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# Strategic Environmental Assessment (SEA) in Europe

4th European Workshop on Environmental Impact Assessment

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## I. WORKSHOP OBJECTIVES AND FINDINGS – INTRODUCTION

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### 1. INTRODUCTION

Since 1990, the Directorate General XI of the European Commission has supported and co-ordinated several international expert meetings in the field of "Environmental Impact Assessment". The participants of these meetings were drawn from ministries, different branches of public administration, EIA-Centres and research institutes. The participants coming from different backgrounds ensured intensive, interdisciplinary discussions. The previous workshops have focused on the following topics:

- Avignon (May 1990): Environmental Impact Assessment – Training and Research in the European Communities.
- Vitoria-Gasteiz (June 1993): Environmental Impact Assessment – Training in the European Communities.
- Delphi (October 1994): Environmental Impact Assessment – Methodology and Research.

The idea of a workshop on Strategic Environmental Assessment can be traced back to the previous workshops which dealt with SEA from the "research and training" point of view. In particular, a discussion group formed during the Delphi workshop (1994) addressed this topic in some detail and identified three main areas of deficiencies:

- *Political/institutional deficiencies* (weak political and administrative support, differences between different countries and cultures, different methodological and procedural approaches),
- *Technical/methodological deficiencies* (selection and definition of alternatives to be assessed, definition of appropriate criteria for determining the significance of strategic-level impacts, predictive methods, handling uncertainty),
- *Consultation/public participation deficiencies* (uncertainties about how best to handle consultations relating to strategic issues, involving 'stakeholders' and 'the general public', spread over a wide geographic area).<sup>1</sup>

Following the workshop in Delphi, the European

Commission funded several research projects on SEA, in particular, one study which dealt with the development of an overall research strategy for EIA/SEA.<sup>2</sup> On 4th December 1996, the Commission passed a "Proposal for a Council Directive on the Assessment of the Effects of Certain Plans and Programmes on the Environment".<sup>3</sup> Finally, after years of negotiations, there is a proposal for a SEA Directive which now has to be discussed within the institutions of the European Union and its Member States. The scope of the Potsdam workshop covers Strategic Environmental Assessment for decisions above the project level, i.e. for plans, programmes and policies. The principal tasks of the workshop were:

- to specify current SEA-related methodologies and procedures, to identify major deficiencies and to propose means of overcoming these,
- to identify constraints to SEA implementation in the Member States and means of overcoming these constraints,
- to identify SEA research and training needs, training methods and means of implementing these.

These tasks have been tackled in the following ways:

- presentations of recent research projects funded by DG XI<sup>4</sup> or individual Member States and the presentation of the proposal for the SEA Directive,
- the preparation of workshop papers which are included chapter III of this documentation,
- discussions in nine parallel working groups,
- presentation of the results of the working groups in the plenary session. The summaries and findings of the working groups are presented in chapter II.

In accordance with the tasks of the workshop, the subject matters of the working groups were the following:

Group I: Methodologies and Procedures		
Subgroup I.1: Methods	Subgroup I.2: Types Plans/Programmes/ Policies	Subgroup I.3: Procedures
Group II: Constraints and Solutions		
Subgroup II.1: Legal framework	Subgroup II.2: Methodology	Subgroup II.3: Policy
Group III: Research/Training		
Subgroup III.1: Research	Subgroup III.2: Training	Subgroup III.3: Dissemination and Networking

The organisers of the Potsdam meeting

summarised the workshop papers, the findings of the workshop sessions and the plenary discussions (see chapter 1, chapter 3 and chapter 4).

## 2. WORKSHOP PAPERS

Prior to the workshop, the participants were asked to fill in a table giving an overview of the situation of SEA in their countries. Furthermore, in order to give a structure to the papers and the discussions, the following questions were sent out together with the invitation to the Potsdam workshop:

1. Could the experiences of implementing council directive 85/337/EEC in your country be used to streamline the implementation of the proposed SEA directive?
2. Would potential constraints to implementation be of a mainly political / administrative / methodological nature? Could you please point out the main problems in each area and identify measures to overcome these problems?
3. Which would be the main areas of application for SEA in our country in your opinion (are there any areas additional to those proposed in the SEA-Draft Directive)?
4. Are there suitable "host-procedures" for SEA in your country?
5. Do you see a need for training programmes for SEA? Are there any examples in your country?
6. Do you know of any regulations or pilot projects on strategic environmental policy assessment in your country?

The tables which give an overview of SEA in the individual countries and the answers to the above questions, where available, were added to the respective workshop papers. Altogether, 36 workshop papers were prepared by the participants and have been included in this documentation.

Most papers describe the current situation of SEA in the countries and identify the area of application of SEA and trial runs. Many papers mention case studies. The majority of them relate to the land-use planning sector. Moreover, methodology problems are identified in the papers. However, only few papers place emphasis on the issues of indicators, environmental protection objectives or impact predictions.

A major proportion of the workshop papers deals with the assessment of environmental impacts of policies, i.e. the preparation of proposals for bills or cabinet decisions. From these papers the conclusion can be drawn that SEA is surprisingly frequently carried out for policies. Furthermore, in several countries guidelines and manuals on SEA for policies have been issued. The setting up of a help desk with environmental specialists at the

Ministry of Economic Affairs (NL) is pointed out as an example of good practice. Case studies from Denmark and Canada demonstrate the feasibility of SEA for political decisions. The experience gained in these countries with SEA for policies can be of use for other countries.

On the whole, the contributions largely confirm the results of various research projects on SEA. The Member States differ in their planning systems (e.g., federal/centralised, sectoral planning/land-use planning), and in the formal requirement to consider environmental matters. However, there are often requirements to take environmental aspects into account in planning, in particular in spatial planning procedures.

As regards the application of SEA for sectoral programmes, transport and waste management programmes are mentioned most frequently. The issues of consultation of environmental authorities and public participation are not addressed in the papers. This may be due to the fact that most papers deal with good practice examples and, consequently, rather focus on methodology questions. However, one could also conclude that, apparently, public participation or consultation of environmental authorities during SEA is not perceived as a problem. From some workshop papers dealing with good practice examples and, in particular, from the answers given to the questions asked, it becomes obvious that the methods of project EIA cannot be transferred to SEA easily. Because of the longer time period necessary to develop plans and programmes, several co-ordination procedures are necessary. Consequently, procedure management plays a greater role in SEA than in project EIA.

The subject and scope of the Potsdam workshop (SEA) is not the same as the Delphi one (methodology and research on EIA). Therefore, the results of the two workshops are not directly comparable. Nevertheless, in comparison to the papers presented in Delphi, an evolution in the state of the art of SEA can be observed. Since 1994, several countries have put legal requirements for SEA into place. Furthermore, in many countries pilot projects on good SEA practice have been commissioned. The outcome of these case studies being available, it is now possible to evaluate the strengths and weaknesses of SEA and to focus on the still open questions. Overall, the Potsdam papers present a good overview of the state of the art of SEA.

### 3. WORKSHOP FINDINGS

The most important results of the workshop, as the results from the written papers, the discussions in the working groups and the recommendations are summarized as follows according to the three topics of the workshop.

#### 3.1 SEA-RELATED METHODOLOGIES AND PROCEDURES

Until now, there are only few formally required SEA procedures carried out in the Member States. The papers also consider procedures and methodologies similar to SEA. The following chapter summarises conclusions which can be drawn from the procedures studied. Special emphasis is given to the co-operation between the environmental and other authorities and to the consideration of ecological, social and economic matters. Furthermore, the question whether EIA methods can be applied to SEA is considered. Not only the assessment of plans and programmes is discussed but also that of policies.

In most Member States, there are either procedures that include some elements of SEA, pilot studies or, to some degree, binding regulations for SEA. However, in none of the Member States, all the requirements of the Proposal for a SEA Directive are already fully met.

In the Member States, most experiences with SEA exist in the area of land-use planning. Since most of the papers present good practice examples, they do not necessarily represent common practice in the Member States regarding all spatial or sectoral plans.<sup>5</sup> Nevertheless, it is clear that a development has been taken place compared to the situation described at the Delphi workshop in 1994. Since then, some practical experience concerning individual procedural steps in SEA has been gained. Furthermore, benefits of SEA and difficulties have become more obvious. Both have been addressed openly in the papers and during the discussions.

Compared to project EIA, SEA calls for a closer co-operation between environmental and sectoral authorities. From an environmental point of view, the crucial question often is the need of the respective action which is dealt with by sectoral plans and programmes. In many countries, it is the responsibility of regional planning to co-ordinate the different sectoral plans and programmes. For environmental reasons, not all needs defined in the

sectoral plans can always be integrated into the regional plan. This might lead to poor acceptance of the regional plan by the sectoral authorities. Therefore, to enhance acceptance, describing the baseline situation, stating the objectives of the plan/programme and considering alternatives are important tasks. As regards the selection of alternatives, environmental authorities tend to focus on environmental quality objectives while other sectoral authorities will usually ask for "feasible alternatives". One major benefit of SEA is to point out alternatives. Only the consideration of alternatives enables the assessment of the environmental impacts and a comparative judgement. The potential benefits and the scope of SEA depend on the state of planning of the plan or programme in question. In cases where several options are still available, the evaluation of alternatives is one of the main tasks of SEA. However, if only a few options remain, the main focus of SEA is to describe suitable mitigation measures.

Economic, social and environmental matters have to be considered when a decision on a plan or programme is made. For this, all these issues have to be presented in a format which allows comparisons to be made. In practice, the consideration of environmental concerns often still is weak, especially in comparison to economic considerations. During the workshop, various proposals for solving this problem have been put forward. For example, the preparation of regional environmental profiles which describe the environmental situation within a region. These profiles can be used to compare one region to other regions and allow the relative environmental sensitivity of a region to be assessed. In addition, economic and social regional profiles could be developed which then, together with the environmental profile, would enable an integrated consideration of environmental, economic and social matters.

The question whether the methods used in project EIA can be applied to SEA is still open. From several papers presenting case studies and from answers given in the questionnaire, it becomes clear that it is not always possible to transpose project EIA methods. Many experts agree that new methods are needed. However, at present, there is no agreement on what kind of methods should be used in SEA. Furthermore, most methods have not been sufficiently tested in practice. Methods commonly used in social science were mentioned as examples for suitable methods for SEA, e.g. policy analysis or scenario techniques. The heterogeneity of the nature of plans and programmes will require the usage of different methods according to the

specific characteristics of a plan or programme.

Until now, SEA is mainly applied to formal plans with spatial reference. However, although informal plans, plans/programs without spatial reference and private plans and programmes also might have significant effects on the environment, at present SEA is rarely applied to them. The experts agree that, in order not to delay the implementation of the SEA Directive further, its area of application should, at a first stage, be limited to formalised plans with spatial reference. However, the private sector should be encouraged to apply SEA to its plans and programmes voluntarily. As the nature of private plans and programmes differs considerably from the formalised plans and programmes by public agencies, new procedures will have to be developed for the private sector. For example, the consultation of authorities and public participation probably would meet resistance.

The existence of a national environmental plan or a strategy for sustainable development, from which environmental quality objectives can be derived, help the preparation of a SEA. Plans and programmes will affect the environment in neighbouring countries more often than projects. Consequently, the development of transboundary environmental quality objectives is increasingly important.

In several countries, provisions for SEA for policies either already exists or it is planned to introduce such provisions. In most cases, SEA at the policy level deals with the environmental consequences of draft bills and cabinet decisions. SEA for policies differs considerably from SEA for plans and programmes. At the policy level, there are not provisions for public participation. Usually, simple procedures are followed. The practical implementation of SEA at the policy level benefits from the existence of guidelines. An essential of SEA for policies is the close co-operation between the different ministries concerned: The introduction of a "help desk" in the Netherlands for the "environmental test" of government proposals is an example for provisions made to encourage co-operation. The help desk staff supports the ministries when filling out a standardised questionnaire on the environmental effects of a policy. At the same time, a so-called "business test" is obligatory. Both tests are not regarded as conflicting instruments but as supplementing each other. Today the two responsible ministries work closely together. However, at the beginning there had been co-ordination problems. It is important that the "environmental test" also covers positive environmental consequences of government proposals. Thus, environmentally

benign proposals are supported in Parliament or cabinet decision-making. Furthermore, the "environmental test" gives positive feedback to the staff in the ministries which developed the proposals.

In summary, in most of the Member States, some experience with some elements of SEA already exists which can serve as a starting point for introducing a full SEA.

### 3.2 CONSTRAINTS TO IMPLEMENTATION AND POSSIBLE SOLUTIONS

According to the experts at the Potsdam meeting, the legal and/or political constraints are most stringent. The necessity of SEA is not always accepted. It is feared that SEA will lead to delays and difficulties without providing additional benefits. The experts conclude that the environmental sector has to improve its public relations to disseminate possible benefits of SEA and to overcome political constraints.

The workshop papers point out that introducing SEA at the national level not always is a straightforward task. Difficulties may arise in countries with sophisticated planning systems. Generally, the existing planning procedures will take environmental matters into account. The introduction of new assessment procedures might be rejected on the grounds that the amount of additional information gained is minor. Furthermore, introducing new procedures requires making major changes to the existing planning system. In particular, in the case of planning systems with a long tradition, a "balance of power" has developed between the various actors in the planning process which might be disturbed by the introduction of new procedures.

Further problems arise where responsibilities are shared between different agencies or different administrative levels (fragmentation of responsibilities): i.e., in particular, in countries with a federal structure.

Most of the SEA case studies presented dealt with local land-use plans. However, comprehensively assessing the environmental effects of local land-use plans seems to be a particularly difficult task. SEAs for regional plans usually have to consider and compare alternatives and their environmental consequences which, too, is not straightforward. In comparison to the difficulties encountered in SEA for local and regional plans, SEA for action programmes (i.e., SEA for a compilation of measures to be implemented within a certain period) seems to be easier.

One of the tasks of regional planning is to co-ordinate sectoral plans (e.g., road plans, landscape plans). The question whether there should be a tiered SEA, i.e. for the sectoral plan itself and for the regional plan, has not been decided yet. SEA is easier to carry out for sectoral plans than for regional plans. In particular for sectoral plans with severe environmental consequences (e.g., transport plans) alternatives and their environmental consequences are more straightforward to consider than they are in the case of local and regional land-use plans.

The experts agree that, wherever possible, existing host procedures should be used for the implementation of SEA. However, in some countries no suitable host procedures exist. In these countries, host procedures need to be introduced or existing procedures need to be adapted in order to accommodate SEA.

The link between SEA and decision-making, i.e. the extent to which the results of a SEA are binding for the decision-makers, is of crucial importance. On the one hand, a weaker link giving discretion to the decision-makers helps to overcome reservations against the introduction of SEA. On the other hand, a weak link bears the risk that the results of SEA are not sufficiently taken into account. Making the results of SEA binding for the decision-maker limits the discretion of the authorities. The experts at the Potsdam workshop suggest a compromise. As a minimum the decision documents should describe which environmental concerns have been taken into account and should give the reasons for possible deviations from concerns. The Member States differ in their legal systems and in the weight given to issues put forward in decision-making procedures. For example, at present, in some Member States, authorities are given discretion whether and how to consider issues put forward during public participation. Whereas in other Member States, authorities have to deal with all issues put forward by the public. The same heterogeneity applies to the weight given to results of SEA in decision-making.

The development and evaluation of alternatives from an environmental point of view still imposes some methodological difficulties. The comparison of alternatives and their environmental impacts is crucial for SEA. It is recommended to present clear alternatives for the discussion already at the scoping stage. These alternatives, however, should not be elaborated in too much detail in order to avoid making the design of plans/programmes unnecessarily complicated. However, the main differences between the individual alternatives need

to be clearly stated. In cases where it is not possible to quantify the environmental impacts at the strategic planning level, a "direction analysis" should be carried out. This allows a statement whether a plan/programme is likely to have positive or negative effects on meeting environmental quality objectives without quantifying these effects.

The development of the plan/programme is often accompanied by difficulties. In most cases, it is a long term process including several rounds of consultations. Therefore, the procedure management at the SEA level plays a greater role than for project EIA. In comparison to EIA, SEA is a process with more feedback cycles. Lead agencies often have no previous experience with the management of such complex procedures. I.e., the persons in charge need to be carefully selected.

Environmental assessment in general, and SEA in particular, is based on a rational decision-making and policy model: I.e., it is based on the assumption that proper and comprehensive development of factual information will lead to rational administrative and political decisions. In the real world, however, this might not be always the case. During the development and the management of SEA procedures, the specific conditions of a decision-making process and the availability of environmental information to the decision-makers have to be taken into account.

The participants of the workshop agree that a lengthy, theoretically oriented discussion of SEA would hinder the practical implementation of SEA. SEA practice should start as soon as possible and already existing procedures should be used as far as they are suitable. It is of utmost importance to improve the political acceptance of SEA for policies, plans and programmes.

### **3.3 SEA RESEARCH, TRAINING, DISSEMINATION AND NETWORKING**

Experiences gained with the introduction of project EIA showed the need for training of all EIA actors and for the early development of guidelines (i.e. before formal implementation). The same applies to SEA. In several Member States, and in particular in those countries where formal requirements for SEA exist, seminars or training courses on the integration of environmental concerns into plans and programmes have taken place. Furthermore, guidelines and manuals on SEA have been issued. However, at present these training and dissemination efforts are put on hold until the emergence of the SEA

directive. The current neglect of training activities is criticised by the workshop participants. Even if there is no formal requirement for SEA at present, environmental concerns need to be increasingly integrated into policies, plans and programmes. For this reason alone, training is needed.

Because of the heterogeneity of SEA procedures, some experts believe that a general SEA training is not possible. Training has to be oriented at the individual plan or program. Therefore, "learning by doing" or "training on the job" are regarded as most appropriate.

The Ispra-Report<sup>6</sup> is seen as a basis for making recommendations for research projects. It has identified the following four major research areas:

- methods for predicting and evaluating potential environmental impacts,
- political and procedural problems,
- integration of SEA and socio-economic appraisal,
- linkages of SEA and project-EIA.

The experts emphasise the necessity of making research findings available as fast as possible to all Member States. Suitable arrangements to this end could include a data base holding SEA-related documents that could be easily accessed, the use of the internet, and the setting up of a multidisciplinary steering group.

Research and training should be closely linked. Research projects should be designed with a view to practical application and research findings should be implemented into practice as soon as possible. Training courses should be organised by the Member States themselves. They should target the following groups:

- administrations responsible for carrying out SEA or supervising the procedure,
- experts who work within the administration or external consultants who support the administration in the preparation of a SEA,
- the general public and NGOs.

In order to prepare the administration and the experts for their future tasks, SEA has to be included in the curriculum of the universities.

Dissemination and networking should not be restricted to environmental authorities and environmental specialists. Networking with the non-environmental sector is very important, too (e.g., networking with sectoral planners for transport, economy or tourism). Thus, host procedures can be improved and barriers between the non-environ-

mental and the environmental sector can be overcome.

The national EIA-Centres play a major role in dissemination and networking. With the support from the Commission, DG XI, they could carry out the following tasks:

- dissemination of information via the internet,
- development of SEA databases at the national level, the structure of these databases should be compatible Europe wide,
- organisation of workshops.

## 4. CONCLUSIONS

Overall, the workshop yields a very encouraging finding: all participants agree that SEA is a suitable instrument to strengthen environmental concerns in decision-making processes for policies, plans and programmes. Although the implementation of SEA might lead to some problems and resistance and an additional procedure may cause some additional costs, the participants expect that the benefits of SEA will outweigh its costs.

The experts do not agree on every detail of the implementation of SEA, e.g. whether the results of SEA should be binding or which methods should be used. However, the participants agree that these differences should be solved in a constructive way. After 20 years of theoretical discussions, open questions should now be solved by implementing SEA into practice and accompanying the implementation by research. Certain experiences gained with transposing and implementing project EIA should be used for SEA:

- training adapted to the needs of the various groups and starting prior to the formal introduction of SEA,
- early public relation campaigns targeting decision-makers and sectoral authorities and highlighting the benefits of additional information which will lead to better decisions,
- co-operation with decision-makers and sectoral authorities from the non-environmental sectors,
- speedy and wide dissemination of the results of research projects commissioned by DG XI either by the Commission itself and/or by Member States,
- strengthening networks for the exchange of information and expert knowledge between the Member States.

The discussions during the workshop, the findings of several research projects and the experiences gained from transboundary EIA make obvious that after more than 10 years there are still distinct differences with project EIA between the various Member States. As regards SEA, one can therefore conclude that the future SEA Directive should focus less on the creation of new national procedures. Instead, it should aim to harmonise existing planning and consent procedures within the Member States by including basic principles.

In general, policy SEA is met by more scepticism than SEA for plans and programmes. The contributions for the workshop show that some Member States have successfully implemented SEA for

policies. Their experiences with SEA for policies can be summarised as follows:

- SEA for policies differs in its procedure from SEA for plans and programmes.
- SEA for policies in practice is handled pragmatically. It is not a time-consuming procedure (unless it is part of a research project). In most cases, simple methods are applied. The results of SEA seem to be sufficient to ensure the adequate consideration of environmental matters in the decision-making process.

The participants emphasise the importance of expert workshops like the one in Potsdam. They provide the chance for an up-to-date and practice-oriented exchange of information. The result of the workshop is not only the publication of the written contributions, but also the further dissemination of findings by the participants which act as multipliers within their countries. One-to-one contacts between experts from different backgrounds (environmental administrations, EIA-Centres, research institutes) are important for the further development of SEA.

This documentation of the workshop findings presents a wealth of experience gained with SEA in the Member States and proposals for the solution of implementation problems. It is hoped that it will help to support the discussion of the Proposal for a Council Directive on the Assessment of the Effects of Certain Plans and Programmes on the Environment.

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