# A GUIDE TO STRATEGIC ENVIRONMENTAL ASSESSMENT

Georgian Perspective

MARCH 2006 TBILISI

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# Strategic Environmental Assessment

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# 1. Introduction

Rapid development of the country is, certainly, a desire of each of its citizens. However, its achievement requires permanent 'peaceful struggle' against the currents hindering such development. This means that, first of all, the properly justified and reasonable development strategy shall be in place, and second – this strategy shall have the serious public support.

One of the forms of ensuring reasonability and public participation, enjoying growing popularity throughout the world, is assessment of developed plans, programmes or strategies in terms of their sustainability.

Sustainability represents the economical, social and environmental concept. It implies structuring the community life the way that its members can enjoy the right to satisfy their needs without causing degradation of the nature and environment as a whole, i.e. without compromising the right of the future generations to satisfy their own needs. In the other words, the society is sustainable, if it resolves its current problems without risking aggravating future situation.

One of the widespread instrumentns of assessing plans, programmes and strategies is the Strategic Environmental Assessment.

#### **Introduction to SEA**

#### History of Development of Strategic Environmental Assessment

History of environmental assessment in the western countries began in 1969, with adoption of National Environmental Policy Act<sup>1</sup> by Congress of the United States. In 1985, 85/337/EEC Directive of European Council introduced system of environmental assessment in Europe as well. The essence and goal of the mentioned system was that while making decision on permitting the activity, which might have the potential influence in the environment, the decision-makers should have comprehensive and accurate information on possible risks, imposed on the environment and human health by any such activity. For these purposes, the person intending to perform the activity should develop Environmental Impact Report (EIR). The Report should indicate all the measures that were or would be taken by the intending party to minimize the environmental impact and prove that technologies or methods used by any such party were the safest and best of reasonably available to it<sup>2</sup>. These documents should be made available for discussion to authorities responsible for the protection of environment, and those potentially imposed to the risk of hazard. After the discussion, the full set of information should be presented to decision makers or bodies, which should consider the benefits of the proposed activities and compare it to the potential environmental damage, and based on such comparison, separately for each particular case, should make the decision on issuing, or not issuing the permit for implementation of the activity under discussion. This decision, together with its justification, should be made publicly available.

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<sup>&</sup>lt;sup>1</sup> the National Environmental Policy Act (NEPA)

<sup>&</sup>lt;sup>2</sup> Using the Best Available Technologies means that investor shall use those technologies, which, in compare to other similar ones, and in consideration of feasibility, will cause the minimal danamage to the environment. This requirement implies that EIR shall thoroughly and seriously consider altewrnative ways and methods of implementation of the intended activity.

Making brief summary, it can be stated that the purpose of environmental assessment in the western countries is to inform steh ociety on potential hazards imposed on the environment and human health by the intended activity.

In the former Soviet Union the environmental assessment of some construction and urban planning projects was introduced in 1970-ies. It was called State Environmental Review and, initially, represented one of the stages of State Review of projects. Although, it had different purpose and envisaged different procedures. Here, the task of the government was not to compare and balance possible benefits and risks. Here, the state itself represented the entrepreneur, and it was responsible for ensuring safe human health conditions, including healthy environment. For these purposes, the soviet state has developed comprehensive set of standards, norms and rules, which ensured safety (theoretically) for any of the existing then business environment and human health. Unlike the environmental assessment in western countries, the State Environmental Review was performed not for the purposes of providing information to decision-makers and influencing their decisions. Decisions were made prior to developing the plans or projects. The purpose of the State Environmental Review was to check the compliance of the projects with the environmental norms and rules. The plans or projects not complying with the stated norms, standards, rules or higher-level plans, were returned to the developers for improvement. The final result should always be in compliance with all the pre-determined rules and norms.

It is clear that there was not even a hint of public participation in the process – technical norms and rules comprehensively reflected interests of the society. Enforcement of the mentioned rules and norms were responsibility of the certain authorities. In such circumstances, public participation could concern only the control of the performance of such authorities<sup>3</sup>

To summarize it, the soviet State Environmental Review, theoretically, was a tool for ensuring environmental and human safety. Although, as a rule, this had no positive effect on the system sicne it was not functional and not effective as well as rarely applied to the strategic documents.

Often, from the project development stage, it was clear that observing all the rules and norms would so drastically increase the costs that an enterprise would be unprofitable. Sometimes, this was discovered at the stage of construction or operation, however, in all cases the resolutions were sought in step-by-step construction and establishment of temporary norms. These practices were especially accepted with concern to environmental measures. Ensuring environmental security was always postponed for the final stages of the construction, funding for which has never been allocated. Or there was the other way: the environmental norms for the sites under construction were milder (so called temporary norms), and there was the schedule for their step-by-step reduction to the general levels, although, as a rule, these schedules were never observed<sup>4</sup>.

<sup>&</sup>lt;sup>3</sup> Even currently, public participation can lead to changing decisions, if the society discoveres and indicates any violations of technical rules and norms. The authorities are simply unable to take into consideration other types of public comments or claims (they cannot refuse permit to the private entrepreneur, who complies with all the rules and regulations)

<sup>&</sup>lt;sup>4</sup> Here, the described history of Enviornmental Review in the Soviet State is shortened and simplified. Of course there are environment pollution norms in the western countries as well, however, they represent not maximal, directed towards achievement of the ideal conditions, but minimal necessary levels, which are easily achievable by using the existing technologies.

Old soviet norms and rules are still valid in Georgia. Their requirements, as a rule, are more strict then those of the western ones. As for the decision-making procedure, currently, Georgian norms represent kind of a mixture of soviet and western systems. Its details and disadvantages are described in Chapter 4. Here, we only want to state that introduction of the western elements (preparing environmental impact assessment report by the investor, carrying out State Environmental Review by the 'independent' experts, public participation in processes of issuing environmental permits) into the existing system did not result in changing the purpose of the procedure itself. Its main purpose still remains checking compliance with the existing norms and not informing the decision-makers. Accordingly, the public participation procedure, instead of taking into account the society's interests, is more oriented towards the technical monitoring of the procedure. In our opinion, in order to develop the environmental assessment modes suitable for current reality in Georgia, it will be necessary to undertake the thorough analyses and evaluation of both, old soviet and existing western models.

# **Environmental Assessment of the Strategic Documents**

Initially, environmental assessment systems were mainly used for making decision on the specific activities (projects)<sup>5</sup>. Little by little, people noticed that, in the most of the cases, the earlier we consider environmental issues in the planning process, easier and cheaper it is to avoid damages to the environment. By the end of the 1980-ies, number of countries started development of special procedures and laws envisaging environmental assessment of the strategic documents (plans, programmes, strategies, policies, legislative acts). It is obvious: the countries, in which governments have commitment to not only preserve the state of the environment, but also to improve it<sup>6</sup>, authorities came to the conclusion that, in order to be able to fulfil their commitments, the environmental issues, along with the cases of making decision on particular activities, shall be taken into consideration in the processes of drawing up the long term development plans. Both, the government and the society shall be aware of the possible environmental consequences of the intended activities. The electorate is entitled to know in which direction the elected government leads its country.

In 1996 European Commission started consideration of introduction of the obligatory environmental assessment (the so called Strategic Environmental Assessment – SEA) for certain plans and programmes. In 2001, EU Council approved this proposal by its Directive 2001/42EC, and it became binding for EU member countries since 2004. In 2003, in Kiev, 35 out of the 46 ECE<sup>7</sup> countries signed UNECE Espoo<sup>8</sup> Protocol on Strategic Environmental Assessment (hereinafter SEA Protocol). Undersigned parties included Georgia, and this means that government made a commitment to introduce SEA in the country. Until now (as of 15 February, 2006), the SEA Protocol is ratified only by Finland, Czech Republic and

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<sup>&</sup>lt;sup>5</sup> NEPA was rather about environmental assessment of the policies and plans, then of the specific activities, although, in a reality, strategic documents, in their most, were released from environmental assessment.

<sup>&</sup>lt;sup>6</sup> Later or earlier, our government will have to undertake this responsibility – current aloofness of the population towards the environment protection issues is just a temporary phenomenon, and is caused by the transition period. According to Leshek Baltserovich, when GDP exceeds USD5,000 per capita, economy reaches the point, when health, recreation and, based on this, quality of the environment become very important for human beings, and society becomes seriously interested environmental issues.

<sup>&</sup>lt;sup>7</sup> Along with the European and former USSR countries, ECE region includes United States, Canada, Turkey and Israel.

<sup>&</sup>lt;sup>8</sup> The full name of the convention is: Convention on Transboundary Environmental Impact Assessment. It is adopted on February 25, 1991, in Espoo, Finland. Entered into force on September 10, 1997. Georgia is not the party to that Convention

Albania, and respectively it is not in force yet. It would be desirable that Georgian decision-makers, prior to ratifying this document, conceive its purpose and applicability, in order to make it fit to and useful for country's development goals and specificities. We hope that this document will be able to make an initial step towards better understanding of the benefits and concept of SEA.

It shall also be mentioned that public participation in environmental decision-making in Georgia is ensured by the Aarhus convention, which became legally binding for the country since 30 October 2001. In more details these issues are reviewed in a separate publication 11.

# **Strategic Documents**

# What are Plans and Programmes?

In early 1990-ies, together with gaining independence from the USSR, Georgia rejected the forcedly introduced economical experiment called 'socialism in transition to communism'. We have turned down so called socialist planned economy and committed ourselves to capitalism based on the free market relationships. Following this decision, the state does not determine which enterprises shall be built, what shall be their product, who shall be the consumer and what the sales price shall be; all this is decided by the entrepreneur. Seeking higher revenues, businessman can better identify and fit public demand, then in the inflexible, bureaucratic central planning machinery.

However, this shall not be understood the way that we have fully rejected idea of future planning and forecasting. It still continues, although, at two different levels: the businessman, independently, on his own risk account, develops and implements business plans; at the same time, the government still has commitment of ensuring welfare and development of the country. It sets the specific targets, and develops and agrees with the society plans for their achievement. Hereinafter, this process will be referred to as Strategy Development.

# What is the Essence and Purpose of Strategic Planning?

In its wide sense, Strategy Development is identification of the way for achievement of the certain goal.

Strategies might have various levels and purposes: this can be the strategy of particular organisation, how to achieve its goals, urban development strategy, strategy on development of country's economy, etc.

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<sup>&</sup>lt;sup>9</sup> Most of the European countries (unlike today's Georgia), after signing international treaty, start harmonising national legislation with the requirements of the mentioned treaty, and only after accomplishment of this process, the instruments are being ratified.

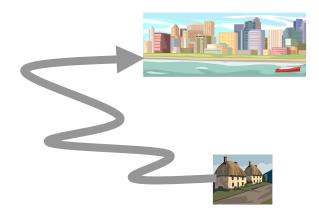
<sup>&</sup>lt;sup>10</sup> SEA Protocol will enter into force on the 90-th day following delivery of sixteenth ratification instrument to the depositary.

<sup>&</sup>lt;sup>11</sup> See the references.

<sup>&</sup>lt;sup>12</sup> It is the attractiveness of the set targets and their achievability, that makes us (or at least should be making) vote for the government

Despite such diversity, it can be said that all the strategic plans and programmes, to the extent required by the nature of such plan, contain three obligatory elements:

- Current status (where are we now)
- Objectices (where we want to get)
- Ways of achieving objectives (how do we get there)



Strategy is a way identified for getting from the current position to the desired one <sup>13</sup>.

This can be formulated otherwise: strategy is the way of problem resolution. From the point of view of development of country or its specific region or district, the strategies can be divided into two categories:

- 1. Strategic plans reflecting territorial development issues, which are usually referred to as land-use plans master plans for future development and general development plans (local or national); and
- 2. Strategic documents reflecting goals of particular sector development, which are usually referred to as sectorial development or targeted programmes.

Although, it should be mentioned that in some countries, terms "plan" and "programmes" in names of Strategic Documents can have the other meanings (for instance, "plan" might mean the consequence of identified activities, "programme" might include the stages of territorial development, etc.)

#### **EXAMPLES OF PLANS AND PROGRAMMES:**

1. Municipal Development Plan of Varna in Bulgaria (2004)<sup>14</sup>. The goal of the plan is extension of the coastal tourism capacities. For these purposes, it was planned to move the industries located in the coastal zone to the inland, already existing industrial zone, where, accordingly, it will be necessary to increase the industrial density.



<sup>&</sup>lt;sup>13</sup> if the target is political (or, in other words, related to the state governance issues), such plans are called the policies

<sup>&</sup>lt;sup>14</sup> See references, No5 and No13





- 2. Land Use Plan in Pizek-Strakonice (Czech Republic)<sup>15</sup>. These two towns located in South Czechia are in the process of merging. Purpose of the plan is to identify the limits of the territories that shall be used for urban construction to coordinate all the urban planning activities for this territory.
  - 3. National Development Plan of Hungary<sup>16</sup>. This plan identifies four development priorities for 2004-2006<sup>17</sup>: rising competitiveness of country's industrial sector; development and employment of human resources; improvement of infrastructure and environment; development of regions. The plan contains five action programmes:
- <u>Programme on Rising Economical Competitiveness</u> implies overcoming technological obsoleteness of the small and medium businesses. This shall be achieved through support to development of informational technologies, scientific researches and innovations;
- <u>Human Resources Development Programme</u> sees its targets in assisting people in getting employment. Programme implies vocational education and training, allowing people getting knowledge and skills demanded by the market;
- <u>Environmental Protection and Infrastructure Development Programme</u> envisages optimisation of traffic currents the way to minimise transport load on the residential areas (construction of bypass roads);
- <u>Rural Development Programme</u> implies modernisation of agricultural sector and food processing industry, in order to make them competitive, as well as development of rural areas, in order to make them attractive to the population
- <u>Regional Development Programme</u>, along with the other programmed activities, implies development of tourism.

Currently, Hungary is developing second, longer term plan for 2007-2013.



4. Christchurch (New Zealand) Waste Plan<sup>18</sup>. The Management plan serves for implementation of the Zero Waste and Sustainable New Zealand Strategy at the local levels. The city intends to avoid construction of new dumps in its outskirts. For these purposes, volume of wastes shall be reduced by 65% until 2020. The specific action plans for achieving the mentioned goals were developed.

<sup>&</sup>lt;sup>15</sup> See references, No20

<sup>&</sup>lt;sup>16</sup> Within the framework of Ntional Development Plans and their respective operational programmes, the new EU member countries (and some other less developed EU regions) receive financial aid from EU Structural and Cohesion Funds, which are used for ensuring social and economical harmonisation and better connections in EU region.

<sup>1&#</sup>x27; See references, No16

<sup>&</sup>lt;sup>18</sup> See references, No17

# **Essence and Benefits of Strategic Environmental Assessment**

# **Essence of Strategic Environmental Assessment**

SEA is a process of preliminary identification and consideration of the possible negative impacts into environment and human health caused by the implementation of any plan, programme or other strategic document. The goals of SEA are: 1) improving plan or programme the way to minimise its potential negative environmental impact and to maximise positive impacts, and 2) ensuring that possible negative impacts that cannot be avoided are properly managed and offset during implementation of the plan or programme.

In the other words, the goal of SEA is to ensure that developers optimise their plans and programmes and make them most beneficial for environment and human health; while, if the full safety cannot be achieved, the potential hazards shall be thoroughly described, and the information shall be provided to the decision-makers, in order to allow them consider expected risks and benefits.

In order to ensure the effectiveness of SEA process, it is essential that the Strategic Documents consider several alternative options for achievement of the identified goals. In this case the SEA allows decision-makers to consider the most environment friendly option.

One more important aspect is that SEA is transparent process based on the public participation. Persons, whose living conditions and health might be influenced by the implementation of plan and programme, shall be entitled to express their interests and have it respectively taken into consideration in the decision-making process. Besides this, society is inexhaustible source of ideas not only for public authorities, but for the experts as well. Planners and SEA experts may thus benefit from proposals provided by concerned citizes.

#### **Benefits of SEA**

As we have already mentioned in the beginning of this book, in order to be successful, the strategy shall be properly justified and shall enjoy public support.

In the following sections we bring several examples of how SEA can improve plans and programmes, and gain public support to their implementation. In general, the following are the main benefits of SEA:

- Environmental assessment and corrections of the plans or programmes at the early stages of planning process will result in much lower costs for the state, then environmental impact assessment for each particular project and improvement of situations caused by improper planning;
- At the plan/programme development stage, it is possible to consider more and wider alternatives, then later, at the implementation stage.

SEA ALLOWS FINDING COMPLETELY NEW SOLUTIONS:

**City of Amsterdam** (Netherlands) experiences serious deficit of the territories necessary for its extension. The main goal of city development plan<sup>19</sup> was to find residential area for people working in the town, which would be close



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<sup>&</sup>lt;sup>19</sup> See references, No15

enough, so that this people would be able to reach center either by public transport, or by bicycle. The planners found such territory. The problem was that this territory was occupied by the shallow freshwater lake, which was included into the international wetland's list, and, being important migrant bird rest, feeding and reproduction point, is protected by the Ramsar Convention. Besides this, the lakeside represented the part of Ziuder-Zee, oldest dam in Netherlands, thus, having the historical value. Therefore the goal of SEA was to assist developers in drawing up environmentally sound alternative plan.

The group of developers and environmentalists worked several years seeking for such alternative. Finally, the new, similarly acceptable for human and water birds, model has been developed: it was decided to create the send island archipelago, the banks of and canals between which would still be sufficient for providing migrant birds with food and shelter, and, at the same time, the islands would provide residential space for 45,000 persons. This plan was submitted to referendum and approved in 1997.

• During the assessment of plans/projects, cumulative (aggregate) effects of the future projects are being considered and taken into account. Along with the other advantages, this enables conservation of the natural resources by the short-term projects, which might be compromising implementation of future, more perspective plans.

# SEA ALLOWS AVOIDING ERRORS



**Argentina**, with the assistance of World Bank, developed about 50 individual projects<sup>20</sup> for protection of the settlements and agricultural lands located in 3 river basins. Joint SEA of these projects demonstrated that projects developed for one of the basins were lacking coordination component. It is obvious that improper upstream management can cause significant damages to downstream

users. These factors were taken into consideration, and the projects were timely corrected.

Besides this, SEA process improves performance culture of the public institutions, makes them committed to participation and transparency, thus, increasing trust of the society in public services and their activities

#### SEA ALLOWS AVOIDING CONFLICTS:

**Naissaar Island<sup>21</sup>** located in Gulf of Finland, nearby city of Tallinn (Estonia) is declared a natural park. In the soviet times, the island was used as closed military base.

Soviet militaries left the territory in extremely polluted condition. At the same, though the island is presently uninhabited, former proprietors claimed ownership rights over the island. Municipality started seeking the island development options, which would allow, on the one hand, protecting respective environmental requirements for parks and, on the other hand, avoiding conflict with the former landowners. Development



<sup>21</sup> See references, No22

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<sup>&</sup>lt;sup>20</sup> See references, No21

plan and its SEA were being developed simultaneously. Active participation of all the parties concerned (these, in the first place, were former landowners and environmental organisations) in the process was ensured. They were given possibility to reveal the problems, participate in their assessment and prioritisation. Five alternative ways of island development were considered (see page 21). Finally, the alternative acceptable for all the parties has been selected: supporting development of medium tourist and recreational business on the island (by the way, the missiles were not removed from the island – they were retained as one additional source for attraction of tourists).

It is noticeable that local government was very satisfied with the process. In its opinion, the fact that SEA was performed in parallel with planning process, has significantly accelerated plan approval and decision-making.

# 2. STRATEGIC ENVIRONMENTAL ASSESSMENT PROCEUDRE

SEA implementation procedure might significantly vary from country to country. Here we describe minimal SEA requirements for this procedure set out in SEA Protocol and its possible modifications.

# Strategic Environmental Assessment Procedure and Actors

We will use small icons for describing SEA procedure. These icons will be marking the actors of the process. Our actors are:



1. Public authority initiating plan/programme. This, at the same time, can be the authority in charge of approving plan/programme and disseminating information on it;



2. Developer of plan/programme (this can be legal or natural person, or the department of initiating body)



3. SEA experts (this can be group of experts, private company, or internal expert within the planning team with sufficient knowledge to undertake SEA)





5. Public



Below we will describe the role of each of the listed actors and their functions at various stages of the process.

# Which Strategic Documents are Covered by the SEA Protocol?

SEA Protocol requires that SEA procedures shall be implemented for "plans and programmes" As we have already mentioned, the "plans and programmes" here are used in a broader sense and they imply Strategic Documents in general. It is not obligatory that the title of strategic document includes terms "plan" or "programme". The document can be called "concept", "strategy", "outlook" etc. The main point is that the document shall sett the framework for future projects in certain territory or sector (here I would include information from the chapter below (2.1.2) where you name the sectors, since when you look at the Article 4.2 both conditions should be met – it is for these sectors and sets the framework for ....).

SEA Protocol does not cover plans or programmes developed by the private persons for their own internal use. It covers only those Strategic Documents, 1) development of which is required by the law, regulation or administrative decision; and 2) which are developed by public authority, or which shall be presented for approval to public authorities or parliament.

<sup>&</sup>lt;sup>22</sup> SEA Protocol also includes non-binding provisions for "policies and legislation". Since these requirements are of recommendatory nature, they are not subject of this document.

The SEA Protocol is not limited to any level of decision-making – it covers national (also trans-national), regional and local plans and programmes. It is also not limited to new plans and programmes –it covers also their updates or amendments if these are likely to lead to significant environmental impacts.

Environmental assessment can be conducted for any type of strategic document.

However, there are Strategic Documents, implementation of which will almost unavoidably result in positive or negative environmental impact and, therefore, their SEA is not only desirable, but also obligatory. According to SEA Protocol, first of all, these are the programmes in the field of:

- agriculture
- forestry
- fisheries
- energy
- industry (including mining)
- transport

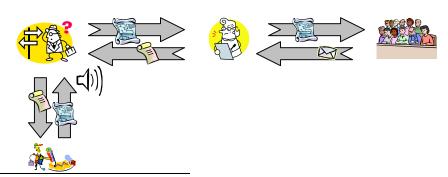
- regional development
- waste management
- water management
- telecommunications
- tourism
- town and regional spatial and land use planning

It is important to conduct SEA for the programmes and plans, which prepare base for implementation of significant industrial or infrastructural activities, and, especially, the activities, which can significantly influence the environment.<sup>23</sup>

Although, usually, the SEA is not required for purely financial of budget related programmes. The same concerns the problems developed for prompt elimination of the consequences of natural or technogenic accidents. SEA is also not required for plans and programmes for national defence.

#### Screening (decision on necessity of SEA)

Initial stage of SEA procedure is making decision on its necessity. As described above, making this decision requires taking into consideration number of factors. First of all, plan/programme initiator or hired developing body shall consult with the environmental and healthcare authorities, who will decide, if the specific plan/programme require SEA procedure (screening).



<sup>23</sup> For the purposes of these guidelines, environmental impact is considered not only impact in the environmental factors, but also human health. This means that everything influencing human health, flora, fauna, biodiversity, soil, climate, air, landscape, natural sites, material property, cultural values shall be taken into consideration

SEA Protocol requires that environmental and healthcare bodies ensure informing the society and public participation after screening. The decision on necessity of SEA for particular plan/programme, together with its justification shall be made available to the society.

It is important to remember that responsibility for preparing the environmental report, and the screening and scoping that precede it, "would in many cases be [with] the authority or natural or legal person responsible for preparing the plan or programme" (EC Guide, <u>para.</u> 5.8), but this may be determined in national legislation<sup>24</sup>.

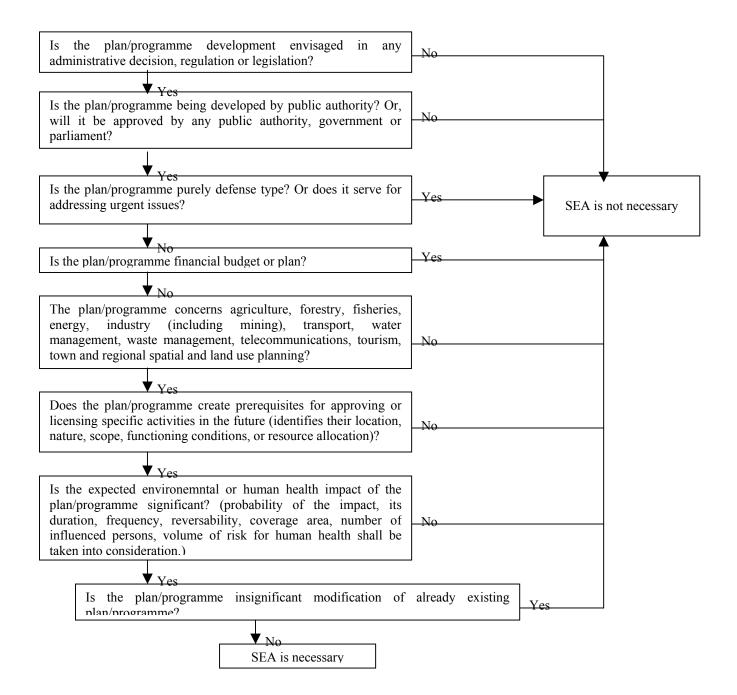
Usuallyy the screeing process can be done either:

- □ By a case-by-case examination
- ☐ By specifying types of plans and programmes (developed and adopted within the national legislation)
- □ By a combination of the above two

The chart<sup>25</sup> bellow outlines key question that should be asked when determining whether the plan or programme require SEA or not.

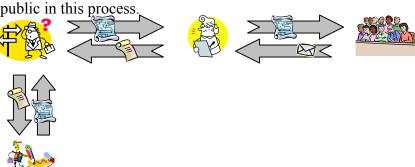
<sup>&</sup>lt;sup>24</sup> From UNECE Capacity Development Manual for the UNECE SEA Protocol

<sup>&</sup>lt;sup>25</sup> From UNECE Capacity Development Manual for the UNECE SEA Protocol



# Scoping (drawing up requirements specification for SEA)

After making decision on necessity of SEA for particular plan/programme, plan initiators shall hire SEA developer. For this, they need to draw up requirements specification, which describe details of the works to be implemented. For this purposes, it is also necessary to consult with environmental and healthcare authorities, and to the extent appropriate to involve the public in this process.



The picture strongly resembles previous one (difference is that decisions are not being delivered to the public. It is obvious: 'requirements specification' is a special document and it is not the subject of public interest). Therefore, this makes clear, why the most of the countries try to implement these two procedures simultaneously.

In process of identification of requirements specification, environmental and healthcare authorities should also indicate the environmental goals<sup>26</sup>, against which the hazardousness or usefulness of the programme shall be assessed. They shall also indicate which environmental and human health issues, to what extent and in which details, in their point of view, shall necessarily be considered. For these purposes, they primarily shall take into account level of details of the programme itself and existing assessment methods and means (environmental assessment of very general programme is simply impossible), public interest to the issues under discussion and informational requirements of the authority in charge of plan/programme approval.

Box 1: Screening and Scoping stages in the **Czech Republic** are not separated. The procedure is as follows<sup>27</sup>:

In order to officially initiate plan or programme development, any public authority shall obtain preliminary authorisation from Ministry of Environmental Protection. This stage is called 'collection of facts' or 'preparatory' stage. Ministry of Environmental Protection carries our screening and scoping, i.e. tries to identify whether the proposed plan or programme requires SEA, or not. In case if the conclusion is positive, it draws up requirements specification. In this specification the Ministry identifies environmental issues and aspects that shall be studied, including the methods for such studies, ways for ensuring public participation, stages and methods, as well as the authorities, which shall be consulted during the SEA implementation process. Consequently, the Ministry of Environmental Protection checks compliance with its indications and informs the respective decision-making authority.

<sup>&</sup>lt;sup>26</sup> This implies national or regional obligations for conservation or improvement of certain environmental aspects.

<sup>&</sup>lt;sup>27</sup> Information was provided by Mr. Jiri Dusik

# **Preparation and Review of SEA Report**

The next stage implies development of SEA Report that needs to include the following information which can be reasonably complied given the nature of the plan or programme:

- 1. current status of the environment and its future development trends;
- 2. characteristics of the environmental factors, which are expected to be negatively influenced;
- 3. characteristics of the environmental elements, which currently face problems and need improvement:
- 4. environment and human health improvement national, regional or local plans related to the area covered by the proposed plan/programme; to what extent are they considered in the proposed plan/programme;
- 5. expected negative environmental/human health impacts of the plan/programme implementation;
- 6. what are the measure envisaged by the plan/programme for avoiding or mitigating the mentioned negative impacts;
- 7. what alternative ways for the goal achievement are considered in the programme, and how selection of the final version is justified; how justified is this selection from the environmental point of view;
- 8. options of monitoring in process of implementation of the plan/programme;
- 9. expected significant transboundary environmental impact;
- 10. non-technical summary of all the above information.

One of the main components of SEA Report is consideration of the alternative ways for achievement of plan/programme's goals and selection of the best available. By this we mean environmentally, and not only economically or technically differing alternatives. If the plan is not backed with such alternatives, there appears a need of close cooperation between planner and SEA developer. This cooperation is useful for the planner: it will be beneficiary for planner that the SEA developer gets acquainted to the draft plan from the very initial stages, in order to exclude environmentally unacceptable variants as early as possible, and not to waste the time and energy on them.

# **EXAMPLE:** Alternatives for the Naisaar Island development



(Continued from page 10) Developing master plan for Naisaari Island, planning group hired by the municipality closely cooperated with SEA Group, which consisted of Estonian and Finnish environmental experts. They have discussed 5 alternatives for island's development:

- 1. Zero alternative: the island remains in existing condition;
- 2. Necessary cleaning operations and small construction works will be carried out, and the island will be used as a protected territory;
- 3. Population of island will grow, recreational and tourist activities, as well as service and construction sectors will be developed;
- 4. Population will significantly increase, tourism and recreation business will grow, new roads will be constructed; multifarious service sector will be developed; transport

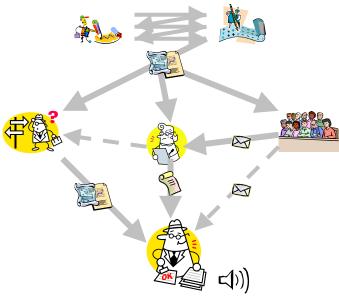
traffic and population migration will need supervision;

5. Purely theoretical alternative: setting tens of thousands of people at south and north ends of the island.

Experts, with broad participation of stakeholders, have selected alternative No. 3.

Joint efforts of the planners (or programme developers) and SEA experts shall result in preparation of two documents – plan/programme and its comprehensive draft SEA. Quality of draft SEA is tested by environmental and healthcare authorities issuing requirements specification<sup>28</sup>. Draft P/P and environmental report shall also, without any delay, be made publicly available.<sup>29</sup> The society shall receive possibility to present its opinions and remarks on the documents.

Finally, both, the society's remarks and conclusions of environmental and healthcare authorities, together with the developed documents, shall be presented to the respective authority having competence of approving the mentioned documents for making the final decision. Final decision, along with its justification shall be made publicly available.



Consultation with the relevant env/health authroties and public participation must occur at this stage, with the authorities and the public commenting on the report and the draft plan or programme alternatives. Their comments need to be taken into account in the decision on the plan or programme, so should be recorded.

If likely transboundary effects have been determined, transboundary consultations must now be begun, if they have not been started earlier. An affected Party might also request that consultations take place.

The decision-maker decides which, if any, of the alternative plans or programmes, or alternative elements within a plan or programme, to adopt (art. 11). In adopting a plan or programme, the decision-maker must take into account the conclusions of the environmental report including the necessary measures to prevent, reduce or mitigate the adverse effects of the various plan or

<sup>&</sup>lt;sup>28</sup> The better practice is, when such testing is performed by the independent body

<sup>&</sup>lt;sup>29</sup> Both, the planner and the SEA developer will benefit, if they arrange public participation in parallel with project development – this will reduce probability of rejecting prepared document by the society, and allow avoiding significant additional expenses for its modification

programme alternatives. They might wish to consider, in particular:

- The compatibility with the plan or programme objectives and environmental objectives
- The residual environmental effects

However, they must take into account opinions expressed by:

- The relevant environmental and health authorities
- The public concerned
- Any affected Parties

Having adopted a plan or programme, the relevant environmental and health authorities, the public (not just the public concerned) and any affected Parties must be informed of that decision. The adopted plan or programme must be made available to them together with a statement:

- Summarizing how the environmental, including health, considerations (as presented in the environmental report) have been integrated into the adopted plan or programme
- Summarizing how their opinions (as expressed by 'the public concerned' in the case of the public) have been taken into account
- Summarizing the reasons why the plan or programme has been adopted in the light of the reasonable alternatives considered<sup>30</sup>

#### **Post-SEA monitoring after decision**

This final element of the SEA provides for on going monitoring of the effects of the implementation of the adopted plan or programme (art. 12). Monitoring includes providing the results to the relevant authorities and to the public. The explicit reason given for monitoring is to identify unforeseen effects and to enable remedial action. But monitoring has other benefits and it is recommended that monitoring be used to:

- □ Compare predicted and actual effects, thus providing information for the improvement of future SEAs (i.e. a quality control tool)
- □ Check that environmental conditions imposed by the authorities are being complied with
- □ Check that the plan or programme is implemented as described, including the prescribed measures to prevent, reduce or mitigate adverse effects

There is no explicit requirement to make the monitoring results available to affected Parties, though it should be in the public domain. The Protocol does not suggest the who, what, where, when or how of monitoring – who is to undertake it, who is to make results available, what to monitor (effects on projects or effects of projects on the environment), what to make available (raw results or analyses thereof), where to monitor, what frequency and for how long, when to make results available, and how to monitor (methods) and to make results

<sup>&</sup>lt;sup>30</sup> Source: adapted from UNECE Capacity Development Manual for the UNECE SEA Protocol

available. Parties might wish to exploit existing monitoring and information access arrangements or to strengthen them specifically for SEA.

The nature of monitoring will vary between different types of plans and programmes. A regularly revised land-use plan might require monitoring of whether the predicted effects were realized, as a means of improving the next version of the plan. The results of monitoring might be made available at the start of the next plan-revision cycle. A transport infrastructure programme might be more focussed on dealing with unexpected adverse effects of its implementation, taking immediate action through modifying the programme or its individual projects. The duration of monitoring for the latter example might be significantly longer than the former, and the making publicly available of monitoring results might be through a programme-specific website, for example.

Though the requirement is to identify **unforeseen** effects, the monitoring is of the significant effects as identified in the environmental report. The meaning of 'unforeseen' might therefore refer to the unforeseen magnitude or intensity of a foreseen effect, such as greater than expected changes in sulphur dioxide emissions arising from an energy sector plan. It would also be possible to include elements in the monitoring programme that might identify truly unforeseen effects. For example, occasional sampling of a broad range of environmental parameters might identify a change in a parameter that was not expected to be affected by the plan or programme.

The Protocol does not discuss what **remedial action** might be taken if an unforeseen adverse effect is observed. If it is decided to modify the plan or programme as a result, this may require a further SEA.

Finally, the significant effects to be monitored might include transboundary effects. The post-project analysis provision of the Espoo Convention (Art. 7) might provide inspiration for how to monitor such effects<sup>31</sup>.

# Concluding remarks - principles of effective application of the entire SEa procedure

Obviously, following the procedure is not end in itself. Described procedure is considered one of the most reliable means for ensuring implementation of effective SEA. However, carrying out SEA is possible by using different procedures, or even a voluntary procedure. Essential is to observe the following principles:

- 1. All the plans and programmes, implementation of which might cause significant influence on the country's sustainable development, shall be subject to preliminary SEA;
- 2. The purpose of SEA shall be to provide full information on how risky for sustainable development can the implementation of the plan or programme can be, and are there less dangerous alternatives, or not;
- 3. SEA shall be conducted at the earliest stages of plan/programme development, in order to make possible taking into account its results in plans/programmes themselves;
- 4. The respective quality assurance reliable mechanism shall be in place;

 $<sup>^{\</sup>rm 31}$  Source: adapted from UNECE Capacity Development Manual for the UNECE SEA Protocol

5. The respective mechanism for informing decision-makers on positions and opinions of all the stakeholders shall be in place;

6. Plan/programme, assessment and final decision shall be publicly available. Stakeholders shall be informed which of their opinions were considered and which not, and justification shall be transparent.

# 3. METHODOLOGY OF STRATEGIC ENVIRONMENTAL ASSESMENT

# **Introduction to Assessment Methodology and Approaches**

This Chapter concerns methods used in SEA. In consideration of diversity of the plans/programmes subject to the assessment, it seems obvious that it is impossible to develop one unified assessment method. Absence of such method often creates significant obstacles to assessment of possible consequences of the particular activity and preparation of the ecological review.

This Chapter describes existing SEA methodology or, in other words, the instruments, methods and approaches actually used during the assessment process. It should be mentioned that SEA instruments are mainly based on the widely accepted EIA methods, although, in consideration of the specificity of the task, here we can often meet adapted planning and evaluation approaches to the assessment of various impacts and expected changes to the environment.

SEA methodics are discussed in number of works and publications. From these we would like to mention the Capacity Building Manual for the UNECE Protocol on Strategic Environmental Assessment prepared by Regional Environmental Center for Central and Eastern Europe, one of the chapters in which is fully dedicated to the methodological issues. Other important study was prepared by ERM, called "A Handbook on Environmental Assessment of Regional Development Plans and EU Structural Funds Programmes and Monograph "Strategic Environmental Assessment" written byBarry Clayton and Barry Sadler....[a1]

From the very beginning, we have to indicate that SEA Protocol identifies basis of the procedures, which shall be used in the implementation process. According to the Protocol requirements, the expected environmental impact of the proposed plan/programme shall be thoroughly analysed. Protocol does not describe the assessment process itself, which is absolutely logical, although this creates certain problems for implementers and assessors.

What is the reason for Protocol not describing the assessment process? There are several reasons: plans and programmes can be different, covering various fields and sectors, and therefore, the assessment methods shall be different. It is impossible that protocol separately considers all types of programmes and plans; on the other hand, the assessment methodology is permanently modified, hence, it would be necessary, with each modification, to amend the protocol, which is not very convenient.

The next subsections describe SEA methods in more details.

#### How do we Carry out SEA?

- The procedural part of SEA implementation is determined much better then assessment methodology. Prior to commencing assessment, it is necessary to consider and analyse plan/programme goals and the ways of their achievement (i.e. activities, which will serve for achievement of the goals). Usually, it is recommended to systematise goals and ways of their achievement, for instance, visualise them graphically or schematically, or enter the available data into tables. At the same time, the basic environmental criteria, based on which the expected impact will be assessed, shall be identified. The next stage includes analyses of existing legislation and current environmental status. Analyses shall reflect planned activities and their impact in each of the identified criteria. At this stage the mane types of possible impact shall be determined, and this function is very important for preparation and assessment of the alternative options. Based on the results of the analyses, the respective recommendations and the lists of modification to be introduced in the plan or programme shall be prepared, and these recommendations and lists shall be taken into account by plan or programme developer and implementers. At the same stage, the SEA Report shall be prepared.
- -The indivisible component of entire SEA process is expert and public participation, which will be discussed in the separate Chapter of this work. The following important circumstances shall be considered: SEA is generally more global, general (less technical) and more dependant on individual experts opinion, point of view and judgement then EIA. The more experts and society representatives we involve in the process, the higher is probability that we will be able to avoid subjectivism and ensure recurrence of the results, which factors are extremely important for correct assessment.
- -Another important issue is that SEA Report is often less focused on technical issues and rather addresses the key "strategic" concerns about the proposed strategic document (e.g. whether or not the strategic document will contribute to achievement of governmental objectives for environment and health, whether all strategic options for management of development demands were sufficiently examined, etc.) . The report shall be brief, include easily comprehensible important information and clearly identify expected environmental changes, thus, providing decision-makers with possibility to assess the consequences, alternative ways and make final decision. Information collected and analysed during SEA, consideration of the research results and other technical materials are, usually, attached to SEA Report as appendixes or separate volumes.

# **Methodical Approach**

In various countries the specialists use various approaches, some of which are based on analytical and half-quantitative assessments. Some use technologies, which require application of matrixes and questionnaires.

The most complicated task in SEA is correct and, to the extent possible, quantitative assessment of the expected plan or programme implementation consequences. Here, the global assessment of each issue shall be paid the special attention.

According to the manual prepared by UNECE, the SEA methods shall be selected on basis of six main principles:

- Fit to purpose SEA tools should be appropriate to the content of the plan or programme and environmental issues and impacts addressed;
- Maximal simplicity the most simple method corresponding to researched impacts shall be selected;
- Adaptation of data and scopes i.e. selected method shall be based on cause-effect relations;
- Reliable approach the results shall be reliable and technically recurrent;
- Implementability the special attention shall be paid to those alternative options and measures, which maximally reduce expected negative effect maximally strengthen positive;
- Importance in decision-making the (most) important problems and compromises shall be described.

# What is Included into Plan or Programme Subject to Assessment

Until we start discussion of SEA process, we want emphasize the principles of preparing plans or programmes themselves. In preparation of the plans and programmes the developers shall take into account structural bases and methods, which are generally used for achievement of goals.

Prepared plan/programme shall contain clear description of the goals, i.e. plans and programmes shall set out the priorities, which shall be achieved or improved as a result of programme implementation.

Success of the plan or programme is assessed against level of fulfilment or satisfaction of the mentioned criteria. Let's take one – development of transport infrastructure in the region. Indicators here can be increase of the passenger traffic, frequency of transport communications at certain routes, etc. Usually, during the SEA, we shall pay attention to environmental effects expected in case of satisfaction of the criteria or, in our case, what can be impact of increasing passenger traffic by 25%: the impact can be small (pollution increased due to intensification of traffic, but, on the other hand, the private transport traffic significantly decreased) or relatively higher (improved infrastructure attracted additional transport companies in the region, causing significant increasing of the pollution0.

# **Initial Stage of SEA**

At the initial stage of SEA, we shall consider compatibility of the each of the above priorities with and their possible impact in environmental goals and objectives of the country. For this purposes, we will need to identify the environmental criteria. Selection of environmental criteria is quite complicated task, since they determine the efficiency and correctness of the research results.

Often, it is very difficult to select the criteria of expected impact. These criteria determine how accurate the final assessment of expected general impact will be. The worldwide examples of SEA, often, contain the global criteria and objectives, which are relevant in today's world.

When determining the environmental criteria, it is necessary to take into account the specific criteria set out in SEA Protocol and ones that are relevant to the broader environmental priorities.

Environmental criteria to be taken into account in process of SEA:

#### Based on SEA Protocol:

- biodiversity, fauna and flora
- population and human health
- soil
- water
- air and climatic factors
- material assets and architectural and archaeological heritage
- landscape

Based on broader environmental priorities:

- energy efficiency
- use of renewable and non-renewable resources
- adaptation to climate change
- transport demands, accessibility and mobility, etc.....

After selection of criteria, it is necessary to identify correlation between goals of the plan or programme with goals and objectives of country or regional environmental policies. At this stage, the assessment is made on basis of semi-quantitative criteria, like 'weak', 'medium', 'strong' or 'very strong'. The purpose of plan assessment is identification of the sectors, where goals of the plan or programme do not comply with comprehensive environmental policy goals. Usually, comparison is being performed by matrixes or other accepted methods. Here we can bring an example of SEA conducted by Regional Environmental Center for Central and Eastern Europe for the National Development Plan (NDP) of the Czech Republic (Ref. 24):

Table 1. Assessment of compatibility of the goals of the NDP and environmental goals of the Czech Republic for the SEA of the NDP

Goals of Development Plan  Environmental Goals	Rising competitiveness of business sector	Development of transport infrastructure	Development of human resources	Improvement of efficiency of environmental measures	Development of multifunctional agriculture	Development of tourism
Reduction of emissions resulting in climate changes	2	2		2	1	1
Reduction of air pollution	2	2		1		1
Limitation of soil and water pollution point sources	2			2	1	
Limiting regional pollution of soil and water	1				2	
Reduction of share of non-renewable energy sources	2	2		2	1	
Reduction of use of non-renewable resources and waste volumes	2	2		2	1	
Preservation of flora and fauna biodiversity	1	1		2	2	1
Preservation of functions and status of ecosystems	1	1		2	2	1
Preservation and improvement of cultural-landscape parameters	1	1		2	1	1
Improvement of conditions in settlements	1	1		1	1	1
Rising public responsibility in environmental issues	1	1	2	2	1	1

 $0-no\ impact,\ 1-insignificant\ impact,\ 2-significant\ impact$ 

Assessment of correlations carried out in the example can also be performed by questionnaires or other similar methods. The purpose of these methods is to register and assess significance of expected impact. Assessment shall be made in semi-quantitative way or in any other values, which will create possibility to mark the expected impact in a certain way. Selection of method is very important, since, use of improper methodics might result in very disperse and inaccurate assessment, which, in the future, will possibly create significant obstacles for implementing the remaining works, and will lead to incorrect conclusions.

#### **Identification of Indicators**

The next stage shall be identification of basic indicators for monitoring defined by environmental policies. In various countries and regions, the indicators might slightly vary, since they depend on the environmental priorities.

# - Air pollution indicators:

- o Emission levels of nitrogen oxides;
- o Emission levels of the volatile organic substances;
- o Emission levels of heavy metals;
- o Emission levels of persistent organic pollutants (POPs), including polycyclic aromatic hydrocarbons.

# - Water pollution indicators

- Biological oxygen demand (BOD<sub>5</sub>);
- o Chemical oxygen demand (COD);
- o Heavy metal concentration;
- Nutrient load;
- o Microbiological parameters.

#### - Soil pollution indicators

- o Heavy metal concentration;
- Nutrient load per hectare;
- Microbiological parameters.

Indicators for the plan or programme under assessment shall be identified, and based on them it will be possible to determine expected consequences of the proposed activity.

When choosing the relevant indicators, SEA experts should also consider data availability. However, a lack of data for certain indicators may not automatically prevent their future use within the SEA. The fact that data are not readily available should be pointed out and an informed judgement should be made on whether to use this indicator, or whether other indicators with more readily available information should be selected.

If clear and relevant indicators are not available, SEA may benefit from well-formulated specific questions that help to examine past and future trends and analyse the impacts of the programming document.

#### **Assessment of Existing Status (baseline information)**

In order to implement full-fledged SEA, it is necessary to obtain additional informational and create necessary supporting elements, one of the most important part of which is consideration of the existing status. The characteristics of the current environmental status of the area shall be considered and basic environmental problems identified. It the assessment process this information helps us in evaluation of possible negative or positive consequences of the specific activities. The background information can be obtained from country environmental reports, or reports prepared for other similar projects.

Usually, assessment of background information is carried out for the area identified during screening and scoping processes or its components, where the climatic influence can be expected (description of air, surface or ground waters, etc.). Generally, background information is obtained from environmental or environment status reports prepared for documents reflecting the country or state monitoring status.

Information itself is analysed by the simple, common methods, like literature survey, discussion of expert opinions, etc. Often, expert opinions are analysed by the so called Delphi Method (method implies sending questionnaires or information to the selected experts and discussing their opinions by the means of internet or regular mail), which is used for compilation of the opinions of various experts and preparation of integrated assessment. For simpler assessment the practical seminar method is used – organised meetings are arranged, and the issues are discussed by the working groups.

All the above activities result in preparation of brief information on existing or background status, based on which potential influences are studied and expected impacts are assessed. The most of the examples include background assessment as an appendix, since, developed programmes and projects usually contain description of the existing conditions, and SEA group issues recommendations on the items doubted by the team, to which the amendments are proposed.

It also should be mentioned that in the course of the works, the issues, on which there is no background information shall be paid the special attention and the additional information shall be sought. Often, during SEA process, there is no possibility for conducting additional researches, since usually it is concerned with a huge works, requiring much time and resources. The mentioned aspects are especially important in Georgian reality; in our case, the experts involved in assessment shall try to demonstrate maximally impartial approach to the assessment of the issues, on which there is no sufficient background information.

It is generally advised that SEA Team develops recommendations, which will promote elimination of existing problems related to insufficiency of the information and presents these recommendations to the relevant state authorities.

#### **Discussion of Alternatives**

After selection of the basic objectives and indicators for our research plan, carrying out the first stage of assessment and identification of sectors, where the main impact shall be expected, it is essential to prepare the alternative scenario, which will allow reducing or mitigating expected impact. Alternatives are one of the main components of SEA, since they ensure inclusion of environmental objectives into the planning and policy development processes. At the same time, we have to take into account that SEA process requires quite a broad approach in presenting the alternatives.

Primarily, the SEA experts (in ideal case together with planners or policy developing experts) shall draw up the alternatives for the plan or programme or their certain parts, allowing achieving the stated goals. For each of the alternatives the expected economical and human health effects shall be estimated. Alternatives shall include zero (plan or programme not being implemented at all) and Best Possible Environmental Options (BPEO). The last, very often, represents very good indicator for assessment of plan/programme effectiveness from the environmental point of view and provides us with possibility of making right choice.

# **Analysis of Expected Impact**

The purpose of this stage is prediction, identification and assessment of importance of the expected impact caused by implementation of proposals (plan, programme or policy) or their alternatives prepared at the previous stages.

Generally, SEA process creates much bigger uncertainty then EIA process. In case of plans and programmes, as well as in case of sectorial policies, we, usually, face the indirect environmental impact, or the impact, identification of temporal and spatial location of which is very hard or impossible.

Various sources give various recommendations on carrying out SEA procedure. It should be mentioned once again that in consideration of diversity of nature and scope of plans and programmes, there is no one, unified methodology, which would cover all types of plans and programmes.

At the screening and scoping stages we managed to identify the basic parameters and priorities of environmental impact, based on which the detailed study of such impact shall be performed.

Usually, the SEA intends to identify the direction of changes in environmental parameters – for instance, one can frequently observe the following type of conclusions: "decrease of wild mammal populations is expected", or "severe decrease of wild mammal populations is expected"; or there is another example: "increase of the volumes of the hazardous wastes shall be expected". These conclusions represent the qualitative description of the results expected from the impact.

Such assessment should describe the likely significant positive or negative effects of the proposed measures. These effects should not be limited to direct effects but should also include possible secondary effects and short, medium and long-term permanent and temporary effects as well as transboundary effects.<sup>32</sup>

In order to ensure the clarity and transparency of these assessments, SEA experts are advised to explain the key features of identified impacts by describing their probability, scale, frequency/duration, reversibility and any transboundary dimension. They may also leave out environmental issues that are not considered significant, so that the assessment focuses on the key issues.

Review of the plan or programme can be carried out by various methods, which, conditionally, can be divided into two groups: methods used for assessment of impact into environment and methods used for assessment of policies and plans.

The first group includes following methods:

- Checklists and questionnaires;
- Matrixes;
- Impact grids;
- Modelling;
- Relative risk assessment;

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<sup>&</sup>lt;sup>32</sup> SEA Directive, Annex I, item (f)

- Assessment of impact in human health.

# **Methods for Assessment of Plans and Programmes**

The next stage of SEA implies direct assessment of plan and programme, thorough consideration of their each chapter and preparation of comments and recommendations on presented issues, revisions to the programme or additional works to be performed.

EIA process actively involves the so called Impact Matrixes Techniques. Their main purpose is as follows: matrix allows assessing basic goals of programme or plan in accordance with the various parameters associated with this process.

When using matrixes in SEA process, together with integration of goals and priorities, it is reasonable to demonstrate the indicators presenting the changes expected as a result of plan/programme implementation to the decision-makers in easily comprehensible way and providing them with possibility to follow the process of implementation. The advantage of matrix is that it is easily possible to add any information into it during the course of the project.

Filling out the matrixes, we shall try to maximally simply and comprehensively reflect value of expected impact. At the same time, the following types of definitions are frequently used:

- Brief textual description;
- Symbols, which can demonstrate positive or negative correlation or level of relation (this implies positive or negative signs, circles of various diameter and colour);
- Digital values, which can be summed up (or, in case of complicated matrixes, it is possible to add a separate coefficient for each of the parameters, identifying the importance of such parameter) and expressed by the aggregate number corresponding to the overall value of the expected impact.

During the SEA process, it is often possible to fill out the matrixes the way, which ensures identification of the parameters on basis of reliable information. There is a big risk that indicators of the information, remarks and parameters included into matrix will appear to be non-recurrent. Often, this is concerned with absence of information or experience. In these cases, the various assessment techniques are being applied, and we will briefly touch them upon.

#### Questionnaires and interviews, expert group discussions (so called panel)

Are frequently used, when it is necessary to obtain and consequently analyse information from various state authorities and ministries, NGOs or expert groups. Questionnaires and interviews give good result for quantitative assessment of specific expected impact, or better identification of parameters of plan/programme goals. Questionnaires allow describing expected result in quantitative values, although, here is a certain risk related to selection of respondents: we shall separate employees of the state structures, representing the concerned party to a certain extent, NGO sector and expert groups. In order to avoid the mentioned problems, often, it is practiced to arrange the expert group meetings (so called panels), during which the issues are discussed by the group having similar interests and consensus, usually, can be easily achieved. The mixed panel techniques can also applied as well. In these cases, the groups of mixed interests are gathered and consensus is reached within such groups. Such

cases do not fully eliminate risks: some groups might not be fully represented, therefore, it is essential to sufficiently interest all the groups during the panel preparation process.

#### Checklists

The mentioned instrument is frequently used in project assessment process, for instance, during the EIA. While using checklists in SEA, we shall take into consideration that we face the strategic and cumulative impacts, which, in their turn, cover more sophisticated cause-effect chains. In case of the mentioned complicated issues, it is very uneasy to find the relevant forms of the checklists and answers to them, and often, the prepared documents do not fully reflect the issue under research.

#### Trend analyses

Trend analyses are often used for assessment of expected changes in the parameters over the certain period of time. The method allows receiving the rough estimates of changes expected in parameters of environmental conditions, resource exploration or other dynamic processes. Usual analyses describe actual changes of the characteristic (or interesting for us) parameter, and estimate the expected changes based on data obtained from such description. This method is frequently used in estimation of the mineral stocks, possible pollution from diffuse agricultural sources, forecasting noise and vibration levels, etc.

#### Use of GIS systems

The mentioned method earns more and more popularity recently, since, it provides with possibility of performing complex studies of the various types of data, taking into account their spatial distribution. Method allows registering the areas, where the impact will be aggregated, assess spread of the impact in sensitive areas and, at the same time, assess the values of expected risks. This method is especially important in assessment of cumulative impacts. Although, creation of GIS models requires huge amount of data and, often, this is concerned with significant difficulties, the data, which is necessary for the each specific case shall be identified, and this creates the risk of receiving radically differing results in case of omitting any of the parameters (or their lack or inaccuracy). Based on the above, it is essential that, along with the GIS, we use complex of analytical and modelling methods.

# Analyses of biodiversity and ecosystems

This instrument is very important in SEA, since, it relays on the approximate assessment methods and carries out systematic assessment of the expected results at regional and interregional levels. Method allows assessing the conditions of sustainable utilisation of natural resources.

#### Networking and systemic diagrams

Use of networking and systemic diagrams gives very good results for studying and assessing cause-effect correlation, since, it actually reflects problem genesis chain and identifies source of and reason for appearance of the cause factor, thus, providing with possibility for planning the impact reduction measures and implementation monitoring.

#### 'Importance' of Negative Impact, Measures for Avoiding and Reducing It

During the process of assessment of the expected impact (see previous Subsection) we have identified the possible negative or positive effects, which might follow the plan/programme implementation. The works described in the same Subsection revealed the main sites, which might be influenced by the negative impact. At the next stage, the SEA implementers shall prioritise the possible negative effects according to their importance.

Resolution of these issues is concerned with quite big difficulties. We have partially touched these problems in paragraph related to use of matrix techniques. In ideal situation, in order to ensure the accurate mathematical processing of the assessment results, each of the matrix items shall have its own importance coefficient, i.e. assessment of each of the items shall be corrected for its importance coefficient. Summing up the results, we can use the mathematical methods for complex assessment of expected impact levels for the various conditions (alternatives).

In order to assess the importance, the expected impact shall be studied and evaluated on basis of environmental criteria and goals. Like the EIA process, the results of such assessment are intended for the decision-makers and represent main basis for their judgement on environmental acceptability of the plan/programme.

It would be ideal, if the results were presented in form of profit-loss account, which will be drawn up in a certain currency and for the long term period. Environmental loss evaluation methods extensively described in various EIA and risk assessment guidelines and toolkits are broadly used in such economical calculations.

In the worst case, the situation shall be considered from the point of view of the most pessimistic and the most optimistic scenarios. The decision-makers shall be provided with the information on the areas, for which it appeared to be impossible to assess the values of expected impacts, and what was the reason for such failure, and what can be consequences of the certain imprecisions and inaccuracies. Such assessments are mainly based on the experts' opinions, sensitive analytical methods or comparison with the similar situations.

Recommendations for reduction and avoidance of the expected negative impact shall be elaborated at the same stage. The attention shall be paid to the fact that recommendations shall be based on the results of SEA, and shall be prepared the way, which leaves the space for improvement of the planned future activities or, in the better case, recommendations shall include the measures for permanent updating and improving action plan for reduction of impact. Like the usual EIA, SEA impact reduction action plans shall include the measure for avoiding, reducing or compensating the main impacts.

The planned activities shall comply with the importance values and specificities identified for certain type of impact. The special attention shall be paid to the types of impact, which could not be identified and analysed due to an objective reasons, although the analyses revealed certain risks of appearance of the important and irreversible impact; in such cases the recommendations shall have the preventive character. Based on such analyses, the decision-makers shall be informed that in case of some alternatives it was impossible to forecast the effectiveness of the reduction measures, and there is certain risk of receiving non-satisfactory results. This might stimulate them (the decision-makers) to approve more realistic alternative in cases, when the selected alternative, in a certain way, is less advantageous then the

proposed one, although, the environmental impact can be significantly reduced through implementation of recommended action plan, and the risk of uncertainty is very low.

# **Strategic Environmental Assessment Report**

The SEA report shall comply with the certain parameters. The basic requirements for the report are as follows: it shall be laconic, easily comprehensible and readable document, majority of which is dedicated to brief description of impact expected from implementation of the proposed plan/programme, conclusions and recommendations. During the development of the report, we shall take into account that it is mainly intended for the decision-making state officials, therefore, each of the issues shall be described clearly and laconically, and shall include links to the detailed information on preparation of each particular recommendation, purpose of such recommendation, reasons for denying the initial version, methods used in examination of initial and alternative versions, etc.

The main purpose of the report is to make the decision-makers aware of the possible negative impacts of plan/programme implementation, and provide them with information allowing alteration of plan or programme the way ensuring improvement of environmental parameters.

Introduction of the SEA report shall in detail describe prerequisites for preparation of plan/programme, its general and specific goals, methods and ways for their achievement. It is recommended that the following section describes environmental objectives, which might be affected by the proposed plan/programme, and the environmental legislation governing implementation process.

The next sections shall be dedicated to selection of indicators, assessment of general impact, description of the current status, etc.

Technical information shall be fully included into the annexes, and this shall be done the way that interested reader can easily follow the specific recommendations and process of developing of the conclusion, see what were the problems identified by SEA team, how the issues under discussion were studied and what were the proposed solutions.

Currently, the reports are often having the so called web-site structure, when the issues of interest have various levels of detalisation. This structure is also called the pyramid structure.

# **Public Participation Issues**

# Why Public Participation?

Besides this, approving plan/programme, the comments and suggestions received from stakeholders and healthcare authorities shall be taken into consideration.

Generally, necessity of public participation is justified by two basic ideas:

- The society shall be entitled to participate in making decisions, which might significantly affect its living conditions; and
- Active participation of the concerned society improves quality of decisions.

It is widely recognised that public prefers to support policies or strategies, in development or at least approval of which it has actively participated. **Public participation in strategy development guarantees its implementation.** The imposed policies, however correct and good they are, cause the negative attitude. (The irritation spring shrinks and it is necessary to release the tension.) Informed, active society will ensure implementation of the jointly adopted decisions.

**Society can share its knowledge and experience.** Public experts can not only criticize and reveal negative aspects of plan/programme, but also propose more effective alternatives. More aspects and risk factors are taken into consideration.

Examples from many countries demonstrate that broader public discussion of the issues **improves social, economical and environmental conditions existing in the countries.** Estonian Naisaari Island represents very clear example of this.

# **EXAMPLE:**

#### SEA of Naisaari Island development master plan (continued from p. 10)



- SEA Process involved future landowners, scientific associations, entrepreneurs, professional associations, unions, movements and other natural or legal persons. Several public meeting were arranged:
- ➤ The first meeting with stakeholders the meeting was attended by representative of district and local governances, local landowners, other stakeholders. The purpose of the meeting to carry out SWOT analyses for the Island. Besides this, the development and environmental goals concerned with the future development of the island were discussed.
- ➤ The second meeting with stakeholders with participation of the working groups. Information on planning and SEA processes were presented; various alternatives for complex planning were described; and information on their potential environmental impacts was provided. The representatives of the stakeholders participated in Matrix Analyses, which allowed them creating awareness on environmental outcomes of the various alternatives.
- ➤ The third meeting with stakeholders draft project proposal on the issue under discussion was presented. At the same time, the positive and negative environmental

effects, as well as the measures for their mitigation were considered. The public comments and recommendations on minimising possible environmental effects were discussed.

Planning and environmental assessment processes were carried out in parallel and each of their stages envisaged public involvement. Project proposal and SEA Report were presented to the society for discussion and presentation of the proposals and comments within the 4 week period. The proposals and comments received from the stakeholders were incorporated into the final version of the project.

Planning	Environmental Assessment	Public Participation
Preparatory works, development of working schedule	Preparatory works, development of working schedule	Information of commencement of planning/SEA process
Development Strategy; review of the existing data; development goals	Environmental aspects of the strategy; environmental researches; environmental goals	The first public discussion
Development of 5 possible alternatives	Assessment of the basic impacts for each alternative; projects of public discussion matrixes; final matrixes based on additional researches	The second public discussion
Planning project proposal	Preparation of SEA Report for the most acceptable alternative (planning project proposal)	The third public discussion
Planning proposals	SEA Report	Ensuring public availability of the documents and receiving comments

Public participation became the most important element of the process. Informing society at the earliest stages allowed avoiding conflicts and finding new and original solutions. Besides this, the basic needs and claims of all stakeholders were timely identified and considered. This allowed avoiding modification and revision of the plan at the later, implementation stages, which would be connected with major extra costs.

Public participation process shall be open and transparent, since this creates **trust in governmental structures and positive attitudes towards decisions made**.

In Georgia one can frequently hear public officials claiming that society is not interested in participation, and if such things happen, they always have some subjective background. In our opinion, it is opposite: passiveness of the society has its specific reasons, and if they will be revealed and removed, the society will be extremely interested in participating in the various processes. One of such reasons is mistrust in public authorities. Each case of public participation failing to influence the decision-making process, contributes to increasing such mistrust. Unfortunately, there are plenty of such precedents in Georgia (as we have explained in Chapter 1, this is caused by the absence of mechanisms ensuring taking into account the public concerns). Georgian society will actively involve in this processes, only after it sees that such involvement is significant and effective.

We came to the conclusion that public participation is not only necessary, but also useful. Then, how public participation and making acceptable for everybody decision shall be ensured?

Involve the society from the very early stages will result in correctly perceiving its requirements, taking into account which allow **avoiding future surprises and conflict situations.** Timely and effective public participation **saves time and money of planners and SEA developers.** It would be appropriate to arrange public participation in parallel with project development – this reduces probability of rejecting prepared document by the society.

Establishment of effective communications is one of the main prerequisites for successful SEA.



In 1999, Vase municipality carried out SEA for land use plan. In order to ensure effective public participation, the following methods were used:

- Round tables:
- official meetings with municipality and its departments (e.g. Department for Spatial Planning);
- public hearings;
- communicational platforms, etc.

The draft land use plan was made available for public discussions for 8-week period. Stakeholders could review document and express their opinions and suggestions.

#### **How to Involve the Society**

In order to achieve successful public participation, it is essential to:

- Ensure accessibility of information for entire period;
- Listen to opinions of various parties at the various stages; and
- Reach the mutual agreement.

Each level has its own, different methods, means and instruments. In selection of the method, the main issues to be considered are:

- Nature and number of stakeholders (education level, technical knowledge, level of environmental awareness, social status, etc.);
- Nature and complexity of plan/programme and technical characteristics of the information to be provided to the stakeholders;
- Institutional conditions and possibilities or financial resources available for project implementation.

The below models are widely used in practices of the various countries. We discuss only their positive and negative aspects, it's up to you to decide which method, and when shall be used.



**Public discussions/hearings** – in order to ensure effectiveness of this method, it is necessary to preliminary provide society with the necessary information on the issues under discussion. The

time and place shall be properly selected. It allows society directly and immediately express its opinion, ask questions and receive answers right away. Of course, the hearings are not means for decision-making. Their purpose is identification of public needs and concerns and its approach to the specific issues



**Questioning, Interviewing** – is another method of collecting information. This method allows identifying the opinions of persons, which are unable to participate in the meetings. For this purposes, the telephone and internet

communications can be used.



• Telephone communication is convenient way for receiving comments from the concerned individuals. Such indirect contacts do not confine the persons, and they openly discuss all the issues of interest for them.



• Audience of internet is quite global and its cost is lower. The web-page can contain huge volume of information, and it allows receiving of similarly huge volume of comments from the big number of people.

Although, unlike telephone, in our reality, the majority of population of Georgia does not have access to internet.



• The researches can also be carried out in written form

Public demonstrations/open access days – the events organised for the purposes of informing society. Such events shall be conducted in public places. The persons shall be given possibility to attend them at specially allocated or any convenient for them time, and, locally, receive information on the issues of their concern or interest. Also the fact that, generally, public better perceives visual information, then communicated by other means shall be taken into account. Besides this, they will have possibility to discuss issues with specialists. However, this method consumes lot of specialists' time and energy.

Consulting groups – small groups of people, which can be completed by the representatives of NGOs or various specialists. They have more trust from the general public and are capable of informing wide strata of population or collecting the necessary information. This method saves time, since, you have to meet smaller number of people and, besides this, and it significantly eases achievement of consensus.



**EXAMPLE: City of Varna Municipal Development Plan** and respective SEA (continued from p.7)

Recently, legislation of Bulgaria envisaged public participation only through public discussion of final versions of plans and SEA. Society could not participate in planning and SEA development processes. In 2003, situation changed, New standards.



development processes. In 2003, situation changed. New standard act setting out public participation from the earliest stages has been adopted. This procedure was firs piloted in drawing up City of Varna Municipal Development Plan.

It was interesting that from the very beginning, two independent 'currents' of public involvement could be observed: city administration and SEA implementing experts. They had absolutely different purposes for public participation:

Municipality was interested in obtaining public support for Municipal Development Plan. They were interested in maximal possible dissemination of the plan, and participation and comment discussions were mainly aimed towards creation of positive attitudes within the society.

As for the SEA developers, their goals were absolutely different. They desired to reveal the environmental concerns of the population; claims and interests of various groups and find interesting solutions, ideas and proposals in the public comments.

In order to satisfy the needs of the both of the mentioned groups, the compromise form was found. Particularly, the process was split to the following stages:

- identification of stakeholders (7 groups in total);
- hiring specialists for analyses of the public comments;

selection of public relations' methods (12 in total) involving all the parties concerned. These are:

- 1. Public opinion polls (350 interviews by 4-page questionnaires);
- 2. Telephone interrogations;
- 3. Public meetings;
- 4. Articles in printed media;
- 5. TV coverage of public meetings;
- 6. Placement of city development plan, SEA report and other relevant documents at the informational boards. At the boards, there were competent persons, who were able to answer the questions related to the issues under discussion;
- 7. Informing stakeholders on public meetings and materials placed on the boards through the printed media means;
- 8. Informing stakeholders on public meetings and materials placed on the boards through the radio;
- 9. Written invitation to seminars;
- 10. seminars with participation of experts;
- 11. telephone hotlines;
- 12. repeated placement of city development concept and basic SEA conclusions on the informational boards, although, this time, without presence of competent experts.

The special attention shall be paid to the fact that information on each of the aspects has been disseminated multiple times, through various media means and at different times, thus, enabling informing maximal number of stakeholders.

The results were as follows:

- high public awareness on the issues;
- high interest level (500 persons attended the meetings in the city with population of 400,000);
- absolutely new, unforeseen technical solutions for development of coastal zone infrastructure (water supply and sewage systems) and use of geothermal waters have been discovered; society presented interesting proposals on elimination of coastal erosion and extension of beach area;
- increased trust in local governance and support to their plans, which was especially important at the later, plan implementation stages.

# 4. ENVIRONMENTAL ASSESSMENT OF PLANS AND PROGRAMMES IN GEORGIA

### **Planning System in Georgia**

It shall be mentioned from the very beginning that there is no clearly identified and specific planning system in Georgia. The existing system originates from soviet period and is mainly directed towards completing the state budget, and serves for financial planning and regulating purposes.

## **History**

Basis of the social-economical development planning system currently existing in Georgia was created by the Law on Basics of Indicative Planning of Social and Economical Development in Georgia passed in 1997. according to this Law, indicative socio-economical development plan shall include the Socio-Economical Development Strategy, basic directions, objectives and methods of their implementation for the given period of time. Indicative plan can be elaborated for short-term (up to one year), medium-term (up to five years) and long term (10-20 years) periods. The long-term indicative socio-economical development plan has not been developed in Georgia yet. In 2000, right after presidential elections, according to the programme of the former president, the indicative socio-economical development plan for 2001-2005 has been developed and approved.

The annual indicative plans represented basis for formulation of draft state budget of the country. Indicative plan was being elaborated on basis **sectorial targeted programmes** (**projects**) developed and proposal presented by state authorities, territorial and local governances and self-governances and scientific institutions. These programmes and proposals were presented to Ministry of Economics.

The Ministry of Economics created special commission for consideration of the targeted programmes. The selected targeted programmes were used for drawing up the list of the programmes to be implemented in the first place, and this list had to be approved by the President. Approved list of programmes, together with their financial indicators was sent to Ministry of Finance for their consideration in the next year draft state budget. Since the expected budget revenues were much less then the amounts necessary for implementation of the selected targeted programmes, only part of them was usually included. Consequently, due to the fact that, often, even such limited expected revenues could not be received, even the approved targeted programmes could not receive the full financing. Hence, the planned activities were either not implemented, or implemented only partially.

According to the Presidential Ordinance on Rules for Selection and Financement of State Targeted Programmes (No. 711, 1998), "main criteria for selection of the targeted programmes is the importance level of its implementation for ensuring achievement goals, objectives, priorities and targets of socio-economical development set for the identified period". Although, according to the existing Presidential Ordinances or strategies, frameworks and other political documents approved by the Parliament decisions, there hardly could be identified the sector, which was considered not important from the aspects of socio-economical development. In such circumstances, when actual priorities, achievable goals and ways for their implementation are not identified and agreed, the limited financial resources

were distributed unsystematically and inefficiently, based on the sectorial development targeted programmes submitted by the various authorities. Hence, the problems arising from inefficiency of the state planning programme were especially acute.

The indicative socio-economical development plans, usually, allocated one chapter for each of the sectors. For instance, regulation of environmental issues and use of natural resources were separated in special subsections, which, generally, identified priority environmental directions and specific targeted programmes (projects) in sphere of environmental protection (including global matters), namely, biodiversity, climate changes, land degradation/deforestation. The same was practiced for the other sectors.

As a rule, the priority directions of each particular sector were identified by respective sectorial authorities (ministry, state department). For instance, priority environmental directions were identified by the Ministry of Protection of Environment and Natural Resources. Some times, environmental projects were included into the various economical sectorial development programmes presented by the respective authorities. Such sectors included: agriculture (protection of soils from erosion, improving soil fertility, etc.), energy (development of wind power generation), transport (development of environmentally friendly transport), construction and urbanisation (programme on the issues concerned with washing black sea coastal zone of Georgia by the rivers), forestry (protection and rehabilitation of forests), etc. Although, these sectorial projects, often, did not comply with the priority directions identified by the indicative plan for this specific sector. Besides this, the projects presented by various sectorial authorities are often contradicting. There were cases, when various sectorial development programmes were not agreed with the Ministry of Environment, although, these projects covered some environmental issues. As a consequence, certain issues of many infrastructural projects dubbed each other.

One of the main disadvantages of indicative socio-economical development planning was that it did not include clearly identified procedures and criteria for development, approval and implementation of targeted programmes and short-, medium- and long-term strategic priorities, and the main stress was shifted from sustainable development towards the financial issues.

At the same time, various ministries were developing plans, programmes, strategies or frameworks of sectorial development. Such documents, usually, were approved by the Presidential Ordinances. Formally, these documents underwent procedure of agreement with all the concerned ministries, although, frequently, deliberately or not, this procedure was 'shrinked'- the concerned ministries either did not receive document, or were given unrealistically short period for its consideration. As a result, there are number of not agreed and contradicting Strategic Documents approved by the Presidential Ordinances.

Various international projects try introduce new, coordinated project planning procedures, although, there still is no unified approach/practice or formal procedure of such planning in place.

#### **EXAMPLE: Economical Development and Poverty Reduction Programme**

In 2000, under the Heavily Indebted Poor Countries Join Initiative of the World Bank and International Monetary Fund and Poverty Reduction and Economical Growth Mechanisms Programme of International Monetary Fund government of Georgia started development of

State Programme for Economical Development and Poverty Reduction. Programme was approved by President in June 2003 (Ordinance No. 800, June 23, 2003). As the Programme documents sets out, it is intended for "ensuring sustainable development and significant poverty reduction in the country, creating welfare and worthy living environment for population of Georgia". Programme includes long-term development plans for the period till 2015. it also thoroughly describes measures to be taken by the government in 2003-2005 period. As it is mentioned in the document, it reflects unified strategy of socio-economical development in Georgia, based on which, all the sectorial and inter-sectorial programmes and action plans shall be developed. In the future, it shall serve as a basis for development of state budget and sectorial reforms. The Programme also creates background for cooperation with World Bank, International Monetary Fund, other international financial institutions and donor countries, and for receiving their aid.

Development of Economical Development and Poverty Reduction Programme represented first realistic attempt for establishment of cooperation between various state authorities, NGOs and academic institutions for the purposes of developing unified strategy. Programme development was coordinated by state commission, and the sectorial sub-commissions included representatives of governmental and non-governmental institutions and private experts.

Document includes specific sub-sections dedicated to environmental issues. These sub-sections reflect environmental problems existing in Georgia and envisage measures to be taken by the government for their elimination. Environmental (including global) issues, problems and measures are also included into sections related to development of various economical sectors (agriculture, energy and transport). The document highlights the global problems, like bio security and soil erosion, salinisation and desertification (agriculture), ineffective utilisation of energy resources, limited use of renewable resources (energy), natural disaster risk management, development of protected territories (environment), forestry resources management (forestry development) and emphasises necessity of addressing these issues and taking effective measures for their elimination. Although, this document pays less attention to state financing programmes necessary for resolution of the mentioned problems. Here, the main source of financing is expected to be found in international community.

It is unclear yet, what will be the formal correlation between indicative socio-economical development plans and Economical Development and Poverty Reduction Programme. Logically, the EDPRP should serve as the basis for development of future annual indicative plans.

Currently, the state decided to introduce the new planning system – MTEF (Medium Term Expenditure Framework) and rejected existing practice of annual indicative planning (it also should be mentioned, that legal acts related to existing planning system are not lifted yet). However, MTEF represents more accented medium-term planning programme, then one currently existing. Strategic plan for sectorial expenses presented by the government does not serve for identification of the policy, but represents a tool for establishing correlation between existing policy priorities and resource distribution. Main purpose of this document is regulation of certain issues related to budgeting process, which issues include establishing connection between strategic planning and budgeting processes. Document highlights necessity of identification of strategic priorities both, on the national and sectorial levels, as the only means for ensuring strategic expenditure of significantly limited state resources. Therefore, based on all the above, planning process in Georgia still requires respective

improvement.

### Plan and Process Assessment Procedures in Georgia

One of the elements of SEA in Georgian legislation can be considered requirement of Law of Georgia on Standard Acts, according to which Strategic Documents (laws, plans, programmes, projects, etc.), implementation of which falls under interest of various state authorities, prior to adoption or approval by legislative or executive powers shall be agreed with the mentioned state authorities. Besides the mentioned, according to Law of Georgia on Environmental Permits, "infrastructural plans, projects and programmes, prior to adoption or approval by legislative or executive powers, shall receive the environmental permits", which procedure implies their environmental assessment, or environmental impact and expert assessment of activities envisaged by the infrastructural assessment.

On August 2, 2005, the new Law on Licenses and Permits came into force. According to this Law, the revisions to the respective laws is still being developed. So, it is unclear, what will be the nature of mentioned revisions.

In consideration of the existing background, it is even more important to prepare package of amendments to the Georgian legislation, which will include strategic planning and assessment issues.

Currently, there are standard acts regulating licensing and permitting procedures in environmental sector, although, there are some gaps, which, in a certain way, hinder the process.

#### **EXAMPLE:** Assessment of the Colkheti National Park Management Plan

The EIA performed for Colkheti National Park Management Plan can serve as an example of EIA for infrastructural projects, which is set out in legislation of Georgia (certain element of SEA procedure).

As it was mentioned above, the Law of Georgia on Environmental Impact Permits sets out that prior to adoption or approval of the infrastructural projects, they shall receive environmental permit (currently, Environmental Impact Permit). Therefore, in order to receive approval on Colkheti National Park Management Plan, the EIA Report has been presented and environmental permit obtained.

Prerequisite for the above procedures was Law of Georgia on Creation of Colkheti Protected Territories and Their Management (1998). The Management Plan was developed in accordance with Laws of Georgia on System of Protected Territories and on Protection of Environment. In order to support activities concerned with creation and management of Colkheti National Park, the Ministry of Natural Resources and Protection of environment initiated establishment Coastal Zone Integrated Management Center, which ensured performing all the activities necessary for receiving permit. Development of Management Plan was preceded by preparation of environmental review document. Based on this document and respective research, the EIA report has been produced. The Management Plan itself (along with the respective Presidential Ordinance) underwent procedures of agreement in government of Georgia; the broad public discussions were also conducted.

The mentioned EIA, long with the environmental impact issues connected with Colkheti National Park Management Plan, also includes outline of environmental management plan. EIA report provides government of Georgia with assessments, which can be used for identification of environmental reasonability of the planned measures. Project is intended for creation of the adequate management tools for addressing the issues existing at the coastal regions, especially at the excessively humid Colkheti area of international significance.

Since the country's legislation does not include provisions identifying full scale SEA procedure, the stated assessment procedures, in our case, can be considered only certain analogue of SEA. Particularly, after accomplishment of EIA procedure (which, according to Georgian legislation, shall be carried out by the activity initiator) and preparation of the assessment report, such report, along with the management plan, was presented to the Ministry of Natural Resources and Protection of Environment. The Ministry, according to the legal requirements, carried out State Environmental Review (i.e. assessment by the experts) and public discussion procedures, based on which the environmental permit has been issued. The mentioned permit, together with its conditions, allows the Ministry of Natural Resources and Protection of Environment, agreeing on the Colkheti National Park Management Plan. Besides, it will be possible to approve the mentioned document in accordance with the legislation. Currently, the mentioned package of documents is already presented and is subject to approval by the President.

It also should be mentioned that draft EIA Report has not been presented by the investor for public discussions, since, according to the legislation of Georgia, investor has right, but is not obliged to carry out public discussions on EIA (as we have mentioned above, public hearings were conducted for the Management Plan).

For comparison, below we will discuss the procedures, which should be implemented, if the document was subject SEA under the legislation.

According to SEA Protocol, the first stage includes preliminary assessment by the state – identification of plan/programme or, in other words, it shall be identified, if the document falls under SEA Protocol requirements, and is it subject to SEA procedure or not. In order to ensure making the respective decision on described issues, the initiator shall apply to state environmental and healthcare authorities. In case of Georgia, it is required that the mentioned authorities are entitled under the legislation to make the respective decisions (which currently is not in place). Analogue of this can be considered process of agreeing Management Plan with the governmental structures, although, generally, this procedure has rather informal nature and represents just the small part of procedures envisaged by the Protocol.

Since, the necessity of preparation and approval of the Colkheti National Park Management Plan is stipulated by the Law and is approved by the Ordinance of President of Georgia, according to the Protocol, this document can be the subject to SEA. Although, during the decision-making, it shall be taken into account that, according to EIA of Management Plan, measures for development of Colkheti National Park will not have significant environmental impact (this was confirmed by World Bank assessment, according to which, the project was attributed to Category B. the projects included in the mentioned category do not have significant environmental effect and, therefore, do not require SEA), and illegal activities currently taking place on the Park territory are having much heavier effect. These activities will significantly reduce after launching Management Plan. The mentioned factors, according to the Protocol, are main basis for identification of need of the SEA procedure.

At the same stage, according to the Protocol, the public participation shall be ensured, and state authorities shall inform public (providing sufficient justification) on decision about necessity of SEA. In our case, public discussion of Colkheti National Park Management Plan can be considered satisfying this specific requirement of the Protocol, although, according to legislation of Georgia, arranging such discussion is not obligatory.

In case if environmental or healthcare authorities make decision on carrying out SEA for particular plan/programme, according to Protocol, it is necessary to identify the scope of ecological report that shall be prepared, or in other words – what information and research results shall be included into such report. At this stage, the initiator shall necessarily receive consultations on issues and information to be included/discussed in the report from state environmental and healthcare authorities. Besides this, according to the protocol, it is desirable to arrange the public hearings.

In Case of Colkheti National Park Management Plan, activities complying with this requirement of the Protocol have not been performed. The analogue of ecological report can be considered preparation of EIA Report required by the Georgian legislation. With this respect the situation is as follows:

Legislation of Georgia (EIA Provisions) identifies general contents and outline of EIA Report for every type of project (only exception is made for trunk pipeline projects, for which there are specific requirements), and does not allow preparing specific assessment necessary for each particular project, i.e. identifying necessity of carrying out number of assessments and researches. On the other hand, some activity might require additional research, which is not approved by the stated requirements. Due to this, some important and problematic issues might stay beyond EIA Report, particularly, in the case, when arrangement of public hearings and discussions is not required by the law. Or, on the contrary, the Report might be overloaded by the unnecessary information. All the mentioned will significantly hinder the process of assessment by the state structures.

During preparation of EIA Report for Colkheti National Park Management Plan, both, the requirement of Georgian legislation on EIA Report, and requirements of Protocol on ecological reports were taken into consideration, and this was performed in compliance with international norms (recommendations of World Bank).

According to the Protocol, the next stage shall be development of ecological report. Generally, the report shall be describing expected significant environmental (including human health) impacts of plan/project implementation and considering the reasonable alternatives. The report shall include: scope of the plan and its linkages to other plans and projects; basic environmental problems of area of implementation; main factors and subjects of environmental impact, as well as the consequences of the expected impact; environmental goals and extent of their involvement; mitigation and/or compensation measures; monitoring and control issues; transboundary aspects and results; various level (international, national, etc.) goals; and brief summary intended for the general public.

At the same stage, public participation id discussion of the ecological report shall be ensured. The discussion procedures shall be timely carried out. Influenced community, stakeholders and concerned NGOs shall be identified. At the same time, timely distribution of plan/project and ecological report in the society shall be ensured and the reasonable time allocated for receiving feedback.

In our case, as we have mentioned before, EIA Report (analogue of ecological report) for the Management Plan under discussion has been prepared. The Report included following issues:

- description of the researched area and planning processes;
- environmental policy, legal and administrative frameworks;
- identification of expected environmental impacts and their possible significance in development of Colkheti National Park. Particularly: cumulative effects caused by development of Park infrastructure; potential impacts in protected territories and biodiversity;
- identification of alternative and mitigation measures, intended for elimination or reduction of negative influence;
- identification of common types and nature of basic data required for measuring expected environmental impacts and consequent monitoring;
- proposals on creation of monitoring system and capacity building for ensuring performance of environmental impact assessment and environmental audit by the staff;
- recommendations on environmental management plan.

As it was mentioned above, initiators did not arrange any public discussion at this stage, since this procedure is not obligatory under the law.

At the Next stage, according to the Protocol, the process of agreement with environmental authorities and other governmental stakeholders shall be carried out within the stated reasonable term, and only after this, decision on approval of plan/project can be made. In decision-making, the following issues shall be taken into consideration: conclusions contained in ecological report; measures for avoiding, reducing or mitigating possible/expected consequences set out in ecological report; comments and proposals received during agreement process, included those received from general public.

Decision on approval of plan/programme shall be published in media, and shall include brief note on how comments, opinions and proposals were considered, as well as reasons/justification of approving the document.

In case of EIA of Colkheti National Park Management Plan, the Ministry of Natural Resources and Protection of Environment, instead of required by Protocol agreement (as already mentioned, the procedure of agreement with governmental stakeholders was carried out for the Management Plan itself), carried out the legal procedures of State Environmental Review (assessment by the independent experts) and public discussions. As a result, based on the conclusions of State Environmental Review nd public participation, the Ministry of Natural Resources and Protection of Environment made decision on issuing the environmental permit.

The Conclusion of State Environmental Review included basic data contained in project documentation, respective notes and conclusions. The permit conditions (which include conclusions and notes contained in Conclusion of State Environmental Review, is binding and make integral part of environmental permit) reflected issues revealed in the process of State Environmental Review, which were not fully presented in the project documentation presented with application. As for the public comments and proposals, no active public participation was observed (probably this was due to the broad public discussions of the Management Plan arranged in the previous years, at which large number of the proposals and comments were made, and many of them, to the extent reasonable, were included into the project proposal), and received opinions mainly concerned with use of Park adjacent

territories, like pasturing, fishing, wood cutting, etc. the mentioned issues are currently more or less regulated, through the recent revisions in the respective laws.

As for approval of the Management Plan, according to the requirements of Georgian legislation, after receiving respective environmental permit, it can be approved in compliance with the stated procedures, particularly, by the Ordinance of President of Georgia, after which it shall be published. The package of documents is already presented and is waiting for the relevant procedures.

After accomplishment of all the specified stages, according to the Protocol, it is necessary to carry out monitoring of significant environmental effects caused by the approved activity. Purpose of the monitoring is early revealing of predicted undesirable impacts and ensuring their timely elimination.

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