

Environmental Policy, Institutional and Regulatory Gap Analysis

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1. Policy, institutional and regulatory gap analysis: ambient air protection

1.1 Preface

Air is one of the most vital resources for a human being. Ambient air pollution with harmful substances, such as carbon, nitrogen and sulphur dioxides, volatile organic compounds, smallest particulate matters, tropospheric ozone and other pollutants have a negative impact on human health, ecosystems and material values.

In Georgia ambient air is mostly polluted by emissions from motor transport, industrial and energy facilities. Moreover, vehicles are the basic urban polluters. The greatest part of pollutants emitted in the country comes just to the transportation sector – emission of carbonic acid (CO) into ambient air - 87%; nitrogen oxide (NOx) – 70%; sulphur dioxide (SO²) – 50%; volatile organic compounds - 40%¹.

This chapter reflects the key issues of the national policy, legal framework, management mechanisms and institutional arrangement related to the ambient air protection in Georgia. It also discusses the shortcomings existing in this sphere, as well as the positive and negative sides of institutional and legislative amendments implemented during past years. The problems existing in the system of ambient air quality management are reflected in the report through comparison with the management systems used by the European Union in this sphere. It discusses which state functions, legislative, regulatory and management mechanisms need to be strengthened and developed in order to improve the ambient air quality management in the country.

1.2 Ambient Air Protection Policy

During past decades ambient air quality protection and improvement represents a priority for many countries of the world. The leading countries are periodically developing the state policies, strategies, programs and plans to settle the priority problems related to air quality management. Many countries reflect such policy in frames of their environmental policies. For example, the Community Environment Action Programme 2001-2010: the Sixth Environment Action Programme -'Environment 2010: Our Future, Our Choice'² discusses ambient air pollution as one of the priority problems and aims “to achieve levels of air quality that do not give rise to unacceptable impacts on, and risks to, human health and the environment.” To achieve this, in 2005 the European Community approved Thematic Strategy on Air Pollution³ and started to implement the Clean Air for Europe Programme. This programme sets particular goals to improve air quality by 2020 and defines what particular measures should be implemented to achieve these goals. The Community Thematic Strategy on Air Pollution mostly focuses on the following:

- Establishing (minimum and tentative) quality standards for ambient air;
- Regulation and control of polluting emissions from large combustion plants and mobile sources;
- Fuel quality improvement;
- Integration of environmental protection requirements into the transport and energy sectors;
- Public informing and ensuring their participation in air pollution reduction measures.

Unlike the European Community and other leading countries, Georgia has no current, officially adopted state policy or program in the sphere of environmental protection, including ambient air protection. The only environmental program, which was developed by the Georgian Government during its independence and which was officially approved by the President of Georgia in 2000, envisaged certain measures for a

¹ The National Environmental Action Plan of Georgia (2011-2015), draft, (November 12, 2010), the Ministry of Environment Protection and Natural Resources of Georgia.

² The Community Environment Action Programme 2001-2010: the Sixth Environment Action Programme -'Environment 2010: Our Future, Our Choice'. Commission of the European Communities, Brussels, 24.1.2001. Com (2001) 31 final.

³ Thematic Strategy on Air Pollution. Commission of the European Communities, Brussels, 21.9.2005. COM(2005) 446 final.

period of 2000-2004⁴. Following this period, although with donor support, the draft of the Second National Environmental Action Plan of Georgia was prepared twice, the Georgian Government failed to discuss, agree and approve this document. One of the drafts was being prepared in 2006-2007 with the support of the UN Development Programme. The second draft was being prepared in 2009-2010 with the support of the Dutch Government. In November 2010 a draft⁵ was prepared, which was discussed during 2011 and is still being discussed by various state agencies of Georgia. However, the Government has failed to finalize and approve the draft so far⁶.

In 2000 the National Environmental Action Plan of Georgia discussed ambient air pollution in the cities - that was mostly related to pollution from vehicles - as one of the environmental priorities and with respect to this problem, the Plan envisaged the implementation of the following measures:

- To increase a share of public transport, especially electric transport, and to improve its work;
- To improve the system of control of exhaust gas emissions from vehicles;
- To strengthen control of fuel quality;
- To introduce new norms on fuel quality and on harmful exhaust gases from vehicles; in a long-term perspective, to harmonize these norms with the EU norms and standards;
- To settle and optimize automobile movement, to observe the rules of movement, to organize parking sites rationally.

Ten years after adopting the first and, so far, the last National Environmental Action Plan, ambient air pollution in some cities of Georgia still remains a serious problem. Moreover, it can be said based on the existing monitoring data that for example, in Tbilisi ambient air pollution has increased during past years that is mostly related to the increase in the movement of vehicles⁷. Despite it, neither Georgia, nor its capital or any other city has a strategy or program on improvement of ambient air quality. The majority of measures envisaged by the 2000 National Environmental Action Plan remained unfulfilled and their implementation is still very important.

1.3 Legislation in the Sphere of Ambient Air Protection

Despite the absence of the state ambient air protection policy, strategy and program, there are some legislative normative acts and bylaws in Georgia, which regulate certain spheres of ambient air protection. The Law of Georgia on Ambient Air Protection⁸, which was adopted by the Georgian Parliament in 1999, represents the key regulatory legislative act in the sphere of ambient air quality management and aims:

- To provide the achievement, maintenance and improvement of ambient air safety for human health and natural environment;
- To provide the regulation of emission of hazardous substances into ambient air;
- To promote the availability of information about ambient air quality to the public.

This law defines those regulatory and management mechanisms, which should be used with the purpose of ambient air protection in the country. According to the law, these mechanisms cover: ambient air quality norms; state regulation of emission of hazardous substances from stationary, mobile and dispersion sources; fuel quality norms and control; air quality monitoring; economic instruments, etc.

⁴ The National Environmental Action Plan of Georgia. The Ministry of Environment Protection and Natural Resources of Georgia, April, 2000. The program was developed with the financial support of the World Bank.

⁵ The National Environmental Action Plan of Georgia (2011-2015), draft, (November 12, 2010), the Ministry of Environment Protection and Natural Resources of Georgia.

⁶ It turned out following this survey that the Georgian Government approved on January 24, 2012 the second Environmental Action Plan. The Plan was approved by decree of the Georgian Government. However, neither the act nor the plan has been published either by the official printing agency, or the reception body.

⁷ GEO Cities: Tbilisi Report 2010. Draft.

⁸ The Law of Georgia on Ambient Air Protection; Georgian Legislative Bulletin N30 (37), 1999. Amendments made by the laws of Georgia 06/30/2000 N465, 12/14/2007 N5605, 11/12/2010 N3806, 03/11/2011 N4386

These mechanisms and the problems related to their functioning are provided in the following chapter of the present document.

The Law on Ambient Air Protection represents the so called framework law, defining which particular legislative normative acts and bylaws should be adopted in the country for settlement of various issues of air quality management in the country. In particular, the Law on Ambient Air Protection, in its initial formulation (1999), envisaged the development and enactment of five legislative normative acts and about 30 bylaws within 2000-2003. In particular, the following laws should have been adopted:

- The Law on Integrated Environmental Pollution Control System;
- The Law on Environmental Monitoring System;
- The Law on Ambient Air Protection from Harmful Effects of Noise and Vibration;
- The Law on Ambient Air Protection from Electromagnetic Fields and Other Physical Effects

For the present, not a single above mentioned law has been either developed or enacted. The following normative acts, envisaged by the Law on Ambient Air Protection (article 25), have not been enforced either:

- The order by the Minister of Environment Protection on approval of the instruction on the rule of periodical inspecting of emissions from motor vehicles or other movable-mechanical means.
- The order of the Minister of Environment Protection on approval of the instruction on the list of transportation and other movable-mechanical means polluting ambient air with hazardous substances and on the maximum permissible norms of emission of hazardous substances from these vehicles.
- The order of the Minister of Environment Protection on approval of the instruction on the rule of controlling the emission from motor vehicles on the territory of Georgia.

It should be noted that the Law on Ambient Air Protection, which was developed by the Ministry of Environment Protection and Natural Resources in 1999, was the first attempt to approximate the normative acts and requirements existing in this environmental sphere to the EU directives and other normative acts. One of the key tasks of the Law was to gradually enact the legal norms established by the EU legislation in the sphere of protection from ambient air pollution on the territory of Georgia (paragraph 2, article 3). The Law on Ambient Air Protection (article 60, paragraph 1, subparagraph “z”, in its formulation from 1999) envisaged the adoption of the presidential order before January 1, 2000 “On the stages of planning and implementing the measures on harmonization of the EU legislation in the sphere of ambient air protection with the Georgian one.” No such normative act has been developed or enacted in Georgia so far. The article and the paragraph envisaging the adoption of such normative act was withdrawn by amendments made to the law in 2007.

Noteworthy that numerous amendments have been made to the Law on Ambient Air Protection since the day of its adoption, in particular – in 2000, 2007, 2010 and 2011. However, these amendments were not directed towards the improvement of the ambient air quality protection system, but in most cases they reflected in the law those institutional changes and reshuffles, which were taking place in the Georgian authorities. For example, in 2007 certain amendments were made to the law⁹ following structural changes that took place at the Ministry of Environment Protection and Natural Resources in 2004 as a result of which it was renamed into the Ministry of Environment Protection and Natural Resources. Another structural change occurred in 2011, as a result of which the Ministry was renamed into the Ministry of Environment Protection that was reflected in the Law on Ambient Air Protection during the same year¹⁰. No significant changes were made during that period to improve the law or to develop the ambient air protection system. On the contrary, a number of articles, aiming at harmonization of Georgia’s normative acts with the EU legislation, were removed by the amendments made to the law in 2007.

⁹ On making amendments and additions to the Law of Georgia on Ambient Air Protection, 2007-12-14

¹⁰ On making amendments to the Law of Georgia on Ambient Air Protection, 2011-03-11

The diversity of so called 'white spots' existing in legal frameworks, which we discussed above, confirm that many issues of ambient air management, including such priority issues as air pollution from motor vehicles, remain without regulation. Although the Law of Georgia on Ambient Air Protection declares harmonization with EU legislation as one of its key goals, actually no significant steps have been taken in this direction during past decade.

1.4 Key Mechanisms of Ambient Air Quality Management and Institutional Arrangement in Georgia

The Law of Georgia on Ambient Air Protection envisages the use of a number of environmental mechanisms with the purpose of air management. Out of these mechanisms some have been put into practice, while others remained inactive because of the failure to adopt relevant laws or bylaws, as well as because of absence of appropriate technical, financial and human resources in the country. A number of so called environmental instruments, which are widely used in the leading countries, has not been either envisaged by legislation or put into practice. The chapter below discusses these mechanisms, legislative, institutional and other problems related to their effective implementation in Georgia as well as their compliance with the EU legislation and practice.

1.4.1 Ambient Air Quality Norms

To avoid the concentration of harmful to health and environment substances in ambient air, it is vital to define ambient air quality norms (standards) - Maximum Permissible Concentrations (MPC) of harmful substances in ambient air. These norms are defined for a certain average period. It is scientifically justified that if the concentration of harmful substances in ambient air, or air pollution does not exceed these norms, no danger is posed to human health or this danger is minimal.

There are internationally recognized ambient air quality norms, for example, the recommendation standards of the World Health Organization (WHO). According to the legislation of European Community, based on the goals of health protection, the air quality standards are set for a number of pollutants.

According to the Law of Georgia on Environmental Protection, the environmental quality norms, including air quality norms or maximum permissible concentrations for each hazardous substance is determined every five years by the Ministry of Labor, Health and Social Affairs. The current ambient air quality norms were approved by making amendments to order 297 dated August 16, 2001 of the Minister of Labor, Health and Social Affairs by order 38 dated February 24, 2003 of the Minister of Labor, Health and Social Affairs "On approval of the norms of qualitative state of the environment." This document is based on the sanitary-hygienic norms acting during the Soviet period – Hygienic Norms, HN 2.1.6.1983-05 "Maximum Permissible Concentrations (MPC) of Harmful Substances in Ambient Air of Populated Areas." Thus, the ambient air quality norms acting in Georgia today are actually identical to those acting in the Soviet Union in the eighties.

For comparison, table 1 presents ambient air quality norms – maximum permissible concentrations for some substances, set by the current Georgian legislation, WHO standards and EU Directives.

The Law on Ambient Air Protection envisages harmonization of ambient air quality norms with the EU air quality standards. In particular, according to article 19 of the law, the meanings, types and list of maximum permissible concentrations of harmful substances in ambient air should be determined by a joint order of the Ministers of Environment Protection and Healthcare, in accordance with the EU Directive 96/62/EC dated September 27, 1996 on Ambient Air Quality Assessment and Management. Although the law envisaged the approval of this order before January 1, 2000, no such normative act has either been developed or adopted so far.

Table N1. Maximum Permissible Concentrations (MPC) of harmful substances defined by the Georgian legislation; ambient air quality norms set by WHO and the European Community

Harmful substances	Maximum Permissible Concentrations, MPC (mg/m ³)			Concentrations averaging period
	MAC according to Georgian legislation	Standards recommended by WHO	Norms set by EU legislation	
Nitrogen dioxide (NO ₂)	-	0.2	0.2	1 hour
	-	0.04	0.4	1 year
	0.04	-	-	24 hours
	0.085	-	-	30 minutes
Sulphur dioxide (SO ₂)	-	0.5	-	10 minutes
	-	-	0.35	1 hour
	-	0.05	-	1 year
	0.05	0.02	0.125	24 hours
Carbon monoxide (CO)	0.5	-	-	30 minutes
	-	100	-	10 minutes
	-	10	10	8 hours
	-	30	-	1 hour
Lead compounds	5	60	-	30 minutes
	3	-	-	24 hours
	-	0.0005	0.0005	1 year
	0.0003	-	-	24 hours
Ground level ozone	0.001	-	-	30 minutes
	-	0.12	0.12	8 hours
	0.03	-	-	24 hours
	0.16	-	-	30 minutes

Source: State of the Environment Report for Georgia 2007-2009. <http://soegeorgia.blogspot.com/p/english-version.html>

1.4.2 Regulation of Emissions from Stationary Sources

In Georgia, like in many other countries, including the EU states, maximum permissible norms of emission of harmful substances from stationary sources are determined to limit the ambient air pollution from such sources. However, the methods of defining these norms are different in Georgia and European Union. In particular, emissions from stationary sources in the EU states are regulated by several legislative acts, which use various approaches. These legislative acts contain:

- EU Directive on Integrated Pollution Prevention and Control (IPPC), which is built on so called “integrated” approach and requires the use of the best available techniques as a condition for issuing pollution permit. Integrated approach means that air pollution should not decrease in one point at the expense of increasing pollution of air or other environmental components (water, soil) in other points. Best Available Techniques (BAT) means the most effective and advanced stage in the development of activities and their methods of operation which indicate the practical suitability of particular techniques for providing in principle the basis for emission limit values designed to prevent and, where that is not practicable, generally to reduce emissions and the impact on the environment as a whole. However, according to BAT approach, such techniques should be available on the market and their purchase should not result in an unjustified economic burden for an entrepreneur.
- Several sectoral directives, which set minimal requirements, including maximum emission limits for type-specific enterprises (large thermal power plants, enterprises burning waste, as well as enterprises using organic solvents, etc.).
- Regulation on European Pollutant Release and Transfer Register (EPRTR), which makes available to the public the detailed information about the release and transfer of harmful substances from about 24 000 industrial enterprises.

Unlike this approach, Georgian legislation does not define emission norms for separate enterprises based on their peculiarity and used technologies; a universal method/approach is used instead. According to this approach, for any type of enterprises, which are subject to ecological expertise (basically medium-sized and large enterprises and their list is defined by the Law of Georgia on Environmental Impact Permit), emission norm, i.e. maximum permissible emission is defined on condition that the concentration of harmful substances jointly released from this pollution source or other sources in ground level layer of ambient air does not exceed maximum permissible concentrations of harmful substances defined for the territory of this particular source. This approach was developed during the Soviet period and theoretically, it can be said that it is justified because it prohibits ambient air pollution to that level, which will pose a threat to human health. However, the problems are related to its putting into practice, in particular:

1. According to this approach, to determine the emission norms for each separate enterprise, it is necessary to obtain comprehensive information about the state of ambient air around this enterprise, i.e. the concentration of each harmful substance in the air. In most cases, the Ministry of Environment Protection has no such information. Therefore, the Ministry, i.e. the body, which approves the norms, depends on that information, which is submitted by an entrepreneur. Moreover, it should also be noted that actually the Ministry of Environment Protection conducts monitoring only for limited number of substances, such as particulate matters (PM), nitrogen dioxide (NO₂), sulphur dioxide (SO₂), carbon monoxide (CO), lead compounds, ground level ozone, and volatile organic compounds. Accordingly, it is complicated to control, whether the enterprise observes the norms or not.
2. According to this approach, preference is given to those enterprises, which received environmental permits on the given territory earlier, because they had to release pollutants into a cleaner atmosphere. While those enterprises, who decide to open an enterprise in the same geographical area, will have to take stricter measures to restrict emissions into ambient air.
3. According to this approach, emission norms for each separate enterprise are calculated by the enterprise itself and are submitted to the Ministry of Environment for approval and receiving a permit. Thus, the entire burden for determining the permissible emission norms lies on the entrepreneur. This approach does not require from the state controlling organizations any knowledge and efforts about what leading technologies can be used in the given situation in order to limit pollution as much as possible. Although the Law on Ambient Air Protection requires that while calculating maximum permissible emission of harmful substances, the best available techniques should be focused, it remains unclear how this requirement should be implemented, since there are no appropriate regulations or guidelines for defining “the best technologies.”

1.4.3 State Control over Emission of Harmful Substances into Ambient Air

State control over emissions from stationary pollution sources is one of the means of preventing and reducing ambient air pollution with harmful substances. Its main function is to provide the enforcement of the norms set by the law. For this purpose, state institutions are functioning in many countries, which are authorized by law and have relevant knowledge and technical equipment to receive and check information, whether this or that enterprise observes environmental legislation, or standards and rules established by the law.

According to the Law of Georgia on Ambient Air Protection, state control and supervision over air pollution from stationary sources is carried out by the Ministry of Environment Protection (article 41, paragraph 2). However, actually the Ministry's human resources, technical means and legislative framework are quite limited in terms of controlling the emissions into ambient air from the enterprises.

In 2003, by order of the Minister of Environment Protection, the rule of making a schedule on inspecting the stationary sources of ambient air pollution was approved, according to which a schedule of inspection should have been made every year upon the order of the Minister. At the same time, the relevant agencies under the Ministry were authorized to inspect the industrial enterprises without an approved schedule, if they received a notification about accidental emission of harmful substances or a written notification from citizens about violation of ambient air protection legislation.

The above mentioned rule failed to work, because it came into conflict with the Law adopted in 2001 “On Controlling Entrepreneurial Activity,” according to which without a judicial order, it was impossible to inspect entrepreneurial activity, including the state of fulfillment of environmental requirements. A judge issues an order on controlling entrepreneurial activity only in case, if a controlling body submits relevant information with substantiated and well-grounded doubts about violation of legislative requirements by an entrepreneur. Taking this controversy into consideration, the rule of making a schedule on inspecting the stationary sources of ambient air pollution was abolished in 2007.

In 2005 the Parliament of Georgia adopted the Law on State Control over Environmental Protection, based on which a state subordinate agency – the Inspection for Environment Protection was set up under the Ministry of Environment Protection and Natural Resources. The same law defined the legal status, key tasks, authorities and obligations of the Inspection, as well as the legal grounds of its activity and the key principles of implementation of its activity. It should be noted that the Inspection for Environment Protection existed for about six years – it was abolished in March 2011, as a result of structural reorganization of the Ministry of Environment Protection and Natural Resources and the Ministry of Energy. Its staff included about 300 persons by then. **The Department of Ecological Expertise and Inspection** was established at the Ministry of Environment Protection, which presently contains the Inspection Division with nine employees. According to the regulations, the Inspection Division is authorized to implement state control in the sphere of environmental protection over those industrial entities, which have a permit issued by the Ministry, as well as over those entities, whose activities are subject to ecological expertise. The Inspection Division is also authorized to control the fulfillment of conditions of the permit/ecological expertise conclusion issued by the Ministry as well as to reveal administrative violations in the sphere of environmental protection. It should be noted that the authorities of the Inspection Division are limited compared to the Inspection for Environment Protection, since these authorities are approved not by the law, but by order of the Minister of Environment Protection¹¹. In addition, the rule of activity of the Inspection Division is not clearly defined by any regulatory act.

The functions of the Inspection Division under the Ministry of Environment Protection are duplicated by **the Monitoring Department of the Agency of Natural Resources** established under **the Ministry of Energy and Natural Resources** in 2011. This structural unit establishes state control over environmental protection and natural resource consumption in accordance with “the Rule of carrying out state control by the Agency of Natural Resources” approved by the governmental decree¹².

It is quite clear that the functions of the Ministry of Environment Protection and the Ministry of Energy and Natural Resources are overlapped in terms of carrying out state control in the sphere of environmental protection, including ambient air protection.

175 employees work at the central and regional offices of the Monitoring Department of the Agency of Natural Resources. We do not know how professional the staff of this new structure is to effectively establish state control over the enforcement of legislative requirements in the sphere of ambient air protection.

1.4.4 Regulation of Ambient Air Pollution from Motor Transport

As we have already mentioned above, motor transport is the major polluter of ambient air in urban areas of Georgia. Despite it, emissions from mobile sources are the most unregulated sphere in Georgian legislation. The Law on Ambient Air envisages two different approaches to limit emissions from motor transport:

¹¹ Order No 22 dated June 15, 2011 of the Minister of Environment Protection of Georgia “On approval of the regulations of the Department of Ecological Expertise and Inspection of the Ministry of Environment Protection of Georgia”

¹² Decree No 313 dated August 11, 2011 of the Georgian Government “On approval of the rule of carrying out state control by the Agency of Natural Resources, a legal entity of public law under the Ministry of Energy and Natural Resources of Georgia.”

- Setting the norms of emission of harmful substances into ambient air specifically for motor transport and establishing state control over the fulfillment of these norms;
- Setting the norms of motor fuel quality and establishing state control over the fulfillment of these norms.

According to article 49 of the Law of Georgia on Ambient Air Protection, the quality norms for petrol and diesel fuel should be established in compliance with the requirements of the EU legislation. These norms must be approved, through the agreement with the Ministry of Environment Protection and the Ministry of Labor, Health and Social Affairs, by the Agency for Standards, Technical Regulations and Metrology under the order "On introduction of the petrol and diesel fuel quality norms on the territory of Georgia based on the requirements of the EU legislation." The Law on Ambient Air Protection bans import, production and consumption of such petrol and diesel fuel in Georgia, the quality of which does not meet the norms specified by this normative act. According to the initial formulation of the law (1999), adoption of this normative act was envisaged before January 1, 2000. As a result of amendments made to the law, the adoption of this normative act was postponed to July 1, 2011, though it has not been enacted so far.

Governmental Decree No 124 dated December 31, 2004 on **Motor Fuel Quality Standards** acts in Georgia to control fuel quality. During 2005-2011 the decree was amended seven times. According to these amendments, almost every year the enforcement of comparatively high petrol standards was postponed. For example, according to the initial version of the decree, maximum lead content in petrol should have been decreased from 0.013 g/l to 0.005 g/l from January 1, 2006. However, according to the amendments made to the decree, this norm can be fulfilled only starting from 2012. Noteworthy that in the EC countries it is inadmissible for a long time already that lead content in petrol exceeds 0.005 g/l. The current decree (the latest amendment was made in December 2011) defines the norms of lead, benzene, aromatic hydrocarbon and sulphur in motor petrol before 2012, in 2012-2014 and for a period after 2014. In particular, the following norms for motor petrol were established:

From January 1, 2012 to January 1, 2014:

Lead content – not more than 0.005 g/l;
Benzene – not more than 3%;
Aromatic hydrocarbon – not more than 42%;
Sulphur – not more than 250 mg/kg

From January 1, 2014:

Lead content – not more than 0.005 g/l;
Benzene – not more than 3%;
Aromatic hydrocarbon – not more than 42%;
Sulphur – not more than 150 mg/kg

Actually, from 2012 a new standard will be introduced in Georgia on motor petrol, which should definitely limit the content of lead, sulphur, aromatic hydrocarbon and benzene in the petrol consumed in the country. Further toughening of motor petrol quality standards is envisaged from 2014.

In 2011 the Government also approved Decree No 449 on the quality of diesel fuel. This decree envisages the reduction of sulphur in diesel fuel from 2014.

If there is a regulatory normative act in respect of fuel quality, the situation is more difficult in terms of defining the norms of emission of hazardous substances from motor transport. As it was already mentioned above, according to the Law on Ambient Air Protection, the following subordinate normative acts should have been adopted before January 1, 2000:

- Joint order of the Ministers of Environment Protection and Healthcare on approval of the instruction on the list of motor vehicles and other movable-mechanical means polluting ambient air with harmful substances and on the maximum permissible norms of emission of harmful substances from these means.

- Order of the Minister of Environment Protection on approval of the instruction on the rule of periodical inspecting of emissions from motor vehicles or other movable-mechanical means.
- The order of the Minister of Environment Protection on approval of the instruction on the rule of controlling the emission from motor vehicles on the territory of Georgia should have been adopted before July 1, 2003.

None of the above mentioned normative acts have been adopted and enacted in Georgia so far. Although, the Law on Ambient Air Protection indicates that before enactment of these normative acts, the norms established by the state standards and/or the normative acts acting on the territory of Georgia before February 1, 1997 are applied for the purposes of this law, it is unclear for the society which particular normative acts and standards are meant. Accordingly, no regulation of ambient air pollution from motor vehicles is actually carried out in Georgia.

The fact that there is no state agency in Georgia responsible for controlling emissions from motor transport is yet another important problem. Before 2004 the Road Police was authorized to perform this function. It was compulsory to carry out technical inspection of motor vehicles every year, in frames of which the compliance of exhaust gases – carbon dioxide (CO₂) with the norms should have been controlled. According to the 2004 amendments to the Law on Road Traffic Safety, annual technical inspection became voluntary. This measure aimed at eradicating a corrupted system of technical inspection. According to the Road Police, in 2004 only 3% underwent voluntary technical inspection. As we have already mentioned, another mechanism for regulating air pollution from motor transport and the responsible authority are not defined in Georgia.

1.4.5 Economic Tools

The leading countries, including the EC states, use the so called ‘economic tools’ in the sphere of environmental protection. Among these tools, the taxes on emission of harmful substances into the atmosphere, on goods or raw, which cause environmental pollution are most widely spread. Such taxes, through affecting the prices of production, services and products, give economic incentives to the producers and consumers to reduce environmental pollution.

In the sphere of ambient air protection various countries use:

- Economic tools encouraging the reduction of emissions from stationary sources – taxes on emission of hazardous substances from industrial facilities. These taxes cover such substances as CO₂, NO_x, volatile organic substances. These taxes encourage the industrial facilities to use such technologies, including air cleaner filters, which provide the reduction of emission of these substances into ambient air and respectively, reduction of the amount of taxes.
- Economic tools related to fuel quality – taxes are differentiated by the content of harmful substances in motor and other fuel. For example, taxes are higher for the fuel with higher content of sulphur.
- Economic tools for motor transport – taxes on motor vehicles by the efficiency of fuel consumption. Ineffective motor vehicles are taxed by higher tariffs.

Taxes on emission of hazardous substances from stationary sources into ambient air were acting in Georgia in 1993-2005. It represented one of the types of taxes on environmental pollution and covered about 200 substances, which might have been emitted from industrial facilities into ambient air. These taxes had a number of shortcomings in terms of stimulating the mitigation of environmental pollution, the analysis of which goes beyond the goals of this document. However, it can be said that instead of improving these shortcomings, in 2005 such taxes were completely abolished as a result of adopting a new Tax Code. The Tax Code adopted in 2005 also abolished environmental taxes on motor fuel acting since 1993.

Out of the above mentioned economic tools, Georgia has enforced an excise tax on imported cars by their age and engine capacity. According to the present situation, the following excise taxes have been imposed on imported motor vehicles:

- Up to one year of age – GEL 1.5/cm³;
- One year - GEL 1.5/cm³;
- Two years - GEL 1.4/cm³;
- Three years – GEL 1.3/cm³;
- Four years – GEL 1.2/cm³;
- Five years – GEL 1.0/cm³;
- Six years – GEL 0.7/ cm³;
- 7-12 years – GEL 0.5/cm³;
- 13 years – GEL 0.6/cm³;
- 14 years – GEL 0.7/cm³;
- Over 14 years – GEL 0.8/cm³;

Real impact of these taxes on the import of motor vehicles to Georgia is not studied. However, it is quite clear that “the younger” the vehicle is, the higher tax is imposed that encourages the import of older cars (7-14 years of age).

Customs duty on imported passenger cars is GEL 0.05 per cubic centimeter of the engine capacity plus 5 percent of the amount of the customs tariff per each year of the exploitation of a vehicle. The amount of this tax increases in accordance with engine capacity and age. However, its amount is so small compared to excise tax, that just this latter represents a stimulating factor for making decisions while purchasing a motor vehicle.

As far as we know, a great part of the motor fleet in the country is aged over 15 years. Even old cars cause significant pollution of ambient air.

1.4.6 Ambient Air Quality and Monitoring of Emissions from Stationary Sources

The Georgian state conducts monitoring of ambient air quality in accordance with the legislation. According to the law, the companies owning the industrial facilities should themselves conduct monitoring of emission of hazardous substances from stationary sources. It means that the entrepreneurs should measure and register emissions as well as submit relevant reports to the territorial bodies of the Ministry of Environment Protection. The rule of self-monitoring and reporting on emission of hazardous substances from stationary sources is defined by the instruction, which is approved by order of the Minister of Environment Protection. Based on the information received from the territorial bodies the Division of Ambient Air Protection of the Ministry of Environment Protection annually prepares a consolidated report on emission of harmful substances into ambient air by enterprises, regions, cities and various economic sectors. The accuracy of these data is extremely doubtful, because the majority of Georgian enterprises do not have any installations measuring the emissions into ambient air. They basically assess the amount of emissions on the basis of consumed fuel and amount of used raw materials. It should be noted that as a result of structural reforms implemented in 2011, the territorial bodies of the Environment Ministry were abolished. Thus, it remains unclear, to whom the enterprises should deliver information about emissions and how the Ministry will manage to collect this information.

As far as ambient air quality monitoring is concerned, this function is performed throughout the country by the National Environmental Agency under the Ministry of Environment Protection.

The Agency’s capacities are quite limited, in terms of ambient air quality monitoring: presently, the Agency conducts monitoring of air pollution in five cities through 7 observation cabins located in Tbilisi, Kutaisi, Batumi, Zestaponi and Rustavi. Air quality is measured three-fold within 24 hours during workdays (sampling is not automated). The following air pollutant concentrations were identified in Tbilisi:

dust, carbon dioxide, sulphur and nitrogen dioxide, lead; Kutaisi – dust, sulphur dioxide, nitrogen dioxide; Batumi – dust, sulphur and nitrogen dioxide; Zestaponi – dust, sulphur, nitrogen and manganese dioxide. Measurement of ground level ozone concentration in Tbilisi as well as carbon dioxide in Kutaisi and Batumi started in 2010¹³.

Lack of ambient air quality observation stations and the problems existing in the sphere of laboratory analysis of the samples do not make it possible to create a satisfactory picture about the condition of air quality in the populated areas of Georgia.

According to the Law on Ambient Air Protection (article 20), air quality monitoring system should function within the environmental observation system, functioning of which should be regulated by the Law of Georgia on Environmental Monitoring System. This law should have been adopted before January 1, 2000. Later the adoption of this law was postponed to January 1, 2011. However, it has not been developed so far.

Similarly, according to the Law of Georgia on Ambient Air Protection (article 21), the rules of minimum standard amount of air pollution observation stations, their location and functioning, as well as the list of standard methods of measuring the level of pollution should have been defined in accordance with the EU Directive 96/62/EC of 27 September 1996 on ambient air quality assessment and management. A relevant normative act – Order of the Minister of Environment Protection – should have been adopted before January 1, 2000. Owing to the amendments made to the Law on Ambient Air Protection in 2007, the adoption of this normative act was postponed to July 1, 2011. However, this order has not been adopted so far.

1.4.7 Public Informing and Participation in Decision-Making Process

The EC Member States have to inform the public of cases where the air quality alert thresholds are exceeded by means of television, radio and newspaper¹⁴; or consult with the relevant Member State on trans-boundary pollution, if the air pollution originates in another Member State. The EC Exchange of Information Decision¹⁵ defines the procedures for exchange and dissemination of information about ambient air quality.

The Law of Georgia on Ambient Air Protection (article 51) acknowledges that the information on the results of ambient air monitoring and on ambient air pollution with harmful substances is open and available to the public; however, this requirement is not realized. The information about real time ambient air pollution remains unavailable to the population. The population fails to regularly receive even those scarce data on air quality, which are collected by the National Environmental Agency in separate cities of Georgia. Such information should be easily and regularly available on the websites of the Agency or the Ministry. The National Environmental Agency periodically posts a monthly information bulletin on the website of the Aarhus Centre Georgia, <http://aarhus.ge>, "Short Review of Environmental Pollution in Georgia." The bulletin contains information about ambient air pollution in some Georgian cities (Tbilisi, Kutaisi, and Rustavi) by average monthly concentrations. Frequently, this bulletin is posted with a three-month delay. In addition, the existence of this website is basically unknown to wide public.

1.4.8 Planning and Implementation of Ambient Air Protection Measures

Local self-government bodies must play an important role in planning and implementation of ambient air protection measures. According to the Law on Ambient Air Protection (article 42), the local self-government executive bodies are authorized to develop and submit to the local self-government

¹³ Geo-cities Tbilisi: the state of the Georgian capital and the integrated environmental assessment of tendencies, September 2011.

¹⁴ Convergence with EU Air Protection Policies – Short Guide for ENP Partners and Russia. J Ruta Landgrebe, at all. European Communities, 2008.

¹⁵ Exchange of Information Decision (97/101/EC).

representative bodies for approval the coordination plans of measures to be implemented in the sphere of ambient air protection on their respective territories. We have no information about the existence of such plans in any cities or administrative units of Georgia. It is known that in 1999 the Tbilisi government adopted a decree on the measures of ambient air quality protection in the capital. The decree envisaged the implementation of the following measures:

- To tighten control over the toxicity of exhaust gases while conducting technical inspection of motor vehicles by the Road Police;
- To control and regulate exhaust gases from mini-buses moving in the capital;
- To prohibit transit movement in the capital;
- To establish and control motor fuel quality norms;
- To improve the monitoring of ambient air quality, etc.

The Committee for Regulation of Environmental Protection and Natural Resources of Tbilisi was entrusted to control the fulfillment of the decree, which had to regularly deliver information to the government.

Because of absence of financial resources and relevant political will, most measures envisaged by the decree were not implemented. However, during the consequent years, although air pollution from motor transport has significantly increased, the Tbilisi government did not develop any concrete plan to settle this problem. The document Tbilisi Millennium Development Goals, which was developed by the Tbilisi Municipality with the support of UN Development Programme (UNDP) in 2007, notes that traffic movement will be regulated in the capital to protect ambient air. No other measures on improvement of ambient air quality in the capital are envisaged either by this or by another strategic document.

1.5 Conclusions and Recommendations

Conclusions

The information and analysis about the state policy related to ambient air protection, legal framework, management mechanisms and distribution of institutional responsibilities presented in the previous chapters allows us to conclude that:

- There is no state vision and established strategy about how ambient air pollution should be prevented in Georgia. This problem especially concerns transport sector, which is the major polluter of ambient air in urban areas.
- Legal framework in the sphere of ambient air management is only partially developed. Some issues of ambient air management, including such priority issues, as air pollution from motor vehicles, remains unregulated.
- Although the Law on Ambient Air Protection declares the harmonization with the EU legislation as one of its major goals, no significant steps have been taken in this direction during past decade. Actually, many articles envisaging the harmonization with the EU legislation and norms were withdrawn from the law during past years.
- The amendments made to the Law on Ambient Air Protection during past years were not directed to the improvement of air quality management system; in most cases they reflected in the law those institutional changes and reshuffles, which took place in the Georgian government. Frequent institutional changes and making relevant amendments to the laws do not promote the respect and enforcement of the legislation on the part of the society, polluters and law enforcers.
- Ambient air quality mechanisms acting in Georgia are less effective in terms of protection against air pollution. Some mechanisms acting in the leading countries in the sphere of ambient air quality protection are not used in Georgia. For example, the approaches on defining the best available techniques are not used while granting environmental impact permits, as well as the norms of emissions from motor vehicles, taxes on emissions into ambient air, taxes on fuel in accordance with the content of hazardous substances, etc. The existing excise tax on motor

vehicles encourages import of old cars (7-14 years) that further increases the problem of ambient air pollution.

- As a result of the reforms carried out at the Ministry of Environment Protection and Natural Resources in 2011, its territorial bodies were abolished that will further complicate obtaining of information about emission of hazardous substances from stationary sources. The reforms have significantly reduced the role of the Ministry of Environment Protection in terms of conducting state control (inspection) of environmental pollution. As a result of the same reforms, the functions of the Ministry of Environment Protection and the Ministry of Energy and Natural Resources are overlapped in terms of carrying out state control in the sphere of emissions from stationary sources. In addition, human resources and technical capacities of the both institutions are extremely limited to conduct effective control.
- Lack of development of mechanisms regulating air pollution from motor vehicles as well as absence of the institutions responsible for the control represents one of the major problems of ambient air protection system in Georgia.
- Ambient air quality monitoring system is developed weakly; while the scarce information, which the National Environmental Agency collects in some Georgian cities about air quality, is not duly available to the public.
- Local self-government bodies do not have a political will and are not able to develop and implement ambient air protection plans.

Recommendations

The Law of Georgia on Ambient Air Protection, which was developed by the Ministry of Environment Protection in 1999, was an attempt to harmonize the Georgian legislation in the sphere of air quality management with that of the European Union. Actually, too little has been done for this purpose after adoption of the law. A number of subordinate laws, the adoption of which was envisaged by the law, remained undeveloped. Respectively, there are numerous so called 'white spots' in the legal framework related to ambient air protection in Georgia, while numerous issues related to air quality management remain unregulated. Taking this problem into consideration, the Georgian Government should discuss whether it is expedient to transfer to the EU standards and norms at this stage and whether the country will be able to observe these standards in short-term and medium-term periods. To answer this question, the Government should conduct an analysis and develop a strategy; it is not a correct approach to neglect, withdraw or postpone the fulfillment of those articles of the law, which envisage harmonization with the EU legislation and norms.

It is essential to strengthen the role and capacities of the Ministry of Environment Protection so that while issuing an environmental impact permit, the Ministry is able to define what particular technologies can be used by an entrepreneur to reduce ambient air pollution. To develop these capacities, the Ministry may receive relevant technical aid from the European Union, which has a relevant knowledge and multiyear experience in defining and using the Best Available Techniques.

It is also important to define and separate the functions, rights and responsibilities of the controlling agencies at the Ministry of Environment Protection and the Ministry of Energy and Natural Resources in the sphere of controlling emissions of harmful substances in ambient air. It will be vital to compose the controlling agencies with highly skilled staff or to retrain and technically equip the existing staff so that they are able to conduct inspection at a relevant level.

To reduce air pollution from motor vehicles, it is expedient to change the structure of excise tax on import so that to encourage import of newer motor cars and more economic vehicles, in terms of fuel consumption. At the next stage, it is necessary to define the norms of emissions from motor vehicles and to prohibit the import of such vehicles, which fail to meet these norms. At the same time, the practice of compulsory inspection of emissions from motor vehicles should be resumed. It is also important to define an institution, which will be responsible for controlling emissions from motor vehicles in the country.

It is essential to strengthen technical capacities of the National Environmental Agency under the Ministry of Environment Protection to conduct ambient air quality monitoring in the cities of Tbilisi, Rustavi, Kutaisi,

Batumi, Zestaponi, etc. Information obtained as a result of monitoring on ambient air quality in these cities should regularly be delivered to the population or be immediately available on the websites of the Ministry of Environment Protection or the National Environmental Agency.

The relevant local self-government bodies, in cooperation with the Ministry of Environment Protection, should develop and implement ambient air protection plans in those settlements, where this problem is extremely pressing. Finally, the development and implementation of such plans should have a decisive importance for the improvement of air quality management throughout the country.

2. Policy, institutional and regulatory gap analysis in water sector

2.1 National Policy Goals

The Georgian National Water Policy, which is represented by numerous legislative acts, lacks uniform vision, consistency and result orientation. The goals and tasks of water resource management are not clearly defined. Moreover, the major water policy documents are actually inactive because they have not been updated as a result of the reforms implemented in the license and permit system as well as other relevant laws.

In frames of the European Neighborhood Policy, the Georgian Government has committed itself to approximate Georgia's environmental, including water legislation to the EU requirements. The National Program on Harmonization of the Georgian Legislation with that of the EU¹⁶ provides those particular EU water directives, approximation to which was deemed a priority. Although, so far Georgia has failed to take evident steps in terms of harmonization with the EU approaches, the requirements set in these directives, according to the harmonization program, are formally declared compulsory; therefore, they represent the key goals of the National Policy.

Below there is a short review of those six EU Directives, which are deemed a top priority in the water sphere under the harmonization program. They are:

1. Water Framework Directive (2000/60/EC);
2. Drinking Water Directive (98/83/EC);
3. Bathing Water Directive (2006/7/EC);
4. Control of Major Accident Hazards (Directive 96/82/EC);
5. Directive on Integrated Pollution Prevention and Control (2008/1/EC);
6. Urban Waste Water Directive (91/271/EEC).

It should also be noted that within the process of preparation of the Association Agreement between Georgia and the European Union, the major emphasis is laid on the following six priority directives: Water Framework Directive (2000/60/EC); Drinking Water Directive (98/83/EC); Urban Waste Water Directive (91/271/EEC); Directive on the Assessment and Management of Flood Risks (2007/60/EC); Directive on the Protection of Waters against Pollution Caused by Nitrates from Agricultural Sources (91/676/EEC) and the Marine Strategy Framework Directive (2008/56/EC).

Water Framework Directive (2000/60/EC)

Out of the EU water legislation, the EU Water Framework Directive is most important. The requirements provided in the Directive are completely built on the principle of integrated management of water resources. The Directive has its concrete objective: to achieve a good water status by 2015. To achieve this, the Directive offers the member states to implement a number of concrete actions. First and foremost, the countries should identify water management bodies, basins as well as ensure institutional provision of river basin management. According to the Directive, water management should be

¹⁶ The National Program on Harmonization of the Georgian Legislation with that of the EU, the guidelines for the Action Plan, 2003.

implemented based on the river basin management plan, which will be developed for each river basin. The river basin management plan will reflect a program of planned measures aiming at improving water quality. In order to develop river basin management plans and programs on planned measures, it is an essential stage to study the characteristics of river basins - to determine natural characteristics of particular water bodies as well as the consequences of human impact and economic aspects of water use. Obviously, in order to study the characteristics of water bodies and carry out periodic observations over them, it is vital to develop monitoring network and conduct routine monitoring.

In order to discuss the condition of this or that water body and plan the relevant water quality improvement measures, it is urgent to determine water status (condition) assessment system. Just therefore, Water Framework Directive offers a concept of ecological status of water. In order to determine the ecological status of this or that body, Water Framework Directive requires the establishment of type-specific hydromorphological, physicochemical and biological conditions for each surface water body type – rivers, lakes, groundwater, etc. Reference conditions are those parameters of hydromorphological, physicochemical and biological quality elements, which a surface water body type has at high ecological status¹⁷. This is that starting point, from where we should “measure” the impact of previous and future human activities on each surface water body and plan relevant measures to improve water status. Reference conditions allow us to separate the impacts of human activities on water ecosystem and natural, background variations. Through comparing with these reference conditions, an ecological status (high, middle and low) of each surface water body type is ascertained

As already mentioned above, type-specific reference conditions are based on hydromorphological, physicochemical and biological parameters. At the same time, biological elements are the major parameters defining water quality. Biological elements react even on small or brief changes in water quality; that is why biological elements are the best indicators for defining water quality. Biological elements are that starting point with respect to which the relevant hydromorphological and physicochemical parameters are established.

Such approach emphasizes the result-orientation of Water Framework Directive. In addition, Water Framework Directive pays special attention to the issues of public involvement in water management. In particular, the Directive requires the members states to encourage the active involvement of all interested parties in the production, review and updating of the river basin management plans.

Drinking Water Directive (98/83/EC)

The objective of the Drinking Water Directive is to protect human health against negative impacts caused by any types of drinking water pollution, thus defining the health and cleanness requirements for drinking water. It applies to all types of water used for drinking and cooking, except for natural mineral waters and waters, which are medicinal products.

The Directive obliges the member states to provide that water intended for human consumption:

- is free from any micro-organisms and parasites and from any substances which, in numbers or concentrations, constitute a potential danger to human health, and
- meets the minimum requirements set out by the Directive (microbiological and chemical parameters, as well as radioactivity-related parameters).

The Directive also obliges the member states to develop drinking water parameters, which will be, at least, relevant to the parameters set in the Directive. The member states shall provide regular monitoring of drinking water, through using the methods of analysis defined by the Directive or equivalent analysis. For this purpose, the member states shall define the points for taking samples and develop a monitoring program. If water parameters are lower than those set in the Directive, the member states concerned shall ensure that the necessary remedial action is taken as soon as possible to restore its quality. In this case, any supply of water intended for human consumption which constitutes a potential danger to human

¹⁷ Point 1.1 of Annex 5 of Water Framework Directive

health is prohibited or its use restricted or such other action is taken as is necessary to protect human health. In such cases consumers shall be informed promptly thereof and given the necessary advice.

Drinking water parameters shall be revised every five years, while every three years the member states shall publish reports on the quality of drinking water for their consumers.

Bathing Water Directive (2006/7/EC¹⁸)

Bathing Water Directive concerns the management of bathing water quality. Its objective is to protect and improve environmental quality and protect human health. It somehow complements Water Framework Directive.

The Directive shall apply to any element of surface waters, where the competent authority expects a large number of people to bathe, except for swimming pools and spa pools; confined waters subject to treatment or used for therapeutic purposes; artificially created confined waters separated from surface water and groundwater. The Directive establishes the aspects of public informing about classifying and monitoring bathing water, water quality management and assessing bathing water quality.

According to the Directive, the member states shall annually identify all bathing waters and define the length of the bathing season. Simultaneously, they shall conduct monitoring of bathing waters. Samples should be taken and analyzed under a strict schedule established by the Directive in those points, which are most frequently used for bathing or where there is the highest risk of pollution. The samples shall be analyzed under two microbiological parameters (Enterococcus and Escherichia coli).

By the end of each bathing season, the member states shall conduct bathing water assessment and classification based on the monitoring results in accordance with the criteria set out in Annex II: “poor quality”, “sufficient quality”, “good quality” or “excellent quality.” The category “sufficient” is that minimum qualitative margin, which the member states should reach at most by the 2015 season. Moreover, the member states shall try to implement relevant measures to achieve “good” and “excellent” quality of bathing water. In respect of those waters, which fall under the category of “poor quality”, the member states shall take relevant measures. First and foremost, it is urgent to prohibit bathing and to warn that bathing is undesirable. It is also essential to establish the reasons for poor water quality and to implement relevant measures to prevent or reduce the causes of pollution. It is also vital to inform the society on the pollution causes and implemented measures.

Furthermore, the member states shall define bathing water profiles, which will consist of a description of the physical, geographical and hydrological characteristics of the bathing water, and of other surface waters in the catchment area of the bathing water concerned; an identification and assessment of causes of pollution that might affect bathing waters; sources of pollution; the location of the monitoring points. The bathing water profiles shall be updated periodically, as envisaged by the rule set in the Directive.

The member states shall apply to special measures if unpredictable situations cause aggravation of water quality or pose a threat to the health of bathers. When the bathing water profile indicates a potential for algae proliferation, appropriate monitoring shall be carried out to enable timely identification of health risks.

Wherever a river basin gives rise to trans-boundary impacts on bathing water quality, the member states involved shall cooperate including through the appropriate exchange of information and joint action to control those impacts.

Under the Directive, the member states shall be encouraged to inform the public and ensure their participation in water quality management. Citizens must be able to formulate suggestions, remarks or complaints. They should also be able to participate in the discussion and updating of the list of bathing waters. The member states shall also ensure that the information about the current bathing water

¹⁸ Bathing Water Directive 2006/7/EC repeals Directive 76/160/EEC. Though, Directive 76/160/EEC shall remain in force until 2014 in the countries, where its implementation has not been completed yet. The present report will discuss Directive 2006/7/EC, as it is an improved version and is more in line with Water Framework Directive.

classification, prohibitions, threats, bathing water body characteristics and profiles, potential pollution, its character and duration is actively disseminated and promptly made available during the bathing season in an easily accessible place.

Control of Major Accident Hazards (Directive 96/82/EC)

The Directive on the control of major accident hazards involving dangerous substances, so called Seveso II Directive, is aimed at the prevention of major accidents which involve dangerous substances, and the limitation of their consequences for man and the environment. This Directive (Seveso II) replaced Directive 82/501/EEC (Seveso I, named after the Italian town which suffered exposure to an accidental release of dioxin in 1976).

The Directive is applicable to any establishment, where dangerous substances are present or likely to be produced as a result of an accident, in quantities equal to or in excess of the quantities listed in the Directive. The Directive does not cover military establishments; hazards created by ionizing radiation; the carriage of dangerous substances by road, rail, air and inland waterways; the carriage of dangerous substances in pipelines outside the establishments covered by the Directive; waste landfill sites. Under Directive 2003/105/EC, amending Council Directive 96/82/EC, exploitation of minerals and tailing ponds or dams, containing dangerous substances, also fall under the Directive regulation.

The Directive encourages the member states to ensure that the operator takes all measures necessary to prevent major accidents and to limit their consequences for man and the environment. The operator is required to prove to the competent authority that he has taken all the measures necessary as specified in this Directive. In addition, the operator is obliged to notify the competent authority on the name or trade name of the operator and the full address of the establishment concerned; the quantity and physical form of the dangerous substance or substances involved; the activity or proposed activity of the installation or storage facility; major accident hazards, etc.

The member states shall oblige the operator to develop and implement major accident prevention policy. The members states shall also require the operator to produce a safety report for the purposes of demonstrating that a major-accident prevention policy and a safety management system for implementing it have been put into effect; demonstrating that major-accident hazards have been identified and that the necessary measures have been taken to prevent such accidents and to limit their consequences for man and the environment; demonstrating that internal emergency plans have been drawn up. The safety report shall also contain an updated inventory of the dangerous substances present in the establishment. An internal emergency plan shall be revised at least every three years. Safety reports and internal emergency plans shall be sent to the competent authority. Moreover, the operator supplies the necessary information to the competent authorities to enable the latter to draw up external emergency plans. External emergency plans shall cover arrangements for receiving early warning of incidents, and alert and callout procedures; arrangements for coordinating resources necessary to implement the external emergency plan; arrangements for off-site mitigation action, etc.

The member states shall ensure that the objectives of preventing major accidents and limiting the consequences of such accidents are taken into account in their land-use policies and/or other relevant policies. The member states shall ensure that their land-use and/or other relevant policies and the procedures for implementing those policies take account of the need, in the long term, to maintain appropriate distances between establishments covered by this Directive and residential areas, buildings and areas of public use, major transport routes as far as possible, recreational areas and areas of particular natural sensitivity or interest. Moreover, the competent authority shall identify establishments or groups of establishments, where the likelihood and the possibility or consequences of a major accident may be increased because of the location and the proximity of such establishments. In such case the member states must ensure exchange of information and cooperation between the establishments.

The member states shall ensure that information on safety measures and on the requisite behavior in the event of an accident is supplied regularly to all persons liable to be affected by a major accident. It is also vital to ensure constant availability of safety reports to the public. In addition, the member states shall

ensure that the public is able to give its opinion in the cases of planning for new establishments, modifications to existing establishments and developments around such existing establishments. The member states are obliged to inform the neighboring states about the possibility of a major accident with trans-boundary effects.

The operator shall be required to inform the competent authorities the circumstances of the accident, the dangerous substances involved, the data available for assessing the effects of the accident and the emergency measures taken. The competent authority shall ensure that any urgent measures are taken and shall collect the information necessary for a full analysis of the technical, organizational and managerial aspects of the major accident. The competent authorities shall also ensure that the operator takes any necessary remedial measures.

The competent authorities shall organize a system of inspections so as to ensure that the operator can demonstrate that he has provided appropriate means for limiting the consequences of major accidents; the data and information contained in the safety report adequately reflects the conditions in the establishment; and information has been supplied to the public. The competent authority must prohibit the activities of an establishment, where no relevant accident prevention measures were taken.

The member states shall supply the Commission with the information concerning major accidents occurred on their territory, including accident circumstances and measures taken.

Directive on Integrated Pollution Prevention and Control (2008/1/EC)

The purpose of the integrated approach towards pollution control is to achieve prevention or reduction of emissions in the air, water and land, including measures concerning waste management, in order to achieve a high level of protection of the environment.

The Directive requires that industrial and agricultural activities with high pollution potential, the full list of which is given in Annex I of the Directive, be subject to permission. A permit shall be granted only in case if certain environmental requirements are observed and if the enterprises commit themselves to ensure prevention and reduction of any type of pollution caused by them.

Applications for permits should be sent to the competent authorities of the member states, who will make a decision on granting a permit. An application for a permit shall include a description of the installation and its activities; the raw and auxiliary materials, other substances and the energy used in or generated by the installation; the sources of emissions from the installation; the conditions of the site of the installation; the nature and quantities of foreseeable emissions from the installation into each medium as well as identification of significant effects of the emissions on the environment; the proposed technology and other techniques for preventing or, where this not possible, reducing emissions from the installation; where necessary, measures for the prevention and recovery of waste generated by the installation; measures planned to monitor emissions into the environment; the main alternatives, if any, studied by the applicant in outline. In addition, an application for a permit shall also include a non-technical summary of the details referred above. All the above mentioned information shall be available to the public through relevant means of informing (including electronic means). Furthermore, the public shall be informed about the permit procedures and contact details of the competent authorities issuing permits, as well as about the means of public participation. If the project has a possible trans-boundary effect, the neighboring countries must be informed about it. The interested parties shall have enough time for reaction. All opinions of interested parties shall be taken into consideration in the process of issuing a permit.

To obtain a permit, industrial or agricultural facilities must meet a number of key requirements. In particular, they should take the appropriate pollution preventive measures, in particular through application of the best available techniques, meaning the use of low-waste technology; the use of less hazardous substances, while the generated substances are subject to recovery and recycling; they should ensure the prevention of any type of large-scale pollution; ensure the prevention of waste production, as well as its processing and disposal; use energy efficiently; the necessary measures are taken to prevent accidents and limit their consequences; the necessary measures are taken upon definitive cessation of activities to avoid any pollution risk and return the site of operation to a satisfactory state.

The competent authority shall grant a permit containing conditions guaranteeing that the installation complies with the requirements of this Directive or, if it does not, shall refuse to grant the permit. The conditions of the permit shall contain the emission limits of pollutants; measures on protection of soil, water and air; emergency measures; measures to minimize long-distance or trans-boundary pollution; monitoring of emissions and other appropriate measures. The permit conditions shall be reviewed periodically and changed by the competent authority if necessary.

The public shall be informed about the permit issued, permit conditions and further changes to the permit conditions; as well as about the justification of decisions made and the results of public involvement. In case of the projects with trans-boundary effects, this information must be supplied to the neighboring countries. The member states shall also ensure that the interested parties are able to appeal against the decision on issuing a permit in court. The monitoring data defined by the permit conditions shall be available to the public.

The member states are obliged to carry out inspections within the installations and provide their compliance with the Directive. It is also vital to exchange information on the best available techniques that is the basis for defining emission limits, among the Commission, member states and industries. The reports on the implementation of the Directive shall be prepared every three years.

Urban Waste Water Directive (91/271/EEC)

The Directive concerning urban waste water treatment (91/271/EEC) concerns the collection, treatment and discharge of urban waste water and the treatment and discharge of waste water from certain industrial sectors. The objective of the Directive is to protect the environment from the adverse effects of the abovementioned waste water discharges.

The Directive requires that the areas, where the population and/or economic activities are sufficiently concentrated (agglomerations), are provided with collecting systems for urban waste water:

- At the latest by 31 December 2000 for those with a population equivalent (p.e.¹⁹) of more than 15000, and
- At the latest by 31 December 2005 for those with a p.e. of between 2000 and 15000.

For urban waste water discharging into receiving waters which are considered “sensitive areas”, the member states shall ensure that collection systems are provided:

- At the latest by 31 December 1998 for agglomerations of more than 10000 p.e. and
- At the latest by 31 December 2005 for all discharges from agglomerations of between 2 000 and 10 000 p.e.

The urban collecting systems must be in compliance with the requirements set out in Annex 1 of the Directive. Where the establishment of a collecting system is not justified either because it would produce no environmental benefit or because it would involve excessive cost, individual systems or other appropriate systems which achieve the same level of environmental protection shall be used.

The member states shall also ensure that urban waste water entering collecting systems shall before discharge be subject to secondary treatment or an equivalent treatment as follows:

- At the latest by 31 December 2000 for all discharges from agglomerations of more than 15000 p.e;
- At the latest by 31 December 2005 for all discharges from agglomerations of between 10000 and 15000 p.e;
- At the latest by 31 December 2005 for discharges to fresh-water and estuaries from agglomerations of between 2000 and 10000 p.e.

¹⁹ 1 p.e. (population equivalent) means the organic biodegradable load having a five-day biochemical oxygen demand (BOD5) of 60 g of oxygen per day.

The Directive obliges the member states to identify sensitive areas in accordance with the criteria set out in Annex II of the Directive. Urban waste water entering collection systems shall before discharge into sensitive areas be subject to more stringent treatment.

The Directive also requires that biodegradable industrial waste water from plants belonging to the industrial sectors listed in Annex III shall before discharge respect conditions established in prior regulations and/or specific authorization by the competent authority.

The Directive requires that the discharge of urban waste water in collecting systems and disposal of sludge from urban waste water treatment plants is subject to general rules or registration or authorization. The member states are obliged to monitor discharges from urban waste water treatment plants. The competent national authorities shall publish relevant reports every two years.

To implement the Directive, the member states shall prepare and submit to the Commission relevant national programs.

2.2 Institutional Framework for Water Management in Georgia

In Georgia, the responsibilities related to water management are dispersed among various agencies at national and local levels, though water management is basically carried out in a centralized way. In addition, the functions and responsibilities in the sphere of water management are not always clearly determined. Overlapping is quite frequent. During past years, various aspects of water management were transferred from one agency to the other. Moreover, following the reorganization carried out at the Ministry of Environment Protection, when natural resource management functions were transferred to the Ministry of Energy and Natural Resources, the fate of water, as of natural resource, became quite obscure.

Nowadays, **the Ministry of Environment Protection** is the key agency in the sphere of water management. It is the Ministry's prerogative to protect and manage water, as well as to conduct water monitoring and carry out environmental control within its competence. However, the functions related to licensing the use of groundwater were transferred to the Ministry of Economic Development in 2008 and later to **the Ministry of Energy and Natural Resources** in 2011.

The Ministry of Labor, Health and Social Affairs determines the qualitative norms of the environment, including for drinking, surface, ground and coastal waters. **The Ministry of Agriculture** is responsible for controlling the quality of drinking water. **The Ministry of Regional Development and Infrastructure** carries out regional development policy. It is in charge of developing the key trends of uniform state policy over rehabilitation-development of water supply sector and of coordinating its implementation; promoting and coordinating the development of water supplies and implementing the measures on the introduction and promotion of water supply systems.

Water Supply Regional Development Agency under the Ministry of Regional Development and Infrastructure, which was set up in 2009, was designed as a coordinating structure aimed to promote the development of water supply and sewerage systems in Georgia. In 2010 the Agency was established as **the United Water Supply Company of Georgia** under the Ministry of Economy and Sustainable Development, as a result of the merger of two large regional water companies. The United Water Supply Company of Georgia provides water supply and sewerage services in various regions of Georgia. In Tbilisi, Rustavi and Mtskheta similar services are provided by a private company **Georgian Water and Power Ltd.** **The Ministry of Economy and Sustainable Development** is also responsible for the participation in defining the directions for the development of water supply and sewerage, as well as melioration systems and for the coordination of their engineering along with the relevant agencies.

The authorities of Georgia's autonomous republics and local self-government bodies are responsible for various aspects of controlling and regulation of water protection and use on their respective territories. Though, their competences are not always unambiguous and clearly distributed. Moreover, since water

management is completely centralized, the competences of local bodies in water sphere are extremely limited. Following the abolishment of the regional departments of the Ministry of Environment Protection, the Ministry has no regional team. However, it should be noted that the competences and resources of regional departments are also quite limited.

Against the background of such distribution of functions, the coordination and cooperation among the state agencies related to water management is extremely weak. It should also be noted that as a result of reforms implemented in the license and permit system in 2005, the regulatory role of the Ministry of Environment Protection has significantly decreased. Moreover, as a result of reorganization carried out at the Ministry in 2011, various functions of the Ministry of Environment Protection (formerly, the Ministry of Environment Protection and Natural Resources), including natural resource management, were transferred to the Ministry of Energy and Natural Resources (formerly, the Ministry of Energy) that further downscaled the role of the Ministry of Environment Protection in the sphere of water resource management. Over the past years the role of the regional departments of the Ministry of Environment Protection was gradually limited and finally, in 2011 they were completely abolished that is one more step behind in terms of decentralization of water resource management.

The issue of carrying out the state control by the Ministry of Environment Protection is also unclear after reorganization. The function of carrying out the state environmental control was transferred to the Agency of Natural Resources under the Ministry of Energy and Natural Resources. However, presently the Department of Ecological Expertise and Inspection of the Ministry of Environment Protection and the Agency of Natural Resources are both authorized to carry out control of the environmental impact permit conditions.

2.3 Water Resources Regulation Mechanisms

Georgian water legislation is represented by over 15 laws and numerous bylaws. Among them the most important is the Law on Water and the Law on Licenses and Permits. The Law on Water is the key framework law regulating water resources, which defines the major issues of water protection and use. However, it should be noted that the Law on Water does not contain all aspects of water management, including groundwater management, which is regulated by the Law on Entrails. The 2005 Law on Licenses and Permits has completely changed the system of permits and licenses. Numerous licenses and permits, including in the sphere of water use, were abolished. Presently, the **environmental impact permit** remains the only permit regulating water use. Moreover, water sphere covers a license on the extraction of minerals, regulating the use of groundwater, and fishing license. It should be noted that in parallel with making changes to the license and permit system, no updates were made to the Law on Water, as a result of which it is quite outdated and absolutely irrelevant. Generally, Georgian water legislation is fragmented and controversial. It does not contain effective mechanisms for the prevention of pollution and excessive water use; neither does it provide a precondition for the establishment of an adjusted water management system.

Water resources protection is carried out in Georgia through setting the quota on qualitative norms for the drinking water, as well as pollution limits and water consumption. In particular, qualitative norms for the drinking water are defined by **order 279 dated August 16, 2011 of the Minister of Labor, Health and Social Affairs “On the approval of the norms of qualitative condition of the environment.”** The order defines the qualitative norms for centralized, non-centralized and surface water supply systems, as well as the rules and norms for sanitary protection of surface waters and springs. It also defines hygienic norms for the protection and use of coastal waters. The first part of this document on the consumption of drinking water has been replaced by **order 349 dated December 17, 2007 of the Minister of Labor, Health and Social Issues “On the approval of technical regulations on drinking water.”**

The key rules of protection against surface water contamination are established by **order 130 dated September 17, 1996 of the Minister of Environment Protection “On approval of the rules of protection surface waters of Georgia from pollution.”** This document defines the key principles of preventing the surface water contamination, such as: controlling water quality in water bodies; regulation

of discharge of pollutants into surface waters; regulation of economic activities, which have an impact on the condition of water bodies; monitoring the fulfillment of established conditions for the discharge of pollutants from point and diffuse sources; monitoring of surface waters, etc. The document defines the norms of water quality in reservoirs under the water consumption categories (drinking; household and fishing). In addition, to provide the protection of normative quality of surface waters, the document requires that the norms of maximum admissible discharge of pollutants are established for each point of discharge.

The rule of development and approval of the norms of maximum admissible discharge has been defined by **order 169 dated December 29, 1997 of the Minister of Environment Protection “On approval of the regulation on maximum admissible norms of emission of harmful substances into the environment and pollution of the environment with microorganisms.”** In particular, according to the document’s requirements, the norms of maximum admissible discharge of pollutants into water body are established for each pollution source based on their technological characteristics, location, background conditions so that the total amount of pollutants does not exceed maximum admissible limits for the given territory. The norms of maximum admissible discharge of pollutants are calculated by water consumers on the basis of the methods developed by the Ministry of Environment Protection, in the process of preparation of environmental impact assessment report, for which the Ministry of Environment issues an **environmental impact permit.**

According to the Law on Environmental Impact Permit, for all those activities, which are not subjected to environmental impact permit, it is essential to observe environmental technical regulations determined by **order 745 dated November 13, 2008 of the Minister of Environment Protection “On environmental technical regulations.”** This document defines technical regulation of discharge of influent waters from industrial and non-industrial facilities into surface water bodies as well as technical regulation on removal of water from surface water bodies.

2.4 Analysis

The current water legislation of Georgia does not comply with the majority of the key requirements of the EU water legislation. The principles of integrated management of water resources are not taken into consideration. There are no preconditions for moving to the model of water basin management. Below, we will discuss the major legislative and institutional shortcomings of Georgia’s water policy in view of the requirements of EU legislation discussed in the first chapter.

Water Management

The EU approach towards water management, firstly, envisages the establishment of integrated management of water resources that is a precondition for ensuring adequate amount and quality of water resources and for achieving long-term sustainability in water management. This is a widely recognized and approbated model throughout the world, which is the best means for planning effective consumption of water resources and simultaneously for protecting the water ecosystem. Although the transition to water basin management launched in 2007 is mentioned among the priorities of the Ministry of Environment Protection, there are no particular preconditions for the introduction of river basin management so far. At this stage, water management is clearly centralized.

Present Georgian water policy is not oriented to the implementation of concrete goals and tasks. These goals are quite general in water legislation and are not strengthened by concrete measures that would promote the implementation of these goals. There are no effective water quality management mechanisms. First of all, there is no mechanism to translate monitoring materials into the status of water bodies that is essential for water quality assessment and planning of relevant measures aimed to improve water quality. In other words, there is no mechanism to ensure that the information obtained through monitoring be used for planning further actions. In order to introduce a concept of water status and to develop type-specific parameters of water bodies, as well as to define the ecological status of water bodies based on this, it is vital to have long, multiyear observations results.

The current monitoring system needs significant technical improvement. Presently, Georgia conducts monthly monitoring of physical-chemical qualitative elements only in 22 rivers, while in the nineties of last century similar monitoring was conducted in 72 rivers. Monitoring of a total of 33 elements is conducted. Neither a great part of organic substances, nor the priority substances defined by the EU Water Framework Directive are actually measured. Hydrological observations are carried out only at 29 stations out of previously existing 150 stations. Except for the seven stations, which were rehabilitated and equipped quite recently, the stations are not appropriately equipped. Hydro biological monitoring is in the process of gaining its foothold. In frames of various international projects the capacity building of the National Environmental Agency is underway both in terms of equipment and methods. However, multiyear observations are needed to accumulate enough information for defining the type-specific characteristics of water bodies.

Numerous licenses and permits existing in the sphere of water consumption were abolished as a result of reforms carried out in the system of licenses and permits in 2005-2006. Currently, there are only fishing and groundwater consumption licenses. Management of water quality and amount is being carried out through environmental impact permit and environmental technical regulations. Environmental impact permit is issued at a national level by the Ministry of Environment Protection. Nowadays, the system of issuing this license needs serious improvement. In addition, today some important industrial sectors, such as food industry, cattle-breeding, extraction of minerals and others, are not subject to environmental impact permit. Those activities, which do not need a permit, are regulated by environmental technical regulations. Technical regulations define the standards of discharge and provide the development of a five-year water intake program, which is approved by the Ministry of Environment Protection. It should be taken into consideration that such standard approach towards control of discharge does not enable us to take into account the base condition, sensitivity of the area or a cumulative effect caused on one territory by several enterprises. Moreover, it is vital to strengthen the inspection and enforcement of the requirements of both environmental impact permit and environmental technical regulations.

The EU Water Framework Directive requires full withdrawal of water service expenses that cannot be achieved in Georgia so far. According to the results of the survey conducted in 2005, the existing financial resources are not enough to maintain the existing water services²⁰. There are no formal methods or rules for calculation of water service tariffs. Tariff increase is complicated because of the population's social condition. Moreover, 'polluter pays principle,' which is the key guideline in the environmental sphere at European and international levels, does not act at all. Pollution tax has been abolished, while a tax of surface water resource consumption is practically inactive. According to the law, a water use license holder²¹ is subject to payment of a tax. After abolition of water use licenses, it became practically impossible to administer the taxes. Based on the above mentioned, we can conclude that today there are no mechanisms to encourage water conservation in Georgia.

Drinking and Bathing Waters

Drinking water standards are established in Georgia by order 349 dated December 17, 2007 of the Minister of Labor, Health and Social Affairs "On the approval of technical regulation on drinking water." This regulation has replaced annex I of order 297 dated August 16, 2001 of the Minister of Labor, Health and Social Affairs – "Drinking water. Hygienic requirements towards the water quality in the centralized drinking water supply systems. Quality control. Sanitary rules and norms".

Technical regulation on drinking water is more simplified regulation, which is based on international standards. However, drinking water parameters and other indicators are different from those described in the EU Drinking Water Directive. Moreover, drinking water regulation does not contain the obligations for providing the public with information. In addition, it does not envisage periodical revision and updating of the established water parameters. It does not provide a clear monitoring program and a list of measurement parameters.

²⁰ The 2005 financial strategy of Georgia's urban water supply and water cleaning systems

²¹ The Law of Georgia on Taxes on the Use of Natural Resource; December 29, 2004, article 3

There is no formalized procedure in Georgia, which would identify, describe bathing waters and define bathing water profiles. Bathing waters are subject to the same regulations, which are generally determined for surface waters. There are no requirements defined for the quality management of bathing waters during a swimming season. Microbiological monitoring is conducted only at some bathing water bodies in Georgia. Furthermore, the assessment and classification of bathing water condition by quality does not take place, though it is required by Bathing Water Directive. Respectively, no measures are planned and implemented for the improvement of bathing water quality where necessary. The legislation does not envisage public informing on the quality of bathing water, character of pollution, causes and duration, possible threats and measures taken. There is a separate regulation on the rules of restricting the rights of water consumers in special cases²², which provides the rules of limitation of water use from drinking-household water supply sources and bathing waters during various emergency situations, such as technogenic disasters, epidemic, natural disasters, hostilities, etc, as well as the criteria for the assessment of safety of these waters and the rules of water quality assessment and control. This regulation also envisages public informing; however, water user is obliged to inform the population on possible threats, while the state and local self-government bodies are obliged to publish through mass media the conditions of restricted water use. It should also be noted that the state sanitary supervision agencies, indicated in the document, which are responsible for the assessment of sanitary-hygienic condition of water supply systems and bathing waters, as well as for the research of pollution area, do not exist today.

Pollution Control

Accidental Pollution

In Georgia, the facilities with increased risk and the related processes are regulated by the **Law on Controlling Technical Danger**. The facilities, equipment, devices, processes and so on, which contain a potential technical risk and which in case of an accident or incorrect exploitation, can cause harm to human life, health, property and environment are believed to pose increased risks. The Technical and Construction Inspection under the Ministry of Economy and Sustainable Development carries out supervision over such facilities. The Technical and Construction Inspection issues construction permit for such facilities; carries out registration of facilities in the registry; controls the implementation of permit conditions and conducts planned technical inspection and non-planned inspection in case of having well-grounded doubts about accidents, disasters or violation of safety norms.

It should be noted that this law mostly focuses on regulation of the facilities containing a risk of technical accidents, while the EU Directive on Control of Major Accident Hazards covers such establishments, where dangerous substances are present or likely to be produced as a result of an accident, in quantities equal to or in excess of the quantities listed in the Directive. The goal of the Directive is to prevent major accidents related to emission of hazardous substances.

Moreover, the Law on Controlling Technical Danger does not envisage preparation of safety reports, accident prevention policy or emergency plans. The law raises general requirements to the owner of the facility, in particular: to provide the compliance of the facility with safety requirements; to take preventive measures in order to avoid accidents/disasters; in case of an accident, to immediately notify the Technical and Construction Inspection and eradicate the consequences of an accident. The EU Directive on Control of Major Accident Hazards details those minimum data and information, which should be included in the safety report, accident prevention policy and emergency plans prepared by the owner of the facility.

Moreover, unlike this Directive, the Law on Controlling Technical Danger does not contain the requirements for public informing and readiness, as well as the requirements for informing the neighboring states about the possibility of a major accident with trans-boundary effects. According to the Law on Controlling Technical Danger, the owner of the facility is obliged to notify only the Technical and Construction Inspection about an accident.

²² Order 308 dated November 5, 2002 of the Minister of Labor, Health and Social Affairs "On the approval of the rules of restricting the rights of water consumers in special cases"

It should be noted that the Law on Controlling Technical Danger, which was adopted in April 2010, replaced the Law on Hazardous Chemical Substances. Among the key goals of this law there were protection of human health and environment against harmful effects of hazardous chemical substances and introduction of management of safe use of hazardous chemical substances. The law also envisaged the issues of publicity of information about hazardous chemical substances. Along with other issues, the law was regulating the issues of production, keeping and consumption of hazardous chemical substances, including the issues of monitoring the technical safety conditions.

It is interesting that the Law on Hazardous Chemical Substances contained the requirements for exchanging information about hazardous chemical substances, including the requirement for exchanging information among the interested states. The law also obliged the producers of chemical substances to prepare a special educational-information material on correct and safe production, transportation, consumption of chemical substances, as well as safety, prophylactic and other measures. However, these requirements had a general nature and they did not explain what kind of information was compulsory to be exchanged and in which particular cases.

Chapter 16 of the law contained the measures on avoiding the emergency situation caused by the use of hazardous chemical substances. In particular, according to the law, the managers of the facilities using hazardous chemical substances were obliged to develop a list of possible accidents and emergency situations, along with forecasting their circumstances; plans of measures on readiness for accidents and emergency situations and the necessary actions, including the plans of rendering medical aid to the personnel and population; also the plans of action during the emergency situations. The plan should have envisaged the issues of operative warning of emergency service, local self-government bodies and population about the state of emergency. However, it did not envisage the particular details, namely some issues envisaged by the Directive on Control of Major Accident Hazards, such as: the situation and developments possible to cause accidents; measures on their control and reduction of possible negative impacts; description of early warning actions, etc.

According to the law, in case of an accident, local self-government bodies were obliged to inform the public through mass media about the accident, its character and scale, possible consequences and necessary measures to mitigate these consequences.

Unlike the Law on Controlling Technical Danger, the Law on Hazardous Chemical Substances covered those facilities, which were producing or keeping chemical substances, though it provided no criteria on identifying such facilities. This latter law also contained the requirements for raising public awareness, though unlike the EU Directive, it contained no requirements for providing public readiness for accidents. The law also envisaged the preparation of the plans on reacting on emergency situations, though it did not specify the compulsory information existing in the plan.

The Law of Georgia on Protecting the Population and Territory from Emergency Situations of Natural and Technogenic Character aims at avoiding the emergence and spread of emergency situations, reducing the harm caused by emergency situations and liquidating the damage. According to this law, the industrial facilities are obliged to plan and implement the measures preventing emergency situations. They are also obliged to notify the authorized bodies about the emergency situation. The law also envisages the publicity of information about emergency situations. In particular, Georgian state, autonomous, regional and local governmental bodies, as well as the administration of the facility, are obliged to inform the population timely and distinctly through mass media.

According to article 27 of this law, **decree No 154 of the Government of Georgia dated June 4, 2010 “On the approval of the instruction concerning the rule of submitting a safety declaration”** was adopted. The instruction requirements apply to the facilities with increased technical risks, including to the facilities, from where, in case of an accident, hazardous chemical substances may be released into the atmosphere. It should be taken into consideration that this list does not contain all those facilities, which are regulated by the Directive on Control of Major Accident Hazards. The law obliges the facilities with increased risks to prepare a safety declaration. Moreover, the law specifies those data, which should be included in a special form of the declaration. These data mostly comply with the information required by

the Directive on Control of Major Accident Hazards. In particular, short description of possible accident scenario at the facility; assessment of the extent and severity of the consequences of identified major accidents; data on possible number of victims, material damage and environmental pollution; hazardous substances existing at the facility, their types, number, quality of danger and character of impact; information about the plan of measures on localization of accident consequences, etc. Safety declarations are filled for a term of three years. Moreover, there is no authorized central body identified, whom a safety declaration shall be submitted to. It is also unclear, whether it is compulsory for a facility to prepare a safety plan, because a declaration only indicates whether any such plan exists at all. It is also indicated, whether there is a system of notification of personnel or the population of the adjacent territory in case of an accident. It should be noted that this and other laws do not contain the requirements for an industrial facility to provide the implementation of restoration measures. The Georgian legislation does not provide any instructions about the actions in case of a major accident with trans-boundary effects. Decree 68 dated March 21, 2008 of the Georgian Government "On the rule of defining the classification of emergency situations", determines the concept of trans-boundary emergency situations. However, the Georgian legislation does not define the measures on notification and reaction as well as the actions to be taken following the liquidation of consequences.

According to the Georgian legislation, those activities, which are characterized with significant environmental impacts, are regulated by the environment impact permit. To obtain a permit, the actors have to carry out environmental impact assessment (EIA). Based on the ecological expertise of EIA report, the Ministry of Environment Protection grants an environmental impact permit. According to the environmental impact assessment regulation²³, EIA report should contain the definition of the probability of possible emergency situations caused by the activities as well as the assessment of their possible consequences. Furthermore, EIA report should also contain the plans of reaction on emergency situations. However, it does not mean a safety plan on emergency situations that is determined by the Directive on Control of Major Accident Hazards. At the same time, it should be noted that generally, in practice EIA reports reflect the probability of emergency situations and the plans of reaction on emergency situations quite weakly.

Based on the above mentioned, and in order to meet the requirements reflected in the Directive, it is essential to subject the types of activities indicated in the Directive to relevant regulations. Since the Law on Technical Danger and the Law on Protecting the Population and Territory from Emergency Situations of Natural and Technogenic Character do not cover all those facilities, which are regulated through the Directive, it would be expedient to prepare sectoral EIA guidelines for such facilities, that would help reflect these issues in EIA report and environmental impact permit conditions.

Integrated Pollution Control

As mentioned above, in Georgia the activities with potential environmental impacts are regulated by environmental impact permit. In 2005 reforms were implemented in Georgia's license and permit system, as a result of which the number of environmental licenses and permits was significantly reduced. The key goal of the reform was to simplify the system of licenses and permits and to introduce "one window" principle. Environmental impact permit envisaged regulation of impact from various activities on various components of the environment - in particular, emissions into the air; discharge into water; water consumption; waster production, etc. At a glance, such permit envisages integrated approach towards environmental management. However, environmental impact permit system has numerous weak sides and shortcomings that ultimately cause a failure to meet the requirements set out in the Directive on Integrated Pollution Prevention and Control. First of all, after implementing reforms in the system of licenses and permits, the types of activities subject to environmental permits were reduced significantly. Particularly, the 2007 Law on Environmental Impact Permit does not apply to a number of important activities envisaged by the Directive, such as: various branches of food industry, processing of dairy products, intensive poultry or pig farming facilities, wood processing, etc. Moreover, the list of activities included in the Law on Environmental Impact frequently contains large categories and is less detailed. Therefore, it is often disputable whether or not this activity is subject to permit.

²³ Approved by order No 14 dated October 4, 2011 of the Minister of Environment Protection of Georgia.

While making decisions in the process of issuing environmental impact permits, the following issues are not taken into consideration: use of pollution prevention measures and best techniques; minimization of waste production; energy saving; accident prevention and harm minimization that are the requirements of the above mentioned EU Directive. Moreover, permit conditions are not established fully that creates problems at the level of monitoring the permit conditions. Furthermore, the environmental impact permit system does not cover the issues of trans-boundary pollution.

The means of public informing and participation are imperfect. In particular, preparation of a short non-technical summary on the issues discussed in EIA is not envisaged. The means of public informing are ineffective. The entity, implementing the relevant activities, is responsible for public informing, organizing public discussions and receiving remarks before submitting an application to the Ministry of Environment Protection for receiving a permit. Afterwards, a decision on issuing a permit is made through a simple administrative procedure, unlike the system existing before 2005, when environmental permit was issued through public administrative proceeding. Simple proceeding means that participation in decision making process is limited and it is possible only for the interested parties. Because of limited terms, absence of particular procedures for public informing and participation, it is almost impossible to participate in the decision making process on issuing a permit. Moreover, the public is not provided with information about the issued permit, permit conditions and any further changes to permit conditions, as well as about decision substantiation and results of public participation. There is no mechanism for informing the neighboring countries in case of the projects with trans-boundary effects. Moreover, the monitoring results defined by the permit conditions are not available to the public.

Due to lack of technical and human resources, control over permit conditions is carried out quite weakly. Moreover, the transfer of the Environmental Inspection to the Ministry of Energy and Natural Resources caused duplication of functions between the Agency of Natural Resources and the Department of Ecological Expertise and Inspection of the Ministry of Environment Protection.

Urban Wastewater

Discharge of wastewater from urban wastewater treatment facilities is regulated by the environmental impact permit. It is essential to define in the environmental impact assessment process those admissible discharge norms for particular treatment facility, which will meet the maximum admissible norms of discharge of hazardous substances and the qualitative norms of surface waters determined by the Georgian legislation.

Today, almost all wastewater treatment facilities are idle in Georgia. As a result, presently urban wastewater represents one of the major sources of surface water pollution. The facility located in the Gardabani district, which treats urban wastewater transported from Tbilisi and Rustavi, provides only primary, mechanical treatment. Moreover, a significant part of wastewater is not connected to a collector and directly flows into the Mtkvari River. According to the permit conditions of the Gardabani wastewater treatment facility, the latter should be fully rehabilitated by 2018. However, no rehabilitation works have started so far.

Georgian legislation does not envisage the possibility of establishment of stricter standards for sensitive waters. Though, this issue is taken into consideration in the process of granting an environmental impact permit. Moreover, there are no requirements for monitoring the waters discharged from urban wastewater treatment facilities and received waters, as well as for regular publishing of relevant reports.

As already mentioned above, Urban Waste Water Directive sets requirements for some industrial sectors. In particular, according to the Directive, the industrial sectors set out in Annex III of the Directive, which mostly discharge into surface waters biodegradable waters rich in nutrients, must be subject to special regulations or permits. These sectors mostly cover the branches of food industry, which, according to the Georgian legislation, do not require environmental impact permits. Respectively, these activities are regulated by environmental technical regulations. However, as already mentioned above, these regulations define uniform standards of discharge without giving due consideration to the peculiarity of the activities, sensitivity of the given environment and other issues. Moreover, the enforcement of both environment impact permit conditions and technical regulations are still extremely weak.

2.5 Recommendations

To eradicate the faults and shortcomings existing in Georgian water legislation and to provide effective protection and management of water resources, it is vital to create a uniform framework document in water sphere, which will cover all types of water bodies, including groundwater.

To provide effective management of water quality it is necessary to develop ecological tasks for each type of water body and to classify water bodies by their ecological statuses. For this purpose, it is crucial to establish a formalized, adjusted system for hydrological and water pollution monitoring. Taking into consideration the existing scarce human and technical resources, it may be expedient to plan monitoring so that the monitoring program firstly involves sensitive and mostly affected water bodies. It is also essential to translate the results of monitoring in the parameters of ecological status of water bodies and to plan further steps to improve water quality.

The system of environmental impact permit also needs further strengthening. It is expedient to introduce an integrated permit for large industrial facilities and comparatively simplified environmental permit for medium-sized and small industrial facilities. Used technologies and measures on pollution prevention should be taken into consideration in the process of issuing a permit. It is also necessary to provide full public participation in decision making process. It is also essential to develop a mechanism to provide the involvement of neighboring countries in the process of making decisions on the activities with trans-boundary effects. Moreover, the public should be informed about the permit applications submitted to the Ministry of Environment Protection, as well as issued permits, their substantiation, permit conditions, any changes to permit conditions and monitoring of permit conditions. It is also urgent to provide relevant inspection of EIA, permit conditions and environmental technical regulations.

It is also necessary to settle the problem related to administering the taxes on consumption of surface water resources.

It is expedient to prepare sectoral guidelines on environmental impact assessment for the types of activities indicated in the EU Directive on Control of Major Accident Hazards to ensure that the issues related to accident prevention and management are appropriately reflected in EIA reports and permit conditions.

It is vital to specify the goals for the reduction of surface water pollution with urban wastewater as well as the relevant program on equipping Georgian settlements with wastewater collection and treatment systems.

3. Policy, institutional and regulatory gap analysis in waste sector

3.1 National Policy Goals

In Georgia there is no waste management policy established at a national level so far. The legislating regulating waste management is extremely scarce. Furthermore, the Government of Georgia has committed itself in frames of the European Neighborhood Policy to harmonize the Georgian legislation in the sphere of environmental protection, including waste, with the relevant EU legislation. Hence, the chapter below will discuss the goals and policy, defined by those major directives, which are considered the priority in the National Program on Harmonization of Georgian Legislation with the EU one.

In the EU countries, against the background of waste generation, huge attention is paid to the improvement of waste management methods, in the direction of prevention and reduction of environmental impact caused by waste. Great attention is also paid to waste recovery in terms of saving natural resources. It is quite obvious from those goals and requirements, which the below mentioned directives raise before the EU Member States, in particular, the Directive on Waste (2008/98/EC), EC Decision on a List of Wastes (the European Waste Catalogue) (2000/532/EC), Landfill Directive (1999/31/EEC) and Regulation on Shipments of Waste (1013/2006 EC).

Directive on Waste (2008/98/EC)

The Directive on Waste establishes the legislative framework for the handling of waste. Its objective is to minimize the negative effects of the generation and management of waste on human health and the environment, as well as to mitigate the harm caused by resource using through more efficient use of resources.

The Directive has undergone several amendments; it was basically caused by the necessity of improving the methods of waste management amid increased waste as well as further encouraging of waste prevention and reduction. In particular, the revised version of the Directive requires a clarification of the distinction between waste and non-waste, i.e. between recovery and disposal. By this, the Directive tries to cut positive correlation between economic growth and waste generation. In addition, it aims to introduce an approach that takes into account the whole life-cycle of products and materials and not only the waste phase, and to focus on reducing the environmental impacts of waste generation and waste management, thereby strengthening the economic value of waste. Furthermore, the recovery of waste and the use of recovered materials should be encouraged in order to conserve natural resources.

The revised Directive also covered and replaced the Directive on the Disposal of Waste Oils (75/439/EEC) and the Directive on Hazardous Waste (689/EEC), which are also discussed as the priority directives in the National Program on Harmonization. The objective of integration of these directives into the Directive on Waste was to abolish outdated regulations, to clarify the text and simplify the legislation.

The Directive encourages the Member States to manage waste in line with the waste hierarchy, according to which a priority is given to prevention; then comes preparing for re-use; recycling; other recovery, e.g. energy recovery; and disposal. The Member States shall ensure that waste management does not pose a threat to human health and the environment.

In order to further develop waste prevention, re-use and recycling/recovery, the Member States shall facilitate the introduction of producer responsibility. Such measures may include an acceptance of returned products and of the waste that remains after those products have been used, as well as the subsequent management of the waste and financial responsibility for such activities. In accordance with the polluter-pays principle, the costs of waste management shall be borne by the original waste producer or by the current or previous waste holders. Member States may decide that the costs of waste management are to be borne partly or wholly by the producer of the product from which the waste came and that the distributors of such product may share these costs. These measures may also include the

obligation to provide publicly available information as to the extent to which the product is re-usable and recyclable.

Furthermore, the Member States shall take appropriate measures to encourage such products, which require less resources and less waste generation and to ensure that the recovery and disposal of products that have become waste take place in accordance with the Directive rules.

The Directive sets particular targets for waste recovery, re-using and recycling. In particular, by 2020, the preparing for re-use and the recycling of waste materials such as at least paper, metal, plastic and glass from households and possibly from other origins as far as these waste streams are similar to waste from households, shall be increased to a minimum of overall 50 % by weight. Every three years, Member States shall report to the Commission on their record with regard to meeting the targets. If targets are not met, this report shall include the reasons for failure and the actions the Member State intends to take to meet those targets.

Where recovery is not undertaken, waste undergoes safe disposal operations so that to protect human health and the environment. In particular, waste management shall be carried out without risk to water, air, soil, plants or animals; without causing a nuisance through noise or odors; and without adversely affecting the countryside or places of special interest.

Waste producer or other holder shall carry out the treatment of waste himself or has the treatment handled by a dealer or an establishment or undertaking which carries out waste treatment operations. Hazardous waste should be managed in a way to ensure the protection of human health and environment. It is inadmissible to mix various hazardous wastes. Hazardous waste shall be packaged and labeled.

Any establishment or undertaking intending to carry out waste treatment shall obtain a permit from the competent authority. A competent body shall specify the types and quantities of waste that may be treated, the method to be used for each type of operation, as well as monitoring and control operations. It shall be a condition of any permit covering incineration or co-incineration with energy recovery that the recovery of energy takes place with a high level of energy efficiency. Permit holders or producers of hazardous waste, which collect or transport hazardous waste on a professional basis, shall keep a chronological record of the quantity, nature and origin of the waste, and, where relevant, the destination, frequency of collection, mode of transport and treatment method foreseen in respect of the waste, and shall make that information available, on request, to the competent authorities.

Establishments or undertakings which collect or transport waste as well as establishments or undertakings which produce hazardous waste shall be subject to appropriate periodic inspections by the competent authorities.

Member States shall take the necessary measures to prohibit the abandonment, dumping or uncontrolled management of waste. For this purpose, they shall impose relevant penalties.

Competent authorities shall draw up one or more waste management plans. The plans shall contain the type, quantity and source of waste generation; waste management systems and location criteria, etc. Waste management plans shall also contain the measures, directed towards introducing those methods of re-using, recycling and disposal, which do not harm the environment.

Member States shall establish waste prevention programs. The objective of such programs is to break link between economic growth and the environmental impacts associated with the generation of waste. Such programs should be integrated into waste management plans or other environmental policy programs, or they may function as independent programs. Waste prevention programs shall contain waste prevention tasks. It shall determine appropriate specific qualitative and quantitative benchmarks in order to assess the progress.

Waste management plans and waste prevention programs shall be evaluated at least every sixth year and revised as appropriate and, where relevant. At the same time, the general public shall have the opportunity to participate in the elaboration of the waste management plans and waste prevention programs.

The Directive also sets the rules for management of waste from oil products. In particular, such waste should be collected separately, where technically possible, and managed in line with the waste hierarchy so that not to pose threat to human health and the environment.

Member States shall also encourage and facilitate the separate collection of bio-waste and their composting.

EC Decision on a List of Wastes (the European Waste Catalogue) (2000/532/EC)

This Decision replaced and incorporated the previous Decision 94/3/EC establishing a list of wastes and the Decision 94/904/EC establishing a list of hazardous waste. Its objective was to increase the transparency of the listing system and to simplify existing provisions, as well as to establish one European Community list which would integrate the above mentioned decisions establishing the list of wastes and that of hazardous wastes.

The Annex of the Decision provides a list of waste, which is based on the Directive on Waste and the Directive on Hazardous Waste. However, appearing on this list is not enough to discuss this or that substance or material as waste. For this to happen, it should satisfy the definition on waste given in the Directive on Waste. The different types of waste in the list are fully defined by the six-digit code for the waste and the respective two-digit and four-digit chapter headings. The list of waste provides large categories of wastes in the chapters, which are defined by the two-digit codes. The chapters and subchapters unite separate categories of waste, which are defined by six-digit codes. Any waste marked with an asterisk (*) is considered as a hazardous waste. These are the wastes which must have one or more of the properties listed in Annex III. The names and classifications of waste are built on the methods of waste management. For example, the chapter on municipal wastes includes a subchapter on separately collected waste. Thus, such classification of waste has a sense only if the appropriate treatment mechanisms are taken into account for all these categories.

Landfill Directive (1999/31/EEC)

The aim of the Directive on the Landfill of Waste is, by way of stringent operational and technical requirements on the waste and landfills, to provide for measures, procedures and guidance to prevent or reduce negative effects on the environment, in particular the pollution of surface water, groundwater, soil and air, as well as any resulting risk to human health, from landfilling of waste.

The Directive focuses on various categories of waste: municipal waste, hazardous waste, non-hazardous waste and inert waste. Respectively, the Directive divides the landfills into the following classes: landfill for hazardous waste; landfill for non-hazardous waste; and landfill for inert waste.

The Directive requires the Member States to develop a national strategy for the implementation of the reduction of biodegradable waste going to landfills. In addition, biodegradable municipal waste going to landfills must gradually be reduced to 75 %, 50% and 35%.

Member States shall take measures in order that only waste that has been subject to treatment is landfilled. Only hazardous waste is assigned to a hazardous landfill. Landfill for non-hazardous waste may be used for municipal waste and non-hazardous waste. Inert waste landfill sites shall be used only for inert waste.

Member States shall take measures in order that the following wastes are not accepted in a landfill: liquid waste; waste which, in the conditions of landfill, is explosive, corrosive, oxidizing, highly flammable; hospital and other clinical wastes arising from medical or veterinary establishments, which are infectious; whole used tires with some exceptions; and any other type of waste which does not fulfill the acceptance criteria determined in accordance with Annex II.

The Directive determines the system of permits for operating a landfill. The application for a landfill permit must contain the following information: the identity of the applicant and of the operator when they are different entities; the description of the types and total quantity of waste to be deposited; the proposed capacity of the disposal site; the description of the site; the proposed methods for pollution prevention and abatement; the proposed operation, monitoring and control plan; the proposed plan for the closure and after-care procedures; the financial security by the applicant; environmental impact assessment report (in accordance with the Directive 85/337/EEC on the assessment of the effects of certain public and private projects on the environment). The Directive also requires the existing landfills, which fail to comply with the requirements of this Directive, to suspend functioning within a shortest period of time.

Regulation on Shipments of Waste (1013/2006 EC)

The objective of this Regulation is to simplify, strengthen and regulate the supervision and control of shipments of waste in a way which improves the quality of the environment. In addition, the Regulation incorporates in the EU legislation the Basel Convention on the control of transboundary movements of hazardous wastes and their disposal.

The Regulation (1013/2006 EC) is about shipments of waste within the EU Member States or through the third transit countries; as well as import of waste to the EU countries from a third country; export of waste from the EU to third countries; and shipments of waste from third countries to third countries through the European Union. It covers all types of waste, except radioactive and some other types of waste.

The Annexes of the Regulation provide the lists of waste, shipments of which are subject to various requirements. In particular, "Amber" listed waste given in Annex IV is subject to the procedure of prior written notification and consent in case of transit. "Green" listed waste is subject to the general information requirements laid down in Annex III; waste subject to the export prohibition is given in Annex V.

The Regulation determines the procedures for waste transit control. The Green list procedure is designed for non-hazardous waste destined for recovery. The procedure of prior notification and consent concerns the transit of those wastes, which must be subject to recovery. In case of any procedure it is essential to take all necessary measures to provide waste management through environmentally safe methods in the process of its shipment, recovery and disposal. The procedure of notification requires the competent authorities of relevant countries to issue shipment permits. According to the Regulation, all shipments of waste for which notification is required shall be subject to the requirement of the conclusion of a contract between the notifier and the consignee for the recovery or disposal of the notified waste. Where waste transit requires written notification, such contract must contain financial guarantees.

Moreover, the Regulation contains other general requirements, such as prohibition of mixing of waste during shipments; availability of information to the public, etc. It is also prohibited to export waste to the third countries with the purpose of disposal, except of the European Free Trade Association (EFTA) countries, which are the parties to the Basel Convention. It is also prohibited to export hazardous waste destined for recovery except of those countries, to which OECD decision applies. It is prohibited to import waste destined for disposal or recovery from third countries, except: from those countries, to which OECD decision applies; from third countries, which are parties to the Basel Convention, and the countries, which have concluded a bilateral agreement with the European Community or member states.

The Regulation clearly determines the requirements related to waste transit as well as post-transit recovery or disposal. The Member States must take measures to control the entire process of waste shipments and recovery/disposal.

3.2 Institutional Framework for Waste Management

In Georgia there is no uniform framework law on waste management, which would clearly define the goals, tasks and responsibilities related to waste management. Various competences related to waste are dispersed among various laws and bylaws.

Municipal waste management is an exclusive authority of **local self-government bodies**. In particular, these authorities include cleaning of the streets, creation of landfills and planning and implementation of collection of solid waste and utilization work²⁴.

The following state institutions are involved in waste management: the Ministry of Environment Protection; the Ministry of Labor, Health and Social Affairs; and the Ministry of Agriculture.

The Ministry of Environment Protection defines the state policy in the sphere of waste management. The Ministry's competences/responsibilities include: state management of waste and chemical substances as well as state management of use, import, export, re-export, transit, shipment, recycling, treatment and disposal of waste and chemical substances²⁵.

The Ministry of Environment Protection issues an environmental impact permit, including for waste treatment/recycling/disposal works and establishes control over the fulfillment of permit conditions. In the process of inspecting, the industrial and technological processes and the environmental activities of the establishment, as well as waste management issues, the sites of waste recycling, disposal and storage are inspected²⁶. Furthermore, the fulfillment of conditions of environmental impact permit and ecological expertise is controlled by **the Agency of Natural Resources**, a legal entity of public law under the Ministry of Energy and Natural Resources. In the process of inspecting, the Agency also inspects the activities related to waste recycling or disposal, along with other aspects of industrial processes. In this case, the activities of these two agencies are obviously duplicated. The Ministry of Environment Protection is obliged, in case of inspecting an establishment subject to regulation, to deliver information about the results of inspection to the Agency of Natural Recourse within five working days²⁷. No other mechanism of coordinating the activities of these two agencies exists so far.

The Ministry of Environment Protection is also authorized to issue a permit on production, shipment, import, export, re-export or transit of materials of limited turnover (including waste of a certain type). In case of shipment, import, export, re-export or transit of materials of limited turnover, the mentioned permit can also be granted by the **Revenue Service**, a legal entity of public law under the **Ministry of Finance of Georgia**. The rule of issuing a permit is approved by a joint order of the Ministry of Finance of Georgia and the Ministry of Environment Protection. Presently, the action of this act is suspended²⁸.

The Ministry of Labor, Health and Social Affairs is responsible for providing safe environment for public health. For this purpose, the Ministry develops the qualitative norms for providing the safe environment in respect of air, water, soil, noise level, vibration, electromagnetic radiation²⁹. Moreover, the Ministry of Labor, Health and Social Affairs is also responsible for ensuring chemical safety. In particular, the Ministry develops the classification of the chemical substances, defines the rules of attributing the substance to a certain class of toxicity and hazard, raises packaging, marking and labeling requirements, etc. According

²⁴ The Organic Law of Georgia on Local Self-Government, December 16, 2005; article 16

²⁵ Regulation of the Ministry of Environment Protection - Approved by decree No 132 dated March 16, 2011 of the Government of Georgia, article 2.

²⁶ Order No 28 dated July 7, 2011 of the Minister of Environment Protection "On approval of the instruction on inspection and related procedures."

²⁷ Decree No 313 dated August 11, 2011 of the Government of Georgia "On approval of the rule of establishing state control by the Agency of Natural Resources, a legal entity of public law under the Ministry of Energy and Natural Resources", article 5.

²⁸ Decree No 184 dated September 28, 2006 of the Government of Georgia "On approval of the regulation on the rule of issuing a permit on production, shipment, import, export, re-export or transit of materials of limited turnover and the list of materials of limited turnover."

²⁹ The Law of Georgia on Public Health, June 27, 2007, article 22

to Georgian legislation, hazardous chemical substances belong to materials of limited turnover, the list of which is approved by the Government of Georgia³⁰.

The Ministry of Agriculture is authorized to define the norms and register the burial places for animals and birds that died from especially dangerous infections. Moreover, the Ministry carries out registration of pesticides and agricultural chemicals; state control of the conditions of transportation, sale and storage of pesticides³¹.

3.3 Regulation of Waste Management

In Georgia there is no state policy developed in the sphere of waste management so far. No priorities and goals for waste management are determined either. Some aspects of waste management are regulated by various legislative documents. However, under conditions of absence of uniform legal framework, this legislation is fragmented and limited. Moreover, some legislative acts are outdated and actually inactive.

In Georgia, the activity of large industrial facilities is regulated by an environmental impact permit in accordance with **the Law of Georgia on Licenses and Permits**. A permit seeker is obliged to prepare an environmental impact assessment report, which along with other aspects of environmental impact must review the measures of waste management. The obligations reflected in EIA become a part of permit conditions, the enforcement of which must be provided during the implementation of activities. **The Law on Environmental Impact Permit**, among other activities, emphasizes the necessary of issuing a permit for recycling municipal solid waste or creating a landfill, as well as for disposal of toxic and other hazardous waste, creating their burial places or recycling and treatment of this waste³².

The Law on Licenses and Permits also determines **a permit for shipment, import, export, re-export or transit of materials of limited turnover**³³. The list of materials of limited turnover is defined by the decree of the Government of Georgia. It also includes the Red, Yellow and Green Lists of Wastes determined by Annexes I and II of the Basel Convention and the Council Regulation (EEC) No 259/93. It should be noted that the act regulating the rule of issuing the mentioned permit is presently suspended. Its enactment was postponed to September 1, 2012³⁴.

In Georgia, transit and import of waste is regulated by the **Law on Transit and Import of Waste on the Territory of Georgia**. The law prohibits transit or import of hazardous and radioactive municipal, industrial or other wastes. It also prohibits transit and import of those non-hazardous and non-radioactive wastes, which are listed in Group A of Annex IV of **the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal**³⁵. Georgia joined the Basel Convention in 1999.

The Law on Nuclear and Radiation Safety regulates the protection of environment and human health from harmful effects of ionizing radiation.

The Law on Pesticides and Agricultural Chemicals determines legal grounds for registration and effective use of agricultural chemicals, for safe consumption in terms of human health and environment, as well as for import and export of registered pesticides.

³⁰ The same, article 24

³¹ The Law of Georgia on Public Health, June 27, 2007, article 33

³² The Law of Georgia on Environmental Impact Permit, December 14, 2007, article 4.

³³ The Law of Georgia on Licenses and Permits, June 24, 2005, article 24

³⁴ Decree No 184 dated September 28, 2006 of the Government of Georgia "On approval of the regulation on the rule of issuing a permit on production, shipment, import, export, re-export or transit of materials of limited turnover and the list of materials of limited turnover."

³⁵ The Law of Georgia on Transit and Import of Waste on the Territory of Georgia, November 16, 1997, article 2

The Georgian Code of Administrative Offences imposes penalties for illegal dumping of waste as well as for various violations of cleaning rules³⁶.

The Criminal Code of Georgia imposes penalties or imprisonment for transit and import of radioactive, toxic industrial or municipal waste³⁷.

Order No 36/n dated February 24, 2003 of the Minister of Labor, Health and Social Affairs “On approval of the sanitary rules and norms for arrangement and exploitation of municipal solid waste landfills” defines sanitary rules and requirements for arrangement, exploitation, control and conservation of municipal solid waste landfills and prohibits the disposal of hazardous, toxic and radioactive industrial waste, as well as biological and medical waste there. It should be noted that the requirements, which this document sets for municipal waste landfills are not sufficiently clear and do not meet modern sanitary landfill standards. Furthermore, it does not reflect the institutional and other changes carried out since 2003. For example, the landfill controlling agency indicated in the document was abolished long ago. Moreover, a requirement for various documents, such as hygienic conclusion, or geological conclusions has also been abolished.

Order No 91 dated October 23, 2001 of the Minister of Environment Protection and Natural Resources “On approval of the instruction on the rules of ambient air protection in the process of exploitation of landfills” defines the rules of ambient air protection while exploiting a landfill. The document prohibits open burning of waste while exploiting a landfill and requires that in case of planning, functioning and/or termination/accomplishment of functioning of landfills, waste must be burnt through using best technologies and best techniques in line with the environmental norms. The document also defines the rules of temporary disposal of solid waste containing harmful substances on landfills.

Order No 300/n dated August 16, 2001 of the Minister of Labor, Health and Social Affairs “On approval of the sanitary rules for collection, storage and treatment of waste from medical-prophylactic institutions” defines sanitary-hygienic and epidemiological standards and rules for collection, storage and treatment of wastes from medical-prophylactic institutions. The document classifies wastes from medical-prophylactic institutions according to their hazardousness and prohibits mixing of various types of wastes during their collection, temporary disposal or shipment. It defines the key rules of collection, temporary disposal and shipments for all types of medical wastes. According to the document, the waste belonging to class A (non-hazardous waste) and some types of wastes from class B (such as materials and instruments, wastes originated in microbiological laboratories and vivariums, etc.) can be disposed on municipal solid waste landfills. The waste belonging to class B (hazardous) and class C (especially hazardous) must be destructed in special waste destruction equipment through thermal methods. Shipment, treatment and burying of waste belonging to class D (similar to industrial waste) must be carried out in line with the hygienic requirements set for collection, shipment, treatment and burying of toxic industrial waste. Class E (radioactive) waste is regulated by the legislation on radioactive waste.

Joint order No 131-197 dated December 19, 1996 of the Minister of Economy and the Minister of Environment Protection and Natural Resources “On the rules of services provided for removal of municipal solid and liquid waste”, based on the Law of Georgia on Protection of Consumer Rights, regulates the relations between consumers and suppliers of services for removal of municipal solid and liquid waste; defines the rules for receiving and formalizing the orders, paying for the services provided as well as the rights and obligations of consumers and suppliers. According to the document, the timeframes for rendering the services should not exceed the timeframes for removal of municipal waste set by the state government bodies.

³⁶ The Code of Administrative Offences of Georgia, December 15, 1984, article 146¹, article 146², article 148, article 119¹.

³⁷ The Criminal Code of Georgia, article 234.

3.4 Analysis

Waste Management

While the EU legislation is further improving to minimize negative impacts caused by waste, no national policy and goals in waste management sphere have been established in Georgia so far. As it was mentioned above, waste-related legislation is fragmented and covers only some aspects. In addition, Georgian legislation is not familiar with waste management hierarchy, linking of waste prevention with saving resources and discussing waste as resources. Also there is no producer responsibility for waste or encouragement mechanisms to save resources and generate less waste.

The EU legislation is undergoing permanent changes in order to create a uniform waste management framework, to consolidate and simplify various regulations and to bring more clarity to them. We have quite an opposite picture in Georgia. In particular, the Georgian legislation is incomplete, fragmented and in some cases, outdated.

Municipal waste management is carried out under the rules established by local self-governments. It mostly envisages waste collection and disposal on landfills. There are no requirements for separate collection of waste. Moreover, there are no requirements for management of hazardous waste, waste from oil products or bio-waste. There is a separate regulation on medical waste management³⁸, though there is no mechanism for its enforcement. In particular, the controlling agency indicated in this regulatory document – State Sanitary Supervision Service has been abolished. The license conditions of medical institutions do not properly reflect clear requirements in terms of medical waste management.

As already mentioned above, waste generation and management by large industrial facilities are regulated in frames of environmental impact permit. However, concrete requirements related to waste management, such as separate collection of some types of waste or waste management hierarchy are not defined so far. Hence, only waste collection and disposal is required in the process of issuing environmental impact permit.

According to Georgian legislation, waste recycling, treatment and disposal on landfills is subject to environmental impact permit. However, since there are no established requirements for various methods of waste management, there are no guidelines for taking into account modern methods of waste management in the process of issuing a permit. It is also problematic to inspect waste producers because of limited resources. There is no control over waste generation and management by those industrial facilities which are not subject to environmental impact permit.

Planning of waste management is also very problematic. According to Georgian legislation, it is not required to submit waste management plans. It does not envisage keeping chronological records by waste producer, collector or carrier on waste, their sources, shipment means, treatment, etc. There exists no state statistics on waste.

Because of absence of uniform vision and planning of waste management, presently it is quite problematic in Georgia to plan landfills for waste. Probably, it would not be expedient to have landfills in all municipalities. Planning of regional landfills goes beyond the competences and capacities of municipalities. Planning of landfills at a national level requires at least defining the priorities of waste management that is not clearly established so far. This problem complicates attraction of investments for construction of new landfills. Old municipal landfills are presently functioning without permits. The requirement for obtaining a permit was postponed several times just because of the problems existing in planning and construction of new landfills. According to the amendments made to the Law on Environmental Impact Permit in 2011, non-hazardous landfills, which started functioning before the enactment of this law, are subject to obtaining a permit before January 1, 2014.

³⁸ Order No 300/n dated August 16, 2001 of the Minister of Labor, Health and Social Affairs "On approval of the sanitary rules for collection, storage and treatment of waste from medical-prophylactic institutions"

Requirements for Landfills

Presently there are no clear standards for landfills in Georgia that would be relevant to the European legislation. Current sanitary rules and requirements, set by Order No 36/n dated February 24, 2003 of the Minister of Labor, Health and Social Affairs “On approval of the sanitary rules and norms for arrangement and exploitation of municipal solid waste landfills” do not comply with modern requirements. It does not clearly define the requirements for protection of environmental components from landfill emissions. It contains no requirements for bottom liner system, methane collection system and drainage collection system. Neither does it define clear procedures for monitoring a landfill as envisaged by Annex III of the Directive on Landfills. It is not clear, the disposal of which particular waste is prohibited on municipal waste landfills. In particular, it is indicated that disposal of waste belonging to class I and class II is prohibited, but the annexes do not provide relevant lists. The annexes include the lists of waste belonging to class III and IV, disposal of which is restricted or should be carried out with observance of special conditions; however, no relevant instructions or restriction conditions are determined. There are no instructions and guidelines for identifying the wastes that can be disposed on landfills. It is not required to treat the waste before its disposal on landfills. There are no requirements for reduction of bio-degradable waste. Moreover, this order is outdated and contains numerous inaccuracies, thus becoming practically inactive. Noteworthy that Georgian legislation does not determine any requirements for other types of landfills, including those for hazardous waste.

Since there are no standards for the construction of modern sanitary landfills, new sanitary landfills are being constructed not in line with the requirements of Georgian legislation, but on the basis of international standards. In this case, it is quite obscure which standards should be taken into consideration while issuing an environmental impact permit for new landfills.

Transit and Import of Wastes

Import of waste is regulated in Georgia by the Law on Transit and Import of Waste on the Territory of Georgia.” The law prohibits transit or import of hazardous and radioactive municipal or other wastes. It is only allowed to import non-hazardous and non-radioactive waste, envisaged by Annex IV of the Basel Convention, particularly “Disposal operations; B. Operations which may lead to resource recovery, recycling reclamation, direct re-use or alternative uses.” These wastes are: ferrous and non-ferrous metal scrap, all types of waste paper, plastic (only those types, which can be recycled in Georgia), waste from weaving and haberdashery production, wood processing (cuttings, sawdust), as well as glass waste. The mentioned wastes belong to categories GA, GH, GI, GN, GL, GE, and GC of the Green List of Waste defined by the Council Regulation (EEC) No 259/93³⁹.

Presently, there is no national legislative document regulating export of waste in Georgia. Export of waste is regulated in the country by the Basel Convention.

In 2006 the Law of Georgia on Licenses and Permits introduced a permit on shipment, import, export, re-export or transit of materials of limited turnover. This list also includes shipment, import, export, re-export or transit of waste defined by the Red, Yellow and Green Lists of Wastes determined by Annexes I and II of the Basel Convention and the Council Regulation (EEC) No 259/93⁴⁰. Thus, this permit allowed the shipment of those wastes, which were prohibited before. However, this permit has not actually functioned – shortly after its adoption the normative act, defining the rule and conditions of issuing this permit, was suspended. Thus, the operation of this normative act has been postponed to September 1, 2012⁴¹. Prevention and regulation of crossing customs border by certain types of goods is carried out through requiring licenses, permits or certificates for transporting these goods⁴². Hence, under conditions of inaction of the mentioned permit, there is no administrative mechanism to regulate import of waste at the

³⁹ The Law of Georgia on Transit and Import of Waste on the Territory of Georgia, article 3

⁴⁰ Decree No 184 dated September 28, 2006 of the Government of Georgia “On approval of the regulation on the rule of issuing a permit on production, shipment, import, export, re-export or transit of materials of limited turnover and the list of materials of limited turnover,” annex I.

⁴¹ The same, paragraph 3.

⁴² Chemical Profile of Georgia, 2009

customs and prevent import of prohibited wastes. Despite it, transit and import of hazardous wastes on the territory of Georgia is punishable under the Criminal Code of Georgia⁴³.

Decree No 184 dated September 28, 2006 of the Government of Georgia “On approval of the regulation on the rule of issuing a permit on production, shipment, import, export, re-export or transit of materials of limited turnover and the list of materials of limited turnover” does not envisage setting of different procedures in accordance with the types of wastes and the goals of their shipment as provided in the EC Regulation on Shipments of Waste (1013/2006 EC). Moreover, the waste shipment of which is prohibited is not separated from others.

According to the above mentioned decree, the documents submitted for obtaining a permit should contain a copy of the agreement and in case of export, consent from the competent authority of a recipient country. However, since this regulation is inactive, there is no mechanism of prior notification of a recipient country as well as the requirement for drawing a contract between the carrier and the consignee. Moreover, there is no mechanism for prohibiting export to the countries, which are not parties to the Basel Convention and there is no administrative procedure to require a permit or any other authorities for shipment of waste within the limits of Georgia.

Furthermore, various rules for shipment of wastes envisaged by the EC Regulation, such as prohibition of waste mixing, availability of information to the public, etc., are not defined. There are no particular requirements and control procedures for the stages of transit of wastes and post-transit recovery or disposal.

3.5 Recommendations

First and foremost, it is vital to develop national strategy and policy on waste and to prepare relevant legal framework. A significant part of existing regulations needs to be renewed in line with the current situation and modern requirements.

It is also essential to define a uniform list of waste and to develop modern standards for various methods of waste management, including various types of landfills. It is also vital to determine clear requirements for management of various wastes, including hazardous waste. The requirements for medical waste management must fully be reflected in the requirements of medical licenses. It is also necessary to ensure that those industrial facilities, which do not need environmental impact permits, are subject to regulation.

Since environmental impact permit is the key mechanism for regulation and control of waste management today, it is decisive to ensure that the system of permits is functioning successfully at all stages. Furthermore, it is also important to improve the inspection of permit conditions.

It is essential to carry out state statistics on waste. Permit holders and those subjects that produce hazardous wastes or collect and ship these wastes must be required to keep a chronological record of the quantity, nature and origin of the waste, and, where relevant, the destination, frequency of collection, mode of transport and treatment method foreseen in respect of the waste.

After defining the national policy, it is necessary to determine particular targets for waste prevention, re-using and recycling in order to gradually introduce modern methods of waste management. It is essential to incorporate in these requirements the obligation on public informing and raising awareness so that to prepare the public for promoting the methods of sustainable waste management.

It is also desirable to take relevant steps to introduce producer responsibility. It is also expedient to develop economic tools for encouraging industrial processes with minimum waste and waste recycling.

⁴³ Criminal Code of Georgia, article 234

As already mentioned above, those landfills, which fail to obtain environmental impact permits, must stop functioning by January 1, 2014. It is decisive to define relevant conservation and recovery requirements for such landfills.

In order to eradicate the shortcomings and collisions related to shipment, import, export and transit of wastes, it is vital to enact the Decree on approval of the regulation on the rule of issuing a permit on production, shipment, import, export, re-export or transit of materials of limited turnover and the list of materials of limited turnover. The rule of issuing this permit must be brought in compliance with the relevant EC Regulation on Shipments of Waste.

4. Policy, institutional and regulatory gap analysis in the area of biodiversity protection and use of biological resources

4.1 Introduction

Caucasus, including Georgia, enters the list of 200 global terrestrial ecoregions of the World Wildlife Fund (WWF). Based on the biodiversity value and the related threats, 34 biodiversity hotspots are identified in the world today (biologically richest and simultaneously the most endangered terrestrial ecoregions). Out of these 34 hotspots Georgia is included in two – Caucasus (the most part of Georgia) and Irano-Anatolian (South Georgia, Javakheti) biodiversity hotspots⁴⁴.

The major threats facing biodiversity are: 1. Destruction, degradation and fragmentation of habitats; 2. Excessive extraction; 3. Introduction of alien species; 4. Pollution; 5. Climate change⁴⁵.

The objective of our research is to discuss how much the Georgian legislation related to biodiversity protection and use, institutional arrangement, existing state policy and practice provide the avoidance of threats facing biodiversity.

4.2 Biodiversity protection policy in Georgia

Multilateral international agreements related to biodiversity

Georgia joined the Convention on Biological Diversity in 1995, a year before adopting the Constitution that played a huge role in defining the country's attitude towards environmental protection and establishing the national legislation. Moreover, Georgia is the party to numerous multilateral international agreements, whose goals and tasks are related to biodiversity conservation.

Besides the Convention on Biological Diversity, Georgia is the party to the following multilateral international agreements related to biodiversity conservation⁴⁶:

- Convention on Wetlands of International Importance especially as Waterfowl Habitat (Ramsar Convention);
- Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES);
- UN Convention to Combat Desertification;
- Convention on the Conservation of Migratory Species of Wild Animals (Bonn Convention);
- Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters (Aarhus Convention);
- The Agreement on the Conservation of African-Eurasian Migratory Waterbirds (AEWA);

⁴⁴ <http://www.biodiversityhotspots.org>

⁴⁵ Millennium Ecosystem Assessment, 2005

⁴⁶ The list is given by sequence of Georgia's joining the agreements.

- Agreement on the Conservation of Cetaceans of the Black Sea, Mediterranean Sea and Contiguous Atlantic Area (ACCOBAMS);
- The Agreement on the Conservation of Populations of European Bats (EUROBATS);
- The Cartagena Protocol on Biosafety to the Convention on Biological Diversity;
- The Bern Convention on the Conservation of European Wildlife and Natural Habitats;
- The European Landscape Convention.

Biodiversity protection strategy and action plan

The Convention on Biological Diversity requires the contracting parties to develop biodiversity conservation strategy and action plan. Georgia's biodiversity strategy and action plan was approved by governmental decree No 27. Taking into consideration the current state of Georgia's biodiversity, problems and threats facing the biodiversity, the document outlines nine major issues: protected areas, species and habitats, agricultural biodiversity, hunting and fishing, biodiversity monitoring, biosafety, environmental education, public awareness and public participation, financial-economic program, sustainable forestry, and legislative aspects. Each of this issue covers ten-year strategic goals and tasks as well as five-year plans of action for their implementation⁴⁷. It was believed that after five years a new action plan would be developed taking into consideration particular situation and the results achieved by that time.

Georgia's Biodiversity Conservation Strategy is based on the principles of Pan-European Biological and Landscape Diversity Strategy. The document outlines future vision: after 10 years Georgia will be a country with sustainable biological diversity; such political, social and economic conditions will be created, where preference will be given to correct use of natural resources and relevant distribution of gained profit.

Information about fulfillment of the commitments undertaken by the Convention on Biological Diversity is reflected in the Second (1994-2001), Third (2002-2005) and Fourth (2005-2010) National Communications submitted by the Georgian Government to the Convention on Biodiversity Secretariat. This latter reflects the state of implementation of Georgia's biodiversity conservation strategy and action plan (2005)⁴⁸.

During the Tenth Conference of the Parties to the Convention on Biological Diversity, which was held in Nagoya in 2010, the biodiversity strategic plan was revised and updated. The plan approved by the Conference, known as Aichi biodiversity targets⁴⁹, defines the actions to be implemented within 2011-2020 as well as the tasks to be solved by 2020. Each country is obliged to integrate Aichi goals into national biodiversity strategies and action plans within the next two years.

In 2011, the Ministry of Environment Protection (which is a focal point of the Convention on Biological Diversity), with the support of German Society for International Cooperation (GIZ), started to work over updating the Biodiversity Strategy and Action Plan of Georgia to fulfill the decisions of the Nagoya Conference of the Parties. At the initial stage 11 directions were outlined, in respect of which the relevant situation analysis were prepared by independent experts and non-governmental organizations involved in the sphere of biodiversity. These directions are: Conservation of Species and Habitats; Protected Areas; Agricultural Biodiversity; Assessment and Sustainable Use of Biological Resources; Biosafety; Public Participation and Education; Biodiversity and Climate Change; Management/Governance of Biodiversity; Biodiversity of Forests; Biodiversity of Internal Waters; Biodiversity of the Black Sea.

⁴⁷ The only exception is the forest sector, in respect of which no action plan has been developed, because during that period the work over the document on forestry policy, strategy and action plan was underway in frames of the World Bank project on forest sector development. Unfortunately, the World Bank suspended the project, because Georgia was not fulfilling its commitments under the agreement. Georgia has not developed forest policy and strategy so far.

⁴⁸ The National Communications are posted on the websites of the Convention on Biological Diversity and the Ministry of Environment Protection of Georgia.

⁴⁹ Aichi Biodiversity Targets <http://www.cbd.int/sp/targets/>

Second National Environmental Action Plan (NEAP)

The Government of Georgia adopted the Second National Environmental Action Plan by decree 127 dated January 24, 2012. The document outlines the measures related to environmental protection to be implemented in 2012-2016. The document covers 11 priority spheres: water resources, ambient air, waste and chemical substances, Black Sea, biodiversity and protected areas, forestry, land resources, mineral resources, disasters, nuclear and radioactive safety and climate change. The document defines long-term and short-term goals for each of them as well as necessary measures to achieve these goals. Moreover, the document outlines key problems persisting in respect of each priority, and the causes of these problems, as well as interested parties, implemented measures, national and international processes and assessment of legal framework. It also indicates potential sources of financing and indicators of fulfillment.

National security concept

The Parliament of Georgia approved new National Security Concept of Georgia by decree No 5589 on December 23, 2011. The National Security Concept of Georgia is the basic document that explains fundamental national values and national interests, the vision of the nation's secure development, threats, risks and challenges, and establishes the main directions for national security policy. Out of 14 national interests, one is about "Ensuring the environmental security of Georgia and the region." One of the directions of the document (a total of 12) is about "Threats, Risks and Challenges to the National Security of Georgia", which includes a paragraph "Environmental Challenges." It is noted that "natural processes and man-made crises might threaten Georgia's natural environment, its bio-diversity, and the well-being of its citizens." Priorities of National Security Policy (a total of 18 priorities) include "Environmental Security Policy," which aims at protecting the security of the population and environment. The Concept realizes the role of international and regional cooperation in ensuring ecological security.

Thus, compared to other areas, in respect of biodiversity the country has adopted several documents concerning the state policy and strategy. However, the level of their transposition into legislation and application in practice is not sufficient.

4.3 Institutional arrangement related to biodiversity protection and use of biological resources

In 2004 the structure of the executive authorities was changed as a result of legislative amendments. The Government of Georgia was established in a form of the cabinet of ministers, led by Prime Minister. Number of state agencies was reduced significantly. State Departments were abolished. The Ministry of Protection of Environment and Natural Resources was liquidated and the Ministry of Environment Protection and Natural Resources was created instead. Reorganization was carried out at the State Forestry Department (a state subordinate organization of the Ministry of Environment Protection and Natural Resources – Forestry Department was set up) and the State Department of Protected Areas, Reserves and Hunting Farms (a state subordinate organization of the Ministry of Environment Protection and Natural Resources – the Department of Protected Areas was set up). The Main Division of Ecological Police of the Interior Ministry was abolished at all. The Inspection of Environmental Protection, which was created on the basis of a special law (the Law of Georgia on Environmental Control, 2005), was instructed to conduct environmental control. Another state subordinate agency, Investigation Department was set up at the same Ministry instructed to carry out preliminary investigation of criminal offences. The Department of Licenses and Permits under the Ministry was instructed to issue licenses on the use of natural resources and environmental impact permits. Thus, the state functions related to biodiversity became the prerogative of the Ministry of Environment Protection and Natural Resources.

The subsequent period was characterized by frequent changes of the legislation and institutional arrangement, accompanied by frequent staff changes. Let us focus your attention on some important institutional changes.

In 2007 the Ministry of Environment Protection and Natural Resources of Georgia launched “forest reform” aimed to release the state from the obligation of forest management as much as possible. Certain institutional reforms were launched with this purpose. The Forestry Department was renamed into the Forest Department; its internal structure was changed; staff reduction was carried out at the central office; territorial bodies of the Department were reorganized: forest farms were abolished and 10 regional forest divisions were created instead, which incorporated the forest districts created within the former forest farms. As a whole, the staff was reduced from previous 1694 to 682. As a result of this reduction, average salaries increased 2.4-fold. A salary of a ranger increased up to GEL 400. The area of action for each ranger increased up to 4,5-5 hectares (rangers were instructed to prevent illegal cuttings on this area; to issue-check permit documents; to prevent fires and forest diseases, etc.).

In March 2008 the function of issuing licenses on forest use were taken away from the Ministry of Environment Protection and Natural Resources and transferred to the Ministry of Economic Development (later it was renamed into the Ministry of Economy and Sustainable Development). The amount of natural resources extractable under the license was defined by the Ministry of Environment Protection and Natural Resources and approved by the Ministry of Economy.

In 2010 the Forest Department, a subordinate agency, was replaced by the Forest Agency, a legal entity of public law, which was authorized to carry out certain economic activities.

In spring 2011 significant structural changes were made in the Georgian Government. The Ministry of Environment Protection and Natural Resources and the Ministry of Energy were renamed into the Ministry of Environment Protection and the Ministry of Energy and Natural Resources, respectively. The following structural units of the Ministry of Environment Protection were delegated to the Ministry of Energy: the Inspection of Environment Protection, the Investigation Department and the Forestry Agency. Later these units were liquidated. The Agency of Natural Resources, a legal entity of public law, was established at the Ministry of Energy and Natural Resources. Forest management functions were transferred to the Agency. Moreover, it was in charge of hunting and fishing issues, as well as management of minerals (setting license quotas, checking license terms, etc.). Furthermore, the function of selling the right to use natural resources was taken away from the Ministry of Economy and Sustainable Management and transferred to the Ministry of Energy and Natural Resources.

Thus, the following functions related to management of natural resources (minerals, water, wild fauna (hunting, fishing), forest, non-timber resources) were concentrated in the Ministry of Energy and Natural Resources (more exactly, in the Agency of Natural Resources under the Ministry): to set the quotas and terms of using natural resources; to prepare license/lease objects; to sell licenses; to control licenses; to prevent illegal use.

The Agency of Protected Areas is still under the Ministry of Environment Protection. The biodiversity-related issues, which are not directly linked with the use of resources, are coordinated by the Biodiversity Service under the Ministry. The Ministry of Environment Protection also has certain functions related to biological resources. The quotas for extracting snowdrop tuber and/or cyclamen balls entered into the annexes of Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) are set by the Agency of Natural Resources based on the conclusion issued by the Scientific Body under the Ministry of Environment Protection.

According to the amendments to the Law of Georgia on the Red List and the Red Book (08.11.2011, N5201), decisions on the permissible amount of extraction (removal from the environment) of endangered wild animals (except those propagated in captivity) are made by the Minister of Environment Protection by individual administrative-legal act. The functions of the Ministry of Environment Protection also include executing the process of state ecological expertise (through issuing a conclusion), issuing an environmental impact permit and controlling the fulfillment of permit terms.

Along with the Ministry of Environment Protection, permits on export, import, re-export and introduction from the sea of species, their parts and derivatives entered into the annexes of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) are also issued by the

Revenue Service, a legal entity of public law under the Ministry of Finance of Georgia. Since joining the Convention, this function was always performed by the Ministry of Environment Protection (or its predecessor); the Revenue Service undertook this function from December 1, 2011, however it has not exercised this right so far.

4.4 Regulatory mechanisms related to biodiversity and analysis of existing practice

4.4.1 Biodiversity conservation in protected areas

According to Georgian legislation, protected areas are created in Georgia to protect and restore the most important national heritage – unique, rare and endemic ecosystems, plant and animal species, natural formations and cultural areas to ensure that they are used for scientific, educational, recreational purposes, as well as with the purpose of developing natural resource-saving economies.

There are the following categories of protected areas in Georgia: state reserve, national park, natural monument, strict nature reserve, protected landscape, and multiple use areas. They are in line with the categories (I-VI categories) of the International Union for Conservation of Nature (IUCN).

A protected area is created on the basis of the law. According to the Georgian legislation, the categories of protected areas, such as state reserve, national park, natural monument, strict nature reserve (IUCN categories I-IV) are managed by the Agency of Protected Areas, while protected landscapes (IUCN category V) and multiple use areas (IUCN category VI) are managed by local self-governments. However, the Akhmeta Municipality established the Tusheti Protected Landscape Administration only in spring 2011, which manages the Tusheti protected landscape. It is also allowed in Georgia to establish some categories of protected areas, which are included in the international network, such as biosphere reserve, the world heritage site, and wetland of international importance (Ramsar site).

Presently, there are 14 state reserves, 9 national parks, 21 natural monuments, 18 strict nature reserves, 2 protected landscapes and 1 multiple use area in Georgia (including Abkhazia and South Ossetia) with the total area of 512 123 ha, which covers about 7.35% of the entire territory of the country. Since 1995 two areas – Kolkheti National Park and Ispani II marsh (Kobuleti strict nature reserve) have been included in the Ramsar List of Wetlands of International Importance. Moreover, 17 sites distinguished by biodiversity importance have been included in the Emerald Network⁵⁰. In 2007 Borjomi-Kharagauli National Park joined the Protected Area Network of Parks, PAN Parks that was a result of management efficiency and compliance with international standards.

Despite certain achievements, serious problems still persist in the sector of protected areas, while existing tendencies further aggravate these problems and pose a threat to the successes achieved in the system of protected areas during past years. Below there are a number of problems related to protected areas:

- Taking into consideration the biodiversity importance and the related threats, protected areas occupy quite a small area of the country. In Europe, protected areas occupy about 18%, especially as they significantly lag behind Georgia with their biological diversity. In addition, Georgia's protected areas are practically isolated and do not connect with each other by ecological corridors. Actually, protected areas have no buffer zones. Their total area and spatial structure fails to provide the protection of biodiversity and ecosystem services.
- Another problem is scarce legislation. The categories, such as protected landscapes (IUCN – V) and multiple use areas (IUCN – VI) actually fail to provide the key function of a protected area – biodiversity conservation. As a result of recent legislative amendments, the importance and efficiency

⁵⁰ The Emerald Network is an ecological network to conserve wild flora and fauna and their natural habitats in Europe. Non-EU countries join this network. The Emerald Network is based on the same principles as Natura 2000.

of natural monuments (IUCN – III) and strict nature reserves (IUCN – IV) were significantly downgraded (see below).

- Only three of existing protected areas have management plans⁵¹. The management plans of others are either outdated or have never been prepared. The guidelines for preparation of protected area management plans were approved in late August 2011. According to legislation, management plan should have a form of a normative act in accordance with the Law on Normative Acts. And this turns protected area management plan, which should be a guideline designed for everyday use by protected area administration and other interested parties, into extremely inconvenient, less useful document.
- Protected areas have inadequately scarce financing. Some of them are partially financed in frames of international projects; however, this financing is not enough. Salaries of protected area staff are low; equipment (including weapons and machinery needed for guard and patrolling) and infrastructure are insufficient. Under such conditions, it is impossible to attract highly skilled staff either to the central office or to the administrations of protected areas. Insufficient financing accounts for insufficient biodiversity monitoring and restoration works. Lack of highly skilled personnel is quite remarkable. Professional training/retraining courses have not a regular character and are mostly held in frames of projects financed by various donors.
- The involvement of various stakeholders, local population and self-government in the process of planning, establishing and functioning of protected areas is minimal that can be explained by imperfect legislative mechanisms.
- The level of awareness of the society and even important decision makers about protected areas is still low. Although the awareness about Georgia's national parks has increased recently, unfortunately, it is related not with its key function – recognition/realization of biodiversity conservation, but with promotion of tourism proposals related to protected areas.

Current tendencies and the related threats

During past years the Ministry of Energy was one of the main and strong barriers for the implementation of environmental projects, including for the establishment of new protected areas. On initiative of the Ministry of Energy, the government rejected the proposals/draft laws prepared by the Ministry of Environment Protection and Natural Resources on creation of Ramsar sites and protected areas at the Racha and Pshav-Khevsureti National Parks, as well as Paravani and Sagamo Lakes.

As a result of transferring the issues of using forests and other natural resources to the Energy Ministry, the latter received more powers to delay the implementation of environmental projects⁵². This has finally violated the balance between environmental protection and use of natural resources in favor of the latter. This tendency harmful to biodiversity conservation and sustainable use became quite serious in several directions:

In July 2011 the Ministry of Energy and Natural Resources launched one more forest reform and started to develop new forest code and subordinate legislation to implement it. One of the key directions of the reform was to allocate forest areas for a long-term lease (50 years, with an exclusive right to further prolong it). The entire forest fund of Georgia, which is not included in protected areas, was divided and leased by river basins. A lease-holder was granted the right to extract not only timber resources, but also minerals; furthermore, in case of a desire, a lease-holder could create fishing/hunting farms and tourist infrastructure, process land for agricultural purposes, etc. According to the draft law, clear-cutting is allowed in natural forests; there is no prohibition on cutting forests on the slopes with great inclination (35⁰ and more). In case of implementation of the above mentioned plan, it becomes impossible to expand the existing protected areas and especially, to create new ones⁵³.

⁵¹ Management plan of protected areas is approved by the Minister of Environment Protection.

⁵² Environmental organizations were expressing their concerns already at the stage of planning the structural reforms in the government; however, officials were saying that as a result of this structural reform, the Ministry of Environment Protection would become stronger and would turn into “a precisely environmental agency.” Unfortunately, no signs of strengthening of the environmental agency are observed so far; this Ministry is much inert and weak than it was before the reforms.

⁵³ According to Minister of Energy and Natural Resources, Alexander Khetaguri, in future no protected areas should be created, because the existing ones are already quite enough, especially as they hamper the implementation of economic projects, including the construction of new HPPs.

In autumn 2011 the Georgian authorities decided to allow commercial hunting of endangered species included in the Red List. Since these animals have small populations (for which they are included in the Red List) and are mostly preserved in protected areas, it became necessary to amend the legislation regulating protected areas to allow hunting on them. According to the Law on Making Amendments to Some Legislative Acts of Georgia, which was adopted by Parliament on November 8, 2011 (No5201), hunting was allowed in protected areas, except of reserves and national parks. Previously, hunting was allowed in some districts of strict nature reserves. It should be noted that according to International Union for Conservation of Nature (IUCN), hunting is allowed on not more than 25% of strict nature reserve.

The Georgian Parliament also made amendments to other laws in order to abolish as many legal restrictions on hunting in protected areas as possible. According to the amendments to the Law of Georgia on Creation and Management of Tusheti, Batsara-Babaneuri, Lagodekhi and Vashlovani Protected Areas (November 24, 2011, No 5298-II), fishing, hunting and creation of hunting farms was allowed in the Tusheti Protected Landscape as well as in the Ilto and Lagodekhi Strict Nature Reserves. The mentioned law contains a huge threat for Georgia's biodiversity. The question is that Capra aegagrus lives only in the Tusheti Protected Areas and one of the key goals of the legislative amendments is to allow hunting of this species. Eastern Caucasian Capra, Caucasian Grouse and Caspian snowcock also live in Tusheti. Since the territory is extremely large and the hunting rules unsettled, it will be very difficult to control whether hunting is carried out on the territory of protected landscape or within the limits of a national park. The Lagodekhi Strict Nature Reserve is very small with a total area of 2155, 2 ha. It only covers the territory containing visitor's center and tourist paths, as well as the places, where the population legally extracts firewood. Accordingly, hunting and, especially, creation of hunting farms is physically impossible there. Even if it is simply noted in the law that hunting is allowed in the Lagodekhi Strict Nature Reserve, it will have a negative impact on the number of ecotourists that will ultimately cause reduction of jobs and incomes from the sphere of ecotourism around the protected area. Certain doubts arise that such wording is designed to prepare the situation for transforming the important part of the Lagodekhi Reserve into the Strict Nature Reserve in order to legalize hunting on the territory of the present Reserve. These doubts are well-grounded since the huntable species – deer lives only in the Lagodekhi Reserve and the Borjomi-Kharagauli National Park. Eastern Caucasian Capra, Caucasian Grouse and Caspian Snowcock also live on the territory of the present Lagodekhi Reserve.

According to the Law of Georgia on making amendments to the Law on Creation and Management of the Kolkheti Protected Areas (November 24, 2011, No 5299-II), fishing, hunting and creation of hunting farms was allowed in the Kobuleti Strict Nature Reserve. We can rank this law in the category of especially curious laws. The Kobuleti Strict Nature Reserve contains Ispani II marsh, which is unique, almost inviolable habitat of world importance, in terms of biodiversity. Ispani peat is covered by a 25-45 cm thick layer of living sphagnum (white moss). It is never covered with water and forms a dome. It is possible to move on the Ispani territory only with the help of special wooden skis. Because of these ecological peculiarities, hunting and fishing are impossible there (there is no water surface). Since 1996 Ispani II has been included in the Ramsar List of Wetlands of International Importance.

Besides the above mentioned amendments, by law N5128 dated October 13, 2011, 842, 4 ha was removed from the Kolkheti National Park (strict protection zone) and a multiple-use area was created. The key goal of this amendment was to allow the construction of a Poti-Anaklia highway and the development of the city of Lazika. Making such amendment to the law in order to implement an infrastructural/economic project was a mistake made by the Ministry of Environment Protection (initiator) and Parliament: according to the Law on the System of Protected Areas, it is not allowed to implement similar projects on multiple-use areas. In order to construct the Poti-Anaklia highway and the city of Lazika without violations, the Parliament will now have to abolish a protected area. In terms of biodiversity, it means the degradation of the middle of the Kolkheti National Park. This is the only place in the entire Black Sea basin, where the marine protected area joins the terrestrial protected area. By such actions, Georgia violates its multilateral agreements (Ramsar, Bern and Aarhus Conventions; Agreement on the Conservation of African-Eurasian Migratory Waterbirds), as well as contradicts the EU Habitats and Birds Directives.

We should also recollect that during past years, not a single action was carried out in favor of various economic projects, which caused harm to protected areas, including: in 2004 – construction of the Kulevi Oil Terminal on the Kolkheti area protected by Ramsar Convention (it should be noted that the construction was launched without EIA, while no Ramsar compensation area has been allocated so far); in 2008 – implementation of Tbilisi Railway Bypass Project on the territory of the Tbilisi National Park; in 2009 – construction of Black Sea Power Transmission Line on the territories of Borjomi-Kharagauli National Park and Gardabani Strict Nature Reserve; in 2011 – construction of Dariali HPP and Larsi HPP on the territory of Kazbegi National Park; construction was launched about three months before issuing an environmental impact permit.

If we summarize the existing situation, we will receive the following picture: as a result of new hunting regulations, as well as the amendments made with the purpose of implementing economic projects, the existing protected areas face a threat of degradation. In case of leasing the country's territory (forest fund) for a term of 50 years, it will become practically impossible to create new protected areas. Thus, the most effective instrument, and in case of Georgia, actually the only instrument of biodiversity conservation - protected areas - becomes extremely ineffective.

4.4.2 Use of biological resources

During past years (2004-2011), state agencies in charge of biological resources were changing quite frequently. Legislative amendments related to this sphere were made even more frequently. For example, the normative framework related to the issues of timber production contained 8 laws, 7 presidential orders, 4 governmental decrees, 5 ministerial orders, as well as 10 orders issued by the chairman of the Forestry Department.

The Law of Georgia on Licenses and Permits (2005) defines a full list of license and permit activities and the types of licenses and permits necessary for such activities. The following licenses are issued for the use of natural resources:

- General license of forest use, which can include a special license on timber production and a special license of hunting farm.
- License of fishery (industrial fishing is meant).
- License on the use of fir-tree cones and snowdrop tuber and/or cyclamen balls, entered into the annexes of Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) for export purposes.
- Environmental impact permit.
- Permit on export, import, re-export and introduction from the sea of species, their parts and derivatives entered into the annexes of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).

The legislation also defines the following types of forest use:

1. Timber production;
2. Hunting;
3. Use with the purpose of setting the designated areas;
4. Use for special purposes;
5. Production of timber forest products and secondary forest products;
6. Removal of a fertile layer of the soil in the forest fund;
7. Use of non-timber forest resources;
8. Forestry plantations;
9. Forest use for agricultural purposes;
10. Use for resort, recreational, sport and other cultural-sanitation purposes;
11. Arrangement of fishery farms;
12. Arrangement of animal shelters and farms;

13. Use for non-agricultural purposes;
14. Complex forest use;
15. Placement of communication facility.

Besides the above mentioned licenses and permits, the Agency of Natural Resources issues other permit documents on certain types of forest use, in line with the Law on Management of the Forest Fund, in particular:

- Document on extraction of animal species subject to hunting (except of migratory birds);
- Timber production ticket (for social felling);
- Agreement on forest use;
- Ticket for the use of forest resources (issued only for the removal of a fertile layer of the soil);
- Agreement on setting the designated areas of the State Forest Fund;
- Agreement on the use of the State Forest Fund for special purposes.

4.4.2.1 Timber production for commercial purposes

As we have mentioned above, according to the Forest Code (1999), short-term (up to one year) and long-term (up to 20 years) forest use is permitted. Before 2007 forest use was mostly carried out under the documents issued for a term of up to one year. In 2006 the Ministry of Environment Protection and Natural Resources issued the first 20-year special license on timber production. Since then (until May 2012), 5, 10 and 20-year licenses on timber production have been issued, covering 161671 hectares. Announcing and holding of auctions on forest use are accompanied by the following problems:

Public access to information and participation in a decision-making processes

As a rule, the rights of Georgian citizens to participate in decision-making process related to the environment/forests are violated; particularly, they cannot participate in selecting the areas subject to licensing or setting the quotas on timber resources subject to cutting (articles 35 and 36 of the Forest Code of Georgia). The interested society, including the local population dependent on forest resources, were post factum learning about the government's decisions on selling forest resources through long-term licenses. In a number of cases conflicts emerged between the local population and licensees, as a result of which the government was obliged to change license areas for license holders (Akhmeta district, "Imedi" Ltd; Chokhatauri district, "Guria JP" Ltd).

As a result of decisions made without consultations with relevant experts and environmental organizations (including with the Service of Biodiversity Protection), licenses on timber production were granted without evaluation of the importance of forest conservation, as a result of which timber cutting licenses covered ecologically sensitive forest areas with especially high conservative (environmental) value.

Obscure and controversial license terms

During that period, as a rule, the license objects with outdated forest inventory were auctioned. This circumstance triggered the following problems:

1. Investors got incorrect data about license objects; the amount of auctioned extractable resource differed from the real one that on the one hand, poses a threat to forest ecosystems, and on the other, infringes investors' (licensees') interests.
2. The obligations of license holders envisaged by license terms do not comply with their rights. It was impossible to fulfill the most license terms. Such relationship creates a corruption environment between a license issuer and a license holder.
3. The relationship between a license holder and the state in the issues of management of resources defined by the license is based on the conflict of interests: after obtaining a license, a license holder, i.e. an interested party carries out forest inventory and defines the amount of extractable resource. The latter carries out all obligations related to forest management, which

according to the Forest Code of Georgia, should be fulfilled by the state – in particular, to carry out detailed inventory of forest fund in advance; to plan the measures on forest biodiversity conservation based on the inventory data; to control illegal cuttings and carry out physical protection of forests, etc.

There is a conflict of interests in the rule, according to which the plan of forest use provided by a license holder is based on the factual data submitted by the latter, i.e. an interested party. Moreover, a license holder himself prepares a technical statement of the work to be done. In such case, the only protective mechanism is the honesty and frankness of those persons (foresters, and other specialists), who are carrying out the inventory and drawing up the plans of forest use under the instructions of a license holder.

Starting price of forest use auction

We should also focus on the practice of setting initial prices at forest use auctions. According to the legislation, the starting price of the auction should have been determined by order N1-1/480 of the Minister of Economic Development of Georgia dated April 4, 2008 “On holding an auction in order to grant the utilization license, determination of starting price and payment rules” (previously by similar order of the Minister of Environment Protection and Natural Resources). However, this mechanism has never been put in practice and it is unclear how the starting prices of auctions were calculated. The government members fail to answer this question or they simply do not want to do it.

Neglecting environmental issues

While selecting the objects for timber production under license, it is not assessed whether it is ecologically expedient to allocate particular forest areas. As a result, the forests with high conservation (environmental) value, which need as much care as the cultural heritage monuments, are allocated for cutting; in addition, they have a huge recreational and tourist potential as potential protected areas and resorts. The forests preserved in the Caucasus Mountains have a global ecological importance, because they are the last virgin forests preserved in the moderate belt.

Weak enforcement

Sufficient attention is not paid to the fulfillment of license terms and there are no proper reactions to their violations. For example, although the terms of the agreement concluded in 2005 on the extraction of chestnut timber – species included in the Red List of Endangered Species – were not fulfilled, in October 2008 the Government still decided to prolong this agreement.

The current legislation provides scarce opportunities for controlling the issued licenses. According to paragraph 10 of article 21 of the Law of Georgia on Licenses and Permits, the fulfillment of license terms can be controlled only once during a calendar year; however, neither this opportunity is used completely.

4.4.2.2 Timber production by local population

In 2005-2011 supplying of local population with firewood and timber materials was regulated by decree N132 of the Government of Georgia dated August 11, 2005 “On approval of the regulation on the rules and terms of issuing licenses on forest use.” This decree has replaced in principle issues the major regulatory act of the forest sector – Forest Code. The state agencies were guiding by this decree when supplying the population with forest resources. Because of imperfect legislation and poor structure of forestry services, it was physically impossible for the most of the population to extract timber legally. Use of forest resources was not available to local population.

After transferring the forestry sector to the Ministry of Energy and Natural Resources, forest utilization by local population is regulated by the rule defined by amendments (13.05.2011 N199) to decree N242 of the Government of Georgia dated August 20, 2010 “On approval of the rule of forest use.” Article 10 of this decree covers the issue “Social cutting.”

According to the new regulations, the procedure seems comparatively simple. In frames of social cuttings, through the electronic database developed by the Agency of Natural Resources, a citizen is provided with information about cutting area at the bank, upon payment of the fee on the use of natural resources. As far as timber materials are concerned, it is defined for each particular case through the agreement between the governor and the governing body (in case of the Autonomous Republics of Adjara and Abkhazia– through the mutual agreement between the self-governing unit and the governing body).

Since 2011 the restrictions on the amount of extractable timber have been abolished (until recently, each family could extract only up to 7 cubic meters of firewood. This amount is 12 cubic meters in mountain regions, and 20 cubic meters in the areas with especially cold climate. The maximum permissible amount of timber materials was 5 cubic meters for local population (household).

It is difficult to assess at this stage, whether this regulation proved successful. If we discuss official data about officially extracted timber materials and firewood, as well as official data about illegal cuttings, we will receive the following picture:

Table 1: Amount of Timber Produced in 2005-2011

Year	Amount of legally produced timber m ³		Amount of revealed illegal cutting m ³	Total timber amount m ³
	Timber	Firewood		
2005	165 084	518 741	22 685	706 510
2006	102 946	481 495	57 178	641 619
2007	100 921	704 501	87 244	845 657
2008	78 915	761 158	40 235	880 308
2009	49 197	658 103	53 854	761 154
2010	73 473	725 419	32 925	831 817
2011	90 823	562 664	7 339	660 826

These data make us suppose that not the amount of illegal cuttings has decreased, but the rate of revealing the crime. The research has shown that two basic circumstances have strongly contributed to receiving such picture: 1. Abolition of the Inspection of Environment Protection; 2. Amnesty announced in 2011 concerning the crimes committed in the issues of forest use in the past. The population decided that they would be forgiven not only their past but also future illegal cuttings. For example, significant illegal cuttings were observed in the Alazani grove, but, unfortunately, the appeals submitted by the representatives of hunting farms to the Ministry of Energy and Natural Resources and the Interior Ministry remained without reaction.

4.4.2.3 Hunting

Until 2010 hunting was allowed only in hunting farms and certain areas of strict nature reserves. Hunting on migratory birds was an exception, as hunting on them is allowed everywhere, except of settlements and some categories of protected areas (reserves, national parks, natural monuments).

Today there are 18 hunting farms (4 more licenses have been issued to create fishing farms). Unfortunately, these farms fail to act effectively and only some of them have approved extraction quotas.

As a result of amendments made to the legislation in 2010 (the Law on Forestry Agency), hunting was allowed on the entire territory of the state forest fund. However, actually, hunting was not launched under this rule because of absence of relevant subordinate legislation.

The Law on Making Amendments to Some Legislative Acts of Georgia adopted on November 8, 2011 legalized new regulations, which poses a threat to Georgia's biodiversity. Let us focus on several problematic issues:

- Extraction of endangered species for commercial purposes;
- Hunting in the protected areas (see above);
- Simplification of extraction of the Red List timber species for commercial purposes;
- Legalization of the possibility of destruction of habitats of rare and endangered species.

Later, several subordinate laws were issued to launch hunting of the Red List species. It was defined how much a hunter should pay (so called service fee) to the Ministry of Energy and Natural Resources to obtain a hunting document (wild goat (*capra aegagrus*) – GEL 500; *Capra*, red deer (*cervus elaphus*), brown bear (*ursus arctos*) – GEL 300; Caucasian grouse, Caspian snowcock – GEL 100).

Extraction terms, as well as certain conditions and prohibitions on the extraction of endangered wild animals were determined (for example, hunting of the following species is prohibited: a bear under one year, as well as a female bear, who has a bear under one year; female species of red deer, *Capra*, grouse and snowcock; male species of *Capra* with horn length less than 100 cm (along curve); male deer, whose antlers are not branched and/or are branched, but the length of the main axis is less than 90 cm). It should be emphasized that these restrictions are formal, because there are no mechanisms to fight poaching, as well as to control or monitor hunting process.

On January 30, 2012 the Minister of Energy and Natural Resources of Georgia made amendments to his own orders issued a month ago, as a result of which hunting season for *Capra* and Chamois (Red List species) increased up to 6 months, while hunting season for other species lasts only 2-3 months.

In January 2012 the Agency of Natural Resources approved the quotas on the extraction of the objects of the wild fauna during the 2012 hunting season (nutria- 194, rabbit -615, badger-168, forest marten- 157, stone martin- 157, wolf -120, jackal- 1453, fox- 162, forest cat- 77, wild pig- 189, roebuck-417, raccoon-96, pheasant- 416, partridge- 713, black francolin- 50), though it did not specify the distribution of these quotas by hunting plots. During years, not a single state or scientific institution has ever registered hunting species outside the protected areas (previously hunting was allowed only in hunting farms, now it is allowed anywhere, except nature reserves and national parks). Hunting quotas should definitely be bound to a particular hunting plot. Legalization of the number of hunting species without specifying those areas, where it is possible to extract these animals (i.e. without distribution of extractable species by hunting plots) contradicts the key ecological principles. Taking all these into consideration, we should suppose that the quotas approved by the Ministry are based on false information. In February 2011, the Agency of Natural Resources announced a tender on procurement of services for inventory of hunting species and determining the extraction quotas.

Poaching remains one of the most serious and unsettled problems of biodiversity. Illegal and non-systemic hunting is the major reason of reducing the populations of deer, Western Caucasian *Capra*, Eastern Caucasian *Capra*, Chamois, *Capra aegagrus*, wild boar, bear and other species. Not so long ago deer was living in all the forest areas of Georgia. Today only three small populations of deer are preserved in the protected areas. The populations of *Capra*, Chamois, *Capra aegagrus* and brown bear also decreased significantly. *Gazella subgutturosa* has become extinct. Poaching also creates huge threat to waterfowl. Many of them are popular hunting objects.

Illegal fishing, especially by prohibited means, is one of the reasons of the reduction of fish species. Illegal fishing on the migration routes of anadromous species (for example, sturgeon), along with the dams, creates huge barriers to their route upstream.

The system of assessment of resources of hunting and fishing objects as well as of definition of the quotas still need important improvement in order to provide sustainable use. For example, the limits on hunting of migratory birds are not based on the results of monitoring of their populations. Most hunting farms do not have appropriate opportunities to register hunting species, while unequal distribution of hunting farms throughout the country, high taxes imposed on hunting and the fact that out of 18 hunting farms, hunting is allowed only in 5, is one of the reasons contributing to illegal hunting. It is expected that new hunting regulations will further strengthen hunting press on biodiversity, because there are no mechanisms developed to control hunting process.

4.4.2.4 Extraction of non-timber resources

Presently, extraction of non-timber resources (food, medical, decorative plants) is not regulated legally. Moreover, assessment of the statuses of these plants is not completed. Accordingly, rare, endemic and endangered species of non-timber resources are not legally protected now. There are no data about the scales of their production and the influence of this activity on the state of their populations. The only exception is the extraction of fir-tree cones, snowdrop bulbs and cyclamen balls.

The number of persons willing to extract and export snowdrop and cyclamen resources was increasing for years. The amount of resource demanded by them significantly exceeded the annual quota of extraction of this resource defined by the scientific board. Such situation has significantly complicated the process of issuing permits on export of snowdrop bulbs and cyclamen balls, in respect of distribution of quotas among the interested persons. Thus, the first normative acts regulating the issue were adopted in 2005, while in 2007 the regulation was approved by the governmental decree, which is still in force. In 2008 ten-year licenses were issued to four subjects on the extraction of snowdrop, who, during the license period, will equally divide the extraction quota defined by the scientific board annually. Presently no license/permit has been issued on the extraction of cyclamen balls. As far as fir—tree cones are concerned, the quota on its extraction is also defined annually.

Table 2: Number of fir-tree cones and snowdrop bulbs extracted under license:

Years	Number of fir-tree cones extracted under license (ton)	Number of snowdrop bulbs extracted under license (unit)
2008	91	10 540 832
2009	388,7	11 462 057
2010	300,4	13 044 836
2011		15 000 000

Besides the above mentioned types of natural resource consumption, other forms of land use also took place on the territory of the State Forest Fund. They are: forest use with the purpose of setting the designated areas that is defined by the Forest Code of Georgia and the Law on Forest Fund Management and removal of areas from the Forest Fund for the purpose of implementation of various projects. Presently, 4412,4 ha have been removed from the Forest Fund and 1875 ha designated.

4.4.3 Fees and taxes related to biological resources

Based of the requirements of the Law of Georgia on Licenses and Permits, since 2005 one can purchase the right to using biological resources only through the auction. A pretender, who offers the highest price, is announced a license owner. The auction is considered valid even if only one pretender participates. The amount paid as a result of bidding is transferred to the state budget. An interested person should also pay a license fee.

Before 2005 the cost for resources was defined by the Tax Code of Georgia. Starting from January 1, 2005 the taxes on natural resources were abolished and presently, implementation of the principle of “paid nature use” is carried out under the Law of Georgia on Fees on the Use of Natural Resources. As already mentioned above, both the holders of licenses on the use of natural resources (the owners of licenses issued for timber production, fishing, hunting farms, extraction of fir-tree cones, snowdrop bulbs and cyclamen balls), as well as private persons, who extract timber and/or hunting species for their own consumption, should pay the fees.

Unlike the amount paid in license bidding, which is transferred to the state budget, the fee on the use of natural resources (the amount of which depends on the amount of actually extracted resource) is transferred to the budget of that self-governing unit (administrative district), where the resource was

extracted. In this view, the principle of fair distribution of the profit gained as a result of exploitation of biological resources is somehow observed.

Decree No 242 of the Government of Georgia dated August 20, 2010 “On approval of the rule of forest use” defines the cost of services, which an user of natural resources should pay to the Agency of Natural Resources for certain services, such as: issuing forest use ticket for removal of a fertile layer of the soil; preparation of information about land plot; cadastral measurement of land plots; preparation of license objects; issuing timber production ticket; issuing a document on the extraction of huntable wild fauna species (except migratory birds); issuing the document on timber origin and/or marking with special banners.

The legislation envisages certain tax privileges for promoting the sustainable use of natural resources. For example, according to the Law of Georgia on Fee on the Use of Natural Resources, tax is reduced by 70% for those users of natural resources, who carry out scientific and cultural-educational activities related to the extraction of natural resources, as well as for those users of natural resources, who implement recovery and reproduction of natural resources on their own (within the volume of restored resource). To facilitate the creation of hunting farms, according to the Tax Code of Georgia, the lands occupied by hunting farms are exempted from the property tax. However, the efficiency of these instruments is too weak to stimulate environmental protection and sustainable use of biodiversity.

In Georgia there is no practice of economic assessment of biodiversity and its value in the decision making process. However, methodological researches in this direction were implemented in the Soviet period and within the framework of some projects financed by various donors. When establishing the amount of tax for the use of natural resources or calculating the damage caused by violation of legal norms, the full economic value of biodiversity is not taken into consideration.

4.5 Conclusion

Thus, the state policy, institutional arrangement and established practice related to the sphere of biodiversity protection and use of natural resources fail to provide its protection against threats and its sustainable use.

The following problems were identified as a result of researching the legislation related to the use of natural resources, institutional arrangement and established practice:

- Conflict of interests: all functions related to natural resources (hunting, fishing, timber and non-timber resources and minerals) are concentrated in one agency – the Ministry of Energy and Natural Resources, particularly: development of a normative framework, policy development, protection of natural resources, commercial activities, issuing licenses and other documents, controlling the fulfillment of the terms of licenses and other permit documents;
- Insufficient personnel in the regions;
- Low skilled personnel in the issues of natural resource management and monitoring;
- Not a single agency is in charge of fighting against poaching (illegal hunting, fishing). Actually, there is no struggle underway against poaching;
- License terms, practice of setting extraction quotas and other conditions, as well as issuing of licenses do not comply with the principles of sustainable use;
- Legislation and policy are oriented to maximum extraction of resources in a short period of time, instead of conservation and sustainability/long-term benefits;
- Access of local population to resources is limited that accounts for unsustainable use of resources;
- Normative framework for sport and amateur fishing, as well as falconry is insufficient;
- There are no hunting rules, as well as controlling rules and possibilities;
- There is no community-oriented and/or trophy hunting concept;
- There are no conditions for reproduction of hunting and fishing species;
- Hunting farms failed to develop that can be explained by impunity of poachers;
- New legislation poses a threat to the Red List species and protected areas;

- Weakness of environmental legislation, environmental monitoring and control accounts for the degradation/destruction of biological resources (extraction and processing of minerals, hydro power plants, industrial and municipal waste);
- Lack of professional knowledge both in the central office and the regions;
- Insufficient human resources (lack of staff).

5. Public access to information and public participation in the decision-making

5.1 Introduction

Without access to information and participation in decision-making, democratic decision-making is unthinkable. Furthermore, lack of information prevents citizens from making important choices based on the given information. Lack of information also hinders participation in decision-making, as only informed citizens can take action in an appropriate way. Without establishing a right to access to information, citizens do not have the possibility to claim access to that information. Georgia is going through a phase of economic restructuring and development. This includes a number of new development projects usually associated with negative environmental impacts. Similar to the project level, negative environmental impacts are also likely to arise at the planning and program level.

The horizontal sector comprises environmental legislation on subjects that cut across other environmental legislation and the environmental media such as water, air or soil. In contrast to the media-related legislation, the horizontal legislation is procedural in character and provides for methods and mechanisms aimed at improving decision-making, legislative development and implementation.

Horizontal EU legislation on the environment includes:

- **Access to Information Directive:** Directive 2003/4/EC of the European Parliament and of the Council of 28 January 2003 on public access to environmental information;
- **Reporting Directive:** Council Directive of 23 December 1991 standardizing and rationalizing reports on the implementation of certain Directives relating to the environment (91/692/EEC);
- **Environmental Impact Assessment Directive:** Council Directive 85/337/EEC of 27 June 1985 on the assessment of the effects of certain public and private projects on the environment as amended by the Council Directive 97/11/EC of 3 March 1997;
- **Strategic Environmental Assessment Directive:** Directive 2001/42/EC of the European Parliament and of the Council of 27 June 2001 on the assessment of the effects of certain plans and programs on the environment;
- **Directive providing for public participation in EIA:** Directive 2003/35/EC of the European Parliament and of the Council of 26 May 2003 providing for public participation with respect to the drawing up of certain plans and programs relating to the environment and amending with regard to public participation and access to justice Council Directives 85/337/EEC and 96/61/EC.

The Access to Information Directive establishes the right to access information and sets out clear conditions on how environmental information must be provided. The Reporting Directive outlines regular reporting requirements. The Environmental Impacts Assessment and Strategic Environmental Assessment Directives address development issues by: (a) determining which projects, plans and programs need to be assessed (i.e. those with potentially significant environmental impacts); (b) setting the framework to uniformly address potential environmental impacts in order to minimize pressures on the environment; (c) in the case of SEA, requiring the analysis of alternatives in order to choose the best design with respect to environmental concerns; and (d) requiring public participation.

In the following sections, the basic principles, approaches and mechanisms to ensure public access to information and public participation in the decision-making processes are discussed as provided under the Georgian legislation.

5.2 Public access to information related to the environment

It should be noted from the beginning that situation related to public authorities possessing and updating environmental information which is relevant to their functions, is not very good. First of all it should be mentioned that the functions of public authorities are not always quite clear, leave alone possessing relevant information. This vagueness is mainly due to permanent reforming of environmental governance system since 2004, including institutional changes. These changes were not one-off event – they continue for years; Institutional/functional changes since 2004 to date could be roughly divided into three stages, to be discussed in short below (these functional changes immediately influence possession of information by an agency and hence it is important to discuss them here).

On the first stage (2004-2007) there were changes in three main directions aiming at consolidation of environmental and natural resources management functions within Ministry of Environmental Protection and Natural Resources. For instance, (1) so called “adjacent” state agencies (State Forestry Department, State Department for Protected Areas, State Geology Department, and part of State Land Management Department, etc.) merged with the Ministry of Environmental Protection and Natural Resources; (2) various entities at the Ministry and at new joint agencies were either abolished or reorganized or new units formed. As a result of such changes a new entity was set up within the Ministry in 2005 – Environmental Protection Inspectorate, charged with environmental enforcement and compliance assurance functions. Before setting up the Inspectorate, environmental enforcement functions were carried out by regional offices of the Ministry. (3) Regional offices of the Ministry were enlarged (there are 6 regional offices as opposed to 13 before) and they were deprived of certain environmental and natural resources management functions.

Second stage (2007-2010) was more stable. During this period Ministry of Environmental Protection and Natural Resources was responsible for all environmental issues. Though, it shared some of the functions with other public authorities (Ministry of Health, Ministry of Agriculture, Ministry of Economic Development and Ministry of Interior) and/or local authorities. Functions between all these authorities were not always clearly distributed; there were issues, not falling under the management/functions of any agency (e.g. certain aspects of waste management, genetically modified organisms, invasive species, etc.)

During this period important reform took place, which changed distribution of functions in natural resources management sector. In particular, in the beginning of 2008 Ministry of Environmental Protection and Natural Resources was deprived of the functions of licensing the use of natural resources (logging, mining operations, fishing, hunting management, etc.) and this function, together with the function of establishing quotas for the use of natural resources was transferred to Ministry of Economic Development. Ministry of Environmental Protection and Natural Resources holds only the function of agreeing the quotas.

Besides, in July 2010 Ministry of Economic Development changed its name and is called now “Ministry of Economy and Sustainable Development”. Change of the name would, naturally, have entailed change of functions, but to date the only more or less clear function is “preparation of sustainable development strategy and development of supporting national program”.

Third stage of redistribution of functions between public authorities started in February-March 2011 and it mainly referred to delivering part of the functions of Ministry of Environmental Protection and Natural Resources to other agencies⁵⁴. As a result of reorganization, functions related to the management and

⁵⁴ Also name of the Ministry of Environmental Protection and Natural Resources has changed; it is now called “Ministry of Environmental Protection”.

use of natural resources were transferred to Ministry of Energy and Natural Resources (legal entity of public law "Forestry Agency", legal entity of public law seedlings forestry, issues related to regulation of nuclear and radiation activities, management of minerals in geologic environment and functions of spatial information). Functions related to the changing the land status and demarcation of state forest fund were transferred to National Agency of Public Registry - legal entity of public law of Ministry of Justice. And coast-protection functions were entrusted to Ministry of Regional Development and Infrastructure. This wave of changes also included abolishment of Environmental Protection Inspectorate – a single environmental enforcement body established in 2005. Currently, the Environmental Protection Inspectorate does not exist anymore in the form that was before February-March 2011 reforms, however there is a unit in the Natural Resources Agency of the Ministry of Energy and Natural Resources, which is responsible for environmental enforcement. Furthermore, in the reformed Ministry of Environment there is a small subunit in one of the departments, which is also responsible for environmental enforcement.

Currently the law does not establish which agency should possess what information. It is meant that environmental information is collected and possessed by Ministry of Environmental Protection and Natural resources but the practice shows that other agencies also possess (should possess) environmental information (especially due to above mentioned functional changes).

There is a statutory act regulating the rules for preparation of National State of Environment Report⁵⁵ that allows identifying administrative bodies, which may possess environmental information. In November 2010 amendments were introduced to this act, partly due to the fact that administrative bodies mentioned in the act had been abolished or new bodies had been set up. It is expected that new changes and amendments will be introduced to this act as a result of institutional changes initiated in February-March 2011, when new functions of national agencies are clearer.

At the same time it should be noted that the above mentioned statutory act envisaged for Ministry of Environmental Protection and Natural Resources to keep dynamic database on the status of environment. This function has been removed from the Ministry as a result of changes of November 2010 (and no other agency has been tasked with it).

As for the information (data) flow between different structural entities of Ministry of Environmental Protection, structural entities, as a rule, possess database relevant to their functions, but these data are not interconnected. Different entities of the Ministry exchange information on practical needs base; there is no institutionalized system of information flow at the Ministry to date (and has never existed).

As for the information flow between public authorities, it happens only in case it is legal requirement in a specific case; for instance, when one public authority participates in an administrative procedure carried out by another public authority. Another example is above mentioned regulation defining rules for preparation of National State of Environment (SoE) report - this statutory act defines public authorities that should provide specific information to the public authority responsible for drafting the national SoE report.

In July 2009 Parliament of Georgia passed the Law on Setting up a Legal Entity of Public Law – Data Exchange Agency aiming at establishment of data transfer system between different public authorities, setting security standards, etc. So far the Agency has not gone beyond the placement of all existing (already publicly available) governmental electronic data on a single web-page; therefore, at this stage it is difficult judge about data security, quality, character of data transfer, etc.

Unfortunately there is no law on electronic transparency in Georgia; nor is there any relevant provision in General Administrative Code. However, since the same code covers issues on access to information in electronic form, transparency of electronic registries should not be a disputable issue.

⁵⁵ Resolution No.389 of 25 June 1999 by President of Georgia „On the rules of preparation of a national state of the environment report” and amendments thereto of 1 November 2010 (Resolution No.876 of 1 November 2010 by President of Georgia).

As for the charges for the information flow, General Administrative Code of Georgia obliges national authorities to provide mutual legal assistance and commitment to pay for such assistance, when the expenses exceed GEL 50. It should be noted that this obligation do not refer to the cases, when provision of such assistance is legally binding. For example, providing environmental information/data by public authorities to National SoE Report drafting authority should be considered such case. Besides the public authorities' obligation to provide information for drafting National SoE Report, the framework Law on Environmental Protection further adds that the information should be provided free of charge.

In general it should be said, that public authorities do not practice proactive publication of information. Even when requested, they restrain from broad interpretation of the law. The problem is that the commitment for proactive publication is not met even when immediately provided by law.

The government does not consistently follow the practice of dissemination of reports on environmental normative acts, strategy and policy documents, international agreements and their implementation reports. As we have already mentioned, the major problem is that the government does not pursue the policy of openness and, as a rule, does not disseminate comprehensive and important information without requesting it. Even in case, when it is sufficiently proactive, it is limited by dissemination of outdated, incomprehensive or generalized information.

5.3 Public participation in the decision-making on specific activities

Public participation in the decision-making on specific activities is regulated within the procedures for issuing the Permit for the Impact on Environment. At this moment there are two statutory acts regulating issuance of a Permit for the Impact on Environment:

1. The Law on Licenses and Permits of 24 June 2005 – this is a framework law, listing the types of licenses and permits operating in the country and sets standard rules of decision-making on issuance of licenses and permits. When it comes to Permit for the Impact on Environment the law provides that the decision should be made through simple administrative proceedings. It should be mentioned that this procedure (in contrast to public administrative proceedings) rules out public participation in decision-making processes.

2. 13 December 2007 Law on Permit for the Impact on Environment⁵⁶ - this law contains the list of activities subject to EIA, general requirements to EIA process, conditions for exemption from EIA, timeframe and rules for project developer to ensure public access to information about planned activity, receiving comments and conducting public hearing. This law also sets procedures for the cases, when obtaining construction permit is also necessary to carry out the planned activity; in other words, the law makes a connection between EIA related decision-making procedure and construction permit issuance procedures.

To put light in the situation in this sector the following should be clarified: before the adoption of above mentioned Law on Licenses and Permits, provisions of Article 6 of the Convention applied to decision-making procedure on Environmental Permit. In 1997-2005 (before the Law on Licenses and Permits entered in force) the Law on Environmental Permit was in force in Georgia, which provided for the procedure of issuance of Environmental Permit.

Framework Law on Licenses and Permits and subsequent statutory acts dramatically changed EIA related decision-making procedure. It would be impossible to describe all the changes and differences, but below are only some of them:

⁵⁶ Before adoption of this law a temporary regulation "on the rules and terms of issuance of Permit for the Impact on Environment" was in force (approved by governmental resolution No. 154 of 1 September 2005). The norms of 2005 temporary regulation and 2007 law are practically identical; in fact the law replaced temporary regulation.

Name of the permit - Law on Licenses and Permits changed the name of the permit. In particular, before 2005 EIA related procedure was called *Environmental Permit* issuance procedure, while after 2005 it is called *Permit for the Impact on Environment* issuance procedure which, allegedly better describes the essence of the permit.

Activities subject to EIA - The Law on Environmental Permit, which was in force in 1997-2005 contained a comprehensive list of activities subject to EIA procedure. Although the list was not perfect (definitions of the activities needed be more precise, thresholds revised), but it was in conformity with Annex I of Aarhus Convention, moreover it contained even the activities, not listed in the Annex I.

Present Law on Permit for the Impact on Environment (Article 4) also contains comprehensive list of activities subject to EIA, but it is more restricted and does not contain many of those from previous list. In particular, such activities, as for instance, extraction of mineral resources (apart from oil and gas extraction, see below), construction of nuclear reactor and nuclear power plants, agricultural and food production facilities, paper, leather and textile industries, certain types of infrastructural projects, sectoral plans and programs, etc. are not anymore subject to EIA.

As for compliance with Annex I of the Convention, the Law on Permit for the Impact on Environment does not contain the activities, provided in a range of sub-paragraphs of paragraphs 1 and 3, as well as paragraphs 7, 10, 11, 12, 15, 16 and 19 of the Annex I.

Another important difference between pre-2005 and after-2005 systems should be mentioned. Before 2005 the listed activities would go through EIA procedure irrespective of its developer – the public or a private person. After 2005 EIA is applicable to only private projects/activities listed in the law. Public (state-owned) projects are exempt from EIA (article 1 of the Law on Licenses and Permits).

30 June 2006 Law on State Support of the Investments is even further-going in the sense for exemptions. It allows for initiating any activity by the developer without prior EIA procedure, provided he/she meets these legal requirements in future.

Permitting and public participation - According to legislation in force during 1997-2005, three months timeframe was envisaged for reviewing the quality of the EIA report (conducting state ecological expertise) and taking decision on issuance of Environmental Permit. To date the timeframe for reviewing the EIA report is 20 days.

As for public participation in permit issuance decision-making process, again much difference can be followed between pre-2005 and after-2005 systems.

In 1997-2005 Environmental Permit used to be issued through *public administrative proceedings* – this rule allows for participation of the public in decision-making process. The public participation procedure was as follows:

The permit issuing competent authority (Ministry of Environmental Protection and Natural Resources) was obliged, within 10 days after receipt of application (that included EIA report) for obtaining environmental permit to:

- a. publish in the media the information on proposed activity, as well as place and time of public hearing;
- b. ensure public access to EIA report during whole period of reviewing the application (3 months);
- c. receive and consider written comments within 45 days after publishing the information;
- d. hold public hearing not later than 2 months after the receipt of application.

This system also enabled the developer, before submitting the application to the Ministry (i.e. before initiating administrative procedure), to hold public hearing in order to receive comments on draft EIA report. It is noteworthy that this was the developer's right and not the obligation.

According to current permitting system in Georgia, Permit for the Impact on Environment is issued through *simple administrative proceedings* – these proceedings rule out participation of the public in decision-making process.

At present, Ministry of Environmental and Natural Resources (permitting authority) is neither obliged nor authorized to ensure participation of the public in decision making process. After receipt of application for obtaining Permit for the Impact on Environment the ministry is not obliged to:

- a. publish information on initiating administrative proceedings;
- b. ensure public access to EIA report;
- c. receive and consider written comments (in case representatives of the public somehow learn about administrative proceedings);
- d. hold public hearing;
- e. publish information on the decision.

The above mentioned indicates clearly that the government withdrew from the responsibility for ensuring public participation in decision-making process. In turn, the law is binding for the developer to inform the public about his/her plans and ensure public consultations in the process of drafting EIA report i.e. before administrative proceedings on issuance of permit start. At the same time the Ministry is authorized to issue the permit even when the developer ignores the comments of the public.

Ministry of Environmental Protection and Natural Resources deems that the scheme in force absolutely meets the requirements of Article 6 of the Convention and ensures participation of the public in decision-making process.

To our opinion the developer's informing the public and ensuring participation of public in the discussions on draft EIA report before submitting the application to the competent authority (i.e. before starting administrative proceedings for decision-making) may not be interpreted as "public participation in the decision-making process" because all of these processes lead by developer are not part of administrative proceedings.

Summing up one could say that the legislation in force reduced public participation to utter formality – ensuring publicity "out" of permit issuing competent authority.

Other permitting procedures related to EIA process

Where obtaining of construction permit is necessary for carrying out the activities, EIA process is linked to construction permitting process. In such case EIA report, together with other compulsory documents, shall be presented to Ministry of Economic Development (competent authority for construction permitting), which in its turn passes over the EIA report to Ministry of Environmental Protection and Natural Resources for Ecological Expertise (to check quality of the report and prepare the decision). Positive decision of ecological expertise becomes part of the construction permit and its condition; in this case Ministry of Environmental Protection and Natural resources does not issue Permit for the Impact on Environment.

Construction permit, in compliance with Georgian legislation⁵⁷, shall be issued in three stages:

I stage – approval of terms of use of land for construction – not more than 30 days;

II stage – agreeing of architectural project, constructive or/and technological schemes – not more than 20 days⁵⁸;

⁵⁷ General rules for issuance of construction permit, as well as other permits are set forth in 2005 Law on Licenses and Permits. Specific rules for issuance of construction permit are set forth in Georgian Government Resolution No.57 of 24 March 2009 "On rules and terms of issuing construction permit". Before adopting this act, the resolution under similar title was in force, which was approved by Georgian Government Resolution No.140 of 11 August 2005.

⁵⁸ Conclusion of ecological expertise shall be issued at this stage and the developer is obliged to organize public hearing on draft EIA report before this stage starts.

III stage – granting construction permit – not more than 10 days.

It should be noted that II and III stages go through *simple administrative proceedings*; as for the first stage – public authority was obliged to take decision through *public administrative proceedings*, meaning publication of the public notice, allocation of 20 days for public to submit written comments and organizing public hearing within 7 days after expiration of term allocated for submission of the written comments.

In September 2010 the legal act setting rules for construction permitting was amended. As a result, the decision on the first stage is also made through *simple administrative proceedings* which, as already mentioned above, rules out public participation in decision-making process. Thus, the whole construction permitting process is now closed for the public.

Exemption from EIA

According to the Law on Permit for the Impact on Environment “*activities may be exempted from EIA if national interests require initiation and taking timely decision on the activities*”. From 2005 to date, 22 activities have been exempted from EIA on the basis of this provision of the law. 16 of them referred to construction or rehabilitation of roads and road-related infrastructure, 4 – construction, rehabilitation or reconstruction of certain sections of main gas pipeline. In one case construction of hydropower plant was exempted from EIA and in another - asphalt plant.

All the above decisions on exemption from EIA were taken by the Georgian Government by its resolutions. The cases of EIA exemptions mentioned above might be incomplete, since, regrettably, not all governmental resolutions are being officially published. The reason for selective publication of governmental resolutions is not clear though.

Time-frames for public participation and the developer’s role

There are no screening and scoping procedures in Georgian legislation and respectively, nor are there relevant public participation procedures at these stages. As mentioned many time before, current system by far does not ensure public participation in decision-making process.

The law imposes responsibility for informing the public and holding public hearing on draft EIA report upon the developer. According to article 6 of the Law on Permit for the Impact on Environment developer is obliged to:

- hold public hearing before submitting EIA report to permitting public authority;
- publish public notice on planned activity in both, central and local printed media;
- receive and review written comments by representatives of the public within 45 days upon publication of the public notice;
- not before 50 days after the publication of public notice and not later, than 60 days hold public hearing on the EIA report.

The law requires that the public hearing be held in administrative center of local self-governance unit, where the activity is planned to be implemented. The law also specifies that any representative of the public is eligible to attend the hearing. The law does not specify where the EIA report should be available during 45-days period. In practice reports are usually available at Ministry of Environmental Protection and Natural Resources, Aarhus Center and the offices of developers; seldom, they are available at local government offices.

Information about the decision

Ministry of Environmental Protection and Natural Resources is not obliged to inform public on the decision, whether positive or negative; there is no such practice either. Ministry releases such information upon request only. In case of request the Ministry will release copies of the decision made, conclusion of ecological expertise and the opinions of individual experts.

Here the attention should be drawn on the status of the conclusion of ecological expertise. Ecological expertise is carried out (i.e. the quality of EIA report is reviewed) and the conclusion is prepared by the commission composed of the Ministry staff; the law also allows for inviting “independent experts” when appropriate. On the basis of the commission’s conclusion, the Ministry (Licenses and Permits Department) prepares the conclusion of ecological expertise, which basically does not differ from the commission’s conclusion (usually the difference is that the first is signed by the chairman of the commission and the latter – by head of Licenses and Permits Department). On the basis of positive conclusion (which may contain conditions) the decision on granting the permit shall be made – the Minister approves the conclusion of ecological expertise by his/her order; that is the Ministry’s final decision.

Orders by the Minister do not contain any reasons and considerations on which the decision is based. They are standard and usually contain few sentences: allowing issuance of permit for the impact on environment; the requirement that the permit owner complies with the conditions of the conclusion of ecological expertise; terms for validity of the permit (usually granted for undefined period) and the deadline for appealing against the decision (one month after entering in force).

The law says nothing about the status of the commission’s conclusion and/or conclusion of ecological expertise - if they are advisory or binding. It is not clear if these documents are just advisory and the Ministry’s final decision can be different from them; or even these documents might differ.

It is also important to take note of the following fact: in the end of 2010 the Law on Permit for the Impact on Environment underwent the changes⁵⁹ which made it possible to change the conditions of the conclusion of ecological expertise (i.e. change the conditions of the decision made by the Ministry). The law provides for possibility of such changes not at the initiative of the Ministry (competent authority) but at the initiative of the developer. The developer is eligible to apply to the Ministry with the request to revise the conditions; developer must substantiate that compliance to the conditions set forth in the permit would not reduce or mitigate environmental impacts; or prove that changing conditions of the permit would be more efficient in terms of mitigating or avoiding environmental impacts.

For the decision on changing the conditions the Ministry shall set another ad-hoc commission, which presents appropriate recommendations to the Minister. In the event of positive recommendation the Minister will raise the issue with Georgian government. After receiving governmental consent the Minister shall issue appropriate order.

All the above procedure, as well as final decision is absolutely closed for the public.

Public participation in reconsideration or updating of the decision

As mentioned above, Permit for the Impact on Environment for the activities defined in article 4 of the Law on Permit for the Impact on Environment is issued for undefined period. The same article of the law specifies that replacement of one production technology by another shall be considered new activity, if it causes the change of operation mode. This would require another decision-making procedure. The legislation does not provide for informing and participation of the public in this case either.

5.4 Public participation concerning plans, programmes and policies related to the environment

The Georgian legislation does not give general explanation about what kind of documents the plan, program or policy are and whether they differ from each other by their scope, level of specification or legal status. Nevertheless, there is a certain practice of development of plans and programs in Georgia; though there is less practice of development of policy documents. As a rule, such documents are developed by administrative bodies (as a rule, with the donor support); consultations are often held with the interested

⁵⁹ 28 October 2010 amendments to the Law on Permit for the Impact on Environment

agencies and other stakeholders in the process of their preparation and finally they are approved by various statutory acts (for example, by presidential or governmental decrees, or by the acts issued by the heads of different public authorities). Since the legislation does not determine either their place in the planning system or their status, the practice of their adoption/approval/endorsement is different in each particular case (there is a slight difference in environmental planning which is discussed below). At the same time, there are frequent cases, when the document of this type is being developed, but finally it is not officially adopted/approved.

When it comes to the environmental planning system, it is important to note that 1996 Framework Law on Environmental Protection (article 15) determines the elements of system: sustainable development strategy; national environmental action program; regional, public authority-level and local programs and environmental management plans for the objects of activities. Detailed procedures of public participation in the development and adoption of these documents should have been specified in a specific law on environmental planning; however, Georgia has neither adopted such law, nor is its development planned so far.

It is essential to mention an important amendment made during last years: before February 2006, pursuant to the legislation, the following plans and programs were subject to EIA and public participation procedures: urbanization and spatial planning programs; industry development programs; transport infrastructure development programs; land use schemes for administrative-territorial units (districts); long-term rehabilitation programs for protected areas; plans on the protection and use of water, forest, land, minerals and other natural resources; national, regional and local construction programs for the location of engineering facilities of all types designed to avoid negative consequences of possible natural disasters. According to the 1997 Law on Environmental Permit, it was obligatory to conduct EIA and to make decisions on issuing environmental permits through public participation before such plans and programs were adopted, approved or endorsed by the legislative and executive bodies. As a result of legislative amendments implemented in February 2006, such plans and programs are no more subject to the above mentioned procedures.

5.5 Conclusion and recommendations

As is evident from the above information the existing EIA system is full of shortcomings, which affect its effectiveness. The system does not ensure public participation in environmental decision-making procedure; nor does it help decision-makers in taking informed decisions. Follow-up monitoring and control is also weak. Georgian EIA legislation does not meet the requirements of both, Aarhus Convention and appropriate EU directives.

The government's commitment for deregulation after the "rose revolution" and the overall trend of weakening democratic institutions and democratic procedures in the country had crucial impact on the shaping of present EIA system.

Georgian EIA system needs fundamental changes; at this stage it is possible to single out the following, most urgent measures:

1. Revision/improving of legislative framework for EIA system; the least it should imply is that: EIA apply to those public and private projects which are likely to have significant effects on the environment and human health (the activities, provided for in Annex 1 to Aarhus convention and Annex 1 to the EU directive 85/337/EEC); procedures of public information and participation are in place which would ensure early and effective public participation in decision-making processes.

2. Full inventory of regulated community and compliance promotion: alongside with legislative improvements, specific groups of regulated community should be identified (as well as specific facilities in each group) that are required to obtain permit for the impact on environment (pursuant to paragraph 2 of Article 22 of the Law on Permit for the Impact on Environment); to develop effective and realistic short-term and long-term strategic plans for each group to promote environmental compliance, instead of

present strategy of “closing eyes” and postponing the problems to “better times“. Implementation of this condition will require proper cost estimates and its reflection in appropriate agency’s budget. Also it is important that public is informed about plans and consulted.

6. Environmental permitting and enforcement

6.1 Environmental permitting

To improve business environment and attract investments in the country state regulatory framework was significantly simplified during last years. This process naturally affected regulatory requirements for environmental protection and use of natural resources. Brief overview of current situation resulting from simplification of regulatory framework is presented below.

EIA and Permit for Impact on Environment

The list of activities subject to Environmental Impact Assessment (EIA) has been downsized and the process of environmental permitting has been simplified. Prior to reforms implemented in 2005-2006 activities were divided into four categories according to their scale, importance and level of impact on the environment. Consequently, permitting requirements were different, as well as procedures of public participation in decision-making. For example, for the activities falling under the first category EIA was mandatory to obtain environmental permit. For activities of II, III and IV category it was mandatory to conduct limited environmental studies depending on the category.

As a result of the reforms, activities of II, III and IV category were abolished, while the list of activities falling under I category was substantially downsized; i.e. there is only one list of activities, which are subject to regulation by the Permit for the Impact on Environment (formerly called Environmental Permit).⁶⁰ To obtain permit for such activities, the EIA must be conducted prior to submission of application for the permit. The list of activities regulated by the permit for the impact on environment is presented in the box 15 below.

In addition to the changes described above, time for decision-making on issuance of the permit has been reduced (to 20 days from initial three months); furthermore, the state has removed from itself responsibility to ensure public participation in the decision-making – now the MEPNR is neither obliged nor entitled to ensure public participation after receiving an application for a permit; instead, the project/activity proponent is obliged to inform public and to hold a public consultation meeting before submission of an application to the Ministry.

It is also important to mention that certain activities that might have significant impact on environment and human health and that used to be subject to EIA and consequently environmental permitting are not anymore regulated by the permit for the impact on environment (for instance, mining of mineral resources, nuclear power stations, agricultural and food industries, wood, paper, leather and textile industries, certain types of infrastructural projects). Furthermore, activities listed in the box above are not subject to regulation by permits if they are implemented by ministries or state sub-agency organizations (i.e. EIA is applicable to private projects/activities listed in the law; public (state-owned) projects are exempt from EIA).

The Law on State Support to Investments of 2006 introduced another innovation directed at simplification of regulatory requirements and this way facilitating investments in the country. The law makes possible for any person to start implementation of activity without conducting EIA and obtaining permit on condition that he/she will fulfill these obligations in the future.

⁶⁰ Instead of “environmental permit” now the permit is called “permit for the impact on environment”; the reason for such a change was that the new name is better suited to the content of the permit.

Technical regulations (generally binding rules)

Up to recent period it was not clear as to how and when other activities which pose high risk to environment and human health will be regulated and which prior to reforms were regulated through permitting.

In 2006 the MEPNR stated in its the annual report for 2005 that “in regard to activities containing certain danger to environment, different form of regulation – technical regulations (for example, limits for air pollution) will be imposed; implementation of technical regulations will be mandatory and activity proponent will no longer be required to obtain permit for commencement of activity. The IEP will ensure compliance to technical regulations”.

Later, the Law on Permit for the Impact on Environment adopted at the end of 2007 obliged the MEPNR to develop and adopt “technical environmental regulations” till January 1, 2008. The law did not specify as to what exactly was meant under technical environmental regulations and which activities should have been regulated through such regulations (article 4 of the law only stipulates that all activities that are not regulated by the permit for the impact on environment shall be subject to technical environmental regulations).

Technical environmental regulations have been adopted only recently, on November 13, 2008 by the Resolution No.745 of the Minister of Environmental Protection and Natural Resources. Namely, following four regulations were adopted: technical regulation for water discharge into surface water bodies from industrial and non-industrial facilities; technical regulation for water extraction from surface water bodies; technical regulation for activities polluting ambient air with hazardous substances; and technical regulation for saw-mills.

Introduction of “one stop shop” approach

License and/or permit applicant who wants to start specific activity does not have to apply to different state bodies to receive permits and/or licenses of different types. The state authorities have to ensure themselves obtaining of relevant consents from each other. For instance, in case activity listed in the box 15 above also needs construction permit, then the entity responsible for issuing of construction permit (the Ministry of Economic Development) shall obtain consent from the MEPNR (conclusion of state ecological expertise). In such case decision of the MEPNR on specific activity (conclusion of state ecological expertise) becomes integral part of the construction permit conditions.

Auctioning off licenses for use of natural resources

Prior to reforms, licenses for use of different types of natural resources were issued almost according to one and the same scheme. According to the legislation, the so-called inter-agency councils should have been formed in the case of each type of resource, which would comprise experts, representatives of various agencies and other relevant persons; these councils were to decide whether or not the license for the given activities would be issued. The MEPNR had to issue the licenses based on the councils' decisions. The Law on Licenses and Permits adopted in 2005 changed the situation. The councils were revoked and today the licenses for the use of any type of natural resources are auctioned off. Apart from this, now licenses for use of natural resources can be divided, sold or inherited. According to the Ministry, this shall promote entering of licenses on the market and also development of secondary market in given area.

Re-regulation

On the background of general deregulation, opposite process – re-regulation – also took place. Re-regulation concerns those activities implementation of which started prior to January 1, 1997, i.e. before entering into force of the Law on Environmental Permit and which till now have been regulated neither by the environmental permit nor permit for the impact on environment. Under new rules, such activities shall be subject to obtaining of permit for the impact on environment till January 1, 2009, in accordance with plan agreed with the MEPNR.

In 2007 the MEPNR has elaborated memorandums on cooperation which was concluded with the following enterprises (so called major polluters): JSC Madneuli, JSC Batumi Oil Terminal, Batumi Port,

Heidelberg Cement (Kaspicementi and Rustavcementi). The memorandum does not represent a legally binding document and it was aimed at expression of goodwill by sides to ensure cooperation for timely and adequate implementation of requirements of the law (till January 1, 2009).

It is not fully clear at this moment as to how many and what type of facilities will be subject to regulation (this also depends as to how many of them satisfy legal requirements and obtain permit for the impact on environment), although it is absolutely obvious that all this will affect Environmental Protection Inspectorate's activities.

6.2 Environmental enforcement

The first national environmental authority – the State Committee of Nature Protection – was established in Georgia in 1974. Initially, the Committee had 13 Territorial (Zonal) Inspections responsible for carrying out state environmental inspection and enforcement, but later their number increased to 60 and they functioned in every administrative unit⁶¹.

In line with the overall changes in the state governance, environmental authority had also undergone major policy and institutional changes in the second half of 1990s, after regaining the independence. The newly established Ministry for Protection of Environment and Natural Resources was vested with the power of environmental policy-making, environmental regulation and management of natural resources, as well as assuring compliance. Sharing responsibilities with so called 'adjacent' authorities (such as for instance, State Department of Forestry, State Department of Protected Areas, State Department of Geology), its remit extended to almost all key environmental and natural resources management issues. Regional departments (sub-divisions) of the ministry had both, regulatory and enforcement functions.

Specifically, they permitted new developments of local importance and issued licenses for the use of natural resources as well as for air and water discharges. At the same time, they were responsible for compliance assurance and control. Most of the regional departments did not have separate inspection divisions. Field specialists, responsible for either individual or several environmental media, implemented both, regulatory and enforcement functions.

Despite a wide range of functions assigned to the regional departments, the actual implementation of these functions was extremely poor. The majority of problems existing in the regional departments were of common character. Lack of funds, human and technical resources were the major issues almost for all of them, however, the magnitude of problems varied from office to office, stemming from existing environmental situation and the level of local capacity. Not all the offices had the same institutional strength. Neither all the regions were of the same strategic importance.

Majority of the regional departments of the ministry existed under poor housing conditions and lacked many of the physical amenities considered to be essential in most modern offices. State budget was a major source of financing of the regional departments. Taking into account the magnitude of needs, public finances were not enough for operating and maintenance of the offices even with minimum performance. Salaries were usually too low to give an incentive to local staff to stay at their position for longer periods or avoid bribery. Certainly, there can never be a legitimate excuse for bribery, however, conditions under which the local staff worked were the main determinants of why they might have been engaged in corrupt practices, though there could have been some who did so simply because of greed.

Major institutional problems hindering full implementation of environmental requirements in Georgia were also identified during a rapid assessment carried out by the OECD/EAP Task Force Secretariat in 2002. The problems identified at that time were as follows⁶²:

⁶¹ Ministry of Environmental Protection and Natural Resources of Georgia, Inspectorate for Environmental Protection. (2007). *Strategy of Environmental Compliance Assurance in Georgia (2007-2010)*. OECD EAP Task Force.

⁶² Ministry of Environmental Protection and Natural Resources of Georgia, Inspectorate for Environmental Protection. (2007). *Strategy of Environmental Compliance Assurance in Georgia (2007-2010)*. OECD EAP Task Force.

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- Outdated and insufficient instruments of inspection (the inspection process was limited to drawing up the Administrative Reports on violation of the environmental requirements and passing them to the courts; in some special instances defined by the law, such cases could have been passed to the law enforcement authorities to carry out investigations);
 - Imperfect regulatory framework;
 - Absence of a strategy for state environmental control, and application of the so-called “fire-fighting approach” instead of methods focusing on prevention;
 - Absence of incentives for businesses to comply and of policies supporting voluntary environmental compliance;
 - Gaps in staff training and a poor level of qualification;
 - Lack of necessary infrastructure, in particular limited sampling and laboratory capacities;
 - Absence of practice of self-monitoring and self-reporting by the regulated community;
 - Lack of communication with policy and law-makers for improving deficiencies in laws revealed during the assessment of the enforcement activities, and poor communication with other agencies working under the umbrella of the Ministry of Protection of Environment and Natural Resources, including the permitting service;
 - Absence of criteria for assessment of institutional performance;
 - Poor coordination and overlaps of mandate with other government authorities;
 - Low penalties for environmental violations;
 - Low support from the general public, and a poor environmental education of the population.

The assessment mentioned above stated that problems of environmental compliance could not be addressed against the background of a poor understanding by government of the benefits of regulatory compliance and a general lack of rule of law in Georgia.

Political changes at the end of 2003 triggered further changes in the system of state governance in successive years and as almost all sectors, the system of environmental governance had also undergone major policy, regulatory and institutional changes. Those changes are discussed in the next chapter, but here it should be underlined that institutional changes were particularly important in terms of promoting better environmental enforcement and compliance.

In July 2005 the Law on State Control of Environmental Protection was adopted which formed the conditions to gather previously dispersed functions of environmental control and to establish a single unit within the environmental authority (at that time already called as the Ministry of Environmental Protection and Natural Resources, MEPNR) responsible for assuring environmental compliance. The legal mandate of the Inspectorate for Environmental Protection (IEP), autonomous environmental enforcement sub-agency within the ministry, included promotion of compliance with and enforcement of environmental regulations, as well as prevention and elimination of environmental violations.

6.3 Functions of the Inspectorate for Environmental Protection

In addition to the Law on State Control of Environmental Protection, functions, responsibilities and powers of the Inspectorate were defined by the various legal acts including, the Law Licenses and Permits, General Civil Code of Georgia, Administrative Violations Code of Georgia and Administrative Proceedings Code of Georgia, Criminal Code of Georgia. They provide for a large scope of the IEP activity that covers pollution control, as well as protection of natural resources and control of their rational use. Based on the analysis of the relevant legal acts following core functions and sub-functions of the Inspectorate could have been identified:

1. Planning of environmental enforcement

- Participation in environmental policy-making
- Participation in elaboration of legal framework
- Planning of the activities of the Inspectorate
- Organizational management

- Elaboration of guidance documents for enforcement

2. Enforcement of environmental legislation

- Introduction and application of the mechanisms for voluntary compliance to environmental legislation
- Enforcement of environmental pollution legislation
- Enforcement of natural resources legislation

3. Monitoring of compliance to environmental legislation

- Assessment of compliance by regulated community
- Assessment of effectiveness of Inspectorate's activities

The Inspectorate implemented its functions through its structural sub-divisions and territorial units. It employed more than 270 people, both at the central office, located in the capital city and territorial units in the regions of Georgia.

In order to effectively implement its functions, soon after the establishment, Inspectorate elaborated Strategy of Environmental Compliance Assurance in Georgia for 2007-2010⁶³. The strategy set the IEP's mission, vision, values, priority areas and includes operational plan of activities to reach the targets defined under each priority area.

The IEP has also defined specific sectors of regulated community where Inspectorate is planning to direct its enforcement and compliance promotion actions during 2007-2010. The sectors are as follows:

- Large industrial enterprises;
- Industrial and municipal landfills;
- Recreational and rehabilitation centers;
- Pesticide warehouses;
- Large agriculture farms;
- Municipal treatment facilities.

The Inspectorate was putting much effort to continuously improve its performance in order to ensure better environmental compliance assurance. Significant legal and institutional initiatives were implemented during last years and the resources have substantially increased in comparison with those that existed just a few years ago; however, there were still areas where significant improvements had to have taken place to ensure that targets defined under the IEP's strategy were met; The major challenges among them included: inadequate remuneration, lack of human resources, inadequate technical resources, lack of means of physical coercion, unavailability of social safeguards, inadequate office space, need for development of knowledge and skills, enhancement of enforcement policy, planning system and practices, legislative drawbacks, etc.

6.4 Institutional changes

The institutional structure has undergone significant changes during 2004-2007. The modifications were primarily made in three main directions:

- The so-called "adjacent" state agencies (i.e., State Forestry Department, State Department of Protected Areas, State Department of Geology, a part of State Department of Land Management) joined the MEPNR; these agencies were sharing management functions with the Ministry in certain areas prior to merger;

⁶³ The document was developed and published with the support from the OECD EAP Task Force.

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- Various units subordinated to the MEPNR and to merged agencies were either abolished or reorganized, or new units were formed;
 - The regional units of the Ministry were consolidated (instead of 13, the ministry has six regional units as of today) and deprived of certain decision-making rights in environmental protection and management of natural resources.

As a result of the above described changes, adoption of the law on State Control of Environmental Protection in 2005 formed the basis for establishment of a new enforcement agency - the Inspectorate for Environmental Protection (IEP) under the umbrella of the MEPNR. The legal mandate of the Inspectorate, as mentioned elsewhere above, includes promotion of compliance with, and enforcement of environmental regulations, as well as taking steps for prevention and elimination of environmental violations.

In December 2007 the Law on Environmental Protection Service was adopted which provided for another consolidation within the administrative structure of the Ministry and which is directly related to the IEP. The law envisages merger of three structural units subordinated to the Ministry, namely: the newly formed Investigative Department⁶⁴, the IEP and the Service for Nuclear and Radioactive Safety. According to the law, merger and reorganization of these structural units should result in formation of a new agency within the MEPNR – the Environmental Protection Service.

The Law on Environmental Protection Service entered into force on January 1, 2008. This means that the Law on State Environmental Control which formed the basis for the establishment of the IEP and defined its authority and responsibilities has become invalid immediately upon the Law on Environmental Protection Service became effective. The latter however also states that prior to completion of the reorganization process all structural units, including the Inspectorate, shall continue functioning the same as usual (as prior to the adoption of the Law on Environmental Protection Service) within their legal mandate.

As to the term of completion of the reorganization, the amendment was made in July 2008 into the law on Environmental Protection Service to postpone the deadline for completion of reorganization (until 1 January 2009), since there were delays in adoption of relevant sub-laws which should have enabled proper functioning of a newly formed unit - Environmental Protection Service. The amendment also extended the period of adoption of sub-laws till 1 April 2009 (initially sub-laws should have been adopted till 1 April 2008). It should be underlined that after completion of reorganization and full enactment of the law, the IEP will retain current legal mandate as a structural unit within the Environmental Protection Service.

Another important consolidation took place within the MEPNR in 2008. By the Presidential decree No.390 of 13 July 2008 two legal entities of the public law subordinated to the Ministry – Center for Monitoring and Prognosis and Spatial Information Center were merged and a single legal entity of the public law – Environmental Protection Agency – was established.

Inspectorate for Environment Protection was abolished in March 2011, as a result of structural reorganization of the Ministry of Environment Protection and Natural Resources and the Ministry of Energy. The Department of Ecological Expertise and Inspection was established at the Ministry of Environmental Protection, which presently contains the Inspection Division with nine employees. According to the regulations, the Inspection Division is authorized to implement state control in the sphere of environmental protection over those industrial entities, which have a permit issued by the Ministry, as well as over those entities, whose activities are subject to ecological expertise. The Inspection Division is also authorized to control the fulfilment of conditions of the permit/ecological expertise conclusion issued

⁶⁴ The Investigative Department was formed by the Resolution No.1040 of the Minister of Environmental Protection and Natural Resources, dated by August 1, 2007. Department was assigned with the function of fighting against offences in the sphere of environmental protection and use of natural resources, as well as preliminary investigation of criminal offences within its competencies, as defined by the Criminal Procedural Code of Georgia.

by the Ministry as well as to reveal administrative violations in the sphere of environmental protection. It should be noted that the authorities of the Inspection Division are limited compared to the Inspection for Environment Protection, since these authorities are approved not by the law, but by order of the Minister of Environment Protection⁶⁵. In addition, the rule of activity of the Inspection Division is not clearly defined by any regulatory act.

6.5 Changes in the competences

In general Georgian legislation recognizes the subsidiarity principle in delimitation of competencies, although this principle has never been translated into practice up to now. Prior to reforms in 2004, delegation of authority in environmental protection and management of natural resources to the bodies of governance of autonomous republics and local bodies of governance was of formal character and in reality these areas were managed centrally, through territorial (regional) units of the central governmental authorities. As a result of reforms, initiated in 2004 and changes in environmental and natural resources management, all management functions (including licensing, permitting and compliance assurance functions) were concentrated within the central office of the MEPNR, though there were some minor exceptions as well. Namely, in 2006 the Ministry has delegated the authority of management over certain types of industrial forest use, mining of construction aggregates, water use, water discharge and hunting to the Department of Environmental Protection and Natural Resources of Adjara Autonomous Republic.

Delegation of certain authority to territorial units within the structure of the Ministry, the Department of Environmental Protection and Natural Resources of Adjara Autonomous Republic and local bodies of self-governance has also taken place recently. Namely, on the basis of Resolution No.129 of the Government of Georgia, adopted in May 15, 2008, authority of taking decisions on issuing permits to local population for use of firewood and timber material for personal needs (i.e. issuing of document confirming legality of extraction of firewood and timber material) was granted to: territorial units of the Forestry Department of the Ministry, territorial administrations of the Agency of Protected Areas of the Ministry, territorial units of the Department for Environmental Protection and Natural Resources of Adjara Autonomous Republic and local units of self-governance.

As to decentralization, in 2005 the Law on Local Self-Governance was adopted (which has entered into force in 2006, from the date of official announcement of results of elections of local self-governances) which was a major step ahead towards implementation of reforms directed at decentralization. At the same time it should be stated, that absence of unified and comprehensive decentralization strategy makes the process of reforms challenging, as numerous laws and decisions are contradictory and incomplete.

Local units of self-governance have their own authority and responsibility in environmental protection and management of natural resources, although implementation of this authority in practice will be impossible without elimination of major inconsistency between the organic Law on Local Self-Governance and current legislation of Georgia and in case of natural resources, without clear delimitation of natural resources of local importance.

In regard to the issue of delimitation, it is also noteworthy to mention about the Resolution No.105 of the Government of Georgia adopted on 23 May, 2007 – resolution defines rules of delimitation of forests of local importance and transfer of forests of local importance into ownership of local self-governances. In addition to defining specific rules, in the preamble to the resolution, the MEPNR was assigned to allocate cutting areas in the forest fund of local importance transferred to local self-governance units within 4 months period (prior to September 30, 2007). This meant that delimitation should have been completed within four months. Despite adoption of the resolution, forests have not been assigned to local self-governance units up to now and it has been postponed for indefinite period of time. It should also be

⁶⁵ Order No 22 dated June 15, 2011 of the Minister of Environment Protection of Georgia “On approval of the regulations of the Department of Ecological Expertise and Inspection of the Ministry of Environment Protection of Georgia”

noted that due to complicated character of transfer process, the time-frame allocated for transferring forest fund to local self-governance units – four months – was unrealistic from the very beginning.

Important developments took place in March 2008 in terms of redistribution of the functions between the state authorities. In March 2008 the Government of Georgia took a decision on removal of authority of licensing of use of natural resources from the MEPNR and transferring it to the Ministry of Economic Development. With new setting, the newly established Department of Licensing of Natural Resources of the Ministry of Economic Development (April 2008) had authority to issue following types of licenses:

- Special license for timber production;
- License for use of spruce cone and tubers of galanthus and/or cyclamen, included into the annexes of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), for the purposes of export.
- Special license for hunting farms;
- Fishing license;
- License for extraction of mineral resources.

The Ministry of Economic Development was entitled to transfer the right of issuing the above referred licenses to its territorial units on the basis of relevant ministerial decision.

Apart from the right of issuing of licenses, the Ministry of Economic Development was also assigned the right of approval of quotas for use of natural resources, in coordination with the MEPNR. The MEPNR was obliged to prepare relevant conclusions to set up quotas for use of natural resources.

As to the control function, after introduction of above described changes, the IEP had retained the authority to ensure compliance with the conditions defined by the licenses.

In the context of distribution of competences in management of natural resources, it is also noteworthy to mention two departments at the Ministry of Economic Development – the Department of State Property Management Policy and the Department of Privatization. Both departments were authorized to “prepare proposals on management and disposal of land, mineral and other natural resources, including forest resources”.

After reorganization that taken place in March 2011, the functions of the Inspection Division under the Ministry of Environment Protection are duplicated by the Monitoring Department of the Agency of Natural Resources established under the Ministry of Energy and Natural Resources in 2011. This structural unit establishes state control over environmental protection and natural resource consumption in accordance with “the Rule of carrying out state control by the Agency of Natural Resources” approved by the governmental decree⁶⁶.

It is quite clear that the functions of the Ministry of Environment Protection and the Ministry of Energy and Natural Resources are overlapped in terms of carrying out state control in the sphere of environmental protection, including ambient air protection. It is important to note that 175 employees work at the central and regional offices of the Monitoring Department of the Agency of Natural Resources, while the unit at the Ministry of Environmental Protection responsible for inspections employees only nine people.

6.6 Conclusion

As it is clear from the analysis, permitting and licensing system, as instruments of environmental regulation, have undergone major changes in recent years. The changes were not implemented to better achieve the environmental objectives and to better protect the environment, but rather to improve the investment climate. Certainly, it was possible to implement such measures, which would satisfy both

⁶⁶ Decree No 313 dated August 11, 2011 of the Georgian Government “On approval of the rule of carrying out state control by the Agency of Natural Resources, a legal entity of public law under the Ministry of Energy and Natural Resources of Georgia.

interests - investment promotion and protection of the environment, however it is obvious that the environmental interests were compromised for the sake of investment promotion.

As for the environmental enforcement, before spring 2011 there was a clear progress in this area. Establishment of the Environmental Protection Inspectorate at the Ministry of Environmental Protection and Natural Resources was undoubtedly a step forward. The inspectorate implemented and planned a number of activities for capacity development and if not sudden institutional changes of 2011, we would have had more progress in its inspection activities. This assumption is grounded on the projects of international donors and clear readiness to change that has existed within the Inspectorate before abolition. Redistribution of functions between two governmental agencies resulted in a duplication of functions; the negative results of such duplication will be manifested in the near future.