

Comprehensive planning for Naissaar Island, Estonia

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INTRODUCTION

The Nature of the pilot project of comprehensive planning and environmental assessment

In accordance with the Act on Planning and Building, approved on July 14, 1995, comprehensive planning should be established with the aim of setting the framework of territorial and economic development of each municipality in Estonia. This Act provides the basis for a planning reinforcement authority to require environmental assessment of the planning.

With Regulation of the Estonian Government No. 314 (1992), the requirement to conduct EA concerning both planning, programmes and development plans was established. The regulation includes stipulations concerning the procedure for conducting EIA for single subjects. However, it does not include concrete procedural rules for conducting EIA for strategic documents. At the time of passing the Regulation, the methodology for performing EIA in the course of developing planning, programmes and plans was not developed. Relevant experience was also missing at that time.

In order to fill in this gap, a special pilot project was initiated in the framework of cooperation agreement between the Finnish and Estonian Ministries of the Environment in the end of 1995. The objective was to conduct Strategic Environmental Assessment during the development of comprehensive planning for a selected municipality. The Finnish guidelines for organization of environmental assessment for comprehensive planning were used as a basis and the experience of Finnish experts in this area were drawn upon. The above also explains why not all rules for conducting EIA as defined in the above Regulation were punctually followed in the course of the pilot project.

The aim of the pilot project was to use the experience obtained throughout the EA process for development of a strategic environmental assessment methodology suitable for Estonian conditions.

See Topic 14

**UNEP EIA Training
Resource Manual**

*Strategic
Environmental
Assessment*

The focus and objectives of the planning project

The subject of the SEA to be conducted via the pilot project was to be Naissaar, an island located off the north coast of Estonia which belongs to the Viimsi commune (municipality). The reasons for this included the following considerations:

- No comprehensive planning had been developed for the island so far.
- The whole territory of the island belongs to the Nature Park (a protected area with recreational objectives) which was established in 1995 with Governmental Regulation No. 150—this sets certain restrictions to planning the nature management and human settlement of the island.
- For the last 50 years before Estonia’s regaining of independence, the island was occupied by a Soviet army base—as a consequence, a number of areas have been severely polluted (with oil products and heavy metals).
- There was no civil population in the island. However, reprivatization of illegally seized land to former owners had already been begun; the highest value of the island is the natural environment itself with its virgin character and relative purity: 80% of the island is covered with forest, and numerous dunes, mire landscapes and species-rich plant communities are found.

The objectives of the pilot project included:

- focusing on environmental impact assessment of the developed comprehensive planning in practice;
- training of Estonian experts, authorities, planners and public in SEA;
- management of comprehensive planning process and the parallel conducting of SEA;
- promotion of the need to consider environmental aspects in the decision-making process;
- promotion of public awareness as an important aspect of SEA.

The objectives of Strategic Environmental Assessment included:

- consideration of environmental conditions in the planning process;
- promotion of the need to consider environmental aspects in the planning process;
- providing the public with a possibility to participate in the planning process;
- providing of environmental assessment to planning solutions;
- improvement of the quality of planning.

The key components of the SEA

In the environmental assessment of the planning, an attempt was made to cover all stages of theoretical strategic environmental assessment.

The first stage concerned determination of the aim and objective of the planning as well as of SEA. This included collecting available source data, mapping the existing conditions and development of the preliminary overview of environmental conditions. On this basis, the alternatives were defined, and identification of potential impacts and scoping was performed.

In the next stage, prediction was made of the scope and significance of the potential impacts, as well as of the assessment of the impacts. The process was continued with comparison of the alternatives, taking into consideration the unwished/negative environmental impacts of applying the alternatives in practice, and comparison of the options for mitigation of those impacts.

As a result of this comparison of alternatives, the optimum solution was determined which was developed into a planning proposal. As the planning proposal was developed, more specific EA was conducted and recommendations were developed for monitoring the state of the environment. In the end of this process, the final SEA report was compiled. This included the interim reports developed through the SEA stages as well as other relevant materials concerning the planning and SEA process.

Emphasis throughout the process was on public involvement and participation, with provision for public participation as well as public hearings. Public meetings were organised and group seminars held for interested parties.

NATURE AND SCOPE OF ISSUES

The main players of the SEA process

Through the different stages of the process, the planning initiator, competent authority, planning organisation together with environmental experts, decision-maker, and members of the public all participated in the activities.

The initiator in this case was the local municipality which in accordance with the Estonian Planning and Building Act is also the decision-maker (as concerns the context of EIA). Interests of the municipality were related to strategic land use planning and planning of the natural as well as cultural environment, taking into consideration criteria of sustainable development and the development objectives of the municipality. The municipality was also interested in considering the environmental conditions with the aim of preserving most of the island in its natural state, as well as in finding the optimum solutions to potential conflicts of interest between the different parties (i.e. state, municipality, future land-owners and other parties).

The objective of the local municipality as the decision-maker was the approval of comprehensive planning which would meet all legal requirements as well as everyone's interests.

An important role in the conducting of the SEA was played by EIA experts—in this case, environmental experts from Finland and Estonia. These experts conducted the environmental inventory and analysis of the planning territory, determined the factors of impact and assessed the potential impacts of the different activities. Their task was to cooperate with planning experts, manage the SEA process, cover all stages of SEA, and draw up the final report.

The competent authority in this SEA process was the county (regional) government which is supervisory body for the comprehensive planning. Its task was to review the final SEA report (together with comments on it from the public), determine that the planning meets valid requirements, supervise the consideration of national interests, and find solutions to conflicts arising in the course of the process in case this is not otherwise stipulated. The county government was also responsible for setting requirements for the putting into practice of activities following the comprehensive planning process, as well as for monitoring of the state of the environment.

The largest group participating in the SEA process was undoubtedly the public-interested persons or persons potentially affected by the planning. These included future land-owners, associations of scientists, entrepreneurs, professional societies/unions, movements, and other private or legal persons. The aim of participation in the process was to represent interests related to development of the planning territory, assisting in specification of the problems coming up in the process, and making sure that their interests would be duly considered at decision-making.

PROCESS AND PROCEDURAL CONTEXT

As stated above, the project was carried out in cooperation with the Finnish Ministry of the Environment and with a clear training component. Therefore the process was conducted following the methodology used in Finland for SEA of comprehensive planning.

The EIA system in which SEA took place

The procedure for conducting EIA in Estonia was established with Governmental Regulation No. 314 of November 13, 1992, which stipulates the terminology to be used in this area, the procedure for collection and distribution of materials, the procedure for conducting EIA concerning a single project, and the rights and responsibilities of different parties, as well as the options for solution of conflicts arising in the process of EIA.

Depending on the specifics, location and scope of the EIA object/project, EIA projects of the national and regional level are distinguished between.

Lists of activities which are subject to national and regional EIA, respectively, are given in the Appendix of the Regulation.

In the case of all projects of national importance as well as of projects of first rank regional importance, the conducting of EIA is mandatory.

The requirement for conducting EIA concerns not only new (planned) activities but also projects for which reconstruction, liquidation or change of ownership is planned.

With Regulation of the Minister of the Environment No.8 of March 14, 1994, 'Methodological guidelines for conduction EIA in Estonia' were approved. In this document questions not stipulated in the above Governmental Regulation are settled. Some stipulations are further specified; guidelines concerning data to be submitted by the proponent to the competent authority are given. The regulation also includes guidelines for EIA experts (or expert groups) for drawing up an EIA report.

In accordance with the Act on Sustainable Development, EIA is mandatory assessment of planned activities such as projects, programmes, planning, in order to judge whether they meet environmental requirements and the main principles of sustainable development, with the aim of finding the optimum alternative. The objective of EIA is to conduct the assessment of information concerning the potential environmental impacts related to the project, as well as concerning the feasibility of the planned use of natural resources and the efficiency of preventive and mitigation measures.

Key principles of EIA according to the Governmental Regulation

As each new project needs to be approved by environmental authorities, the local government (municipality) in its role of decision-maker submits data and materials received from the proponent to the environmental department of the county government which then decides on the necessity for conducting an EIA.

The Governmental Regulation concerning the EIA procedure defines lists of areas of activity which are likely to cause significant environmental impacts, for the environmental approval of which the conduct of an EIA at the national or regional level is required.

For regional level EIA projects, the conducting of EIA is organised by the district environmental department. In the case of a project subject to national level assessment, the materials are forwarded to the Ministry of the Environment for conduct of a national level EIA.

After taking a decision concerning the necessity for conducting an EIA, the competent authority (at the regional level–district government, at the national level–Ministry of the Environment) informs the proponent and publicly announces the decision to conduct an EIA. The competent authority either decides on the EA experts or announces public tender to find experts.

The experts conducting the EA have to be licensed for this by the Ministry of the Environment and have a valid license. The competent authority together with the experts decide on the areas of EA and draw up the EA programme.

The experts conduct the EIA, in the course of which the following main stages of the process need to be covered:

- processing and analysis of source data;
- analysis of public reactions and opinion;
- investigation and description of potential impacts of the development on the environment ;
- presentation of alternative solutions;
- identification of key impacts and scoping;
- prediction and assessment of impacts' magnitude and significance (including those on the social and cultural environment as well as on public health);
- analysis of the scope and effectiveness of mitigation measures;
- comparison of alternatives and selection of the optimum alternative.

After completing these stages, the EIA report for which a guideline has been approved with the ministerial regulation is compiled. The competent authority submits the draft version of the EA report for comments to the public and to interested parties. After receiving the comments from the public, the competent authority analyses these and appends them to the EIA report.

The competent authority submits to the decision-maker its opinion and the requirements based on the EIA report. It is also entitled to require that the proponent conduct environmental monitoring after the completion of the project at the proponent's own expense.

The decision-maker takes a decision based on the EIA concerning the implementation of the project, issues a construction permit, and informs the public about its decision.

The conduct of the EIA is financed by the proponent. The conclusions of the EIA are considered valid for two years. The environmental restrictions and requirements set by the competent authority on the basis of EIA are mandatory for the proponent.

Interrelations between EIA and the permitting and decision-making process

The need to conduct an EA may be brought about by a desire to start a planned activity for which the proponent needs to apply to the local government for a construction permit. Later, permits concerning use of natural resources might also be necessary. These are issued by the environmental department of the county government. Thus, EIA precedes

the process of issuing permits (designing permit, building permit and utilisation permit of natural environment and resources, and permits for emitting pollutants and disposing of wastes into the environment).

Conclusions drawn on the basis of the EIA results are in the form of recommendations to the decision maker. If the decision-maker cannot consider the EA conclusions in making its decision, it needs to justify this and take into consideration the possibility that interested parties not satisfied with the decision have the right to take legal action.

Environmental assessment of strategic documents.

The EIA Regulation stipulated that national concepts, programmes and development plans of areas related to nature management as well as land use planning are subject to SEA. For acts, regulations and strategies approved by the Riigikogu (Parliament of Estonia) and governmental regulations, the conduct of SEA is currently not legally required.

Based on the Act on Sustainable Development, interrelations between programmes, development plans and planning drawn up for development of economic activity and for balancing economic activities with the state of the environment and nature management can be pointed out. These programmes include:

- National programmes of areas of most significant threat to life and natural environment
- Development plans for an environmentally highly threatened region
- County Planning
- Comprehensive planning for municipalities
- Detailed planning in municipalities (which prepares building activities for the nearest upcoming years)
- Building projects

In the development of all the above mentioned strategic documents, the state of the environment needs to be considered; environmental analysis has to be conducted and environmental impacts need to be assessed.

Decision-making process in which the SEA took place

The EA conducted in the course of the planning process (of the pilot project) was managed by a planning working group (which included environmental experts) in cooperation with representatives of the local government. The county government in its responsibility for supervision concerning the planning was regularly informed about the progress. The county government was also responsible for reviewing and approving the SEA report. The local government considered the EA results both at making the

intermediate decision–selection of the suitable alternative–and at making the final decision–approving the planning.

It should be emphasized that the conclusions drawn by experts are not binding to the decision-maker. The EA report provides the decision maker with objective data facilitating decision making. It is up to the decision-maker to use this information or not. If the decision maker decides to ignore the conclusion made by experts, such a decision should be justified well enough to convince the public.

In accordance with the Act on Planning and Building, comprehensive planning of a municipality or town defines the main functions for use of the territory as well as the requirements concerning use of land and water areas and restrictions to building/construction activities. Thus, comprehensive planning is not directly related to building/construction activities and does not provide bases for issuing of construction permits not permits for use of natural resources. However, requirements concerning use of landscapes and natural communities are established with comprehensive planning and, if necessary, recommendations concerning the taking of land areas and single objects into protection or making of amendments in their protection rules can be made.

CASE ANALYSIS

In the process of development of the comprehensive planning environmental assessment was divided into stages.

Both the mentioned processes were carried out in parallel and were closely connected, contributing to and having influence on each other.

The stages of the planning and EA process

Planning	Environmental Assessment	Public Participation
0. Preparatory activities, development of work schedule	0. Preparatory activities, development of work schedule	Information on the initiated planning
1. Development strategy Source data and investigations Development objectives	1. Environmental aspects of the strategy Environmental investigations Environmental objectives	Public discussion
2. Proposing of development alternatives (planning alternatives)	2. Programme for environmental assessment Scoping	Public discussion

	Prognosis of magnitude and significance of impacts for relevant alternatives Additional investigations	
3. Draft planning proposal	3. Preparation of SEA report on preferred alternative (draft planning proposal)	Public discussion
4. Planning proposal	4. SEA report	Public display and consideration of the results of the public display
5. Implementation of the planning in practice, monitoring	5. Implementation of mitigation measures Monitoring and post-auditing	

First stage

The first stage of the process proved to be very effective thanks to the involvement of representatives of district and commune authorities, land-owners of the area and representatives of other interested parties. With their participation the first public meeting was held where SWOT analysis (strengths, weaknesses, opportunities, threats) was conducted among the participants. At the meeting, the initial opinion of the different parties was defined, and problems of the island and development possibilities of the territory were identified.

Second stage

The second stage of the planning process was also successful. It was begun with planning the development alternatives. In parallel to this, the state of the environment of the island was further investigated on the basis of available data and site visits with the aim of identification of influencing factors and scoping the topics to be considered at the conducting of the EA. Four development alternatives were drawn up by the planning and EA working group; the fifth alternative was added later from outside this group. The proposed development alternatives for Naissaar were the following:

Alternative 0-	The island is left by itself, without any concrete action plan developed (No-action alternative)
Alternative 0+	Necessary cleaning up is performed in the island, small-scale building activities and use of the island is possible
Alternative 1	Increase of local population as well as tourism and recreation activities, development of the service sector and construction activities
Alternative 2	Considerable increase of local population as well as tourism and recreation activities, construction of new roads in the island, varied service sector, regulated movement
Alternative 3	A theoretical alternative based on the principle that activities are concentrated in the very south and north end of the island. The extreme option for this alternative foresees the settlement of tens of thousands of people in the island

For identification and assessment of environmental impacts, the matrix analysis method was used. Environmental components, at which impacts arising from implementation of the planning would be directed, were presented in horizontal lines:

- nature and landscape (ground and surface water; weather; fauna; biological diversity; etc.);
- structure of population and man-made environment (buildings; facilities; infrastructure; historical heritage; etc.);
- man and society (living; working; service; health; safety; private property, etc.);
- activities bringing about the impacts (presented in vertical columns);
- activities causing the impacts: short-term activities (construction; risks; dangerous situations; etc.) and continuous or long-term activities (living; tourism; recreational activities; traffic; economic activities; etc.);
- description of the impacts (frequency; scope; strength; etc.);
- the significance of the impacts; and
- possibilities for avoiding or mitigating the impacts.

The identified factors of influence were assessed in broad categories so as to facilitate easier understanding of the differences between alternatives as concerns their environmental impact. As a result of this matrix analysis, activities causing significant negative impact were identified as well as environmental components which would suffer the most from those activities.

At the second public meeting, the planning process and EA process were introduced, development alternatives of the comprehensive planning were described and their potential environmental impacts were commented upon. Representatives of the interested parties participated in conducting the matrix analysis, as a result of which the vision of the public concerning the environmental impacts of the alternatives was presented. The positions of the working groups differed mostly in their emphases, however, some conclusions could be drawn on the basis of those.

Environmental experts of the working group continued working more thoroughly on the significant environmental impacts as identified with participation of the public.

Special attention was paid to landscapes, coastal plant cover, sand dunes and mire areas. Ground water quality was analysed and factors influencing the diversity of fauna, flora and landscapes were investigated. Impacts on the social environment, especially on security, structure of the society, recreational activity, quality of the living environment and land use were also considered to be of high importance. In the assessment process, potential risks associated with development of the transport system and tourism, forest (timber) processing and waste management were analysed. In parallel with assessment of the impacts, analysis of their mitigation measures and the efficiency of those was conducted.

In this stage of the planning process, comparison was made between the environmental impacts of the alternatives considering the opinion of both the environmental experts, the public, interested parties and officials. As the interests and wishes of all participants in the process coincided in this case, the selection of the optimum alternative proved to be easy.

It was decided that development alternative No.1 would be taken as the basis for drawing up of comprehensive planning as this was most easy to be merged with environmental requirements and would still enable settlement and recreational activities on a modest scale.

On the basis of alternatives presented in the planning as well as SEA results, the municipality also decided to take development alternative No.1 as a basis for drawing up the planning proposal.

Third stage

In the third stage of the planning process, work was continued with developing a planning proposal based on the selected alternative, in the course of which attention was focused on the characteristic features of this option and on the finding of planning solution. In parallel to this, the potential environmental impacts were further specified and final assessment was given to those together with recommendations concerning measures for prevention or mitigation of environmental damage.

The third public meeting was held, at which the draft version of the planning proposal was introduced to participants. Both positive and negative environmental impacts and their mitigation measures were described. Comments and proposals of representatives of the public concerning mitigation measures were presented and discussed.

Documentation of the SEA process and SEA report

Documentation of the more important topics as well as of positions influencing the progress and decision-making throughout the process facilitated the compilation of the final EA report. At the development of the report, earlier interim reports were made use of and more detailed assessments concerning the environmental impacts of the planning proposal were added. The report also included recommendations concerning the mitigation measures to be implemented while applying the comprehensive planning in practice. The necessity for monitoring was discussed and guidelines for organisation of monitoring of environmental components in the island were given.

Before presenting the planning to the public, the county government (competent authority) reviewed the planning proposal and draft SEA report and made its decision concerning the necessity of additional approval of these documents.

After that comprehensive planning was introduced to, and officially approved by, the neighbouring municipalities and all relevant authorities. In accordance with the Act on Planning and Building the proposal was put on public display for four weeks, together with the EIA report. During this time, it was possible to submit comments concerning the planning. The views presented during the public display period were analysed and incorporated into the planning.

Supervision of the Planning and EA report

After public display of the documents, the county government verified whether:

- the planning met the requirements of sustainable development and all valid legal requirements;
- environmental objectives were duly taken into account and measures for solving environmental problems were foreseen;
- conditions necessary for maintaining environmental quality were met;
- the conducted environmental assessment was sufficient and the report included all necessary data;
- the conditions for participation of the public in the process had been sufficient.

Public opinion and comments were considered at the making of decision.

The whole process of development of the comprehensive planning for Naissaar took 17 months having started in December 1995, and being completed in April 1997, with the approval of the comprehensive planning.

Evaluation of the SEA process

SEA conducted in parallel to the development of comprehensive planning resulted in directing the planning process already in its course towards environmentally sound solutions, while taking into account the interests of different interested parties related to the planning territory. As a consequence, no considerable problems or seriously differing opinions arose in the final stage of the planning—the implementation stage.

One of the most important and successful stages of the process was public involvement and participation. Timely and early informing of the public enabled the avoidance of conflicts, finding new creative solutions and receiving information concerning the preferences of interested parties and inhabitants. Good organisation of the public involvement process made it possible to avoid the situation in which changes would need to be made in the planning implementation stage.

The effectiveness of the process was also enhanced by the division of the planning and EA process into stages. Thus, it was easier to scope the topics to be considered, focus attention on the key problems and recommend alternative solutions to those. In the course of the intermediate stages it was possible to obtain varied information for solution of the identified problems and to analyse the potential impacts of decisions made in the course of the process.

More important facts were documented during each stage, and identified problems together with the assessments and recommended solutions as well as interim decisions were presented in written form.

The opinion of the competent authority concerning the effectiveness of the process was positive. The implemented pilot project proved that the integration of EA into the very process of development of planning is the only way to reach a solution optimum from the viewpoint of both the natural environment and the society while using the minimum of resources.

Officials of the local government considered the process of development of the planning highly useful and informative and they were also impressed by the rational use of both time and material resources throughout the process. The fact that environmental impact assessment was carried out in parallel to the development of the planning considerably facilitated the process of approval of the planning and decision-making.

The weakest aspects of the process were the following:

- Source data concerning the state of some environmental components of the island were partly lacking. Gaps and partial insufficiency were

identified in data concerning biological (mainly faunistic) and geological (especially concerning the genesis) and geomorphological information. Consequently, the identification of environmental impacts in these areas proved to need further investigation.

- While considering development alternatives, the possibilities for making changes among the areas reserved for different types of activities were not well enough considered.
- The role of the decision-maker (the municipality) appeared to be relatively modest since the municipality could not adopt intermediate decisions sufficiently fast. The main deficiency was the lack of experience in planning and EIA, and some ignorance in environmental law and regulations.

Enforcement of the planning

The comprehensive planning approach was adopted by the municipality in April, 1997. The comprehensive planning has to be followed by detailed planning for dense settlements and for building and land use in dispersed settlements. Since the process of land and property restitution is still under way and permanent transport connections as well as an energy supply network are lacking, implementation of the comprehensive planning is in its initial stage as yet. Thus, it is currently not possible to emphasize specific results nor evaluate the effectiveness of implementation and the validity of the predicted environmental impacts. As of today, there is also no feasible need and possibility of establishing a monitoring system on the island.

NOTE

The objective of the pilot project was development of a landuse plan for a municipality. The main aim of decision-making concerning land use within the selected planning territory was the maintenance of a Nature Park together with development of recreational activities and restricted residential building.

The stages of SEA as covered during project implementation are given in the 'Case Analysis' part of this case study.

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Key words

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