



OPERATIONAL PROGRAMME “ENVIRONMENT”

2007 – 2013



SOFIA, 2006

TABLE OF CONTENT:

A.	Introduction.....	5
B.	Conclusions of the Ex-ante Evaluation	6
C.	Analysis of the Current Situation.....	7
I.	Water.....	7
1	Water supply and water consumption.....	7
2	Sewerage systems	9
3	National Water Monitoring System	10
4	Legislation and economic instruments in use	10
5	Institutional framework for management of water supply and sewerage sector.....	11
II.	Waste.....	12
1	Waste generation.....	12
2	Waste collection (including separate waste collection)	13
3	Waste recovery and disposal	14
4	Landfilling	16
5	Legislation and economic instruments in use.....	17
III.	Terrains polluted with waste	18
1	Existing landfills for waste and illegal dumpsites.....	18
2	Other waste contaminations	19
IV.	Air	20
1	Emissions of harmful substances.....	20
2	Legislation	20
V.	Greenhouse gas emissions.....	21
VI.	Biodiversity.....	22
1	Wild flora and fauna and natural habitats.....	22
2	Protected areas and management plans	22
3	Development of the national part of NATURA 2000 network	23
4	Legislation	24
VII.	Noise.....	24
D.	SWOT Analysis	25
E.	Strategic objectives and priority axes of OP “Environment 2007-2013”	27
I.	Strategic objectives of the Operational Programme.....	27
1	Global strategic objective.....	27
2	Specific strategic objectives of the programme.....	28
II.	Priority axes	30
1	Priority 1: Improvement and development of waste water infrastructure in settlements with over 2 000 PE.....	30
2	Priority 2: Improvement and development of waste treatment infrastructure	35
3	Priority 3: Preservation and restoration of biodiversity	39
4	Priority 4: Technical Assistance	42
F.	Compliance with Community policies and EU legislation.....	46
1	Partnership	46
2	Sustainable development	46
3	Environment protection	48
4	Equal opportunities.....	49
5	Protection of competition	50
6	Public procurement.....	52
G.	Financial plan of OP “Environment 2007 - 2013”	54
H.	Institutional framework for implementation of OP “Environment 2007 – 2013”	57

I.	Main bodies included in the institutional framework.....	57
1	Managing Authority	57
2	Intermediate Body	58
3	Certifying Authority.....	58
4	Audit Authority.....	58
5	Internal Audit Unit.....	59
6	Monitoring Committee of OP “Environment 2007 - 2013”	59
7	Committee for selection and coordination of projects under OP “Environment 2007 – 2013”	59
II.	Distribution of tasks between the Managing Authority, Intermediate Body and Final Beneficiaries	60
1	Tasks of the Managing Authority.....	60
2	Tasks delegated to IB for implementation.....	61
3	Tasks for implementation by FB	62
III.	Evaluation of OP.....	64
IV.	Financial management and control of OP	65
1	Information for the competent body for receiving payments from EC and for competent body making payments to FB.	65
1.1	Competent Body for receiving payments from EC.....	65
1.2	Competent Body for making payment to FB	65
1.3	Certification and payments.....	65
2	Description of the financial flows for the OP:	66
3	Identification and reporting of irregularities	68
4	Audit	69
V.	Publicity and information for the OP	69
VI.	Procedures for computerized exchange of data with EC.....	70
I.	List of major projects for OP “Environment 2007 - 2013”.....	71
J.	Appendixes	73
	Annex 1	74
	Annex 2	75
	Annex 3	77

A. Introduction

The Operational Programme “Environment” is one of the six operational programmes to the National Strategic Reference Framework of Republic of Bulgaria for the programming period 2007-2013. On the basis of the analysis of the current situation it sets the priority areas for the country with regard to sector environment that would be implemented and financed in the framework of the present document and within this period.

Through improvement and development of the basic environmental infrastructure, the Operational Programme would contribute to the implementation of the strategic vision for Bulgaria, delineated by the National Strategic Reference Framework for the period 2007-2013, namely: **by 2013 Bulgaria should become a country with a higher standard of living, based on a sustainable socio-economic growth during the process of full integration into the European Union.**

The Operational Programme is based on the goals and priorities of EU environmental policy and reflects international environmental commitments that Bulgaria has undertaken, as well as both the commitments undertaken to the EU in the pre-accession period, and the specific national interests. The Programme is prepared in accordance with the principles, formulated in the basic national documents for sector environment.

Operational Programme “Environment” supports the achievement of the following mid-term strategic goals of the Bulgarian National Strategic Reference Framework for the period 2007-2013:

- *To attain and maintain high economic growth through a dynamic knowledge-based economy in accordance with the principles of sustainable development;*
- *To improve the quality of human capital and to achieve employment, income and social integration levels, which provide higher living standards.*

The Operational Programme “Environment” is developed in the framework of the Convergence objective of the European Community and will be implemented with the financial support of the European Union (through the Cohesion Fund and the European Regional Development Fund).

The Operational Programme includes an analysis of the present situation of sector environment and a SWOT (strengths, weaknesses, opportunities and threats) analysis. On the basis of the results of these analyses and considering the disparities between the average level in the country and that in the EU on basic indicators for sector environment, the strategy of the operational programme, its objectives and priorities, the financial plan for their realization, and the implementation framework are defined.

The Operational Programme “Environment” has been prepared in full compliance with the partnership principle, actively involving all administrative and socio-economic partners, such as: representatives of line ministries, the National Statistical Institute, the National Association of Bulgarian Municipalities, the Association of Municipal Ecologists, as well as representatives of Regional administrations, the Bulgarian Chamber of Commerce, the National Association of the Disadvantaged, , ecological NGOs¹, syndicates, the Bulgarian Academy of Science, etc. The entire programming process has been organized by the Managing Authority (MA) of the Operational Programme – the Cohesion Policy for the Environment Directorate within the Ministry of Environment and Water.

¹ Annex 3 provides detailed information for the procedures for the election of environmental NGO representatives and their representation in the working group.

B. Conclusions of the Ex-ante Evaluation

C. Analysis of the Current Situation

The basic documents which guide the environmental policy in the country are the National Environmental Strategy 2000-2006 and the National Action Plan, as well as the National Environmental Strategy 2006-2015 and the corresponding national action plan.

The current analysis is prepared on the basis of the detailed survey undertaken of the sector environment for the purposes of the National Environmental Strategy 2006-2015. In contrast with the National Environmental Strategy, however, the current analysis covers only these directions of the sector environment, which are most likely to be part of the common strategy of the country with regard to the financial resources from EU (Cohesion and Structural Funds) for the period 2007-2013.

In addition, other national documents are used for the purposes of the current analysis, as for example: National Waste Management Programme 2003-2007; National Strategy for Management and Development of the Water Sector 2004 – 2015; the programmes for the implementation of the requirements of different “heavy” directives, elaborated in 2003, such as: 91/271/EEC, 94/62/EC, 1999/31/EC, 2001/80/EC, etc.

The analysis also comprises the main disparities with other EU member states with regard to some basic dimensions in the scope of the Operational Programme – management of waste waters and waste management.

The data, used in the analysis are for the period 1999-2004, as where data from 2004 are missing, there are used data from 2003. The sources of the statistical data used are the National Statistical Institute, Executive Environmental Agency within the Ministry of Environment and Water and EUROSTAT.

I. Water

1 Water supply and water consumption

Water resources formed at the territory of the country as a whole are sufficient to secure the normal water supply of the settlements. The total volume of water used amounts to 5 401 014 thousand m³ (2004) which constitutes 81% of the volume of water extracted for the same year, according to data from NSI. The basic part of the water resources extracted for use for 2004 are obtained from water sources, owned by the economic sectors, while public water supply (local WSS companies) extract 15% of them (NSI).

Table 1: Water used (1999 – 2004) in thousand m³

Water used (indicators)	1999	2000	2001	2002	2003	2004
Agriculture, hunting and forestry (incl. fisheries)	124 715	234 738	184 828	157 853	184 887	171 176
Industrial sector	5 367 033	4 177 697	4 426 815	5 265 269	5 282 157	4 893 085
Household sector	396 680	404 749	372 937	337 472	342 626	336 752
TOTAL water used - gross	5 888 428	4 817 184	4 984 580	5 760 594	5 809 670	5 401 014

In Bulgaria, there is well developed *water supply system* that secures water to 5031 settlements, and covers 98.8% of the population of the country (2004). However, one of the main problems in the water supply sector for many regions in the country is the regime in water supply caused by the internal losses in the distribution networks and the lack of water reservoirs.

Water consumption in the country is comparatively low, but the volume of the extracted water is nearly twice as large in comparison with other countries, which to a great degree is due to the amortization of the water supply network that in some places requires entire substitution. The following table shows some basic data with regard to water use in Bulgaria and in some EU member states.

Table 2: Water use in member states (2003)

Indicator	Measure	Member state				
		Austria	Portugal	Hungary	Czech Republic	Bulgaria
Population	Inhabitants	8 033 000	10 356 000	10 198 000	10 023 000	7 801 273
Fresh water extracted for public use	m ³ /cap/d	75	75	74	76	144
Water consumed by the population	l/cap/d	155	184	106	104	96
Population included in the water supply network	%	86.4 ²	90.4	98.0	89.8	98.8

Source: EUROSTAT 2003

During the last years **water losses** during transportation to the final consumers is between 40% - 79% (average 59.5%) dependently on the age, type of the pipes and the pressure in the network. In 2004 the water losses during transportation to the final consumers are on the average of 51.6% of the water received. For the period 1980 – 2001 the percentage of the efficiently used water decreases from 84.90% to 38.95%. The basic actions, which are necessary to be undertaken in order to reduce the water losses are connected with the purchase of devices and appliances for detection of leakages, reconstruction at stages of the distribution water-supply network and water-supply system connections and elaboration of projects for efficient control on water losses.

As a whole, the water quality in the country is good, except in definite regions, facing problems of a local character. The quality of drinking water supplied for the population is regulated according to the requirements of Decree No.9/16.03.2001. The basic pollutants of the surface water are the water from the domestic-faeces of the urban sewerage system in the big settlements and the industrial waste water which flows untreated in the rivers.

The basic pollutant of underground water in all river basin districts are the nitrates. For the period 1997 – 2004 a progress was achieved with relation to the removal of the pesticides which is due to the measures undertaken with regard to the liquidation of the old stores with pesticides in the country.

For the purpose of reflecting the requirements of EU Directives with regard to drinking water, in 2002 a National programme for priority construction of drinking water treatment plants (DWTP) and the related water-supply infrastructure and as well as the Strategy for management and development of the water-supply and sewerage systems sectors in the country were elaborated. The Strategy is approved by the Council of Ministers in 18.03.2004. According to it, **the infrastructure assets in the water-supply sector are** as follows:

- Total length of the water-supply network - 70,620 km.
- 15 dams with total capacity of 1,158.4 millions m³.

² The data is from the web page of the Federal Ministry of agriculture, forests, environment and water for 2002.

- 3,560 pumping stations for water-supply.
- 42 constructed DWTP with total productivity of 480,506.000 m³/yearly. (15.24 m³/weekly.);
- 6,087 reservoirs for drinking water with total capacity of 2,613,735 m³;

2 Sewerage systems

With regard to the degree of construction of **sewerage network** in settlements and of Urban Waste Water Treatment Plants (UWWTP), the country lags behind in comparison with the water-supply networks. The number of the settlements with sewerage network is 277, 167 of them being towns and 100 - villages. Approximately 70.5% of the towns in the country have sewerage networks constructed, but with regard to the villages this percentage hardly reaches 2.1%.

Currently, 67 **UWWTP** are constructed in the country, 14 of which are only with mechanical treatment and the rest 53 are with a biological step for water treatment. They serve 71 settlements with 3 342 075 actual inhabitants. The efficiency of the UWWTPs remains low, which in 2003 operate with the 56% of their design capacity. The main causes of the problem are routed in the incomplete/missing sewerage systems in the settlements.

In 2004 (NSI), 69.2% of the **population is connected to sewerage networks**, which is an increase of only 2.2 % compared to 2000. During the same year, 39.9 % of the population of the country was connected to waste water treatment plants, which is an increase of 3.4% compared to 2000.

The table below compares some basic data regarding sewerage systems in Bulgaria and some EU member states.

Table 3: Sewerage systems in member states

Indicator	Measure	Member state				
		Austria	Portugal	Hungary	Czech Republic	Bulgaria
Population	Inhabitants	8 033 000	10 356 000	10 198 000	10 023 000	7 801 273
Population included in the sewerage network in 2000	%	85.0	N/A	51.0	75.0	67.0
Population connected to WWTPs in 2001	%	86.0	N/A	N/A	68.0	38.0

Source: EUROSTAT

For 2003 – 2004 (Table 4) significant increase in the total volume of the generated waste water can be observed. This is due to the acceleration of the industrial sector, with regard to the completion of restructuring of industry and the economic growth of the country during the last years.

Table 4: Generated waste waters in thousand m³

Generated waste water (indicators)	1999	2000	2001	2002	2003	2004
In agriculture	10 156	5 572	5 090	3 442	3 172	3 172
In industry	377 265	328 497	274 475	225 023	666 142	657 812
In households	300 463	304 679	277 273	257 789	269 344	260 973
TOTAL generated waste water	687 884	638 748	556 838	486 254	938 658	921 958

Source: NSI

The total **quantity of waste water discharged** increases with about 63% in 2003-2004 compared to 2002 (Table 5). The increase of the waste water treated in UWWTP is due to the construction of new/modernization of old UWWTP during the last four years.

Table 5: Waste water discharged in thousand m3

Waste water discharged (indicators)	1999	2000	2001	2002	2003	2004
TOTAL waste water discharged	955 320	878 576	785 219	746 446	1 193 984	1 191 908
Treated	605 169	550 326	488 490	516 834	950 730	943 499
Untreated	350 151	328 250	296 729	229 613	243 254	248 409
Percentage ratio of treated water from the total annual base	63,35%	62,64%	62,21%	69,24%	79,63%	79,15%
Percentage ratio of untreated water from the total annual base	36,65%	37,36%	37,79%	30,76%	20,37%	20,84%

3 National Water Monitoring System

The National Water Monitoring System (NWMS) consists of the national networks for monitoring of rainfall and surface water (253 monitoring and measurement stations), for groundwater monitoring (212 hydrogeological stations) and seawater monitoring (25 coastal sea stations), and for biological monitoring (1157 stations). A total of 111 stations from surface water monitoring network, as well as 73 stations from groundwater monitoring network are included in the European monitoring network (EUROWATERNET) of the European Environment Agency.

4 Legislation and economic instruments in use

The **Environmental Protection Act and the Water Act** are the main legislative acts which regulate water management. The EPA and the WA comprise the basic principles of effective environmental policy, such as “polluter pays”, “public awareness regarding the state of the environment”, “shared responsibility”, “preventive action (control)”, “integrated management”. The WA, currently in force, along with State Property Act and Municipal Property Act incorporate the basic principles and define the ownership of water supply and sewerage infrastructure. In 2005 the Council of Ministers approved a **new Water Management Act** that was presented to the Parliament for adoption on 10.08.2005 and is currently under discussion. It is anticipated that the adoption of the law in 2006 will lead to: (1) establishment of uniform legislative framework in the water sector; (2) full transposition of the requirements of the EU environmental legislation in the water sector; (3) setting up full regulatory framework for water management in the country. In 2005 **Water Supply and Sewerage Services Regulation Act** was adopted. It establishes the legal basis for the regulation of prices, accessibility and quality of water supply and sewerage services provided by the water supply and sewerage (WSS) companies, which operate the facilities.

The water resources are managed in accordance with the river basin management approach. Therefore, the country’s territory is divided in **four river basin districts** in order to optimize and improve the quality of water resources management. River Basin Management Directorates within the structure of MOEW are established in each of the districts.

During the negotiations for accession to the EU, transitional periods for **implementation of the requirements of Directive 91/271/EEC** concerning urban waste-water treatment have been agreed. One of the main challenges to be faced by the country in the period 2007-2013 is fulfillment of the commitments under transitional periods, with regard to:

- Construction of sewerage networks and urban waste water treatment plants in the settlements with **more than 10 000 PE – by 31.12.2010;**

- Construction of sewerage networks and urban waste water treatment plants in the settlements with **PE between 2 000 and 10 000 – by 31.12.2014.**

For the purposes of implementation of Directive 91/271/EEC, National programme for priority construction of urban waste water treatment plants was developed, that aims at setting priorities for construction of UWWTP at watersheds for all settlements in the country with a population equivalent of more than 10 000.

The legislation in the country also introduces economic instruments to regulate and guide the conduct of the users of water and water bodies. The following economic instruments - **consumer fees, fees for use of resources, concessions for natural resources, sanctions and market mechanisms** ensuring investment and operational costs for achieving and maintaining the environmental standards, are effectively applied.

5 Institutional framework for management of water supply and sewerage sector

Pursuant to the Water Act, currently in force, the competent authorities are as follows:

- Ministry of Regional Development and Public Works - responsible for the state policy related to design, construction and operation of the water supply and sewerage systems in the country. The Minister exercises the rights of State ownership in the water companies wherein the State holds a share of the capital exceeding 50%.
- Ministry of Environment and Water - responsible for the management of water resources and their distribution among the consumers. The Minister is in charge of issuing permits for water use and permits for discharge of treated waste water into the respective water body.
- Ministry of Health - responsible for the exercise of control on the quality of drinking water.
- The (commercial) water companies operate the facilities.

The municipal administrations play an important role in the implementation of the environmental policy in the water sector. Their basic tasks are related to:

- development of programmes for protection of the environment;
- construction, maintenance and operation of UWWTP;
- providing public information regarding the state of the environment;
- control on the implementation of the legal requirements in small facilities of local importance

Currently, the entire infrastructure for water supply and sewerage in the settlements, constructed before 1998 represents corporate property of the water companies. The infrastructure constructed after 1998 is owned by the municipalities.

Water companies (WSSC) are responsible for the activities related to the operation and maintenance of water supply facilities (at the sources of drinking water, drinking water treatment plants, pumping stations, water reservoirs and water supply network) and the sewerage networks (for waste water collection, treatment and discharge). There are 49 WSSC in the country. Twenty nine of them are regionally based, delivering services to a specific district center and several municipalities. The rest of the companies are providing services in a single municipal area.

Ownership of the WSSC is as follows:

- 16 WSSC companies with mixed property - 51% state and 49% municipal share of the company's capital;
- 13 WSSC companies with 100% state share of the capital;

- 20 WSSC companies with 100% municipal share of the capital.

The basic principle in determining the prices of water supply and sewage services is the establishment of price levels that will offer the opportunity for a full coverage of operational costs. Profitability of up to 12% is calculated to the costs. For some companies the percentage of profitability is different for the households and for the legal entities. The elements included in this expenditure section comprise only tax-eligible expenditures and do not include investment costs other than depreciation. Investments are most often provided by governmental authorities in the form of subsidies. The prices of water supply and sewerage services are determined on the basis of the costs estimated for 1 m³ of water. They are calculated as a ratio between the overall costs and the forecasted volume of water to be sold for the respective period. Due to the various parameters used in determining the tariffs, each WSSC applies different tariffs for delivering water supply and sewerage services. Since 2005, the price policy of the WSSC has been regulated by recently adopted Water supply and Sewerage Services Regulation act.

II. Waste

1 Waste generation

During the period 2001 – 2004 the average *total quantities of the waste generated* in the country is about 13 450 thousand tonnes. During this period the quantities of the waste generated increase as a whole, as in 2004 the increase is with 7.3% compared to 2003. This is mainly due to the growth of the quantity of the industrial waste (as a result of the increased economic activity) which are about 70% of the total waste generated. For the same period the quantities of the generated municipal and hazardous waste are decreasing. The municipal waste are about 25% of the total quantity of waste generated and the remaining of around 5% are hazardous waste.

Table 6: Quantity of waste generated (in thousands of tonnes)

Indicator	Year				Average quantity
	2001	2002	2003	2004 ³	
Municipal waste	4 003	3 945	3 916	3 673	3 884
Industrial waste	8 184	8 010	9 113	10 462	8 942
Hazardous waste	756	611	626	526	630
Total waste generated	12 943	12 566	13 655	14 661	13 456

Source: NSI

For the period 2000 – 2004 a decreasing tendency in the quantity of the *municipal waste* collected is observed, although the share of the population served increased with 6%.

The accumulation rate of municipal solid waste of 472 kg. for 2004 is below the average value of 537 kg. for the EU (25) and significantly lower than the average value of 580⁴ kg for EU (15). In 2004 (Table 7) totally of 3 092 thousand tonnes of municipal waste are collected, which is with 4% less, compared to 2003.

Table 7: Household waste in Bulgaria

Indicator	Measure	Year					Average quantity
		2000	2001	2002	2003	2004	

³ The data for 2004 are preliminary

⁴ The data of the European Environmental Agency for 2004

Indicator	Measure	Year					Average quantity
		2000	2001	2002	2003	2004	
Total quantity of household waste	thousand tonnes/year	3318	3211	3199	3209	3 092	3207
Accumulation rate of municipal solid waste	kg/capita/year	518	505	503	502	472	500

Source: NSI and EEA

For the period 2000 – 2004 the total quantities of generated *industrial and hazardous waste* are relatively constant. The average annual quantity of the generated hazardous waste for the period is 630 thousand tonnes, with a decreasing tendency as from 2000. In 2004 526 thousand tonnes of *hazardous waste* are generated which is about 16% less compared to 2003. In 2004 the waste from thermal processes (71%), and construction and demolition waste (10%) prevail in the quantity of industrial and hazardous waste totally generated, followed by the waste from inorganic processes (9%). The energy sector is the biggest generator of industrial and hazardous waste, followed by the processing industry.

In 2004 the initial data for the management of *waste from sludge generated by the treatment of waste water* are collected and analyzed. The total quantity of the generated sludge for 2004 is 406 thousand tonnes, the half of which are classified as hazardous waste and the remaining half as non-hazardous waste. In 2004, 87% of the sludge from the large WWTP are landfilled, 12% of them being in a temporary storage and hardly 1% being used for recultivation of damaged sites. Currently, large quantity of the waste water incoming in WWTP are from the industrial enterprises, which aggravates the quality of the sludge and respectively decreases the share of them suitable for use in agriculture.

During the period 1999 – 2002 there is a decreasing tendency of the overall quantity of the *generated waste from the extraction and primary treatment of mineral resources*, a consequence from the restructuring of the mining industry and the decommissioning of unprofitable operations. In 2004 the quantity of the generated waste from the extraction and treatment of mineral resources is 71 300 thousand tonnes, which is with 5.2% lower, compared to 2003. The main share of the waste generated in 2004 come from the ore extraction and the extraction of energy resources, 74% and 15% of the total quantity of waste generated, respectively.

2 Waste collection (including separate waste collection)

By the end of 2004 84.2% of the population of the country was covered by the organized *municipal waste* collection system, which is with 5.6% more in comparison with 2000. In 2004, the operating systems for organized collection and transportation of municipal waste serve 1801 settlements, with population of 6 551 181 inhabitants (i.e. 84% of the population of the country). In the cities the organized waste collection system covers almost 100% of the population, but in the villages the population served is slightly under 40%.

Till 2003 the collection of *waste for recycling* was undertaken in accordance with the current market demand and was limited only to waste for which the expenditures for collection, separation and transportation are less than the market price of the materials collected, paid by the final manufacturers.

Since 2004, MOEW has started to finance the municipal systems for separate collection of *packaging waste*. In 2004 pilot projects are funded in 12 municipalities. During the second half of the 2004 4 organizations for recovery of packaging waste were licensed. In 2004 the overall quantity of packages released to the market is 446 thousand tonnes. The generated packaging waste are distributed among the households and the business sector in approximate ratio of 59% to 41%. The

consumption of packages per capita in 2004 is 57,47 kg/c/y (157 g/c/d). Compared to the other European countries these quantities are low, which is in close relation to the level of consumption in the country.

The collection of *hazardous waste* for recycling is limited to the buy - back of lead-acid batteries, spent oils and waste petroleum products. The system for collection of some groups of specific hazardous waste streams as luminescent tubes, batteries, small chemical waste, etc is not complete.

3 Waste recovery and disposal

Data for 370 installations and facilities for waste recovery and disposal are registered and maintained in the country (by EEA). These are facilities which have the capacity to recover or dispose waste received from other enterprises. There is a trend of increasing the share of waste delivered for recovery to the total generated waste, which is related to the put into operation of installations for reuse and recycling of waste. Metal-containing hazardous waste as aluminum slag, lead slag, zinc ash, zinc sludge, spent lead-acid accumulators and waste oils are most often delivered for recovery. For 2004 the overall quantity of recovered waste in the country is 2175 thousand tonnes.

3.1 Installations and facilities for incineration and co- incineration

The incineration of waste is not a common practice in the country. At present, there is not any installation for incineration of *municipal waste* constructed.

During the period 2000-2004 the industrial waste disposed through incineration are on the average amount of about 0.46% of the overall quantity of generated industrial waste, and in 2004 their quantity amounts to 42 kilotonnes.

The incineration as a method for disposal is typical for the *waste from medical establishments*. In 2004 approximately 1810 tonnes of waste from medical establishments are disposed in the two incinerators for hazardous waste from medical establishments (in Sofia), which meet the requirements of the legislation in the area of waste management. Furthermore, other smaller facilities for thermal waste treatment from medical establishments are also in operation in the country. The overall capacity of the thermal waste treatment from medical establishments in the country is 4142 t/y.

Sludge from WWTP containing oils and petroleum products are disposed in the installations for incineration of "Lukoil Neftohim – Bourgas". The incineration installations of Varna Port receive for disposal *mixed municipal waste, discharged from the entering ships*.

Green and wood waste are burned in steam-boilers with solid fuel. The typical industrial waste from the wood processing industry is used mainly as fuel (91%), and hardly 3% is pressed into briquettes, and 6% is composted.

Co- incineration is undertaken in industrial burning installations in 5 cement plants – the overall quantity of waste with energy recovery in them is 2 602 tonnes.

The cement plants "Zlatna Panega Cement" and "Devnya Cement" give serious contribution to the disposal of *non-organic waste* (especially from group 10). The overall quantity of waste disposed in this way is 519 thousand of tonnes.

3.2 Installation and facilities for mechanical treatment

The mechanical treatment of waste in most of the cases is important as pretreatment, preceding the recovery or the final disposal. The facilities are balling systems, briquette installations, mills and separators. Transfer stations and sorting stream lines exist in some of the landfills, but only in few municipalities. In these facilities are treated mixed municipal waste, which have high percentage in the overall amount of waste. The total amount of all other recyclable waste, as plastics, glass, wood

and textile fabrics is about only 2% of the mechanically treated waste. The preliminary treatment of biodegradable waste, which is the first step of the strategy for reduction of the quantities landfilled is slightly developed. In the area of hazardous waste disposal there are two installations in operation, constructed at the end of the 80s. In 2004, about 9% of the hazardous waste are disposed through chemical methods and incineration.

3.3 Installations and facilities for physical and chemical treatment

The physical and chemical treatment is applied mainly for the metal containing waste (about 90%), as well as for the treatment of waste from petroleum products, treatment of industrial waste water and spent galvanic liquids, disposal of accumulators, etc. Lately, there is an interest for disposal of vegetable oils used in the household and the biodiesel produced from them. There are quotas established for this kind of “ecofuel”. In the country, there is such an installation operating with the capacity of over 10 tonnes/per year. In 2004 data from 45 facilities with physical and chemical treatment are received.

3.4 Installations for recycling

The total capacity for recycling of **paper and cardboard waste** is estimated at about 200 thousand tonnes. The main processing facilities in the country are the enterprises from the pulp and paper industry, as well as the plants producing construction panels. In 2004 about 82 thousand tonnes of paper are recycled in the recycling installations for waste paper.

The processing of **plastic waste** is concentrated in three major plants in the country with the capacity of about 12 000 tonnes per year. The actual quantities of processed waste are considerably lower than the potential and processing is entirely geared towards foil materials in quantities of about 5400–7200 tonnes/year. An installation for recycling of PET waste with a capacity of 12 000 tons/year was put in operation in 2004.

Waste glass is processed in 6 plants in the country. The annual quantity of processed glass waste is around 15 000 tonnes/year. The necessary infrastructure for sorting, separation and processing of glass waste does not exist in the country. In 2004 in the installations for recycling of waste glass are recycled about 33,5 thousand tonnes of glass.

Technical infrastructure for treatment of **waste from accumulators** is established in Bulgaria. In 3 enterprises there are installations for treatment of waste from accumulators and their capacity is about 23 000 tonnes per year. Their capacity is sufficient to ensure the processing of the waste collected in the country. Two technological lines for processing of **spent tires** were opened in 2003 and they have a total capacity of 4 tonnes/hour. There is only one plant licensed to regenerate **waste oils**. The existing capacity there (5000 tonnes) does not allow for the recycling of the entire quantity of this type of waste.

Recycling becomes a preferred method for treatment of packaging waste and covers 23% of the overall quantity for 2004, according to data from the final manufacturers. In 2004 totally 101 651 tonnes of **packaging waste** are treated, of which 100 610 tonnes are recycled, 47 tonnes are energy recovered and 995 tonnes are landfilled. At the end of 2004, there are 177 stations for separate collection of packaging waste, 98 stations for separate collection of unusable accumulators, 12 stations for separate collection of waste oils and 20 stations for separate collection of end-of-life electrical and electronic equipment, including luminescent tubes and other tubes containing mercury. **Composting and incineration of waste with energy recovery** are not a widely spread practice in the country yet.

4 Landfilling

Waste landfilling remains the only method for treatment of municipal waste in the country and a basic method for all other types of waste. In 2004, 86.5% of the total quantity of generated waste is landfilled (Table 8).

Table 8: Quantities of waste deposited in the period 1999 –2004 in thousand tones.

Indicator	Measure	Year					
		1999	2000	2001	2002	2003	2004
Municipal waste	thousand tonnes	3197	3318	3211	3199	3209	3092
Construction waste	thousand m ³	1009	651	650	600	773	732
Industrial non-hazardous waste	thousand tonnes	7120	7558	7451	7225	8212	7511
Hazardous waste	thousand tonnes	517	478	517	346	296	316

Source: NSI for municipal, construction and industrial waste, EEA for hazardous waste

According to NSI data (2004), there are 663 landfills for municipal waste, which cover 780 ha. and where 3 092 thousand of tonnes of municipal waste is landfilled. Fifty-nine (59) of these landfills serve settlements with a population of over 20 000 inhabitants, which is approximately 70% of the population in the country. By 2004, in 110 landfills there is control of the waste at the entry. Most of the landfills for household waste do not meet the current requirements, with the exception of the landfills constructed, reconstructed, modernized and put into operation after 1997.

According to the commitments that Republic of Bulgaria has undertaken with regards to Directive 1999/31/EC, **by 16.07.2009, a system of a total of 54 facilities (regional landfills) should be established** in the country, which requires reconstruction of the existing and construction of new regional landfills for disposal of the total quantity of municipal waste generated in the country. Gradually, within the same timeframe and in parallel with the commissioning of the respective regional landfills, all existing landfills for municipal waste that do not meet the legal requirements and the current technical standards will be decommissioned and closed. By the end of 2004, 20 of the envisaged regional landfills for municipal waste were constructed and put into operation, 12 are under construction, and the remaining are at different stages of preparation for construction.

Currently, there are 74⁵ **landfills for industrial non-hazardous waste** in the country that are in operation (another 10 are already decommissioned). For the period 2000-2004, an average amount of 87% of industrial waste has been treated through landfilling. For 2004, 72% of the quantity of generated industrial waste is landfilled. Currently, in the country there are 18 landfills under operation where **hazardous waste** is disposed off and none of them meets the legislative requirements. The existing landfills are fully operated by the enterprises generating the waste. There is not facility for landfilling the hazardous waste in the country that operates on a commercial basis. During the period 2000-2004 about 60% of the total quantity of generated hazardous waste is landfilled. The average annual amount of hazardous waste landfilled is 390 thousand of tonnes. In 2004, about 316 kilo tonnes of hazardous waste are landfilled, which is 8% more compared to 2003.

⁵ The total number of landfills does not include the facilities for disposal of waste from the exploration, extraction and treatment of mineral resources and the sites for backfilling of pits in open mines for lignite coal with ashes from coal burning.

5 Legislation and economic instruments in use

The Environmental Protection Act (EPA) and the Waste Management Act (WMA), along with the relevant secondary legislation represent the main legislative acts in the field of waste management in Bulgaria. In 2003 the National Waste Management Programme (NWMP) for the period 2003 – 2007 was developed. The objectives and priorities set within its framework for all areas of waste management are to ensure the implementation of an integrated and effective waste management system at all levels. NWMP shall be revised in 2007 and the new programme is envisaged to cover the period 2008-2013.

During the negotiation process for country's accession to the EU the following **transition periods under several implementation programmes** have been agreed:

- For Directive 94/62/EC, amended by Directive 2004/12/EC:
 - ✦ 2 years (i.e. by 31.12.2008 r.) for the requirement of 60% recycling rate for paper; 50% recycling rate for metals, and 15% recycling rate for wood;
 - ✦ 6 years (i.e. by 31.12.2014) for 60% utilization of waste and 55 - 80% recycling rate for packaging waste.
 - ✦ 5 years (i.e. by 31.12.2013) for 22,5% recycling rate of plastics and 60% recycling rate of glass.
- For Directive 2002/95/EC and 2002/96/EC, amended by Directive 2003/108/EC:
 - ✦ 2 years (i.e. by 31.12.2008 r.) for achieving targets for separate collection and reuse/recycling at the rate of 4 kg/inh./year
- For Directive 99/31/EC:
 - ✦ 8 years (i.e. by 31.12.2014) for 14 installations, concerning prohibition for landfilling of liquid waste.
- For Regulation 259/93/EEC:
 - ✦ 3 years (i.e. by 31.12.2009) for import of certain types of waste from the “yellow” list and not mentioned in a list for the purposes of recovery.

According to the national legislation, the municipalities are responsible for the development of municipal waste management programmes with a scope determined by the Waste Management Act. The specific requirements for waste management at local level are introduced by the municipal regulations laying down the procedure and terms for dumping, collection, incl. separate collection, transportation, transferring, treatment and recovery of municipal and construction waste and specific waste streams. The above regulations also determine the amount and payment procedure for the local fees for supplying the respective services.

With a view of the application of “polluter pays” principle, the municipal councils in the country determine the amount of the “municipal waste” fee within the limits envisaged in the Local Taxes and Charges Act. The annual amount of the fee is determined with a decision of the municipal council for each settlement.

Pursuant to the Waste Management Act, the producers and importers of products which, after use, generate specific waste streams are responsible for organizing the collection, recovery and/or treatment of waste from these products. In order to fulfill their obligations the producers and importers can choose between two alternatives:

- when such products are placed on the market, the generators of waste pay product charges to the Enterprise for Management of Environmental Protection Activities (EMEPA). Funds

collected in this way are used for financing projects for separate collection and recovery of waste.

- the producers and importers of waste organize and finance by themselves the waste collection and the achievement of the targets set for recovery or recycling. The activities are implemented individually or through collective systems, represented by an organization for recovery of waste. In this case product charges are not paid.

Bulgaria has ratified the Basel Convention on the control of the trans-boundary shipment of hazardous wastes and their treatment and actively participates in the meetings of the parties to the convention and the activities of the working groups.

III. Terrains polluted with waste

1 Existing landfills for waste and illegal dumpsites

At present, a significant number of the **existing landfills for household waste** do not comply with the requirements of the national and EU legislation, except the ones that were constructed, reconstructed, modernized and put into operation after 1997. Due to the potential risk that they impose, it is of first priority to remediate them in order to guarantee their future operation, or to close and replace them with new facilities as envisaged in the Implementation Programme for Directive 1999/31/EC on landfilling of waste.

During the past few years, National Program for Reducing the Number and Risk of Landfills and Past Contaminations with Waste was developed, featuring the solid waste landfills during its first stage. A register of landfills and past contaminations with waste was created, maintained by the Executive Environmental Agency, where information for 275 landfills has already been entered. Methodology for prioritization was developed. It is already used for investigation, inventory, assessment and categorization of 59 existing landfills of waste serving population of over 20 000 inhabitants (ca.70% of the country population), according to the assessed risk for the environment. The results showed that on one side, a significant number of landfills do not comply with the current requirements as technical facilities, and on the other hand, that they are spread within the country in a way imposing high risk. The landfills that were subject to inventory have been categorized into four groups, according to the risk they impose:

- I – st group – very high risk – 12 landfills;
- II – nd group – high risk – 17 landfills;
- III – rd group – medium risk – 28 landfills;
- IV – th group – minimum risk – 2 landfills

Twelve of the existing landfills for household waste serving settlements with population of over 20 000 inhabitants (including 3 of very high risk, 2 of high and 7 of medium risk) are expected to be closed by the end of 2006. The necessary measures for the remaining 47 landfills, situated on a total area of 3763 dca could be subject to the present operational programme. Furthermore, another 170 landfills serving settlements with population of under 20 000 inhabitants, exist in the country. The necessary measures for those 170 landfills, that are situated on a total area of 3482 dca could also be subject to the operational programme.

The number of **illegal dumpsites** in the country is still high. During 2001 and 2002, 5135 illegal dumpsites and terrains, contaminated with waste, have been identified in the country. Out of them 3554 have been closed by the end of 2004 (551 in 2002, 1677 in 2003 and 1326 in 2004).

2 Other waste contaminations

Pursuant to the Environmental Protection Act (2002), currently in force, **past contamination of sites or construction facilities on industrial sites with hazardous substances and waste** generated by industrial, agricultural, commercial or transport activities, posing a hazard to human health or to the environment is defined as “damage caused to the environment resulting from past acts or omissions”.

Pursuant to EPA the State is liable for damages caused to the environment resulting from past acts or omissions until privatization of enterprises. Past contaminations are liquidated through activities undertaken in the framework of programmes for liquidation of the old environmental damages. By 31.12.2004 16 programmes comprising totally of 55 sub-projects for liquidation of past contaminations upon privatization of industrial enterprises have been implemented. With a view to support the state budget, the required financial resources have been ensured through loan contracts with international financial institutions.

As a result of the exploration, extracting and primary processing/treatment/ of **mineral resources**, the environment is significantly damaged. A serious problem is the generation of huge quantities of waste, the treatment of which is limited mainly due to lack of technologies, customers' interest and economic regulators. The prevailing method for waste treatment is the landfilling. The waste generated from prospecting, extracting and processing of mineral resources is disposed at specialized landfills that are operated by the enterprises.

The total quantity of waste from the **coal mining** amounts to 3717.4 mil tonnes by the end of 2003. By the end of 2004 the total area of terrains damaged by the coal mining constitutes 22 027.5 ha, and only 7 926.9 ha are recultivated. The area of damaged terrains practically remains the same, while the area of recultivated ones significantly increases. In 2004 8,2 mln BGN from state budget were spent for activities with regard to technical decommissioning, recultivation and liquidation of the consequences of coal mining activities.

The total quantity of accumulated waste from **ore mining** amounts to 1318.7 mln tonnes by the end of 2004. The total area of terrains damaged by ore mining constitutes to 629,7 ha by the end of 2004, and 622 ha have been recultivated. During 2004, 38,7 ha were recultivated in comparison to 2003 and 2002, when 76,9 ha and 42,9 ha were recultivated, respectively. In 2004, 13 mln BGN were spent for technical and biological recultivation of terrains damaged by ore mining industry.

The total amount of accumulated waste by **non-metal and raw materials' extraction** constitutes 20 mil tonnes by 31.12.2004 to. The total area of terrains damaged by non-metal and raw materials' extraction constitutes to 2 545.9 ha by the end of 2004 ha, and 403,9 ha are recultivated. In 2004, 95,3 ha have been recultivated which is 3 times more than the area of recultivated sites in 2002 and 2003. By 31.12.2004 r. the ratio of damaged terrains to the total area of recultivated⁶ ones is 6:1, and the whole process could be assessed as unsatisfactory.

In order to decrease the impact of the extracting and processing industry on the environment, remediation measures are implemented according the following Decrees of the Council of Ministers:

- Decree № 74/28.03.1998 on eliminating the consequences of the extraction and processing of uranium raw materials;
- Decree № 140/23.07.1992 on ore mining's restructuring and phase-outing of inefficient production facilities in the country;
- Decree № 195/2000 on technical liquidation, conservation and removal of the negative environmental impact of coal mining.

⁶ Indicator is used for Community level assessment

IV. Air

1 Emissions of harmful substances

During 1999-2004 the levels of the four major pollutants falling within the scope of Directive 2001/81/EC on the national emissions ceilings for certain atmospheric pollutants (SO₂, NO₂, NH₃ and NMVOC) remains steady, with a relative decrease of the sulphur oxides' share as a result of operation of facilities for sulphur oxides' removal in thermal power plants (10% of the emissions are captured).

Table 9: Emissions of harmful substances in the atmosphere (thousands tones/year.)

Indicator	1999	2000	2001	2002	2003	2004
Sulphur oxides (SO)	942	982	940	965	968	929
Nitrogen oxides (NO)	202	186	191	198	210	216
Methane (CH ₄)	486	604	618	652	656	632
Non-methane volatile organic compounds (NMVOC)	283	288	301	295	292	306
Carbon oxide (CO)	641	706	756	743	744	762
Carbon dioxide (CO ₂)	56 778	49 033	48 606	47 454	51 674	50 729
Dinitrogen oxide (N ₂ O)	41	33	42	39	39	42
Ammonia (NH ₃)	65	56	56	57	52	54

Source: NSI

With the current pace of development, if new large production facilities that are sources of harmful substances are not launched, and if abatement technologies are introduced, by 2010 Bulgaria will manage to fulfill its commitments under the Gothenburg Protocol on limitation of the national annual emissions and under the Convention on long-range trans-boundary air pollution.

In 2004 within the system of Ministry for Environment and Water, there are 70 stations for air quality control including 45 manual stations.

The energy sector is the main **sulphur oxide** polluter with a share of 88.2% of the total emissions, and the thermal power plants continue to emit 30% of the nitrogen oxides.

Activities connected with extraction and conversion of fossil fuels remain the most significant **methane** pollutants. In 2004 their share is 74,5 % of the total emissions. In 2004, the basic emittents of **ammonia** were agricultural activities and activities related to the treatment and landfilling of waste with a share of 67.5% and 18% of the total emissions, respectively. Industry is the major emittent of **lead** in 2004 with a share of 89.3% of the total emissions. Industrial combustion processes and the thermal power plants are the most significant emittents of **mercury** with a share of 52% and 34.8% of the total emissions for 2004, respectively. Industrial combustion processes emit 95% of the total emission of **cadmium**. Thermal power plants and burning of fuels in households are the basic emittents of **dioxins and furans**, with a share of 49.5% and 27.3% of the total emissions emitted by anthropogenic activities in the country, respectively.

2 Legislation

The legal framework for air quality sector comprises Environmental Protection Act, Clean Ambient Air Act and the secondary legislation. In accordance with the National Programme for Phasing-Out of the Production and Use of Leaded Petrol, as of 01.01.2004, the use and production of leaded petrol in the country is forbidden. During the negotiation process for country's accession to the EU, the following **transition periods under several implementation programmes** have been agreed:

- by the end of 2011 for limiting the sulphur content in boiler fuels to 1% (mass) pursuant to Directive 99/32/EC;
- by the end of 2007 and 2009 for limitation of emissions from VOC resulting from the storage of petrol and its distribution for terminals and service stations with “average” and “low” capacity pursuant to Directive 94/63/EC;
- by the end of 2011 and 2014 for achieving compliance (in terms of the permissible emissions limit values) for individual blocks of TPP “Rousse”, “Lukoil Neftochim – Bourgas”, “Varna” and “Bobov dol” pursuant to Directive 2001/80/EC.

Only the Implementation Programme for Directive 99/13/EC on the limitation of emissions of volatile organic compounds due to the use of organic solvents in certain activities and installations does not envisage a transitional period for its implementation. As a result, the technical requirements set within its framework have to be applied to existing installations on the territory of the country by 31.10.2007.

V. Greenhouse gas emissions

Inventory⁷ of the emissions of greenhouse gases (GHG) for 2003 shows a total GHG emissions of 69 167 Gg in CO₂ equiv. These figures demonstrate for the first time a change in the trend of the last 14 years. Table 1 represents the total amounts of the major GHG (not considering LUCF) and the share of the total GHG emissions to the emissions registered in the base year - 1988, assumed to be 100%.

Table 10: Total GHG emissions⁸ in Gg, CO₂-equiv. and share in comparison to the base year

Greenhouse gases/ year	CO ₂	CH ₄	N ₂ O	HFCs	PFCs	SF ₆	Total	Share (%)
1988	102 518,53	24 441,41	14 861,15	0.00	0.00	0.00	141 821	100
1990	82 807,755	25 584,33	13 681,59	0.00	0.00	0.00	122 074	86,08
1991	65 273,351	24 986,37	11 326,92	0.00	0.00	0.00	101 587	71,63
1992	58 746,64	23 626,09	9 197,47	0.00	0.00	0.00	91 570	64,57
1993	61 108,49	21 238,35	8 045,57	0.00	0.00	0.00	90 392	63,74
1994	58 279,12	15 394,90	7 742,84	0.00	0.00	0.00	81 417	57,41
1995	61 340,66	16 145,83	8 405,85	2,95	46,94	0.00	85 943	60,60
1996	59 742,71	15 042,15	8 177,27	0.00	45,88	0.00	83 008	58,53
1997	57 909,88	12 801,91	7 741,82	0.00	37,26	0.00	78 491	55,34
1998	51 602,91	11 751,47	6 608,04	0.00	69,44	0.00	70 032	49,38
1999	47 887,79	10 092,33	6 222,62	0.00	43,55	0.00	64 246	45,30
2000	46 690,42	10 164,92	6 721,68	0.00	33,14	1,06	63 611	44,85
2001	48 914,33	9 370,31	6 624,47	0.00	16,29	1,10	64 926	45,78
2002	46 755,50	9 375,51	6 274,98	0.00	21,42	1,10	62 429	44,02
2003	53 321,38	9 365,83	6 456, 39	0.00	20,69	2,52	69 167	49,98

Source: Executive Environmental Agency, 2004

⁷ Inventory for 2004 is in process

⁸ Excluding Forestry

Generally, the emissions of GHG demonstrate a tendency of decrease. This is due to the reduced emissions of GHG in sectors “Energy”, “Industrial processes” and “Waste”. In 2002 the emissions of GHG in CO₂ equiv. were the less compared to the base year 1988, and 2003 is the first year showing an increase in GHG emissions. However, **the decrease in the emissions in 2003 is 50% of the value in the base year.** In 2003 the emissions of CO₂ had the largest share of the total GHG emissions expressed in CO₂ equiv., the emissions of CH₄ ranked second, and the emissions of NO₂ ranked third. The Bulgarian energy sector emits over 77% of aggregated GHG emissions as per the last inventory from 2003.

Bulgaria ratified **the United Nations Framework Convention on Climate Change (UNFCCC) and the Kyoto Protocol** in March 1995 and at present complies with the requirements of the UNFCCC. The forecast for GHG emissions in Bulgaria till 2020, based on the assumption that the Action plan on climate change will continue to apply, shows considerably lower values than admissible under the Kyoto Protocol and ensures a reserve for compliance with the commitments. After accession to the EU, Bulgaria will participate in the first period of the implementation of the European Scheme for the GHG trade of and its participation will continue also during the second period. Bulgaria actively participates in the “Joint implementation” mechanism under the Kyoto Protocol and prepares for introducing the European Scheme for the GHG trade as from 2007.

VI. Biodiversity

1 Wild flora and fauna and natural habitats

Bulgaria is one of the richest countries in biological diversity in Europe including ca. 3700 higher plants species, ca. 5 200 fungi, 1300 lower plant species, lichens – 709, 700 vertebrate species, over 400 bird species, mammals -94, ca. 27 000 invertebrate species. Endemic plant species in Bulgaria constitute about 5% of the entire flora - a relatively high percentage for Europe. The available information on invertebrates shows that 8,8% of endemic species, excluding insects, and 4,3 % of insect species are endemic. The known endemic vertebrates groups include 12 species of fresh water fish, 1 amphibian variety, 4 reptilian varieties and at least 4 mammal varieties. According to the Red Book of Bulgaria (1984), 158 species of higher plants are threatened and 574 species are rare. Appendix 3 to the Biodiversity Act (BD) in Bulgaria lists as protected 90 animal species, 331 bird species, 594 plant species.

Bulgaria offers almost all main types of natural habitats represented in Europe. An Appendix to the Biodiversity Act lists 106 types of natural habitats as representative for Bulgaria and Europe in accordance with the unified European habitat classification. A complete inventory and assessment of the natural habitats' diversity has not been made in the country yet. An Appendix to the Biodiversity Act comprises 102 plant species, 334 bird species and 91 other animal species excluding birds.

With a view to protecting the rare and threatened species, the assessment of the conservation status and the degree of endangerment of some Red-Book's plants and fungi populations continues, and in 2004 the work on the new Bulgarian Red Book started. Action plans on protection of the first 8 species of plant and 6 species of bird threatened are in preparation.

2 Protected areas and management plans

Considering the natural-historic and socio-economical conditions in the country, by 2010 the protected areas and protected zones within the National Environmental Network should cover at least 15% of the territory of the country. The pace of achieving that goal will be strongest after 2007 when, after Bulgaria's envisaged accession to the European Union, the identified and characterized representative habitat types for Bulgaria and Europe will be designated as units of the Pan-European Ecological Network NATURA 2000.

The number of protected areas in Bulgaria is 858 by the end of 2004, with a total surface of 544 394,9 ha, categorized as illustrated in Table 9. The decrease in the protected areas' surface in 2003 and 2004 was due to re-categorization process of these areas in accordance with the categories of protected areas pursuant to the Protected Areas Act (PPA). So in 2004 the peoples' parks and historic sites were closed. At present the surface of protected areas in Bulgaria represents 4,9% of its total area. The greatest is the share of the natural parks- 45%, followed by the national parks- 27,6 % and the reserves with 14,1%. The less is the share of managed reserves - 0,8%. The existing protected areas possess a high nature protection value. The surface of the virgin forests in Bulgaria is 257 000 ha (according to TBFRA), ranking the country third in Europe. Natural processes are well represented in the Bulgarian protected areas (PA) and there is a high potential for their development into qualitative parks according to the Pan- European assessment.

Table 11: Protected areas (2002-2004)

№	Category of protected areas (PAs)	Total number of PAs			Total surface of PAs (ha)		
		2002	2003	2004	2002	2003	2004
1.	Peoples' parks	3	1	0	35690.6	1630.8	0
2.	Reserves	55	55	55	76979.0	76979.0	76979,0
3.	Managed reserves	35	35	35	4517.1	4517.1	4517,1
4.	National parks	3	3	3	150362.3	150362.3	150362,3
5.	Natural parks	8	10	10	210663.5	244723.3	244723,3
6.	Protected sites	175	402	409	41634.4	50047.9	51220,9
7.	Natural monuments	457	352	346	21833.6	16608.8	16592,3
8.	Historical sites	528	8	0	8246.7	134.8	0
	Total:	1264	866	858	549927.2	545004.0	544394.9

Source: Executive Environmental Agency, Green Book 2004

On the other hand the existing network of protected areas is not completely representative. Highly protected areas, including reserves, national parks and managed reserves are only 2,1% of the country's territory. In the Ministry for Environment and Water a register of protected areas has been established. Significant problem is lack of computerized boundaries and lack of GIS of the protected areas. The cadastre of protected areas is not completely connected with the national land cadastre.

The process of designation of protected areas is slow. Significant problems have been observed in the development and approval of management plans for national/natural parks and managed reserves. Only 21 management plans have been approved since the adoption of the Protected Areas Act till the end of 2004.

3 Development of the national part of NATURA 2000 network

The Biological Diversity Act introduced a new form of territorial protection of biological diversity, namely the establishment of protected zones for conservation of natural habitats. The development of the national part of the NATURA 2000 network began in 2003. A GIS strategy is being developed along with a national GIS database compatible with the requirements of the European Commission. According to general estimates, there are about 309 potential sites meeting the requirements of NATURA 2000 in the country, covering about 35 % of the its territory. For both 2003 and 2004 inventories were made for 153 sites covering a total area of 1 million ha. A list was prepared comprising the potential NATURA 2000 sites for which an inventory is envisaged to be carried out. The list includes 100 potential Specially Protected Areas in accordance to the Birds'

Directive; 150 potential protected areas of Community importance (p. SCI) according to the Habitat Directive; 50 p. SCI with a function of bio-corridors, including 25 rivers; 800 – 1200 p. SCI – caves, including 200 sites important for bats. A certain difficulty in the process of establishment of the NATURA 2000 is the lack of a map of national distribution of natural habitats.

4 Legislation

In 2003 Bulgaria closed the negotiations with the EU on Chapter 22 “Environment” without transitional periods agreed in the field of biological diversity. Bulgaria is a party to almost all global and European environmental conventions. The conservation and the sustainable use of biological diversity in the country are regulated by 3 laws and the related secondary legislation (the Protected Areas Act, the Medicinal Plants Act, and the Biological Diversity Act). In 2004 the Black Sea Biodiversity and Landscape Conservation Protocol to the Convention on the Protection of the Black Sea against Pollution and the European Landscape Convention were ratified by law.

The general regulatory framework for the protection and use of the respective biological resources and of the biological diversity is established by the sectoral legislation dealing both with natural biological resources and with those cultivated by man (Agricultural Land Conservation Act, Agricultural Land Ownership and Use Act, Protection of New Plant Varieties and Animal Breeds Act, Forests Act, Hunting and Game Keeping Act, Fisheries and Aquaculture Act, Veterinary Practices Act, etc.).

VII. Noise

Environmental noise caused by transport is one of the major environmental problems for the large towns in the country. Urban noise is studied applying an intra-institutional methodology and indicators adopted within the framework of the National System for Control, Limitation and Abatement of Urban Noise. In 2004 the number of assessment points for measurement of noise levels is 592, which is 27 more than in 2003. In 2004 in 429 of the points noise levels above 60 dB(A) were measured. The analysis outlines that the unfavorable acoustic background is maintained in the urban areas. Traffic noise constitutes 80-85% of the overall noise load in large settlements. Problems directly related to noise pollution caused by road transport are the lack of noise abatement barriers, shortcomings of urban planning, inefficient traffic organization and poorly maintained road network. The development of a new Ordinance for noise limit values considering also the specificity of air-traffic noise is envisaged.

The main sources of industrial noise are the small production enterprises, such as wood-processing enterprises, motor-car workshops, enterprises for production of woodwork, situated in settlements. Large industrial facilities located in or outside the settlements do not add to the acoustic load of the environment.

In 2003 the national legislation transposed Directive 2000/14/EC relating to the noise emission in the environment by equipment for use outdoors and Directive 86/594/EEC on airborne noise emitted by household appliances. The Protection of the Environment from Noise Act, which transposes Directive 2002/49/EC on assessment and management of noise in the environment, was adopted at the end of August 2005. The secondary legislation, introducing the requirements of Directive 2002/49/EC on the to environmental noise indicators and the development of strategic noise maps and action plans is in a process of elaboration. Bulgaria has undertaken the commitment to apply from the date of accession the European legislation on noise adopted by 2003.

D. SWOT Analysis

The Analysis of strengths, weaknesses, opportunities and threats (SWOT analysis) for the purposes of OP “Environment 2007-2013” was elaborated by the working group, responsible for the preparation of the Operational Programme in the period of January – March 2005. In line with the methodology applied and based on the analysis of the current situation, the subject of the analysis and the most important factors that have an impact on the sector were defined first.

The subject of the SWOT analysis was defined as “The status of the environment in the Republic of Bulgaria looked from the perspective of complying with the requirements of the EU environmental legislation.”

The results of the SWOT analysis are presented in the following table:

STRENGTHS	WEAKNESSES
1. Low aggregate level of water pollution.	1. Insufficient and depreciated infrastructure for collection, supply, discharge and treatment of water and ineffective utilization of water resources;
2. High level of constructed water supply network in the country.	2. Limited internal financial resource for investments in the environment and high expenditures for implementation of environmental legislation;
3. Initiated development of national system of regional facilities for treatment of municipal solid waste .	3. Lack of sufficiently developed administrative capacity, particularly at municipal level, for implementation of the requirements of environmental legislation and for programming, preparation, management and monitoring of investment programmes, plans and projects;
4. Bulgaria is one of the richest countries in biodiversity in Europe with high level of naturally established sites within the protected areas and the network of potential NATURA 2000 sites.	4. Insufficiently developed systems for waste collection (including separate waste collection), waste transportation and waste treatment facilities. Insufficient measures for waste minimization, re-use and recovery.
5. Increasing application of the “Polluter pays” and “Producer responsibility” principles.	5. Partially developed National environmental network. Decrease in the biodiversity and process of deterioration of the conditions in some ecosystems.
6. The country generates relatively low greenhouse gas emissions.	6. Presence of a great number of polluted areas (illegal dumpsites, past contaminations);
7. Relatively well-developed system for monitoring of most of the environmental components ⁹ . A National monitoring system for biodiversity is under development.	7. Water in the country ¹⁰ are declared as “sensitive zones” in the sense of Directive 91/271/EC.
8. Established legal framework harmonized with the EU environmental legislation and adopted programmes for implementation of environmental protection policies.	

OPPORTUNITIES	THREATS
1. Realization of accelerated economic growth and increase of the national finance resource for investments in the environmental sector;	1. Global climate change, falling of the country in the drought zone and risks, related to unforeseen disasters (i.e. floods, accidents, drought);
2. Accession of the country to the European Union and use of EU financial instruments for solving problems related to environmental protection in the	2. Potential new expenditures for business and public sector for implementation of environmental legislation, related to amendments and supplements in the EU

⁹ Excluding Biodiversity monitoring

¹⁰ With the exception of the Mesta river.

OPPORTUNITIES	THREATS
country; Alternative financing of environmental protection activities through participation of Bulgaria in various global funds/projects.	environmental legislation.
3. Process of restructuring of the energy sector, a potential for higher energy efficiency and use of renewable energy sources;	3. Potential for intensification of agriculture and transport and increase of pollution from tourism and industry with increased growth of these sectors and non-compliance with environmental requirements;
4. Development of the institutional framework for public information and participation in decision making process on environmental matters and participation of business in environmental protection;	4. Negative public attitude towards construction of waste treatment facilities;
5. Restructuring of the ownership and the management of the branches within the “water” sector;	5. Insufficient integration of environmental policy in the sectoral policies and their legislation.
6. Introduction of effective and contemporary techniques applied in relation to the environmental sector in other countries;	

E. Strategic objectives and priority axes of OP “Environment 2007-2013”

I. Strategic objectives of the Operational Programme

1 Global strategic objective

The environment in Bulgaria is one of the most valuable national assets that should be protected and preserved with a view to gain future benefits. At the same time our country is going through a period of major changes and many of them expose this asset to potential risks. In order to protect and preserve the natural resources and improve the state of environment in the country, sustainable development should be ensured for the future – not only in social and economic but also in environmental terms. For this reason the main strategic objective of the environmental policy for the period 2005-2015 is:

- *To improve the quality of life of the population in the country through ensuring healthy and favorable environment and to preserve the rich natural heritage on the basis of sustainable development of the country.*

The Operational Programme “Environment” is only one of the instruments for the implementation of the national policy for development of the country and particularly of the national environmental policy. Objectives and priorities of the national environmental policy will be supplemented also by other means, other financial resources, respectively, in accordance with the national sectoral and regional programmes and plans (such as Operational Programmes “Regional development”, “Development of the competitiveness of the Bulgarian economy” and “Administrative capacity”, “Rural development” Programme, “Fishery and Aquacultures” Programme).

In this sense the implementation of Operational Programme “Environment” is also directed towards achieving the strategic objectives of the National Development Plan 2007-2013 and the National Strategic Reference Framework for the same period, namely:

- *To attain and maintain high economic growth through dynamic knowledge-based economy in accordance with the principles of sustainable development;*
- *To improve the potential of human capital and to achieve employment, income and social inclusion level that provides high quality of life.*

The National Strategy for Environment and the National Development Plan as well as the commitments undertaken during the negotiation process for country’s accession to the EU directly or indirectly define the development of the environmental infrastructure as a condition for improvement of the quality of the environment. The National Strategic Reference Framework of the country for the period 2007-2013 defines 5 priority areas for interventions in the next 7 years, one of them being the following:

- *“Improvement and development of the basic infrastructure”*

In order to achieve the above-stated objectives, identified in the basic national documents, the following **general strategic objective of Operational Programme “Environment 2007-2013”** is defined:

- ***Improvement, preservation and recovery of the natural environment and development of the environmental infrastructure.***

The implementation of this objective will contribute to the improvement of the quality of life of the population and to expanding the possibilities for investments in the country. The general strategic objective is identified in accordance with one of the priorities of the European Community for the

cohesion policy 2007 – 2013 that is directed towards *improvement of attractiveness of EU Member States, cities and regions through improving accessibility, ensuring quality and level of services, and preserving their environmental potential.*

2 Specific strategic objectives of the programme

The past decade is characterized with favorable changes for the Bulgarian environment. The considerable developments in respect to the environment in the country contributed to the reduction of the disparities with the average EU level for variety of indicators. Nevertheless, there is a need of additional efforts in regard of achieving progress on a variety of issues.

In the field of infrastructure for the protection and rational use of water, the main issues in the country are related with the increase of the share of the population, connected to sewerage networks and to urban waste water treatment plants. The water supply in some regions is deteriorated due to the poor condition of the water supply systems. Further to that the water resources are not uniformly allocated along the territory of the country and the population in some regions suffers seasonal (in some events all-year) shortage of water. There is a definite need of improvement of the water balance, increase of the accessible water resources and last but not least improvement of the infrastructure and the measures for prevention of the floods, which become an essential issue for the country during the past year. The development of alternative water supply, schemes of water consumption, new water sources and measures for prevention or elimination of the negative impact of the floods, also require significant investments. These needs shall be covered by several operational programmes. Operational Programme “Environment 2007-2013” will be mainly directed towards achievement of compliance with the requirements of the European environmental legislation in the field of building up sewerage systems, including urban WWTPs.

In the field of infrastructure, related to waste management, the main issues in the country, which principally have to find solution are related to building up the needed waste treatment infrastructure, the extension and modernization of the organized waste collection and transportation systems, reduction of the municipal waste generation, the introduction of their separate collection and implementation of activities directed to reuse of the generated waste. The issues related to the construction waste management and those from demolition, infectious and other hazardous waste from the health care institutions in the country require solution as well. Last but not least are the issues related to the existing municipal waste landfills which do not meet the requirements of the legislation, to the existing old contaminations and the improvement of the management of illegal municipal waste dumpsites. Operational Programme “Environment 2007-2013” will be mainly directed to the achievement of compliance with the requirements of the European environmental legislation and in particular with Directive 1999/31/EC.

Bulgaria is one of the richest countries in Europe in terms of flora and fauna (biodiversity), diverse natural habitats, extensive forests and other natural resources of biological significance. The protection of biodiversity requires the long-term preservation of the natural habitats of the rare species. The relevant policy in Bulgaria involves measures, such as development of the NATURA 2000 network, increase of the protected areas and creation of mechanisms for their management. In addition to the conservation and rehabilitation of the natural habitats, special efforts are also needed to protect certain species that are extremely endangered from extinction. Part of the envisaged actions is geared towards formulation, approval, and implementation of Action Plans for all endangered species of European/global significance. Operational Programme “Environment 2007-2013” will target with priority the preservation of natural habitats through development, updating and implementation of the protected areas management plans and of plans for management of the protected zones of NATURA 2000.

Table 12: Main differences between Bulgaria and EU concerning environment

	Indicator ¹	Definition of the indicator	Bulgaria	EU – 25 (average)
1	Total greenhouse gas emissions	Aggregated emissions of the 6 basic greenhouse gases (CO ₂ , CH ₄ , N ₂ O, HFC, PFC and SF ₆) in CO ₂ equivalent. The base year is equal to 100. (1990 = 100 for CO ₂ , CH ₄ и N ₂ O); (1995 = 100 for HFC, PFC and SF ₆)	44.0 (2002)	91.0 (2002)
2	CO ₂ emissions	The indicator compares the level of CO ₂ emissions in EU countries and the rest countries (developing countries according to the OECD definition). It is presented as tons of CO ₂ emissions per capita of population.	5.9 (2002)	8.8 (2002)
3	Total SO ₂ emissions ²	The indicator presents the total SO ₂ emissions of the certain country for 2001, measured in kilotons.	849.0 (2001)	Austria – 37 (2001) Portugal – 301 (2001) Hungary – 401 (2001) Czech Republic – 251 (2001) Poland – 1564 (2001)
4	Municipal waste collected	The indicator presents the amount of municipal waste collected from the population, incl. waste from commerce, offices and public institutions (measured in kg/resident/year)	500 (2002)	531 (2002)
5	Municipal waste landfilled	The indicator presents the share of municipal waste collected, incl. waste from commerce, offices and public institutions disposed off through landfills (measured in kg/resident/year)	404 (2002)	267 (2002)
6	Municipal waste incinerated	The indicator presents the share of municipal waste collected, incl. waste from commerce, offices and public institutions disposed off through incineration (measured in kg/resident/year)	0 (2002)	91 (2002)
7	Population connected to the water sewerage network	The indicator presents the percentage of population connected to the water sewerage network in relation to the total number of population in the country.	67.0 (2000)	Austria – 85.0 (2000) Hungary – 51.0 (2000) Czech Republic – 75.0 (2000)
8	Population connected to WWTP	The indicator presents the percentage of population connected to a municipal WWTP, compared to the total number of population in the country.	39.0 (2001)	Austria – 86.0 (2001) Czech Republic – 68.0 (2001)

Source: Ministry of Environment and Water, National Statistical Institute, EUROSTAT

The gradual reduction of disparities requires on one side harmonization of environmental legislation, building and strengthening of administrative capacity and on the other side significant investments in environment protection and improvement.

On the basis of the Community Strategic Guidelines for Cohesion policy 2007-2013 and for the purpose of realization of the main priorities of European Union concerning employment, growth and sustainability (Lisbon, Gothenburg), in order to ensure complementarily with the other EU policies and based on the socio-economic analysis of the sector, the following **specific strategic objectives of Operational Programme “Environment”** are defined for the period 2007 – 2013:

- ***Protection and improvement of the condition of water resources;***
- ***Improvement of waste management and soil protection;***
- ***Preservation of biodiversity and nature protection;***

The global strategic objective and the resulting specific strategic objectives will contribute to the ***strengthening of the synergies between the environmental protection and growth***, as required by the Community Strategic Guidelines.

¹ All data (excluding the data for the total SO₂ emissions) is from the EUROSTAT web page: www.epp.eurostat.cec.eu.int – statistics for sector “Environment”

² The data is from the web page of European Environment Agency www.themes.eea.eu.int/Specific_media/air

The implementation strategy for Operational Programme “Environment” is based on: 1) the analysis of the present situation for the period 1999 – 2004; 2) the SWOT analysis elaborated for purposes of the programme; 3) the main differences in the key indicators that were identified for the environmental sectors between EU and Bulgaria. The implementation strategy is described by means of definition of a certain number of priorities (axes), each of them comprises a distinct type of activities.

The implementation of Operational Programme “Environment” is directed to the objectives of European Community environmental policy, which in accordance with Art. 174 of the Treaty for establishing the European Community are: preserving, protecting and improving the quality of environment, prudent and rational utilization of natural resources and protecting human health.

II. Priority axes

The Operational Programme “Environment 2007 – 2013” identifies 4 priority axes, which will be financed by two European Union Funds: (1) the Cohesion Fund and (2) the European Regional Development Fund.

Through the definition of priority axes for financing in the fields of “water”, “waste” and “biodiversity”, the OP “Environment 2007 -2013” corresponds to the necessities for investments in the environmental infrastructure, aiming at achieving compliance with the EC environmental legislation. In this way the priorities of the operational programme are defined in accordance with the activities proposed by the Strategic Guidelines for financing, in order to strengthen the unity between the environmental protection and growth.

Operational Programme “Environment 2007 – 2013” will focus on the implementation of the priorities that are directed towards compliance with the directives, requiring the largest financial resources. The implementation of the priorities shall contribute to the compliance with the requirements of both EU and national legislation in the field of environment.

Priority 4 is directed towards providing the necessary technical assistance for the overall Operational Programme.

1 Priority 1: Improvement and development of waste water infrastructure in settlements with over 2 000 PE.

1.1 Priority rationale and description

The priority is based on the purpose of Council Directive 2000/60/EC laying down the framework for community activities related to water - Water Framework Directive (WFD) as well as the purposes of Council Directive 91/271/EEC for urban waste water treatment.

Bulgaria will have to comply with the requirements of Council Directive 91/271/EEC on urban waste water treatment by December 31, 2010 for all agglomerations with a population equivalent (PE) above 10 000 and by 31 December 2014 for agglomerations with PE between 2 000 and 10 000. This requires extension, reconstruction and modernization, as well as construction of new sewerage systems including UWWTPs in the settlements. The above mentioned deadlines represent the schedule for waste water treatment in compliance with the requirements of this Directive.

In the same time, Bulgaria has declared water on its entire territory as being sensitive zones/except Mesta River with its river valley and Dobrudza’s rivers and gullies/. For agglomerations with PE above 10 000, which dilute in sensitive zones, elimination of nitrogen and phosphorus is required.

In 2003 Bulgaria has developed an Implementation Programme for the requirements of Directive 91/271/EEC. According to this directive it has been determined that 430 agglomerations (settlements or group of settlements, resorts, country sites, districts of big cities) require the

construction of entire sewerage infrastructure, completion or reconstruction of the existing sewerage networks and WWTP.

The above mentioned 430 agglomerations include 20 agglomerations with PE above 100 000, 101 agglomerations with PE between 10 000 and 100 000 and most of the agglomerations (309) are in the category 2 000 – 10 000 PE. The total estimated investment costs of the programme is 4 337 million BGN. In 2006 the total estimated investment costs needed is 3 461 million BGN (1 770 million EUR). For the rest investments, funding has been provided mainly through ISPA and PHARE financial instrument and from the national state budget.

Approximately 67% of the total budget of the present OP has been devoted to this priority axis. This would provide for approximately 59% coverage of the needed financial resources as identified in the IP for directive 91/271/EC.

According to the terms of agreement for transition periods for implementation of Directive 91/271, the present OP shall give priority to investment projects in agglomerations with more than 10 000 PE. Projects in agglomerations between 2 000 and 10 000 PE shall be considered as a second priority within the present OP.

The Framework Water Directive is the milestone for EU water policy and it is significant to other areas as it provides a framework and tool for integrated river basin management. The aim of this Directive is to prevent “further deterioration” (i.e. not to make water condition worse) and achieve “good ecological and chemical status” (i.e. improvement of current state) in all EU water resources by December 2015.

The integrated river basin management is based on the natural functioning of freshwater ecosystems, including wetlands and groundwater, as these are the source of freshwater on which population depends. The implementation of WFD requirements consists several planning cycles. The first one covers 15 years (from 2000 to 2015), while the subsequent ones are to take place every 6 years thereafter. During these cycles, the river basin directorates will have to be established and they should develop and implement a set of different tasks. Each cycle shall be reflected in a River Basin Management Plan, which includes all the measures needed to prevent deterioration and achieve “good status” for water quality. The first River Basin Management Plans under the Water Framework Directive should be finalized by 2009, with the first set of measures starting to apply in 2012. Bulgaria has not requested any transition periods for complying with the requirements of the WFD with regards to this aspect.

According to the European Community Guidelines for the Structural Funds and their coordination with the Cohesion Fund (COM (2003) 499 final) the specific measures targeted at waste water treatment actions must be seen as part of an overall strategy for ensuring the ecological status and chemical quality in the entire river basin. Integrated river basin management programmes, including the development of the management plans foreseen under the WFD, will also be eligible for financial assistance.

1.2 Priority objective

The main objective of the priority is **preservation and improvement of the environmental condition of the water in the country.**

The reduction of the disparities with regard to the share of the population connected to sewerage system as well as the achievement of compliance with Directive 91/271/EEC through the provision of (environmental friendly) discharge of waste water from agglomeration with over 2 000 PE, will be supported within the framework of the priority. Further to that, the priority will also support the implementation of the basin water management approach, in view of preserving and improvement of water environment in the country, as well as the sustainable use of water.

1.3 Indicators for implementation of the priority

The following impact, result and output indicators are identified with the purpose to measure the progress on implementation of the priority.

Table 13: Indicators for Priority 1

Definition of indicators	Unit of measurement	Baseline data 2007	Data in the end of period - 2013	Sources of information
Result indicators				
Population connected to sewerage systems	Number of inhabitants			MOEW, final beneficiary, project application forms, progress reports of the approved projects
Population connected to waste water treatment plants	Number of inhabitants			MOEW, final beneficiary, project application forms, progress reports of the approved projects
Output indicators				
Length of constructed sewerage systems	km	0		MOEW, final beneficiary, project application forms
Number of constructed WWTP	number	0		MOEW, final beneficiaries, project application forms
Number of reconstructed/modernized UWWTP	number	0		MOEW, final beneficiaries, project application forms
Number of developed river basin management plans	number	0	4	MOEW, final beneficiaries, project application forms

1.4 Typology of activities within the priority

The activities comprised within the framework of this priority include:

- (1) The construction of new sewerage systems, including urban waste water treatment plants, as well as reconstruction and/or extension and/or modernization of the existing ones in (1) settlements with over 10 000 PE as first priority and (2) in settlements with over 2 000 to 10 000 PE as second priority. In settlements with over 10 000 PE the activities will support the introduction of technologies for tertiary treatment of urban waste water, in compliance with Directive 91/271/EEC. Other activities, which will be supported within the framework of this priority are those related to the supply of equipment for the detection and measurement of leakages, as well as to the provision of the facilities for sludge treatment from urban waste water treatment plants. The last will be supported only within the framework of projects for new and/or extension, reconstruction and modernization of existing sewerage systems, including urban WWTPs.
- (2) Development and updating of river basins management plans. The river basins management plans for each of the four river basin management directorates will be prepared within this activity.
- (3) Development of investment projects for subsequent financing within priority 1 of Operational Programme "Environment 2007 – 2013".

The activities described above will be additionally grouped and elaborated (in a separate document) into measures for the implementation of the Operational Programme, with all the necessary and associated components.

A significant prerequisite for the successful implementation of the set up activities and objectives is the creation and implementation of adequate new legislation which shall regulate the ownership of the water management systems and facilities. This is also a condition for the realization of various forms for the provision of the needed investments (for instance the public – private partnership).

1.5 Sources of financing:

- Cohesion fund – the financial assistance from the fund will be maximum 85% of total eligible expenditure.
- National funds

With regard to net revenue-generating projects, according to the Proposal for a Council Regulation laying down general provisions on the ERDF, ESF and the CF (dated 6 April 2006), the maximum rate of the support from EU funds will be calculated in compliance with the requirements of article 54 which defines the eligibility of expenditure.

In case of necessity originating from the final versions of EU Regulations, the support for development of a project (as a separate operation within the priority) to be presented for financing under this priority at a later stage, could be limited to 3% from the total budget of the priority axis.

1.6 Categories of assistance³

According to the Categorization of Structural funds assistance 2007-2013, the present priority comes under the scope of:

- Category No. 46 – Waste water treatment

1.7 Final beneficiaries:

Municipal administrations, Water Supply and Sewerage companies (WSS) and River Basin Management Directorates.

1.8 State aid:

All activities under this priority will be implemented in compliance with the European legislation and by observing the principle of free competition. Any state aid that might be granted under this priority will be assessed in accordance with national State Aid Act, the Rules for its implementation, with a decision of the Bulgarian Commission for Protection of Competition. All state aid falling within the scope of the de minimis rule will be granted pursuant to the requirements of EC Regulation 69/2001/EC for the application of Articles 87 and 88 of the EC Treaty.

The activities included in this Priority can be considered as state aid schemes in cases when final beneficiaries are Water Supply and Sewerage companies and their compliance with the state aid rules should be therefore assessed, respectively. The conditions for funding these activities will be equally applied to all WSSC in the country. The constructed infrastructure will be generally accessible and will be used under equal terms by all current and potential users of the provided services. The application of the provisions of the Public Procurement Act should guarantee the lack of economic advantages at the level of contractor/sub-contractor of the operations (projects) financed under this priority.

³ In the Proposal for a Council Regulation laying down general provisions on the ERDF, ESF and the CF (dated 6 April 2006) categories for expenditure in regard to the environment are not outlined. The outlined categories are according to Draft Commission Regulation, setting out the detailed rules for the application of the Council Regulation laying down general provisions on the ERDF, ESF and the CF and of the Regulation of the European Parliament and of the Council of ERDF (dated 15 February 2006).

1.9 Coordination with other programming documents⁴ for period 2007 - 2013

With regard to water sector, the implementation of OP “Environment” will aim at achieving compliance with the requirements of the European Environmental acquis in the field of water, and implementation of the commitments that Bulgaria has undertaken during the negotiation process for EU membership (especially the achievement of the requirements of Directive 91/271/EC).

On the other hand, the **Operational Programme “Regional Development”** will also be directed towards solving essential problems in the water sector. In the framework of “Urban regeneration and development” priority of this programme will be financed activities related to:

- Rehabilitation, reconstruction and construction of water supply networks in settlements, main water supply pipelines connecting water supply networks with aquifers, improvement of drillings and water catchments. All actions related to water supply networks will be implemented in areas, where UWWTP is already constructed or a positive decision for financing the UWWTP and/or sewerage network construction/reconstruction/modernization is envisaged under ISPA programme or OP “Environment 2007 - 2013”.
- Construction or extension of the capacity of water storage tanks and reservoirs for ensuring provision of required water quality, as well as steady water pressure to balance the network and guarantee a stable supply;
- Modernization of pumping stations, water control and water reduction structure;
- Construction/extension of purification facilities for increasing drinking water quality;
- Provision of access to alternative water sources.

In the programme are included also the infrastructure and measures aiming risk prevention and especially these aiming flood prevention, as well as these fighting with the landslides. They are as follows:

- Establishment and reinforcement of infrastructure for prevention against floods and landslides, i.e. dikes, barrages and other supportive facilities;
- Purchase of machinery for maintaining the flood defense lines, machinery for dikes and river-beds prevention of harmful vegetation;
- Small infrastructure measures combating banks’ erosion, creating small reservoirs for water retention, weirs, etc.;
- Creation and introduction of hydraulic structures for reducing or eliminating floods and its consequences;
- Rehabilitation and construction of drainage facilities and infrastructures;
- Hydrometrological monitoring systems for urban environment, information systems for monitoring and timely warning for high levels of rivers.

National Programme “Rural Development” also stipulates activities for improvement of the water sector. In the framework of this Programme will be financed:

- Construction/reconstruction/rehabilitation of water supply and sewerage infrastructure in settlements designated as rural areas with PE below 2000 inhabitants.
- Rehabilitation and construction of drainage installations and small infrastructure for flood protection and banks erosion on the territory of the agricultural farm.

⁴ The Operational Programmes, The National Strategy Plan for Rural Development and its National Programme for “Rural Development”, National Strategy Plan of Fisheries and Aquaculture and its Programme “Fisheries and Aquaculture”.

2 Priority 2: Improvement and development of waste treatment infrastructure

2.1 Priority rationale and description

The priority is designed to achieve compliance with a number of EU directives, which requirements are transposed into the national legislation. The priority is mainly designed to achieve compliance with Directive 75/442/EEC on waste and Directive 1999/31/EC on the landfill of waste.

The hierarchy of waste management has been formulated by the 1996 Community Strategy for Waste Management. It describes the operations and activities with regards to waste management in the following preferred sequence:

- (1) Prevention of waste generation by reducing the quantity and/or concentration of dangerous substances in the accumulated waste.
- (2) Reuse/Recycling/Recovery by:
 - reuse – multiple use of materials or products for the same or different purposes;
 - recycling – recycling of waste and its use as raw material for production of same or different products;
 - recovery – by employing for composting, energy recovery, or other relevant technologies;
- (3) Disposal of waste by means of landfilling or incineration without recovery of energy, in cases no other alternatives are available.

The purpose of the hierarchy is to provide a model for integrated waste management approach, whose application in the pointed out sequence will contribute for the establishment of a sustainable waste management policy.

In Bulgaria, the Waste Management Act regulates a hierarchy for the waste management, which sets as:

- priority 1 – prevention of waste generation;
- priority 2 – utilization of waste by reuse, recycling, and/or extraction of secondary raw materials and energy;
- priority 3 – final disposal by means of landfilling or incineration of waste that cannot be prevented and/or utilized;

The generation and treatment of municipal and construction waste is still a problem which threatens the quality of the environment and represents a risk both for the environment and the human health. The current levels of waste generation are high and their integrated waste treatment shall be encouraged within the present priority through implementing activities in integrated manner that comply with the above-described hierarchy for waste management. In addition to the activities described below, the priority shall also finance the preparation and update of regional plans for integrated waste management as a precondition for implementing integrated waste management schemes.

Up to now, the waste landfilling has been the preferred method of waste treatment in Bulgaria. The present priority shall also focus on introducing new models for management of municipal, construction and demolition waste, which also shall contribute to the reduction of the total quantity of landfilled waste as well as to their environmentally sound recovery.

The incineration of waste is not a common practice in the country and also a substantial part from the existing installations for incineration does not comply with the requirements of the legislation and the modern technical standards. Till the moment, in the country does not exist any installation for incineration of municipal waste. The main reasons for that shall be sought in the high costs for

construction of such facility compared to cost of the existing practice of waste landfilling; the relatively low calorificity of the mixed municipal waste in the country; the limited financial opportunities of the municipalities for investments in the municipal infrastructure for waste treatment.

During the last years the advantages and disadvantages of the waste energy recovery have been broadly discussed. Despite the potential risks the usage of waste as alternative fuels and/or their incineration with energy recovery could be an applicable possibility with actual benefits for the environment and the national economy. The incineration of waste shall be performed only in installations which are in compliance with the requirements of the legislation and thus the highest level of environmental protection to be guaranteed. The emitted heat shall be recovered to the greatest possible extent. Taking into consideration the fact that the present levels of usage of waste energy recovery are negligible, initiatives and investments will be supported in this sphere. The waste with high energy content which are not suitable for recycling shall be orientated towards incineration with energy recovery.

At present, significant part of the existing landfills for household waste serving the settlements with organized waste collection do not comply with the requirements of the national and EU legislation. Landfills constructed, reconstructed, modernized and put into operation after 1997 are an exception. Due to the potential risk that they impose, it is of first priority to remediate them in order to guarantee their future operation, or to close and replace them with new facilities as envisaged in the Implementation Programme for Directive 1999/31/EC on landfilling of waste.

In the past few years, a National Programme for Reducing the Number and Risk of Landfills and Past Contaminations with Waste was developed. As a first stage it focuses on the solid waste landfills. A register of landfills and past contaminations with waste was created in the framework of the National Environmental Monitoring Network (NEMN), maintained by the Executive Environmental Agency, where information for over 275 landfills has already been entered. Methodology for prioritization was developed, and fifty nine (59) existing landfills for household waste, serving settlements with population of over 20 000 inhabitants (i.e. approximately 70% of the country's population) have been investigated, inventoried, assessed and prioritized on the basis of the assessed risk for the environment (water and soil) and the associated risk to human health. The results showed that, on one side the major part of the landfills do not comply with the current technical requirements for such facilities, and on the other hand, they are located within the country in a way imposing high health and ecological risk. The inventoried landfills are categorized into four groups, according to the risk they impose:

- a. I – st group – very high risk – 12 landfills;
- b. II – nd group – high risk – 17 landfills;
- c. III – rd group – medium risk – 28 landfills;
- d. IV – th group – minimum risk – 2 landfills

Twelve of the existing landfills for household waste serving settlements with population over 20 000 inhabitants (including 3 of very high risk, 2 of high risk and 7 of medium risk) are expected to be closed by the end of 2006. The closure of the remaining 47 landfills could be financed under the Operational Programme “Environment”.

The staged re-cultivation and closure of the existing landfills for household waste, which do not comply with the requirements of the legislation and the current technical standards, will be bind by the putting into operation of relevant new regional facility/installation for treatment of household waste. Priority will be given to landfills that impose higher risk to the environment and human health.

Approximately 24% of the total budget of the present OP has been devoted to this priority axis. This would provide for approximately 58% coverage of the needed financial resources as identified in the relevant programmes for the components included in the present priority axis.

2.2 Priority objective

The general objective of the priority is to:

- **improve the waste management in the country in compliance with the defined hierarchy for waste management (prevention, utilization and final treatment).**
- **improve the soil and groundwater condition and to decrease the part of the country's territory covered with existing landfills for household waste.**

The priority shall also aim at providing conditions for environmentally friendly treatment of construction and demolition waste. This shall be achieved through improving and development of waste treatment infrastructure and diminishing the quantity of landfilled waste.

2.3 Indicators for implementation of the priority

The following impact, result and output indicators are identified, with the purpose to measure progress on implementation of the priority.

Table 14: Indicators for Priority 2

Definition of indicators	Unit of measurement	Baseline data 2007	Data in the end of period - 2013	Sources of information
Result indicators				
Population covered by regional systems for waste management	number			MOEW, final beneficiary, project application forms, progress reports of the approved projects
Areas of remediated sites as a result from re-cultivation and closure	dca	0		MOEW, final beneficiary- project application forms, progress reports of approved projects
Output indicators				
Number of constructed/completed regional facilities/installations for waste treatment	number	0		MOEW, final beneficiary, project application forms
Number of constructed facilities/installations for pre-treatment of waste	number	0		MOEW, final beneficiary, project application forms,
Number of regional facilities for recycling of construction and demolition waste	number	0		MOEW, final beneficiary, project application forms
Number of closed landfills that do not comply with legal requirements	number	0		MOEW, final beneficiary- project application, progress reports of approved projects

2.4 Typology of activities within the priority

The activities under this priority include:

- (1) Completion the construction of systems of regional facilities/installations for municipal waste treatment having sufficient capacity for the country's purposes in the 54th waste management regions (for example regional landfills and transfer stations);
- (2) Construction of facilities for pre-treatment including composting, sorting, and separation of waste, in parallel with putting into operation of the newly constructed municipal waste regional landfills;

- (3) Construction of waste recycling centers in parallel with putting into operation of the new municipal waste regional landfills;
- (4) Construction of installations for recovery of the emitted gas emissions (methane) from the municipal waste landfills for the production of electricity;
- (5) Construction of regional facilities for recycling of construction and demolition waste;
- (6) Staged decommissioning and consequent closure of existing municipal landfills that do not comply with the requirements of the legislation and the modern technical standards. The closure of these municipal landfills will be considered together with putting into operation of the relevant new regional facility/installation of municipal waste treatment;
- (7) Preparation/update of regional waste management plans;
- (8) Development of investment projects for subsequent financing within priority 2 of Operational Programme "Environment 2007 – 2013".

The activities described above will be additionally grouped and elaborated (in a separate document) into measures for the implementation of the Operational Programme, with all the necessary and associated components.

2.5 Sources of financing:

- European Regional Development Fund – the financial assistance from the fund will be maximum 85% of total eligible expenditure.
- National funds

With regard to net revenue-generating projects, according to the Proposal for a Council Regulation laying down general provisions on the ERDF, ESF and the CF (dated 6 April 2006), the maximum rate of the support from EU funds will be calculated in compliance with the requirements of article 54 which defines the eligibility of expenditure.

In case of necessity originating from the final versions of EU Regulations, the support for development of a project (as a separate operation within the priority) to be presented for financing under this priority at a later stage, could be limited to 3% from the total budget of the priority axis.

2.6 Categories of assistance³

According to the Categorisation of Structural funds assistance 2007-2013, the present priority comes under the scope of:

- Code No. 44 – Management of household and industrial waste.
- Category No. 50 – Rehabilitation of industrial sites and contaminated sites

2.7 Final beneficiaries:

Municipal administrations, regional associations/associations of municipalities;

2.8 State aid:

In the framework of this priority are not envisaged companies to be beneficiaries, pursuant to §1, point 1 of the Supplementary provisions of the State Aid Act, consequently, the included activities

³ In the Proposal for a Council Regulation laying down general provisions on the ERDF, ESF and the CF (dated 6 April 2006) categories for expenditure in regard to the environment are not outlined. The outlined categories are according to Draft Commission Regulation, setting out the detailed rules for the application of the Council Regulation laying down general provisions on the ERDF, ESF and the CF and of the Regulation of the European Parliament and of the Council of ERDF (dated 15 February 2006).

do not contain an element of state aid, according to article 87 of the Treaty Establishing the European Community and of the State Aid Act.

2.9 Coordination with other programming documents 4 for period 2007 - 2013:

With regard to waste sector, the implementation of OP “Environment” will aim at achieving compliance with the requirements of the European Environmental acquis in the field of waste, and implementation of the commitments that Bulgaria has undertaken during the negotiation process for EU membership (in particular, ensuring compliance with the following Directives: Directive 75/442/EEC on waste, Directive 99/31/EC on the landfill of waste, and Directive 2000/76/EC on waste incineration).

On the other hand, the **National Programme for “Rural Development”** also foresees measures for improvement of waste management sector. Specifically, it will finance the construction of carcass collection facilities, incinerators, and other types of infrastructure for agricultural waste treatment.

3 Priority 3: Preservation and restoration of biodiversity

3.1 Priority rationale and description

The implementation of this priority is directed towards preservation, restoration and support to the entire management of species and natural habitats within the National Environmental Network comprising protected areas and protected zones under NATURA 2000. The establishment of the National Environmental Network aims at conservation of priority natural habitats and priority species. In the cases of destroyed or highly affected habitats and species, measures are taken for the sake of their restoration, as in the typical case of wetlands which are important habitats of various plant and animal species as well as for the migrating birds.

Management plans should be elaborated in order to improve the management of protected zones under NATURA 2000. The development of these plans is particularly needed in cases when various interests are involved, including different groups of stakeholders, regarding areas hosting habitats and species of Community importance. The management plans will determine the protected zones and the areas where different activities can be performed, as well as the specific measures regarding nature conservation.

In addition, any investment activities to be implemented in the protected areas and zones under NATURA 2000 should correspond to the specific conservation objectives and to the measures, defined by the management plans. The investment activities should not be financed and implemented in contradiction to the conservation objectives and the protected zones’ management plans.

For the purposes of monitoring the progress in implementation of measures regarding the conservation of habitats under NATURA 2000, mapping of the natural habitats and assessment of their geographic distribution in the country shall be performed. The assessment report will provide basic information on the conservation status of the species and habitats covered by Directives 79/409/EEC and 92/43/EEC.

The establishment of NATURA 2000 network aims at conservation of species and habitats, and increasing public awareness is one of the means of achieving this objective. The public awareness regarding the importance of habitats and species will be raised through several campaigns.

⁴ The Operational Programmes, The National Strategy Plan for Rural Development and the National Programme for “Rural Development”, National Strategy Plan of Fisheries and Aquaculture and the Programme “Fisheries and Aquaculture”.

Large number of species is endangered by various factors, therefore, urgent measures are needed in order to ensure their survival and conservation. These measures will be developed in separate action plans for all endangered species. The plans will set short-term and long-term measures for elimination of the negative factors affecting species and will ensure favorable conditions of their habitats.

Some of the significant habitats covered by Directive 92/43/EEC are strongly influenced by anthropological activities and thus implementation of measures and actions for their restoration is required. These measures could include restoration of wetlands or forestation with native species.

The invasive species are identified as a factor that endangers the survival of both species and habitats. Currently the data on invasive species collected at national level is quite insufficient, and therefore research in this field will support the reduction of their negative impact. In addition the research could also contribute to the development of guidelines for preventive actions and measures for future implementation.

The native ability of species to adapt to the changing environmental conditions (particularly related to climate change) also needs to be supported. Extreme weather events like increase in temperature, humidity changes, drought, floods etc. could result in extinction of species and deterioration of habitats, especially in cases when their ability to adapt is limited.

Approximately 6.8% of the total budget of the present OP has been devoted to this priority axis. This would provide for approximately 53% coverage of the needed financial resources as identified in the relevant programmes for the components included in the present priority axis.

3.2 Priority objective

The main objective of the priority is to **reduce and halt the loss of biodiversity in the country.**

The objective shall be pursued by developing the national NATURA 2000 network, and by ensuring sustainable management, preservation, and restoration.

3.3 Indicators for implementation of the priority

In order to measure the progress on implementation of the priority, the following indicators for impact, result and output are identified:

Table 15: Indicators for Priority 3

Definition of indicators	Unit of measurement	Baseline data (2007)	Data in the end of period (2013)	Sources of information
Result indicators				
Protected species and habitats covered by Directive 92/43/EEC and Directive 79/409/EEC through NATURA 2000 network	number	0		MOEW, final beneficiary – project application forms; progress reports of approved projects
Output indicators				
Number of developed management plans for protected areas and zones of NATURA 2000 network	number	0		MOEW
Number of implemented measures from the management plans for protected areas and zones of NATURA 2000 network	number	0		MOEW

3.4 Typology of activities within the priority:

The activities under this priority will include:

- (1) Development and update of the management plans for protected areas and zones of NATURA 2000 network.
- (2) Implementation of investment activities in accordance with the approved management plans for protected zones of NATURA 2000 network and with the protected areas management plans related to preservation and restoration of habitats and regulated use of species.
- (3) Mapping of the NATURA 2000 habitats and their geographic distribution in the country, and elaboration of a report on the favorable conservation status of the species and habitats covered by Directive 79/409/EEC and 92/43/EEC.
- (4) Increasing the awareness of municipalities and the public on NATURA 2000 network.
- (5) Development of action plans for all endangered species of global/European significance, and implementation of the activities included in the plans.
- (6) Implementation of activities for restoration of destroyed and anthropogenically influenced habitats.
- (7) Studying the impact of invasive species and implementation of activities for limitation of their negative impact.
- (8) Implementation of activities reducing the climate change impact on biodiversity.
- (9) Development of investment projects for subsequent financing within priority 4 of Operational Programme "Environment 2007 – 2013".

The activities described above will be additionally grouped and elaborated (in a separate document) into measures for the implementation of the Operational Programme, with all necessary and associated components.

3.5 Sources of financing:

- Cohesion Fund – the financial assistance from the fund will be maximum 85% of the total eligible expenditure;
- National sources

With regard to net revenue-generating projects, according to the Proposal for a Council Regulation laying down general provisions on the European Regional Development Fund, the European Social Fund and the Cohesion Fund (dated April, 6, 2006) the maximum rate of contribution from the EU Funds will be calculated in compliance with the requirements of article 54, defining the eligibility of expenditure.

If so required by the final versions of EU Regulations, the support for development of a project (as a separate operation within the priority) to be presented for financing under this priority at a later stage, could be limited to 3% of the total financial resources allocated to the priority axis.

3.6 Categories of assistance⁵

According to the Categorisation of Structural Fund assistance for 2007-2013, the priority axis falls within the scope of the following category:

- Category No. 51 – Promotion of biodiversity and nature protection (including NATURA 2000)

⁵ In the Proposal for a Council Regulation laying down general provisions on the ERDF, ESF and the CF (dated 6 April 2006) categories for expenditure in regard to the environment are not outlined. The outlined categories are according to Draft Commission Regulation, setting out the detailed rules for the application of the Council Regulation laying down general provisions on the ERDF, ESF and the CF and of the Regulation of the European Parliament and of the Council of ERDF (dated 15 February 2006).

3.7 Final beneficiaries:

Municipal authorities, regional associations/associations of municipalities, directorates managing national and natural parks and other regional bodies of the Ministry of Environment and Water and the Ministry of Agriculture and Forestry that are involved in the management of NATURA 2000 zones and protected areas, NGOs

3.8 State aid:

The activities included in the priority do not qualify as state aid according to article 87 of the EC Treaty and the national State Aid Act, since no companies within the meaning of § 1, p. 1 of the Supplementary Provisions of the State Aid Act are eligible for funding as final beneficiaries.

3.9 Coordination with other programming documents ⁶ for period 2007 - 2013:

With regard to sector “biodiversity and protection of nature”, the implementation of Operational Programme “Environment” will aim at achieving compliance with the requirements of the Community environmental legislation on National Environmental Network, composed of protected areas and protected zones under NATURA 2000 (and in particular at meeting the requirements of the following Directives: 92/43/EEC on the conservation of natural habitats and of wild fauna and flora (Habitat Directive) and 79/409/EEC on the conservation of wild birds (Birds’ Directive).

On the other hand, the **National Programme “Rural development”** foresees activities for improvement of this sector. In particular, the programme will indemnify the agricultural producers, whose land is included in National Environmental Network NATURA 2000. This will be of substantial importance for the implementation of the measures for conservation of different habitats and species, included in the respective management plans. Activities for conservation of habitats and species, typical for areas of ornithological significance will be supported in the period 2007-2010. Subsequently, activities for conservation of the habitats defined in conformity with the Habitats Directive will be also supported.

The National Programme “Rural Development” will render financial assistance for sustainable use of forests in order to protect the environment and to preserve the rural landscape. The envisaged measures for forestation of cultivated and uncultivated land will support the fight against wind and water erosion, the desertification and the decrease of adverse consequences of climate warming. The country forestation will be improved and the sources for renewable energy will increase. The restoration of the production potential and the introduction of preventive measures for private forest owners will significantly contribute to the protection against forest fires.

Operational Programme “Regional development” will render financial assistance for revival of natural attractions of tourists’ interest. Activities, related to the construction and reconstruction of the infrastructure in the areas of tourists’ attractions, not included in the National Environmental Network NATURA 2000, will be also implemented.

4 Priority 4: Technical Assistance

4.1 Priority rationale and description

Technical assistance in the framework of the Operational Programme will provide support for the programme management, implementation, monitoring, control, and evaluation as well as for publicity measures, programme promotion and exchange of experience. All activities related to the effective administration of the Operational Programme (preparation, management, monitoring,

⁶ The Operational Programmes, The National Strategy Plan for Rural Development and its National Programme for “Rural Development”, National Strategy Plan of Fisheries and Aquaculture and its Programme “Fisheries and Aquaculture”.

control and evaluation.) have to be in compliance with the Council Regulation laying down general provisions on the ERDF, ESF and the CF. This priority will support the realization of the activities, as well as all studies, considered by the Managing Authority as necessary for the successful Programme and priorities implementation.

Additionally, the effective Programme realization requires the existence of specific capacity for project preparation and implementation (incl. management) in sector “Environment”. This priority will also support the strengthening of the existing capacity in the country, as well as the existing capacity of the structures involved in the general management system of the OP and at last but not least the municipalities as main final beneficiaries.

Approximately 1.4% of the total budget of the present OP has been devoted to this priority axis.

4.2 Priority objective

Main objective of the priority is **the effective management of Operational Programme “Environment 2007-2013” in order to improve the absorption capacity within the Programme.**

4.3 Indicators for implementation of the priority

The following impact, result and output indicators are identified with the purpose to measure the progress on implementation of the priority.

Table 16: Indicators for Priority 4

Definition of indicators	Unit of measurement	Baseline data (2007)	Data in the end of period (2013)	Sources of information
Result indicators				
Number of population that is aware of EU assistance in the field of environment	Number	0		MOEW survey
Output indicators				
Number of conducted information campaigns	number	0		MOEW, project application forms, progress reports of approved projects, Monitoring Committee Reports
Number of trainings	number	0		MOEW, project application forms, progress reports of approved projects, Monitoring Committee Reports
Number of approved for assistance projects/operations	number	0		MOEW, project application forms and Monitoring Committee Reports
Number of sessions of OP Monitoring Committee and of OP Programme Selection Committee	number	0		MOEW

4.4 Typology of activities within the priority:

The activities under this priority will include:

- (1) Activities will aim at **providing the necessary support for the Operational Programme implementation.** The general activities are related to:
 - Assessment of submitted projects and their selection (including organization of Project Selection Committee Sessions);
 - Organization and holding of the Monitoring Committee Sessions to the Operational Programme (and of the working groups/ sub-committees of the Monitoring Committee);

- Collecting and analysis of data on the implementation and monitoring of the Operational Programme;
 - Financing of the needed human resources, involved exclusively in the implementation of strictly defined tasks for Operational Programme management, implementation, monitoring and control (in accordance with the Regulation of EC 448/2004);
 - Carrying out of audit and control of the Operational Programme and other relevant expenditure (as expenditure, related with on-the-spot checks of operations executed in the framework of the Operational Programme);
 - Modernization and maintenance of the information system for monitoring and management and providing of technical equipment for the Operational Programme implementation and management;
 - Preparation, organization and carrying out of trainings for strengthening the capacity of the Managing Authority, Intermediate Body, Internal Audit Unit, Monitoring Committee (and its sub-committees) and Project Selection Committee within the Programme;
 - Conducting of studies, tests and analytic evaluations referring to the Operational Programme, including hiring of external expertise to improve the Programme implementation system, and the preparation of new programming documents for the next programming period;
 - Training of final beneficiaries of the Operational Programme with regard to strengthening their capacity in projects preparation and submission and for sound management of the approved projects;
 - Evaluations of the Operational Programme.
- (2) Activities will aim at **providing the necessary support for publicity and promotion of the Operational Programme**. The general activities are related to:
- Preparation, organization and implementation of communication plan of the Operational Programme, including the envisaged activities for Programme publicity, its objectives and priorities(for example, seminars and other information measures with the participation of the socio-economic partners; developing and maintenance of a web-site, informing potential beneficiaries about the available assistance under the programme, and the results of its implementation; setting up of an information office (center); hiring of needed human resources for information and publicity activities);
 - Preparation and dissemination of the official programming documents related to the Operational Programme (for example, the approved Operational Programme, Programme Complement, guidelines and manuals for Programme implementation, leaflets and other information packages) to potential final beneficiaries and/ or the public;
- (3) Development of projects for subsequent financing within priority 6 of Operational Programme “Environment 2007-2013”.

The activities described above will be additionally grouped and elaborated (in a separate document) into measures for the implementation of the Operational Programme, with all the necessary and associated components.

4.5 Sources of financing:

- Cohesion Fund– for co-financing of all activities, except activity 2. The fund assistance will be maximum 85% of the total eligible expenditures;

- European Regional Development Fund – for co-financing of activity 2. The fund assistance will be maximum 85% of the total eligible expenditures;
- National funds

4.6 Categories of assistance⁷

According to the Categorization of Structural funds assistance 2007-2013, the present priority comes under the scope of:

- Category No. 84 – Preparation, implementation, monitoring and inspection
- Category No. 85 – Evaluation and studies; information and communication;

4.7 Final beneficiaries:

Managing Authority, Intermediate Body, Monitoring Committee of the Operational Programme, Project Selection Committee, Internal Audit Unit within the Ministry of Environment and Water, municipalities, regional association of municipalities.

4.8 State aid:

In the framework of this priority are not envisaged companies to be beneficiaries, pursuant to §1, point 1 of the Supplementary provisions of the State Aid Act, consequently, the included activities do not contain an element of state aid, according to article 87 of the Treaty Establishing the European Community and of the State Aid Act.

4.9 Coordination with other programming documents ⁸ for period 2007 - 2013:

Within this priority no potential overlapping, requiring additional coordination with other Operational Programmes in the country, has been discovered.

⁷ In a Proposal for a Council Regulation laying down general provisions on the ERDF, ESF and CF (dated 9 March 2006) categories of expenditure in regard to the environment are not outlined.

⁸ Operation Programs, National Strategy Plan for Rural Development and the accompanied Programme “Rural Development”, National Strategy Plan of Fisheries and Aquaculture and the accompanied Programme “Fisheries and Aquaculture”.

F. Compliance with Community policies and EU legislation

In accordance with the requirements of the EU legislation on the Cohesion and Structural Funds, Operational Programme “Environment” is consistent with Community policies and priorities. The document is elaborated in co-operation with the administrative, and social and economic partners in order to attain better quality of the programme and effective implementation of the objectives, stated within its framework.

OP “Environment” is directed towards application of the requirements of the EU and national environmental legislation. The Operational Programme reflects the objectives, defined in Article 174 of the Treaty establishing the European Community, and shall contribute to the realization of the priorities of Lisbon and Gothenburg concerning environmental protection, competitiveness, employment and economic growth in order to promote balanced, harmonious and sustainable development.

All operations, financed under OP “Environment”, should comply with the EU and national legislation in the field of environmental protection, competition, state aid and public procurement. In the framework of the Operational Programme the principles of partnership, sustainable development and equal opportunities should be respected and applied.

1 Partnership

According to the EU Regulations for Cohesion fund and Structural funds Operational programme “Environment” is prepared in cooperation and consultations with the administrative and social and economic partners. For its elaboration a working group was established including representatives of line ministries, municipalities, district administrations, environmental non-government organizations, organizations of and for disabled people, scientific organizations, and representatives of the employers, syndicates and business.

The implementation of partnership principle was extended through participation of the working group representatives in open public forums for discussion and reaching consensus on the main objectives and priorities of the different operational programmes and achieving coherence among them and with the National Development Plan.

The partnership principle should be also applied during the implementation, monitoring and evaluation of the Operational Programme. The participation of the administrative, social and economic partners identified during the Programme preparation will be guaranteed through the development of the working group into a Monitoring Committee of OP “Environment”. It will monitor the progress in the achievement of Operational Programme objectives and thus will guarantee the effectiveness and quality of its implementation.

2 Sustainable development

Bulgarian policy in sector “Environment” is directed to promoting balanced, harmonious and sustainable development. For the purpose of overcoming the main threats to sustainable development the Gothenburg strategy identifies objectives and measures in order to limit climate change and increase the use of clean energy, raise consciousness of the threats to human health, manage natural resources more responsibly and improve the transport system and land-use management.

The Sixth Community Environment Action Programme setting the environmental priorities of the Strategy on sustainable development aims at:

- stabilizing greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system;

- protecting, conserving, restoring and developing the functioning of ecosystems, natural habitats, wild flora and fauna in order to halt desertification and the loss of biodiversity by 2010, including diversity of genetic resources;
- achieving high quality of life and social welfare of the citizens by safeguarding an environment where the level of pollution does not give rise to harmful effects on human health and the environment, and by encouraging sustainable urban development. This aim should be pursued by achieving high quality of ground and surface water and air quality, sustainable use of water and water resources; substitution of dangerous chemicals by less hazardous chemicals or safer alternative technologies, reduction of the negative impacts and achieving more sustainable use of pesticides, substantial reduction of the number of people regularly exposed to noise pollution;
- better resource efficiency and resource and waste management to bring about more sustainable production and consumption patterns, thereby decoupling the use of resources and the generation of waste from the rate of economic growth and aiming to ensure that the consumption of resources does not exceed the carrying capacity of the environment. In order to attain this goal, the indicative task is to ensure that by 2010 22% of the electricity within the European Community will be produced by renewable energy sources. For that purpose, it is necessary to achieve a significant reduction of the volume of waste for disposal and of hazardous waste, safe waste treatment and disposal, and to encourage re-use of waste;

Laying down the framework for the EU environmental policy and implementing Article 6 of the Treaty, the Sixth Community Environment Action Programme shall contribute to the integration of environmental protection requirements into all Community policies. Ensuring public participation in decision-making process and ensuring access to information on the environment are essential for the successful implementation of the Programme.

In compliance with the provisions of the Gothenburg strategy and the Sixth Community Environment Action Programme, the National strategy for Environment 2005-2014 aims at:

- solving global environmental problems: implementing the commitments under Kyoto Protocol and the United Nations Framework Convention on Climate Change; phasing-out chemical substances and preparations depleting the ozone layer; confining and confronting the processes of desertification and land degradation;
- protecting natural heritage and maintaining the wealth of biodiversity, conserving and restoring biological diversity and halting the loss of biodiversity by 2010; ensuring sustainable use of natural resources, conservation and restoration of natural habitats and ecosystems, conservation of the diversity of species, of the genetic biodiversity and ensuring biological safety;
- attaining and maintaining high quality of urban environment by achieving compliance with the EU air quality standards; improvement of waste management, including through implementation of systems for separate collection, following re-use and recycling of waste; improvement of the physical urban environment; reduction of noise pollution and development of sustainable and environmentally friendly urban transport systems;
- providing good quality and sufficient quantity of water, including through utilization of water resources by the economic and public sectors;
- closer integration of the environmental policy into the sectoral and regional policies: pollution reduction and prevention of future impacts of industry and energy sectors on the environment; increasing the use of renewable energy sources and improvement of energy efficiency, environmentally friendly management of hazardous waste and substances, minimizing the environmental risks resulting from old contaminations; implementation of

environmentally friendly practices in agriculture and protection of non-polluted areas; development of sustainable tourism and environmentally friendly transport systems with reduced impact on the environment;

- effective management of the environment, including by strengthening the administrative capacity of the institutions responsible for the enforcement of the environmental legislation, involving the public in the process of decision-making related to environmental protection, and extending the access to information.

As a tool for realization of the national environmental policy, Operational Programme “Environment” formulates objectives and priorities whose implementation shall result in reduction of water pollution by means of construction, reconstruction, extension and modernization of sewerage systems and urban waste water treatment plants; more effective waste management and stimulating waste re-use and ecologically sound utilization; reducing the risks to human health and the environment by rehabilitation of contaminated areas and closure of dumpsites; conservation and restoration of the species and natural habitats. In this respect, the implementation of the Operational Programme is directed to the fulfilment of the Community environment priorities.

The Community Strategic Guidelines for Cohesion 2007-2013 underline the necessity to support the implementation of Lisbon and Gothenburg priorities, aimed at achieving sustainable development, by strengthening the synergies and complementarities with other EU policies within the framework of the Cohesion policy. The implementation of OP “Environment” shall support the application of the requirements of European Community legislation, as well as the promotion of urban areas’ attractiveness and the preservation of their environmental potential. Investments in environmental infrastructure are connected to sustainable economic growth and job creation. They also contribute to promoting convergence and increasing the competitiveness of regions.

The implementation of OP “Environment” will lead to better quality of life. Improvement of ambient air quality, restoration of contaminated sites and closure of the dumpsites results in elimination of the risks to human health and environment. The construction of necessary infrastructure for household waste water collection, discharge and treatment, and infrastructure for waste treatment is connected to overcoming health-and-ecological risks, as well as with providing quality environmental services to citizens. The activities aimed at preservation, restoration and support to the overall management of species and natural habitats contribute to more responsible management of natural resources, thus contributing to the achievement of the objectives of EU Strategy for Sustainable Development.

OP “Environment” aims at improvement, preservation and recovery of natural environment and at development of Bulgaria’s environmental infrastructure, thus leading to improvement of quality of life and to promoting investment opportunities in the economy. Thereby, the realization of the Operational Programme shall contribute to achieving the strategic goals of the National Development Plan 2007-2013, focused on attaining and maintaining high economic growth in compliance with the principles of sustainable development, and on providing high quality of life.

3 Environment protection

The national environmental policy reflects the principles of the European Community, related to protection and improvement of the environment and the protection of human health, including the principles: “the polluter pays”, “publics’ right to know”, and “preventive action”. These principles form the basis of the current Bulgarian environmental legislation.

Environment Protection Act transposes the requirements of Directive 2001/42/EC on the assessment of the effects of certain plans and programmes on the environment, thus establishing the legislative framework for integration of the requirements for environmental protection into the sectoral and regional policies.

Environmental assessment aims at identifying possible significant effects of the plan/programme on the environment in national and trans-boundary context and its potential effect on the human health. Within the established legislative procedure, the assignor of the plan or programme bears the responsibility for preparation of an environmental report, comprising a description of measures envisaged to prevent, reduce and as fully as possible offset any presumed adverse effects on the environment caused by the implementation of the plan or programme, as well as description of measures concerning monitoring and control.

Environmental assessment is prepared at the same time with the document concerned, and prior to its final adoption. It seeks to ensure compliance of the plan/programme with the national environmental policy's objectives and priorities and with the international commitments undertaken by the country. In order to ensure transparency of the decision-making process related to environment protection, consultations with competent authorities of central and local governance and with the general public concerned is being carried out in the framework of environmental assessment procedure.

In accordance with the provisions of the European and national environmental legislation, OP "Environment" is a subject to environmental assessment. The purpose is to identify, describe and assess both the effects of the Programme on environment and its contribution to sustainable development.

For the purpose of ensuring proper application of the preventive action principle, Environment Protection Act institutes a procedure for assessment of the impact on environment of investment proposals for construction, activities and technologies, which is in compliance with the requirements of EU legislation and Convention on Environmental Impact Assessment in Trans-boundary Context, ratified by Republic of Bulgaria. The above procedure will be applied during the implementation of OP "Environment". Operations financed in the framework of the Operational Programme, that fall within the scope of Directive 85/337/EEC, amended and supplemented by Directive 97/11/EC will be subject to environmental impact assessment.

The application of the "public's right to know" principle was safeguarded by transposing Directives 2003/4/EC and 2003/35/EC into the Bulgarian Environment Protection Act and the Law on Access to Public Information. Information concerning the status of environment should be generally accessible and understandable, as well as trustworthy and reliable. In the framework of OP "Environment" is defined a priority, whose implementation seeks to develop an adequate information and monitoring system for the environment sector in the country.

4 Equal opportunities

The operations financed under OP "Environment" shall be implemented by observing the principles of promotion of equal opportunities and prevention of all forms of discrimination, stipulated in the harmonized with the *aquis* Bulgarian legislation.

For the purpose of ensuring an effective application of the principle of equal opportunities, Bulgaria has transposed the *acquis communautaire* in its national labour and anti-discrimination legislation. Non-discriminatory provisions are also introduced in legislative acts such as the Social Security Code, Law on Stimulating the Employment, Law on Protection, Rehabilitation and Social Integration of People with Disabilities, Law on Health and Safety at Work and the Law on Protection against Domestic Violence.

The Labour Code incorporates all provisions of the Bulgarian labour legislation. The Law amending and supplementing the Labour Code, in force since 01.08.2004, introduces additional guarantees for granting equal rights to individuals on temporary and permanent labour contracts and those employed part-time and full-time; prohibits discrimination arising from differences in the duration of labour contracts and the duration of the working day, and obliges the employers to provide the

workers and civil servants with timely access to information on vacancies. The adopted amendments enable new types of leaves for rising up a child to a certain age, which can be used under equal conditions by both the parents and the adoptive mother and father.

The Law on Protection against Discrimination constitutes the legal framework of the Bulgarian anti-discrimination legislation. Its provisions are in conformity with the international agreements in the field of human rights, to which Bulgaria is a party. The Law on Protection against Discrimination seeks to safeguard equality of individuals before the law, equality of treatment and of opportunities for participation in the public life, as well as effective protection against discrimination. It reflects the requirements of EU Directives by defining direct and indirect discrimination, prosecution (victimization), inducement to discrimination, sexual harassment and racial segregation.

The control over the Law's enforcement is entrusted to the Commission of Protection against Discrimination that has competences in the field of detecting infringements, imposing sanctions and issuing opinions on the compliance of draft legal acts with the Law on Protection against Discrimination.

A National Council on Equality between Women and Men has been established by Decree № 313 of Council of Ministers from 26.11.2004 as a permanent body to the Council of Ministers. The Council carries out consultations, cooperation and coordination between the governmental institutions and nongovernmental organizations during the process of elaboration and implementation of the national policy of equality between sexes. The Council is chaired by the Minister of Labour and Social Policy in his/her capacity of central body of the executive power, which elaborates, organizes, coordinates and controls the realization of the governmental policy in the field of social protection and social inclusion of vulnerable groups and promotion of equal opportunities between women and men. The National Council on Ethnic and Demographic Issues, established by Decree № 333 of Council of Ministers from 10.12.2004, is an advisory and coordinating body, supporting the activities of the Council of Ministers related to ensuring effective equal treatment between all Bulgarian citizens, irrespective of their ethnic origin.

The integration of the principle of equal opportunities in OP "Environment" comprises all measures and activities during the period of planning, implementation, monitoring and evaluation that directly influence or contribute to the promotion of equality between women and men and the integration of disadvantaged groups. During the programming process, the Ministry of Labour and Social Policy has been constituted as a partner in the working group for the elaboration of the Operational Programme. Representatives of the National Council of and for Disabled People, branch organizations and nationally represented organizations of employers and employees are also involved as social partners. Same mechanism of representation will be applied also when establishing the Monitoring Committee for OP "Environment".

The actual application of the equal opportunities principle during the implementation of the OP "Environment" will be ensured by indicators designed to plan and assess the contribution of operations to the promotion of equal opportunities, where it is applicable and appropriate. It will be included also in the criteria for assessment of operations funded under OP "Environment".

5 Protection of competition

Pursuant to Art.19, paragraph 2 of the Constitution of the Republic of Bulgaria, the legislation establishes and guarantees equal legal conditions for all citizens and legal entities to develop economic activity through preventing abuse of monopoly position and unfair competition and by protecting the consumer. The Act on Protection of Competition, in force since 8th May 1998, establishes conditions for promoting competition and the free initiative in the economy. It contains provisions for protection against prohibited agreements, decisions and concerted practices, abuse of monopolistic and dominant position on the market, concentration of economic activities, unfair

competition and other activities which can lead to forestalling, restriction or distortion of the free competition.

A Commission on protection of competition has been established in order to ensure the Law enforcement. Its competences cover execution of control, detecting infringements and imposing sanctions to the offenders. Thereby, the Commission regulates the establishment of proper conditions for free economic initiative in an actual competitive environment. Decisions enacted by the Commission on protection of competition are subject to sole judicial control from the Supreme Administrative Court.

A Law amending and supplementing the Act on Protection of Competition was adopted in 2003, addressing both the necessity for improving the existing anti-monopoly legislation and the need for its more complete harmonization with the EU legislation. It supplements the existing legal rules that regulate the counteractions against vertical and horizontal cartel agreements, abuse of monopolistic and dominant position and concentration of economic activities, and introduces the institute of "joint dominance". The powers of the Commission on Protection of Competition related to collecting information and evidence during the investigation process have also been extended.

5.1 Application of state aid rules

Operations financed through OP "Environment" should be implemented by observing the harmonized Bulgarian legislation on state aid.

The legislative acts adopted by the Republic of Bulgaria safeguard an adequate functioning of the system for monitoring, assessment and control of granting state aid. The requirements of the Community Guidelines on state aid granted for rescuing and restructuring (2004/C 224/02) were transposed with the amendments of the Regulation for the implementation of the State Aid Act from April 2005, and thus the process of harmonizing the Bulgarian legislation with *acquis communautaire* was accomplished.

The State Aid Act contains a definition of the term "state aid", which is fully compliant with the definition under Art. 87, paragraph 1 of the Treaty establishing the European Community. In accordance with Art.87 of the Treaty, the State Aid Act introduces a fundamental prohibition for granting state aid that could create potential danger of distortion or could directly distort free competition. The national legislation defines the scope of permissible aid and the aid that could be judged permissible in accordance with the established procedure for notification. It is fully consistent with the state aid regime set by the primary and secondary EU legislation.

The assessment of compatibility of the individual aids, as well as of state aid schemes is performed on the basis of criteria resulting from the application of the provision of Art.87 of the Treaty, and according to the Bulgaria's commitments undertaken by virtue of international agreements. Following Decision No 2/2001 of the Association Council, the compatibility with the enforced and future secondary EU legislation, the frameworks, guidelines and other relevant administrative acts in force in the Community, as well as with the Law on legal proceedings of the Court of first instance and the Court of Justice of the European Communities is also being assessed.

Pursuant to the State aid Act the Minister of Finance is responsible for the coordination, observation and ensuring transparency of granting state aid. The Ministry of Finance maintains and updates a Central Register of State aid comprising information on the proposed and granted aid at national, regional and municipal level. The Register contains data also on granted *de minimis aid* for the purposes of exercising effective control over the fixed thresholds and preventing possible accumulation of state aid over the permissible limits to the advantage of a certain enterprise. Following its competences, the Ministry of Finance prepares a consolidated annual report for the state aid granted on the territory of Republic of Bulgaria, and submits it to the Parliament, the

Council of Ministers, the Commission on Protection of Competition and the European Commission.

The Commission on Protection of Competition, being specialized and independent state body, controls and approves state aid granting. Its powers are similar to those of the European Commission as regards the obligation for preliminary notification, types of decisions issued and the possibility of recovery of state aid unlawfully granted. All institutions that intend to grant or to modify aid already granted, should notify the Commission on Protection of Competition on the state aid measures. Aid granted without its approval and judged to be inadmissible should be reimbursed by the enterprise which has received them, together with the legally determined interest. Upon its own initiative or upon a written complaint submitted by a competitive enterprise, the Commission inspects cases of supposed state aid and decides on the nature of the measure and its compatibility with the principles of free competition.

The Managing Authority should notify The Commission on Protection of Competition of all state aid schemes that envisaged co-financing from EU funds. In accordance with the national legislation the Commission enacts a Decision determining whether the operations envisaged in the scheme constitute a state aid pursuant to Article 87 of the Treaty and whether the state aid may be assumed compatible. Until The Commission renders authorizing, the state aid schemes may not be put into effect.

The provisions of Art.87 and Art. 88 of the Treaty and the Council Regulations laying down rules for state aid will be directly applied with the accession of Bulgaria in the EU. The EC will dispose of the exclusive authority in relation to the assessment and control of the state aids compatibility with the principles of free competition.

Pursuant to Art.88, paragraph 3 of the Treaty, the Managing Authority informs the EC of the state aid schemes that envisaged co-financing from EU funds. The Managing Authority will bear the responsibility for the compatibility of each operation with the state aid rules after the adoption of the OP "Environment" by the EC. The Managing Authority will observe the respecting of the limits set, the application of the de minimis rule and the application of the group exemptions in the sense of 994/1998 Council Regulation.

6 Public procurement

The operations financed under OP "Environment" should be performed through observing the Bulgarian legislation in relation to the rules on public procurement which is harmonized with EU legislation.

The legislation of Republic of Bulgaria in the field of public procurement fully transposes the requirements of Directives 92/50, 93/36 and 93/37 of the European Union. It is based on the principles of free and fair competition, publicity and transparency, and equality of all candidates. The Public Procurement Law and the legislative acts adopted under it for the purpose of its implementation contain provisions, that determine those categories of works, supplies and services obligatory for public procurement, types of procedures and conditions for the selection of procedure for awarding a certain public contract, methods for determining the value of the contract for public procurement, criteria for assessment of the offers (the lowest price or most economically favorable offer) and the specific circumstances under which the candidates should be eliminated from the participation in the notified procedure.

In compliance with the EU Directives specific rules are established for award of public contracts by assignors carrying out activities in the fields of water supply, power supply, transport and postal services. Moreover, the Public Procurement Law gives the assignors the possibility to stipulate additional requirements for the implementation of the public contract, related to environment protection, unemployment and new job-creation for disabled people. This possibility is conceded in

the framework of the general prohibition for providing advantage to certain candidates and for unreasonable restriction of participation of potential candidates in the notified procedure.

The present Bulgarian legislation in the field of public procurement contains guarantees that ensure free access for all candidates to the information regarding the planned and notified public procurement on the country's territory. The Public Procurement Law gives the requirements related to the content of the documentation to be prepared for carrying out procedures for awarding of public contracts. In the meaning of the Law the assignors prepare preliminary notice (prior information notice) for the planned public awards for the current calendar year. With an Order of the Minister of Economy of Republic of Bulgaria, who bears the responsibility for the implementation of the state policy in this field, a unified form of notice for public award is approved, which is obligatory to be filled by each assignor for the purposes of conducting the particular procedure for the awarding of public contract.

In order to ensure accurate and equal application of the Law, a Public Procurement Agency is established to the Minister of Economy, which issues methodological instructions, monitors public awards in the country and coordinates and controls compiling and summarizing the existent practice. The Agency is responsible for the establishment and maintenance of a Public procurement register, which is in compliance with the Strategy of Republic of Bulgaria for E-government for providing quality administrative services to citizens and business entities in an electronic way. In the Register are entered the preliminary notices (prior information notices) and notices for conducting procedure for the awarding of particular public contracts. They are to be promulgated in the State Gazette.

Pursuant to its international commitments, Bulgaria is in a process of elaboration of a Law amending and supplementing the Public Procurement Law. The purpose of the amendments planned is to reflect in the present Bulgarian legislation the requirements of the new EU Directives (Directives 2004/17/EC and 2004/18/EC of the European Parliament and the Council of 31 March 2004) which should be transposed no later than 31 January 2006).

In accordance with the commitments of Republic of Bulgaria under Chapter 21 "Regional policy and coordination of structural instruments", the Managing authority of OP "Environment" bears the responsibility for the establishment of clear/explicit and transparent system for carrying out procedures for awarding of public contracts, which should guarantee the application of the relevant principles and requirements. The Public Internal Financial Control Agency and the National Audit Office perform the control of the effective and accurate functioning of the system.

G. Financial plan of OP “Environment 2007 - 2013”

The OP “Environment 2007-2013” financial plan is based on the financial plan of the Bulgarian National Strategic Reference Framework for the period 2007-2013.

The OP “Environment 2007-2013” implementation will be co-financed by two EU funds: the Cohesion Fund (contribution of EUR 1,005 million) and the European Regional Development Fund (contribution of approximately EUR 323 million).

Pursuant to the EC Regulations for the new programming period the co-financing ceilings from these two funds shall not exceed the following allocations per project:

- 85% of the public expenditure for projects financed by the Cohesion Fund under the “Convergence” objective
- 85% of the public expenditure for projects financed by the European Regional Development Fund under the “Convergence” objective

The implementation of OP “Environment 2007-2013” will be financed also by national resources amounting to EUR 232 million and which represent 15% of the total financial resources of the Operational Programme.

The total financial package for the implementation of the Operational Programme “Environment 2007-2013” amounts to EUR 1 559 981 700 . The appropriation allocated under each priority within this financial package is as follows:

- **To Priority 1** – Improvement and development of waste water infrastructure in settlements over 2000 PE – are allocated **67.75% of the total financial resources of the Operational Programme or 89.50% of the Cohesion Fund contribution to the programme.**
- **To Priority 2** – Improvement and development of waste treatment infrastructure - are allocated **24.06% of the total financial resources of the Operational Programme or 99.00% of the European Regional Development Fund contribution to the programme.**
- **To Priority 3** – Preservation and restoration of biodiversity – are allocated **6.81% of the total financial resources of the Operational Programme or 9.00% of the Cohesion Fund contribution to the programme.**
- **To Priority 4** – Technical Assistance – is allocated **1.38% of the total financial resources of the Operational Programme(1.5% from Cohesion fund and 1.0% from the European regional Development Fund).**

The financial allocation for the OP as a whole has been mainly decided on the basis of the top-down approach. The financial allocation between the identified priority axes has been mainly decided on the basis of the combination of the two approaches:

- top down approach, resulted from the accomplishment of the deadlines established for the commitments undertaken during the negotiation process.
- the bottom-up approach resulted from feasible project proposals prepared within the MOEW for financing under ISPA.

For the weighting of relative importance attributed to each priority, the following considerations were made:

- The requirements for accession as resulted from negotiations for Chapter 22, which are particularly demanding, especially with regards to the implementation of the EU Directives

in the water and waste sectors within the negotiated transition periods. These are one of the most investment - heavy directives and this is reflected in the financial allocation for present OP.

- The OP will be implemented over a limited period (2007-2013) and with limited financial resources, therefore it cannot tackle all the problems faced by the environmental sector in the country and therefore an investment prioritization was also considered.
- The provisions of the new acquis are observed, particularly indicating that:
 - During the 2007-2013 programming period, the Structural and Cohesion Funds programmes fix only long term global objectives and focus on a limited number of priorities (named priority axes), likely to have more significant impact
 - One priority axis should be financed only from one Fund – for SOP ENV case, either Cohesion Fund or European Regional Development Fund.
- The extent of co-financing resources from national budget and IFI loans is to be approved by the Ministry of Public Finance.
- The complementarity with the other OPs developed in the country has been taken into consideration and the financing of the same type of projects within more than 1 OP has been avoided.

The proposed annual distribution of funds has been made taking into account both the experience gained in project management within pre-accession instruments and the issues related to the absorption capacity of funds. On the basis of this a cautious approach of the funds distribution has been considered for the first years after accession with an increasingly trend reaching a maximum peak in the middle of the programming period.

The **EU financial contribution** to the OP “Environment 2007-2013” will be performed in conformity with the financial plan presented in the next table.

Table 17: Financial Plan of EU commitments by year and by EU Fund in EUR

	Structural Funds (ERDF)	Cohesion Fund	Total
	(1)	(2)	(3) = (1) + (2)
2007			
In regions without transitional support	48 396 600,00	40 049 250,00	88 445 850,00
In regions with transitional support	0,00	0,00	0,00
Total for 2007	48 396 600,00	40 049 250,00	88 445 850,00
2008			
In regions without transitional support	57 850 069,20	106 957 125,00	164 807 194,20
In regions with transitional support	0,00	0,00	0,00
Total for 2008	57 850 069,20	106 957 125,00	164 807 194,20
2009			
In regions without transitional support	70 723 564,80	173 990 625,00	244 714 189,80
In regions with transitional support	0,00	0,00	0,00
Total for 2009	70 723 564,80	173 990 625,00	244 714 189,80
2010			
In regions without transitional support	48 364 335,60	189 291 750,00	237 656 085,60
In regions with transitional support	0,00	0,00	0,00
Total for 2010	48 364 335,60	189 291 750,00	237 656 085,60
2011			
In regions without transitional support	38 846 337,60	196 779 000,00	235 625 337,60
In regions with transitional support	0,00	0,00	0,00

	Structural Funds (ERDF)	Cohesion Fund	Total
	(1)	(2)	(3) = (1) + (2)
Total for 2011	38 846 337,60	196 779 000,00	235 625 337,60
2012			
In regions without transitional support	32 457 986,40	171 603 750,00	204 061 736,40
In regions with transitional support	0,00	0,00	0,00
Total for 2012	32 457 986,40	171 603 750,00	204 061 736,40
2013			
In regions without transitional support	26 005 106,40	126 328 500,00	152 333 606,40
In regions with transitional support	0,00	0,00	0,00
Total for 2013	26 005 106,40	126 328 500,00	152 333 606,40

In Table 18, as a financial plan, for each priority axis are shown: (1) the total amount of EU Funds co-financing – Cohesion Fund and European Regional Development Fund, (2) the total amount of National Public co-financing, (3) the total amount of financing for each priority and (4) the rate of contribution from EU Funds.

Table 18: Financial Plan (EU + National Public financing) by priority of the Operational Programme for the period 2007 – 2013 in EUR

	Financing from EU	National Public Co-financing	Total funding	Rate of EU Funds contribution	For information	
					EIB funding	Other funding
	(1)	(2)	(3)=(1)+(2)	(4)=(1)/(3)		
Priority axis 1 - CF	899 475 000,00	157 408 125,00	1 056 883 125,00	85%		
Priority axis 2 - ERDF	319 417 560,00	55 898 073,00	375 315 633,00	85%		
Priority axis 3 - CF	90 450 000,00	15 828 750,00	106 278 750,00	85%		
Priority axis 4:						
• CF	15 075 000,00	2 638 125,00	17 713 125,00	85%		
• ERDF	3 226 440,00	564 627,00	3 791 067,00	85%		
TOTAL	1 327 644 000,00	232 337 700,00	1 559 981 700,00			

In addition to the above information, Table 19 presents also the financial contribution from National Private Financing Resources for each priority axis of the Operational Programme.

Table 19– Financial Plan (EU + National Public financing + National Private financing) by priority of the Operational Programme for the period 2007 – 2013 in EUR

	Financing from EU	National Public Co-financing	National Private Co-financing	Total funding	Rate of EU Funds contribution	For information	
						EIB funding	Other funding
	(1)	(2)	(3)	(4)=(1)+(2)+(3)	(5)=(1)/(4)		
Priority axis 1 - CF	899 475 000,00	157 408 125,00	0,00	1 056 883 125,00	85%		
Priority axis 2 - ERDF	319 417 560,00	55 898 073,00	0,00	375 315 633,00	85%		
Priority axis 3 - CF	90 450 000,00	15 828 750,00	0,00	106 278 750,00	85%		
Priority axis 4:							
• CF	15 075 000,00	2 638 125,00	0,00	17 713 125,00	85%		
• ERDF	3 226 440,00	564 627,00	0,00	3 791 067,00	85%		
TOTAL	1 327 644 000,00	232 337 700,00	0,00	1 559 981 700,00			

H. Institutional framework for implementation of OP “Environment 2007 – 2013”

I. Main bodies included in the institutional framework

1 Managing Authority

The Managing Authority for the OP “Environment 2007 – 2013” shall be the **Ministry of the Environment and Water – Directorate “Cohesion Policy for Environment”**. The Managing Authority shall be responsible for overall programme implementation. It shall delegate certain tasks on the implementation to the Directorate “EU Funds for Environment” within the Ministry of Environment and Water (see Intermediate Body below).

The Managing Authority shall be responsible for managing and implementing the operational programme in accordance with the principle of sound financial management and in particular for⁹:

- ensuring that operations are selected for funding in accordance with the criteria applicable to the operational programme and that they comply, for their whole implementation period, with applicable Community and national rules;
- verifying the delivery of the co-financed products and services and that the expenditure declared by the beneficiaries for operations has actually been incurred and complies with Community and national rules; on-the-spot verifications of individual operations may be carried out on a sample basis in accordance with the detailed rules to be adopted by the Commission in accordance with the procedure referred to in Article 104(3);
- ensuring that there is a system for recording and storing in computerized form accounting records of each operation under the operational programme and that the data on implementation necessary for financial management, monitoring, verifications, audits and evaluation is collected;
- ensuring that beneficiaries and other bodies involved in the implementation of operations maintain either a separate accounting system or an adequate accounting code for all transactions relating to the operation without prejudice to national accounting rules;
- ensuring that the evaluations of operational programmes referred to in Article 46(3) are carried out in accordance with Article 45;
- setting up procedures to ensure that all documents regarding expenditure and audits required to ensure an adequate audit trail are held in accordance with the requirements of article 88;
- ensuring that the certifying authority shall receive all necessary information on the procedures and verifications carried out in relation to expenditure for the purpose of certification;
- guiding the work of the Monitoring Committee and providing it with the documents required to permit the quality of the implementation of the operational programme to be monitored in the light of its specific goals;
- drawing up and, after approval by the Monitoring Committee, submitting to the Commission the annual and final reports on implementation;
- ensuring compliance with the information and publicity requirements laid down in Article 68;

⁹ According to art. 59 of the draft General Regulation on ERDF, ESF and CF (March 2006)

- providing the Commission with information to allow it to appraise major projects;

2 Intermediate Body

According to article 58 (2) of Regulation (EC) 492, the member state may designate one or more intermediate bodies to carry out some or all of the tasks of the Managing Authority under the responsibility of that authority. For this purpose written agreement needs to be signed between the MA and the designated IB¹⁰.

The designated Intermediate Body for the OP “Environment 2007 – 2013” shall be the **Ministry of Environment and Water - Directorate “EU Funds for Environment”**. The Intermediate Body shall support the operative execution of the OP in accordance with the tasks delegated to it. Its main responsibilities will be related to preparation, implementation, monitoring, control and reporting activities. Currently the IB performs the functions of the ISPA Implementing Agency for sector Environment.

3 Certifying Authority

The Certifying Authority for the OP “Environment 2007 – 2013” shall be the **Ministry of Finance - Directorate “National Fund”**. The Certifying Authority shall be responsible in particular for¹¹:

- drawing up and submitting to the Commission certified statements of expenditure and applications for payment;
- certifying that:
 - the statement of expenditure is accurate, results from reliable accounting systems and is based on verifiable supporting documents,
 - the expenditure declared complies with applicable Community and national rules and has been incurred in respect of operations selected for funding in accordance with the criteria applicable to the programme and complying with Community and national rules;
- for the purposes of certification ensuring that it has received adequate information from the Managing Authority on the procedures and verifications carried out in relation to expenditure included in statements of expenditure;
- for the purposes of certification taking account of the results of all audits carried out by or under the responsibility of the Audit Authority;
- maintaining accounting records in computerized form of expenditure declared to the Commission;
- keeping an account of amounts recoverable and of amounts withdrawn following cancellation of all or part of the contribution for an operation. Amounts recovered shall be repaid to the general budget of the European Union, prior to the closure of the operational programme by deducting them from the next statement of expenditure;

4 Audit Authority

The Audit Authority for the OP “Environment 2007 – 2013” shall be the **Ministry of Finance - Directorate “Audit of EU Funds”**. The Audit Authority shall be responsible in particular for¹²:

¹⁰ The agreement in reference is under preparation.

¹¹ According to art. 60 of the draft General Regulation on ERDF, ESF and CF (March 2006)

¹² According to art. 60 of the draft General Regulation on ERDF, ESF and CF (March 2006)

- ensuring that audits are carried out to verify the effective functioning of the management and control system of the operational programme;
- ensuring that audits are carried out on operations on the basis of an appropriate sample to verify expenditure declared;
- presenting to the EC within 9 months of the approval of the OP an audit strategy covering the bodies which will perform the audits, the method to be used, the sampling method for audits on operations and the indicative planning of audits to ensure that the main bodies are audited and that audits are spread evenly throughout the programming period;
- submitting to EC an annual control report setting out the findings of the audits carried out during the previous year in accordance with the audit strategy of the OP and reporting any shortcomings found in the systems for the management and control of the programme;
- submitting to EC at the latest by 31.12.2016 a closure declaration assessing the validity of the application for payment of the final balance and the legality and regularity of the underlying transactions covered by the final statement of expenditure, which shall be supported by a final control report;

The Audit Authority shall ensure that the audit work takes account of internationally accepted audit standards.

5 Internal Audit Unit

By virtue of Council of the Ministers Decree (promulgated State Gazette No. 90/01.11.2005) of the amending the Organic Rule of the MOEW and **Internal Audit Unit is established** within the ministry, which is directly subordinated to the Minister of Environment and Water and performs the internal audit function in all structures, programs, activities and processes in the Ministry, including structures managing the EU funds and the lower level budget spending units.

6 Monitoring Committee of OP “Environment 2007 - 2013”

The implementation of the OP shall be monitored by Monitoring Committee established for this purpose. Procedural rules for its functioning shall be developed which will be agreed with the MA of OP in accordance with art. 62 of the General regulation. The MC shall be officially established with a decree of the Minister of Environment an Water, after individual nomination of the different representatives from the various institutions/organizations. The functions of the MC shall be in accordance with the General Regulation on ERDF, ESF and CF. The secretarial functions shall be performed by the MA. The MC shall consist of:

- chairperson (the deputy minister of environment an water responsible for the MA);
- members (representatives of the central administration, the regional and the local authorities, the social and the economic partners, the NGOs).
- observers (representatives of the EC, the IFIs (if projects are co-financed by them)

7 Committee for selection and coordination of projects under OP “Environment 2007 – 2013”

A Committee for selection and coordination of projects under OP “Environment 2007 – 2013” (with a status of Technical Committee) shall be set up by the MOEW with the purpose to discuss the strategic documents and proposed projects in the given sector and to give recommendations for the selection of projects. The Committee will consist of representatives of the MA, representatives of competent departments of the MOEW, the IBs (to act only as reporter of the results of the

projects' assessment process) as well as line ministries/institutions of relevance for OP, such as Ministry of Finance, Ministry of Agriculture and Forestry, Ministry of Regional Development and Public Works and its IBs, Ministry of State Administration and Administrative Reform etc.

II. Distribution of tasks between the Managing Authority, Intermediate Body and Final Beneficiaries

1 Tasks of the Managing Authority

1.1 Preparation, selection and approval of operations for financing

- Organizing the preparation and publication of the requirements and conditions for submission of project applications by the potential FB for approval of funding;
- Receives the project applications submitted by the potential FB, registers them and undertakes first level assessment (covers only formal requirements);
- Sends to the IB the project applications that have successfully passed the first level assessment for second level assessment (covers detailed technical, administrative, financial, socio - economic and environmental aspects of the project applications, as appropriate);
- On the basis of the Capacity Assessment Report prepared by the IB for the separate potential FBs, undertakes risk assessment and decides on the intensity of the verification checks to be carried out by the IB.

1.2 Programme implementation and financial management

- Verifies (through formal document – based checks) the submitted by the IB statements of expenditure and payment verification report at the level of priority.
- On the basis of the verified statements of expenditure and payment verification report on priority level, submitted by the IB the MA prepares statements of expenditure and payment verification report on OP level and submits both of them to the CA.

1.3 Verifications and audits

- Establishes written standards and procedures for verification checks to be carried out by the IB and keeps record of all verifications carried out.
- Monitors the implementation of the actions required/recommendation given by the FB, as described in the Verification Findings Reports (prepared by the IB after verification checks) and undertakes the necessary respective actions;
- Establishes written standards and procedures for adequate audit trial (together with AA and IAU) at the level of MA, IB and FB and undertakes the necessary steps to get the IB and the FB acknowledged with them.
- On the basis of the Audit conclusions report prepared by the IAU for the audits performed, undertakes the necessary preventive and corrective measures;
- Maintains archive (information) for the authorities storing the supporting documentation (all documents that are obligatory for adequate audit trial and their location) related to the expenditures and audits (in accordance with art. 18 of the General regulation for ERDF, ESF and CF);

1.4 Monitoring and Reporting

- Receives by the IB periodic monitoring reports at the level of priority – (quarterly, annual and final);
- After approval of the IB reports prepares consolidate monitoring report for the OP a whole in order to report the progress with OP implementation. The monitoring reports are prepared periodically (quarterly, annual and final). When necessary the reports are discussed at a level of MC subcommittee (at the level of priority). The annual and final reports are present to the MC for approval;
- Organizes the meetings of the MC, actively participates in them and performs the functions of the secretariat;

2 Tasks delegated to IB for implementation

2.1 Preparation, selection and approval of operations for financing

- Advise the potential FB during the development of project proposals;
- Undertakes second level assessment (covers detailed assessment of the technical, administrative, financial, socio - economic and environmental aspects of the project applications, as appropriate) of the submitted project applications that have successfully passed the first level assessment;
- For each project proposed the IB undertakes the necessary steps in order to prove the presence of the necessary co-financing on the side of the FB (if different from financing from the state budget);
- Undertakes formal assessment of the potential FB capacity to procure and manage (administratively, technically and financially) the operation that is subject of approval and prepares Capacity Assessment Report that is submitted to the MA.
- Prepares draft contracts to be signed with the final beneficiary of the approved project including all conditions under which the final beneficiary will receive the assistance from the EU funds;

2.2 Public procurement and tendering for operations

- Ensures the correct application of the public procurement procedures by the FB and their compliance with the Community legislation in the field of public procurement, environmental protection, state aid, equal opportunity and competition. For that purpose ensures that the IB is presented in the tender evaluation procedures (committee) organized by the FB for the different contract award procedures under the approved for financing operations. The IB representative/s prepare/s independent report/s for the tender evaluation procedures and the results of it.

2.3 Programme implementation and financial management

- Consult and advise the FB during the implementation of the operations approved for financing on issues related to financial management, monitoring, reporting and technical implementation;
- Receives the applications for payments from FB accompanied with the respective supporting documentation, including verification report prepared by the FB.
- On the basis of the verified applications for payments from FB prepares statements of expenditure and payment verification report on priority level and submits them to the MA.

- Directly executes payments to FB after the CA has certified the statement of expenditure, submitted by the MA and after the CA has granted the approval of the limit.
- Collection and processing of data necessary for the monitoring and the evaluation of the priorities, including entering of information in the information management and monitoring system of the OP;
- Collection and filling of the entire information related to the implementation of the priority (-ies)/the programme, including the projects, in full compliance with the requirements of the European Commission and the national legislation; Ensures that expenditure documentation including all supporting documents is being kept by the FB for a period of 3 years following the closure of the operational programme (i.e. until 31.12.2016)
- Assist the MA in the implementation of publicity measures, including development and maintenance of a internet site for the priorities for which tasks are delegated to the IB;

2.4 Verifications and Audits

- Undertakes verifications checks that cover administrative, financial, technical and physical aspects of the operations carried out as appropriate; The verification checks includes document – based checks of 100% of requested claims¹³;
- After each verification check prepares Verification Findings Report and submits it to the FB for further actions and to the MA for information and monitoring purposes;
- Establishes and maintains comprehensive accounting system for recording and storing in computerized form all the transactions at operation level. This includes filing and archiving of financial data, supplementary documents and reports at the level of details as described in the General regulation for ERDF, ESF and CF and the Regulation for detailed implementation of the General Regulation for SF and CF – Annex 3);
- Supports the MA in defining and implementing the necessary coercive and preventive measures with regards to the FB, recommended through the conclusions of the audit reports prepared by the IAU with regards to the audit performed;

2.5 Monitoring and Reporting

- Receives by the FB periodic monitoring reports at the level of priority – (quarterly, annual and final);
- Performs checks on the (1) content and conclusions of the reports and (2) of the data that has been entered into the MIS as a basis for approving the submitted reports.
- After approval of the FB reports prepares consolidate monitoring report at a level of OP priority in order to report the progress with the priorities' implementation. The monitoring reports are prepared periodically (quarterly, annual and final).
- Enters into the MIS the necessary data for each of the reported priorities.
- Send the prepared consolidated monitoring reports to the MA.

3 Tasks for implementation by FB

3.1 Preparation of project proposals (project application forms)

- Organizing the preparation of the relevant project applications in accordance with the requirements applicable for OP “Environment” and the Cohesion and Structural Funds.

¹³ CA requirement

- Submits the prepared project applications to the MA for approval of funding, in accordance with the terms and conditions for submission of project applications by the potential FB as specified by the MA;
- Undertakes all necessary steps in order to update/correct/improve the content of the submitted project application in accordance with the comments/requests sent by the MA or the IB during the assessment process.

3.2 Public procurement and tendering for operations

- Undertakes all necessary steps for timely and quality preparation of the necessary tender documents and for proper public procurements of the works/supplies/services included in the operation approved for financing under the Operational programme.
- Invites representatives of the IB to participate in the tender evaluation procedures as either independent observers or as independent evaluators.
- Prepares Tender Evaluation Report, signs it and submits it to the IB for approval
- Signs the contracts with the contractor/supplier/consultant, selected after the public procurement procedure, after the approval by the IB of the results of the tender procedure, presented in the prepared tender evaluation report;

3.3 Programme implementation and financial management

- Responsible for the day-to-day management of the operations approved for financing under the operational programme including all administrative, financial, technical and physical aspects;
- Collection and processing of data necessary for the monitoring and the evaluation of the approved project for the purposes of entering of information in the MIS of the OP;
- Receives the invoices from the contractor/supplier/consultant and after verification that the requested claims comply with the contract documentation (terms of reference/technical specifications) executes the payment with own resources;
- Prepares applications for payments to the IB, which is accompanied with the respective supporting documentation, including payment verification report prepared by the FB and submits all these to the IB for further processing.
- Establishes and maintains comprehensive accounting system for recording and storing information in computerized form for all transactions at contract level. This includes filing and archiving of financial data, supplementary documents and reports at the level of details as described in the General regulation for ERDF, ESF and CF and the Regulation for detailed implementation of the General Regulation for SF and CF – Annex 3);
- Ensures that the MA, IB and CA have access to information included in the comprehensive computerized accounting system (in accordance with Art 14 (1) of Regulation for detailed implementation of the General Regulation for SF and CF);
- Keeps (as originals and on appropriate electronic carrier) the entire expenditure documentation for the operations including all supporting documents for a period of 3 years following the closure of the operational programme (i.e. until 31.12.2016).

3.4 Verifications and Audits

- Undertakes day-to-day checks that cover administrative, financial, technical and physical aspects of the operations carried out as appropriate;

- Implements the follow-up actions required/being recommended as per the Verification Findings Reports of the IB in compliance with the specified deadlines.
- Ensures that the IAU and the AA as well as any other external audit institution have access to information included in the comprehensive computerized accounting system (in accordance with Art 14 (1) of Regulation for detailed implementation of the General Regulation for SF and CF);

3.5 Monitoring and Reporting

- Performs periodic monitoring on the implementation of the approved projects (operations) and prepares the necessary periodic monitoring reports - monthly, quarterly, annual and final – where reports on the progress on implementation (including the indicators);
- Submits the monitoring reports to the IB for approval;

III. Evaluation of OP

The evaluation will be carried out in accordance with the General regulation for ERDF, ESF and CF, with the aim to improve the quality, effectiveness and consistency of community assistance and implementation of the programme. In accordance with Articles 45-47 of the General Regulation, three main types of evaluations will be carried out:

- Ex-ante evaluation (before OP implementation commences)

The ex-ante evaluation shall aim to optimize the allocation of budgetary resources and improve programming quality. It shall identify and appraise medium- and long-term needs, the goals to be achieved, the results expected, the quantified targets of the OP, the coherence of the strategy proposed with the Community's priorities and the quality of the procedures for implementation, monitoring, evaluation and financial management. The ex-ante evaluation shall be carried out with the support of PHARE programme (through by an external evaluators).

The OP has already been screened for necessity of SEA and a positive decision has been issued by the competent authority (MOEW). The SEA shall be an important part of the ex-ante evaluation and shall be done in accordance with the provisions of the Directive No 2001/42 on the strategic environmental assessment (SEA). This directive was transposed in national legislation in 2004. The ex-ante recommendations shall be taken into account in the final version of the present OP.

- Ongoing evaluations (during the period of implementation of the OP)

Ongoing evaluations carried out during the period of implementation of the present OP shall be of 2 types – (1) interim and (2) ad hoc. The Interim Evaluation will aim at improving the quality, effectiveness and consistency of the assistance and the strategy and implementation of operational programme. The interim evaluations shall support the OP management process by analyzing problems/issues that would occur during the OP implementation and shall propose specific solutions to improve the operation of the system. Ad-hoc evaluations will be carried out, if needed, to address either implementation or management issues of an individual priority or key area of intervention, or can be “thematic”. Interim and ad hoc evaluations shall be managed by the MA and shall be conducted externally, by independent evaluators. Specific objectives, evaluation questions, tasks and expected results of interim and ad-hoc evaluations shall be defined separately for each evaluation to be conducted.

- Ex-post evaluation.

Ex-post evaluations shall be carried out by the Commission, for each objective, in close cooperation with the MS and MAs, according to art. 47 of the General regulation for ERDF, ESF and CF. The Commission may also carry out strategic evaluations, as well as evaluations linked to the monitoring of operational programmes, in accordance to art. 47 of the General regulation for ERDF, ESF and CF.

IV. Financial management and control of OP

The MA is responsible jointly with the CA for the existence of a proper financial management of the OP and is accountable for the legality of the transactions concluded on the basis of funds received.

1 Information for the competent body for receiving payments from EC and for competent body making payments to FB.

1.1 Competent Body for receiving payments from EC

With decision of the Council of Ministers No.988/27.12.2005 the **Ministry of Finance – Directorate “National Fund”** is designated as body for receiving the payments from EC with regards to the structural and cohesion funds.

1.2 Competent Body for making payment to FB

With regards to OP “Environment 2007 -2013” the payments with the FB shall be executed by the IB of the OP – directorate “EU Funds for environment” within the MOEW.

1.3 Certification and payments

The CA being also a Competent Body for receiving payments from EC shall be responsible for the certification of expenditures and for payments from EC. With regards to the certification it shall be responsible in particular for drawing up and submitting to the EC the certified statements of expenditure and payment claims in computerized form. The CA shall be certifying that:

- the statement of expenditure is accurate, results from reliable accounting systems and is based on verifiable supporting documents;
- the stated expenditure complies with applicable Community and national rules and was incurred in respect of operations selected for funding in accordance with the criteria applicable to the programme and complying with Community and national rules.

From this point of view the tasks of the Certifying Authority shall be to ensure that the received information on the procedures and verifications carried out in relation to expenditure and included in expenditure statements provides an adequate basis for certification, which entails:

- to verify the compliance of the claimed figures with the database;
- to verify the correct calculation of the total amount of eligible expenditures;
- to take account of the results of all audits carried out by or under the responsibility of the AA/Audit services of EC;

With regards to the payments the CA shall be responsible performing the following activities:

- receiving the ERDF, ESF and CF funds;
- transferring the ERDF, ESF and CF funds and the co-financing amounts (if is the case) to the IB;
- drawing up and submitting the estimation of expenditures to the EC;

- based on MA assessment, compiling and submitting to the EC the updated payment forecasts;
- returning to the EC the non-eligible expenditures or the funds that were not used, including interest of late payment;

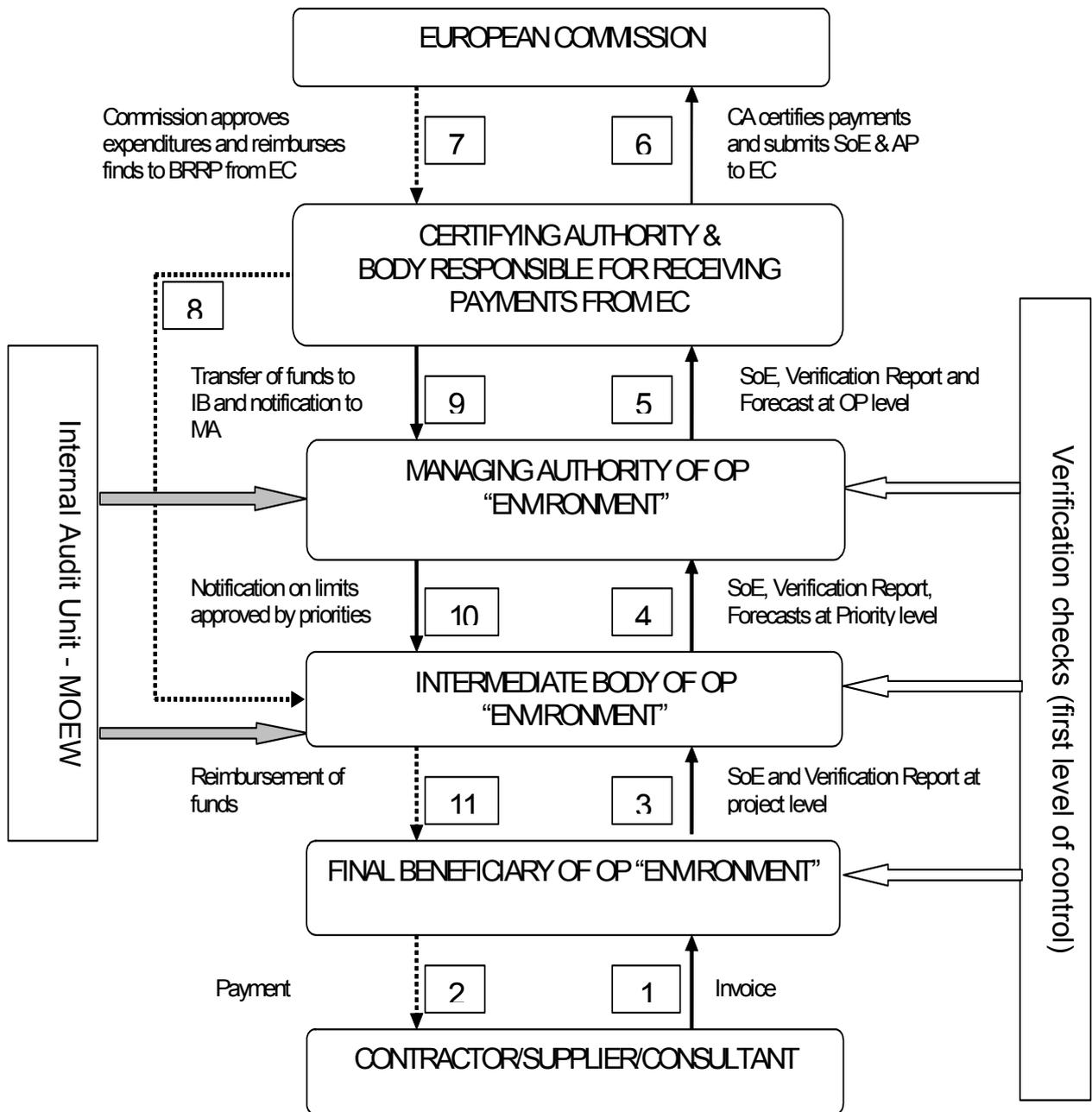
The MA shall work closely with the CA in fulfilling the responsibilities for effective, correct and efficient financial management and control to ensure that:

- the money are used in the most effective way so as to achieve the objectives of the OP;
- the use of resources is publicly accountable to the EU and the MS;
- the budgetary control is effective
- the financial planning is adhered to
- the contracting is within budget
- there is proper procurement of goods and services under projects financed (the procurement takes place and is in conformity with the EU and national rules and represents value for money)
- Financial statements sent to EC and other bodies are correct, accurate and complete (funds are applied correctly; free from errors and all relevant items have been included) ;
- Payments to Beneficiaries are made regularly and without undue delay or deductions;
- Co-financing resources are provided as planned;
- Payments are properly accounted for;
- Irregularities are notified in line with EU regulations;
- Any sums wrongly paid out are recovered swiftly and in full;
- Unused or recovered resources are re-committed within the respective OP;
- De-commitment is avoided – particularly in relation to the n+3/n+2 rule;
- Closure of each OP takes place smoothly and on time.

Within the purpose of expenditure certification to the EC the verification checks are carried out on four levels – at the FB level; at the IB level; at the MA level; and at the CA level.

2 Description of the financial flows for the OP:

The following figure represents the system for financial flows and payments with regards to OP “Environment 2007 -2013”, the main participant in the process and the main documents necessary during the different stages of the overall financial management process.



With regards to the processes numbered 1 to 11 the following applies:

- 1 The contactor/supplier/consultant issues an invoice or a document of equivalent probative value to the name of the FB. The FB verifies that the documents comply with the contract documentation (ToR, technical specification, etc.). He also performs day-to-day checks on the operations carried out by the contractor/supplier/consultant.
- 2 FB settles the invoice with own resources on the basis of invoice verification and day-to-day checks on operations.

- 3 FB prepares a payment verification report (declaration for verification), and a statement of expenditure by operation/project. On monthly basis he submits the above documents to the IB together with the copies of invoices/documents of equivalent probative value.
- 4 IB verifies (through document based checks on 100% of the requested claims), the submitted by the FB payment verification reports, statements of expenditure and the supporting documentation. The verification covers formal, eligibility and credibility checks. IB shall also perform on-the-spot checks on operations selected on the basis of risk analysis. Based on the verifications and on-the-spot checks the IB prepares on monthly basis: statement of expenditure on priority level, payment verification report (declaration of verification) on priority level, and payment forecasts on priority level. IB submits the above documentation to the MA together with copies of invoices/ documents of equivalent probative value.
- 5 MA verifies (through document based checks on 100% of the requested claims), the submitted by the IB payment verification reports, statements of expenditure and the supporting documentation. MA reserves the right to perform on-the-spot checks on operations selected on the basis of risk assessment. As a result, on monthly basis, the MA prepares: statement of expenditure on OP level, payment verification report on OP level, and payment forecast on OP level and submits them to the CA.
- 6 CA certifies the statement of expenditure received from the MA
 - is accurate;
 - is based on verifiable supporting documents
 - results from reliable accounting systems
 - expenditures comply with the applicable Community and national rules;
 - expenditures are incurred for operations selected for funding in accordance with the criteria applicable for the OP
 - adequate information from MA received with regards to the procedures and verifications carried out in relation to the expenditures included in the SoE
 - taking into account the results of all audits carried out by or under responsibility of the AA.

As result the CA prepares a payment application in electronic format and submits it to the EC together with the certified statement of expenditure. The submission of payment applications shall be done 3 times per year, the latest date for submission is 31 October of the year. The CA sends to the EC also aggregated payment forecasts for the current and subsequent financial years till the end of February.
- 7 EC transfers the payment to the account of the body responsible for receiving funds from the EC, and an advice note/notification, no later than 2 months after the date on which the payment application is registered in case there is no suspension of payment.
- 8 On basis of limits approved by the CA, the payments are transferred to the IB.
- 9 In parallel a notification is sent to the MA for the settlement.
- 10 The MA notifies the IB for the approved limits on each priority.
- 11 The IB reimburses the funds to the FB.

3 Identification and reporting of irregularities

The legal basis is represented by Commission Regulation No 1681/94 concerning irregularities and the recovery of sums wrongly paid in connection with financing of structural policies and the Council Regulation No. 2988/95 on the protection of the European Communities' financial

interests that settles the ways of control and recovery of sums resulted non-reimbursable EU financial assistance. According to Commission Regulation (EC) No 1681/94 irregularities involving loss of EU funds of less than 4,000 Euro are not required to be reported to the Commission unless the Commission requests it. Therefore, irregularities of over €4,000 and all irregularities committed intentionally must be reported to the European Commission.

TO BE FURTHER DEVELOPED:

4 Audit

TO BE FURTHER DEVELOPED:

V. Publicity and information for the OP

In each institution (MA, IB and FB) involved in the OPE implementation a person shall be designated to be responsible for the publicity measures as well as for providing information on OPE implementation within the scope of the competencies of the respective institution. Information on the possibility to contact these persons shall be included in the publicity and information materials.

Institutions involved in the OPE implementation shall regularly report on the information and publicity measures envisaged, ongoing and completed.

All FB who obtain support from the CF and/or ERDF within the OPE are obliged to implement certain information and publicity measures. These will depend on the type of project being carried out. The available instruments include: diplomas, certificates; advertising billboards; permanent commemorative plaques; placing the EU and OPE logos on all documents pertaining to the project; co-operation with the media.

The requirements for the implementation of information and publicity measures by the FB shall be included in the co-financing agreement signed between them and the IB for the financial support granted from the CF or the ERDF for the projects approved under the OPE. The FB shall reports (as part of their monitoring reports) to the IB on the implementation of the publicity and information measures.

The IB shall also play the role of “OPE promoter” (in addition to the envisaged supportive to the MA roles of “OPE project advisor” and “OPE project assessor”). The IB shall report to the MA as part of their monitoring reports. Among the other main responsibilities of the IB are the following ones: participation and support for conducting conferences and seminars; organization of information meetings with FB; preparation and distribution of information materials; training and workshops for the FB; support in maintaining the Internet site for OPE; co-operation with the media;

The MA shall be responsible for preparing the OPE Communication Plan in accordance with the requirements of art 2 of the Draft Commission Regulation (EC) No.../...of [...] setting out detailed rules for the application of Council Regulation (EC) N°.../...laying down general provisions on the European Regional Development Fund, the European Social Fund and the Cohesion Fund and Regulation (EC) N°.../... of the European Parliament and of the Council on the European Regional Development Fund. Among the other main responsibilities of the MA are the following ones: OPE, programme complement and procedures manual publication and distribution; organizing and conducting opening conferences for the OPE, conferences, seminars and information meetings FN, public and stakeholders; preparation, publication and distribution of brochures, information materials; training and workshops for the IB and FB; development and maintenance of Internet site for OPE; co-operation with the media; opening and maintaining OPE information office and issuing OPE information bulletin; organizing and conducting periodical evaluation and the corresponding reports.

On the basis of the monitoring reports submitted by the IB the MA shall prepare combined information on implementation of the Plan. The information shall be the basis for preparing an annual report of the OPE Managing Authority to the European Commission on enforcing the Commission's Regulation 1159/2000 of 30 May 2000 on information and publicity measures to be carried out by the Member States concerning assistance from the Structural Funds.

VI. Procedures for computerized exchange of data with EC

The electronic data exchange with the European Commission shall be done through an interface between unified MIS which is currently under development with PHARE assistance and the EC MIS. At the level of MA and IBs, specialised units (monitoring units) have been created in order to manage the database management for the OP and the MIS maintenance.

TO BE FURTHER DEVELOPED:

I. List of major projects for OP “Environment 2007 - 2013”

Table 20 – List of major projects for OP “Environment 2007 -2013”

No.	Name of project	Main components	Total eligible cost of the project (indicative)	EU funding contribution (indicative)		National funding (indicative)	Time table		
				CF	ERDF		Preparation indicative	Start indicative	Completion indicative
1	Kurdjaly waste water and sewage project	WWTP; Reconstruction of sewerage network; Construction of sewerage network;	25 237 847,00	21 452 169,95	0,00	3 785 677,05	2007 - 2008	second half of 2008	second half of 2010
2	Jambol waste water and sewage project	WWTP; Extension of sewerage network - 6 000 l.m.; Reconstruction of sewerage network - 7 000 l.m.	28 440 906,00	24 174 770,10	0,00	4 266 135,90	2007 - 2008	second half of 2008	second half of 2010
3	Plovdiv waste water and sewage project	WWTP; Construction of sewerage network - 15 836 l.m.	45 477 292,00	38 655 698,20	0,00	6 821 593,80	2007 - 2008	second half of 2008	second half of 2010
4	Kocherinovo - Construction of regional waste management center	New regional landfill; 3 transfer stations	34 125 793,00	29 006 924,05	0,00	5 118 868,95	2006 - 2007	first half of 2008	first half of 2010
5	Construction of regional waste treatment facilities in Stara Zagora region	New regional landfill; Development of material recovery facilities (MRF's); In-vessel composting facilities; Windrow composting facilities for green waste; Transfer station; Development of recycling centers;	36 061 131,84	30 651 962,06	0,00	5 409 169,78	2007 - 2008	first half of 2009	first half of 2011
6	Construction of regional waste treatment facilities in Varna region	New regional landfills; Development of material recovery facilities (MRF's); In-vessel composting facilities; Windrow composting facilities for green waste; Development of recycling centers;	30 058 873	25 550 042,05	0,00	4 508 830,95	2007 - 2008	first half of 2009	first half of 2011
7	Closure of the existing landfill for municipal solid waste - Rouse	Closure of the existing landfill site at Rouse Municipality, Region Rouse.	25 000 000	0,00	21 250 000,00	3 750 000,00	2006 -2007	second half of 2007	second half of 2009
	TOTAL		224 401 842,84	169 491 566,41	21 250 000,00	33 660 276,43			

J. Appendixes

Annex 1

Groups of waste according to the list of Waste (Appendix 1, Order RD-323/1998 r.)¹⁴

Code	Name
01	Waste from the exploration, extraction and treatment of mineral resources
02	Waste from agricultural, horticultural, hunting, fishing and aquacultural primary production, food preparation and processing
03	Waste from wood processing and the production of paper, cardboard, pulp, panels and furniture
04	Waste from the leather, fur and textile industries
05	Waste from petroleum refining, natural gas purification and pyrolytic treatment of coal
06	Waste from inorganic chemical processes
07	Waste from organic chemical processes
08	Waste from the manufacture, formulation, supply and use of coatings (paints, varnishes and vitreous enamels, adhesives, sealants and printing inks)
09	Waste from the photographic industry
10	Inorganic waste from thermal processes
11	Inorganic metal-containing waste from metal treatment and the coating of metals, and non-ferrous hydrometallurgy
12	Waste from mechanical and surface treatment of metals, ceramics, glass and plastics
13	Oil waste (except edible oils and those from 05.00.00 and 12.00.00)
14	Waste from organic substances used as solvents (except 07.00.00 and 08.00.00)
15	Packaging; absorbents, wiping cloths, filter materials and protective clothing not otherwise specified
16	Waste not otherwise specified in the list
17	Construction and demolition waste (including road construction)
18	Clinical waste from human or animal health care (except food waste not arising from medical facilities)
19	Waste from waste treatment facilities, waste water treatment plants and the water industry
20	Municipal waste and similar commercial and industrial waste including separately collected fractions

¹⁴ Order RD-323 / 1998 r. was replaced as of 25.05.2004 by Regulation № 3 on waste classification, but the data analysis of the current situation correspond to Order RD-323 / 1998.

Annex 2

List of Abbreviations

NPP	Nuclear Power Plant
GDP	Gross Domestic Product
BD	Basin Directorate
BSS	Bulgarian State Standard
BC	Basin Council
RES	Renewable Energy Sources
WPP	Water Power Plant
WSS	Water Supply and Sewerage
LCP	Large Combustion Plant
LFQCDG	Liquid Fuels Quality Control Directorate General
GEF	Global Environment Facility
GIS	Geographic Information System
UWWTP	Urban waste water treatment plant
SAMTS	State Agency for Metrology and Technical Surveillance
EC	European Commission
EU	European Union
BDA	Biological Diversity Act
WA	Water Act
EPA	Environmental Protection Act
PT	Protected areas
WMA	Waste Management Act
CAAA	Clean Ambient Air Act
EEA	Executive Environmental Agency
AAQ	Ambient Air Quality
FEC	Final Energy Consumption
IPPC	Integrated Pollution Prevention and Control
IP	Integrated Permit
CLRTAP	Convention on Long-range Transboundary Air Pollution
VOC	Volatile Organic Compounds
MI	Ministry of Interior
MEER	Ministry of Energy and Energy Resources
MAF	Ministry of Agriculture and Forestry
ME	Ministry of Economy
MV	Motor Vehicle
MoEW	Ministry of Environment and Water
MTC	Ministry of Transport and Communications

NPBDC	National Plan for Biological Diversity Conservation
NGO	Non-Governmental Organisation
NWMP	The National Waste Management Programme
NSI	National Statistical Institute
NWMS	National Water Monitoring System
NSEM	National System for Environmental Monitoring
NSEAP	National Strategy for the Environment and Action Plan
EIA	Environmental Impact Assessment
ODS	Ozone Depleting Substances
PAH	Polycyclic Aromatic Hydrocarbons
GHG	Greenhouse Gases
MPC	Maximum Permissible Concentration
MS	Monitoring Station
CMD	Council of Ministers' Decree
MP	Management Plan
RIEW	Regional Inspectorate of Environment and Water
RAAAQAM	Regions and Agglomerations for AAQ Assessment and Management
UWWTP	Urban Waste Water Treatment Plants
TPP	Thermal Power Plant
POP	Persistent Organic Pollutants
PM	Particulate matter
HEI	Hygienic and Epidemiological Inspectorate with the Ministry of Health

Annex 3

Election of environmental NGO representatives for participation in the elaboration of OP “Environment 2007-2013”

Operational programme “Environment 2007-2013” is elaborated from a working group specially established with this purpose. The principle composition of this working group (WG) is determined with a decision of the Coordination Council of NDP in August 2004. The WG comprises, except representatives from the line Ministries, regional and local authorities, social and economic partners, scientific organizations and syndicates also two representatives of environmental NGOs from the country. In accordance with the implementation of partnership principle all participants of the WG actively participated through cooperation and consultations in the elaboration of the operational programme, including the representatives of environmental NGOs.

The election of environmental NGO representatives is undertaken under procedure determined by the NGOs themselves during the National NGO Conference “Vitosha – 2002”, carried out in Sofia in 2002. For this purpose, in September 2004 the MA of OP “Environment 2007-2013” asked the environmental NGOs from the country to designate their representatives in the WG for the elaboration of OP.

According to the procedure of environmental NGOs, NGO representative is a person, elected in a certain body or institution to represent the NGO community working for the environmental conservation and sustainable development. The elections are organized from the organization of Bulgarian NGOs working in the area of environmental conservation and sustainable development. The right for participation in the elections has each registered under the Non-Profit Legal Entities Act NGO working on the problems of nature and environmental conservation and sustainable development.

The communication mechanisms, used for the organization of the elections and information exchange between NGOs are through the electronic information network BlueLink, through the mailing list ngos@bluelink.net, the popular web site www.bluelink.net, through the monthly printed newsletter “Ecopolis” and through the common post in cases when a certain NGO has submitted a written request and has paid an annual fee, fixed by the Managing Council of the Organization of Bulgarian NGOs/ further on referred to only as the Organization/.

The first environmental NGO representative in the WG is elected through the mailing list of the electronic informational network BluLink, in which is used the procedure for electing environmental NGO representatives.

The election procedure for representatives is launched on the ground of written request from a certain organization or institution (in the specific case from the Ministry of environment and water) for election of environmental NGO representative/s. The Organization announces the launch of procedure on the election of NGO representative through its communication mechanisms and the information network BlueLink. Each NGO, having the right to participate in the elections can nominate one representative for each open position, and it is obliged to coordinate the nomination with the nominated person before submitting the application for nomination. The applications can be submitted through a letter, fax or through an e-mail and they must contain the name of the nominated person, the nominating NGO, declaration of an NGO for the experience of the candidate, his/her autobiography in a specific form and in an electronic source, motivation letter from the nominated person submitted to the Organization. The deadline for the nomination of environmental NGO representatives is defined by the Organization and the term can not be lesser than 12 working days from the date of the launching of the procedure. In terms of 5 working days following the date of the conclusion of the nomination procedure, the Organization prepares a list with the nominated persons and a package with their autobiographies and motivation letters and

sends them through an e-mail and a common post to the organizations that have the right to participate in the elections.

The deadline for voting is defined by the Organization and it can not be lesser than 10 working days from the date of announcing the launch of the voting procedure. The voting is performed with a document, signed by the person, officially representing the organization or other authorized person and sealed with the official seal of the organization and dispatched to the Organization by e-mail, common post or fax.

Each NGO, having the right to participate in the elections can vote for only one candidate for each free position. For an elected NGO representative is considered the candidate who has collected the most votes. In cases when for a certain candidate for an NGO representative there are equal votes, a second voting procedure is undertaken. Each person interested for the results can examine the election documentation within 3 days following the voting deadline. The Organization of Bulgarian NGOs announces through BlueLink and the monthly newsletter "Ecopolis" the results from the elections within 7 working days following the voting deadline.

According to this procedure for election of environmental NGO representatives in the WG for the elaboration of OP "Environment 2007-2013" are elected two NGO representatives (titular and a substitute). They are nominated in the period 07-23.09.2004 (12 working days according to the procedure for NGO elections) in result of the elections launched by "BlueLink" Foundation. For a titular is elected Mr. Petko Kostadinov Kovachev from the "Information and training center for ecology", Sofia.

The two representatives (titular and substitute) are elected from a total of 10 voting environmental NGOs within the period 24.09-08.10.2004 (10 working days according to the procedure for NGO elections), namely: Association for the wild nature "Balkans", Sofia; "Land Forever" Association, Svishtov; "Agrolink" Association, Sofia; "Ecoglasnost" National movement, Montana; "Akademika" GeoEcoClub, Veliko Tarnovo; "Sirius" Club for studying, nature conservation and human achievements, Plovdiv; Association of Parks in Bulgaria; "For the Land" Ecological Association, Sofia; "Green Balkans" Federation, Plovdiv; "Information and training center for ecology", Sofia.

The second representative in the WG for the elaboration of OP "Environment 2007-2013" is elected in August 2004 after the election procedure undertaken for NGO representatives and published in "Green Shield" magazine and disseminated through an e-mail and the coordinators of the Coordination Council of the National NGO Conference "Vitosha -2002". For this representative of the WG is also elected a substitute.

Following the conclusion of the voting procedure for a titular is elected Mrs. Galya Marinova Bardarska – member of the Managing Council of the "Global Water Partnership for Central and Eastern Europe" and a member of the Managing Council of UBIFRANCE – Bulgaria – responsible for the environment in the economic mission of the French Embassy. Mrs. Bardarska is nominated from the Coordination Council of the National NGO Conference "Vitosha -2002".

The NGOs approved the nomination of Mrs. Galya Bardarska for a representative of an environmental NGO in the WG for the elaborations of OP "Environment 2007-2013" are from a total of 15 voting NGOs, namely: "BIOTERA" NGO, Pleven; "Interecu 21century" Federation, Sofia; "Man, Ecology, Nature" NGO, Sofia; "Hebelera" Ecoassociation, Asenovgrad; "The Universe of a Man" Foundation, Sofia; "Democratic Rhodopi" Foundation, Yakoruda; "Mountaineers" Ecoassociation, Troyan; "Global Water Partnership", Sofia; "Ecology and Sustainable Development" Association, Targovishte; "Green Patrols" National Movement, Sofia; "Ecotera" Association, Asenovgrad; "Balcan" Private Development Association, Pirdop; "Ekstrem" NGO, Pleven; "International Association of Water and Soil Conservation"; Civil Ecological Council", Sofia.

The participation of appointed environmental NGO representatives in the elaboration of the operational programme will continue in the future during the transformation of the working group to a Monitoring Committee of the OP “Environment 2007-2013”. In the second half of 2006 is envisaged the official establishment of the Monitoring Committee of the OP “Environment 2007-2013”, in which is also envisaged the inclusion of representatives of environmental NGOs, with the purpose of the implementation of partnership principle.