

## **Case Studies of SEA for Plans and Programs in Central and Eastern Europe**

by Jiri Dusik

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My presentation will focus on three different issues. First of all, I will give you a bit of background information about the evolution of Strategic Environmental Assessment in our region. Secondly, I will discuss with you some of the approaches to integration of SEA into elaboration of plans and programs. Lastly, I will present an example of SEA application on a sector operational program for tourism as part of development in the Czech Republic.

The region I will be talking about covers 10 countries of Central and Eastern Europe. The region stretches from the Eastern border of the European Union and the Western border of the Soviet Union. It covers countries that currently seek membership in the European Union, and eight of them will become members of the European Union in May 2004.

The countries actually have very similar planning traditions. All of them were former socialist countries. And in the beginning of the '80s, there was a change of political systems, and all of the countries undertook reform of their planning systems to operate in free market economies and, at the same time, there was a strong desire to make the planning processes, which were very strong in all of these countries, more transparent and participatory.

The countries, at the same time, because of their wish to join the European Union, have to implement the EU legislation, and in the field of Strategic Environmental Assessment, they currently implement the provisions of the EC directive on the Strategic Environmental Assessment. They currently face quite important choices of integration of SEA into the various planning systems, and I will be talking about this later.

If you look at the legislation of the 10 countries, you will see that many of them require environmental analysis of proposed land-use plans. These analyses were quite narrow. They focused on the environmental potential of the territory and look at a narrow range of environmental impacts such as the direct impacts of the proposed land-use plan on the use of the territory, on nature-protected areas, et cetera.

However, they never look at the wider issues, such as the indirect impacts of let's say proposed transportation systems or proposed changes in the forest use, et cetera, and they never look into the synergistic impacts of various planning proposals on the environment.

Therefore, many countries--and notably, for example, Poland, Slovenia, Bulgaria, Czech Republic or Slovakia--have introduced in beginning of '90s EIA requirements for land-use plans. These requirements complemented partial environmental analysis and actually aims to provide really detailed information about the environment impacts of the land-use plans.

However, there were certain problems. In many countries, the old partial environmental analysis within the land-use planning stayed in existence, and it was quite unclear how they relate to the newly established EIA obligations. There was often confusion on who runs the process, how to organize public participation, et cetera. So many of the countries currently seek to merge these two environmental assessment tools--the partial environmental analysis and the EIA provisions--into one system which would run as part of the planning process and would provide different types of environmental information at different stages of the planning process.

The second type of strategic decisions which are subject to SEA are sectoral plans outside of the spatial planning system. These plans cover, for example, watershed management plans, waste management plans, forestry plans, energy plans, and they are very different from spatial planning because they do not have an exactly defined procedure of their elaboration by the act. So they can be prepared on a very ad hoc basis, and the SEA begins usually when they are submitted to environmental authority for approval.

Actually, only two countries have experience with this type of SEA in the region--the Czech Republic and Slovakia enacted SEA requirements for these plans in '92--and three countries currently have legal provisions for the SEA and started implementing it in practice. They include Poland, Slovakia, Bulgaria. There will be a lot more of these countries in the future because all of the EU accession countries have to implement the EC SEA directive, and the directive will cover these plans as well.

The third type of strategic decisions which are currently subjected to SEA in the region are economic development plans. These plans are rather new, and they are being elaborated as part of EU accession process, where the accession countries were required to prepare programming documents for the future use of the EU assistance, financial assistance, for the boost of the economy in the region.

There is a requirement to make these plans subject to rigorous economic, social and environmental assessment, and although the economic analysis prevailed, there are some countries--notably, for example, the Czech Republic, Estonia, Poland, Slovenia, Hungary, Bulgaria, and Latvia--that apply thorough environmental analysis as part of this planning process. I will be presenting to you experience learned with a SEA applied for tourism development program which was this type of programming document in the Czech Republic.

The Czech Republic and Slovakia began to require SEA for national policies in the early '90s. However, this hasn't been applied for a long time. And since the late '90s, there have been examples in both countries of SEA for national energy policies or transport policies. These provided some very interesting examples of objective-led assessments, where very general documents were appraised against sustainability objectives or environmental objectives.

Two countries in the region--Poland and Estonia--started to require SEA for national policies in early 2000, and there are experiences in both countries on the level of pilot projects. In the case of Estonia, it was a national forestry policy, in Poland, the national transport policy.

Only one country in the region--Slovakia--requires SEA for legislative proposal. However, this has been applied only once so far, and there are no clear procedural requirements for implementing of this type of SEA in practice.

The Regional Environmental Center studied application of SEA in Central and Eastern Europe since 1997. We look at both the legislation as well as the practice and discuss the lessons learned with government officials who are responsible for EIA and SEA matters. There are two fundamental lessons which we have learned so far.

The first lesson is that SEA, if it is to be effective, it needs to be integrated into the elaboration of plan or program. It needs to run in parallel to the planning or programming process, and it needs to provide the right types of analysis and environmental information at various stages of plan or program elaboration.

The second lesson is that SEA should provide two equally important types of environmental information. The first information is the analysis of possible environmental effects of various alternative proposals for the plan or program. The second equally important information is the overall information about the consistency of the proposed plan with nationally established environmental objectives and targets. This is very important information because decisionmakers want to know whether the proposed development plans will enable them to achieve environmental objectives or whether they will prevent them from doing so.

So these types of information are equally important as specific information about possible environmental impacts of a proposed plan or program.

Let me present some of the findings on the integration of SEA into the elaboration of plans and programs. If you look at the requirements of the European Union SEA directive, you will see that it requires basically five major tasks:

The first task is the SEA screening to see which types of plans and programs should be subjected to SEA.

The second task is the scoping, defining the scope of the assessment on the basis of consultations with environmental authorities.

The third task is the elaboration of environmental report.

The fourth task is the review of environmental report with the public and public authorities.

And the last task is due account of environmental report in the actual decisionmaking process.

Let me present the example of separation of SEA from the planning process. If you look at the planning process, you will actually see that it can be simplified into four major tasks: the initiation; elaboration of draft plan and program; the consultations on the proposed draft and program; and the adoption.

If we want to undertake SEA as part of this planning process, and we don't want to integrate it already into the elaboration of draft plan or program, we can actually start the SEA after this draft plan or program has been elaborated. Then, we can undertake the screening, we can define the scope of the assessment, we can prepare the environmental report and make it subject to review, and the review can take place as a part of consultations.

During the adoption, the presumption is that all of this information provided in the environmental report and in the consultations during its review would be taken into account. This procedure enables detailed assessment because the SEA teams have specific documents to assess, and they can prepare environmental report.

However, this procedure, as I mentioned before, has some very significant problems. First of all, this assessment comes already too late in the planning process, when the planners have made their minds, real choices have been made, and the new alternatives and proposals which are coming from the SEA team may be boycotted by the planners.

For example, let's imagine that during the scoping process the planners require an alternative of the plan, so the planners may boycott it and may say we don't have the resources for doing so, and we don't have enough time to elaborate the alternative which we didn't develop as part of the planning process. So the problem is that the SEA will not be able, for example, to analyze this alternative and proper detail.

Another problem is that this type of SEA prolongs the entire planning process because additional time is needed to define the scope of the assessment and to elaborate the report, to review it with the public.

Lastly, we have learned that these type of SEAs can be a lot more costly because the assessment teams, which work separately from the planning teams, may have to gather their own information. They have to create their own analytical models or analytical systems, and that tends to be quite costly. It would be a lot cheaper if the assessment team and the planning team were using the same type of data and were working together.

So, in sum, this type of SEA, although it happens quite often because it's a quite friendly procedure to planners, can be quite ineffective and basically may provide information which doesn't influence the planning process and may be quite costly in the end.

Contrary to separation of SEA from the planning process, there is an approach which advocates for full integration of SEA into the elaboration of plan and program. If you look again at the simplified scheme of elaboration of plan and program, this SEA is possible only if the SEA screening happens at the stage of initiation of a plan or program. Then, environmental report is

prepared during the elaboration of draft plan and program, and there would be lots of interaction between the SEA teams and the planning teams, and I will discuss this later.

If we look at the detail and how actually the draft plan or program looks like, we can see that each plan or program can be simplified into three types of information or three stages of elaboration at the same time.

The first information is the problem analysis. Planners usually examine the trends in development of certain sector or territory. The second task is the formulation of a strategy, and here we talk about the general objectives and scenarios. The last task in the planning process is the implementation of projects, the design of supervision and of monitoring schemes. So these implementation arrangements tend to be often quite elaborated, especially when the plan or program really deals with multiple projects to be implemented.

If you look at these three simplified tasks of the planning process, you could see that actually the requirements for the elaboration of environmental report are very similar in their logic.

First of all, we have to study the environmental baseline: the evolution of the state of the environment and of the main problems which are happening in the current sector or in the current region.

It would be sensible to elaborate this type of analysis already at the stage of problem analysis, and it would make sense to provide this information to the planners so they may consider it as a part of the wider picture. In cases where the planners do this, the SEA team may only check whether they really analyzed all relevant environmental issues in sufficient detail and whether they looked at the linkages between the development in the sector or the region and the evolution of the state of the environment.

At this stage, the first stage of the planning and the assessment process, it also would make sense to organize consultations with relevant environmental authorities and to make sure that due account of the information provided from these consultations and from the SEA is taken in this first stage of the SEA process.

Once this has been arranged, the planners may start elaboration of a strategy. They may set up their objectives, and again the assessment team is required to do very similar things. They are required to determine the relevant environmental objectives and to see whether the proposed objectives of the plan or program are roughly consistent with the relevant environmental objectives for the plan and program. This can be done in the form of simple matrixes, showing synergies or conflicts between the development objectives and proposed environmental objectives. And, again, it would be quite helpful to organize consultations with authorities and with the public to check whether these analyses are done properly.

Again, this information can be provided back to the planning teams, and the planning teams may modify the proposed development objectives on the basis of the information provided from the SEA teams.

Lastly, once the development objectives have been established and optimized, implementation arrangements may be elaborated. There may be a number of projects already envisaged in the plan or program. And at this stage of planning process, SEA team may start looking at the assessment of environmental effects, and design of mitigation measures and also at the design of monitoring system. Again, at this stage, consultations with authorities or with the public can be organized just to make sure that the information provided within the SEA process is correct and that the planning team gets full information about the possible environmental consequences of their proposals.

Once all of these tasks have been done by the planners, a draft plan or program is completed. Once the three tasks of the SEA have been done, the information obtained through this process can be summarized in the SEA report, and this SEA report can be sent, with the proposed plan or program, for wider consultations and review.

If we are to examine the benefits and the negative features of this SEA, we can see that this SEA actually helps to put assessment, and environmental assessment, into the heart of the planning process. It saves time because it runs in parallel to the planning process, and it often saves money because the assessment team uses the same data as generated within the planning process and at the same time help the planners to enrich their base of information which they use in elaboration of a plan or program.

Lastly, and this is very important, this SEA facilitates early consultations between the assessment team and between the planners and the environmental authorities, and it prevents late conflicts and surprises.

However, if you decide to go for this type of SEA, you should have in mind that this type of SEA can be quite difficult to manage. First of all, as I mentioned, it cannot really begin unless the SEA screening happens already during the initiation of a plan or program because, unless we know that SEA will be carried out right from the beginning, the SEA will not start.

The second thing is that these types of SEA are more difficult to manage, especially because the SEA team has to respect the logic and the time line of the planning process. And at least in our planning cultures, planners often go back and forth. So the SEA team has to follow this, and often it is quite demanding, and it can take more time than elaboration of environmental report on already made document.

Lastly, there are lots of consultations within this process between the SEA team and the planning team because SEA team becomes more integrated into the whole planning process, and there is more attention needed to secure transparency and accountability of this integrated process.

However, if I was to sum up this, we would definitely see major, major benefits of this type of SEA. It's more demanding, but it can be a lot more effective because SEA provides right information at the right stages of the planning process, and that is, after all, the ultimate objective of the SEA.

Let me illustrate these general conclusions and an example of one specific SEA which we implemented for a tourism operational program in the Czech Republic.

This operational program is part of the economic development planning within the EU accession process. The Czech Republic prepared it in order to support development of tourism industry, and the program deals with a variety of instruments. It suggests development of new infrastructure for tourism, it suggests development of new products to attract tourists into the country, and also it deals with the international promotion of the Czech Republic as a destination for tourists. Approximately, US\$100 million have been allocated for the implementation of this program in the next three years.

When we were asked to do SEA for this program, we were giving almost finalized program. So the SEA was not integrated into the elaboration of this program. We have been given about 70 work days to complete this assessment, and we put together an expert team consisting of three experts. All together, the SEA took four months to complete, including the elaboration of SEA report, as well as the review of the SEA report with the public.

We carried out this SEA on the basis of quite intensive consultations with the planning team for the program, with the Ministry of Regional Development, which served as a proponent of this program, and the Ministry of Environment that reviews the quality of SEA in the Czech Republic.

When we got this ready document, we said that we don't want to analyze it as a whole document. We want to analyze its specific parts, and we want to carry out consultations with the planning team and the Ministry of Environment on the treatment of environmental issues in the various parts of this document.

So we almost simulated an integrated SEA within the planning process, but we requested, actually, the elaboration of the changes in the plan all because of the SEA. We said that we cannot really provide information on the entire proposal because it would be too complex, and we want to discuss with the planners the very logic of our programming document and the treatment of environmental issues right from the beginning. The planners agreed to do so.

So we started with the analysis of problems related to tourism, and we looked at the relevant environmental issues and trends. We organized consultations with environmental authorities. Then, we looked at the objectives of the proposed plan, and we looked at the relevant environmental objectives for tourism and had quite detailed consultations to determine really what are the most crucial ones because there were too many of them, and then we analyzed the consistency of the proposed objectives of the operational program for tourism with the relevant environmental objectives.

Once we did so, and suggested changes in the programming document, we looked at the proposed activities, and we did two types of assessments. First, we analyzed the consistency of the proposed activities with relevant environmental objectives and, secondly, we analyzed their likely significant environmental impacts. Both of these analyses provided suggestions for design if mitigation measures.

Lastly, we looked at the implementation arrangements, and we looked at the selection criteria for various projects to be supported under the tourism program, and we suggested a new layer of environmental evaluations for all projects. We also discussed how the environmental monitoring for the whole program should be organized and what indicators should be used.

Within all of these stages, we consulted the Ministry of Environment, and only within the last stage we consulted the public when we presented the whole SEA to the public through six regional public workshops. That was a weakness of the whole process. However, it still provided us with information which we could use before finalizing the entire SEA process. What proved to be very helpful was the consultation of environmental authorities throughout the whole SEA.

Let me present to you some of the stages of the stages of the SEA process in more detail.

The first task, as I mentioned, was the analysis of the current state of tourism sector. When we got the document, we actually saw that the tourism planners have paid no attention to environmental issues at all because they regarded it as a sole responsibility of environmental authorities. Therefore, they didn't map the problems arising from intensive use of certain areas for tourism. They didn't look at the environmental pressures from individual car transport or, for example, the impact of ski resorts on protected areas or tourism, generally, in protected areas and the impacts on the biodiversity.

At the same time, they didn't actually consider the negative impacts of a worsening environmental quality on the attractiveness of tourism destinations. They didn't see the link between the clean air and attractiveness of landscape for the attractiveness of the tourist destinations, and we actually had to bring these issues to their attention.

It would be quite natural for them to consider this right from the beginning of the planning process. However, they didn't. So we had to find out information, which we brought to their attention, and they decided to incorporate this into the analytical part of the programming document. At that stage, they started understanding why environmental protection is important in the context of tourism development. This information they didn't consider before.

The second part of the program dealt with the objectives for the development of tourism. When we examined this, we again saw that there is no single environmental objective. Now, all of the objectives dealt with the economic development, with impact of tourism on the unemployment or the development of small and medium enterprises, and there was not a single environmental objective.

Again, we looked at the national environmental policy, national environmental action program, and U.N. documents which deal with tourism, and which the Czech Republic signed, and we established a list of relevant environmental objectives for tourism. Initially, we established a long list of about 25 various objectives, and we discussed them with the Ministry of Regional Development and the Ministry of Environment. Based on these intensive discussions, which

happened through two full days of workshops, we determined a set of 10 environmental objectives for tourism.

The first objective calls for support of adoption of environmental management systems in tourism industry.

The second objective calls for regulation of number of tourists in areas that are heavily affected by tourism.

The third objective calls for decentralization of tourism activities in time and in territory. Basically, it calls for off-seasonal tourism in destinations which are not heavily yet affected by tourists.

The fourth objective calls for support of environmentally friendly means of transport in areas that are attractive for tourism. Those include city centers.

**(What's the fifth objective?--JS)**

The sixth objective calls for improvement of local environmental quality, including the local air quality, water quality, noise levels or attractiveness of urban areas in areas that are attractive for tourism.

The seventh objective calls for maintenance of biodiversity and attractiveness of landscape.

The eighth objective calls for protection of a local cultural heritage.

The ninth objective calls for information of visitors about the key features of the local environment and about the rules for its protection.

And the last objective calls for enhancement of community participation in the management of tourist sites.

Once we agreed on these environmental objectives for tourism, we inserted them into the programming document, and they became an integral part of it. And also the planners, by this time, agreed that all activities suggested in the program should contribute to these environmental objectives or should not contradict them, at least.

We then started examining the proposed activities. And as I mentioned, these proposed activities included infrastructural projects, for example, development of new transport infrastructure in protected areas or development of golf courses or, for example, development of service centers for whitewater rafting on some of the rivers.

The proposed activities also suggested development of new products, tourism packages, to attract more tourists into the Czech Republic, as well as some of the promotional activities to increase awareness of global population about the attractiveness of Czech landscape.

All of these activities actually have some kind of relationship, either positive or negative, to the relevant environmental objectives for tourism, and we examined all of them. We looked at the relationship of the proposed activities to relevant environmental objectives, as well as at their possible environmental impacts, and the Czech SEA Act requires us to examine four types of impacts:

First of all, its impacts on inhabitants; secondly, its impacts on ecosystems, and their functions and components; thirdly, its impacts on manmade systems and the functional use of the territory; and, fourthly, we are required to examine large-size impacts on the landscape. The fifth category of impacts relates to other impacts, basically whatever doesn't fit into these four broad categories.

To carry out the assessment we created modified Leopold Matrix, where on one axis we listed all proposed activities. There were about 42 proposals, specific projects that were suggested in the program. On the other axis, we listed the relevant environmental objectives and the various categories of impacts as required by the Czech SEA Act. And also we inserted one column which would enable us to specify mitigation measures for each of the projects. And the mitigation measures were inserted in two forms--the conditions for the implementation of proposed activities or reformulation of proposed activities.

We filled this matrix on the basis of collective expert judgment by three members of the SEA team. We often also consulted the Ministry of Environment to check whether we provided the right information. And basically the cells in the matrix were filled in by various symbols, indicating the severity of negative or positive impact of the proposed measure, either on the achievement of relevant environmental objectives or on the components of the ecosystems, as required by the Czech SEA Act.

Our last task was to examine the proposed implementation arrangements for the program, and we basically did three subtasks.

First of all, we designed the terms of reference for any subsequent EIA which would be needed for certain activities that implements the program, and these EIA terms of reference were drafted for development of golf courses in the Czech Republic as well as for service centers for whitewater rafting.

Secondly, we suggested a new system of environmental scoring of each and every project proposal for support within the operational program. The operational program will basically give funding to a number of projects, and there will be a competition between them. So we have suggested that each and every project proposal has to go through environmental scoring, which identifies and summarizes the relationship of the proposed project to relevant environmental objectives.

We suggested two levels of environmental scoring: First of all, informal scoring or preliminary scoring which could take place already during the elaboration of project proposals. The formal scoring would be the second step and would have to be organized as a part of selection process for projects to receive funding.

Lastly, we specified the roles of environmental authorities in the supervision of implementation of the whole program, and we defined their roles in the monitoring committees which will supervise the whole program and also their specific duties and rights to interfere. Basically, the environmental authorities will be supervising the environmental scoring of projects.

Our very last task was examination of monitoring system for the program. We looked at the proposed system and actually realized very quickly that it includes new environmental data because the environment has not been treated as a part of the programming process.

So, therefore, we suggested a new system of environmental monitoring which would help the planners to examine whether the implementation of the program actually meets the relevant environmental objectives for tourism or not. And this information will be very important in the next round of the programming process in three years, when we will prepare a next program for tourism, which should build on the lessons learned from this one. So it's quite important to get information on whether the program, as it was amended and as it was implemented, actually helped to achieve relevant environmental objectives for tourism or not and what can be done in the future.

We suggested a set of specific indicators which would measure achievements of 10 relevant environmental objectives for tourism, and we did this in partnership with the Ministry of Environment and also the National Statistical Office that gathers a lot of data about the development of economy and, as well, about the environmental effects.

We suggested a very simple technique for gathering of data about the environmental effects of the program because we will have this system of environmental scoring for each project which will be supported by the program, and therefore we can extract from these scoring sheets the rough information about the achievement of relevant environmental objectives by the various activities that are supported.

And then, once they are implemented, this information can be checked and verified whether it was correct or not, and then information from individual projects can be summarized and put together into one comprehensive system.

With these comments on a monitoring system, the SEA has been concluded, and the SEA report actually summarizes various comments which we have suggested or provided to the planning team as part of the SEA, the level of the receptiveness by the planning team to these comments, and we summarized major outstanding issues. And then in the annexes to the SEA report, we provided detailed comments which we have forwarded to the planning team.

So what hasn't been actually achieved or not achieved within the SEA process?

First of all, the SEA actually helped us to influence the program because we inserted a new dimension into the program, the environmental dimension, and right from the analysis of problems down to the monitoring system. Most of our suggestions were actually incorporated, in one way or the other, by the planning team and were fully reflected in the final version of the program.

Perhaps the most important role of the SEA and the benefit of the SEA was the improved communication between the Ministry of Regional Development, the Tourism Office and the Ministry of Environment because these institutions, before the beginning of the SEA, had a very tense relationship because of their past conflicts, and the SEA helped them to find a mutual ground. Actually, we are quite happy to see that especially people from the Tourism Department, at the Ministry of Regional Development, are very eager to implement some of the commitments they made within the SEA, in practice.

So what were some of the difficulties? Because this process was not perfect either.

My first comment is that this whole process took much longer, in work terms, than we expected. We originally budgeted for 70 days. It has been about 100 work days which we spent on the SEA, and most of this time has been spent in discussion with the planning teams and understanding their argumentation and explaining the recommendations for the changes of the program from our side.

Secondly, we found out how incomplete and often poor the environmental planning system is in our country because the environmental goals and targets were established in environmental policy, official Czech environmental policy, but when we started applying them in practice, we saw that they do not provide clear environmental targets for tourism industry, and we had to reformulate them.

So I think this is one of the problems with the objective-led appraisal, using the environmental objectives as a basic benchmark for SEA, and often these environmental objectives either do not exist or are so poorly reformulated that they have to be redefined within the SEA process.

The last weakness of the entire process was that we had a very limited time to organize public participation, and we organized it only in the last stage of the SEA process. It would be a lot easier for us if we could organize public workshops in each stage of this whole SEA, but simply there was no time.

This experience just shows you some of the easy-to-do SEA techniques which can be applied as a part of the planning process, and I hope you will find this experience useful. I have presented only one example, and currently we have description of about 20 SEAs from Central and Eastern Europe which you could visit at our web page at [www.rec.org](http://www.rec.org) or which you can obtain from me by writing to my e-mail address, which you see behind me.