2
	2012	74.7	0.04	24.4	49.6	0.5	0.2
CET II	2011	418.1	0.01	59.7	358	0.3	0.1
	2012	493.9	0.01	123.5	369.4	0.9	0.1
Termocom	2011	103.1	0.4	12.4	62.4	2.6	25.3
	2012	114	0.2	16.2	65.2	10.2	22.1

Source: Index - Current air quality in the Republic of Moldova in 2013

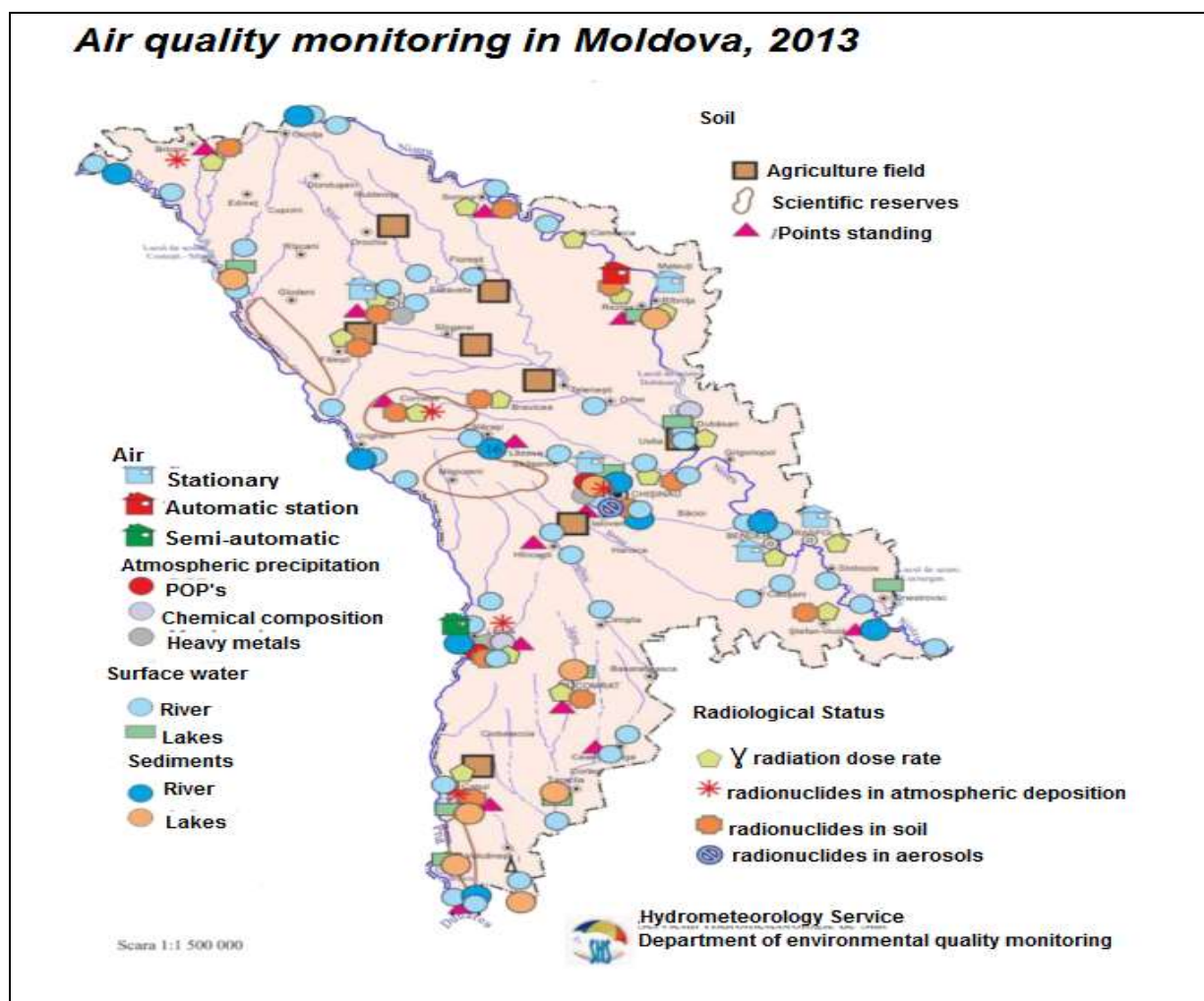
Changes in air pollutant emissions resulted from stationary in the years 2011 ÷ 2012 is presented in Table 4.5.3.

Table 4.5.3 *Changes in emissions of pollutants from stationary in the period 2011 ÷ 2012*

	Year	Emissions (tone)	CO	Hydrocarbon	NO ₂	SO ₂	Solids	COV	Other
Chisinau	2011	4,723.4	1,506.9	374.1	988.9	133.9	547.7	610.2	561.8
	2012	3,324.9	986.3	101	701.3	97.2	500.3	660.2	278.7
Balti	2011	793.6	227.8	225.7	59.4	13.7	75.3	149.7	41.8
	2012	832.3	232.3	214.7	42.3	14.1	132.6	144.8	51.5
Rezina	2011	4,238.4	1,211.8	1,362.7	418.3	26.8	261	0.010	957.8
	2012	4,081.1	1,133.9	1,367.3	321.9	25.3	274.1	0	958.5

Source: Index - Current air quality in the Republic of Moldova in 2013

Air quality



In 2013 the national air quality monitoring network was represented by 19 stationary sources, including: 17 sources operating under Program 3 times/24h (700, 1,300, 190), which sampled air after following key indicators: particulates, SO_2 , CO, NO_2 and specific: SO_4 , $\text{C}_6\text{H}_5\text{OH}$, CH_2O , located in 5 industrial centers of the Republic of Moldova (Chisinau - 6 positions, Balti - 2 positions, Bender - 4 positions, Tiraspol - 3 positions, Rîbnița - 2 positions).

During 2013 at the automatic post Mateuti were taken and analyzed approximately 98,544 samples, of which 72,264 for CO, O_3 , SO_2 , total suspended solids and 26,280 samples for the equivalents of the ambient dose range of gamma radiation.

In Leova during 2013 were collected and analyzed about 2,940 samples for the 12 pollutants monitored (solids - PM10 fraction; anions: Cl, $\text{NO}_3\text{-N}$, $\text{SO}_4\text{-S}$, HNO_3 , $\text{SO}_2\text{-S}$ and cations Na^+ , NH_4^+ , K^+ , Mg^{++} , $\text{NH}_4\text{-N}$, Ca^{++} , NO_2), according to the EMEP program level I.

Chisinau Municipality

The municipality has an area of around 120.75 km² and a population of about 592,600 inhabitants. The sources of pollution in the city are: JSC "I CHP", JSC "CHP II", JSC "Elcas", JSC "Skin", JSC "future" Factory of champagne "Cricova", LLC "East Auto Lada" SA "Tutun CTC", JSC "glass Factory", JSC "Agurdino" glass Container Company,

SA "Macon" yeast factory, "Termocom"/boiler South, SA "Icam" "Termocom"/Sculeni boiler, SA "Aralit", JSC "Joy", JSC "Dawn", JSC "plant of concrete and mortar", JSC "Taxi - Service" Trust "Edilitate", JSC "Autosalubritate", JSC "Topaz", SA "Termocom"/boiler Muncești, SA "Carmez", JSC "Frigo", JSC "Franzeluța", JSC "Vitanta" auto -didactic no. 4.

Table 4.5.4 Concentrations of pollutants in Chisinau

No.	Pollutant	No.of observation	Annual mean concentrations				No. of days exceeding	IPA
			Average		Maximum			
			mg/m ³	Value expressed in CMA	mg/m ³	Value expressed in CMA		
1.	Solid particles	5,336	0.100	0.7	3.100	6.2	28	0.45
2.	SO ₂	5,207	0.007	0.1	0.097	0.2	-	0.13
3.	Sulfur	888	0.010	0.1	0.090	0.3	-	-
4.	CO	5,346	0.700	0.2	4.000	0.8	-	0.30
5.	NO ₂	5,336	0.050	1.3	0.530	6.2	259	1.44
6.	NO	455	0.040	0.7	0.320	0.8	-	0.64
7.	Phenol	1,931	0.001	0.3	0.018	1.8	5	0.13
8.	Formaldehyde	3,219	0.014	4.7	0.129	3.7	116	7.46

Balti Municipality

Balti area has a surface of 41.43 km² and a population of about 122,800 inhabitants. Basic sources that contribute to air pollution of the municipality are: JSC "Cereal Products ", JSC "Cet - Nord", JSC "Moldagrotehnica" SMS "Knaufl", JSC "Plant Food" seed processing plant corn, SA "Sunflowers", JSC "Beer Master", JSC "Incomlac", JSC "North Basarabia"-Department civil buildings (CSM), JSC "Raut", JSC "Apa- Canal", JSC "Bălțanca" locomotive depot, SA "White Stork".

Table 4.5.5 Concentrations of pollutants in Balti

No.	Pollutant	No.of observation	Annual mean concentrations				No. of days exceeding	IPA
			Average		Maximum			
			mg/m ³	Value expressed in CMA	mg/m ³	Value expressed in CMA		
1.	Solid particles	1787	0.300	2.0	1.900	3.8	114	2.00
2.	SO ₂	1621	0.008	0.2	0.051	0.1	-	0.15
3.	Sulfur	894	0.020	0.2	0.080	0.3	-	0.04
4.	NO ₂	1787	0.030	0.8	0.120	1.4	18	0.76
5.	Formaldehyde	1297	0.008	2.7	0.049	1.4	11	3.52

Tiraspol Municipality

Tiraspol municipality has an area of approximately 54.65 km² and the population is of about 166,800 inhabitants. The main sources of pollution are: factory "Moldavizolit" factory "Electromas" brick factory, glass factory packaging, furniture factories no. 4 and no. 5 canning association, heating networks and boiler houses, cotton mill, auto transport, etc.

Table 4.5.6 Concentrations of pollutants in city Tiraspol

No.	Pollutant	No.of	Annual mean concentrations	No. of	IPA
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		observation	Average		Maximum		days exceeding	
			mg/m ³	Value expressed in CMA	mg/m ³	Value expressed in CMA		
1.	Solid particles	2,485	0.100	0.70	0.700	1.4	6	0.40
2.	SO₂	2,487	0.001	0.02	0.133	0.3	-	0.02
3.	CO	2,548	1.600	0.50	30.000	6.0	14	0.59
4.	NO₂	2,487	0.030	0.80	0.310	3.6	125	0.63
5.	Phenol	862	0.006	2.00	0.032	3.2	103	2.41
6.	Formaldehyde	1,240	0.004	1.30	0.028	0.8	-	1.62

Bender Municipality

Bender municipality occupies an area of approximately 20.86 km² and has a population of about 121,000 inhabitants. Basic sources are starch factory "Electrofarfor", the processing factory of cotton, wool and furniture no. 7 factory "Moldavcabeli" reinforced concrete production plants no. 3 and no. 7 power plants, boiler houses, automobiles, etc.

Table 4.5.7 Distribution of pollutants concentrations in Bender

No.	Pollutant	No.of observation	Annual mean concentrations				No. of days exceeding MAC mm	IPA
			Average		Maximum			
			mg/m ³	Value expressed in MAC md	mg/m ³	Value expressed in MAC mm		
1.	Solid particles	3,212	0.040	0.30	0.200	0.4	-	0.29
2.	SO ₂	3,395	0.001	0.02	0.035	0.1	-	0.01
3.	CO	3,392	1.600	0.50	4.000	0.8	-	0.58
4.	NO ₂	3,395	0.020	0.50	0.140	1.6	17	0.51
5.	Formaldehyde	1,242	0.004	1.30	0.059	1.7	10	1.34

"-" No exceeding of MAC have been recorded

Rîbnița City

Rîbnița city, with an area of approximately 31.95 km² has a population of about 60,000 inhabitants. The basic sources of pollution are: Cement and Slate Plant, metallurgic plant, sugar and alcohol plant, pump plant, concrete plant.

Table 4.5.8 Distribution of pollutants concentrations in Ribnita

No.	Pollutant	No.of observation	Annual mean concentrations				No. of days exceeding MAC mm	IPA
			Average		Maximum momentary values			
			mg/m ³	Value expressed in CMA md	mg/m ³	Value expressed in CMA mm		
1.	Solid particles	1,707	0.100	0.70	0.600	1.20	1	0.51
2.	SO ₂	1,707	0.001	0.02	0.010	0.02	-	0.01
3.	CO	1,708	1.100	0.40	11.00	2.20	2	0.41
4.	NO ₂	1.707	0.040	1.00	0.130	1.50	34	0.92

"-" No exceeding of MAC have been recorded

Automatic monitoring station in Mateuti Village

Since March 2007, in order to achieve effective monitoring of the quality of atmospheric air, works for achieving automatic control stations have been initiated in

Mateuti. Location of the stations may be explained by the high level of pollution in the area in Moldova. Main sources of air pollution in the Mateuti are: "Cement" factory in Rezina, "Moldavian Metallurgical Plant" and "Cement and Slate Plant" from Ribnita.

Over- average annual concentrations were recorded for: particulate matter in Balti, nitrogen dioxide in Chisinau, formaldehyde in all monitored places (Chisinau, Balti, Bender, Tiraspol), phenol in Tiraspol, tropospheric ozone at the automatic station located in the town Mateuti, where the concentration ratio reached 1.0 MAC.

The highest annual average concentration values were recorded for: particulate matter - 2.0 MAC, sulfur dioxide - 0.2 MAC, soluble sulphates - 0.2 MAC in Balti; Formaldehyde - 4.7 MAC, nitrogen dioxide - 1.3 MAC in Chisinau; phenol - 2.0 MAC in Tiraspol, carbon monoxide - 0.5 MAC in Bender and Tiraspol and ozone - 1.0 MAC in Mateut.

➤ WATER

River Danube gathers rivers from a huge territory in Western Europe. More than 1/3 of the catchment area and almost 1/2 of the length of navigable course are in Romania, and from the confluence with the river Prut (600 m) to the border with Ukraine – on Republic of Moldova's territory.

River Prut, border river, which starts on Goverla mountain slopes, 15 km south-west of the village Vorhota ,from the Carpathian Mountains with Cernogoric forests. Prut River is the last major left tributary of the Danube. The length of the river is of 967 km, the water basin area is of 27,540 km², the total collapse of water is of 1577 m, average inclination - 1.63%. The main tributaries: on the right side - Liucica river , the river Pistîncea, river Rîbnîța, Cisremoș river, the river Dereli, little rivers: on the left side: Turca creek, river Cerneava, river Beleluia, Sovita little river, river Old Boundary, Rînceag river, the river Cerlena, Vilia river, the river Lonatnica, Racovăț river, the river Ciuhu , Kamenca River, River Gîrla Mare, River Delia, Nîrnova river, the river Gura - Lăpușna, Sarata River, River Tigheci Prut river water feeds industrial enterprises, also the water is used to irrigate land and for fishing and sailing.

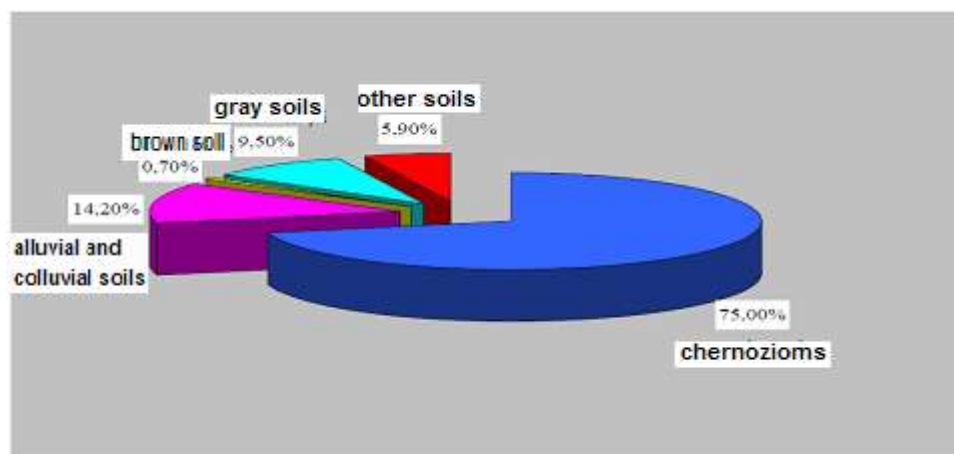
Ciuhur River starts from the merging of several not too large springs, from 3 km north - west of Ocnîța village, Ocnita Rayon, flows into the river Prut on the left bank, at 558 km from the river mouth, near the town of Costesti, Riscani Rayon. The length of the river - 90 km, catchment area - 724 km², the total fall - 175 m, average inclination of 19‰ , the degree of convolution - 1.38‰.

Main tributaries are: on the right side- Tsar Valley (length 11 km); on the left side - Șofrîncoasă Valley (length 15 km), Ciuhureț runlet (length 15 km).

Sarata River flows from the lower lake . River length is of 187 km and flows into the river Prut. Main tributaries: on the right side Orac River (length 22 km) and on the left side, Salty river (length 15 km).

➤ SOIL

Moldovan soil types are presented in the following figure :



5. ANY EXISTING ENVIRONMENTAL PROBLEMS RELEVANT FOR PLAN OR PROGRAM, INCLUDING, IN PARTICULAR, THOSE RELATING TO ANY AREAS OF PARTICULAR ENVIRONMENTAL IMPORTANCE, SUCH AS AREAS DESIGNATED PURSUANT TO DIRECTIVES 2001/147/EEC AND 92/43/EEC

I. ROMANIA

Information regarding Site of Community Importance and Special Protection Areas from the territory of four counties in the eligible area were taken from the MEWF ROMANIA web site- <http://www.mmediu.ro/articol/date-gis/434>.

The sources of the photos are: Environmental Status Reports concerning Botoşani, Galati, Iasi and Vaslui Counties, corresponding to year 2013, published on the web-sites of Counties Environmental Protection Agencies.

➤ **Botosani County**

In Botosani County, have been established : 7 Sites of Community Importance (SCI), 4 Special Protection Areas (SPA) for avifauna, and nature reserves. **Figure 5.1** shows the distribution of SCI, SPA and nature reserves in the Botosani County.

Natural Reserves are divided into forest and floristic reserves type.

➤ **Forest type**

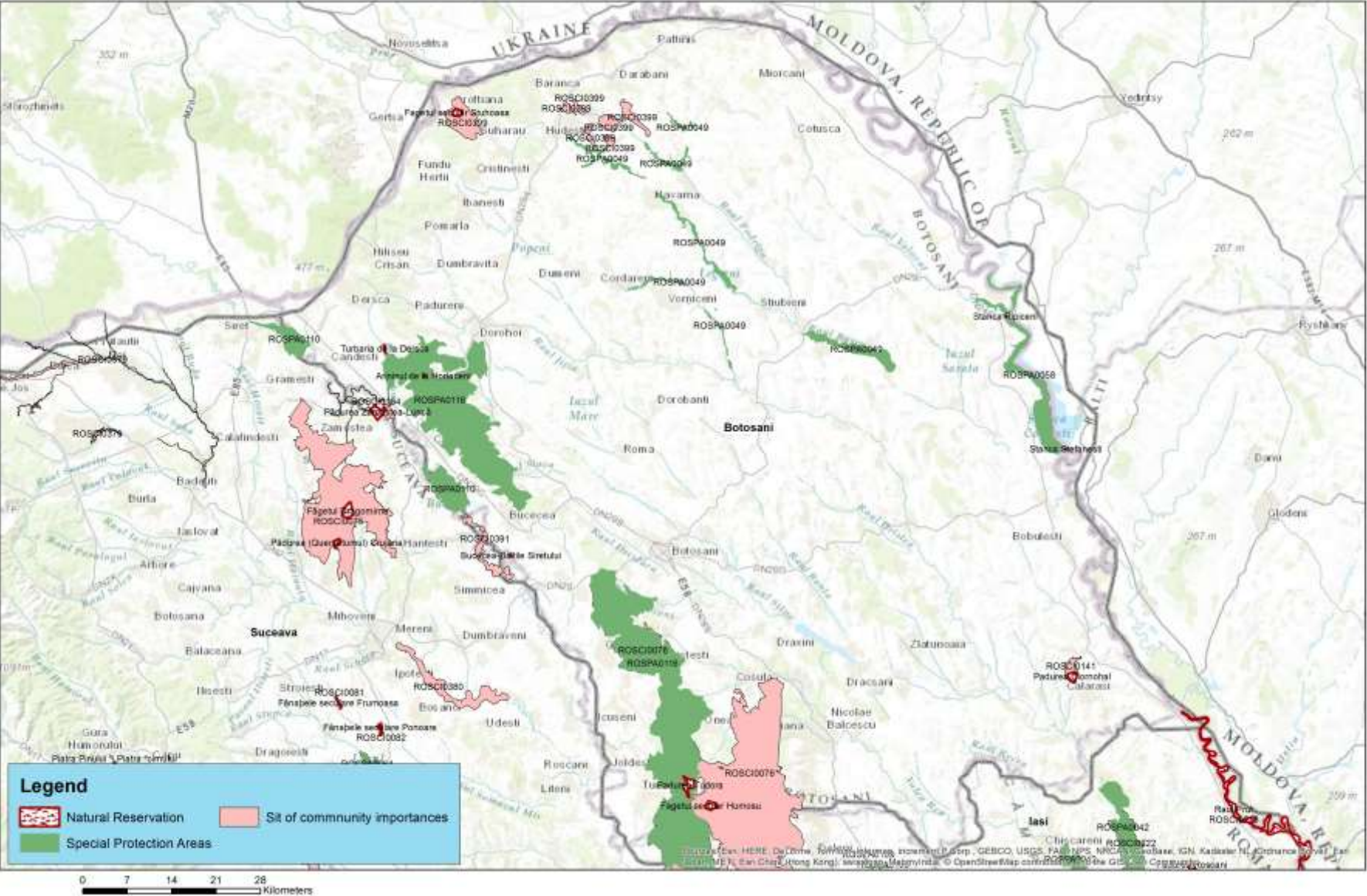
- Tudora Forest 119,0 ha;
- Ciornohal Forest 76,5 ha;
- Arinis from Horlăceni 5,0 ha;
- Secular Fagetul Stühle 0, 5 ha.

➤ **Floristic type**

- Rabies from Dersca (Lozna) 10,0 ha;

- Bucecea ponds Siret 2,0 ha;
- Floristic Reserve Rock - Ștefănești 1,0 ha;
- Floristic Reserve Ripiceni 1, 0 ha.

BOTOSANI COUNTY- NATURA 2000



I. SPECIAL PROTECTION AREAS –SPA

In Botosani County, 4 SPA are declared, with a total area of 29453,68 ha.

➤ ROSPA0058 Lake Stâncă Costești

Location: lands of Stefanesti town and Ripiceni and Manoleasa villages.

Protected species: 44 species of wild birds mentioned in Annex 1 of the Birds Directive, spotted eagle (*Aquila clanga*), yellow heron (*Ardeola ralloides*), the diver winter (*Podiceps auritus*), ferruginous duck (*Aythya nyroca*), honey buzzard (*Penis auritus*).

Surface: 2,161 ha.



ROSPA0058 Lake Stâncă Costesti

➤ ROSPA0049 - Ponds on Ibăneșei- –Baseului - Podriga Valley

Location: lands of Darabani and Saveni towns and Cordăreni, Hănești, Hudești, Havârna, Mileanca, Vorniceni, Ungureni, Știubieni, Vlăsinești and Concești villages..

Ponds: Negreni, Mileanca, Cal Alb, Ibaneasa, Vorniceni, Havirna, Hanesti;

Protected species: 20 species of birds listed in Annex I of the Birds Directive, Western marsh-harrier (*Circus aeroginosus*), increase gray (*Porzana parva*), great egret (egret), heron (*Ardea purpurea*), Rent pond (*Sterna hirundo*).

Surface: 2,705 ha



Acumulare Cal-Alb-Ciconia nigra

Hanești-Phasianus colchicus

Ibăneșei -base- Podriga Valley Ponds

➤ ROSPA0110 - Rogojești Bucecea Accumulations

Location: Botoșani County - Mihăileni , Vf. Campului villages and lands of Suceava County.

Protected species: 22 species listed in Annex 1 of the Birds Directive.

Surface: 1,537.38 ha.



➤ **ROSPA0116 - Dorohoi Șaua Bucecei**

Location: Lands of Suceava, Iasi and Botosani counties.

Protected species: 15 species of birds listed in Annex 1 of the Birds Directive.

Surface: 23,050.3 ha.

II. SITES OF COMMUNITY IMPORTANCE-SCI

Currently, in Botosani County are **7** Sites of community importance.

Total Surface of SCI established: 16,978.17 ha.

➤ **ROSCI 0141 - Ciornohal Forest**

Location: Călărași village;

Community Habitat type: Dacian oak and hornbeam forests

Floristic species of Community interest: *Iris aphylla ssp hungarica*

Surface: 265 ha



➤ **ROSCI0076 - Dealul Mare- Hârlău**

Location: Lands from Botoșani, Iasi and Vaslui counties;

Types of habitats of Community interest: Dacian oak-hornbeam forests, beech forests Fagetum Asperulo.

Surface: 14,565 ha on the Botoșani County- lands of Copălău, Corni, Coșula, Cristești, Curtești Flămânzi, Frumușica, Tudora, Vlădeni, Vorona villages.



➤ **ROSCI0255 Turbăria Lozna (Dersca)**

Location: Lozna village

Types of habitats of Community Interest: Natural eutrophic lakes with Hydrocharition or Magnopotamion vegetation and peat bogs capable of natural regeneration

Floristic species of Community interest: *Angelica palustris*.

Surface: 12 ha



➤ **ROSCI0234 Stânca Ștefănești**

Location: Stânca, Ștefanesti town.

Habitat type: The communities rupicole calcify or meadows Basify of Alysso- Sedion white.

Surface: 1 ha.



ROSCI0234 Stâncă Ștefănești

➤ **ROSCI 0399 - Suharău Darabani**

Location: lands from Concești, Darabani, Hudești and Suharău.

Habitats of Community interest: Asperulo beech forests Fagetum, oak-hornbeam forests Dacian, Sarmatian steppes Ponto, and Ponto Sarmatian deciduous bushes.

Surface: 1,936 ha.

➤ **ROSCI0391- Middle Siret Bucecea**

Location: Lands from Botosani and Suceava counties, In Botoșani county–Bucecea town 3% and Vf. Câmpului village 1%;

Habitats of Community interest: herb fringe communities of high hydrophilic from the plains to the mountain and alpine.

Fish species listed in Annex 2 of the Habitats Directive *Aspius aspius*, *Gobio kessleri*, *Cobitis taenia*

Surface: 125.4 ha

➤ **ROSCI0184 - Zamostea Luncă Forest**

Location: Botosani and Suceava counties. In Botosani County lands from Candesti and Varful Campului villages.

The types of habitats: forests of oak and hornbeam Dacian, mixed riparian forests with *Quercus robur*, along the great rivers *Frasinus excelsior*.

Amphibians and reptiles species from Annex 2 of the Habitats Directive: *Emys orbicularis*;

Surface: 68.77 ha.

➤ **Galați County**

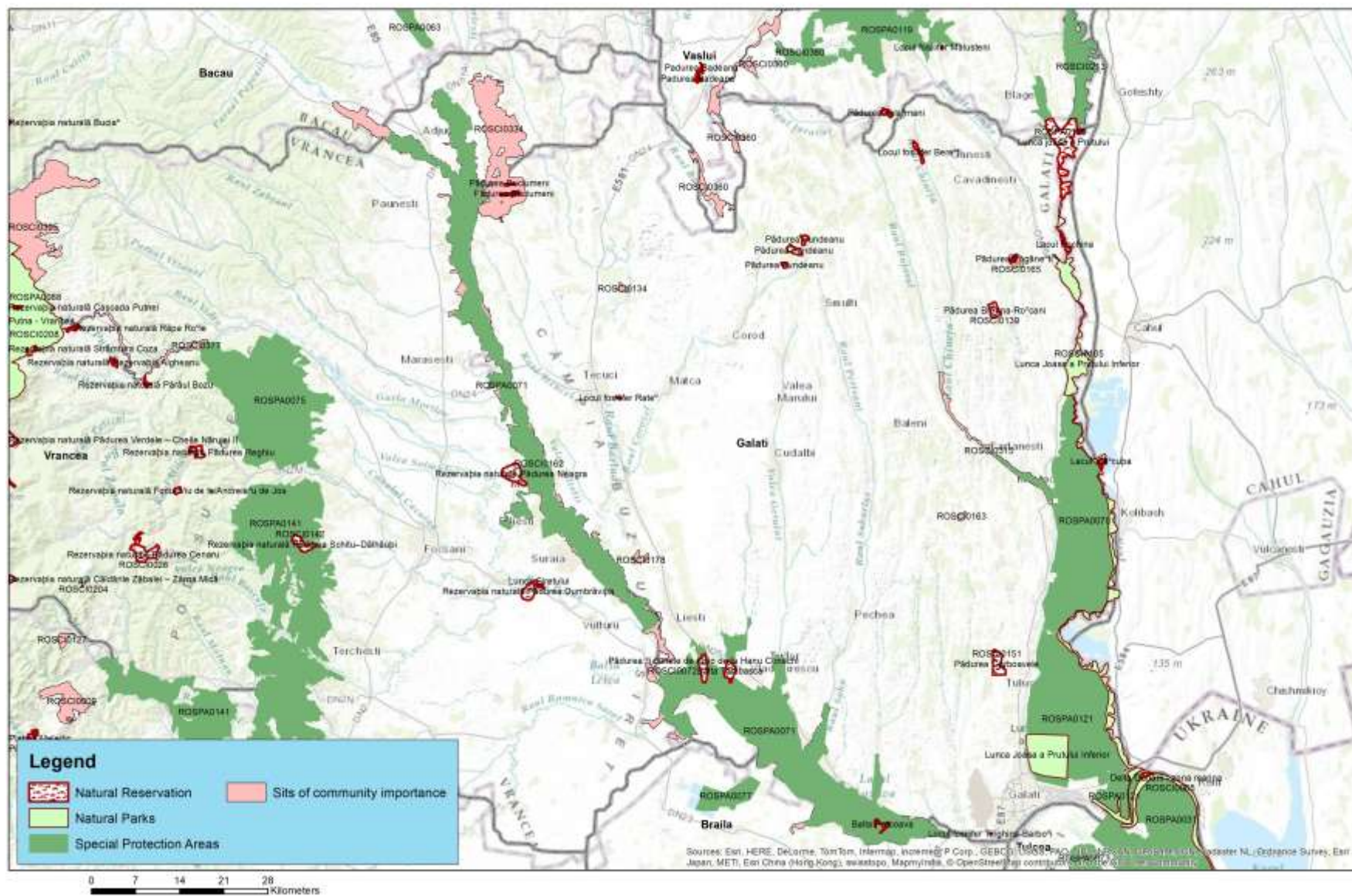
In Galați County have been established 14 Sites of Community Importance, 5 Special Protection Areas for avifauna, nature reserves and natural parks. **Figure 5.2** shows the distribution of SCI, SPA, nature reserves and natural parks in Galați County.

In Galați County there are 17 nature reserves, out of which: 3 are significantly important in terms of paleontological (fossil sites Tirighina - Barbosi, Rateș and Berești), while the rest of them are important for their flora, fauna and forestry.

Natural areas of interest

No.	CODE	Protected area	Location	Surface (ha)
1.	2.402	Sand Dunes from Hanu Conachi	Fundeni Village, Hanu Conachi	199.30
2.	2.403	Garboavele Forest	Tulucesti Village	230.00
3.	2.404	Breanca- Roscani Forest	Baneasa Village	78.30
4.	2.405	Fosil Place Tirighina-Barbosi	Galati Municipality	1.00
5.	2.406	Fosil Place Rates	Tecuci Municipality	1.50
6.	2.407	Fundeanu Forest	Draguseni Village	53.20
7.	2.408	Talasmani Forest	Beresti County	20.00
8.	2.409	Buciumeni Forest	Buciumeni and Brahasesti Village	71.20
9.	2.410	Ostrovul Prut	Galati Municipality	62.00
10.	2.411	Potcoava Pond	Branistea Village	49.00
11.	2.412	Talabasca Pond	Tudor Vladimirescu Village	139.00
12.	2.413	Fosil Place Beresti	Beresti City	49.00
13.	2.414	Prut floodplain	Cavadinesti Village	81.00
14.	2.415	Pochina Lake	Suceveni Village	74.80
15.	2.416	Vlascuta Lake	Mastacani Village	41.80
16.	2.417	Poganesti Forest	Baneasca Village	33.50
17.		Natural Park „Prut Floodplain”	Cavadinesti, Suceveni, Oancea, Mastacani, Vladesti, Foltesti, Frumusita, Tulucesti, Galati	8,247.00

In 2004, four natural reserves of national interest (Balta Vlasca, Balta Pochina, Ostrovul Prut and Prut Floodplain) were included in the Natural Park "Lower Prut Floodplain" (PNLJPI) established by *Romanian Government Decision no. 2151/2004 regarding the protected natural area regime for new areas.*

GALATI COUNTY- NATURA 2000

GALATI COUNTY- NATURA 2000



The total area of Sites of Community Importance of 22,902 ha, representing 5% of the county Galati, while the total area of Special Protection Areas is of 56,106 ha, and representing 12.5% of the county.

No.	County(s)	CODE	Site Name	Area in Galati County (ha)
SITES OF COMUNITY IMPORTANCE IN GALATI COUNTY				
1.	Galati	ROSCI0072	Sand Dune Hanul Conachi	241.700
2.	Galati	ROSCI0105	Prut floodplain	5,851.700
3.	Galati	ROSCI0134	Balta-Munteni Forest	86.000
4.	Galati	ROSCI0139	Breana –Roscani Forest	156.800
5.	Galati	ROSCI0151	Garboavele Forest	219.100
6.	Vrancea Galati Bacau Braila	ROSCI0162	Inferior Siret Meadow	12,289.543
7.	Galati	ROSCIO163	Mogos-Matele Forest	64.900
8.	Galati	ROSCI0165	Poganesti Forest	180.900
9.	Galati	ROSCI0175	Talasmani Forest	53.400
10.	Galati	ROSCI0178	Torcesti Forest	129.900
11.	Galati	ROSCI0315	Chineja Meadow	944.900
12.	Vrancea, Galati	ROSCI0334	Buciumeni-Homocea Forest	2,047.253
13.	Vaslui, Galati	ROSCI0360	Barlad River between Zorleni and Gura Garbovatului	642.350
14.	Tulcea, Constanta, Galati	ROSCI0065	Danube Delta	1% in Galati County
Special Protection Area for avifauna in Galati County				
15.	Galati	ROSPA0070	Meadow Prutul-Vladesti-Frumusita	14,389.00
16.	Galati, Vrancea, Braila	ROSPA0071	Inferior Siret Meadow	24,084.8
17.	Galati	ROSPA0121	Brates Lake	15,682.0
18.	Galati, Vaslui	ROSPA0130	Mata-Carja-Radeanu	1,950.0
19.	Galati, Tulcea, Constanta	ROSPA0031	Danube Delta and Razim Sinoe Complex	1% in Galati County

➤ **Iasi County**

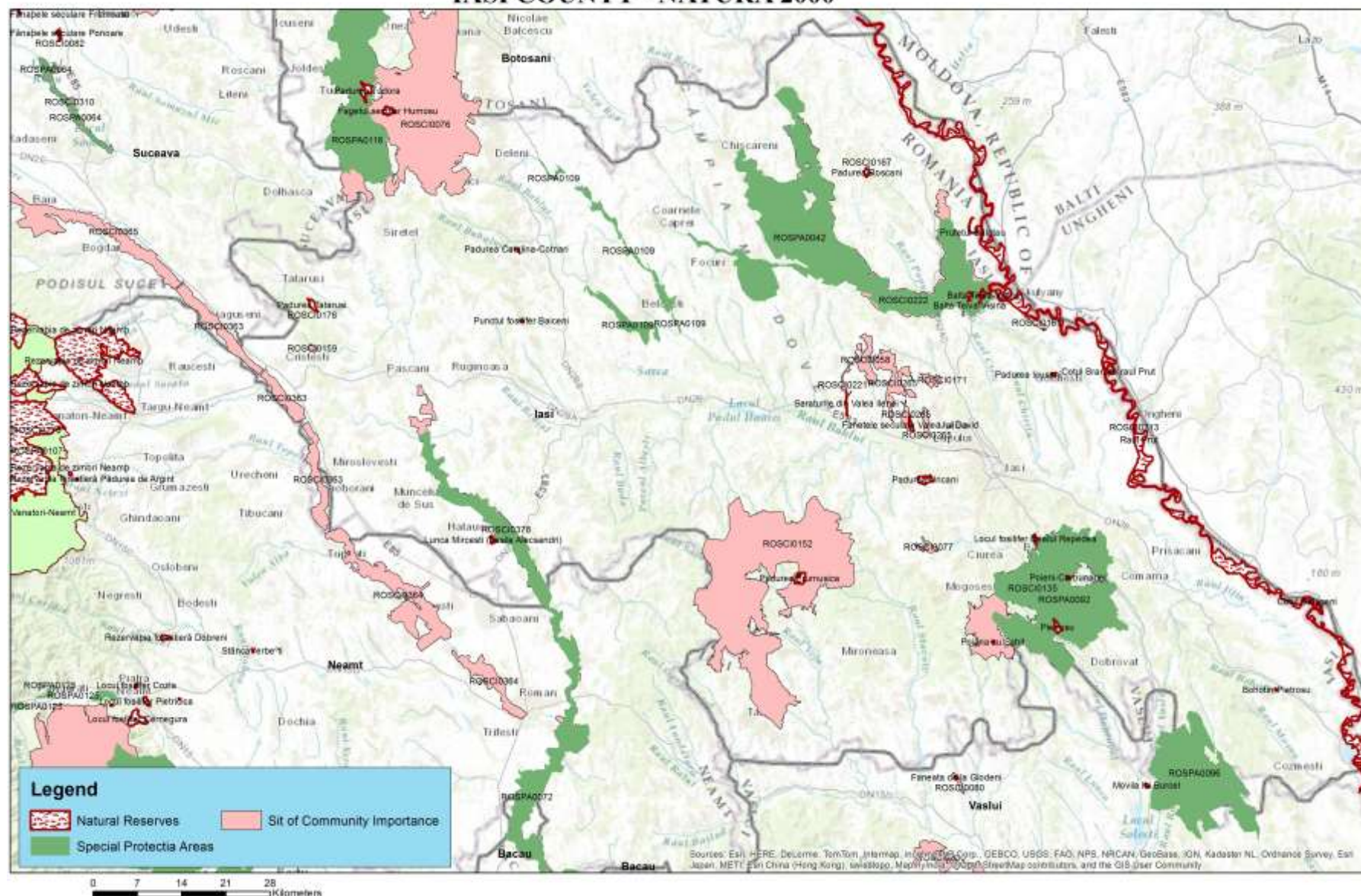
In Iasi County established 19 Site of Community Importance, 6 Special Protection Areas for avifauna and nature reserves. **Figure 5.3** shows the distribution of SCI, SPA and nature reserves in the Iasi County.

Protected natural areas of national interest

In Iasi County, 27 natural reserves are established, out of which :

- **12 of forestry type** (Catalina Cotnari Forest, Fagetul Secular Humosu, Frumușica Forest, Ghiorghitoaia Forest, Icuseni Forest, Mircești Meadow, Medeleni Forest, Pietrosu Forest,, Poieni - Carbunariei, Roșcani Forest, Tătăruși Forest, Uricani Forest);
- **3 of floristic type** (Poiana cu Schit, Valea lui David secular meadows and Saraturile from Valea Ilenei);
- **7 of aquatic type** (Balta Teiva- Vișina Prut River Bend Bran, Prutețul Balata Sălăgeni Bend, River Prut, Chirița accumulation, accumulation Pârcovaci);
- **5 of geological, palaeontological type** (Forestry Point Băiceni, Bohotin Pietrosu, Fossil place Dealul Repedea , Scheia, Pârul Pietrei - Bazga Răducăneni).

IASI COUNTY - NATURA 2000



I. SPECIAL PROTECTION AREAS –SPA

No.	Name	Location	Surface (ha)		The surface superposed on NPA of national interest (%)	Surface occupied on County area (%)
			Total	Inside County		
1.	ROSPA0109 Belcesti Accumulation	Iasi County – UAT: Belcesti, Cepelnita, Coarnele-Caprei, Cotnari, Deleni, Harlau, Scobinti	2,099	2,099	0.00	0.38
2.	ROSPA0116 Dorohoi – Sautu Bucecei	Botosani, Suceava, Iasi County's; Iasi County – UAT: Deleni, Siretel	25,330	1,266	0.00	0.23
3.	ROSPA0042 Jijiei and Miletinului Ponds	Iasi County – UAT: Andrieseni, Coarnele Caprei, Ierbiceni, Focuri, Fantanele, Gropnita, Movileni, Popricani, Probota, Victoria, Vladeni, Sipote, Tiganași	18,990	18,990	0.03	3.46
4.	ROSPA0072 Siret Middle Floodplain	Iasi, Neamt and Bacau County's; in Iasi County – UAT: A.I.Cuza, Butea, Halauceti, Mircesti, Mogosesti, Siret, Rachiteni, Stolniceni-Prajescu	10,455	3,241	0.00	0.59
5.	ROSPA Barnova Forest	Iasi County – UAT: Barnova, Ciurea, Comana, Dobrovat, Grajduri, Schitu Duca and Tomesti; Iasi	12,887	12,887	0.84	2.35
6.	ROSPA0096 Micesti Forest	Iasi and Vslui County; in Iasi County – Ciortesti and Dolhesti	8,631	5,437	0.00	0.99
TOTAL				43,290		8.00

II. SITES OF COMMUNITY IMPORTANCE- SCI

No.	Name	Location	Surface (ha)		The surface superposed ANP (%)	Surface occupied (%)
			Total	Inside County		
Iasi County						
1.	ROSCI0058 God's Hill	Iasi County – UAT: Letcani, Movileni, Rediu, Romanesti	579	579	0.00	0.100
2.	ROSCI0067 Dealul Mare-Harlau	Botosani, Suceava, Iasi County's; Iasi County – UAT: Deleni, Harlau, Lespezi, Siretel	25,112	9,040	0.81	1.650
3.	ROSCI0077 Barca Meadows	Iasi County – UAT: Miroslava, Mogosesti, Voinesti	144	144	0.00	0.020
4.	ROSCI0107 Mircesti Floodplain	Iasi County: - UAT: Mircesti	33	33	79	0.006
5.	ROSCI0135 Barnova-Repedea Forest	Iasi County – UAT: Barnova, Ciurea, Comana, Dobrovat, Grajduri, Iasi, Mogosesti, Schitu-Duca, Scanteia, Tomesti	12,216	12,216	0.88	2.230
6.	ROSCI0152 Floreaanu-Frumisica-Ciurea Forest	Iasi and Neamt Counties; Iasi County – UAT: Dagata, Dumesti, Horlesti, Madarjac, Popesti, Sinesti, Tansa, Voinesti, Tibana, Tibanesti	18,978	16,700	0.58	3.040
7.	ROSCI0159 Homita Forest	Iasi County – UAT: Cristesti, Motca	57	57	0.00	0.010

8.	ROSCI0160 Icuseni Forest	Iasi County – UAT: Golaiesti	10	10	86.2	0.001
9.	ROSCI0161 Medeleni Forest	Iasi County – UAT: Golaiesti, Victoria	131	131	0.00	0.020
10.	ROSCI0167 Roscani Forest	Iasi County – UAT: Roscani	56	56	61.78	0.010
11.	ROSCI0171 Marzesti Forest and Meadows	Iasi County – UAT: Rediu, Popricani	200	200	0.00	0.030
12.	ROSCI0176 Tatarusi Forest	Iasi County – UAT: Tatarusi, Cristesti, Valea Seaca	55	55	90.72	0.010
13.	ROSCI0181 Uricani Forest	Iasi County – UAT: Miroslava	114	114	59.64	0.020
14.	ROSCI0213 Prut River	Galati, Iasi and Vaslui County's; Iasi County – UAT: Bivolari, Trifesti, Probota, Victoria, Golaiesti, Ungheni, Tutora, Prisacani, Grozesti, Gorban	11,961	11,861	36.38	2.160
15.	ROSCI0221 Ilenei Valley Salting	Iasi County – UAT: Dumesti, Letcani, Romanesti	112	112	5.26	0.020
16.	ROSCI0222 Lower Jijia-Prut Salting	Iasi County – UAT: Andrieseni, Gropnita, Movileni, Sipote, Tiganasi, Popricani, Probota, Trifesti, Victoria, Vladeni	10,613	10,613	0.06	1.930
17.	ROSCI0265 David Valley	Iasi County – UAT: Letcani. Miroslava, Rediu, Valea Lupului	1,435	1,435	3.23	0.260
18.	ROSCI0363 Moldova River between Oniceni and Mitesti	Suceava, Iasi and Neamt Counties; Iasi County – UAT: Cristesti, Miroslovesti, Motca	3,215	1,736	00.00	0.310
19.	Siret River between Pascani and Roman	Neamt and Iasi Counties; Iasi County – UAT: A.I. Cuza, Butea, Halaucesti, Mircesti, Mogosesti-Siret, Pascani, Ruginoasa, Rachiteni, Stolniceni-Prajescu	3,711	2,264	0.00	0.410
TOTAL				67,356		22,237

➤ Vaslui County

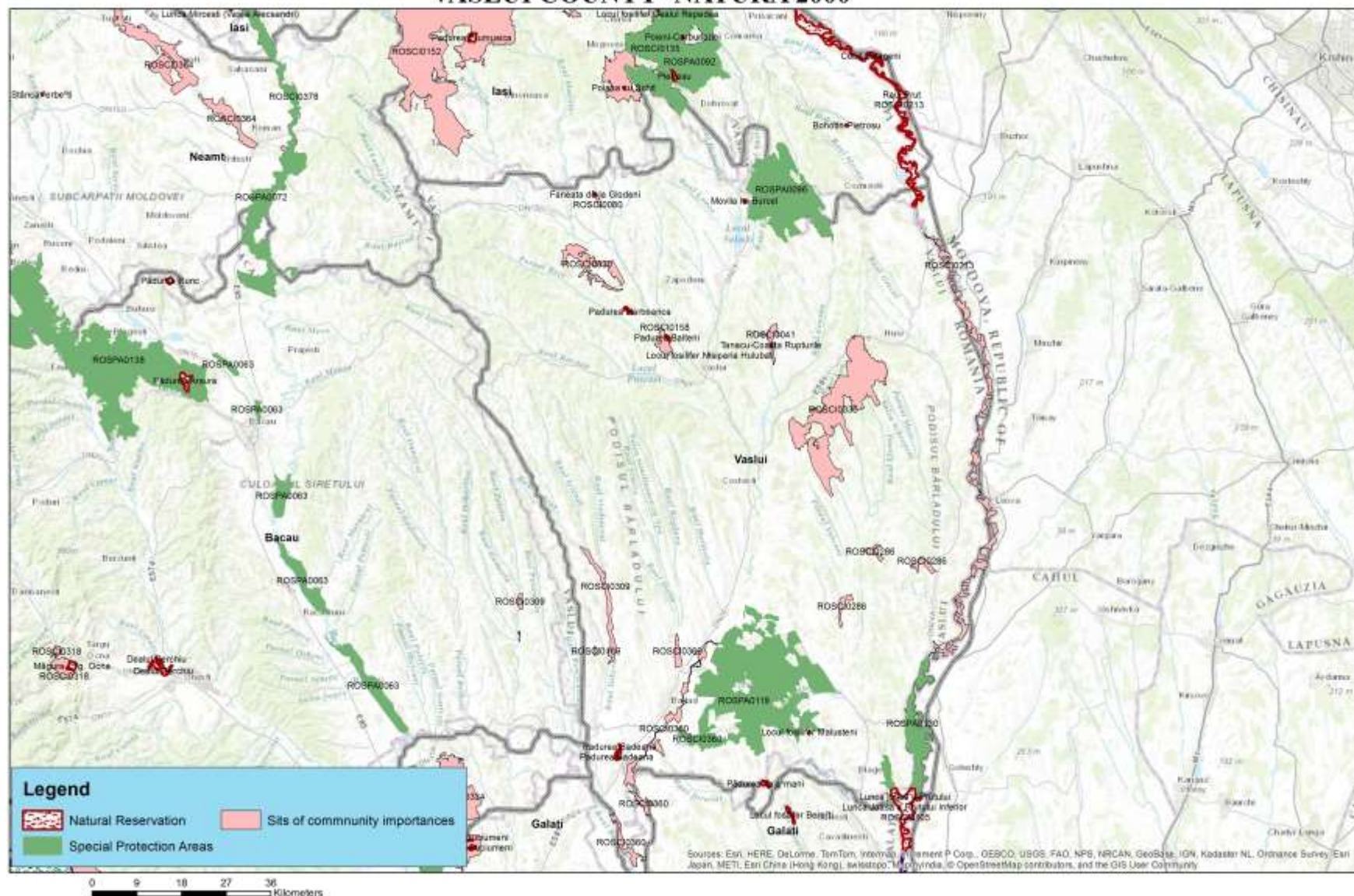
In Vaslui County have been established 15 Site of Community Importance, 4 Special Protection Areas for avifauna and nature reserves. **Figure 5.4** shows the distribution of SCI, SPA and nature reserves in Vaslui County.

Nine nature reserves, with an area of 302.80 ha , are protected by law. However, currently only 191.28 ha of their area remained. These are:

- Mălușteni paleontological reservation ;
- Fossiliferous Point sanding shafts Nisiparia Hulubăț;
- Botanic Reserve Burcel heap ;
- Botanical Reserve Rupturile Tanacu Coast ;
- The forestry Badeana ;
- The forestry Harboanca ;
- The forestry Bălteni ;

- Botanical Reserve Fanatulde la Glodeni ;
- The Forestry Reserve Seaca - Movileni .

VASLUI COUNTY -NATURA 2000



I. SPECIAL PROTECTION AREAS –SPA

In Vaslui County, an area of 27,288.19 ha , which includes a 4 Nature 2000 was established as special protected area for avifauna..

The objective is the protection and conservation of 52 species of birds under the Birds Directive 2009/147 / EC Annex I, and also other 31 species of birds, having the status of vulnerable species requiring conservation measures.

No.	Name	Location	Surface (ha)		The surface superposed on NPA of national interest	Surface occupied on County area (%)
			Total	Inside County		
1.	ROSPA0092 Pădurea Bârnova	Vaslui and Iași	12,887	124.22	0	0.023
2.	ROSPA0096 Pădurea Miclești	Vaslui and Iași	8,631	3,193.47	0	0.600
3.	ROSPA0119 Horga - Zorleni	Vaslui	20.188	20.188.00	0	3,800
4.	ROSPA0130 Mața – Cârja -Rădeanu	Vaslui and Galați	5,735	3,782.50	0	0.710

II. Sites of Community Importance

Prut River is the largest protected natural area of community interest in Vaslui County. This area is located along the river Prut in Vaslui and Iasi, with a total area of 12506 ha , located between the right bank of the Prut River and the flood protection dyke, ponds in the south of the village Fălcu and fisheries complex Carja up to the bordering county of Galati .

Floristic biodiversity of the meadow Prut River is completed with marsh vegetation , and in this sense we can find species such as the wolf tooth (*Bidens tripartite*), white spinach (*Chenopodium polyspermum*), yellow (*Austrian Rorippa*), comfrey (*Symphytum officinale*), etc. Among shorter plants we mention: foxtail (*Alopecurus aequalis*), wild mint (*Mentha arvensis*), tămâioară (*Chenopodium botrys*) Bolgari (*Ranunculus sceleratus*), etc.

In ponds associated with river Prut with shallow waters (0,5 ÷2m) and low in nutrients species, such as: white waterlily (*Nymphaea alba*), cornaci (*Trapa natans*), float (*Nymphoides peltata*) and water spike (*Potamogeton natans*) are growing.



Flower cork

Source: Environment Report in Vaslui EPA website

No	Name	Location	Surface (ha)		The surface superposed on NPA of national interest	Surface occupied on County area (%)
			Total	Inside County		
Vaslui County						
1	ROSCI0041 Coasta Rupturile Tanacu	Vaslui	328	328.00	1.83	0.062
2	ROSCI0080 Fânăturile de la Glodeni	Vaslui	75	75.00	8.00	0,014
3	ROSCI0105 Lunca Joasă a Prutului	Vaslui and Galați	5,852	134.74	0.00	0.025
4	ROSCI0117 Movila lui Burcel	Vaslui	13	13.00	92.30	0.002
5	ROSCI0133 Pădurea Bădeana	Vaslui	61	61.00	96.00	0.011
6	ROSCI0135 Pădurea Bârnova - Repedea	Vaslui and Iași	12,887	122.16	0.00	0.023
7	ROSCI0158 Pădurea Bălteni - Hârboanca	Vaslui	526	526	8.55	0.099
8	ROSCI0169 Pădurea Seaca - Movileni	Vaslui	51	51.00	86.47	0.010
9	ROSCI0175 Pădurea Talașmani	Vaslui and Galați	53	0.50	90.00	9.4*10 ⁻⁵
10	ROSCI0213 Râul Prut	Vaslui and Iași	11,861	7,472.43	0.00	1.405
11	ROSCI0286 Colinele Elanului	Vaslui	755	755.00	0.00	0.140
12	ROSCI0309 Lacurile din jurul Măscurei	Vaslui and Bacău	1,160	1,020.80	0.00	0.192
13	ROSCI0330 Oșești – Bârzești	Vaslui	1,449	1,449.00	0.00	0.272
14	ROSCI0335 Pădurea Dobrina - Huși	Vaslui	8,518	8,518.00	0.00	1.602
15	ROSCI0360 Râul Bârlad între Zorleni și Gura Gârbovătului	Vaslui and Galați	2,569	1,926.75	0.00	0,362

II REPUBLIC OF MOLDOVA

EMERALD Network is an ecological network aimed at preserving wildlife and their natural habitats in Europe, launched in 1998 by the Council of Europe as part of its work under the Convention on the Conservation of European Wildlife and Natural Habitats - Convention Berne (1979).

Information on biodiversity in Moldova has been taken from the website <http://bsapm.moldnet.md/Noutati/Emerald.pdf>.



Emerald Network in Moldova is designed as part of the National Ecological Network and is an integral part of Pan-European Ecological Network. The national program on the establishment of the National Ecological Network (approved in 2011) aims at the integrated management of activities for the establishment of national ecological network by preserving natural genetic diversity in Republic of Moldova.

Emerald Network database contains information on species and habitats under the Bern Convention, Resolutions 4 and 6 present in Moldova, including biogeographic, environmental, population and location of species and habitats information presented in geoinformation maps are available through EUNIS the European information system (<http://eunis.eea.europa.eu/gis-tool.jsp>) and European data base EIONET (<http://cdr.eionet.europa.eu/>). Under the Berne Convention, Rez.6, 9 species of plants were included in the database for Republic of Moldova, including: *Colchicum fominii*, *Genista tetragonal* *Luronium natans*, etc. *Pulsatilla grandis* 74 selected animal species include birds 51, mammals 11, amphibians 3, fish 3, reptile 3, invertebrates 3.

In the case of Republic of Moldova, 17 sites were selected to be included in the Emerald Network, representing 10.65 % of the surface of Republic of Moldova, which have special importance for the protection of species and habitats under the Bern Convention, namely:

- **Forests:** Caraușeni, Orheiului Woods, Forests Strășeni, Tigheci Woods, Bahmut Harjauca, Codru Scientific Reserve, Royal Forest Scientific Reserve, Scientific Reserve Plaiul Fagului.
- **Wetlands:** Middle Prut, Lower Prut Scientific Reserve, Lower Prut Lakes, Lower Dniester, Unguri - Holosnita.
- **Rocky Ecosystems:** Cliffs of Transdnistria, Rezina - Tipova;

- **Steppe:** Bugeacului Steppe, Steppe Bălțului.

EMERALD SITES

➤ **Bahmut-Hârjauca**

Bahmut - Harjauca has the following features: area 13,400 ha, the average altitude 280 m, biogeographical region - mainland. It includes three types of habitat under the Berne Convention: forests of beech, oak and hornbeam forests, mixed woodland slope and gully.

Protected areas in this area are: Plaiul Fagului, Cornești, Bahmut - Leurdoiaia, Bogus, Scăfăreni .

➤ **Nistrul de Jos**

Its area is about 60,000 ha, including forest ecosystems of willow , poplar and white oak from the meadows of Lower Dniester. There are areas with valuable aquatic vegetation and marshy, swampy areas, meanders of the river near villages Copanca, Talmaz, Olanesti and steppe areas near the villages Ciobruciu , Răscăieți and other valuable areas with aquatic and marshy vegetation. Habitats under the Bern Convention, Rez. 4 formations include riparian willow forest sectors river compact central European forests bordering Ponto- Sarmatic mixed aspen eutrophic wet meadows, sedge marshes layers .

Lower Dniester website includes Landscape Reserve "Turkish Garden", raions Causeni, Stefan Voda and forest sectors from Copanca Talmaz, Olănești.

➤ **Scientific Reserve Codru**

Scientific Reserve Codru is a hardwood forest of the type of those in Central Europe and includes a forest area located in the largest Codrilor massive from the center of Moldova. The main values of the Reserve Codru are beech and oak and populations of rare plants and animals. In these places, many species of plants and animals are on the eastern edge of the spreading area in Europe. Codru forest reserve is located near the village Lozova, Straseni raion. The area of the reserve area is of 5,642 hectares. The surface of the area with integral protection is of 720 ha.

➤ **Scientific Reserve Plaiul Fagului**

Scientific Reserve Plaiul Fagului is located in the central part of Moldova , near the town Rădenii vechi, raion Ungheni. The main protected objects are beech and oak, as well as rare plants and animals. The area of the reserve is of 5,642 hectares. The surface area under integral protection is of 803 ha. The protection zone covers 3,055 ha.

The habitats include forests of beech, hornbeam and oak forests, riparian willow formations.

➤ **Scientific Reserve Pădurea Domnească**

Scientific Reserve Padurea Domneasca covers an area of 6,032 ha, with full protection area of 261.7 hectares and protection zone of 2,005 ha.

Reserve Padurea Domneasca is located in the Middle Prut Meadow. It covers an area of 40 km (from the town Cobani to Pruteni)

It is one of the most valuable and old floodplain forests in Europe. The biggest forest massive is located near the village Domneasca Royal (Glodeni raion), which gave the name of the reserve. Reserve Padurea Domneasca is represented by poplar, willow, oak, floodplain ecotype. In the Reserve Padurea Domneasca 580 plant species, including 12 rare plant species included in the Red Book of Moldova were recorded. The habitats include riparian formations of willow, riparian forests Pontic – Sarmatian, mixed aspen forest, Central European compact river sectors from , peri-Danube sedge marsh , fen European herbs.

➤ **Scientific Reserve Prutul de Jos**

It is located in the Lower Prut. Almost 2/3 of the reserve area is occupied by the waters of Lake Beleu. Lower Prut Reserve was organized in 1991 on an area of 1691 ha. It includes not only Beleu lake, and the nearby ponds and meadow , with their coppices and meadows. Lower Prut Reserve is a valuable ecosystem, which keeps about 300 species of plants. Lower Prut reserve represents an important passage route for migratory birds.

Here inhabit 155 species of birds, out of which 33 are rare and 12 are sensitive, endangered species. Habitat types included: European marsh grasses, willow riparian formations , Central European compact river sectors , riparian forests Pontic - Sarmatian mixed poplar, alder east-Carpathian forests, peri-Danube swamps with sedge.

➤ **Codrii Tigheci**

The surface of this area is of 2519 hectares. Landscape Reserve Forests Tigheci is located in the axial region steppe - Tigheciului hills - which stretches 100 km from the woods to the south of the Central Moldavian Republic, with a maximum altitude of 301 m. Include pubescent oak groves and English oak. The gene pool includes 452 different plant species, 9 species of rare plants included in the Red Book of Moldova. The population of snowdrops in Tigheci protected area is unique in Republic of Moldova.

➤ **Stepa Bugeacului**

The area is 50,000 ha. The settlements included in this area are: Ciucur - Minjir , Bugeac, Dezghingea, Comrat, Congaz, Taraclia, Ciumai. The structure and composition is very diverse steppe areas.

Protected area "Vinogradovca - Ciumai" is considered a core area of international importance. Steppe communities that are remnants of the past steppes, widespread in Southern Moldova Plain, presents a particular scientific interest. The territory of this protected area were found 422 different plant species, 46 plant species are

rare, some are found only here. Through these three species included in the Red Book of Moldova. It is a sector with a unique floristic diversity and special phytocoenotic.

➤ **Caracușeni**

The surface of this site is 4585 ha within Briceni, Edinet, Lipcani, Caracuseni forestry sectors, Rososeni, Sire, Balasinesti. The habitats in this site include: caves, mixed forests and forest slopes and valleys of the South East European ash, oak and alder. Cave Emil Racovita in the composition of this site is one among the largest caves in Europe. It is located 1.5 km west of the village Criva, Briceni rayon. After genesis, it is a den of dissolution. In terms of general development direction, caving network has two horizontal lines dominate the sector.

CULTURAL HERITAGE

I. ROMANIA

As regards to the cultural heritage the information is taken from each county council page or from the pages of County Department of Culture, Religious Affairs and National Cultural Heritage of the Ministry of Culture: Botosani, Galati, Vaslui, Iasi.

➤ **Cultural Heritage in Botosani County**

Botosani county has numerous monuments and historical heritage sites out of which some of the most representative are:

- Ciomac Cantemir House Foundation Stefan Luchian;
- House Costache Enescu George Enescu Museum premises;
- House Manolache Iorga, Botosani;
- G. Enescu Memorial House Liveni;
- N. Iorga Memorial House, Botosani;
- Memorial Ipotești;
- Museum of Archaeology, Saveni;
- Museum of Natural Sciences, Dorohoi;
- Botosani County Museum.

In Botoșani County, there are numerous worship places, from which, a number of 23 places are highlighted as the most representative.

➤ **Cultural Heritage in Galati County**

Galați cultural Heritage are quite numerous, but the following are some of the most representative:

- Urban Ensemble " Royal Street " (including such emblematic buildings Administrative Palace - today prefecture , Archdiocesan Cathedral of Saint Nicholas , the Palace of Justice - University today : " Lower Danube " Dramatic Theater "Fani Tardini " Grand Hotel - Galati City Hall today , Cavaliotti House - now the Museum of History);
- Pharmacy Tinc – now House museum collections;
- Cuza Voda House;
- The Museum of Natural Sciences;
- Museum history, culture and Christian spirituality of the Lower Danube;
- Library " V.A. Urechia " - former Palace of the Danube European Commission;
- Virgin Mary Church - currently the oldest building in town;
- Village Museum "Petru Caraman " - Forest Garboavele;
- Barbosi archaeological site , Galati;
- Hortensia House Papadat Bengescu – Ivesti village;
- Rural house "Ion Avram Dunareanu " – Suhurlui village;
- Memorial House " Costache Negri " - Costache Negri village;
- Theodor house Cincu currently Tecuci Mixed Museum;
- The wave of Trajan.

Places of worship in Galati County are numerous, exceeding 300 in number.

➤ **Cultural Heritage in Iasi County**

Iasi county has numerous cultural heritage sites out of which the most representative are:

- "Ion Creangă", Memorial House;
- "V. Pogor" House;
- Palace of Culture;
- National Theatre "Vasile Alecsandri";
- "Alexandru Ioan Cuza" University.

In regards to places of worship in Iasi County these are numerous with a number of 7 places of worship highlighted as most representative.

➤ **Cultural Heritage in Vaslui County**

In vaslui County there are more than 300 monuments as listed by the Ministry of Culture, including places of worship. Out of these some of the most representative are:

- Monumental Complex from Podul Inalt
- S. Belloescu Library
- Royal Palace and Church in Husi

In regards to places of worship, in Vaslui County, these are numerous out of which a number of 15 places are highlighted as most representative.

II. REPUBLICA MOLDOVA

In Republic of Moldova it was preserved, being spread within the territory, an important cultural inheritance of incontestable value: archeological sites, dwelling houses, mansions, castles, monasteries and churches, monumental art works, monuments and technical equipment, building ensembles - squares, streets, neighborhoods, villages and urban centers or traditional architecture ethnographic areas. The information was taken from the website <http://patrimoniul.asm.md/>.

The mobile cultural inheritance is owned by 87 country museums, out of which 5 museums and 7 branches are directly subordinated to the Ministry of Culture and Tourism and 66 to the local government bodies. Their collection includes about 700,000 heritage items related to the history and culture of national and universal value.

The Republic of Moldova's archaeological heritage is rich in works of art of considerable seniority; Sculptural models dating from the Paleolithic period were discovered. Ceramics of "Cucuteni - Tripoli" from the Neolithic period is attested in several regions of Republic of Moldova and has incontestable artistic valences, presenting a whole mythology in pictures.

UNESCO World Heritage of the Republic of Moldova includes one monument and two other items are on examination list. Moldova ratified the UNESCO Convention on the Protection of the World Cultural Heritage in 2002.

The Struve Geodetic Arc cultural heritage is located in Rudi, Soroca. Spring points are located in several countries: Norway, Sweden, Finland, Russia, Estonia, Latvia, Lithuania, Belarus and Ukraine.

On 17 December 2013, the black earth soils from Republic of Moldova are included within UNESCO heritage.

The ancient custom – male fog carols – from Republic of Moldova and Romania are included on 5th December 2013 within the UNESCO heritage.

Romania and Moldova into the UNESCO on December 5, 2013 with an ancient custom: male fog carols.

➤ CHIȘINĂU:

- National Museum of Ethnography and Natural History ;
- Village Museum , Chisinau ;
- National Art Museum of Moldova;
- National Museum of Archaeology and History of Moldova;
- House & Museum "Alexei Sciusev ";
- House-Museum "A. S. Pushkin ";

- History Museum of Chisinau;
- Military History Museum;
- Museum of Romanian Literature.

- **ORHEI:**
 - Museum Complex " Balioz Mansion " (Muzeul Handicrafts), Ivancea ;
 - Lazo family mansion , the village Stone ;
 - Museum Complex " Old Orhei", Orhei;
 - Museum of History and Ethnography, Orhei ;
 - House-Museum "A. Donici" village Donici;
 - The museum complex" Saharna - Tipova" s. Saharna, Rezina; s. Tipova, Orhei, Monastery of Saharna;

- **CĂUȘENI:**
 - Church "Adormirea Maicii Domnului ;
 - House- museum of writer and poet "A. Mateevici Zaim village.

- **BĂLȚI**
 - Museum of History and Ethnography;
 - Pinacoteca "Antiochus Cantemir".

- **CAHUL**
 - Land Museum Cahul: subsidiaries: House - museum "N. Lebedenco" Lebedenco village; Museum of Military Glory, Cahul town.

- **CIADAR-LUNGA**
 - Museum of History and Ethnography, Ciadăr–Lunga city.

- **HÂNCEȘTI**
 - Museum of History and Ethnography, Hincest.

- **LEOVA**
 - Museum of History and Ethnography, Leova;
 - Museum of History and Ethnography, the village Tigheci.

- **RÎȘCANI**
 - Museum of History and Ethnography, the city Rîșcani
 - Branches: House- museum " L. Demian" CORLATENI village.

6. THE ENVIRONMENTAL PROTECTION OBJECTIVES, ESTABLISHED AT INTERNATIONAL, COMMUNITY OR MEMBER STATE LEVEL, WHICH ARE RELEVANT TO THE PROGRAMME AND THE WAY THOSE OBJECTIVES AND ANY ENVIRONMENTAL CONSIDERATIONS HAVE BEEN TAKEN INTO ACCOUNT DURING ITS DRAFTING

I. ROMANIA

The Partnership Agreement with Romania

The Partnership Agreement (PA) Romania - EU approved on August 6, 2014 provides the strategic framework for the necessary reforms and investment to be carried out in the 2014-2020 period. The PA is the main strategic document, covering needs and investments for FESI allocated to Romania, totalizing approximately 40 billion Euros.

The PA objectives are totally coherent and convergent with ENI CBC Thematic Objectives due to the fact that the documents are converging with the EU 2020 strategy. The main development issues in terms of environmental protection and resource efficiency are the following:

- Expanding public access to water services in the context of the Framework Directive, regarding the water and watershed management plans;
- Implementing and upgrading infrastructure for compliance with the requirements of the Directive on waste and Plans Waste Management and prevention programs and maintenance;
- Protection and nature conservation, including a coherent and functional network Natura 2000, support for high nature value farming systems and restoration of degraded ecosystems;
- Sustainable management of natural resources in Romania, including landscapes, farmland, forests, inland waters and coastal protected areas and biodiversity;
- Development and improvement of air quality assessment and monitoring;
- Improving urban sustainable transport and reducing pollution;
- Addressing the situation of abandoned and contaminated sites, and management of existing sources of pollution;
- Preservation and protection of cultural heritage;
- Reduce the risk of abandonment of farming activities;
- Development of public institutions through integrated management plan.

Based on the conclusions of the analyse on development difficulties and prevention of emergency situations the main development needs are:

- Improving Romania's ability to anticipate, prevent and respond to extreme natural or anthropogenic emergencies ;
- Improved adaptation and resilience of Romania to the negative consequences of climate change and, in particular, to the increased incidence of extreme heat events, drought, coastal erosion and flooding in line with the National Strategy on Climate Change;
- Improved adaptation and resilience resistance of Romania to other natural and anthropogenic risks;

- Adoption of farming practices to improve resilience to climate change; advisory service should accompany the adoption of measures at farms level;
- Enhancement of water efficiency in agriculture as to contribute to climate change adaptation.

National Reform Program for Romania (NRP)

This strategic document is setting the framework for the main priorities and reforms to be applied on short and medium term for Romania as to meet the objectives of the Europe 2020 Strategy. The NRP includes particular measures in various policy areas targeted to sustain growth and create jobs and meet the objectives of Europe 2020. Focused on the Romania's most urgent measures, the National Reform Program (NRP) is paying special attention to governance issues and macroeconomic stability. It is aiming to boost competitiveness, productivity and growth, social cohesion, territorial and economic convergence for reducing disparities in terms of economic development to other member states of the European Union.

Generally, ENI CBC Thematic Objectives are converging with NPR measures, with the exception of two of them, TO3 Promotion of local culture and preservation of historical heritage and TO10 Promotion of border management and border security, that are not essential to the NRP.

National Strategy on Climate Change 2013 ÷ 2020

Given the evolution of EU policy on climate change, the second NSCC 2013 ÷ 2020 was adopted by Government Decision no. 529/2013, foreseeing two action directions: *reducing greenhouse gas emissions and increasing carbon sequestration* through natural absorbent tanks; and *adaption to the negative effects* of climate inherent change on natural and anthropogenic systems.

The strategy overall objective is to integrate the obligations related to energy and climate legislative package underlying principles that will guide the development of action plans and programs at sectorial level, setting goals and targets to be achieved through future specific measures and actions at sectorial level.

NSCC highlights the two key components of the climate effort: the prevention and mitigation of climate change (through action to reduce emissions of greenhouse gases - GHG emissions) and the appropriate adaptation measures with minimal damage in the context of the climate change already underway.

GHG emission mitigation component identifies the economic sectors that require specific measures to reduce GHG emissions (energy, industrial processes, agriculture, land use, land use change, forestry, waste management). In addition, data on the GHG emissions contribution of each sector, general information on how human activity (productive processes or consumer / user) alongside with natural processes lead to these types of emissions are presented and key measures to reduce GHG emissions in each sector are proposed.

The objective of adaptation to climate change component is to increase the capacity to adapt to real or potential effects of climate change by establishing strategic directions that can guide sectorial policy development, action to be taken and capacity development needed to update them regularly. Actions supported by this component are:

- active monitoring of climate change impacts and associated social and economic vulnerability;
- integration of adaptation measures to climate change into development strategies and policies at sectorial level and the harmonization of these measures between them;
- identification of urgent adaptation measures to climate change in critical socio-economic sectors.

National adaptation to climate change component encourages the identification of measures, actions and solutions that must be implemented in accordance with existing national needs in line with available resources and research requirements in order to limit the negative effects of forecast climate scenarios in medium and long term. Measures, actions and solutions identified will be implemented through inter-institutional cooperation and by providing technical assistance.

NSCC provides guidance support on policies and measures to be taken using EU structural and investment funds of the future of financial year (2014 ÷ 2020).

NSCC will contribute to the sustainable use of natural resources; reduce emissions of greenhouse gases in our country and the protection of biodiversity and natural ecosystems.

The objectives included in NSCC in 2013 ÷ 2020 will contribute to the sustainable use of natural resources, to the reduction of Romania greenhouse gases emissions, to the protection of biodiversity and natural ecosystems and the long-term preservation of social welfare by creating new jobs in specific sectors.

National Strategy for Flood Risk Management on medium and long term

NSFRM on medium and long term (2010 ÷ 2035), developed under SEA procedure, has been approved by Government Decision no.846/2010 and its main objective is to prevent and reduce the consequences of floods on human life and health, socio-economic activities and the environment. The strategy foresees an integrated management of water and adjacent resources: planning and urban development, nature protection, agricultural and forestry development, protection of transport infrastructure, building and tourist areas, personal protection, etc.

National Strategy for Flood Risk Management objectives are the following:

- Social objectives: prevention and minimization flood risk on people and human communities, prevention and minimization flood risk on public/ community goods (hospitals, clinics, schools, etc.) and recreational areas, minimizing damage to health state due to the impact on population of the flooding phenomenon and pollution associated with it;
- Economic objectives: prevention and minimization of economic losses by reducing the flood risk in populated area, minimizing the risks on economic objectives and goods by providing flood protection for localities with the exceedance probability of 1% for urban areas and 10% for agricultural areas, differentiated on various scenarios time.
- Environmental objectives – the accomplish the European Water Framework Directive requirements, avoiding the influence of anthropogenic alteration on watershed geomorphology, preventing pollution of watercourses and

groundwater as a result of floods and their associated effects on the ecological quality of watercourses; protect and improve the land, and where possible encourage changes in agricultural practice to prevent or minimize leakage and flooding associated with it due to intensive agricultural activities; protection and preservation of historic monuments, protected areas and ecosystems; protecting and improving the environment and the specificity of its aesthetic appearance; minimize or prevent impacts of climate change on the occurrence of floods phenomenon.

In line with the NSFRM objectives the Plans for Prevention, Protection and Mitigation of floods effects (PPPM) were developed, as required by Directive 2007/60 / EC (Flooding) in order to reduce the risk of natural disasters (floods) affecting the population by implementing preventive measures in most vulnerable areas in the medium term (2020). PPPM will be completed in 2014 ÷ 2015 and will form the basis of schemes necessary to protect the population goods, property and cultural values against floods on each basin/catchment area. On this basis the Hydrographic Basin Development Plans and Flood Risk Management Plans will be developed.

Waste Management

In order to ensure an effective waste management one should consider all relevant legislative provisions as:

- Accession Treaty -section Environment - Romania's commitments for the waste sector for each county are detailed within the EU Directives Implementation Plans;
- SOP Environment - Priority Axis 2, Intervention area 1 - "Development of integrated waste management and waste management infrastructure expansion";
- National Waste Management Strategy (NWMS), approved by Government Decision no. 1470/2004, the basic tool that ensures implementation in Romania the EU waste policy. NWMS 's overall objective is to create the necessary framework for the development and implementation of an integrated waste management environmentally effective and economically feasible to protect human health and the environment.
- National Waste Management Plan (NWMP), Government Decision 1470/2004, constitute the implementing plan for the national strategy objectives through adequate actions and measures as to comply with the environmental acquis in the field of waste management;
- Regional Waste Management Plan (RWNM) for the Region 1 - North - East, approved by Order EWM no. 1364/1499/2006.

North-East Regional Development Plan 2014-2020

The strategy identified four key strategic priorities for the NE Region of Romania:

- Improving human capital;
- Development of modern infrastructure;
- Sustaining competitive economy and local development
- Optimizing the use and protection of natural resources.

Most of the strategy specific objectives are convergent with ENI CBC Thematic Objectives and their respective priorities.

South-East Regional Development Plan 2014-2020

The strategic document (currently in consultation process) identified ten development priorities for the SE Region as follow:

- Integrated sustainable urban development;
- Development of regional transport infrastructure;
- Improving the competitiveness of the regional economy, in the context of promoting smart specialization;
- Improving the quality of tourism at regional level;
- Conservation and protection of environment;
- Improving energy efficiency and using renewable resources;
- Improving quality in education, health and social inclusion;
- Recovery superior resources in rural areas and upgrading of the rural economy;
- Improving human resources at the regional level in the context of smart regional specialization;
- Promoting cross-border and interregional cooperation.

Even if these development priorities are formulated differently than the objectives of the CBC programmes, the measures included in the SE Regional Development Plan are strongly convergent with ENI CBC Thematic Objectives.

II. REPUBLIC of MOLDOVA

Strategy 2020

Moldova 2020 is the main strategic document and contains seven key development priorities:

- The alignment of the education system to labor market requirements in order to increase labor productivity and employment growth in the economy;
- Increase public investment in infrastructure and local roads;
- Reducing financing costs by increasing competition in the financial sector and developing risk management tools;
- Improve the business climate, promoting competition policy, streamlining the regulatory framework and applying information technologies in public services for businesses and citizens;
- Reducing energy consumption by increasing energy efficiency and use of renewable energy sources;
- Ensuring financial sustainability of the retirement system;
- Increase the quality and efficiency of the judiciary and fighting corruption.

The priorities are partially converging with the strategic thematic objectives of ENI CBC. Given the focus of prioritization mechanism in place for this document, the strategy and the key policy areas that have a direct impact include economic development, education, governance and energy.

National Regional Development Strategy

National Regional Development Strategy sets out ways to achieve overall strategic objective of a balanced and sustainable development in all regions of Republic of Moldova, focusing on the following specific objectives:

- Improving the legal and regulatory framework on regional development;
- Support for sustainable development of the regions and ensure a polycentric urban system;
- Capacity building for regional development in regions of the country;
- Reducing the local and intra – regional disparities;
- Establishing territorial cohesion to prevent marginalization of disadvantaged areas;
- Development and promotion of participatory integrated planning and regional development process.

The main areas of intervention are the same as the ENI CBC objectives, particularly in terms of water / wastewater, solid waste management and energy efficiency, roads, supporting entrepreneurship, tourism and rural development.

Environment Strategy for 2014 ÷ 2020

The Environmental Strategy for 2014 ÷ 2020 of Republic of Moldova was approved by Government Decision no. 301/2014.

Like other countries in the region, Republic of Moldova is facing many significant challenges in the environmental field. Insufficient solid waste management cause pollution of soil, air and water; inadequate management of forests and irrational agricultural practices causes soil degradation and biodiversity loss; small rivers, wells are heavily polluted due to agricultural activities, water treatment infrastructure is outdated, there are illegal storages of waste and manure; industrial activities and the large number of old cars cause air pollution in urban areas, and the lack of renewable energy and energy insecurity contributes to climate change.

The development of the environmental strategy was dictated by the political vector of European integration of the country, the current requirements being that of aligning the national legislation to the EU directives and ensuring sustainable development of the country by promoting the green economy.

The European integration process is a challenge to the environmental sector and includes two major directions: harmonization of national environmental legislation with the communitarian acquis in the sector and institutional reform, which involves developing an institutional mechanism able to implement the new legislative framework adopted. The environmental strategy for the years 2014 ÷ 2023 aimed at exactly these challenges and tends to be the key strategic planning document for the actions that has to be implemented in the next decade.

Specific objectives of the Environment Strategy are as follows:

- ensuring conditions of good governance and institutional potential efficiency and environmental management to achieve environmental objectives;
- integrate the principles of environmental protection, sustainable development and green economic development, adaptation to climate change in all sectors of national economy;
- improve knowledge on environmental protection among pupils, students and employees with at least 50% by 2023 and ensuring access to environmental information;
- reducing the negative impact of economic activity on the environment and improving measures to prevent environmental pollution;
- creating integrated monitoring system and quality control environment;
- ensure rational use, protection and conservation of natural resources by:
 - improving the quality of at least 50% of surface waters and implementation of watershed management;
 - a provision of access, by 2023, around 80% of the population to access secure systems and services for water supply and 65% to sewerage systems and services;
 - an improvement of soil quality and ecological restoration of degraded lands affected by landslides and farmland protection strips of 100%;
 - a sustainable management and protection of useful mineral resources;
 - an expansion of forests up to 15% of the country and state protected areas to 8% of the territory, and ensure efficient and sustainable management of natural ecosystems;
- creating integrated management system for air quality, reducing emissions of pollutants into the atmosphere by 30% by 2023 and greenhouse gas emissions by at least 20% by 2020 compared to the baseline scenario;
- creation of integrated waste management and chemicals, which help to reduce by 30% the amount of waste and increasing the recycling rate by 20% show until 2023.

III. EUROPEAN UNION

Europe 2020

Europe 2020 is the EU's ten-year growth and jobs strategy launched in 2010. It aims to create within the EU the conditions for economic growth:

- Smart, through more effective investments in education, research and innovation;
- Sustainable, thanks to a decisive move towards a low-carbon economy;
- Inclusive, with a strong emphasis on job creation and poverty reduction.

The EU 2020 targets are focused on:

- Employment;
- Research and Development:

- Climate change and energy sustainability;
- Education,
- Fighting poverty and social exclusion.

Danube Strategy

In 2011 the European Council, at Romania and Austria proposal, adopted a macro-regional strategy to boost development of the Danube basin region. The strategy aims to create synergies and coordination between policies and initiatives taking place in the Danube basin region, including in 14 countries, including Romania and Moldova.

The strategy is based on four major pillar:

- A. Connecting the Danube region;
- B. Protect the environment in the Danube region;
- C. Improve prosperity in the Danube region;
- D. Strengthening the Danube region.

Each pillar of the strategy corresponds to specific areas of action, grouped into 11 priority areas, each priority area is coordinated by 2 states / provinces in the region, namely:

A. Connecting the Danube Region

- Improving mobility and multimodality:
 - a. inland waterways; (Austria and Romania);
 - b. road, rail and air; (Slovenia and Serbia);
- Promote sustainable energy; (Hungary and Czech Republic);
- Promote culture and tourism, people to people contacts; (Romania and Bulgaria).

B. Protecting the environment in the Danube region

- restore and maintain water quality; (Hungary and Slovakia);
- manage environmental risks; (Hungary and Romania);
- preserve biodiversity, landscapes and air and soil quality (Bavaria and Croatia).

C. Building prosperity in the Danube region

- Develop the knowledge society through research, education and information technologies (Serbia and Slovakia);
- support the competitiveness of enterprises, including cluster development (Baden Württemberg Croatia);
- Investing in people and skills (Austria and Moldova).

D. Strengthening the Danube Region

- Improving institutional capacity and cooperation (Austria and Slovenia).

Work together to promote security and tackle organized crime and serious crime issues (Bavaria and Bulgaria). Most of ENI CBC's strategic thematic objectives, excluding social inclusion and local government are well represented in this strategy. Among the priority axes related also to matters / activities of the CBC Programme shall include:

- Connectivity (intermodal transport, culture and tourism, energy networks);

- Environmental protection (water management, biodiversity protection and risk management);
- Increasing prosperity of the Danube region (education, research, competitiveness);
- Improvement of governance (institutional capacity and internal security).

Given the cross-country and regional dimension of the Danube Strategy is needed an integrated approach to border Cooperation Programme to support joint complementary measures.

Eastern Partnership

Representing the Eastern dimension of the European Neighbourhood Policy, this initiative was launched at the Prague Summit in 2009 and was reaffirmed in 2011 and subsequently in 2013. It aims to deepen and strengthen relations between the European Union and its six Eastern neighbours, Armenia, Azerbaijan, Belarus, Georgia, Republic of Moldova and Ukraine.

The EaP is focused on several Flagship Initiatives as follows:

- Integrated Border Management Programme;
- Small and Medium-size Enterprise (SME);
- Regional energy markets and energy efficiency;
- Diversification of energy supply;
- Prevention of, preparedness for and response to natural and man-made disasters;
- Environmental protection.

The implementation of the Programme Romania-Republic of Moldova thematic objectives should take into consideration the EU Directives, Decisions and Regulations on air quality, surface water and groundwater, soil and subsoil, climate change, health, biodiversity, conservation, resource efficiency or the national legislation in force (Romania or Republic of Moldova) if this is less restrictive.

The development of the program indicative actions will consider the measures necessary to fulfil the United Nations Framework Convention on Climate Change and the Kyoto Protocol. It also will take into account any other national or European policy or strategy on adaptation and mitigation of climate change.

The projects promoted through the Programme indicative activities will be in line with the legal framework and provisions of the Romania-Republic of Moldova bilateral water management, namely the *Agreement between the Government of Romania and the Government of Republic of Moldova on cooperation for protection and sustainable use Prut and Danube waters*, signed on 28 June 2010 in Chisinau.

7. THE LIKELY SIGNIFICANT EFFECTS ON THE ENVIRONMENT, INCLUDING ON ISSUES SUCH AS BIODIVERSITY, POPULATION, HUMANHEALTH, FAUNA, FLORA, SOIL, WATER, AIR, CLIMATIC FACTORS, MATERIAL ASSETS, CULTURAL HERITAGE INCLUDING ARCHITECTURAL AND ARCHAEOLOGICAL HERITAGE, LANDSCAPE AND THE INTERRELATIONSHIP BETWEEN THE ABOVE FACTORS

TO2 - SUPPORT TO EDUCATION, RESEARCH, DEVELOPMENT & INNOVATION

Objective 1: *Develop competencies and support research, development and innovation by facilitating the cooperation at local, regional and central level*

Priority 1.1 – Institutional cooperation in the educational field for increasing access to education and quality of education

No.	Indicative activities	Environmental aspects and objective considered	Potential impact
1.	Joint planning and joint development of educational plans, policies and strategies	Is not the case	Indirectly
2.	Exchanges of experience, teacher exchanges, transfer of good practices, development of joint training centres for increasing the effectiveness of education through the diversification of professional training programs for employees in the education system in areas such as		
	- School development, school management, developing the relation between schools and communities	Is not the case	Indirectly
	- Developing and applying innovative educational methods, for increasing teaching skills to facilitate and motivate students to perform	Is not the case	Indirectly
3.	Developing joint/ common programs of entrepreneurship education, programs that stimulate creativity, innovation and active citizenship	Is not the case	Indirectly
4.	Improving the educational quality and participation through rehabilitation/modernization/ extension/ endowment of infrastructure of the educational infrastructure and equipment procurement;	Resource efficiency Waste management	Positive Low energy consumption, raw materials, hazardous substances Recovery/ waste disposal
5.	Development and implementation of partnerships between educational institutions to:		
	- Prevent and correct early school leaving phenomenon through integrated programs (including awareness campaigns) for prevention of school dropout, encourage school attendance and reintegration of those who have left school early	Is not the case	Indirect
	Develop after school programs and extra-curricular activities	Is not the case	Indirectly
6.	Development and implementation of joint actions in support of disadvantaged groups, e.g.:		
	Integrated support actions addressing children and youth with parents living abroad (which may include inter alia guidance, counselling, after school programs, educational and cultural activities);	Is not the case	Indirectly
	Support actions meant to facilitate the social and work integration of children and youth and integration of adults with disabilities	Is not the case	Indirectly
7.	Support for youth (including educational campaigns) for the prevention of drug use, human trafficking, alcohol abuse, etc	Is not the case	Indirectly
8.	Development and implementation of cross programmes and actions for enhancing/ improving/ facilitation of job qualifications and competencies	Is not the case	Indirectly

Priority 1.2 – Promotion and support to research, development and innovation

No.	Indicative activities	Environmental aspects and objective considered	Potential impact
1.	Development of partnerships/networking between universities and research centres for the purpose of creating a favourable environment for know-how transfer and business.	Is not the case	Indirectly
2.	Dissemination, cooperation and networking between programmes and organizations from the two states acting in the field of research and innovation	Is not the case	Indirectly
3.	Joint research actions and studies including those in the field of environment (climate change challenges, preservation of biodiversity, renewable energy and resource efficiency etc.).	Is not the case	Indirectly
4.	Promotion and support for research and innovation through rehabilitation/ modernization/extension of the specific infrastructure including the procurement of related equipment.	Efficient use of the resources	Positive Reduced consumption of power raw material, hazardous substances
5.	Exchange of experience and best practices among relevant authorities on cluster development and establishment.	Is not the case	Indirectly

TO3 - PROMOTION OF THE LOCAL CULTURE AND PRESERVATION OF HISTORICAL HERITAGE

Objective 2: *Preservation of the cultural and historical heritage in the eligible area, support the developing of local culture, specific cultural identities and the cultural dialog*

Priority 2.1 – Preservation and promotion of the cultural and historical heritage

No.	Indicative activities	Environmental aspects and objective considered	Potential impact
1.	Construction, extension, instalment, restoration, conservation, consolidation, protection, security of cultural and historical monuments, archaeological sites (including the corresponding access roads), museums, objects and art collections and their promotion based on relevant cross-border strategies/concepts;	Cultural heritage Biodiversity	Positive The technologies should have a minimum impact
2.	Preservation, security, and joint valorisation of cultural and historical monuments and objects	Cultural heritage Biodiversity	Positive
3.	Cultural institutions networks aiming at the promotion of the cultural and historical heritage	Is not the case	Indirectly
4.	Support for specific and traditional craftsman activities, important for preserving local culture and identity	Is not the case	Indirectly
5.	Promotion of specific and traditional activities in the eligible area (including cross border cultural events)	Is not the case	Indirectly
6.	Preserving, promoting and developing the cultural and historical heritage, mainly through cultural events with a	Is not the case	Indirectly

	cross-border dimension		
7.	Valorisation of the historical and cultural heritage through developing joint promotion strategies, common tourism products and services	Is not the case	Indirectly

TO7 - IMPROVEMENT OF ACCESSIBILITY TO THE REGIONS, DEVELOPMENT OF TRANSPORT AND NETWORKS AND COMMUNICATION SYSTEMS

Objective 3: *Improve public transport services, infrastructure and ITC cooperation and networking*

Priority 3.1 – Development of cross border transport and ITC infrastructure

No.	Indicative activities	Environmental aspects and objective considered	Potential impact
1.	Construction, rehabilitation, modernization of cross-border transport infrastructure systems	Air Water Soil Climate Change Biodiversity	Positive
2.	Development of environmentally friendly (carbon-proofed) cross-border transport initiatives and innovative solutions	Air Climate Change Soil Waste Management Biodiversity	Positive
3.	Improvements of multimode transport (road/water) facilities of cross-border interest	Air Water Soil Climate Change Biodiversity	Positive
4.	Construction, rehabilitation, widening of cross-border (segments of) roads connecting settlements alongside the border with main road which leads to the border;	Air Water Soil Climate Change Waste Management Biodiversity	Positive
5.	Improvement/restoration/construction of (segments of) access roads to centres of cross-border interest	Air Water Soil Climate Change Biodiversity	Positive
6.	Elaboration of joint strategies/policies/plans for improving the cross-border transport infrastructure	Is not the case	Indirectly
7.	Joint investments in ITC infrastructure with cross-border impact (for example fibre link services)	Is not the case	Indirectly
8.	Development of cross-border connections, information and integrated communications networks and services;	Is not the case	Indirectly
9.	Upgrading existing facilities to enable linkages between communities and public services which promote co-operation on a cross-border and wider international basis;	Is not the case	Indirectly

TO8 - COMMON CHALLENGES IN THE FIELD OF SAFETY AND SECURITY

Objective 4: Addressing common challenges in concerning the access to health, management of natural and anthropic risks and emergency situations, cross-border security through joint projects

Priority 4.1 - Support to the development of health services and access to health

No.	Indicative activities	Environmental aspects and objective considered	Potential impact
1.	Joint planning and joint development of plans, policies and strategies for public health and social care	Is not the case	Indirectly
2.	Joint activities meant to enhance the access to health in the border area through construction / rehabilitation / modernization of infrastructure of public health services (including through the use of renewable energy etc.);	Air Water Soil Waste Management Population and public health	Positive
3.	Developing labs and mobile labs for the prevention / detection / monitoring of diseases, accidents, incidents and border epidemics.	Population and public health	Positive
4.	Equipping specific public medical service infrastructure (outpatient, emergency room facilities, medical centers, integrated social intervention, etc.)	Population and public health	Positive
5.	Joint training programs and exchange of experience, networking for supporting the functioning of the specific public medical services, telemedicine	Is not the case	Indirectly
6.	Exchange of experience, joint activities in order to ensure compatibility of the treatment guidelines	Is not the case	Indirectly
7.	Awareness campaigns concerning public education on health, diseases and prevention of epidemics	Is not the case	Indirectly

Priority 4.2 – Support to joint activities for the prevention of natural and man-made disasters as well as joint actions during emergency situations

No.	Indicative activities	Environmental aspects and objective considered	Potential impact
1.	Measures for preventing land slide and flooding	Soil Water Waste Management Biodiversity	Positive
2.	Joint integrated systems/ structures for efficient monitoring and disaster prevention and for the mitigation of consequences;	Soil Water Biodiversity	Positive
3.	Common strategies and tools for hazard management and risk prevention including joint action plans;	Is not the case	Indirectly
4.	Elaborating of joint detailed maps and databases (indicating natural and technological risks, and land use for regional planning authorities, environmental agencies and emergency services)	Soil Water Biodiversity	Positive
5.	Exchanging experience and knowledge, including raising awareness in the field of efficient risk prevention and	Is not the case	Indirectly

	management in the cross-border area		
6.	Development of integrated and common standards for the urban planning and risk management;	Is not the case	Indirectly
7.	Investments and development of common, integrated, emergency management systems	Is not the case	Indirectly
8.	Planning coordinated actions of the authorities in emergency situations caused by natural and man-made disasters	Is not the case	Indirect
9.	Investment in construction, renovation or upgrading of the infrastructure and equipment directly related to the monitoring and intervention in emergency situations.	Air Water Soil Climate Change Waste Management	Positive

Priority 4.3 Prevention and fight against organised crime and police cooperation

No.	Indicative activities	Environmental aspects and objective considered	Potential impact
1.	Common actions for increasing mobility and administrative capacity of police units (including border police)	Is not the case	Indirectly
2.	Creating collaborative work platforms in order to increase the efficiency of police, border police and custom structures in the exchange of data and information;	Is not the case	Indirectly
3.	Joint training of police, border police and custom personnel, exchange of best practices on specific areas of activity (analysis, criminal investigation, organized crime);	Is not the case	Indirectly
4.	Investment in construction, renovation or upgrading of police and border crossing infrastructure and related buildings	Air Water Soil Waste Management	Positive
5.	Investments in operating equipment and facilities specific for the activity of police/customs/border police/gendarmerie (e.g. laboratories, equipment, detection tools, hardware and software, means of transport)	Air	Positive
6.	Developing common policies and strategies including awareness campaigns, experience exchange for fighting organized crime.	Is not the case	Indirectly

LARGE INFRASTRUCTURE PROJECTS

No.	Indicative activities	Environmental aspects and objective considered	Potential impact
1.	Communication infrastructure	Soil Waste Management	Positive
2.	Regional Cooperation for Preventing and Combating Cross-border Crimes between Romania and Republic of Moldova	Soil Waste Management	Positive
3.	A safer Romanian – Moldavian cross border area infrastructure through the improvement of the operating infrastructure of the Mobile Emergency Service for Resuscitation and Extrication	Air Waste Management	Positive

	(SMURD)		
4.	Rehabilitation of the facilities from hydro node - Stânca-Costești Phase I	Air Water Soil Climate Change Waste Management	Positive
5.	Rehabilitation and modernization of customs offices from the border of Romania and Republic of Moldova (customs offices Albița – Leuseni, Sculeni - Sculeni and Giurgiulești – Giurgiulești)	Air Water Soil Waste Management	Positive

The resulted effects on the environment of the each indicative activities corresponding to the thematic objectives priorities of the Programme Ro-Md will be identified and estimated. In this evaluation all the national, European and international relevant environmental objectives and policies are taken into consideration.

The impact of the eligible activities financed by the Program is analysed for each of the following relevant aspects that characterised the environment:

- Air;
- Surface and underground waters;
- Soil and subsoil and landscape;
- Climate changes;
- Population and human health;
- Biodiversity, flora and fauna;
- Waste management;
- Cultural heritage;
- Resources efficiency, including renewable sources

Environmental assessment is performed using a scoring system shown in Table 7.1, which estimates that are indicative efectele shares over every aspect of the environment, taking into account the overall environmental impact.

Table 7.1 Scoring approach to environmental assessment

Symbol	Semnification	Definition
++	Significant Positive Impact	Highly positive benefit for the environment which is of considerable importance in terms of its overall policy implication
+	Positive Impact	Positive effect on the environment which is not considered to be significant
0	Neutral	No effect envisaged
-	Negative Impact	Negative impact on the environment which is not considered to be significant
--	Significant Negative Impact	Highly adverse impacts on aspects of the environment which seriously demand to be addressed through revision of current stated policy

?	Uncertainty	Effect could not be determined due to lack of data or information
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The assessment methodology was achieved by estimating the environmental impact of every aspect that was highlighted in Table no. 7.2. At this level of detail in the program was used a comprehensive methodology which attempted to highlight the possible effects of indicative actions on environmental issues. Applying accuracy of the methodology depends very much on projects that will be funded.

Table no. 7.2 presents the impact of the indicative action on each relevant environmental aspect. This approach show how the environmental aspects can be influenced by the future projects that will be financed by the indicative activities.

Assesment of the Programme Thematic Objectives on Environmental Factors	Air	Water	Soil,subsol and landscape	Climate Change	Population, Human Health	Biodiversity, Flora and Fauna	Waste Management	Cultural Heritage	Resource efficiency
1	2	3	4	5	6	7	8	9	10
TO2 - SUPPORT TO EDUCATION, RESEARCH, DEVELOPMENT & INNOVATION									
<i>Objective 1: Develop competencies and support research, development and innovation by facilitating the cooperation at local, regional and central level</i>									
Priority 1.1 – Institutional cooperation in the educational field for increasing access to education and quality of education									
Joint planning and joint development of educational plans, policies and strategie	0	0	0	0	0	0	0	0	0
Exchanges of experience, teacher exchanges, transfer of good practices, development of joint training centres for increasing the effectiveness of education through the diversification of professional training programs for employees in the education system in areas such as: <ul style="list-style-type: none"> ◦ school development, school management, developing the relation between schools and communities; ◦ developing and applying innovative educational methods, for increasing teaching skills to facilitate and motivate students to perform. 	0	0	0	0	0	0	0	0	0
Developing joint/ common programs of entrepreneurship education, programs that stimulate creativity, innovation and active citizenship	0	0	0	0	0	0	0	0	0
Improving the educational quality and participation through rehabilitation/modernization/ extension/ endowment of infrastructure of the educational infrastructure and equipment procurement	?	+	?	0	0	0	-	0	+
Development and implementation of partnerships between educational institutions to: <ul style="list-style-type: none"> ◦ prevent and correct early school leaving phenomenon through integrated programs (including awareness campaigns) for prevention of school dropout, encourage school attendance and reintegration of those who have left school early; ◦ developing after school programs and extra-curricular activities. 	0	0	0	0	0	0	0	0	0

Development and implementation of joint actions in support of disadvantaged groups, e.g.: <ul style="list-style-type: none"> Integrated support actions addressing children and youth with parents living abroad (which may include inter alia guidance, counselling, after school programmes, educational and cultural activities); Support⁴ actions meant to facilitate the social and work integration of people (children, youth and adults) with disabilities 	0	0	0	0	0	0	0	0	0
Support for youth (including educational campaigns) for the prevention of drug use, human trafficking, alcohol abuse, etc	0	0	0	0	0	0	0	0	0
Development and implementation of cross programmes and actions for enhancing/ improving/ facilitation of job qualifications and competencies	0	0	0	0	0	0	0	0	0
Priority 1.2 – Promotion and support to research, development and innovation									
Development of partnerships/networking between universities and research centres for the purpose of creating a favourable environment for know-how transfer and business	0	0	0	0	0	0	0	0	0
Dissemination, cooperation and networking between programmes and organizations from the two states acting in the field of research and innovation	?	?	?	0	0	0	-	0	+
Joint research actions and studies including those in the field of environment (climate change challenges, preservation of biodiversity, renewable energy and resource efficiency etc.)	+	+	+	++	+	++	+	0	0
Promotion and support for research and innovation through rehabilitation/modernization/extension of the specific infrastructure including the procurement of related equipment	0	0	0	0	0	0	0	0	0
Exchange of experience and best practices among relevant authorities on cluster development and establishment	0	0	0	0	0	0	0	0	0
TO3 - PROMOTION OF THE LOCAL CULTURE AND PRESERVATION OF HISTORICAL HERITAGE									
<i>Objective 2: Preservation of the cultural and historical heritage in the eligible area, support the developing of local culture, specific cultural identities and the cultural dialog</i>									
Priority 2.1 – Preservation and promotion of the cultural and historical heritage									
Construction, extension, instalment, restoration, conservation, consolidation, protection, security of cultural and historical monuments, archaeological sites (including the corresponding access roads), museums, objects and art collections and their promotion based on relevant cross-border strategies/concepts	-	-	-	0	0	?	?	++	0

⁴ Only activities that do not provide an economical advantage for the beneficiary will be supported

Priority 4.3 Prevention and fight against organised crime and police cooperation									
Common actions for increasing mobility and administrative capacity of police units (including border police)	0	0	0	0	0	0	0	0	0
Creating collaborative work platforms in order to increase the efficiency of police, border police and custom structures in the exchange of data and information	0	0	0	0	0	0	0	0	0
Joint training of police, border police and custom personnel, exchange of best practices on specific areas of activity (analysis, criminal investigation, organized crime)	0	0	0	0	0	0	0	0	0
Investment in construction, renovation or upgrading of police and border crossing infrastructure and related buildings	+	+	+	0	0	0	-	0	+
Investments in operating equipment and facilities specific for the activity of police/customs/border police/gendarmerie (e.g. laboratories, equipment, detection tools, hardware and software, means of transport)	+	+	+	+	+	0	-	0	+
Developing common policies and strategies including awareness campaigns, experience exchange for fighting organized crime	0	0	0	0	0	0	0	0	0
LARGE INFRASTRUCTURE PROJECTS									
Communication infrastructure	+	+	+	+	0	0	+	0	0
Regional Cooperation for Preventing and Combating Cross-border Crimes between Romania and Republic of Moldova	0	0	0	+	+	0	0	0	0
A safer Romanian –R. Moldavian cross border area infrastructure through the improvement of the operating infrastructure of the Mobile Emergency Service for Resuscitation and Extrication (SMURD)	0	0	0	+	+	0	0	0	0
Rehabilitation of the facilities from hydro node - Stâncă-Costești Phase I	+	+	+	0	0	0	+	0	0
Rehabilitation and modernization of customs offices from the border of Romania and Republic of Moldova (customs offices Albița – Leuseni, Sculeni - Sculeni and Giurgiulesti – Giurgiulești)	0	++	++	0	+	++	++	0	0

8. THE MEASURES ENVISAGED TO PREVENT, REDUCE AND AS FULLY AS POSSIBLE OFFSET ANY SIGNIFICANT ADVERSE EFFECTS ON THE ENVIRONMENT OF IMPLEMENTING THE PLAN OR PROGRAMME⁵

Environmental impact assessment of indicative activities under the four thematic objectives of the Programme Ro-Md performed in chapter 7 of this Environmental Report revealed that most of them have an indirect effect, having a neutral impact as the activities of cooperation and support between the two partner states are mostly conceptual and refer to:

- Education, research, technological development and innovation;
- Preservation of cultural and historical heritage;
- Strategies for improving cross-border transport infrastructure;
- Development of health and access to health;
- Strategies to prevent and manage natural and man made disasters;
- Prevention and fight against organized crime and police cooperation.

Given that the effects on the environment of future projects funded by the indicative actions of the four thematic objectives and the five large infrastructure projects should be reduced as far as possible the following actions are recommended:

- Reduce the electricity and / or heat consumption;
- Reduce fuel, raw materials and hazardous substances consumption;
- Use of high energy performance equipments;
- Choose adequate technologies for restoration/ preservation and respect them accurately so that the solutions chosen do not affect species of flora, fauna and aquatic ecosystems in the area;
- Valorification of cultural/ historical heritage should take into account the fact that it should not affect flora and fauna and aquatic ecosystems in the area;
- Preservation and conservation of protected species and habitats
- Minimize production of waste both during construction and functioning.
- Ensure collection/ sorting/ recycling/recovery of the waste resulted;
- Choice of technologies for construction/ rehabilitation/ widening roads with reduced emissions of particulate matter;
- Solutions for infrastructure construction so as to avoid contamination of soil and water by liquid fuel or other materials during construction period;
- Choice of routes for new roads or access parts so as to not affect flora and fauna species and aquatic ecosystems;
- Choice of low emission transportation solutions.

⁵ All measures of prevention and reduction of any possible adverse impact will be realized in compliance with specific environmental legislation as well as with relevant legislation related to the use of EU funds, including, but not limited to, those regarding sustainable development and public procurement.

For the implementation of the thematic objectives of the Programme Romania-Republic of Moldova the relevant Directives, Decisions and EU Regulations regarding air quality, surface and phreatic waters, soil and subsoil, climatic change, waste management, population health, biodiversity, cultural heritage preservation, efficient use of resources and/or of the national legislation (Romania/Republic of Moldova) if those are more restrictive will be taken into account.

Investment projects that will be financed within the indicative activities of the programme should consider the following measures recommended for the reduction of the impact on the environment:

- Obtaining the agreements/permits/statements/authorisations necessary for the construction and functioning, according to the national legislation in force, from the relevant authorities;
- In the case of projects relating to water resources, obtaining the relevant agreements according to national legislation in force (for Romania - agreement from the National Administration of Romanian Waters, or of the relevant Basin Administration from the area of the projects) and in the case of cross border waters also from the authorities in Romania/Republic of Moldova (in accordance with the *Agreement between the Government of Romania and the Government of Republic of Moldova on cooperation for protection and sustainable use Prut and Danube waters*, signed on 20 June 2010 in Chisinau);
- Obligation of conducting the biodiversity assessment of the potential effects on the natural protected areas of community interest for the projects that take place in natural protected areas, in accordance with national legal provisions in force which implement art 6.3 from the Habitat Directive;
- The requirements of the Framework Convention of the United Nations regarding climatic change and of the Kyoto Protocol and of the european/national policies and strategies regarding adaptation and reduction of the effects of climate change;
- The principles and directions regarding waste management from NWMS, NWMP, RWMP.

For those indicative actions that are likely to have an impact on the environment the following measures to prevent and reduce any likely impact have been proposed:

Indicative activity from the Ro-Md Programme	Measure for prevention and reduced impact
TO2 - SUPPORT TO EDUCATION, RESEARCH, DEVELOPMENT & INNOVATION	
Objective 1: Develop competencies and support research, development and innovation by facilitating the cooperation at local, regional and central level	
<i>Priority 1.1 – Institutional cooperation in the educational field for increasing access to education and quality of education</i>	
Improving the educational quality and participation through rehabilitation/modernization/ extension/ endowment of infrastructure of the educational infrastructure and equipment procurement	<ul style="list-style-type: none"> - Reducing consumption of electricity and/heat - Reducing consumption of fuel, raw material, hazardous substances; - Energy efficient equipments;

	<ul style="list-style-type: none"> - Reducing the waste produced; - Assuring collection/ sorting/ recycling/ recovery of waste
<i>Priority 1.2 – Promotion and support to research, development and innovation</i>	
Promotion and support for research and innovation through rehabilitation/modernization/ extension of the specific infrastructure including the procurement of related equipment	<ul style="list-style-type: none"> - Reducing consumption of electricity and heat - Reducing consumption of fuel, raw material, hazardous substances; - Energy efficient equipments.
TO3 - PROMOTION OF THE LOCAL CULTURE AND PRESERVATION OF HISTORICAL HERITAGE	
Objective 2: Preservation of the cultural and historical heritage in the eligible area, support the developing of local culture, specific cultural identities and the cultural dialog	
<i>Priority 2.1 – Preservation and promotion of the cultural and historical heritage</i>	
Construction, extension, restoration, conservation of archaeological sites, consolidation, protection, security of cultural and historical monuments (including the corresponding access roads), museums, objects and art collections and their joint promotion based on relevant cross-border strategies/ concepts	<ul style="list-style-type: none"> - Accuracy in respecting restoration, conservation technologies; - Choosing solutions that do not affect species of flora, fauna and aquatic ecosystems in the area; - Preservation and conservation of the protected species and habitats.
Preservation, security, and joint valorisation of cultural and historical monuments and objects	<ul style="list-style-type: none"> - Choosing appropriate conservation technologies; - Choosing solutions that do not affect species of flora, fauna and aquatic ecosystems in the area; - Preservation and conservation of protected species and habitats
TO7 - IMPROVEMENT OF ACCESSIBILITY TO THE REGIONS, DEVELOPMENT OF TRANSPORT AND NETWORKS AND COMMUNICATION SYSTEMS	
Objective 3: Improve public transport services, infrastructure and ITC cooperation and networking	
<i>Priority 3.1 – Development of cross border transport infrastructure and ICT Infrastructure</i>	
Construction, rehabilitation, modernization of cross-border transport infrastructure systems	<ul style="list-style-type: none"> - Use of technologies with low emissions of particulate matter; - Solutions for infrastructure construction so as to avoid contamination of soil and water by liquid fuel or other materials during construction period; - Choice of routes for new roads or access parts so as to not affect flora and fauna species and aquatic ecosystems; - Preservation and conservation of protected species and habitats
Development of environmentally friendly (carbon-proofed) cross-border transport initiatives and innovative solutions	<ul style="list-style-type: none"> - Eco-friendly transport (electric, hydrogen, etc.) - Preservation and conservation of protected species and habitats
Improvements of multimode transport (road/water) facilities of cross-border interest	<ul style="list-style-type: none"> - Low emission transport solutions with minimal effect on soil, water, fauna and flora;

	<ul style="list-style-type: none"> - Preservation and conservation of protected species and habitats
Construction, rehabilitation, widening of cross-border (segments of) roads connecting settlements alongside the border with main road which leads to the border	<ul style="list-style-type: none"> - Use of technologies with low emissions of particulate matter; - Solutions for infrastructure construction so as to avoid contamination of soil and water by liquid fuel or other materials during construction period; - Choice of routes for new roads or access parts so as to not affect flora and fauna species and aquatic ecosystems - Choosing solutions that do not affect species of flora, fauna and aquatic ecosystems in the area; - Preservation and conservation of protected species and habitats
Improvement/restoration/construction of (segments of) access roads to centres of cross-border interest	<ul style="list-style-type: none"> - Use of technologies with low emissions of particulate matter; - Solutions for infrastructure construction so as to avoid contamination of soil and water by liquid fuel or other materials during construction period; - Choice of routes for new roads or access parts so as to not affect flora and fauna species and aquatic ecosystems - Preservation and conservation of protected species and habitats.
TO8 - COMMON CHALLENGES IN THE FIELD OF SAFETY AND SECURITY Objective 4: Addressing common challenges concerning the access to health, management of natural and anthropic risks and emergency situations, cross-border security through joint projects	
<i>Priority 4.1 - Support to the development of health services and access to health</i>	
Joint activities meant to enhance the access to health in the border area through construction / rehabilitation / modernization of infrastructure of public health services (including through the use of renewable energy etc.)	<ul style="list-style-type: none"> - Reducing consumption of electricity and heat; - Reduce fuel, raw materials and hazardous substances consumption; - Energy efficient equipments; - Reducing the waste produced; - Assuring the collection/ sorting/ recycling/ recovery of waste; - Preservation and conservation of protected species and habitats.
Developing labs and mobile labs for the prevention / detection / monitoring of diseases, accidents, incidents and border epidemics.	<ul style="list-style-type: none"> - Energy efficient equipments
Equipping specific public medical service infrastructure (outpatient, emergency room facilities, medical centers, integrated social intervention, etc.)	<ul style="list-style-type: none"> - Energy efficient equipments
<i>Priority 4.2 – Support to joint activities for the prevention of natural and man-made disasters as</i>	

<i>well as joint actions during emergency situations</i>	
Measures for preventing land slide and flooding	<ul style="list-style-type: none"> - Choosing green solutions, with minimal impact on the area; - Minimizing the waste; - Preservation and conservation of protected species and habitats and aquatic ecosystems.
Joint integrated systems/ structures for efficient monitoring and disaster prevention and for the mitigation of consequences	<ul style="list-style-type: none"> - Choosing green solutions, with minimal impact on the area; - Preservation and conservation of protected species and habitats and aquatic ecosystems.
Elaborating of joint detailed maps and databases (indicating natural and technological risks, and land use for regional planning authorities, environmental agencies and emergency services)	<ul style="list-style-type: none"> - Taking into account of the most advanced technologies appropriate to specific situations (aerospace, radar interferometry, etc.); - Preservation and conservation of protected species and habitats.
Investment in construction, renovation or upgrading of the infrastructure and equipment directly related to the monitoring and intervention in emergency situations.	<ul style="list-style-type: none"> - Reducing consumption of electricity and/or heat; - Reducing consumption of fuel, raw material, hazardous substances; - Energy efficient equipments; - Reducing the waste produced; - Assuring the collection/ sorting/ recycling/ recovery of waste;
<i>Priority 4.3 Prevention and fight against organised crime and police cooperation</i>	
Investment in construction, renovation or upgrading of police and border crossing infrastructure and related buildings	<ul style="list-style-type: none"> - Reducing consumption of electricity and/or heat; - Reducing consumption of fuel, raw material, hazardous substances; - Energy efficient equipments; - Reducing the waste produced; - Assuring the collection/ sorting/ recycling/ recovery of waste;
Investments in operating equipment and facilities specific for the activity of police/customs/border police/gendarmerie (e.g. laboratories, equipment, detection tools, hardware and software, means of transport)	<ul style="list-style-type: none"> - Reducing consumption of electricity and/or heat; - Reducing consumption of fuel, raw material, hazardous substances; - Energy efficient equipments.
Large Infrastructure Projects	
Communication infrastructure	<ul style="list-style-type: none"> - Solutions for infrastructure construction so as to avoid contamination of soil and water by liquid fuel or other materials during construction period; - Reducing the waste produced.
Regional Cooperation for Preventing and Combating Cross-border Crimes between Romania and Republic of Moldova	<ul style="list-style-type: none"> - Solutions for infrastructure construction so as to avoid contamination of soil and water by liquid fuel or other materials

	during construction period; - Reducing the waste produced.
A safer Romanian – Moldavian cross border area infrastructure through the improvement of the operating infrastructure of the Mobile Emergency Service for Resuscitation and Extrication (SMURD)	- Low emission transport with minimal effect on soil, water, fauna and flora; - Reducing the waste produced.
Rehabilitation of the facilities from hydro node - Stâncă-Costești Phase	- Choosing solutions that do not affect species of flora, fauna and aquatic ecosystems in the area
Rehabilitation and modernization of customs offices from the border of Romania and Republic of Moldova (customs offices Albița – Leuseni, Sculeni - Sculeni and Giurgiulești – Giurgiulești)	- Reducing consumption of electricity and/or heat; - Reducing consumption of fuel, raw material, hazardous substances; - Energy efficient equipments; - Reducing the waste produced; - Assuring the collection/ sorting/ recycling/ recovery of waste; - Preservation and conservation of protected species and habitats and aquatic ecosystems.

9. THE REASONS FOR SELECTING THE ALTERNATIVES DEALT WITH, AND A DESCRIPTION OF HOW THE ASSESSMENT WAS UNDERTAKEN INCLUDING ANY DIFFICULTIES (SUCH AS TECHNICAL DEFICIENCIES OR LACK OF KNOW-HOW) ENCOUNTERED IN COMPILING THE REQUIRED INFORMATION

9.1 Selection of the Programme Ro-Md alternatives

The alternatives analysed for the Joint Operational Programme Romania –Republic of Moldova for period 2014 ÷ 2020 are presented below:

Alternative 0: The Programme is not implemented;

Alternative 1: in order to achieve the three ENI strategic objectives the ten ENI thematic objectives were taken into consideration:

TO1. Business and SME development (Strategic objective: A);

TO 2. Support to education, research, development and innovation (Strategic objective: A);

TO 3. Promotion of local culture and preservation of historical heritage (Strategic objective: A);

TO 4. Promotion of social inclusion and fight against poverty (Strategic objectives: A, B, C);

TO 5. Support to local & regional good governance (Strategic objectives: A, B, C);

TO 6. Environmental protection, climate change adaptation (Strategic objective: B);

TO 7. Improvement of accessibility to the regions, development of transport and networks and communication systems (Strategic objective: C);

TO 8. Common challenges in the field of safety and security (Strategic objective: B);

TO 9. Promotion of energy cooperation (Strategic objective: B);

TO 10. Promotion of border management and border security, migration and mobility management (Strategic objective: C).

To select the most appropriate thematic objective specific for the Programme the following criteria were employed:

- Socio-economic and SWOT analyses;
- Preliminary consultations: interviews, focus groups, online survey;
- Coherence analysis and multi-criteria analysis;
- Public consultations on the first JOP draft.

The multi criteria analysis showed that the thematic objectives below are relevant for the Programme Ro-Md:

TO 2. Support to education, research, development and innovation (Strategic objective: A);

TO 3. Promotion of local culture and preservation of historical heritage (Strategic objective: A);

TO 7. Improvement of accessibility to the regions, development of transport and networks and communication systems (Strategic objective: C);

- TO 8. Common challenges in the field of safety and security (Strategic objective: B);
- TO 10. Promotion of border management and border security (Strategic objective: C).

JPC (Joint Programming Committee) approved during the meeting of October 2014, in Bucharest, the following four thematic objectives for Romania - Republic of Moldova Programme:

- TO2: Support to education, research, development and innovation (strategic objective: A);
- TO 3: Promotion of the local culture and preservation of historical heritage (strategic objective: A);
- TO 7: Improvement of accessibility to the regions, development of transport and networks and communication systems (strategic objective: C);
- TO 8: Common challenges in the field of safety and security (strategic objective: B)

According to article 41 of Regulation EU no. 897/2014 the JPC decided to finance a list of Large Infrastructure Projects (LIPs), too. To this purpose, a joint working group (JWG) was established to identify, select and prioritise the list of LIPs. The JWG was formed of central and regional authorities' representatives from each country for the following interest fields: energy, transport, environment, internal affairs (emergency situations/ cross-border police) and customs.

Alternative 1: The Programme Ro-Md consists of four thematic objective and a prioritised list of Large Infrastructure Projects:

TO2 - SUPPORT TO EDUCATION, RESEARCH, DEVELOPMENT AND INNOVATION

Objective 1: Develop competencies and support research, development and innovation by facilitating the cooperation at local, regional and central levels:

Priority 1.1 - Institutional cooperation in the educational field for increasing education and quality of education

Justification:

The education sector development is one of the areas strongly supported as a key area for intervention by the conclusions of analyses such as the territorial and SWOT analysis. Among the arguments for intervention within the programme area, one can outline the early school leaving identified as an alarming phenomenon; Moreover, a significant number of students leave the core eligible area to continue their studies in other parts of Romania or other EU member-states, impacting on the long run the socio-economic development of the region.

As the well-educated individuals represent one of the key resources for future economic development of the programme area, consistent investment in education will i) reduce the effect of the early school leaving ii) ensure proper retention of the student population is critical for medium-term development of the region.

The current capacities that the three major university centres (Iași, Galați, Chișinău and Bălți) possess may be utilized to their full potential to address the main issues outlined above and to ensure proper cooperation to increase the quality, attractiveness and accessibility of their education programs.

Also, the identified priority and the subsequent activities answer to the urgent needs of poor accessibility to educational infrastructure in rural areas.

In the same time, both i) the preliminary consultations organized in the preparatory phase of the program and ii) the analysis of the results of the calls for proposals and projects carried out in the framework of the JOP ROUAMD 2007-2013 indicated the strong interest of the potential beneficiaries in educational projects.

As a result, following the identified needs and the interest, the priority 1.1 was designed to support projects ensuring wide access (and more people to people activities) within the Programme, targeting a wide range of beneficiaries from central and local level.

Priority 1.2 - Promotion and support to research , development and innovation

Justification:

Innovations are commonly described as successful production, assimilation and exploitation of novelty in the economic and social spheres. The Programme vision is that research and innovations provides the needed support to a balanced and sustainable development of the eligible area and the preliminary consultations have shown a strong support from regional authorities for in favour of such activities.

However, the current status within the field unfolds a low level of investments in Research & Development combined with an underuse of R&D outputs within the industrial and technological activities. Furthermore, only 0.045% of employed population is hired in high added value activities as R&D, Innovation the ratio being one of the lowest in Europe.

Taking into consideration the above outlined arguments, the priority activities have been designed by taking into consideration the fact that Iași and Chișinău have a high potential for research and innovation, given their status of economic and educational hubs while Galați County has a specific potential in the industrial area (metal and shipbuilding industry). Galați could also be considered as a strategic point in terms of R&D needs and capacities (i.e. Galați Free Zone) of the eligible area, since it joins all communication channels on its territory (road, rail and sea).

TO 3 - PROMOTION OF THE LOCAL CULTURE AND PRESERVATION OF HISTORICAL HERITAGE

Objective 2: *Preservation of the cultural and historical heritage in the eligible area, support the developing of local culture, specific cultural identities and the cultural dialog*

Priority 2.1 – Preservation and promotion of the cultural and historical heritage

Justification:

The cultural infrastructure in the Programme area is for most part similar in density and distribution across the whole core eligible area. There are a total number of 1404

cultural institutions in the four Romanian counties, and 2974 cultural institutions in Moldova. These include museums, libraries, cinemas theatres and other cultural institutions.

It is important to highlight the fact that the two sub-national/national eligible areas share commonalities in terms of cultural heritage due to similar historic evolution. Nonetheless, despite the fact that there is a high concentration of natural and historical sites and natural protected areas, the eligible area registers a low level of investments in touristic and cultural facilities.

In this context, the priority encourages the beneficiaries to focus on cultural projects and to link their initiatives within the field with the purpose of ensuring wide access of citizens to an improved cultural infrastructure and protected historical heritage.

TO 7 - IMPROVEMENT OF ACCESSIBILITY TO THE REGIONS, DEVELOPMENT OF TRANSPORT AND NETWORKS AND COMMUNICATION SYSTEMS:

Objective 3: *Improve public transport services, infrastructure and ITC cooperation and networking*

Priority 3.1 - Development of cross border transport and ITC infrastructure

Justification:

Transport in the core eligible area is dominated by road and rail. However, regardless of the high density of transport networks, their viability is reduced by the poor quality and maintenance and by the lack of modernization projects and resources. This increases travel times significantly and impacts on the transport costs.

Technical differences in terms of rail transport between the two countries (i.e. use of different rail gauge) and limited multi-modal transport capabilities makes cross-border transportation more difficult. However, the Programme area presents a high potential for river transport development that should be acknowledged and acted upon. Furthermore, the people and business have low access levels to broadband internet and communications infrastructure, especially in the rural areas.

Taking into consideration the outlined arguments, the priority has been dedicated to improve the external and internal accessibility of Programme area. The priority highlights the improvement and the rehabilitation of transport system along with investments in information and communication technology (ITC). Also, the development of policies aimed at improving the transport infrastructure will be promoted. Attention is given to the good potential for strategic coordination between Romania and Republic of Moldova as regards the implementation of projects with high cross-border impact.

TO 8 - COMMON CHALLENGES IN THE FIELD OF SAFETY AND SECURITY

Objective 4: *Addressing common challenges in concerning the access to health, management of natural and anthropic risks and emergency situations, cross-border security through joint projects*

Priority 4.1 - Support to the development of health services and access to health;

Justification:

The accessibility to health infrastructure in the core eligible area is low and the old health infrastructure is predominant, especially in the rural area. The infrastructure capacity and number of physicians is below national averages whereas the life expectancy at birth across the Programme area is below international averages.

On the one hand, taking into consideration that the access and development of health services is a wide issue of common concern and on the other hand, the fact that the Programme area is exposed to a series of structural challenges the need for financing and implementing health initiatives becomes necessary. In this context, the priority will dedicate support to joint actions and emergency medicine initiatives in the field of public health. It is relevant to outline that the priority has a very good potential for cross-border impact due to the good capacities for project management already developed during the previous programming period 2007 ÷ 2013.

Priority 4.2 – Support to joint activities for the prevention of natural and man-made disasters as well as joint activities during emergency situations

Justification:

The Programme area presents a high risk of pollution through industrial accidents, especially along Prut River and the Danube area. Furthermore, there is a high risk of natural disasters as a result of the dense hydrographical network (for instance flooding, landslides) and due to the proximity of the seismic area of Vrancea in Romania (e.g. earthquakes)

The priority concentrates on several environmental issues by the means of a diversity of instruments such as prevention, training, monitoring and planning of joint coordinated actions with the aim of common intervention in emergency situations. In this framework is important to outline that the consultation with the Programme stakeholders have indicated a strong and clear interest toward the implementation of risk-prevention projects, with a special focus on the local public administration initiatives. Taking into consideration the potential for integrated projects and previous experiences, emphasis is given to investments in common emergency management system and structures. Attention is given strategies and tools for hazard management and risk prevention.

Priority 4.3 - Prevention and fight against organized crime and police cooperation

Justification:

In the field of prevention and fight against organized crime, Romania and Republic of Moldova enlist a series of common problems combined with the tendencies toward criminal phenomenon at the shared border. Further, the structures of police, border police and customs are underdeveloped and such, the potential risks are increased within the Programme with negative impact in the fight against human and drug trafficking, illegal smuggling of goods and border fraud. However, it is worth to mention that the two states have a good police cooperation experience and high capacities for implementing projects with cross-border impact.

In line with the identified problems, the priority intends to provide support for the intensification of dialogue between the specialized structures through the joint implementation of projects with clear cut impact within the field of fight against crime and police.

Large Infrastructure Projects:

- Communication infrastructure
- Regional Cooperation for Preventing and Combating Cross-border Crimes between Romania and Republic of Moldova
- A safer Romanian – Moldavian cross border area infrastructure through the improvement of the operating infrastructure of the Mobile Emergency Service for Resuscitation and Extrication (SMURD)
- Rehabilitation of the facilities from hydro node - Stâncă-Costești Phase I
- Rehabilitation and modernization of customs offices from the border of Romania and Republic of Moldova (customs offices Albița – Leuseni, Sculeni - Sculeni and Giurgiuilesti – Giurgiuilești)

The selection of alternative 1 of the Programme was done so as to ensure that the indicative activities will generate a minimum impact on biodiversity.

9.2 Difficulties

There weren't encountered any problems in drafting the Environmental Report for SEA regarding the Joint Operational *Programme "Romania – Republic of Moldova" 2014 ÷ 2020*.

10. DESCRIPTION OF THE MEASURES ENVISAGED CONCERNING MONITORING IN ACCORDANCE WITH ARTICLE 10

The Projects financed by the Programme Ro-Md will meet the European environmental legislation in force and the national legislation.

According to article 10 of SEA Directive, the monitoring of the significant environmental effects of Plans/Programmes has to be done in order to identify early any adverse effects and to be able to take the proper corrective measures.

The monitoring system proposed is based on the environmental issues that may be substantially affected by the implementation of the Programme Ro-Md.

For the monitoring of the Programme impact on the environment the following principles should be taken into consideration:

- Contribution to the reduced usage of raw materials or hazardous substances and renewable energy resources;
- Contribution to the development of green infrastructure, including management of protected areas;
- Contribution to sustainable mobility and multimodal transport;
- Contribution to an effective waste management, recycling and reuse;
- Contribution to risk prevention/natural disasters and climate change mitigation;
- Application of the principle of green public procurement.

The Programme environmental impact monitoring rated the degree to which the proposed programme indicators are suitable for monitoring environmental impact and recommendations have been made for their adaptation as specified in the table below:

Thematic objectives	Priority	Assessment indicators	Recommendations
TO2 - SUPPORT TO EDUCATION, RESEARCH, DEVELOPMENT & INNOVATION Objective 1: <i>Develop education and support research, development and innovation at the level of the Programme area by facilitating the cooperation at local, regional and central level</i>	P1.1 Institutional cooperation in the educational field for increasing access to education and quality of education	In order to see the effects on the environment of the proposed indicative actions it is necessary to include an additional indicator for the Programme " <i>Number of rehabilitated/modernized educational institutions</i> ". It can be determined without difficulty together with the proposed indicator for the Programme	Rehabilitation/modernization/extension/ equipment procurement for the educational infrastructure will fulfill all the environmental requirement and will be in line with best environmental practices like energy efficiency, waste management
	P1.2 Promotion and support to research, development and innovation	The proposed monitoring indicator for the Programme " <i>Number of institutions using programme support for cooperation in R&D and support of innovation</i> " can reflect also the impact on the environment"	Rehabilitation/modernization/extension/ equipment procurement for the research and innovation infrastructure will fulfill all the environmental requirement and will be in line with best environmental practices like energy efficiency, waste management
TO3 - PROMOTION OF	P 2.1 Preservation	The proposed monitoring indicator for the Programme	The technologies used for restoration, conservation and

<p>THE LOCAL CULTURE AND PRESERVATION OF HISTORICAL HERITAGE Objective 2: <i>Preservation of the cultural and historical heritage in the eligible area, support the developing of local culture, specific cultural identities and the cultural dialog contributing to an enhanced attractiveness of the eligible area</i></p>	<p>and promotion of the cultural and historical heritage</p>	<p><i>"Number of improved cultural and historical sites"</i> can reflect also the effects on cultural and historical heritage of the implementation of the projects financed under the indicative actions of this priority</p>	<p>consolidation of cultural and historical monuments should be chosen so that their impact on environmental aspects to be minimized. Choosing and applying the proper restoration, conservation and consolidation technologies so as to avoid the impact on flora and fauna species and on aquatic ecosystems in the eligible area For ensuring security and valorization of monuments and cultural and historical objects energy efficient solutions should be taken into account and also the use of an integrated waste management if the case</p>
<p>TO7 - IMPROVEMENT OF ACCESSIBILITY TO THE REGIONS, DEVELOPMENT OF TRANSPORT AND NETWORKS AND COMMUNICATION SYSTEMS Objective 3: <i>Improve public transport services, infrastructure and ITC cooperation and networking</i></p>	<p>P 3.1 Development of cross border transport infrastructure and ICT Infrastructure</p>	<p>Monitoring priorities effects revealed the need for an additional indicator for the program: <i>"Number of environmentally friendly (carbon-proofed) cross-border transport initiatives developed "</i> that clearly reflect how indicative activities will support reducing the environmental impact of transport. The second indicator proposed by the Programme, namely <i>"Total length of reconstructed or upgraded roads "</i> can also reflect the positive impact on the environment of the implementation of such indicative actions</p>	<p>Construction, rehabilitation, modernization, enhancement of cross-border transport infrastructure will have to undergo the EIA / SEA procedure (where required by the legislation) and where appropriate through a proper evaluation to see the impact on the Natura 2000 network. Transboundary consultations under the Espoo Convention should be considered when transboundary impacts occur. Choosing construction/ rehabilitation/ widening roads technologies with low emissions of particulate matter , avoiding contamination of soil and water by liquid fuel or other construction materials during execution period. Choosing routes that do not affect species of flora, fauna and aquatic ecosystems</p>
<p>TO8 - COMMON CHALLENGES IN THE FIELD OF SAFETY AND SECURITY Objective 4: <i>Addressing common challenges in cross-border security, access to</i></p>	<p>P 4.1 Support to the development of health services and access to health</p>	<p>The proposed monitoring indicators for the Programme <i>"Number of medical service infrastructure units improved"</i> will reflect the impact on the population and public health of the indicative actions</p>	<p>Developing health facilities or improving them will consider all environmental legislative requirements regarding air, water and soil quality, including waste management principles. It will consider the impact on biodiversity when appropriate.</p>

<p><i>health, management of natural and anthropic risks and emergency situations through joint projects</i></p>	<p>P 4.2 Support to joint activities for the prevention of natural and man-made disasters as well as joint actions during emergency situations</p>	<p>The indicator "<i>Number of population affected by the implementation of measures</i>" initially proposed for the monitoring of these activities coincided with one of the Program indicators <i>Population benefiting from flood protection measures</i>" and will reflect the positive environmental impact. We recommend that the second proposed indicator for the Programme "<i>Number of joint actions (exchanges, training, study visits, joint planning session, etc.)</i>" to be completed to the number of the joint actions with "development or updating of new maps, creation of data bases, realization of systems/structures, purchasing of equipment" in order to be possible to monitor the impact of all the indicative activities of this priority.</p>	<p>The solutions chosen for disaster prevention should be designed so as not to affect the flora, fauna and aquatic ecosystems in these areas. The development of infrastructure for monitoring and intervention in case of emergency (eg buildings) should be in line with all applicable environmental requirements and apply the best environmental practices for ensuring the quality of air, water and soil and waste management.</p>
	<p>P 4.3 Prevention and fight against organised crime and police cooperation</p>	<p>The indicator proposed by the Program "<i>Number of modernized facilities of police, police border and custom services from the eligible area</i>", can monitor positive environmental impact</p>	<p>Construction, renovation or modernization of police / customs / border police / should consider all environmental legislative requirements regarding quality assurance of air, water and soil, including waste management principles.</p>
<p>Large Infrastructure Projects</p>	<p>Communication infrastructure (TO7)</p>	<p>Is not the case, because after the additional communication infrastructure is done there will be a insignificant environmental impact</p>	<p>Realization of large infrastructure projects will have to undergo the procedure EIA / SEA and where appropriate through a biodiversity assessment to see the impact on flora, fauna and aquatic ecosystems. Transboundary consultations must be considered under the Espoo Convention, where transboundary impacts occur</p>
	<p>Regional Cooperation for Preventing and Combating Cross-border Crimes between Romania and Republic of Moldova (TO8) 4.3</p>	<p>The indicator proposed for Programme „<i>Number of modernized facilities of police, police border and custom services from the eligible area</i>” can show also the positive environmental impact caused by the construction/modernisation/extension of the policy facilities</p>	
	<p>A safer Romanian – Moldavian cross border area infrastructure</p>	<p>The indicator proposed for Programme „<i>Population covered by improved medical services as direct consequences of the Program support</i>” can show the positive impact on population</p>	

	through the improvement of the operating infrastructure of the Mobile Emergency Service for Resuscitation and Extrication (SMURD) (TO8) 4.2	and public health, too	
	Rehabilitation of the facilities from hydro node - Stânca-Costești Phase I (TO8) 4.1	One of the Programme indicative, namely „ <i>Population benefiting from environmental protection measures</i> ” can reflect the environment impact, too	
	Rehabilitation and modernization of customs offices from the border of Romania and Republic of Moldova (customs offices Albița – Leuseni, Sculeni - Sculeni and Giurgiuilești – Giurgiuilești (TO8) 4.3	The indicator proposed for Programme „ <i>Number of modernized facilities of police, police border and custom services from the eligible area</i> ” can reflect the positive environment impact, too	

The table below summarizes the monitoring indicators recommended for the indicative activities of the Programme under which there is a possibility to finance projects having an impact on the environment.

INDICATIVE ACTION of the Program Ro-Md	Monitoring indicators ⁶
OT2 - SUPPORT TO EDUCATION, RESEARCH, DEVELOPMENT & INNOVATION	
Objective 1: Develop competencies and support research, development and innovation by facilitating the cooperation at local, regional and central level	
<i>Priority 1.1 Institutional cooperation in the educational field for increasing access to education and quality of education</i>	
Improving the educational quality and participation through	Number of rehabilitated /

⁶ According to the SEA Directive, article 10, para.2, the existing monitoring systems (developed in the Programme framework) might be use to avoid doubling the monitoring stage. In respect to this, monitoring indicators of the environmental effects are going to be subsequently defined after completion of the indicators used in the Operational Program.

INDICATIVE ACTION of the Program Ro-Md	Monitoring indicators ⁶
rehabilitation/modernization/ extension/ endowment of infrastructure of the educational infrastructure and equipment procurement	modernized educational institutions
<i>Priority 1.2 Promotion and support for research, development and innovation</i>	
Promotion and support for research and innovation through rehabilitation/ modernization/extension of the specific infrastructure including the procurement of related equipment. Exchange of experience and best practices among relevant authorities on cluster development and establishment	Number of institutions using programme support for cooperation in R&D and support of innovation
OT3- PROMOTION OF THE LOCAL CULTURE AND PRESERVATION OF HISTORICAL HERITAGE	
Objective 2: Preservation of the cultural and historical heritage in the eligible area, support the developing of local culture, specific cultural identities and the cultural dialog	
<i>Priority 2.1 Preservation and promotion of the cultural and historical heritage</i>	
Construction, extension, instalment, restoration, conservation, consolidation, protection, security of cultural and historical monuments, archaeological sites (including the corresponding access roads), museums, objects and art collections and their promotion based on relevant cross-border strategies/concepts	Number of improved cultural and historical sites
Preservation, security and joint valorization of cultural and historical monuments and objects	Number of improved cultural and historical sites
OT7 - IMPROVEMENT OF ACCESSIBILITY TO THE REGIONS, DEVELOPMENT OF TRANSPORT AND NETWORKS AND COMMUNICATION SYSTEMS	
Objective 3: Improve public transport services, infrastructure and ITC cooperation and networking	
<i>Priority 3.1 Development of cross border transport and ITC infrastructure</i>	
Construction, rehabilitation, modernization of cross-border transport infrastructure systems	Total length of reconstructed or upgraded roads
Development of environmentally friendly (carbon-proofed) cross-border transport initiatives and innovative solutions	Number of environmentally friendly (carbon-proofed) cross-border transport initiatives developed
Improvements of multimode transport (road/ water) facilities of cross-border interest	Total length of reconstructed or upgraded roads
Construction, rehabilitation, widening of cross-border (segments of) roads connecting settlements alongside the border with main road which leads to the border	Total length of reconstructed or upgraded roads
Improvement/restoration/construction of (segments of) access roads to centers of cross-border interest	Total length of reconstructed or upgraded roads
OT8 - COMMON CHALLENGES IN THE FIELD OF SAFETY AND SECURITY	
Objective 4: Addressing common challenges in concerning the access to health, management of natural and anthropic risks and emergency situations, cross-border security through joint projects	
<i>Priority 4.1 Support to the development of health services and access to health</i>	
Joint activities meant to enhance the access to health in the border area through construction / rehabilitation / modernization of infrastructure of public health services (including through the use of renewable energy etc.)	Population covered by improved health services as a direct consequence of programme support
Developing labs and mobile labs for the prevention / detection / monitoring of diseases, accidents, incidents and border epidemics.	Number of medical service infrastructure units improved Population covered by improved health services as

INDICATIVE ACTION of the Program Ro-Md	Monitoring indicators ⁶
	a direct consequence of programme support
Equipping specific public medical service infrastructure (outpatient, emergency room facilities, medical centres, integrated social intervention, etc.)	Number of medical service infrastructure units improved Population covered by improved health services as a direct consequence of programme support
<i>Priority 4.2 Support to joint activities for the prevention of natural and man-made disasters as well as joint action during emergency situations</i>	
Measures for preventing land slide and flooding	Population benefiting from flood protection measures
Joint integrated systems/ structures for efficient monitoring and disaster prevention and for the mitigation of consequences	The number of joint actions, including software operations (including but not limiting to exchange experience, trainings, study visits, common planning sessions, newly developed maps, data bases, systems/ structures, acquisitioned equipment, etc) as well as joint infrastructure investments in the field of emergency situations and the prevention of man-made disasters.
Elaborating of joint detailed maps and data bases (indicating natural and technological risks, and land use for regional planning authorities, environmental agencies and emergency services)	The number of joint actions, including software operations (including but not limiting to exchange experience, trainings, study visits, common planning sessions, newly developed maps, data bases, systems/ structures, acquisitioned equipment, etc) as well as joint infrastructure investments in the field of emergency situations and the prevention of man-made disasters .
Investment in construction, renovation or upgrading of the infrastructure and equipment directly related to the monitoring and intervention in emergency situations	The number of joint actions, including software operations (including but not limiting to exchange experience, trainings, study visits, common planning sessions, newly developed maps, data bases, systems/ structures, acquisitioned equipment, etc) as well as joint infrastructure investments in the field of emergency situations and the prevention of man-made

INDICATIVE ACTION of the Program Ro-Md	Monitoring indicators ⁶
	disasters.
<i>Priority 4.3 Prevention and fight against organized crime and police cooperation</i>	
Investment in construction, renovation or upgrading of police and border crossing infrastructure and related buildings	Number of modernized facilities of police, police border and custom services from the eligible area
Investments in operating equipment and facilities specific for the activity of police/customs/border police/gendarmerie (e.g. laboratories, equipment, detection tools, hardware and software, means of transport)	Number of modernized facilities of police, police border and custom services from the eligible area
Large Infrastructure Projects	
Communications infrastructure	Not applicable
Regional Cooperation for Preventing and Combating Cross-border Crimes between Romania and Republic of Moldova	Number of modernized facilities of police, police border and custom services from the eligible area
A safer Romanian – Moldavian cross border area infrastructure through the improvement of the operating infrastructure of the Mobile Emergency Service for Resuscitation and Extrication (SMURD)	Population covered by improved health services as a direct consequence of programme support
Rehabilitation of the facilities from hydro node - Stânca-Costești Phase I	Population covered by improved health services as a direct consequence of programme support
Rehabilitation and modernization of customs offices from the border of Romania and Republic of Moldova (customs offices Albița – Leuseni, Sculeni - Sculeni and Giurgiulesti – Giurgiulești)	Number of modernized facilities of police, police border and custom services from the eligible area

The monitoring indicators will be used for assessment of effects on environment for each project financed from the Programme. This data will be provided by the project beneficiaries through the monitoring of activities and will be collected annually in order to be able to include them in the Annual Implementing Report of the Programme submitted to the JMC.

Authorities proposed to be involved in the monitoring of the effects on the environment are: the beneficiaries of projects financed by the Ro-Md Programme, JMC, MA (MRDPA) and MEWF.

11. NON - TECHNICAL SUMMARY

The Strategic Environmental Assessment is carried out based on the requirements of the SEA Directive (European Council Directive no. 2001/42/EC on the assessment of effects of certain plans and programmes on the environment). The main elements recommended to be followed in such environmental assessments by law or guidelines are as follows:

- Description of key environmental aspects to be addressed;
- Description of the reference range of environmental values to be submitted for analysis in the SEA report;
- Ways to identify the environmental impact of the plan/programme implementation;
- Assessment of capacities to address the challenges, risks and their prevention on the environment.

The methodology used in the strategic environmental assessment includes the requirements of the above-mentioned documents and of the following methodological recommendations:

“Guidance notes on Strategic Assessment in the context of ENI CBC” developed by **INTERACT ENPI** for the specific situation of **Joint Operational Programs financed under the European Neighbourhood Policy 2014 ÷ 2020** .

Considering the extent to which the Joint Operational *Programme "Romania – Republic of Moldova" 2014 ÷ 2020* provides a framework for future projects and other activities, development of its first version will be notified to the environmental competent authorities, for estimation of its impact on environmental factors. In this procedure it is necessary **to finalize the Programme in parallel with developing Environmental Report.**

The Environmental Report is a part of the **Programme** documentation that identifies, describes and evaluates the likely significant environmental effects of its implementation and reasonable alternatives, taking into account the objectives and the related geographical area.

Performing the strategic environmental assessment procedure is mandatory, the European Commission requiring the for approval of the CBC program “Romania - Republic of Moldova” 2014 ÷ 2020 also the point of view in this respect of responsible environmental authority of the Republic of Moldova, in terms of conducting the environmental assessment in compliance with national, european and international legislation in force.

In accordance with the SEA Directive (2001/42/EC), the environmental assessment involves the following steps:

- Identification of environmental authorities of all countries involved (Romania, Republic of Moldova);
- The decision on whether SEA is required or not,

and if yes:

- Determining the SEA scope and development of the Environmental Report;

- Consultation of environmental authorities and the public;
- Inclusion of findings and results of consultations in the Environmental Report;
- Adequate monitoring of recommendations;
- Notification of the authorities consulted and the public on the programme approval.

Environmental assessment is mandatory when programmes include projects covered by the EIA Directive in the sectors covered by Article 3.2 (energy, industry, transport, waste management, water management, telecommunications, tourism, town and country planning, land use, etc.) and projects with significant environmental impact in other sectors, under Article 3.4.

Managing Authority notified in February 2015, the Ministry of Environment, Water and Forests of Romania of the opening of the SEA as required by law. Thus, taking into account that the Operational Programme will fund large infrastructure projects and activities with environmental impact, MEWF of Romania notified the Managing Authority on the need to conduct proceedings without an SEA screening stage

ENI CBC Programmes with Large Infrastructure Projects should perform a SEA procedure.

In the general framework created by the Programming document for the EU Support to ENI Cross-Border Cooperation 2014-2020 (henceforth Programming document), EU Regulation 232/2014 establishing a European Neighbourhood Instrument and of the Commission Regulation no 897/2014 laying down specific provisions for the implementation of cross-border cooperation programmes financed under Regulation 232/2014, the programme partners have cooperated in order to identify the needs of the programme area and have selected the thematic objectives and priorities that are most relevant to the programme area.

Within this context, the partner countries nominated the Ministry of Regional Development and Public Administration from Romania as Managing Authority and created the Joint Programming Committee (JPC) as decisional body for the programming process. Additionally, two working groups were created, one for the identification of Large Infrastructure Projects and one for the Management and Control structures.

The Joint Operational Programme Romania – Republic of Moldova provides the legal framework for the financing of cross-border cooperation projects between the two countries during 2014 ÷ 2020. The methodology for the elaboration of the Romania-Moldova Joint Operational Programme included stakeholder consultations, socio economic analysis (SWOT) and multi criteria analysis, as well as a review of the lessons learnt from the Joint Operational Programme Romania-Ukraine-Republic of Moldova 2007 ÷ 2013.

The main steps of the development of the Ro-Md Programme were:

- Territorial Analysis;
- Socio-economic and SWOT analyses;
- Preliminary consultations: interviews, focus groups, online survey;
- Coherence analysis and multi-criteria analysis;
- Public consultations on the first JOP draft;

- Elaboration of SEA Report;
- Public consultation on SEA;
- Public consultation on the final draft of JOP.

The Ro -Md Programme identified four thematic objectives:

TO2 - Support to education, research, development and innovation:

Objective 1: Develop competencies and support research, development and innovation by facilitating the cooperation at local, regional and central levels:

- *Priority 1.1* - Institutional cooperation in the educational field for increasing education and quality of education;
- *Priority 1.2* - Promotion and support to research, development and innovation.

TO 3 - Promotion of the local culture and preservation of historical heritage

Objective 2: Preservation of the cultural and historical heritage in the eligible area, support the developing of local culture, specific cultural identities and the cultural dialog

- *Priority 2.1* – Preservation and promotion of the cultural and historical heritage

TO 7 - Improvement of accessibility to the regions, development of transport and networks and communication systems:

Objective 3: Improve public transport services, infrastructure and ITC cooperation and networking

- *Priority 3.1* - Development of cross border transport and ITC infrastructure

TO 8 - Common challenges in the field of safety and security

Objective 4: Addressing common challenges in concerning the access to health, management of natural and anthropic risks and emergency situations, cross-border security through joint projects

- *Priority 4.1* - Support to the development of health services and access to health;
- *Priority 4.2* – Support to joint activities for the prevention of natural and man-made disasters as well as joint activities during emergency situations;
- *Priority 4.3* - Prevention and fight against organized crime and police cooperation

The Joint Operational Program Romania – Republic of Moldova 2014 ÷ 2020 would cover the following area:

Romania: 4 counties: *Botosani, Iasi, Vaslui and Galati;*

Moldova: the whole country.

The central eligible area of the programme covers a total area of 54,092 km², from which:

- Romanian territory 20,246 km² (Botoșani 4,986 km², Iași 5,476 km², Vaslui 5,318 km², Galați 4,466 km²);
- Republic of Moldova's territory 33.846 km².

For Romania, the four counties in the eligible area represent 8.5% of the country.

Due to the rural character of the eligible area the settlements network consists of a limited number of cities, of which only five have more than 100,000 inhabitants: Iasi, Galati, Botosani, Chisinau, Bender, Balti and Tiraspol municipalities.

The border shared by the two countries represents the border of the European Union, and its status plays an important role in the development of border infrastructure Romania – Republic of Moldova.

Romania – Republic of Moldova border

The border total length of the eligible is of 681.4 km (by Romanian measurements, 684.3 km by Moldovan measurements). The central eligible area of the Program has several ecological problems as a result of the aggressive industrialization process before 1989, but in line with the international pollution limits. The major issues are related to four main sources:

- The industrial emissions and the resulted waste from operating and closing the industrial platforms, that have a negative impact on air, soil and waters;
- Reduced management of waste, especially in rural areas, this has a direct effect on the environment, if we take into consideration that there are no adequate facilities for their treatment;
- The usage of the chemical fertilizers and improper disposal of agricultural waste, with direct impact on soil and on water quality;
- The urban centers are the main generator of greenhouses gas (CO₂) and have a significant impact on air quality and generally on environment, too.

Currently, the program area covers more than 1,300 national and international protected areas and many historical sites.

In general environmental situation of the program area both in Romania and in Moldova will not be directly influenced by the non-implementation of the projects to be supported by the Ro -Md .

The Projects that achieve the thematic objective TO2 and TO3 are more concept projects and exchange of experience related to education, research & development and innovation or rehabilitation and promotion of the historical heritage, this can have only an indirect impact on environment.

Instead the Projects implemented on TO7 and TO8 would have beneficial effect on environment through development of an infrastructure at the border with a significant positive impact compared with the actual situation and through prevention of the landslides and flooding with a positive impact, too.

If the Program Ro-Md won't be implemented, the current status of the environment in the eligible area would stay unchanged and in time will be damaged, affecting almost all the environment factors: air, water, soil, biodiversity, waste management, archaeological an architectural and landscape.

The environmental protection objectives, established at international, community or member state level, which are relevant to the programme and which have been taken into account during Program preparation are included in the following Romanian, Moldavian and European documents:

ROMANIA:

- The Partnership Agreement with EU
- National Reform Program for Romania (NRP)
- National Strategy on Climate Change 2013 ÷ 2020;
- National Strategy on Flood Risk Management on medium and long term (perioada 2010 ÷ 2035);
- Agreement between Romania and the Republic of Moldova on cooperation for the protection and sustainable use of waters of Prut and Danube;
- Waste Management (National Strategy, National / Regional Management Plan);
- North-East Regional Development Plan 2014 ÷ 2020;
- South-East Regional Development Plan 2014 ÷ 2020.

REPUBLIC OF MOLDOVA

- 2020 Strategy;
- National Strategy for Regional Development;
- Environmental Strategy for 2014 ÷ 2023.

EUROPEAN UNION

- Europe 2020;
- Danube Strategy;
- Eastern Partnership.

The implementation of the Program Ro-Md thematic objectives should take into consideration the EU Directives, Decisions and Regulations on air quality, surface water and groundwater, soil and subsoil, climate change, health, biodiversity, conservation, resource efficiency or the national legislation in force (Romania or Republic of Moldova) if this is less restrictive.

The likely contribution of proposed individual activities will take into consideration the necessary actions in order to fulfill the United Nation Framework on Climate Change and Kyoto Protocol requirements. It also will take into consideration any other national or European policy or strategy regarding adaptation and mitigation of climate change.

The potential contribution of individual activities proposed for each priority thematic objectives of the Programme is evaluated by Ro -Md effects resulting taking into account relevant environmental objectives and policies at national , European or international .The impact of the eligible activities financed by the Program is analysed for each of the following relevant aspects that characterised the environment:

- Air;

- Climate changes;
- Surface and underground waters;
- Soil subsoil and landscape;
- Population and public health;
- Biodiversity, flora and fauna;
- Waste management;
- Cultural heritage;
- Resources efficiency, inclusively social – economic aspects.

The possible significant effects on the environment, including on issues such as biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage including architectural and archaeological heritage, landscape, as well as their interactions are presented below for each indicative activities of the Programme Ro-Md 2014÷2020 four thematic objectives.

TO2 - SUPPORT TO EDUCATION, RESEARCH, DEVELOPMENT & INNOVATION

Objective 1: *Develop competencies and support research, development and innovation by facilitating the cooperation at local, regional and central level*

Priority 1.1 – Institutional cooperation in the educational field for increasing access to education and quality of education

No.	Indicative activities	Environmental aspects and objective considered	Potential impact	Environmental assessment
1.	Joint planning and joint development of educational plans, policies and strategies	Is not the case	Indirectly	Neutral
2.	Exchanges of experience, teacher exchanges, transfer of good practices, development of joint training centres for increasing the effectiveness of education through the diversification of professional training programs for employees in the education system in areas such as			Neutral
	- School development, school management, developing the relation between schools and communities	Is not the case	Indirectly	Neutral
	- Developing and applying innovative educational methods, for increasing teaching skills to facilitate and motivate students to perform	Is not the case	Indirectly	Neutral
3.	Developing joint/ common programs of entrepreneurship education, programs that stimulate creativity, innovation and active citizenship	Is not the case	Indirectly	Neutral
4.	Improving the educational quality and participation through rehabilitation/modernization/ extension/ endowment of infrastructure of the educational infrastructure and equipment procurement;	Resource efficiency Waste management	Positive Low energy consumption, raw materials, hazardous substances	Neutral

			Recovery / waste disposal	
5.	Development and implementation of partnerships between educational institutions to:			Neutral
	- Prevent and correct early school leaving phenomenon through integrated programs (including awareness campaigns) for prevention of school dropout, encourage school attendance and reintegration of those who have left school early	Is not the case	Indirect	Neutral
	Develop after school programs and extra-curricular activities	Is not the case	Indirectly	Neutral
6.	Development and implementation of joint actions in support of disadvantaged groups, e.g.:			Neutral
	- Integrated support actions addressing children and youth with parents living abroad (which may include inter alia guidance, counselling, after school programs, educational and cultural activities)	Is not the case	Indirectly	Neutral
	- Support actions meant to facilitate the social and work integration of children and youth and integration of adults with disabilities	Is not the case	Indirectly	Neutral
7.	Support for youth (including educational campaigns) for the prevention of drug use, human trafficking, alcohol abuse, etc	Is not the case	Indirectly	Neutral
8.	Development and implementation of cross programmes and actions for enhancing/ improving/ facilitation of job qualifications and competencies	Is not the case	Indirectly	Neutral

Priority 1.2 – Promotion and support to research, development and innovation

No.	Indicative activities	Environmental aspects and objective considered	Potential impact	Environmental assessment
1.	Development of partnerships/networking between universities and research centres for the purpose of creating a favourable environment for know-how transfer and business.	Is not the case	Indirectly	Neutral
2.	Dissemination, cooperation and networking between programmes and organizations from the two states acting in the field of research and innovation	Is not the case	Indirectly	Neutral
3.	Joint research actions and studies including those in the field of environment (climate change challenges, preservation of biodiversity, renewable energy and resource efficiency etc.)	Is not the case	Indirectly	Neutral

4.	Promotion and support for research and innovation through rehabilitation/modernization/extension of the specific infrastructure including the procurement of related equipment	Efficient use of the resources	Positive Reduced consumption of power raw material, hazardous substances	Positive impact
5.	Exchange of experience and best practices among relevant authorities on cluster development and establishment	Is not the case	Indirectly	Neutral

TO3 - PROMOTION OF THE LOCAL CULTURE AND PRESERVATION OF HISTORICAL HERITAGE

Objective 2: *Preservation of the cultural and historical heritage in the eligible area, support the developing of local culture, specific cultural identities and the cultural dialog*

Priority 2.1 – Preservation and promotion of the cultural and historical heritage

No.	Indicative activities	Environmental aspects and objective considered	Potential impact	Environmental assessment
1.	Construction, extension, instalment, restoration, conservation, consolidation, protection, security of cultural and historical monuments, archaeological sites (including the corresponding access roads), museums, objects and art collections and their promotion based on relevant cross-border strategies/concepts	Cultural heritage Biodiversity	Positive The technologies should have a minimum impact	Positive impact
2.	Preservation, security, and joint valorisation of cultural and historical monuments and objects	Cultural heritage Biodiversity	Positive	Positive impact
3.	Cultural institutions networks aiming at the promotion of the cultural and historical heritage	Is not the case	Indirectly	Neutral
4.	Support for specific and traditional craftsman activities, important for preserving local culture and identity	Is not the case	Indirectly	Neutral
5.	Promotion of specific and traditional activities in the eligible area (including cross border cultural events)	Is not the case	Indirectly	Neutral
6.	Preserving, promoting and developing the cultural and historical heritage, mainly through cultural events with a cross-border dimension	Is not the case	Indirectly	Neutral
7.	Valorisation of the historical and cultural heritage through developing joint promotion strategies, common tourism products and services	Is not the case	Indirectly	Neutral

TO7 - IMPROVEMENT OF ACCESSIBILITY TO THE REGIONS, DEVELOPMENT OF TRANSPORT AND NETWORKS AND COMMUNICATION SYSTEMS

Objective 3: *Improve public transport services, infrastructure and ITC cooperation and networking*

Priority 3.1 – Development of cross border transport and ITC infrastructure

No.	Indicative activities	Environmental aspects and objective considered	Potential impact	Environmental assessment
1.	Construction, rehabilitation, modernization of cross-border transport infrastructure systems	Air Water Soil Climate Change Biodiversity	Positive	Positive impact
2.	Development of environmentally friendly (carbon-proofed) cross-border transport initiatives and innovative solutions	Air Climate Change Soil Waste Management Biodiversity	Positive	Positive impact
3.	Improvements of multimode transport (road/water) facilities of cross-border interest	Air Water Soil Climate Change Biodiversity	Positive	Positive impact
4.	Construction, rehabilitation, widening of cross-border (segments of) roads connecting settlements alongside the border with main road which leads to the border;	Air Water Soil Climate Change Waste Management Biodiversity	Positive	Positive impact
5.	Improvement/restoration/construction of (segments of) access roads to centres of cross-border interest	Air Water Soil Climate Change Biodiversity	Positive	Positive impact
6.	Elaboration of joint strategies/policies/plans for improving the cross-border transport infrastructure	Is not the case	Indirectly	Neutral
7.	Joint investments in ITC infrastructure with cross-border impact (for example fibre link services)	Is not the case	Indirectly	Neutral
8.	Development of cross-border connections, information and integrated communications networks and services	Is not the case	Indirectly	Neutral
9.	Upgrading existing facilities to enable linkages between communities and public services which promote co-operation on a cross-border and wider international basis	Is not the case	Indirectly	Neutral

TO8 - COMMON CHALLENGES IN THE FIELD OF SAFETY AND SECURITY

Objective 4: Addressing common challenges in cross-border security, access to health, management of natural and anthropic risks and emergency situations through joint projects

Priority 4.1 - Support to the development of health services and access to health

No.	Indicative activities	Environmental aspects and	Potential impact	Environmental
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		objective considered		assessment
1.	Joint planning and joint development of plans, policies and strategies for public health and social care	Is not the case	Indirectly	Neutral
2.	Joint activities meant to enhance the access to health in the border area through construction / rehabilitation / modernization of infrastructure of public health services (including through the use of renewable energy etc.);	Air Water Soil Waste Management Population and public health	Positive	Positive impact
3.	Developing labs and mobile labs for the prevention / detection / monitoring of diseases, accidents, incidents and border epidemics.	Population and public health	Positive	Positive impact
4.	Equipping specific public medical service infrastructure (outpatient, emergency room facilities, medical centers, integrated social intervention, etc.)	Population and public health	Positive	Positive impact
5.	Joint training programs and exchange of experience, networking for supporting the functioning of the specific public medical services, telemedicine	Is not the case	Indirectly	Neutral
6.	Exchange of experience, joint activities in order to ensure compatibility of the treatment guidelines	Is not the case	Indirectly	Neutral
7.	Awareness campaigns concerning public education on health, diseases and prevention of epidemics	Is not the case	Indirectly	Neutral

Priority 4.2 – Support to joint activities for the prevention of natural and man-made disasters as well as joint actions during emergency situations

No.	Indicative activities	Environmental aspects and objective considered	Potential impact	Environmental assessment
1.	Measures for preventing land slide and flooding	Soil Water Waste Management Biodiversity	Positive	Significant positive impact
2.	Joint integrated systems/ structures for efficient monitoring and disaster prevention and for the mitigation of consequences	Soil Water Biodiversity	Positive	Significant positive impact
3.	Common strategies and tools for hazard management and risk prevention including joint action plans;	Is not the case	Indirectly	Neutral
4.	Elaborating of joint detailed maps and databases (indicating natural and technological risks, and land use for regional planning authorities, environmental agencies and emergency services)	Soil Water Biodiversity	Positive	Significant positive impact
5.	Exchanging experience and knowledge, including raising awareness in the field of	Is not the case	Indirectly	Neutral

	efficient risk prevention and management in the cross-border area			
6.	Development of integrated and common standards for the urban planning and risk management;	Is not the case	Indirectly	Neutral
7.	Investments and development of common, integrated, emergency management systems	Is not the case	Indirectly	Neutral
8.	Planning coordinated actions of the authorities in emergency situations caused by natural and man-made disasters	Is not the case	Indirect	Neutral
9.	Investment in construction, renovation or upgrading of the infrastructure and equipment directly related to the monitoring and intervention in emergency situations.	Air Water Soil Climate Change Waste Management	Positive	Significant positive impact

Priority 4.3 Prevention and fight against organised crime and police cooperation

No.	Indicative activities	Environmental aspects and objective considered	Potential impact	Environmental assessment
1.	Common actions for increasing mobility and administrative capacity of police units (including border police)	Is not the case	Indirectly	Neutral
2.	Creating collaborative work platforms in order to increase the efficiency of police, border police and custom structures in the exchange of data and information;	Is not the case	Indirectly	Neutral
3.	Joint training of police, border police and custom personnel, exchange of best practices on specific areas of activity (analysis, criminal investigation, organized crime)	Is not the case	Indirectly	Neutral
4.	Investment in construction, renovation or upgrading of police and border crossing infrastructure and related buildings	Air Water Soil Waste Management	Positive	Positive impact
5.	Investments in operating equipment and facilities specific for the activity of police/customs/border police/gendarmerie (e.g. laboratories, equipment, detection tools, hardware and software, means of transport)	Air	Positive	Positive impact
6.	Developing common policies and strategies including awareness campaigns, experience exchange for fighting organized crime	Is not the case	Indirectly	Neutral

LARGE INFRASTRUCTURE PROJECTS

No.	Indicative activities	Environmental aspects and objective considered	Potential impact	Environmental assessment
1.	Communication infrastructure	Soil Waste Management	Positive	Positive impact
2.	Regional Cooperation for Preventing and Combating Cross-border Crimes between Romania and Republic of Moldova	Soil Waste Management	Positive	Positive impact
3.	A safer Romanian – Moldavian cross border area infrastructure through the improvement of the operating infrastructure of the Mobile Emergency Service for Resuscitation and Extrication (SMURD)	Air Waste Management	Positive	Positive impact
4.	Rehabilitation of the facilities from hydro node - Stânca-Costești Phase	Air Water Soil Climate Change Waste Management	Positive	Positive impact
5.	Rehabilitation and modernization of customs offices from the border of Romania and Republic of Moldova (customs offices Albița – Leuseni, Sculeni - Sculeni and Giurgiuilesti – Giurgiuilești)	Air Water Soil Waste Management	Positive	Positive impact

The alternatives analysed for the Joint Operational Programme Romania – Republic of Moldova for period 2014 ÷ 2020 are presented below:

Alternative 0: The Program is not implemented;

Alternative 1: The Program Ro-Md 2014÷2020 has four thematic objectives and a prioritized list of Large Infrastructure Projects

According to the article 10 of SEA Directive, the monitoring of the significant environmental effects of Program has to be done, in order to identify early any adverse effects and to be able to take the proper corrective measures.

The monitoring system will be proposed is based on the environmental issues that can be influenced substantially by implementing CBC Programme 2014 -2020 Ro -Md .

The proposed indicators for monitoring the environmental impact of the Programme are:

- Contribution to energy efficiency, the reduced usage of raw materials or hazardous substances;
- Contribution to the development of green infrastructure, including management of protected areas;
- Contribution to sustainable mobility and multimodal transport;
- Contribution to an effective waste management, recycling and reused;
- Contribution to risk prevention/natural disasters and climate change mitigation;
- Application of green public procurement.

For the Program monitoring framework are proposed the following modification based on the assessment of indicative actions with impact on the environment:

Thematic objective	Priority	SEA procedure recommendation
TO2 Support to education, research, development & innovation	Priority 1.1 – Institutional cooperation in the educational field for increasing access to education and quality of education	The inclusion of an additional indicator for the Program: <i>“Number of rehabilitated / modernized educational institutions”</i>
	Priority 1.2 – Promotion and support to research, development and innovation	None
TO3 Promotion of the local culture and preservation of historical heritage	Priority 2.1 – Preservation and promotion of the cultural and historical heritage	None
TO7 Improvement of accessibility to the regions, development of transport and networks and communication systems	Priority 3.1 – Development of cross border transport infrastructure and ICT Infrastructure	The inclusion of an additional indicator for the Programme: <i>“Number of environmentally friendly (carbon-proofed) cross-border transport initiatives developed”</i>
TO8 Common challenges in the field of safety and security	Priority 4.1 - Support to the development of health services and access to health	None
	Priority 4.2 – Support to joint activities for the prevention of natural and man-made disasters as well as joint actions during emergency situations	Completion of the proposed Programme indicator to the number of the joint actions with <i>“development or updating of new maps, creation of data bases, realization of systems/structures, purchasing of equipment”</i>
	Priority 4.3 Prevention and fight against organised crime and police cooperation	None
Large Infrastructures Projects	Communication infrastructure	None
	Regional Cooperation for Preventing and Combating Cross-border Crimes between Romania and Republic of Moldova	None
	A safer Romanian – Moldavian cross border area infrastructure through the improvement of the operating infrastructure of the Mobile Emergency Service for Resuscitation and Extrication (SMURD)	None
	Rehabilitation of the facilities from hydro node - Stânca-Costești Phase I	None
	Rehabilitation and modernization of customs offices from the border of Romania and Republic of Moldova (customs offices Albița	None

– Leuseni, Sculeni - Sculeni and Giurgiulesti – Giurgiulești)

In the following table are presented the monitoring indicators of the indicative actions related to the four thematic objects of the Program Ro-Md and Large Infrastructure Projects that could have likely effect on environmental aspects taken into consideration for the strategic environmental assessment.

INDICATIVE ACTION of the Program Ro-Md	Monitoring indicators ⁷
OT2 - SUPPORT TO EDUCATION, RESEARCH, DEVELOPMENT & INNOVATION	
Objective 1: Develop competencies and support research, development and innovation by facilitating the cooperation at local, regional and central level	
<i>Priority 1.1 Institutional cooperation in the educational field for increasing access to education and quality of education</i>	
Improving the educational quality and participation through rehabilitation/modernization/ extension/ endowment of infrastructure of the educational infrastructure and equipment procurement	Number of rehabilitated / modernized educational institutions
<i>Priority 1.2 Promotion and support for research, development and innovation</i>	
Promotion and support for research and innovation through rehabilitation/ modernization/extension of the specific infrastructure including the procurement of related equipment Exchange of experience and best practices among relevant authorities on cluster development and establishment	Number of institutions using programme support for cooperation in R&D and support of innovation
OT3- PROMOTION OF THE LOCAL CULTURE AND PRESERVATION OF HISTORICAL HERITAGE	
Objective 2: Preservation of the cultural and historical heritage in the eligible area, support the developing of local culture, specific cultural identities and the cultural dialog	
<i>Priority 2.1 Preservation and promotion of the cultural and historical heritage</i>	
Construction, extension, instalment, restoration, conservation, consolidation, protection, security of cultural and historical monuments, archaeological sites (including the corresponding access roads), museums, objects and art collections and their promotion based on relevant cross-border strategies/concepts	Number of improved cultural and historical sites
Preservation, security and joint valorization of cultural and historical monuments and objects	Number of improved cultural and historical sites
OT7 - IMPROVEMENT OF ACCESSIBILITY TO THE REGIONS, DEVELOPMENT OF TRANSPORT AND NETWORKS AND COMMUNICATION SYSTEMS	
Objective 3: Improve public transport services, infrastructure and ITC cooperation and networking	
<i>Priority 3.1 Development of cross border transport infrastructure and ICT Infrastructure</i>	
Construction, rehabilitation, modernization of cross-border transport infrastructure systems	Total length of reconstructed or upgraded roads
Development of environmentally friendly (carbon-proofed) cross-border transport initiatives and innovative solutions;	Number of environmentally friendly (carbon-proofed) cross-border transport initiatives developed
Improvements of multimode transport (road/ water) facilities of cross-border interest	Total length of reconstructed or upgraded roads

⁷ According to the SEA Directive, article 10, para.2, the existing monitoring systems (developed in the Programme framework) might be use to avoid doubling the monitoring stage. In respect to this, monitoring indicators of the environmental effects are going to be subsequently defined after completion of the indicators used in the Operational Program.

INDICATIVE ACTION of the Program Ro-Md	Monitoring indicators ⁷
Construction, rehabilitation, widening of cross-border (segments of) roads connecting settlements alongside the border with main road which leads to the border	Total length of reconstructed or upgraded roads
Improvement/restoration/construction of (segments of) access roads to centers of cross-border interest	Total length of reconstructed or upgraded roads
OT8 - COMMON CHALLENGES IN THE FIELD OF SAFETY AND SECURITY	
Objective 4: Addressing common challenges in concerning the access to health, management of natural and anthropic risks and emergency situations, cross-border security through joint projects	
<i>Priority 4.1 Support to the development of health services and access to health</i>	
Joint activities meant to enhance the access to health in the border area through construction / rehabilitation / modernization of infrastructure of public health services (including through the use of renewable energy etc.);	Population covered by improved health services as a direct consequence of programme support
Developing labs and mobile labs for the prevention / detection / monitoring of diseases, accidents, incidents and border epidemics	Number of medical service infrastructure units improved Population covered by improved health services as a direct consequence of programme support
Equipping specific public medical service infrastructure (outpatient, emergency room facilities, medical centres, integrated social intervention, etc.)	Number of medical service infrastructure units improved Population covered by improved health services as a direct consequence of programme support
<i>Priority 4.2 Support to joint activities for the prevention of natural and man-made disasters as well as joint action during emergency situations</i>	
Measures for preventing land slide and flooding	Population benefiting from flood protection measures
Joint integrated systems/ structures for efficient monitoring and disaster prevention and for the mitigation of consequences	The number of joint actions, including software operations (including but not limiting to exchange experience, trainings, study visits, common planning sessions, newly developed maps, data bases, systems/ structures, acquisitioned equipment, etc) as well as joint infrastructure investments in the field of emergency situations and the prevention of man-made disasters.
Elaborating of joint detailed maps and data bases (indicating natural and technological risks, and land use for regional planning authorities, environmental agencies and emergency services)	The number of joint actions, including software operations (including but not limiting to exchange experience, trainings, study visits, common planning sessions, newly developed maps, data bases, systems/ structures, acquisitioned equipment, etc)

INDICATIVE ACTION of the Program Ro-Md	Monitoring indicators ⁷
	as well as joint infrastructure investments in the field of emergency situations and the prevention of man-made disasters
Investment in construction, renovation or upgrading of the infrastructure and equipment directly related to the monitoring and intervention in emergency situations	The number of joint actions, including software operations (including but not limiting to exchange experience, trainings, study visits, common planning sessions, newly developed maps, data bases, systems/ structures, acquisitioned equipment, etc) as well as joint infrastructure investments in the field of emergency situations and the prevention of man-made disasters
<i>Priority 4.3 Prevention and fight against organized crime and police cooperation</i>	
Investment in construction, renovation or upgrading of police and border crossing infrastructure and related buildings	Number of modernized facilities of police, police border and custom services from the eligible area
Investments in operating equipment and facilities specific for the activity of police/customs/border police/gendarmerie (e.g. laboratories, equipment, detection tools, hardware and software, means of transport)	Number of modernized facilities of police, police border and custom services from the eligible area
Large Infrastructure Projects	
Communications infrastructure	Not applicable
Regional Cooperation for Preventing and Combating Cross-border Crimes between Romania and Republic of Moldova	Number of modernized facilities of police, police border and custom services from the eligible area
A safer Romanian – Moldavian cross border area infrastructure through the improvement of the operating infrastructure of the Mobile Emergency Service for Resuscitation and Extrication (SMURD)	Population covered by improved health services as a direct consequence of programme support
Rehabilitation of the facilities from hydro node - Stânca-Costești Phase I	Population covered by improved health services as a direct consequence of programme support
Rehabilitation and modernization of customs offices from the border of Romania and Republic of Moldova (customs offices Albița – Leuseni, Sculeni - Sculeni and Giurgiuilesti – Giurgiuilești)	Number of modernized facilities of police, police border and custom services from the eligible area

The monitoring indicators will be used for assessment of effects on environment for each project financed from the Programme. This data will be provided by the project

beneficiaries through the monitoring of activities and will be collected annually in order to be able to include them in the Annual Implementing Report of the Programme submitted to the JMC.

Authorities proposed to be involved in the monitoring of the effects on the environment are: the beneficiaries of projects financed by the Ro-Md Programme, JMC, MA (MRDPA) and MEWF