

**ASSESSMENT OF EFFECTIVENESS OF
ENVIRONMENTAL IMPACT ASSESSMENT (EIA) SYSTEM
IN ARMENIA**

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PREFACE

This publication was prepared by the Caucasus Environmental NGO Network (CENN), a non-governmental, non-profit organization established in 1998. Since its establishment, CENN has acted as a voluntary effort to foster regional cooperation by means of improved communication among environmental organizations of Armenia, Azerbaijan and Georgia.

CENN with its activities tries to strengthen capacity and partnerships of environmental NGOs working in the Caucasus region, public participation and development of civil society. The organization aims to introduce and advocate new concepts and practices in the society to promote principles of sustainable development and good governance in the region.

CENN perceives that the states of the South Caucasus have much to share and much to work on jointly. This especially concerns the environment of our region. We are highly interdependent in achieving our common goal of promoting environmental protection and sustainable development, information exchange and harmonization of legislation with international, and specifically European, standards. This shall become one of the cornerstones of success in our endeavors. CENN is hopeful that this publication shall serve as a significant contribution to this end.

One of the main directions of the CENN's activities is improvement of EIA systems in the South Caucasus countries. In order to develop effective Environmental Impact Assessment (EIA) system and promote transboundary collaboration and sustainable development in the Caucasus, the project: "Assessment of Effectiveness of Environmental Impact Assessment (EIA) System in the South Caucasus" was implemented by CENN with the direct participation and advice of the Netherlands Commission for EIA. The Netherlands Commission for EIA is an independent expert body that provides advisory services on EA and aims to assist countries in establishing effective systems for impact assessments as a means of contributing to sustainable development and alleviation of poverty.

The project was directed towards identification and assessment of existing needs and gaps in the EIA systems in Armenia, Azerbaijan and Georgia as well as development of the relevant recommendations for improvement of EIA systems in these countries, and was implemented during September 2003 - May 2004 by common efforts of international - Georgia-Armenia-Azerbaijan team.

The present report is the first attempt ever to bring together EIA systems of three South Caucasus states – Armenia, Azerbaijan and Georgia. CENN believes that this publication shall be useful for governments of the South Caucasus countries, environmentalists, lawyers and the general public interested in environmental issues and committed to improve environmental governance in these countries.

CENN would like to express its gratitude to the State Secretary for Housing, Spatial Planning and the Environment of the Netherlands for expression of interest in assistance of improvement of effectiveness of Environmental Impact Assessment systems in the South Caucasus countries and provision of funding for the Project. We highly appreciate the kind assistance and valuable advice of the Netherlands Commission for EIA during the project implementation.

CENN would like also to thank the Ministries of Environment of the South Caucasus countries – Armenia, Azerbaijan and Georgia, consulting companies, international organizations as well as all stakeholders engaged in the EIA process for their support and assistance in provision of data and information.

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LIST OF ACRONYMS

CAA	Civil Aviation Administration
CENN	Caucasus Environmental NGO Network
CIP	Center of International Projects
CIS	Commonwealth of Independent States
EIA	Environmental Impact Assessment
EIE	Environmental Impact Expertise
EC	European Community
EEC	European Economic Community
EEU	Environment and Economics Unit
EU	European Union
EVOC	Rus: Assessment of Environmental Impacts (Ekspertiza vozdeystvia na okruzhayushuyu sredu)
GOST	Rus: State Standard (Gosudarstvenni standart)
ISO	International Standards Organization
JSC	Joint Stock Company
MPE	Maximum Permissible Emission
MoNP	Ministry of Nature Protection
NGO	Non-governmental Organization
OVOS	Rus: Assessment of Environmental Impacts (Otsenka Vozdeystvia na okruzhayushuyu sredu)
RA	Republic of Armenia
SEA	Strategic Environmental Assessment
SEE	State Ecological Expertise
SNCO	State Non-Commercial Organization
UNDP	United Nations Development Program
UNEP	United Nations Environmental Program
USAID	United States Agency for International Development
USSR	The Union of the Soviet Socialistic republics
WTO	World Trade Organization

EXECUTIVE SUMMARY

After regaining independence in the early 90s of the XX century a process of reconstruction of the State administration has been started. The laws regulating all aspects of social relations which often had a declarative nature had been adopted rapidly. However, these laws were based on standards and methodological approaches of the Soviet period. The administration system, including the central and regional authorities, elective bodies, etc. was changing dramatically. The model of presidential administration was introduced.

Numerous grants and credits allocated by international donors for “structural reforms”, as well as for environmental protection, played a significant role in these processes. There was a tendency of concentration of functions within one agency. As a result the executive and controlling functions in the field of environmental protection and use of natural resources fell under the Ministry of Nature Protection of Armenia. At the same time certain functions were duplicated by other agencies and ministries.

Later, experience gained by the country coupled with the lessons learned from the international practice resulted in change of the development strategy. After the first stage of total liberalization the role of state regulation in economic and social relations, and the priority of preventive approaches in environmental matters was better understood. Introduction of requirements of international conventions and agreements has been taking place gradually. International programs financing and promoting development of public organizations as well as introduction of requirements of the Aarhus Convention also played a productive role. Although many international conventions are not ratified yet, the overall influence of these conventions on the development strategy is obvious.

The necessity of a system approach to environmental protection and transition from the simple control to preventive policy with the use of EIA for the first time in Armenia was reflected in the Law on Environmental Impact Expertise adopted in 1995. In Armenia as in the majority of the CIS states ecological expertise or environmental impact expertise is a main component of EIA.

The Law on Environmental Impact Expertise, along with the relevant laws and normative documents, created a basis for introduction of a system of assessment of the potential impact of the proposed activity on the environment and human health. A number of subordinated units of state authorities and local self-governance, as well as public organizations, are operating on this basis. Environmental Impact Expertise (EIE) gives an opportunity to increase the quality of projects and programs, specifically the quality of the territorial development programs. In this respect, repeated and detailed consideration of project related to the development of the Sevan region and the Sevan National Park, as well as protected territories are worth to be mentioned.

The Law and relevant regulations define the administrative part of the process, authorized state body and its function as well as general provisions on EIE procedure. However, more detailed procedure for conduction of EIE is specified in Provisions approved by the Minister of Nature Protection, which significantly decreases the importance of EIE itself. The authorized body – the Ministry of Nature Protection (MoNP) has established a special division – State Non-Commercial Organization “Environmental Expertise” within its structure with the purpose to carry out the EIE.

The Law on EIE sets two stages for conducting EIE. The purpose of the first stage is to select projects or applications on proposed activity, while the second stage is EIE. The Law specifies the list of types of activities, which are subject to EIE; however establishment of the limit indices for specified types of activity for conduction of EIE is a prerogative of the Government. Moreover, the Law considers cases when municipal authorities, public organizations, as well as other bodies of state administration may act as initiators of examination of the proposed activity to take decision on the relevance of conducting EIE.

The Law stipulates public involvement at all the stages of EIE: at the stage of initial examination (selection), at the stage of consideration of the parameters of the proposed activity, examination of the documentation on potential impact on the environment as well as during discussion processes of the draft conclusion on EIE. However, the ambiguity of many provisions, lack of the control mechanisms over activity of state bodies during examination of the project and in the process of decision-making, hinder effective use of mentioned provisions of the Law. The Government has to elaborate the procedure for conducting public hearings. Many laws regulating various fields of environmental activity, including the Forest Code, the Land Code, the Water Code, laws on protection of atmospheric

air, flora and fauna, the laws regulating the issues of human health, sanitary, urbanization, etc. are components of the EIE process as well. Many changes have been introduced to the Administrative and Criminal codes to ensure implementation of requirements of the EIE legislation.

However, despite the existence of many normative acts and amendments to the relevant laws, effectiveness of EIE system is too far from the desired quality. Low effectiveness of the EIE system could be explained by incompetence of many employees of the state sector, high level of corruption, low living standards of the population, etc., that is common for the countries in transition.

Further development of the EIA system first of all is connected to the launch of the process of harmonization of the national legislation with the European standards. Introduction of the requirements of international agreements, such as the Convention on Biological Diversity, the Convention on Long Range Transboundary Air Pollution of November 13, 1979 (Geneva), the Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters (Aarhus Convention), the Espoo Convention of the Environmental Impact Assessment in a Transboundary Context and the Kiev Protocol on Strategic Environmental Assessment will play a major role in the nearest future, regardless of the fact, whether these agreements are ratified by the Parliament of Armenia or not.

The Aarhus Convention can play a special role, since active public participation is a main guarantor of the effective functioning of the whole system of state administration, transparency and control *inter alia* in the issues of organization and conduction of EIE. Full public involvement can ensure observation of main principles of ecological expertise – reliability, all-inclusiveness and democracy.

Clearly defined responsibilities of all the participants of the EIE process, exclusion of duplication of functions of state bodies, training of qualified personnel both in the governmental bodies and consulting companies involved in the development of EIA can become another important step toward raising the effectiveness of EIE.

It is worth mentioning that during the process of development of the legislation not only the approved international standards should be taken into account, but also the peculiarities of the countries in the region and other related problems, such as risks of ethno-conflicts, etc. Development and adoption of the new Constitution of Armenia may play an important role in this process.

1 Introduction

1.1 The Aim of the Research

Any economic activity to some extent affects the environment. Global climate changes, ozone layer depletion, land degradation, damage of landscapes, extinction of many species of flora and fauna, pollution of all elements of the environment is a result of human economic activities. Searching for solutions of these problems is a priority for the world community. A set of measures on prevention or minimizing harmful impact of economic activities on the environment should be a basis for the nature protection policy.

OVOS system is designed to solve this problem. Separate elements of this system took root from the former USSR, from 60s and 70s of the 20th century. After disintegration of the USSR, the countries of the South Caucasus began to reform the economic system and adopt laws regulating the legal aspects of OVOS. However, these laws of transitional period have incorporated all contradictions of this period. Application of these laws in practice revealed imperfection of provisions and weakness of the mechanisms of their enforcement.

As soon as the dynamics of development of the Southern Caucasus states becomes stable and they begin a gradual integration into the European community, the necessity of adaptation to the modern European system of standards will become obvious.

The purpose of the present research is to: (i) study EIA related legislative and statutory acts currently in force in Armenia, as well as their application in practice; (ii) reveal positive and negative aspects; (iii) provide the detailed analysis of the results of the research and elaborate recommendations which will allow to choose the optimal way of harmonization of existing EIA systems with the European standards taking into account national and geographical peculiarities of the country. The same type of reports has been prepared for Azerbaijan and Georgia.

1.2 Methodology

Armenia, Azerbaijan and Georgia compose one ecological region with a number of many common problems; from this standpoint the study of the EIA system in the whole region rather than in one separate country seems to be more relevant. Based on this approach the experts from all three countries were engaged in the study, which in general was coordinated by the Caucasus Environmental NGO Network (CENN).

The working group identified all stakeholders of the EIA process, including state, municipal, public and private organizations, experts, employees, officials, investors, etc. The study is mainly based on the analysis of the outcomes of conversations, questioning, meeting, etc. At the same time the EIA system related documentation and literature including codes, laws, decisions of the Parliament and the Government, documentation various departments, standards, specifications, international agreements and conventions have been consolidated and studied. Collected information and documentation was analyzed by experts of the working groups and the results of the work were discussed with a number of stakeholders.

Based on this analysis, a picture on the effectiveness of the EIA system covering its legal framework, practice, drawbacks and gaps as well as the enforcement mechanisms was drawn. Recommendations on further development of the EIA system and the final report have been developed as a result of this study, which have been discussed during a round table with many representatives of the involved organizations.

The final report has been elaborated on the basis of the remarks and recommendations provided by the Netherlands Commission for EIA.

2 Country Background

Armenia is the second most densely populated state from the former Soviet republics, being a landlocked country, with the area of 29,800 km², situated between the Black and the Caspian Seas, bordered by Georgia and Azerbaijan from the north and east and by Iran and Turkey from the south and west. The population (3,213,011 people) is highly urbanized. Almost half from 3.5 million Armenians live in the capital Yerevan. 97% of the population are Armenians, 1.6% Kurds, 0.8 % Russians, 0.6% others¹.

The official state language is Armenian. Russian is a second language for about 40 percent of the population. Approximately 91 percent of the population belongs to the Armenian Apostolic Church. Armenia has one of the highest literacy rates - 99 percent -in the region.

Armenia prides itself on being one of the first nations formally adopting Christianity (early 4th century). Armenian history dates back to the middle of the first millennium BC. Despite periods of autonomy, over the centuries Armenia came under the sway of various empires, though tenaciously preserving its national and cultural identity. It was integrated into Russia in 1828 and the USSR in 1920 (UNDP, 1995).

At the end of 1991, after the collapse of the Soviet Union, Armenia held a referendum and declared its independence from the USSR. Levon Ter-Petrossian was elected as a president of the independent state and re-elected in 1996. Following public demonstrations against Ter-Petrossian's policy in Nagorno-Karabakh, the President resigned in January 1998 and was replaced by the Prime Minister Robert Kocharian. In October 27, 1999, assassination of parliamentarians in the Parliament, initiated a period of political instability but Kocharian was successful in riding out the unrest and was re-elected in 2003 (US Department of State, 2004).

The country has incorporated all fundamental human rights and freedoms in its national policy. Armenia is a signatory to numerous international conventions and treaties and is gradually moving toward a free market economy, having privatized land and nearly finished the privatization of real estate. However, the country inherited a distorted, inefficient, and obsolete national economy strongly affected by the collapse of the central planning system. The earthquake of 1988 and the conflict with Azerbaijan over Nagorno-Karabakh, a primarily Armenian-populated region, assigned to Soviet Azerbaijan in the 1920s by Moscow, exacerbated the economic and social problems.

As a part of the Superpower, Armenia received many "benefits". It became an independent state without its own fuel and energy resources, with scarce fossil fuels and a limited, small territory. The country had to find its own solutions to political, social and economic problems.

Up until independence, Armenia's economy was based largely on industry - chemicals, electronic products, machinery, food processing, synthetic rubber, and textiles - and highly dependent on outside resources. Agriculture accounted for only 20% of net material product and 10% of employment before the breakup of the Soviet Union in 1991. Armenian mines produce copper, zinc, gold, and lead. The vast majority of energy is produced with imported fuel, including gas and nuclear fuel (for its one nuclear power plant) from Russia; the main domestic energy source is hydroelectric. Small reserves of coal, gas, and petroleum have not yet been developed (UNDP, 2001).

Hard socio-economic situation of Armenia until 1994 was conditioned by the impacts of the consequences of the Spitak earthquake, collapse of the USSR and blockade, geopolitical location, as well as the lack of natural resources potential. A period of stabilization of the socio-economic situation has started since 1994. At present slow and stable development trends are noticeable. Below is given the description of the development of basic sectors of economy.

Energy. About 50% of the power is generated by the Heat Power Plants, the 1/3 - by the Armenian Nuclear Power Plant, and the rest – by the Hydropower Plants, which completely satisfy the demand of the country.

Industry. Due to international investments and dependence upon the external market, industrial sector development was not stable till 2000. Since 2000, the industrial index increased up to 4%.

¹ These figures represent the final results of the census of October 2001, as announced in January 2003 (See at the US Department of State website).

Agriculture. After gaining the independence the 2/3 of the agricultural lands were privatized and about 335,000 farms were established within the context of the nation's transition to the market economy and reformation of the agricultural sector. However, before 2000, the marketability of the agricultural products was low. Currently, the growth of marketability of agricultural product is observed.

Transport and Communication. The transport sector development was unstable too, due to the changes in cargo transportations of different transport.

Within the recent years, there was an essential revival in the area of communication services due to introduction of a computer engineering system.

Construction. In recent years, the decline in construction of residential buildings was observed too. However, starting from 2000, there was a definite revival in this sector due to the constructions undertaken at the own expenses of the citizens.

Consumer and labor market. The state of the consumer and labor market in terms of job opportunities and public purchasing capacity is directly related to the fluctuations of the above-mentioned sectors and their stabilization since 2000.

Health. Decline of the economy of the country, deterioration of the environment and consequences of transition to market economy, had resulted in reduction of public health services and worsening of the health of the population.

3 Legal Framework of Environmental Impact Assessment

3.1 History of the Development of the Armenian Environmental Assessment System

The Soviet laws, such as the Land Code, Forest Code, Water Code, Law on Wildlife protection regulated the field of environmental protection of Armenia until the collapse of the Soviet Union.

There was no administrative body responsible for nature protection, and no law regulating the issues in this field. National laws were simply copied from the Central legislation. In 1988 the State Committee on Nature Protection, responsible for Nature Protection and Management was created. In 1992, the Ministry of Nature Protection and Environment of the Republic of Armenia (RA) was established, and among other laws and legislative acts, RA adopted "Principles of legislation of Republic of Armenia on Nature Protection", which set the frames of future laws and policies in this field. It was the Law where the necessity of the state ecological expertise was mentioned for the first time.

3.2 National Legal Acts on Environmental Impact Assessment

Legal provision regulating the different aspect of the EIA system currently in force in Armenia, are incorporated in a number of legal documents. See below a brief description of these documents.

Legislative Principles of RA on Natural Protection (hereinafter Principles) adopted by the Supreme Council² of the Republic of Armenia on July 9, 1991 stipulated the mandatory ecological expertise using the term "State Ecological Expertise" (SEE).

Article 16 of the Principles says that State Ecological Expertise is a mandatory measure for examining the conformity of urban development, economic and other activities with the ecological requirements of the country, determining the ecological risk levels of planned and ongoing activities, which should be done with the participation of experts and representatives of public. One of the positive aspects of the Article is that it stipulated the provision for inviting foreign experts for participation in the state expertise.

² This institution was inherited from the Soviet times and was functioning on the behalf of the Parliament. After adoption of the Constitution of RA in 1995, the legislative body was named National Assembly

The Principles, like the Act, state, "it is forbidden to implement projects without the positive conclusion of expertise". However, the Principles, defining general principle provisions, does not regulate and elaborate in detail the process of state ecological expertise from the beginning to the end, and in this regard, it only refers to the Ecological Expert Assessment Act, which is the currently enacted Law on Environmental Impact Expertise of Armenia.

In 1995 the Law of RA on Environmental Impact Expertise³ was adopted by the National Assembly of the Republic of Armenia. In order to harmonize the provisions of the Principles with the newly adopted Law, Article 16 of the Principles was amended by the Law of April 2 1996. The amended Article 16 for the first time uses the term "the environmental impact expertise", which is as a mandatory action to be implemented by the State. The purpose of the action is to define, prevent and minimize the impact of the proposed economic, social and other activities (construction, reconstruction, extension, modernization, liquidation).

Ecological examination, as well as Environmental Impact Assessment (EIA) in Armenia is regulated by the law on Environmental Impact Expertise (EIE), other legislative acts, as well as international agreements, which are presented in Annexes N1 and N2.

Law on Environmental Impact Expertise

In accordance with the constitutional requirement⁴ the Law on Environmental Impact Expertise was adopted in 1995, which was the first separate law for Environmental Impact Assessment. The mentioned Law regulates legal, economic and organizational bases of expertise of the environmental impact of the proposed activities and concepts. The main goal of the Law is to regulate proposed activities which are likely to have the impact on the environment. This document for the first time in the legal system of Armenia contained the notion of concerned communities as well as public hearing processes, which motivate the involvement of public in decision making on environmental issues. The Law provides the list of activities, which are subject to EIA.

- a) In the energy sector: nuclear plants and other installations; thermoelectric power plants; plants for the generation steam and hot water; hydroelectric power plants; alternative energy plants; geothermal plants; facilities for conversion, enrichment and production of nuclear fuel; spent nuclear fuel interim storage facilities; processing and final disposal of highly radioactive waste; processing and final disposal of radioactive waste from operating or shut-down nuclear power plants and from installations using radionuclide.
- b) In mining; extraction and processing of minerals; extraction and processing of coal, oil, natural gas; extraction and processing of uranium ore, decontamination of slag heaps and sludge ponds, rehabilitation of mines.
- c) In the chemical industry: production and processing of rubber, rubber items and other organic materials; oil-processing industry; production of inorganic acids, alkali and other products; production of detergents and other products of household chemistry exceeding a threshold value; production of toxic and pharmaceutical products; production of toxic products.
- d) In the construction sector: production of cement, lime and limestone; production of plates, bricks, reinforced concrete constructions and other construction materials.
- e) In metallurgy: production and processing crude iron, steel and non-ferrous metals; surface processing of metals exceeding threshold value.
- f) In the electric and radio-electronic industry: activities exceeding threshold values.
- g) In the wood-processing industry and production of cellulose and paper: activities exceeding threshold values.
- h) In light industry: production of textile, footwear and other goods in an amount exceeding threshold values.
- i) In food processing and fishery: activities exceeding a threshold value.

³ The Armenian version of the Law sounds as 'the Law of RA on the Environmental Impact Expertise' which is similar to the European and American understanding of the Environmental Impact Assessment. This generated a wide range of discussions and misunderstanding, and brought about an agreement for the necessity of development and adoption of the new law in this field.

⁴ Article 8 of the Constitution of RA states that the ownership rights must not interfere with the rights of other owners, the environment and the State., 1995

- j) In the urban construction sector: houses, buildings, complexes and other planned activities exceeding threshold values.
- k) In municipal services: facilities for treating sewage water.
- l) In waste processing: facilities for processing decontaminating and incinerating waste, decontamination and disposal of industrial waste.
- m) In nature protection: rehabilitation and restoration of natural ecosystem affected by human activities; introduction of new animal and plant species.
- n) In agriculture: amelioration activities (such as desalinization of soils, drainage of swamps, etc) in areas exceeding a threshold values.
- o) In forestry: restoration of forests: qualitative improvement of forests.
- p) In water supply: construction of reservoirs and dams, big canals, pumps and other water-supply facilities;
- q) In infrastructure: construction of highways and roads, tunnels, bridges, underground tunnels, railways, airports; long-distance gas, oil, steam, hot water and other pipelines, including ancillary facilities (pumping exchange and compressor stations) exceeding a threshold values; long-distance power transmission lines exceeding threshold value; protective engineering structures.
- r) In the service sector: trade centers and markets exceeding a threshold value; hotels and camping sites exceeding a threshold value; petrol stations; restaurants and cafeterias exceeding threshold value; bus and railway stations; crematoria and cemeteries.

The Law on EIE regulates also EIA for all activities planned for the future: concept papers, programs, complex schemes and master plans, regional planning documents and schemes for utilization of resources.

According to Article 6 of the Constitution of Armenia, international treaties, ratified by RA, are the integral parts of the national legal system, and have supremacy upon the national laws. Thus, the Law on Environmental Impact Expertise of RA and the International Convention on Environmental Impact Assessment in a Transboundary Context as well as its Protocol on Strategic Environmental Assessment are the main legally binding documents which entirely regulate this field.

Concept papers are strategic development documents for all sectors of economy (including the environmental sector), which according to the International Convention on Environmental Impact Assessment in a Transboundary Context and its Protocol on Strategic Ecological Assessment are subject to environmental evaluation and expertise. Unfortunately, the Law on EIE does not foresee expertise of the strategic ecological assessment of policies and legislation stipulated by the Protocol.

Order of the Government No. 345 dated October 30, 1996 on “State body authorized for conducting expertise of environmental impact”, designates the Ministry of Nature Protection of Armenia as the authorized state body for conducting expertise of environmental impact.

Order of the Government No. 386 dated December 20, 1996 on “Regulations for issuing certificates authorizing specialized expertise of environmental impact”, defines regulations for issuing certificates authorizing specialized expertise of environmental impact (hereinafter Certificate). According to this Regulation (hereinafter Regulation) specialized certificates are issued by the relevant committee formed by the authorized body (Ministry of Nature Protection) for this purpose and based on regulations defined by the latter. According to the Regulation, specialized certificates are issued to groups, scientists, highly qualified individual experts, who have submitted applications together with the corresponding documents in accordance with the Regulation. The relevant committee shall make a decision on issuing the specialized certificate within three months after submission of the application. Decisions of the committee shall be approved by the Minister.

According to the Regulation, certificates are valid for three years. The Regulation also defines the cases and conditions for halting and restoring the validity of the certificate, as well as its cancellation.

Order of the Government No. 115 dated February 25, 1998 on “Approving program of measures for implementing the commitments of the Republic of Armenia under a number of environmental conventions”. This order approved the 5-year program of measures for implementing the commitments of the Republic of Armenia under the Convention on Environmental Impact Assessment in a Transboundary Context.

Order of the Government No. 193 dated March 30, 1999 on "Limits of the scale of proposed activities subject to expertise of environmental impact" defines limits of the scale of proposed activities subject to expertise of environmental impact by sectors, in accordance with the second paragraph of Article 4 of the Law on EIE. Article 4 stipulates the list of activities, falling into the group of activities for which Environmental Expertise is mandatory, while their limit scales are defined by this Governmental Order. In other words, the Law on Environmental Impact Expertise (EIE) determines only the types of activities subject to ecological expertise, while the abovementioned Order determines the minimal productivity (scale) or other parameters (for example, planned territory), above which the proposed activity is subject to obligatory ecological expertise.

Order of the Government No. 701-N dated May 8, 2003 on "Conditions, timetables and procedures for reviewing or annulling expert conclusions on EIA" was adopted on the basis of the requirement of Section 5 of Article 11 of the Act. Article 11 stipulates, that the responsible body (Ministry of Nature Protection) may review or cancel the expertise conclusion in two cases: 1) if the new environmental legislation is adopted, and 2) if after issuance of the expertise conclusion new environmental factors – such as change of the status of territory (designation of the territory as an especially protected area), change of the status of elements of environment (atmosphere of populated areas, purpose of reservoirs, lands), change of sanitary specifications and etc. takes place. In both cases project proponent and/or representative are to revise and amend the EIA report or develop new EIA report and submit it to the MoNP for carrying out EIE (terms, instructions, sources of financing in these cases are envisaged neither by the law nor by the present Order).

The Annex "Main requirements regarding the composition and content of construction projects" to the Order of the Government No. 608 dated May 2, 2003 **"Regulations for development, expertise, endorsement, approval and changes of construction projects"** defines that the text part of the construction project shall also include EIA. This order regulates the structure and contents of projects, persons and organizations having the right on development, coordination, change and approval of projects, basic normative acts and by-laws, etc. The Appendix to the present Order supplements requirements to the contents of projects. More specifically these requirements relate to the necessity of environmental assessment of the projected activity.

Instruction of the Minister of Environment No. 28 dated March 6, 1997 "Regulations for the membership and activities of the committee for issuing specialized certificates for expertise of environmental impacts." According to the Law on EIE the authorized state body (MoNP) engages only licensed experts for development of the professional conclusion on assessment of environmental impact of the proposed activities. The present Instruction determines the functions and the structure of the Commission that makes decision on issuance and issues specified licenses.

Instruction of the Minister of Environment No. 79 dated July 22, 1997 "Functions of the committee for issuing specialized certificates for expertise of environmental impacts, as well as for approving conclusions of expertise of environmental impacts". The present Instruction makes amendments to the provisions of the previous Instruction, and at the same time determines the rules of revision and approval of the decision made by the authorized body on EIA, which is also to be carried out by the Commission issuing the certificates.

Instruction of the Minister of Environment dated October 28, 1997 "Temporary regulations for the activities of the committee for issuing conclusions of expertise of environmental impacts" approves the rules (instruction) for formation and activity of the above-mentioned Commission.

Instruction of the Minister of Environment No. 131 dated October 12, 1999 "Formation of the coordinating committee for implementing the commitments of the Republic of Armenia under the Convention on Environmental Impact Assessment in a Transboundary Context". The present Instruction establishes the Coordinating Committee, which is to develop the relevant activities within this Convention, study the necessity of legislative changes and coordinate various state bodies to meet the commitments of the country to the Convention.

Instruction of the Minister of Environment No. 151 dated November 13, 2002 "Regulations for conducting expertise of environmental impacts" determines the relations among the various units of the Ministry of Nature Protection as well as the procedure of expertise.

Instruction of the Minister of Environment No. 196 dated December 30, 2002 "Approving the statute of "Ecological expertise" state non-commercial organization and the list of property

transferred to the organization with the right to ownership.” This instruction was adopted after the Order of the Government No. 1846 dated November 21, 2002, establishing “Environmental Expertise” state non-commercial organization”. The present order stipulates the structure and the status of the authorized body carrying out environmental impact expertise. According to this Order the organization «Environmental Expertise» is a non-commercial state organization within the structure of the Ministry of Nature Protection.

Fees for expertise of proposed activities and concept papers, as well as norms for actual expenditures were approved by the **Minister of Environment on October 7, 1997 and reconfirmed on July 26, 2000 (Instruction No. 24) and March 13, 2003 (Instruction No. 73)**. The document determines criteria, according to which the payment for conduction of environmental expertise is to be estimated in accordance with the type of activity, its scale and geographical location. As the authorized body is not a budgetary organization, persons or organizations submitting application for carrying out environmental expertise, have to sign a contract with the authorized body and pay fees as determined by this Order.

The Administrative Violations Code and the Criminal Code of Armenia (1999)

Administrative penalties for the violation of the requirements of EIE Law is 50,000 drams (approximately \$90) for private persons, 100,000 drams (\$180) for officials, and 80,000 and 150,000 drams for repeated infringement respectively. No criminal punishment for non-execution of provisions of the EIA related legislation is envisaged by the legal acts of the Republic of Armenia.

It should be noted that the drafts of the following legal acts have been developed and submitted to the Government of Armenia for discussions:

- Draft Order of the Government “The list and volume of the documents required for expertise of environmental impacts, and their content”; and
- Draft Order of the Government “Procedures for public hearings related to expertise of environmental impacts”.

3.3 Other Laws Related to the Environmental Impact Assessment

There are some "sectoral" legal acts that establish links with the main law of the corresponding field. Some “sectoral” legal acts, mainly recently adopted, such as the Water Code, partially the Land Code, envisage the state ecological assessment (or expertise). Others obligate the project proponent (investor) to apply for other types of licenses, permits, limits, etc. (for instance, permit for logging, limits for air emissions, permit for water use, disposal of waste, permit for use of mineral resources, etc.).

The Forest Code of Armenia stipulates the requirement for state ecological expertise, which has been adopted by the Supreme Council of the Republic of Armenia (November 1, 1994). Article 14 of the Code defines that during allocation, design, construction and operation of new and reconstructed enterprises, constructions and other facilities, as well as introduction of new technologies, which might have an impact on forests and their regeneration capacity, the measures for protection of forests from negative impacts should be planned and implemented. It should be done on the basis of state ecological expertise. Effectiveness of planned activities in forestry or the necessity of these activities is to be determined by the results of environmental expertise.

- ***The Water Code of Armenia*** was adopted by the National Assembly on June 4, 2002;

Paragraph 3 of Article 10, defines the development of “principles and norms for ecological-economic justification of the assessment of impacts on water resources resulting from economic activities”. Paragraph 4 of Section 6 of Article 121 of the Code says, that within one year after publishing of the Code the Government or its authorized body shall approve the “Regulations for assessment of the impacts of economic activities on water resources”.

In order to ensure the implementation of the requirements of the mentioned Articles, the Government of Armenia has adopted the corresponding Order on August 14, 2003 “Approving regulations for assessment of the impacts of economic activities on water resources” (No. 1110). The Order regulates the characteristics and procedures for assessing the impacts of economic

activities on water resources, and adopts the quantity of pollutants, permissible limits of hazardous substances and the duration of their impacts as a basis for impacts assessment.

The managing body for water systems, i.e. the Water Systems Committee of the Republic of Armenia is designated by Paragraph 6 of Article 12 of the Code as an organizer of expertise for investment projects relating to water systems, and by Paragraph 8 of the same Article as a body ensuring preliminary expertise for project documents on construction and reconstruction of facilities having an impact on water systems.

Article 30 of the Code puts forward the requirements for environmental impact assessment (including public awareness), which shall be conducted with regard to the process of issuing water use permits. The mentioned Article stipulates that the evaluation of the application submitted to the water resources management and protection body for receiving water use permit includes the definition of special conditions on water use, and points out the necessity of the additional information and EIA foreseen by the Water Code. In cases defined by the Act, the person applying for water use permit shall submit an EIA. If necessary, the timetable for reviewing the application is adapted to the timetable for environmental impact assessment.

The same requirement is stipulated by Article 43 of the Code with regard to the process of issuing permits for the use of water systems.

The requirement of environmental impact assessment according to Article 31 of the Code is among the main requirements for issuing the permit on water use by relevant bodies.

Paragraph 4 of Section 2 of Article 16 of the Code stipulates that the National Water Program should include the description of water use by sectors in water basins management regions and the comprehensive impact assessment of their consequences on water resources distribution.

According to Section 3 of Article 103 of the Code "persons with the corresponding licenses conduct the expertise of project documents for construction and reconstruction of facilities with an impact on water systems or water resources".

It must be noted that some provisions relating to expertise defined in the Water Code are in contradiction with the principles of environmental impact legislation.

- Only Article 28 of the ***Mining Code of Armenia*** adopted by the National Assembly on November 6, 2002 refers to state ecological expertise in the mining sector, even with conditions contained in Paragraph 4 of Article 28. The paragraph 4 of the mentioned Article defines that "state expertise can be conducted at any phase of the geological study of the mine site in accordance with regulations, if the results of expertise allow for objective evaluations of the quantity and quality of minerals, their industrial significance and technical, hydro-geological, environmental and other conditions".
- Article 60 of the ***Law on "Studies of minerals for industrial purposes and their exploitation concession"*** adopted on November 5, 2002 defines that "while issuing any right on minerals, the authorized body of the Republic of Armenia, based on the results of environmental impact expertise conducted in accordance with regulation defined in the legislation, takes into account the impact on air and water basins, soil, fauna and flora, as well as its cultural, architectural, archeological, historical and geographical specifics".
- ***The Land Code of Armenia*** adopted on May 2, 2001 by the National Assembly. The purpose of the Land Code is to regulate the land and related matters; the environmental impact assessment is not in the subject of the Land Code. It refers to environmental protection or permissible limits in a number of Articles (for example Subparagraphs 1 and 5 of Paragraph 2 of Article 8, Paragraph 7 of Article 36), however explicit requirement for ecological expertise in order to evaluate negative impacts on soil conditions is expressed only in Paragraph 2 of Article 37 of the Code.

In order to bring about the effective enforcement of its provisions Land Code makes references to the following Governmental orders, which serve as mechanisms for its implementation.

Order of the Government No. 479 dated July 30, 1998 "Regulations for implementing urban development activities in case of absence of approved urban development project documents" (together with its future amendments) establishes the mandatory ecological expertise requirement

regarding new land uses, according to which all proposals on new land uses are subject to ecological expertise required by the Environmental Impact Act of Armenia;

Paragraph 12 of the Order of the Government No. 613 dated May 8, 2003 "Regulations for land allocation and urban development activities on lands of natural protected areas and forest reserves of Armenia" stipulates that "urban development activities are sanctioned in natural protected areas only if positive environmental and urban development expertise conclusions are provided in accordance with the Armenian legislation".

Paragraph 9 of the Order of the Government No. 608 dated May 2, 2003 "Regulations for development, expertise, endorsement, approval and changes of construction projects" defines that after completion of project development the project proponent presents the project for expertise in accordance with the regulations stipulated in the Order of the Government No. 96 dated February 2, 2002 mentioned in point 1.6 of section II of this report, i.e. presents the project for comprehensive, including environmental, expertise. The annex "Main requirements from the composition and content of construction project" of the same Order No. 608 defines that the text part of the construction project should also include the EIA.

The party placing the order is required to conduct mandatory comprehensive expertise in accordance with regulations approved by the Order of the Government No. 96 dated February 2, 2002 also based on Paragraph 21 of the Order of the Government No. 609 dated May 2, 2003 "Regulations for development, expertise, endorsement, approval and changes of master plans in urban and rural communities of Armenia". It defines that "The party placing the order, after the end of activities, presents the master plan to the person with a corresponding license for comprehensive expertise". The same Paragraph defines that "the party delivering the work can present project documents for expertise, if such a provision is made in the official project contract".

It must be noted that this contradicts the Expert Assessment of Environmental Impact Act of Armenia and itself. Since: 1) nobody is able (be it a natural or legal person) to carry out a comprehensive, including environmental, expertise by itself, and have the corresponding licenses; and 2) if the project commission contract foresees that documents should be presented for expertise, the party delivering the work should do it as a part of executing the contract and consequently it cannot be decided on an arbitrary basis, the possibility of which is provided to the party by the formulation "can present" in the mentioned Paragraph.

The requirement to conduct comprehensive expertise in accordance with regulations approved by the Order of the Government No. 96 dated February 2, 2002 is also stipulated in Paragraph 13 of the Order of the Government No. 997 dated August 8, 2003 "Regulations for development, expertise, endorsement, approval and changes of master plan outlines and projects". And Paragraph 3i of Annex No. 2 "Main requirements from the composition and content of master plan projects" of the same Order No. 997 requires that, in accordance with provisions defined in the master re-settlement plan of Armenia, "EIA and comprehensive environmental protection plan" be included in the composition of territorial master plan".

Similar expertise and public awareness requirements are put forward also in the Order of the Government No. 408 dated May 1, 2001 "Regulations for development, expertise, endorsement, approval and changes of zoning of settlement territories". However, this Regulation, in particular its Paragraph 13 stipulates that "expertise is conducted based on the contract between the party placing the order and the party conducting the assessment".

This formulation implies that if there is no contract between the party placing the order and the party conducting the assessment, expertise will not be done.

Paragraph 14 of the Regulation also refers to public information on zoning projects. According to this Paragraph "the party placing the order should inform the public on the positive expertise conclusion obtained for the zoning project in accordance with the Order of the Government No. 660 dated October 28, 1998 "Regulations for information provision on planned changes to the living environment and participation of representatives from the public in discussions and decision-making processes regarding publicized urban development programs and projects" (with its changes adopted by Order No. 1001 dated August 8, 2003).

- It shall be noted that Orders of the Government are based on provisions of *the Law on Urban Development* adopted on May 5, 1998 (Articles 10, 13, 14, 17, 30, etc.). *Order of the*

Government No. 96 dated February 2, 2002 “Approving regulations for expertise of urban development documents” defines the regulations for examination of urban development documents, where the concept of complex examination urban development documents is also stipulated.

Urban development design documents, which require the implementation of environmental protection, emergency situation prevention, industrial safety, rational use of underground resources and other necessary measures, are subject to complex expertise. At the same time the Regulation stipulates (Point 5) that complex expertise (including urban development, ecological, seismic norms, safety etc.) in cases defined by the legislation is to be conducted with the participation of stakeholder bodies authorized to issue the corresponding ecological expertise conclusions. While according to Point 7 of the same Regulation, organizations conducting complex expertise also take into account the conclusion of ecological expertise during formulation of the expertise conclusion. The Regulation defines a 45-day period for the complex expertise.

According to the above-mentioned, during the implementation of expertise and formulation of the conclusion, the conclusion of ecological expertise should be taken into account as defined by the law. Very often, however, urban development officials and specialists do not give adequate consideration to this requirement assuming that the ecological expertise conclusion should be issued during the comprehensive expertise, which principally contradicts the Law and makes room for unnecessary disputes and causes differences in the ways the processes are conducted.

At the same time, it must be noted that the Regulation includes contradictory provisions as well as provisions contradicting the Law. In particular:

The fact that in accordance with Point 7 of the Regulation the conclusion of ecological expertise should be taken into account during the formulation of the comprehensive expertise conclusion and the definition of the deadline for comprehensive expertise in Point 16 at 45 days contradict each other, since the Law allows for 180 days for the completion of ecological expertise.

- **The Law on Energy** (adopted on March 7, 2001) refers to environmental impact issues with Paragraph 2 of Article 6 stipulating that “Issues of nuclear energy, its environmental impact and safety are regulated by international agreements and the corresponding legislation of the Republic of Armenia”.
- Environmental protection provisions are included in **The Law on Safe Use of Nuclear Energy for Peaceful Purposes** (adopted on February 1, 1999) through its introduction and Articles 3, 7, 17, 23 and 33. Provisions relating to expertise are stipulated in Articles 10 and 18 of the Law, according to which: (i) Local self-governing bodies implement authorities in the area of nuclear power use delegated to them by the State. They shall primarily “ensure the participation of community residents in public discussions and expertise of projects of facilities for the use of nuclear energy in the territory of their community” (Article 10 Para. A); and (ii) In the area of nuclear energy use, it is also mandatory “to conduct expertise of facilities for the use of nuclear energy, their projects and other documents” (Article 18.2 e).
- Articles 22 and 45 of the **Law on Aviation** (adopted on May 20, 2002) refer to environmental protection issues. Article 22 defines that “Airplanes operating in the Republic of Armenia should be fit for flying and correspond to environmental protection rules. Within the context of this Law, airplanes are considered fit for environmental protection if they are designed, manufactures, equipped and serviced in correspondence with the existing limits on noise and emissions and other environmental protection requirements”. Article 45 defines that “Permits for exhibition air performances and air competitions and other special activities are issued in accordance with regulations defined by CAA (Civil Aviation Administration). Permits are issued if exhibition air performances and air competitions and other special activities are not harmful to the environment and do not threaten the life and health of people on the ground.”
- Articles 10, 11, 19, 20, 21, 22, 23, 24, 25 and 28 of **The Law on Lake Sevan** (adopted on May 15, 2001) refer to the reduction, prevention and prohibition of harmful impacts on the Lake Sevan ecosystem, as well as to issues of the corresponding expertise to be conducted for the mentioned purpose.

Paragraph e) of Article 11 of the Law stipulates the development of short, medium and long term programs for restoration, protection, regeneration and natural development of Lake Sevan ecosystem and the state policy principle for ensuring their mandatory state ecological expertise, as well as other expertise stipulated by the Law. Paragraph f) of Article 22 of the Law includes EIA in the list of main requirements for the restoration, protection, regeneration and use of the lake's ecosystems.

“Before conducting activities or introducing technological changes, enterprises should present the corresponding declaration to the authorized body. Within one month after receiving the declaration, the authorized body, based on expertise defined by the Law, makes a decision on permitting or banning the given activity” – as stipulated by Article 25 of the Law.

- **The Law on Atmospheric Air Protection** (adopted on November 1, 1994) also includes provisions relating to expertise of negative impacts. Article 5 of the Law includes “organization and implementation of state expertise of negative impacts on atmospheric air” in the list of the functions of the Government of the Republic of Armenia.

Article 21 of the Law defines “Selection of the location of all enterprises, constructions and other facilities having an impact on atmospheric air and their reconstruction projects are subjected to ecological expertise by the special authorized bodies for environmental protection with the participation of non-governmental organizations and independent experts in accordance with regulations defined in Armenian legislation”.

- **The Law on the Sanitary-Epidemiological Safety of Population**, which was adopted on November 16, 1992, puts forward requirements for sanitary-hygiene expertise.

Article 23 of the Law stipulates “Facilities of nuclear energy and those having emissions and discharges of chemical and biological substances into the environment, as well as allocation, reconstruction and final approval for operations of facilities in zones with ecological disaster status, introduction of new unprecedented technologies and other cases defined by Armenia's legislation are subject to sanitary-hygiene expertise”.

3.4 International legal documents on Environmental Impact Assessment

Environmental Impact Assessment in Armenia is also regulated by international environmental conventions and protocols.

In order to determine the level of harmonization of EIA related provisions of the national legislation with international conventions, some conventions were analyzed, the list of which is presented below.

No	CONVENTION, PLACE AND DATE	In force	Ratified
1.	Convention on Biological Diversity (Rio-de-Janeiro, 1992)	21.03.1994	14.05.1993
2.	UN Framework Convention on Climate Change	1992	14.05.1993
3.	Convention on Long-range Transboundary Air Pollution (Geneva, 1979)	1983	21.02.1997
4.	Convention on Environmental Impact Assessment in a Transboundary Context (Espoo, 1991)	10.09.1997	21.02.1997
5.	Convention on the Transboundary Effects of Industrial Accidents (Helsinki, 1992)	1992	21.02.1997
6.	Convention on Combat Desertification (Paris, 1994)	27.09.1996	02.07.1997
7.	Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal (Basel, 1989)	05.05.1992	09.1999

8.	Convention for the Protection of the Ozone Layer (Vienna, 1985)	1985	1999
	Montreal Protocol on Substances that Deplete the Ozone Layer (Montreal, 1987)	1987	1999
9.	Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters (Aarhus, 1998)	25.06.1998	14.05.2001

During the analysis and comparison of provisions of the international conventions with the legislation of Armenia, significant contradictions were not revealed, however many provisions of the international conventions are not brought in national legislation. Thus, it is necessary to note, that at present amendments to many laws (Water code, Land code, Law on Minerals) as well as the new draft law on EIE, where many requirements of the international conventions are taken into account are under development. Moreover, a number of changes are made to the work plans of many subordinated bodies of MoNP in accordance with the international conventions, in particular Espoo, Helsinki, Basel and Aarhus conventions.

4. Administrative Framework

The EIA system can play an important role in sustainable and harmonious development of the society. From this standpoint one of the major functions of the government is to ensure effective cooperation among all stakeholders of the system. Clear and controllable relationships between the stakeholders, could be considered as an obligatory condition of effectiveness of the whole system.

Although a process of permanent development and improvement of EIE systems has been taking place since the adoption of the law on EIE in Armenia, significant success is not achieved. It should also be mentioned, that the infrastructure of economical (not State) component of this process practically has not developed so far. In other words, there is very limited number of specialized organizations carrying out EIA and developing the EIA reports in Armenia and even these organizations are deficient in necessary technical and human resources. No increase either in number or experience of these companies is being observed.

4.1 Stakeholders of the EIA Process According to the EIE Law

Legal, economic and organizational relations between the stakeholders are regulated by the Law of RA on Environmental Impact Expertise, the Article 1 of which defines the stakeholders in the EIE process. They are:

Authorized body - (article 1, point 3) - state body, which carries out expertise of environmental impact of proposed activity and conceptual programs.

Representative - (article 1, point 4) - organization or person, who develops the concepts (general plans, programs) and submits them for examination.

Initiator - (article 1, point 6) - legal entity or natural person, as well as the enterprise, which has not a status of legal entity, intending to implement any proposed activity.

Authorized persons - (article 1, point 8) - specialists, institutions, enterprises, organizations and individual businessmen, which had obtained professional competence certificates from authorized body for development of professional conclusion.

Concerned community - (article 1, point 9) - population of marzes, communities, who could suffer from the probable environmental impact of the proposed activity.

4.2 Roles and Tasks of Stakeholders

Businessmen or companies and enterprises, public organizations as well as natural person can act as initiators of any activity. Local and international funds, local administrative authorities and the central Government of the country can be initiators of conceptual programs.

According to the point 1 of article 2 of the Law on “Environmental Impact Expertise” Environmental Impact Expertise is an obligatory activity carried out by the State. According to the Decree 345 (done on October 30, 1996) the Ministry of Nature Protection is a state authorized body, implementing environmental impact expertise. “Environmental Expertise” - a state non-commercial organization (SNCO) operates within its structure. It is subordinated to the Minister of Nature Protection and organizes environmental impact expertise activities and prepares drafts of expertise conclusions.

During the expertise of documentation of proposed activities SNCO “Environmental Expertise” collects opinions of interested state bodies (Ministries of Urban Development, Health, Agriculture, Transport, Economic Development and Trade, municipalities) and departments of the MoNP and gets professional conclusions from certified experts in order to make a professional decision. On the basis of received documentation the draft conclusion is to be composed and presented to the commission of MoNP for discussion. Then it is to be transferred to the Minister for approval.

In case of positive decision of Environmental Impact Expertise, the State Environmental Inspection, which is also located within the structure of the Ministry of Nature Protection, undertakes the monitoring of the work being done by the initiator. The Inspection checks the fulfillment of provisions (conditions) of the conclusion of expertise.

From the very beginning, the initiator submits the preliminary information to the SNCO “Environmental Expertise” of the Ministry of Nature Protection. Based on the preliminary information (the initial planning stage of the project) the SNCO “Environmental Expertise” makes a decision on the necessity of carrying out the environmental impact assessment.

After making the decision on carrying out the Environmental Impact Assessment, the Initiator on its own or with involvement of the specialized organizations develops the documentation necessary for carrying out the Expertise of Environmental Impacts (EVOC)⁵. Developed documentation is to be submitted to the SNCO “Environmental Expertise” of the MoNP for examination. More detailed information about the structure of the documentation is given in the section 5.3 while regulations (instructions) for carrying out the Environmental Impact Expertise (EIE) is provided in the section 5.2. The final decision on the results of Expertise is to be made by the Commission, which is responsible for approving EIE. The commission is headed by the Minister of Nature Protection and its conclusion is to be based on the draft decisions submitted by the SNCO “Environmental Expertise”.

The control on implementation of the provisions of the documentation (report on EIA) approved by the Minister of Nature Protection is to be undertaken by the State Environmental Inspection of MoNP as it was already mentioned.

5. The Process of Environmental Impact Assessment of Armenia: Legislation and Practice

5.1 Legislation

As it was mentioned above, the Law on EIA in Armenia does not exist and therefore relations in EIA process are regulated mainly by the Law on EIE and partly by other statutory acts mentioned in the section 3.

5.1.1 The Purposes and Principles of the Law on EIE

The main principles the Law on EIE is based on are:

- Human right to be healthy, to live and work in a healthy environment;

⁵ EVOC is a Russian abbreviation for Environmental Impact Expertise (EIE)

- Necessity of rational, complex and reasonable use of natural resources;
- Maintenance of ecological balance and preservation of all plant and animal species.

The Law on EIE is based on the principles of: (i) Scientific validity; (ii) Legality and (iii) Publicity.

5.1.2 The Objectives of EIE

The purpose of the EIE is to make (i) An analysis of a proposed activity or conceptual program as well as their alternative opportunities and reasonability, taking into account all environmental concerns; (ii) An estimation of possible impact on the environment of a proposed activity, conceptual programs and alternatives; (iii) Revision of a degree of possible impact on the environment of proposed activity, conceptual programs and alternative opportunities, as well as integrity and accuracy of the analysis of consequences of possible impact, sufficiency of the prevention and mitigation measures; (iv) Rational use of natural resources; (v) Prohibition of any proposed activity, with a potential of irreversible harmful impact on the environment; (vi) Promotion of public participation at all stages of EIE.

5.2 EIA Stages

Until the end of 2002, expertise used to be carried out in accordance with Law on Environmental Impact Expertise and the provisions of the Order of the Minister of Environment dated October 28, 1997 on "Temporary regulations for activities of the commission of the Ministry of Nature Protection responsible for issuing EIA conclusions". Since the adoption of the Order No. 151 (November 13, 2002) of the Minister of Nature Protection the expertise is carried out according to the mentioned order.

The EIE process consists of two main stages. At the first stage, the initiator submits preliminary documentation on the proposed activity to the authorized state body - MoNP. After revision of the documentation the authorized body takes a decision about the necessity of carrying out EIE. If EIE is necessary, the initiator submits the required documentation to the same body. At the second stage EIE is to be carried out according to the procedure of Environmental Impact Expertise. All steps of EIE are presented below in more detail:

- Initiator, who intends to implement any activity, presents the relevant documents (3 copies) to the Ministry of Nature Protection of RA.
- The documents with the instructions made by the Minister are to be transferred to the "Environmental Expertise" SNCO within three days.
- Within six days after receiving the relevant documents the "Environmental Expertise" SNCO informs the leaders of concerned communities and public about the initiative of implementation of a proposed activity.
- Within 30 days after receiving the documents presented for expertise the "Environmental Expertise" SNCO decides whether to implement or not the environmental assessment expertise on the basis of assessments and informs the initiator about the decision.
- In case when the implementation of Environmental Assessment Expertise is necessary the initiator submits all required documents (3 copies) to the "Environmental Expertise" SNCO.
- During five working days after receiving the documentation the "Environmental Expertise" SNCO provides the leaders of marzes and communities, relevant state bodies, concerned community and licensed experts with copies of these documents.
- The Head of the "Environmental Expertise" SNCO designates an expert or a group of experts to carry out the process of expertise.
- Within 4 days the "Environmental Expertise" SNCO on the basis of normative-legal relevant documents and environmental assessments defines (i) the scale of impact of activity on the environment and concerned communities; (ii) the capacity of expertise process, duration, and the price of services.
- The Head of the "Environmental Expertise" SNCO signs a contract with the Initiator on implementation of expertise.

- The “Environmental Expertise” SNCO provides the leaders of marzes or communities with the documents immediately and then during 30 days studies the documentation and organizes public hearing together with the initiator.
- If the number of concerned communities is more than one, the “Environmental Expertise” SNCO defines the place of hearing. (In fact, meetings and hearings are organized by the initiator, while the SNCO “Environmental Expertise” defines which communities may be exposed to potential impact).
- “Environmental Expertise” SNCO can officially address the state bodies and relevant departments of the Ministry to get professional opinions if necessary.
- After 30 days, the leaders of concerned community present public and their opinions to the “Environmental Expertise” SNCO.
- If the company does not get any opinion within the established period of time the opinion on documents will be considered as positive.
- If there are gaps and omissions in documentation, and additional information is required for expertise, the “Environmental Expertise” SNCO officially requires the initiator to submit revised documents within defined time terms. In this case, the expertise process is considered as suspended.
- In case the documents are not submitted within the defined time terms, the “Environmental Expertise” SNCO officially informs the State environmental Inspection of the Ministry of Nature Protection of RA about it.
- Within 30 days after receiving a professional conclusion the “Environmental Expertise” SNCO provides public hearings.
- Within 20 days after public hearings the company prepares the draft conclusion of expertise on the basis of professional conclusions and protocols of public discussions and submits it to the relevant ministerial departments. These agencies issue their opinions regarding the draft conclusion of expertise in writing.
- If there are no opinions presented within defined time terms, it is considered as positive.
- In case of disagreement between various divisions of the Ministry of Nature protection (MoNP), the SNCO “Environmental expertise organizes preliminary discussion to be attended by the representatives of these divisions, as well as by other experts. Only after achieving the common agreement, the draft decision is to be submitted to the Commission responsible for approval of the decision of expertise.
- The Head of “Environmental Expertise” SNCO submits the conclusion to the Minister for approval.
- After ministerial approval the conclusion of expertise is to be given to the initiator.

5.3 Reporting

The Article 5.1 of the Law on EIE stipulates the following:

- Forecast, description and estimation of possible direct and indirect impact of proposed activity on the environment
- Alternative decisions, including: alternative of the zero option (exception of the proposed activity), comparative analysis and selection of the best option;
- Measures for preventing or decreasing possible environmental impact of the proposed activity;
- The detailed analysis of economic and social development as a result of selection of the zero option.

According to these provisions, the Article 6.2 sets requirements to the contents of the application (the preliminary documentation) on the proposed activity. Preliminary documentation should include the following information:

- Specifications on the proposed activity, including the name, location, objectives, characteristics (features), volumes, the dates of commencement and completion;

- Required land, power and water resources and a source of raw materials;
- A brief description of technical and technological decisions;
- Basic data on possible pollution of separate elements of the environment;
- The decision of local authorities on allocation of the land area;
- The decision of local authorities about compliance of the proposed activity with the plan of development of the region;
- The decision of the corresponding state structure, or a license (if necessary).

According to Article 7.2, the list of documentation and volume of information should be determined by the decision of the Government.

5.4 Screening

Paragraph 1 of Article 4 of the Law on EIE defines the list of proposed activities subject to environmental impact expertise. As it was already mentioned, preliminary documentation of all types of activities given in the list of the mentioned Article should be submitted to the authorized body for consideration. At the stage of preliminary consideration the documents should cover general data on the proposed activity, its productivity, location and expected impact on the environment. MoNP considers the submitted documentation and makes a decision about the necessity of EIE.

Pursuant to Article 4.2, the Decision #193 of the Government (March 30, 1999) approves the list of limiting values for carrying out of EIE. Limiting values of such parameters as productivity, volume, occupied territory, etc. are given in the list. Proposed activity with higher parameters shall undergo EIE.

Article 4.4 also establishes that the authorized state institution may decide to carry out EIE even in cases when the proposed activity does not exceed the established limiting values, on the basis of:

- Proposals of local authorities of a region where the activity is planned;
- Proposals of the ministries and other state structures;
- Proposals of public organizations and initiative groups of the public;
- Own initiative.

The Article 15.1 of the Law on EIE provides the list of the conceptual programs subject to obligatory EIE.

5.5 Decision-making

The basis for decision-making on EIE is:

- The professional decision of the certified experts invited by the SNCO “Environmental expertise” for assessment of considered projects (Article 9);
- The decisions and recommendations of MoNP departments and other state institutions (Article 8);
- The conclusions and recommendations of local authorities (Articles 8 and 10);
- Materials of public hearings (Article 8)

Based on the specified materials the SNCO “Environmental expertise” develops the draft decision on EIE, which is examined by the Commission for licensing of experts and approved by the Minister of Nature Protection.

The decision on EIE becomes invalid if proposed activity is not initiated within one year from the date of issuance of the permit.

5.6 Monitoring, Control and Supervision

Paragraph 7 g) of Article 9 of the Act states that during the expertise the recommendations on measures for prevention or reduction of negative environmental impact of the proposed activity, as well as for implementation and operation of the proposed activity shall be taken into account. This statement can be understood as an indirect provision for monitoring.

In addition, Paragraph 2 e) of Article 16 of the Act directly stipulates that the monitoring is to be conducted by the authorized body - the State Environmental Inspection at the Ministry of the Nature Protection. The control and supervision over the proposed activity can be implemented only after the launch of the construction work.

According to Article 12 of the Act, realization of the proposed activities could be started only after the positive conclusion of expertise. In case of negative conclusion the implementation of the activity is not allowed. Although the Law on EIE does not state directly that a positive conclusion might include some conditions or requirements. It says that "in case of violation of conclusion conditions the authorized body - State Environmental Inspection shall partially or totally stop, suspend or ban the implementation of the proposed activity until the conditions of the expertise conclusion are met", and also the authorized body has the right to control the implementation of the requirements of the conclusion of expertise.

According to the internal regulations of the Ministry of Nature Protection the "Environmental expertise" SNCO does not have the authority to control and supervise. This is the responsibility of State Environmental Inspection of the MoNP, which is to be provided with one copy of the conclusion of expertise. On the basis of this document, the State Environmental Inspection undertakes planned and regular environmental supervision activities, including supervision over implementation of conditions and requirement, determined in conclusions and applies the corresponding sanctions if necessary

5.7 Exemption from EIA

The Law on State and Civil Servant Secrets (1996) stipulates the fields closed for EIE, for example: fields of military defense, military industry and related fields, national security, strategic planning. Paragraph (b) of Article 10 of the mentioned Law specifies the cases, which shall not to be considered as State or Civil Servant secrets. Paragraph of the Article is applicable for the field of nature and environmental protection.

5.8 Liability for Violation

Responsibilities for violation of the EIA processes are defined in the Administrative Violations Code and the Criminal Code.

The Law on Responsibilities for Violations in Urban Development was adopted on April 28, 1999. Article 12 of the Law stipulates that if violations of conditions of approved projects, standards, procedure, and conclusions of technical supervision do not present a danger for human beings and the environment and can be eliminated without suspension of the construction process, the legal sanction for the violations shall be a penalty at a rate of 50 minimal salaries.

If the above mentioned violations present dangers for human beings and the environment and they cannot be eliminated without suspension of the construction process, legal sanctions for the violations shall be a penalty at a rate of 300 minimal salaries and the suspension of the certificate for construction.

There are no sanctions considered in the Armenian legislation for the violations in the field of Environmental Assessment Expertise. The Administrative Code of RA, Art. 94.1

5.9 Transboundary Context

Article 14 of the Law on EIE titled “Expert assessment of activities having transboundary impacts” defines that the drafting of expertise conclusions by the authorized body regarding a proposed activity with environmental impacts outside the borders of the Republic of Armenia, shall be guided by the requirements of international treaties adopted by the Republic of Armenia and the expertise conclusion shall be approved by the Government of the Republic of Armenia.

The permissible limits, which have been copied from the Convention on EIA in Transboundary context, can also be used for conducting EIA together with neighboring countries regarding facilities with transboundary impact, and they shall have a status of a normative-legal act. Thus, the permissible limits of the scale of activities defined by the Act, shall not have a mandatory, but rather a consultative nature.

5.10 Public Participation

According to the Law on EIE, public participation shall be ensured at various stages of the EIE process. At the initial stage, within 7 days after receiving the application about intention (preliminary documentation) from the initiator, the authorized body (MoNP) informs about it the local governing body and the population of the community (Article 6.3). Local governing body of the community and the initiator organize public hearing within 15 days (Article 6.4).

The second public hearing is to be organized at the stage of implementation of EIE (after making a decision on the necessity of EIE), when the authorized body directs a copy of the received documentation to the heads of community, where the proposed activity will take place. The local governing body of the community together with the initiator and the authorized body organize public hearings within 30 days (Article 8.2).

The third hearing is to be arranged after the professional decision on EIE is made by the certified experts. The authorized body has to organize public hearings with participation of representatives of other state structures, regional authorities and individual experts within 30 days (Articles 10.1-10.4).

6. Analysis of the Effectiveness of Armenia’s EIA System

6.1 External Factors

The effectiveness of the EIA system depends on various factors. First of all it depends on public demand and the willingness of state authorities to introduce the better system. The fact that this system has been created and developed in countries with established democratic systems demonstrates that the EIA system can operate effectively only along with the process of democratization of the society.

6.1.1 Democratization of Society

The rate of formation of democratic institutions in Armenia is slow. This is one of main reasons for ineffectiveness of the EIA system. The State authorities repeatedly declare about their commitment to the European values and their aspirations for integration into the European society, however many arrangements directed towards the increase of the level of publicity and accountability of state authorities, especially the permanently declared struggle against corruption, are not actual.

The main index of actual changes is an increased role of the population in forming governmental bodies through the elections of the President and the Parliament of the country and bodies of self-governance. However the elections are being carried out with violations, with use of administrative resources, involvement of criminals and subornation of voters. Although there are many promises of the authorities to call to account the real organizers of various types of adulteration, only some insignificant infringers have been punished. Legislation, regulating election processes, has been reformed several times, the principles for assembling election commissions have been changed and the number of observers has been increased, however the real progress is not achieved yet.

The fact that many people were ready to vote for a mere pittance (recorded by many foreign observers), can be considered as one of important factors.

6.1.2 Effectiveness of State Management

Armenia is behind the majority of CIS states by many indices characterizing the level of well-being of the population (CIS Statistical Committee, Annual Report, Moscow 2002). A clannish character of economy, concentration of main financial and economical resources in possession of a limited number of people, lack of real competition is characteristic of the economy of the country. The coalescence of large-scale business and authorities is taking place. Even government oriented media speaks about the scales of the “shadow” economy and unaccountability of oligarchic elite to the tax and other state regulating bodies.

Despite of permanent reforms the functioning of the system of state management is not effective; enforcement bodies are completely controlled by high officials, especially the juridical system gives rise to unfavorable criticism. Although recently certain changes have been made in the juridical system under the pressure of European organizations, there is no real independence yet and in many cases a person or party opposing the state authorities end up losing. Even in some rare cases when a fair verdict is reached, the state authorities can ignore the finding of court with impunity. In support of above stated numerous surveys show that the juridical system is considered to be the most corrupted.

Many analysts point to the awkwardness and ineffectiveness of the State machinery. The existence of numerous ministries and agencies, excessive number of officials, unclearness and duplication of functions serve as a basis for corruption. They also hamper the effectiveness of operation of the whole system of State management and mainly serve to satisfaction of personal needs of officials.

6.1.3 Corruption

The struggle against corruption is a main theme of all statement of the President, members of the Government and the Parliament. At almost all seminars and forums the measures for reduction of the level of corruption in the State machinery, the measures for creation of economic, administrative, and moral preconditions against this phenomenon is being discussed. The Government receives grants from various international organizations for development of measures against corruption. The President assigned a special advisor in corruption matters; in 2004 a special council (commission) for the struggle against corruption has been created on the basis of the Presidential Decree.

Most likely the leaders of the State are really committed to reduce the level of corruption. In his numerous statements the Special Advisor of the President points out the main direction of this struggle: creation of the relevant legal environment, creation of economical conditions, transparency in officials' activity, public control through media, creation of an independent juridical system.

Many respondents point out the following main reasons for corruption: impunity of state officials at almost all levels, low salaries in budgetary sector, excessive differentiation of social groups, ineffective and unfair juridical system, and tolerance of the majority of the population to the corruption phenomenon. Many respondents consider that the main reason of corruption should be quested in unfair and nontransparent elections resulted in election of officials, who are not able to fight against corruption even having an aspiration to do so.

6.1.4 Economic Condition

Among objective reasons having impact on the effectiveness of EIA system the low level of economic activity should be noted also. Although during recent years the Government permanently reports about unexampled rates of economic growth there is absolutely different situation in reality. Superficial signs of the growth and revival of economy mainly is the result of activity of foundations being funded by foreign donor organizations and especially by the representatives of the Armenian diaspora.

High level of unemployment and low salaries force many people to look for a job in foreign countries. According to the modest calculations more than 1 million people (more than one third of the population of Armenia) left the country during the last 10-15 years (UNDP, Armenia, Human Development Report, 1996. The annual reports of the state statistical management of Armenia).

Money transferred by people working abroad to their families and relatives make the largest share in financial earning of the country. According to the data provided by mass media annually more than \$200 millions are being transferred to Armenia only through the banking system.

During the Soviet period Armenia was a relatively developed industrial republic. After obtaining the independence the situation was changed radically. The economic blockade of the country connected with the conflict in Nagorny Karabakh, lost of markets in former Soviet and Eastern European states, non-competitiveness of goods produced by the majority of industrial enterprises led to the economical collapse.

In the beginning of ninetieth of the last century the reform of the political system of Armenia has been undertaken: the presidential form of governance was introduced, the state property was privatized and the state management system was liberalized. As a result the greatest part of the industrial potential was lost, the property fell in hand of those who did not want or could not lead any economic activity. As for the excessive liberalization, as a result of it the State was pushed aside from the regulation of economical processes and promotion of economical growth on the whole.

As a result technological and science intensive industries became unclaimed and the economical development occurred at the expense of primitive agriculture for satisfaction of own needs and mining i.e. mineral resource industries, which in its turn led to the lag in science and lost of specialists.

To a certain extent such development resulted in improvement of the environmental quality. The sharp decrease of industrial production, use of fertilizers and pesticides in agriculture, consumption of electricity reduced air, water and land pollution. However the subsequent energy crisis led to the uncontrolled use of natural resources, especially to excessive forest felling and use of water resources in the Lake Sevan.

Now the state authorities are trying to proceed to the regulated market pattern of the economic development. Programs for the development of certain economic sectors, legal and administrative mechanisms for stimulation of technological industries, etc., are being developed. Unfortunately, despite of all efforts, outflow of people able to work is still observed.

The analysis of qualitative composition of projects submitted for EIE shows that the majority of these facilities are of social profile, facilities of urban infrastructure or service sector, which may not have a real impact on environment; it means that the EIE procedure has a formal character.

6.1.5 Public Participation

It should be noted that the public itself is not ready to be involved in the real struggle for its rights and interests. Passive attitude of the public sectors can be explained by the hard social and economic conditions and lack of faith in possibility of positive changes. Activity of public and public organizations becomes apparent only in certain matters. Public mainly is concerned with the developments in central parts of Yerevan and construction of commercial buildings and private houses on green areas (parks, lawns).

In 2001-2002, the situation around the construction of the hotel complex "Golden Palace" within the boundaries of the most popular park of Yerevan "Park of Victory" caused a special resonance. Almost all public environmental organizations, representatives of public and mass media joined in the effort against this construction. Appeals were addressed to the city and state authorities, office of the General Public Prosecutor. In his TV speech the representative of the Public Prosecutor's office noted, that in this case many laws, including the EIE Law had been violated. However the next day the President expressed his support to this construction in the statement made for TV. In that way he struck the public's belief to be heard by the authorities and in their commitment to observe the laws.

The issue of allocation of lands for construction within green zones, parks, forest stands is the most painful and according to almost all respondents (even according to the anonymous representatives of State Agencies) shows the inability or unwillingness of authorities to struggle against corruption in State institutions.

However, the activity of some public organizations have certain effects, especially in the issue of development of the ring boulevard of Yerevan and Dalma gardens, located within the limits of Yerevan. Although the violations in this field are still taking place they are not widespread. On April 6, 2004 a public hearing organized by public organizations (Coalition of Public Organizations protecting

the green zones of Yerevan) as against the other cases. The main topic of the hearing was construction of various facilities in parks, lawns and green zones and the role of the Yerevan Municipality in it, since in almost all cases permissions of the city authorities were presented. Representatives of the Yerevan Municipality and the Government could not ignore the Public hearing, which provoked a great interest among the public.

At the same time in the majority of cases when the initiator of a proposed activity or the municipality organize public hearing as prescribed by the EIE Law, the level of activity of the public and public organizations is very low.

Study of the practice of public hearings revealed that this process has been initiated in Armenia since 2000 for individual facilities in Yerevan, which had been subjected to the complaints of the public and NGOs. These hearings were held in the areas of facilities being discussed (vicinity of residential buildings, near petrol stations, etc.). Later, the boundaries of hearing were extended beyond the limits of Yerevan and they were held in buildings provided by communities (halls, schools, etc.). These hearings were conducted arbitrarily and often by procedures developed on the spot, with the corresponding shortcomings and inadequacies and in an unorganized manner. Although the Law on EIE requires 3 public hearings for each facility, in practice, at the best, only one is organized (usually for the discussion on documents of the proposed activity).

Analysis showed that public hearings (and as mentioned only one time) take place only for 5 percent of documents submitted for expertise. Reasons for this are the following:

- Requirement to organize 3 public hearings for all facilities regardless of the level of their impact on the environment;
- Absence of procedures for public hearings;
- Inadequate perception of the importance of the involvement, information provision and participation of the public by the authorized body.

Results of the analysis of public hearings showed that:

- During public hearings, the public prioritizes social rather than environmental issues;
- The level of environmental education and awareness of the public is very low, particularly in rural areas;

The public is almost unaware of its rights and the importance of its role in the decision-making process on environmental issues.

6.2 Internal Factors

6.2.1 EIE Procedure

Instructions on carrying out EIE contained in the Law on EIE are not clear; therefore the SNCO “Environmental Expertise” operates in accordance with the Order of the Minister of Nature Protection, which actually substitutes the Law. The normative base should cover all stakeholders involved in the process, starting from the MoNP and responsible representatives of the local authorities and ending with public organizations and individual experts.

In practice many projects, especially the projects on reconstruction and re-equipment of already operating enterprises are not submitted for EIE, because initiators and employees of the organizations, that issue initial permits (e.g. permits for land allotment) are not aware of it.

It should be mentioned that process of revision of documentation usually is a very long process due to nonexistence of certain information or documentation required by the officials. Moreover, objectivity of these requirements is not always obvious, as it is not regulated by relevant normative documents.

In many cases, the process of expertise used to be delayed due to the requirement of signing a contract between an initiator and the SNCO “Environmental Expertise”.

The absence of targeted normative-legal documents on EIA, often results in conflicts between the project proponent (initiator) and the body implementing the expertise, the most disputable issues of:

- the fact that the project documentation is subject to expertise;
- the volume and level of details;
- justifications for required approvals;
- the necessity of development of additional measures for reduction of environmental impacts required by the expertise;
- monitoring requirements for post-project analysis;
- justifications for fees charged for expertise;

In addition to the mentioned shortcomings of the EIA procedures in Armenia, the requirement on submission of 3 copies of documents by the project proponent and obtaining comments from the Ministry makes matters even worse in all cases. On one hand this requirement impacts on financial conditions and on another complicates and prolongs the duration of the process of expertise.

6.2.2 Screening

Existing principles and criteria for consideration of the proposed activity, based on the list of types of activities and the minimal parameters (productivity), were estimated by the respondents as ambiguous. Representatives of the business sector think that it is necessary to increase the minimal parameters of productivity for carrying out the environmental assessment. However the overwhelming majority of respondents think, that defining both the list of activities subject to expertise, and the limits of the scales of activities, significantly affects the process of expertise. First, it is impossible (today and in the future) to predict all possible types of activities. If in the future someone decides to carry out the activity not included in the list, then it will not be subject to expertise, since it is not in the list, and consequently there will be a risk of negative impact on the environment and human health. Second, it is not possible to determine a certain scale which would serve as a measurement for defining whether the activity has or has not a negative impact on the environment.

The possibility of negative impact and its extent should be determined in each specific case based on the scale of the proposed activity and stability of affected ecosystems. Certain activity conducted in stable ecosystems might have negligible negative impact, while if conducted in unstable and sensitive ecosystems the same activity might have irreversible consequences.

In this regard, the expertise is conducted in an ineffective manner, and the concept of permissible limits stipulated by the Law on EIE does not allow carrying out expertise and revealing all negative impacts on the environment. There are many examples of it. From this point of view the idea of introduction of criteria in the Law on EIE for determination whether the activity is subject to expertise or not should be excluded. Experience shows that all types of activities shall be subject to expertise. The depth and the level of details of the assessment, or the EIA procedure for the given activity to be conducted for the specific ecosystem shall be decided by the authorized body at the initial stage of the assessment.

6.2.3 Scoping

The executor of EIA does not make scoping, since there are no relevant regulations. In practice scoping partially is implemented during the expertise with the assistance of experts.

The majority of respondents consider that the procedure of scoping, order and responsibilities should be clearly defined in the legislation.

6.2.4 Reporting and Reviewing

As it was already mentioned, due to the absence of a special legal act, the EIA process is conducted on the basis of the Law on Environmental Impact Expertise, which does not contain specific articles, provisions and procedures, including those relating to the objective, activities, principles, subjects, frameworks of EIA and content of its reports.

Based on the above stated, it can be concluded that the quality of the EIA for the majority of projects and concept papers submitted by project proponents is extremely poor. This shortcoming can be eliminated, if possible, through additional justification during the expertise, further development, calculations, agreements and introduction of environmental measures.

Due to the absence of normative-legal or methodological documents for the regulation of the EIA process, (except some definite provisions in the Law on EIE and some provisions contained in different legal acts of Armenia, which sometimes contradict each other and have shortcomings), and the fact that the majority of project proponents are not aware of the existence of the Law on EIE and the EIA process itself, they develop the "Environmental Protection" section of the project in accordance with mandatory requirements formerly applicable to projects based on construction norms and rules, methods, standards and other guidelines of the former USSR by themselves. Majority of project proponents do not develop environmental measures at all or introduce them arbitrarily.

In practice there may arise other disputable issues too, dependent on circumstances. The Law on EIE (paragraph 2 of Article 7) makes reference to the Order of the Government, which serves as an implementation mechanism and defines the list of documents, their content and other relevant information. However, the Government has not adopted any such order yet.

Expert assessment conducted by the SNCO is based upon the implementation of activities, stipulated by the Law on EIE in order to achieve the ultimate objective. Many years of experience shows that there are several shortcomings and complications in all documents presented for expertise. They must be corrected in order to protect the environment or minimize its damage.

In practice the documentation submitted for EIE may be classified by the following categories:

- Documentation containing only construction and technological projects;
- Documentation containing construction and technological projects together with an explanatory note on environmental protection in the projects;
- Documentation **containing main provisions of EIA.**

The law on EIE does not envisage an extremely important process, namely the process of further elaboration. In case of a formal approach, the documents needed further elaboration shall be sent back to the project proponent accompanied by a negative conclusion. However, considering the financial situation of the project proponent and the fact that they cannot afford the second payment for the expertise, and also the urgent need of development of various sectors of the economy of the country, proponents are asked to make changes and amendments to the presented documents without additional payments. This is an effective measure. Many years of experience shows that about 350 projects from 730 presented projects were given back for further elaboration, after which positive conclusions were issued. Negative conclusions were issued only in 7 cases.

Experience shows that additional elaboration of small scale projects mainly relate to the issues of green areas in their vicinity, obtaining various licenses (mainly permits from sanitary-epidemiological service, fire department, traffic inspection police, gas use, water use and sewage discharge), to wastewater removal, oil filter installation in carwash facilities and construction of wastewater disposal wells in municipal-service facilities, individual buildings or recreational zones. Project proponents, as a rule, make these changes without any problems.

Larger facilities have also to introduce changes required by the expertise, such as: changes in pipeline programs for eliminating or reducing damages to forest and historical and cultural monuments, changes in the construction of water system facilities in order to ensure fish migration, changes in mining technologies for more effective underground use, as well as re-cultivation of soil disrupted due to mineral exploitation, producing or adjusting calculations for emissions into the atmosphere, development of additional environmental protection measures.

The Law on EIE sets the timetable for conduction of expertise, however the cases when the further development is needed are not considered. In such cases SNCO notifies the initiator about the necessity of further development of the documentation and suspends the EIE procedure. However it is not considered by the Law and neither provision on prolongation of the period for conducting EIE is provided in it. If the expertise process is not suspended, the project proponent can extend the further elaboration until the deadline for the assessment, after which the provision of Paragraph 2 of Article 11

of the Law will be applied, according to which the conclusion will be considered positive. Obviously, the issue of further elaboration of project documents has not been adequately addressed in the Law.

According to Article 9 of the Law expert conclusions are drafted by licensed experts (specialists), who have received the corresponding certificate from the authorized body. The expert conclusion should be finalized within 70 days. The deadline can be extended up to 180 days if necessary. In order to have a picture of the quality of expert conclusion, we need to refer to regulations for issuing certificates of expertise for environmental impact expertise (Order of the Government No. 386 dated December 20, 1996). This regulation defines that certificates can be issued to specialists, institutions, enterprises, organizations and individual businessmen. In order to obtain certificates, the above mentioned persons submit an application to the authorized body, together with a copy of higher education certificate, an extract from the employment record with information on employment during last 5 years and the list of published scientific papers. Organizations submit application together with the founding documents of the organization, the list of activities for which certificate is required and all above-mentioned documents for each person. The committee makes a decision on issuing the certificate on the basis of the qualifications of applicants. The certificate is issued for a 3-year period.

The expertise conclusion issued by the authorized body, in accordance with Paragraph 1 of Article 11 of the Law, is submitted for specialized conclusion and public discussions. Thus, the quality of the expertise is predicated upon the level of qualification of the licensed expert, its objectivity, its capacity to conduct comprehensive analyses and other individual characteristics. Hence, it becomes obvious that the commission issuing certificates, specialists holding certificates and public opinion play a significant role in the quality of expertise.

The commission has not rejected even one applicant for certificate. One of the reasons, besides the formal attitude of the commission toward the issuance of certificates is inadequate criteria and requirements for selecting applicants and the complexity of defining such criteria.

From June 1997 until present, 92 certificates for specialized expertise of environmental impact have been issued, 18 from which are issued for the second time; i.e. 74 specialists were given the certificates. Since certificates have a 3-year validity period, today there are 36 certified specialists: 8 biologists, 7 mining engineers, 6 biochemists, 3 water supply sewage specialists, 3 architects, 2 heating and energy specialists and 1 biophysicist, 1 geographer, 1 agronomist, 1 economist and 1 forest specialist.

It is impossible to have licensed experts having knowledge in all fields of the science, technique and technologies at the same time. If the process of expertise requires qualified specialists, they shall be identified and involved in the process. After preparing the documentation, a session of high-ranking officials shall be held to make a decision on issuance of a certificate. Only after obtaining a certificate a contract on conducting the expertise shall be made. Usually this process takes a long time.

Since the Ministry of Nature Protection is the authorized body in this field and is responsible for the high quality expert conclusions, these conclusions should be elaborated by the Ministry through involvement of relevant qualified specialists from the whole country, as well as international experts for especially important cases if necessary. The authorized body also shall take into account opinions of stakeholder ministries and agencies, local self-governing bodies, heads of communities, communities, NGOs and individuals, as it is stipulated by many articles of the Law (Articles 6/1/, 6/2/, 6/4/, 6/5/, 8/1/, 8/5/, 10/1/, 10/2/, 11/1/, 15/4/).

It shall be noted that the department responsible for conducting expertise shall be staffed with qualified, unprejudiced and impartial specialists with adequate scientific, industrial and administrative work experience. In addition, there is a need for institutional and structural reforms in expertise. Finally, experience shows that the requirement of mandatory involvement of certified specialists stipulated by the Law is often ineffective and results in unnecessary prolongation of the period of expertise. The decision on the implementation of a proposed activity or concept is taken on the basis of expert conclusion. Article 12 of the Law prohibits the implementation of a proposed activity without a positive environmental expert conclusion, and according to Paragraph 6 of Article 15 the concept papers shall not be approved without a positive environmental expert conclusion issued by the authorized body. However, experience shows that numerous proposed activities are being carried out in the country without any environmental conclusion. In many cases, project documents of already constructed or even operated facilities undergo expertise due to the lack of efforts and the efficiency of the state environmental Inspection.

6.2.5 Consideration of Alternative

As a rule the documents of the proposed activities related to small facilities (petrol and natural gas refilling stations, family houses, shops, recreational zones, service sector and other small scale facilities) submitted for ecological expertise do not contain alternative options. Alternative options for activities related to water systems and municipal services (irrigation, water supply and sewage) are presented in project documents of only large-scale facilities. Sometimes alternatives of selection of technologies and equipment are presented for certain large-scale facilities.

Discussions on zero option have been recorded only for few projects.

It shall be noted that the selection of alternative options is mainly done on the basis of technical-economic justifications, where environmental issues are considered among other things.

The cases of alternatives of proposed activities presented for the expertise are the following:

- technological changes of development of mines;
- options of places, where the water-pipe can be laid;
- options for cleaning of sewage waters of the facility;
- options of the method of storing nuclear fuel produced by the Armenian Nuclear Station (solid or liquid);
- hydropower plants with dam or derivation canal;
- options of anti-filtration methods (clay or polyethylene coat);

Plans of risk assessments are absent; there are neither legal requirements nor methodologies for this.

6.2.6 Monitoring and Control

Only a few documentations of proposed activities submitted for expertise have envisaged monitoring after completion of construction works and during operation (gold extraction, mining, water system facilities). Project proponents hardly accept the requirement of expertise of implementation of monitoring measures, on one hand due to the absence of such provision in the Law on EIE and on another due to increase of expenditures of the project proponent. The necessity of monitoring, as well as post-project analysis for the facilities having an environmental impact, shall be considered by the national law, especially as the corresponding provisions exist in many international conventions.

It shall be noted that in almost all conclusions the SNCO puts forward certain requirements, implementation of which will contribute to future improvement of the environment or implementation of the requirements of the law.

After obtaining a positive decision on EIE, all documents including recommendations from experts and state institutions participating in EIE, are to be transferred to the State Environmental Inspection.

If there are certain recommendations regarding construction or operation, the organizations supposed to consider these recommendations, have to submit the report about the performance of their activities to the State Environmental Inspection.

In case of violation of the provisions specified in the documentation that were subject to EIE, or the recommendations provided by EIE, the State Environmental Inspection directs an official notification to the head of the organization or applies administrative measures in accordance with the Administrative Violation Code.

Scheduled inspections of enterprises reveal different types of violations. According to the EIA documentation the control over environmental pollution is to be undertaken by the enterprises themselves. The State Environmental Inspection checks the objectivity of this control. However, the limited number of adequately equipped laboratories of the Inspection and their limited capacity make the inspections ineffective. Moreover, often construction of enterprises and their operation are being carried out without EIE or with violation of requirements of EIE due to the small number of personnel and shortage of resources. The State Environmental Inspection pays a special attention to the larger enterprises or facilities and actually there is no the effective control over medium and small enterprises.

It shall be noted, that conceptual programs are practically out of control. A number of violations took place while implementing the program on development of the Sevan national park, however usually these violations are not officially recognized and the relevant information can be obtained only through the media and public organizations.

6.2.7 Licensing and Enforcement

Licenses

Licensing of any proposed activity in Armenia is regulated in accordance with the Law on Licensing (30.06.2001). The Law specifies the list of types of activities requiring licensing, types of licenses and bodies responsible for the issuance of licenses. Licensing of experts involved in EIE by SNCO Environmental Expertise is carried out in accordance with the Law on EIE (Order of the Government No. 386 dated December 20, 1996 on "Regulations for issuing certificates authorizing specialized expertise of environmental impact").

Conduction of a project activity is a subject for licensing too, however in this list there are no activities in the field of environmental protection. Thus development of EIA, development of documents or regulation of emissions in air, water consumption, and drainage are not considered to be licensed, or they may be included in other project activities. Such provision lowers the importance of the whole field of environmental project and consultative activity.

Commercial extraction of minerals is a subject to licensing too.

Permits

In accordance with the Law on Atmospheric Air, enterprises shall obtain permits on emissions of harmful substances in atmosphere. For this purpose standards of Maximum Permissible Emission (MPE) are developed on the basis of which the Ministry of Nature Protection issues a permit on emission.

In accordance with the Water Legislation enterprises shall have standards on water consumption and drainage (MPE) on the basis of which the Ministry of Nature Protection issues a relevant permit.

In accordance with the Law on Mineral Protection, enterprises engaged in the mining sector shall have agreements with the Ministry of Nature Protection as well as relevant permits on mining activities on the basis of these agreements. Moreover, in order to carry out the activity on the basis of various regulatory documents, enterprises get permits from sanitary and fire fighting services, local authorities, civil motor licensing inspection departments, etc.

During the EIE process the SNCO "Environmental Expertise" identifies the necessity and the presence of required permits and licenses.

Enforcement

In accordance with the Resolution of the Parliament of Armenia 1149-N dated 25.08.2002 the State Environmental Inspection at the Ministry of Nature Protection controls and takes measures for enforcement of requirements of the Armenian legislation related to the environmental protection, use and reproduction of natural resources. In case of disclosing the violations of the requirements of the legislation on licenses and special permits, the Inspection takes measures considered by the Administrative Code.

Besides, control over economical activity is to be undertaken by the executive bodies of local authorities of the relevant area, and in case of revealing construction or other type of activity without relevant permits, they appeal to the authorised body or to the Prosecutor's Office.

The Prosecutor's Offices undertake general observation over compliance with the legislation. Main violations are the conduction of activities without EIE. In many cases violations are discovered during the check-ups of activities. Very often violations are discovered by special divisions of the Ministry of Nature Protection while issuing licenses on emissions or water consumption when they find out that the enterprise is operating without EIE.

In 2004 the Yerevan Municipality together with the Prosecutor's Offices carried out the check-up of the legality of constructions on the territory of Yerevan. As a result, more than hundred cases of illegal constructions were revealed. The greatest part of them is filling stations. Administrative penalties are to be imposed on these facilities by request of the Prosecutor's Offices. The management is required to submit necessary documentation for the EIE procedure.

The same practice is used by the State Environmental Inspection. In case of revealing enterprises operating from 1995 without EIE, disciplinary measures are applied against the administration of the enterprise. The administration is required to submit documentation for EIE.

However such practice raises doubts in many respondents, who consider that when an enterprise is already operating for 7-8 years, it is necessary to use disciplinary measures and approaches as in case of operating enterprises, i.e. to carry out a complex examination on compliance with the environmental legislation and special permits.

Opponents of this statement consider that it will legalize the practice of evasion from EIE. In such cases used penalties should be toughened.

6.3 Main Stakeholders

As it was stated in the Section 4 the main stakeholders of the EIA process are bodies of state administration and municipalities, which can be executors of EIE as well as initiators of activities, entrepreneurs, specialized organizations and independent experts, international organizations and private persons.

6.3.1 Decision makers

The Ministry of Nature Protection and its specialized division – SNCO “Environmental Expertise” play a major role in the EIE process. They have a statute power of decision making. Other state and municipal bodies, the role of which is to issue various permits and (consents), also take part in this process. These are:

- Ministry of Health (consent, control)
- Ministry of Urbanization (consent, issuance of licenses on certain types of activity)
- Ministry of Trade and Economic Development (issuance of licenses on certain types of activity)
- Ministry of Agriculture (issuance of licenses on certain types of activity)
- State Committee of Water Economy (issuance of licenses, regulation of water consumption and drainage)
- Ministry of Energy (issuance of licenses on certain types of activity)
- National Service of Seismic Protection (consent)
- Municipal authorities (consent, land allocation)

The Ministry of Nature Protection (MoNP) is the multifunctional State body regulating and managing the sphere of protection of the environment and the use of natural resources. Since its establishment in 1991, the Ministry is under the permanent process of reorganization. It is connected mainly to the existing duplication of functions of the various units within the Ministry, and in the Government as a whole. Having both executive and supervising functions, the Ministry often becomes a subject of debates.

On 8.08.2002 on the basis of the Resolution 1237-N the Government of Armenia approved the Regulations and Structure of the Ministry of Nature Protection in accordance of which the following agencies responsible for water resource management, biological resource management, geology, mineral resources, hydrometeorology and environmental monitoring, SNCO “Environmental Expertise”, also the State Environmental Inspection and the Inspection for Safe Use of Nuclear and Radioactive Energy operate within the Ministry.

The Sevan National Park and other protected territories (reserves) are also included in the structure of the Ministry of Nature Protection. In 2004 in accordance with the resolution of the Government, the

State JSC “Hayantar”(“Armenian Forest”) which undertakes the management of the Armenian forestry (formerly included in the structure of the Ministry of Nature Protection) was subordinated to the Ministry of Agriculture. The Ministry of Nature Protection retains forest controlling functions.

MoNP is an authorized state structure responsible for carrying out EIE. It gives out final decisions on the basis of EIE.

SNCO “Environmental Expertise” is subordinated to MoNP, however it is not a budgetary organization. SNCO is financed from the payments of initiators for carrying out of EIE. SNCO has limited number of employees, whose major functions are: to study preliminary and basic documentations submitted by an initiator; select experts; to send inquiries to the various divisions of the MoNP, other state institutions and specialized organizations; to collect and generalize expert decisions, notes and recommendations; to organize discussions and public hearings; to prepare draft decisions, etc. At present the staff of SNCO Environmental Expertise consists of 13 employees with \$80-90 average salary.

Environmental Inspection, which has central and regional inspections, operates within the structure of MoNP. The Inspection consists of 11 regional departments, 10 from which are located in marzs and one separate inspection is based in Yerevan.

The staff of the State Environmental Inspection controls the environmental pollution, use of natural resources, compliance of the activities undertaken by the different organizations or enterprises with the existing environmental legislation. They also control condition of treatment facilities of the enterprises and municipalities. Under the responsibilities of the Inspection falls also the control over the performance of all requirements of the Law on EIE. The Inspection carries out systematic checkups of enterprises, treatment facilities and territories according to the work plan developed in advance. It also carries out off-schedule inspections on the request of the higher level authorized bodies or in case of emergency signals. The Inspection has the special instructions, in accordance of which the implementation of the requirements of EIE is controlled. While carrying out various inspections, the Inspection also detects illegal construction or reconstruction activities, which have not undergone the EIE process. In such cases, the Inspection applies administrative measures (decision on suspension, administrative penalties), and is empowered to bring cases to the court.

As it was revealed by the questionnaires, the Inspection has enough personnel, it can use laboratories operating within the MoNP, however the equipment is insufficient and outdated; Qualification and objectivity of inspectors frequently is the subject of criticism that is explained by the low salaries of employees of the Inspection.

Communities are one of the basic stakeholders of the EIE process. **Executive bodies of communities** are engaged in the EIA system from the moment of decision-making on allocation of land parcels, consideration of compliance of the proposed activity with the approved development programs of the region. They also represent the interests of local population. Community takes part at all stages of the EIE process (preliminary consideration of documents, hearings, discussions with experts, preparation of the draft decision).

At almost all municipalities and executive authorities of marzs (regions) there are special departments or employees responsible for the environment, including the issues of EIE. There is the Environmental Department at the Yerevan Municipality, which is the most competent agency after the Ministry of Nature Protection. The Department is involved in current environmental issues, as well as in environmental planning and coordination of other municipal departments such as Departments of Communal Services, Greening, Collection and Utilization of Waste and Garbage. Similar units exist in the cities of Giumri, Vanadzor and Razdan too. However the level of staffing and the competence of employees are considerably low, as for other cities and marzs, actually there are no experts in such structures.

The common problem of all these bodies is the low proficiency both among the experts and medium /high level managers. The low salaries can be considered as a major factor, which does not promote the commitment of employees and is one of the reasons of corruption. After adoption of the Law on Public Service (04.12.2001) and creation of the Special Examination Body, a certain improvement in this matter is observed. In particular, the number of medium level managers and specialists without relevant education or completely incompetent employees has been reduced.

However, according to the respondents, it is crucial to find solutions to such basic issues as training of experts and managers, creation of permanently functioning training centers, conformity of salaries with real basket of goods, creation of the mechanism of public control, etc. The respondents also pointed out the necessity of development of relevant legislative and normative acts, their harmonization and the technical and financial maintenance of the key stakeholders of EIE.

6.3.2 EIE Practitioners

The second category of participants of the EIA process may be divided into three groups, which are discussed below.

- **Initiators of a proposed activity or programs.** Initiators of strategic programs are the Government of the country, various state authorities, regional authorities, international organizations and foundations. Initiators of the economic activity are local and foreign investors. Usually foreign investors are more careful towards the legislation of the host country and survey the requirements of various laws, including the EIA related legislation. From international investors the World Bank operates in Armenia through particular programs of initiative credits. The World Bank gives credits to the projects in case of positive conclusion.
- **Companies involved in designing of proposed activity and development of EIA.** These are projecting and academic institutes, which are known since the USSR. These are academic: (i.e. the Center of Ecological and Noospheric Research, the Institute of Hydroecology) and projecting organizations (Armproject, Armproject, Armagroproject, the Institute of Non-ferrous Metallurgy (former Armniitsvetmet), etc).

Academic institutes are involved mainly in research activities. In the same time they take part in development of EIA of certain projects within their competence. These institutes are staffed with qualified personnel; however the equipment and technical means are outdated in general. Salaries are not high.

The mentioned projecting institutes are also engaged in their specific work – designing of the facilities within their competency. Salaries are not high in these institutes either. Development of EIA looks like an environmental section in general project documentation prepared in accordance with old methodology.

Besides the mentioned institutes 3-4 new private companies operate in this field. They have narrower specialization in the development of environmental documentation on regulation of emissions in air, water consumption, drainage, extraction of minerals, etc. However the volume of works in this field is limited and consequently, the capacity of these companies is not large. Salaries in these companies are relatively high; however their staff is limited due to the small number of orders.

- **Independent experts and scientists** also participate in the EIA system. In many cases when the scale of a proposed activity is not large, initiator or company, which develops a construction and technological part of the project on the basis of the agreement with the initiator, hire independent experts to develop EIA as an integral part of the documentation to be submitted for EIE. In the majority of cases independent experts are invited to prepare an explanatory part of the project documentation, where the absence of negative impact of the proposed activity on the environment is proved.

According to the representatives of companies – EIA developers, very often initiators hire licensed experts from SNCO “Environmental Expertise” as independent experts to carry out EIA, however it is prohibited by the Provisions on Licensing of Experts. In such cases the name of the EIA developer simply is not indicated in documentations. It is permissible since this activity (EIA development) is not a subject for licensing, as it was mentioned in the subchapter 6.2.7.

6.3.3 Civil Society – Public and NGOs

The main feature of a civil society is its readiness for action. It should be noted that the role and importance of NGOs in the life of the country is not big. Among the other reasons the lack of relevant

traditions, extremely low life standards of the majority of population, impact of the Soviet regime, financial problems in the majority of NGOs, etc. should be emphasized. Active NGOs get their main funds from various international organizations and foundations in the form of grants. The Governmental assistance to public organizations is insignificant and has a selective nature, i.e. authorities provide financing to certain NGOs preliminary selected by them.

Besides the abovementioned, there is one more reason for inactivity of the public environmental organizations. The process of democratic changes in Armenia has been started from the public environmental movement. In the middle of eighties of the 20th century, after declaration of the publicity in the former USSR, the movement for closing especially harmful industrial facilities and the nuclear power plant was started. Later on, environmental movement had been associated with the sharp worsening of social conditions, energy crisis, unemployment, which took place in Armenia by that time, which in its turn caused a negative attitude towards environmental organizations. However, a slight activation, especially in participation of NGOs in the EIA process, has been observed during last 2-3 years.

NGOs make the public aware of EIA problems, ecological normative acts, international conventions, assist EIA stakeholders in cooperation and help to reform legislation. NGOs provide initiators with independent ecological consultations. Public organizations can play an essential role in organizing and carrying out public hearings. They can represent interests of the population along with local governments.

6.4 Payment System

At present the EIA system exists at the expense of the initiator of the proposed activity. The financial aspect of the EIA system consists of two components:

- Initiator of a proposed activity hires the EIA developer at his own expense. Depending on the scale and complexity of the proposed activity it may be either a projecting organization, or an independent expert. In case of large-scale activities or development of strategic programs, several organizations (projecting and scientific) may be invited for development of EIA. Consequently, the volume of financing considered for development of EIA depends on its complexity and scale.

However the general level of financing development of the EIA report, does not correspond to the volume of the work undertaken, especially in case of small-scale projects, which make the majority of applications submitted for EIE. According to the respondents, the payment in such cases is \$100-300. Accordingly the quality of submitted documentation is low. Some respondents consider that the State should take part in financing the EIA development; specifically they suggest creating of special group, which would develop territorial schemes, calculate and define quotas. The group may do this work for fee, as it is practiced in EU.

- EIE is to be carried out also at the expenses of the initiator of a proposed activity. SNCO "Environmental Expertise" enters into agreement with the initiator on conduction of EIE, after the initiator pays for EIE. SNCO "Environmental Expertise" defines the price of EIE on the basis of main indices developed by the Ministry of Nature Protection. Payment is to be done before commencement of EIE and does not depend on the results of EIE.

The majority of respondents, as well as the employees of SNCO "Environmental Expertise" considers that the system of financing of EIE shall be changed. One proposal is to transform SNCO "Environmental Expertise" into a budgetary organization and oblige initiators to pay only state duties.

6.5 Quantity and Analysis of Project Submitted for EIE

Below is given the matrix providing the data on number of expertise undertaken in Armenia:

Matrix 6.1. Dynamics of Expertise Undertaken

Years	Total	Including:							
		1996	1997	1998	1999	2000	2001	2002	2003
Quantity of Expertise Undertaken	863	28	27	90	169	119	151	143	136

Source: Ministry of Nature Protection

7 facilities from those submitted for expertise received a negative conclusion. About 48% from submitted documentation needed additional information or were given back for further development.

Matrix 6.2. Analysis of results of expertise undertaken in 2003

Distribution of Projects by the Type of Activity	Percentage
Submitted Projects (total)	136 (100%)
Mines and Deposits	28 %
Water Economy	20.6 %
Gas and Petrol Filling Stations	10.3 %
Construction of Buildings and Hotels	9.5 %
Heating Systems	7.3 %
Industrial Enterprises	6.6 %
Strategic Programs	6.6 %
Roads Construction	4.4 %
Agriculture	2.2 %
Energy	2.2 %
Other	2.3 %

It should be noted that there was only one case of reconstruction of the industrial enterprise.

6.6 Summary of Analysis

Generally it can be stated that many elements of the EIE system are introduced in Armenia and this system performs its main function. However it is not true for the EIA system.

Summarizing the reasons for ineffectiveness of the EIA system specified in various subsections of the Section 6 of the present Report, the following reasons are to be mentioned:

- Imperfection of the Legislation;
- Low effectiveness of the State administration;
- General state of economic development and especially low level of investments in economic development;
- Difficulties in civil development: corruption, social indifference, lack of organization of social institutions;
- Lack of qualified specialists and consulting companies recognized in this field.

The determinant legislative act - the Law on EIE – has a number of shortcomings. Shortcomings of the Law, in particular incomplete list of facilities subject to expertise, the conditionality of standards for assessing the environmental impact of economic activities, the lack of clarity in the process of holding

public hearings and the absence of a number of necessary provisions, absence or inadequacies of bylaws and normative-technical documents regulating the process of expertise, absence of sanctions for violating the requirements of the Law and incentive mechanisms and other factors, which result in the arbitrary implementation of the expertise process, as well as internal contradictions of the Law and the fact that it does not correspond to the provisions of international conventions, have a significant negative impact on the implementation and the quality of expertise.

It must be noted that the SNCO “Environmental Expertise” which is in charge of conducting expertise should have highly qualified, impartial and unprejudiced specialists with strong scientific, industrial and administrative knowledge and work experience. In addition, there is a need for institutional and structural reforms in expertise. Finally, experience shows that the requirement of mandatory involvement of certified specialists stipulated by the Law is often ineffective and results in unnecessary prolongation of the period of expertise.

The results of analysis of the current legislation, practice of its application, shortcomings and recommendations, developed on the basis of interviews with EIA stakeholders in Armenia, are given in the Table 6.1.

Matrix 6.3. Comparative Analysis of Country's EIA Legislation and Procedures with the EIA Practices

#	Issue	National Legislation (EIA System)	EIA Practice	Shortcoming	Recommendation for Improvement
1.	Screening	Par. 1 of Article 4 of the Law on EIE defines the list of proposed activities subject to environmental impact expertise by permissible limits		The system of limiting parameters for conduction of EIE is ineffective	Change the system of limiting parameters according to the practice of application. Improve interaction between the Ministry of Nature Protection and executive bodies of local authorities
2.	Scoping	Absent		Omission in the Legislation	Clearly define Scoping Procedure in the Legislation
3.	Public Participation in the EIA Process	Articles 6, 8 and 10 of the Law on EIE	Low activity of public in the EIE process		Increase legal responsibility of MoNP for organization of public hearings
4.	Decision-making and Environmental Clearance	Article 11 of Law on EIE	Low level of documentation submitted for EIE. Frequent delays, related with the requirement of elaboration of submitted documentation	List of documentation and data is not determined	Adopt legal document, providing the list of necessary information for EIA. Change the system of financing of EIA and payment for EIE
5.	Post-Decision Monitoring	Regulated by Article 11 of the Law on EIE and charter of the MoNP	Low level of control over all stages of implementation of proposed activity	Deficiency of provisions in the EIE Law	Add some provisions to the Law. Equip State Environmental Inspection with modern techniques, promote the growth of the number of qualified personnel
6.	Liability for Violation of the EIA Legal Framework	Criminal Code; Law on Administrative Violations	Low efficiency of the applied administrative measures	Lack of effective law enforcement; Low penalties	Improve law enforcement; increase penalties for violation of the EIA regime
7.	EIA in Transboundary Context	Article 14 of the Law on EIE	Article 14 of the Law on EIE has only declarative nature	No relevant bilateral agreements concluded	Conclude treaties with neighboring states to regulate EIA in transboundary context

7 Strategic Environmental Assessment (SEA)

Article 15 of the Law on EIE regulates the expertise of concepts too. According to Paragraph 2 of Article 1 and Paragraph 1 of Article 15 of the Law the term *concept* implies concept papers, programs, complex schemes and master plans, regional planning documents and schemes for complex use of resources, which can be classified as strategic papers by definition.

According to Paragraph 1 of Article 15 of the Law the concepts are strategic development documents for all sectors of economy (including the environmental sector), which according to the Convention on Environmental Impact Assessment in Transboundary Context and its Protocol on Strategic Environmental Assessment are subject to environmental evaluation and expertise.

Differing from the procedure of expertise of proposed activities, concepts should be publicized by the applicant before they are submitted for expertise.

No earlier than 30 days before publicizing, public hearings are to be organized in order to take into account the public opinion. The authorized body, having the records of public hearings, organizes the expertise within 90 days after submission of the concept and makes a corresponding decision.

The comparative analysis of procedures defined by the Law regarding EIE and expertise of proposed activities and concepts revealed a number of contradicting principles and omissions from which the following should be removed or elaborated:

Concept papers of activities having strategic significance and with a potential of environmental impact on one or more communities or territories as well as on the whole country, shall naturally be allocated more time and attention of the experts. But the Law says the opposite: expertise of concepts should take 90 days, while proposed activities can be assessed in 120 - 180 days;

Proposed activities shall have public hearings at three stages, while concepts shall have only one, despite the fact that the concepts undergo more changes during discussions due to the multi-level nature of discussions (from the level of developing organization up to the approvals of the Government, the Parliament and the President);

The Legislation says that only authorized persons can participate in the process of expertise of proposed activities. In the case of the process of expertise of concepts this is not envisaged. As a result, the expertise of fundamental papers is conducted without participation of external, impartial, skilled and more experienced specialists. Such experts take part in the expertise of less important documents. This illogical approach shall be corrected.

Another drawback of the Law is that it specifies all participants of the expertise of the documentation of a proposed activity (starting from the public, community, local self-governing bodies up to the national Government), while the issue of participants of the expertise of concept papers having a significant strategic importance is not addressed.

Armenia has not adopted any methodology of SEA. During the expertise the EIA approaches are used. The only case of implementation of SEA is the SEA of the Water Code carried out by "Jinj" Co. Ltd. on the request of USAID. "Jinj" Co. Ltd. is a consulting company. It got funding from USAID to develop the Concept of Water Legislation. Later on this Concept had been discussed at various forums and a certain part of it was used during the development of the Water Legislation.

8 EIA System of the Country and Possibilities for Harmonization with EU Standards

The Legislation of Armenia regulating the existing EIA system is based on standards, concepts and by-laws of the former USSR. Currently Armenia is at the next stage of the development of the system when a process of amendments to the existing laws and creation of new legislation on the basis of standards and requirements of the European Union takes place. Basic European legal acts regulating the EIA system are: **Council Directive of June 27, 1985, Council Directive 97/11/EC of March 3, 1997, Council Directive 96/61/EC of September 24, 1996, Directive 2003/35/EC of the European Parliament and the Council of May 26, 2003** and other Directives of EU, which establish principles of assessment of environmental impact resulting from public and private activities, as well as the principles of public participation in decision-making process.

The table below contains a comparison analysis of provisions of the current Armenian legislation and corresponding EU Directives.

Other legal requirements, i.e. standards, technical norms, methodologies, different guiding documents, in other words, the normative-methodological and normative-technical documents, ensuring the implementation of international and national legislations, play an important role in the whole process together with the laws and bylaws.

The requirement of having and applying a normative-methodological and normative-technical basis is stipulated in both international and national legislation. However, the legislative regulation of the application of normative-methodological and normative-technical acts regulating the EIA process is extremely unclear and inadequate. The normative-methodological and normative-technical basis for the EIA process is almost entirely missing. Currently, normative-methodological and normative-technical acts adopted by the former USSR are applied in Armenia.

Nevertheless, activities for development of legislative regulation of standards and technical regulations are underway. After the adoption of "The protocol on Armenia's adherence to WTO and to Morocco agreement on establishing the WTO" and "Agreement on technical trade barriers", a certain work has been done in Armenia towards adaptation of the technical legislation to the mentioned documents, so that the country is able to fulfill the commitments undertaken.

Within this framework, the following documents are currently applied in Armenia:

- Law of Armenia on Standardization
- Law of Armenia on Unification of the Measurements
- Law of Armenia on Approval of Conformity of Goods and Services with Normative Requirements
- Order of the Government No. 9 dated January 11, 2000 "Regulations for developing, adopting and applying technical regulations".

According to the Law on Standardization, legal and natural persons, without exceptions, have the right to develop standards. Standards in some fields are developed also by technical commissions for standardization. National standards in Armenia are approved by the national standardization body authorized by the Government of Armenia and acknowledged by ISO international organization.

The implementation of international (ISO), regional (EU) and CISI (GOST) standards agreed with stakeholder bodies is ensured by the national standardization body.

The implementation of CIS standards is ensured on the basis of the agreement on "Coordinated policies in standardization, metrology and certification", adopted in Moscow on March 13, 1992.

One of the objectives of standardization stipulated by the Law is to ensure the safety of products, works and services for protection of the environment, life, health and property. The corresponding requirements should be stipulated by technical regulations.

According to the Law on Unification of the Measurements, one of the objectives of unification of the measurements in Armenia is to protect human life and health, the environment and ensure occupational safety. The State undertakes control and supervision in these areas to ensure the use of unified measurements, reveal and prevent violations of regulations and norms of metrology.

Matrix 8.1. Comparative Analysis of Country's EIA Legislation and Procedures with the EU Requirements

#	Issue	National Legislation (EIA System)	EU Requirements & Procedures	Comments
1.	Legal texts under review	Law on Environmental Impact Expertise, (1995) <i>Order of the Government "Limits of the scale of proposed activities subject to expertise of environmental impact", (1999)</i>	Council Directive of June 27, 1985 on the assessment of the effects of certain public and private projects on the environment 85/337/EEC Council Directive 97/11/EC of March 3, 1997 amending Directive 85/337/EEC of June 1985 on the assessment of the effects of certain public and private projects on the environment. Council Directive 96/61/EC of September 24, 1996 concerning integrated pollution prevention and control Directive 2003/35/EC of the European Parliament and the Council of May 26, 2003 providing for public participation in respect of 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	
2.	Applicability of EIA	The goal of EIA is to reveal, prevent or decrease harmful impact of proposed activity on human health, environment, economic and social development (Article 2.1 of the EIE law)	The EU Directive 85/337/EEC as amended by Directive 97/11/EC applies to the assessment of the environmental effects of those public and private projects, which are likely to have significant effects on the environment (Article 1). The activities to which it is applied are defined in annexes 1, 2 of the Directive in accordance with Article 4 of the Directive	
3.	Type of activities subject to EIA/Screening	Par. 1 of Article 4 of the Law on EIE defines the list of proposed activities subject to environmental impact expertise	Exhaustive mandatory list is given in Annex 1 of the Directive, however Article 4(2) also has an open-ended provision, saying that activities listed in Annex 2 may be subject to EIA	
4.	Scoping	Absent in Legislation		The draft of the new Law on EIE is being discussed
5.	Assessment-Environmental studies	Article 5 of the Law on EIE determines the scope and the list of parameters subject to EIE	Article 5 + Annex 4 of the Directive	
6.	Impact Management and Mitigation	Activities on reduction of environmental risk are regulated by Water, Land, Forestry codes and by law on Atmospheric air protection	Article 5 + Annex 4 of the Directive	The draft of the new Law on EIE is being discussed
7.	Public Participation	Articles 6, 8 and 10 of the Law on EIE	Directive 2003/35/EC	
8.	Post-Decision	Regulated by Article 11 of the Law on	Article 8 of the Directive	

	Monitoring	EIE and the Charter of MoNP		
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- The objectives of mandatory approval of compliance, which forms the basis of ***the Law of Armenia on Approval of Conformity of Goods and Services with Normative Requirements***, are to ensure the safety of citizens' life and health and protection of the environment, flora and fauna.

Methods for approving the conformity of goods and services subject to mandatory approval for compliance are stipulated in declaration and certification procedures.

The work for developing and applying ISO 14000 international standards for ecological management systems, as well as certification procedures for ecological management systems currently is underway in Armenia. Also, activities for developing and introducing technical regulations in the field of environment are being carried out. A department for cooperation with WTO and EU has been established at the Ministry of Trade and Economic Development.

In order to ensure the development and application of national technical regulations and standards in accordance with international standards and the European directives and standards corresponding projects should be implemented, which shall study and analyze the national and international normative-methodological and normative-technical legal acts related to environment and other areas linked with the EIA process. The necessity of their development, timetables for conducting these activities, amounts and sources of funding for implementation of these activities, as well as the possibility for immediate application of individual international legal acts should be determined too.

The development and application of national technical regulations and standards compatible with international standards and European directives and standards need a long-term step-by-step approach, as well as considerable financial resources.

9 Conclusions and Recommendations

Based on the analysis of the EIA system and related legal acts, it can be concluded that the system has no adequate normative-legal basis. The current legislation does not provide proper legal and economic bases and effective mechanisms for implementation of EIA, and thus does not contribute to the improvement of the environment and the socio-economic development of the country. It neither ensures the legal and economic bases for EIA and SEA.

The analysis of the EIA related legislation shows that it has numerous shortcomings, needed corrections, further development and changes. Principle provisions, mechanisms and procedures for the regulation of the EIA process are missing. First of all the corresponding legislation shall be improved in order to enhance the effectiveness of the EIA process.

More specifically it is recommended to:

- Define the sphere regulated by the Law, which will make a distinction between the concepts of ecological expertise, EIA and SEA, and thus EIA and SEA will become spheres regulated by the Law;
- Define the subjects of legal relationships regulated in the sphere of ecological expertise, EIA and SEA, their rights and responsibilities;
- Define the objectives, principles and purposes of ecological expertise, EIA and SEA;
- Specify the role of ecological expertise, as a mandatory function of the State in examining the accuracy of EIA and SEA;
- Divide the EIA and SEA processes into classes: with different procedures and timetables in accordance with the scale of their environmental impact, excluding the application of permissible limits to proposed activities;
- Define regulations, procedures, mechanisms and restrictions for implementation of ecological expertise, EIA and SEA, requirements in EIA and SEA procedures regarding public awareness and ensuring consideration of public and affected communities' opinions and feedback link in the EIA implementation and decision-making stages, requirements of financial independence, control and supervision, etc., as well as forms of sanctions in case of violations;

- Clearly define (i) stages; (ii) timetables; (iii) requirements of the applicability of justified methods, construction norms, indicators and management plans; (iv) specifics of EIA implementation in areas with a special status; (v) specifics of EIA implementation in cases of transboundary impacts; (vi) a stage of further elaboration and alternative options for EIA implementation; (vii) requirement to submit EIAs in the form of reports.

In addition it is required to:

- Establish a national EIA center, which will ensure training of specialists, develop data bases, provide consultancy and alternative, including public, expertise, support the establishment of NGOs specialized in EIA and perform other functions.
- Decentralize the management of the field by enhancing the role of regional governance and local self-governing bodies.
- Introduce a certification system for EIA practitioners.

It is also recommended to ensure the state funding for implementation of EIA and expertise.

Bibliography

1. Economic Commission for Europe. Environmental performance review of Armenia. (as discussed and approved by the seventh session of the Committee on Environmental Policy.)
www.unece.org/env/documents/2003/eia/wg.1/mp.eia.wg.1
2. The Ministry of Nature Protection of the Republic of Armenia «National report on environmental situation of Armenia in 2002»
3. Ministerial report «From Aarhus to Kiev», 2003
4. Association for sustainable human development «The concept of sustainable development of the Republic of Armenia», Yerevan, 2002. National Committee of UNEP

National Legislation

5. The Basis of Legislation of the Republic of Armenia on Nature protection (July 9, 1991, Yerevan)
6. The Law of the Republic of Armenia on Environmental Impact Expertise (November 20, 1995, Yerevan)
7. Order of the Government of the Republic of Armenia on State body authorized for conducting environmental impact expertise of proposed activity (N 345, of October 30, 1996, Yerevan).
8. Order of the Government of the Republic of Armenia on confirmation of procedure of providing of professional competence certificates on environmental impact expertise (N 386, from December 20, 1996, Yerevan).
9. Order of the Government of the Republic of Armenia on Limited levels of proposed activities subject to environmental impact expertise (N193, of March 30, 1999, Yerevan).
10. Regulations for conducting environmental impact expertise (order N151 of the Minister of Nature Protection, of November 13, 2002, Yerevan)
11. Order of the Government “Approving program of measures for implementing the commitments of the Republic of Armenia under a number of environmental conventions” (N115, of February 25, 1998)
12. Order of the Government “Conditions, timetables and procedures for reviewing or annulling expert conclusions on EIA” (N701-N, of May 8, 2003)
13. Instruction of the Ministry of Environment “Regulations for the membership and activities of the committee for the issuing specialized certificates for expertise of environmental impacts” (N28, of March 6, 1997)
14. Instruction of the Minister of Environment “Functions of the committee for issuing specialized certificates for expertise of environmental impacts, as well as for approving conclusions of expertise of environmental impacts”, (N79, July 22, 1997)
15. “Temporary regulations for the activities of the committee for issuing conclusions of expertise of environmental impacts” (October 28, 1997)
16. Instruction of the Minister of Environment “Formation of the new committee for issuing specialized certificates for expertise of environmental impacts as well as for approving conclusions of expertise of environmental impacts” (N137, October 22, 1997)
17. Instruction of the Minister of Environment “Formation of the coordination committee for implementing the commitments of the Republic of Armenia under the Convention on Environmental Impact Assessment in a transboundary Context”, (N131, October 12, 1999)
18. Instruction of the Minister of Environment “Approving the statute of “Ecological expertise” state non-commercial organization and the list of property transferred to the organization with the right to ownership” (N196, December 30, 2002)

National bibliography

19. Social-ecological association «Database for implementation of powerful environmental impact expertise» (2002, Yerevan).
20. Environmental Public Advocacy Center «The Environmental Law of the Republic of Armenia» (2000, Yerevan) - collection of legal acts.
21. Environmental Public Advocacy Center «Manual on Public Participation in Environmental Decision-making» (1999, Yerevan)
22. Aida Iskoyan «Public participation on decision-making on the environmental problems in the countries of the South Caucasus» (2001, Tbilisi, REC-Caucasus).
23. Aida Iskoyan «Environmental Legislation of the Republic of Armenia» (1994, Yerevan)
24. Doors to democracy, guide on the countries of Eastern Europe. «Legislation and practice of public participation in the environmental decision-making in Armenia, Byelorussia, Moldova, Russia and Ukraine on the basis of national reviews»
25. B. Ghazaryan. Environmental Impact Assessment: the analysis of legislation and EIA adaptation in Armenia. Materials of regional workshop “Legislation and practice of Environmental impact assessment in the countries of the South Caucasus”, Kobuleti, 2002
26. B. Ghazaryan and others. Environmental Impact assessment of “Water Code of the Republic of Armenia”. USAID. Report “JINJ”. Yerevan, 2002
27. B. Ghazaryan. Legislative base of EIA. International workshop “The improvement of EIA process” in the environmental decision-making process. UNEP/Center of International Projects (CIP). Moscow, 2002
28. Handbook on EIA for the participant-countries of CIS. UNEP/CIP. Moscow, 2003
29. B. Ghazaryan, N. Alaverdyan. On strategic environmental assessment in the Republic of Armenia. Regional workshop “Practical use of strategic environmental assessment”, Prague, 2003
30. B. Ghazaryan. Environmental assessment of the plans and projects, as well as in the transboundary context. UNEP/CIP, Moscow, 2003
31. Environmental assessment of the projects and political tendencies in the environmental sphere. Practical handbook. Paris, 1997
32. Materials of the workshop “The principle of Environmental assessment”. Agency of Nature Protection of USA. Yerevan, 1999.
33. Legislation in CIS – harmonization in assessment of nature protection. Materials of international conference. UN Environment program /CIP, Moscow 2001
34. John A. Dickson, Luisa Fallon Skura, Richard A. Karpenter, Pol. B. Sherman. Economical analysis of Environmental Impact, Moscow 2000
35. James Roberts «What is that?», 1993, USA
36. Winod Thomas, et al. The quality of growth. “Whole world”, Moscow, 2001
37. Armenia. National Environmental Action Program. Main Report, World Bank. Washington, 1999
38. O. M. Cherp, MV. Khotulov, et al. “Environmental assessment and expertise”, Moscow, 2001
39. EIA report on RA Legislation and its improvement. Program “The improvement of EIA legislation” Transparency-International, Armenia, 2003
40. T. A. Khorujhaya. The methods of the assessment of environmental danger. Moscow, 1998
41. Handbook. Nature protection norms and the rules of designing. Moscow, Stroyizdat, 1990
42. V. V. Glukhov, T. V. Lisochkina, T. P. Nekrasova. Economic basis of environment. Saint Petersburg, 1997
43. N. G. Smolyaninov, V. I. Tagasov. The safety of vital activity. Moscow, 1997
44. Handbook of legislative normative and methodological documents for expertise of air protection activity. Hidrometeoizdat. 1986

45. Constructive norms and rules. City-planning. The planning and building up of cities and countries. 1989
46. Sadler B. International Study of the Effectiveness of Environmental Assessment Final Report - environmental assessment in a changing world: Evaluating Practice to Improve Performance, 1996
47. Wood Ch., Barker A., Jones C., Hughes J., Evaluation of the Performance of the EIA Process, EIA Center, 1996, Manchester
<http://europa.eu.int/comm/environment/eia/eia-studies-and-reports/eiaperform.pdf>
48. UNEP EIA Training Resource Manual, UNEP, 2002
<http://www.ea.gov.au/assessments/eianet/unespmanual/manual/index.html>
49. UNEP: EIA: Issues, Trends and Practice, Scott Wilson Resource Consultants, Ron Bisset, UNEP, Environment and Economics Unit (EEU), June 1996
<http://www.ea.gov.au/assessments/eianet/unespmanual/bisset/index.html>
50. EC: Guidance on EIA, Screening, The Environmental Commission, ERM Ltd., June 2001
<http://europa.eu.int/comm/environment/eia/eia-guidelines/g-screening-full-text.pdf>
51. EC: Environmental Impact Assessments and Geological Repositories for Radioactive Waste, The Environmental Commission, ERM Ltd., June 2001
http://europa.eu.int/comm/energy/nuclear/pdf/eia_report_vol1.pdf