

Proceedings of

# International Workshop on Public Participation and Health Aspects in Strategic Environmental Assessment

Convened to support the development of the UN/ECE Protocol on  
Strategic Environmental Assessment to the Espoo Convention



THE REGIONAL ENVIRONMENTAL CENTER  
*for Central and Eastern Europe*



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# **International Workshop on Public Participation and Health Aspects in Strategic Environmental Assessment**

*Convened to support the development of the UN/ECE Protocol on  
Strategic Environmental Assessment to the Espoo Convention*

*November 23-24, 2000  
Szentendre, Hungary*

Edited by  
**JIRI DUSIK**

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**THE REGIONAL ENVIRONMENTAL CENTER**  
*for Central and Eastern Europe*

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<b>Introduction</b>	<b>5</b>
<b>Introduction</b> <i>Jiri Dusik, REC</i>	7
<b>A Framework Approach to Strategic Environmental Assessment: Aims, Principles and Elements of Good Practice</b> <i>Barry Sadler</i>	11
Postscript <b>Strategic Environmental Assessment: An Aide Memoire to Drafting a SEA Protocol to the Espoo Convention</b> <i>Barry Sadler</i>	25
<b>Key Developments of Strategic Environmental Assessment</b>	<b>35</b>
<b>The Future Directive on Strategic Environmental Assessment of Certain Plans and Programmes on the Environment: How this New Instrument will Link to Integration and Sustainable Development</b> <i>Lieselotte Feldmann, Marc Vanderhaegen and Charles Pirotte, European Commission</i>	37
<b>Developments in Strategic Environmental Assessment in Central and Eastern Europe</b> <i>Jiri Dusik, Barry Sadler and Nenad Mikulic</i>	49
<b>Strategic Environmental Assessment in the Newly Independent States of the Former Soviet Union</b> <i>Aleg Cherp, Russia and Belarus</i>	57
<b>SEA Application for Spatial and Regional Plans and Programmes</b>	<b>69</b>
<b>The Application of Strategic Environmental Elements in Land-use Planning in Norway: Small Steps to Improvement</b> <i>Ingvild Swensen, Norway</i>	71
<b>Strategic Environmental Assessment of Regional Land-use Plans: Lessons from Poland</b> <i>Urszula Rzeszot, Poland</i>	77
<b>Strategic Environmental Assessment of Varna Municipality Development Plan</b> <i>Vanya Grigorova and Jacquelina Metodieva, Bulgaria</i>	81
<b>Application of Strategic Environmental Assessment for National Policies</b>	<b>85</b>
<b>Strategic Environmental Assessment of Slovak Energy Policies</b> <i>Maria Kozova and Jan Szollos, Slovakia</i>	87
<b>Health Impact Assessment and Intersectoral Policy at a National Level in the Netherlands</b> <i>Gerard Varela Put, The Netherlands</i>	105
<b>Health Impact Assessment and the Potential Application for Agricultural, Food and Nutrition Policies</b> <i>Karen Lock, UK</i>	111
<b>SEA Application for Sectoral Plans and Programmes</b>	<b>113</b>
<b>Strategic Environmental Assessment, National Sectoral Plans and Programmes</b> <i>David Aspinwall, UK</i>	115
<b>Strategic Environmental Assessment of the Czech National Development Plan</b> <i>Jiri Dusik and Simona Sulcova, REC</i>	119
<b>Strategic Environmental Assessment in Slovenia: Summary of Methodological Topics</b> <i>Branko Kontic, Slovenia and Milena Marega, REC</i>	127
<b>SEA Application for Rules and Legislation</b>	<b>135</b>
<b>Lessons Learnt from the Strategic Environmental Assessment of Government Proposals Submitted to the Norwegian Parliament</b> <i>Stig Roar Husby, Norway</i>	137
<b>Annex 1: List of Participants</b>	<b>141</b>

## ACRONYMS AND ABBREVIATIONS

AAU	Assigned amount unit	INSSE	National Institute of Statistics and Economic Studies (Romania)
BU	Bulgaria	IOS	Environmental Protection Institute (Poland)
CCAP	Center for Clean Air Policy	IPCC	Intergovernmental Panel on Climate Change
CDM	Clean development mechanism	ISPE	Institute of Power Studies and Design (Romania)
CEE	Central and Eastern Europe	ITS	Institute of Road Transport in Warsaw (Poland)
CER	Certified emission reduction	Jl	Joint Implementation
CH <sub>4</sub>	Methane	KGI	Hungarian Institute for Environmental Management (Hungary)
CHMI	Czech Hydrometeorological Institute (Czech Republic)	LUCF	Land-use change and forestry
CIE	Information Center for Energy Sector in Warsaw (Poland)	MoEW	Ministry of Environment and Water (Bulgaria)
CO <sub>2</sub>	Carbon dioxide	MS	Ministry of Environment (Poland)
COP	Conference of the Parties	MWFEP	Ministry of Water Forest and Environmental Protection (Romania)
CORINAIR	Coordination information air	N <sub>2</sub> O	Nitrous oxide
CZ	Czech Republic	NC	National communication
DESA	United Nations Department of Economic and Social Affairs	NCCC	National Commission on Climate Change (Romania)
EIONET	European Environment Information and Observation Network	NFOS	National Fund for Environmental Protection and Water Management (Poland)
EIT	Economies in transition	NGO	Non-governmental organization
ERU	Emission Reduction Unit	NO <sub>x</sub>	Nitrogen oxide
ET	Emission trading	NSI	National Statistical Institute (Bulgaria)
EU	European Union	PFC	Perfluorocarbon
FEWE	Foundation for Energy Efficiency in Katowice (Poland)	PGNiG	Polish Oil and Gas Company in Warsaw (Poland)
GHG	Greenhouse gas	PL	Poland
GUS	Main Statistical Office (Poland)	QA	Quality assurance
HEEA	Hungarian Energy Efficiency Agency (Hungary)	QC	Quality control
HFC	Hydrofluorocarbons	SI	Slovenia
HU	Hungary	SBSTA	Subsidiary Body for Scientific and Technical Advice
ICIM	Research and Engineering Institute for Environment (Romania)	SF <sub>6</sub>	Sulfur hexafluoride
IDR	In-depth report	SO <sub>2</sub>	Sulfur dioxide
IET	International emission trading	SORS	Statistical Office of the Republic of Slovenia
IGNiG	Institute of Oil and Gas Research in Warsaw (Poland)	ToR	Terms of reference
IL	Aviation Institute in Warsaw (Poland)	UNFCCC	United Nation Framework Convention on Climate Change

# Introduction

**Introduction** ■

Jiri Dusik, REC

**A Framework Approach to Strategic Environmental Assessment:  
Aims, Principles and Elements of Good Practice** ■

Barry Sadler

POSTSCRIPT ■

**Strategic Environmental Assessment: An *Aide Memoire* to Drafting  
a SEA Protocol to the Espoo Convention**

Barry Sadler





# Introduction

Jiri Dusik, REC

## 1. Purpose and Background of the Workshop

The International Workshop on Public Participation and Aspects of Health in Strategic Environmental Assessment took place on 23-24 November, 2000 at the Regional Environmental Center (REC) for Central and Eastern Europe (CEE) in Szentendre, Hungary. The workshop was held at the invitation of Norway and the Czech Republic, and with the support of Italy, the Sofia EIA Initiative, UN/ECE, WHO/EURO and the REC.

The workshop's primary goal was to provide information and relevant background documents to delegations participating in negotiations of an SEA Protocol in the UNECE (Espoo) Convention on issues regarding public participation and the incorporation of health concerns.

The workshop was held in accordance with a decision of the Second Meeting of Signatories to the Aarhus Convention (see CEP/WG.5/2000/2, paragraph 54). The Meeting mandated the workshop to:

- develop ideas and recommendations regarding the role of public participation and a Health Impact Assessment (HIA) in Strategic Environmental Assessment (SEA);
- facilitate effective cooperation between the Aarhus Convention and Espoo Convention on issues related to SEA; and
- support the formulation of an UN/ECE Protocol on a SEA to the Espoo Convention.

## 2. Scope of the Workshop

The workshop aimed to identify the relationship between public participation and health impact assessment in SEA on the four levels at which public authorities apply the process within UN/ECE countries, namely:

- spatial and regional plans,
- sectoral plans and programmes,
- policies,
- legislative proposals.

The particular focus of discussion was on the lessons of SEA practice at the above levels. When analysing the

### BOX A

#### Integration of environment and health impact assessment

##### Benefits

- When health considerations are introduced at a strategic level, problems are avoided at a project level.
- Overlapping and duplication of assessment should be avoided.
- Public participation should be dealt with at one stage or immediately.

##### The way forward

- Institutionalise health impact assessment and move it higher up on the policy agenda.
- Identify and agree on common tools that aid integration.
- Develop guidance by building on previous experience.
- Provide intensive training and networking.

##### Areas of concern relating to inclusion of health in strategic environmental assessment

- Need to maintain a balance between environment and health components.
- Need for flexibility and adaptation to different contexts and sectors.
- Need for clear guidance/procedures on how and when to involve health authorities.

experience gained to date, workshop participants were asked to address the following questions regarding the role of public participation and health impact assessment in SEA:

1. When should SEA, integrated with public participation and health impact assessment, begin in the decision-making process?
2. How should environmental and health issues be identified and analysed? What type of health information is missing in current approaches to SEA?
3. How should health authorities and experts be involved in the SEA process?
4. How should public participation in SEA be arranged? Specifically, three issues were considered:

## BOX B

**SEA public participation in health impact assessment**

The public concerned includes:

- persons likely to be affected (the population of the jurisdiction covered by a proposal);
- persons and civil society groups that are likely to be interested;
- all neighbouring jurisdictions.

The public concerned includes:

- media and relevant jurisdictions;
- public notices;
- web pages;
- mailing lists (of those who have expressed an interest in being notified); and
- individually, as appropriate.

- how to identify the relevant public in relation to environmental and health issues;
- how to notify the relevant public;
- how to provide access to information and what these information resources should contain.

5. How should environmental and health authorities adequately take into account comments submitted by the public?
6. How should access to justice be arranged?

### 3. Workshop Conclusions

#### **3.1 When should SEA, integrated with public participation and a health impact assessment, begin in the decision-making process?**

Workshop participants agreed that the introduction of public participation and health impact assessment at the strategic decision-making level is very important in order to avoid problems at the project level. It was also recognised that public participation in strategic decision-making can and should take place outside of the SEA process. There was wide support for integrating public participation and health impact assessment within the SEA process.

There was a consensus that SEA, integrated with public participation and health impact assessment, should start at an early stage of strategic decision-making, when major options are still open.

In order to achieve this aim, early screening of decisions should be undertaken to examine their potential impact, as well as to determine whether an SEA is required. Screening should begin as soon as there is enough information available and while options are still open. Preferably, the screening process should take place simultaneously with the effort to formulate a strategic intervention, for example:

- when the basis of strategic intervention is decided; or
- when the objectives of the strategic intervention are formulated; or, at the latest
- when the drafting of policy, plans etc. begins.

#### **3.2 How should environmental and health issues relevant for SEA be identified and analysed? What type of health information is missing in current approaches to SEA?**

There was a consensus that the integration of SEA with public participation and a health impact assessment should make better use of existing resources and avoid duplication of efforts. Despite this consensus, most workshop participants felt that legislative attempts to do so would present major problems. Subsequently, the workshop addressed this issue: “Should SEA address only environmentally-mediated health effects or consider all types of health issues?”

Although no clear conclusion was reached on the issue, workshop participants generally agreed that the health aspects should be assessed more broadly than the current practice based on risk assessment models.

In principle, all major health effects should be covered in SEA. At a minimum, the SEA Report should contain «standard» information on exposure, and may also address the following issues:

- health determinants and effects (specify which determinants and priority risk factors are to be addressed);
- positive and negative health effects (using appropriate indicators);
- effects on particularly vulnerable groups; and
- implications for the attainment of Health 21 goals.<sup>1</sup>

The key health impacts to be addressed in SEA should be identified on a case-by-case basis and determined on the basis of the public concern associated with a particular impact and/or on the basis of expert judgments by health professionals within the SEA team. Any limitations of the SEA process with regard to coverage of health impacts should be acknowledged at the beginning and at the end of the assessment process (to guide comments by health stakeholders) and in the SEA Report.

Although the health aspects should be institutionalised in both EIA and SEA, it was agreed that the ways and means of doing so should be flexible. Better integration of SEA and HIA will require the development of guidelines similar to those developed by the World Health Organisation, the World Bank or the British Medical Association. These guidelines should:

- develop a common vocabulary;
- develop checklists of health determinants;
- identify common tools that facilitate integration of environmental and health impact;

- review objectives and targets against which health impacts can be analysed (all countries should have National Sustainable Development Strategies and Environmental Health Action Plans, which provide benchmarks for this purpose).

### **3.3 How should health authorities and experts be involved in the SEA process?**

No or late involvement by health authorities in EIA and SEA process is one of the main reasons for the limited consideration of health information in these processes. In addition, it was stated that health authorities do not have a good understanding of EIA/SEA philosophy and process. There is also a lack of methods regarding “know-how.”

The workshop concluded that health authorities should be involved in the same manner as environmental authorities. In order to meet this principle, notification and consultation of health authorities should be a mandatory requirement of SEA systems.

In addition, clear procedural guidance should be given as to how and when to involve health authorities, and this in turn should be developed in consultation with those who will use it. For the longer term, more resources are needed for EIA/SEA capacity-building within health institutions.

### **3.4 How should public participation in SEA be arranged?**

#### *3.4.1 How to identify the public interested in environmental and health issues?*

The workshop agreed that, in the context of SEA, the public should include, but be not limited to:

- (a) the general public in the jurisdiction for which the plan is developed;
- (b) interested people and NGOs; and
- (c) the public affected in neighbouring jurisdictions.

The key question debated at the workshop was whether an expressed interest should be required for public participation in SEA, or whether public authorities should be required to notify all potentially relevant groups.

It was concluded that public bodies should be proactive in identifying and involving the public. Consulting with NGOs is not sufficient; instead public authorities should actively reach out, especially to population groups that are traditionally under-represented.

#### *3.4.2 How to notify the relevant public?*

The public must be informed in accordance with the provisions of Articles 6.2 and 6.6 of the Aarhus Convention.

When involving a wide cross-section of the public, passive notification of the general public should be combined with proactive notification of interest groups and those directly affected by a proposal.

Passive notification can include public announcements and broadcasts in relevant media and on web pages.

Active notification shall be used to inform members of public who have expressed an interest in being regularly notified, or directly affected groups who do not have access to information due to limited resources (e.g. low income). Active notification effected through direct contact with individuals and groups.

#### *3.4.3 How to provide access to information and what should it contain?*

Access to, and dissemination of, information should be an ongoing process based on the following principles:

- both passive and active notification should inform the public about the SEA process and its key stages (see above);
- all information which is used in the decision-making process and all SEA documentation should be publicly available;
- public comments and inputs on the documentation should be publicly available.

Given the complexity of issues addressed in the strategic decision-making process, it is important to provide a clear and concise summary of the key issues addressed within SEA.

### **3.5 How should environmental and health authorities adequately take into account comments submitted by the public?**

Public comments should be formally documented and made publicly available. Public comments can be taken into account at different stages of the SEA process, notably in scoping; preparing SEA reports; modification of the proposal; and the implementation/evaluation of policy, plans etc.

A systematic approach to recording, grouping, evaluating and responding to comments is needed, backed by provisions for procedural transparency.

The evaluation of comments should take account of the public perception of risks.

### **3.6 How should access to justice be arranged in strategic environmental assessment?**

Access to justice should be provided in accordance with Article 9 of the Aarhus Convention, which lays down the minimum standard to be incorporated within strategic environmental assessment.

#### **ENDNOTE**

1 Goals established by the Health For All process launched by WHO in 1995 in response to accelerated global change and to ensure that individuals, countries and organisations are prepared to meet the challenges of the twenty-first century.



# A Framework Approach to Strategic Environmental Assessment: Aims, Principles and Elements of Good Practice

Barry Sadler

This paper outlines a framework approach to strategic environmental assessment (SEA). It describes key aims, concepts, principles and elements of good practice, drawing on lessons of international experience with the implementation of SEA. By definition, these aspects have generic application across different SEA systems, rather than being characteristic of a particular methodology, procedure or set of institutional arrangements. In combination, they help illustrate the basis of effective SEA process, practice and performance.

As commissioned, the paper was prepared to help frame and focus discussion at the Szentendre workshop on SEA, Health and Public Participation. It covers an agenda of basic issues, comprising a number of commonly asked questions about SEA (Box A). These issues are still subject to debate by SEA practitioners and experts, as well as enquiry by those less familiar with the field. Others might see them as “points of reference” when drafting an SEA Protocol to the UNECE Convention on EIA in a Transboundary Context. This aspect is developed separately (see postscript) and the main body of the text comprises a briefing note on the status of SEA internationally, with much information summarised in boxes that may be amended to purpose.

More pointedly, the paper offers a particular interpretation of what might be called the high road to SEA.

## BOX A

### Some basic issues covered in this paper

- What is strategic environmental assessment?
- Why is it important?
- What are its key aims and benefits?
- What is the scope of SEA application?
- Which procedures and methods are used?
- What are key principles and elements of approach?
- How can the public best be involved in the SEA process?
- How can social, health and other factors best be integrated into or with the SEA process?
- How can SEA be applied as a sustainability instrument?

This emphasises the importance of a differentiated approach to SEA, keying process and procedure to the geometry of decision-making and linking them firmly to the delivery of sustainability objectives and principles. An EIA-based approach to SEA, as exemplified by the European directive, is only one lane on that route map and a relatively narrow one at that. Not everyone may agree with this interpretation and, most importantly, it will be tested along with other views in the discussion at Szentendre. The forum was an important in that respect because of the range of opinion leaders who attended the workshop, representing the constituencies of the Espoo Convention, the Aarhus Convention and the World Health Organisation.

## 1. The Concept of SEA

**The chief institutional challenge of the 1990s, according to the World Commission on Environment and Development (1987), required consideration of “the ecological dimensions of policy at the same time as economic and other dimensions.”**

**EA is a systematic process for evaluating the environmental consequences of proposed policy, plan or programme initiatives in order to ensure they are fully included and appropriately addressed at the earliest appropriate stage of decision-making on par with economic and social considerations.**

(Sadler and Verheem, 1996)

There are many definitions of SEA. Often, they are akin to muzak — the compression of variations into a narrow tonal band. Each one gives a slightly different perspective, essentially the particular “take” of the author(s) on the concept of SEA. The above definition, for which no special claim to primacy is made, tries to pare down the SEA process to generic fundamentals and relate them to the “chief institutional challenge of the 1990s” as identified by the Brundtland Commission and taken up in Agenda 21. Others prefer to define SEA more explicitly and by reference to EIA-type procedures such as report preparation (e.g. Therivel and Partidario, 1996). A more radical redefinition of SEA is suggested later.

Commonly understood, SEA is a process to integrate environmental considerations into the highest levels of decision-making, including proposed policies, legis-



## BOX B

## SEA legal and policy benchmarks

1970	US <b>National Environmental Policy Act</b> (1969) requires “proposals for legislation and other major federal actions significantly affecting the [...] environment” to include a “detailed statement [...] on the environmental impact” (Sec. 102 (2)(c)) <b>California Environmental Quality Act</b> modelled after NEPA and applies to activities proposed or approved by state agencies, including programmes, plans & staged projects (Guidelines Sec. 15165-15168)
Mid-1970s	CANADA <b>Public inquiries and environmental reviews of major proposals</b> considered policy issues (e.g. Mackenzie Valley Pipeline Inquiry, Canada, 1974-1977, Ranger Uranium Environmental Inquiry, Australia, 1975-1977)
1978	NEPA <b>Regulations issued by Council on Environmental Quality</b> specify actions subject to programmatic EIS as those that can be grouped generically, geographically or by technology (Sec 1052.4 (b))
1987	NETHERLANDS <b>EIA Act</b> (amended 1994) applies to specified national plans and programmes, including all those fixing the locations of projects for which an EIA is mandatory
1989	AUSTRALIA <b>Resource Assessment Commission Act</b> establishes independent inquiry body on resource policy issues (Commission disbanded in 1993, legislation retained); WORLD BANK <b>Operational Directive 4.00</b> (amended 1991, 1999) refers to preparation of sectoral and regional EA (Annex A 6-8) UNECE ( <b>Espoo</b> ) <b>Convention on EIA in a Transboundary Context</b> (came into force 1997) calls on the parties “to the extent appropriate [...] [to] endeavour to apply” the principles of EIA to policies, plans and programmes (Article 2(7))
1990	CANADA <b>Environmental Assessment Process for Policy and Programme Proposals</b> by Order-in-Council (amended 1999) applies to proposals submitted to Cabinet
1991	NEW ZEALAND <b>Resource Management Act</b> is a landmark sustainability law combining policy, planning and regulatory functions into omnibus regime UK <b>Guide on Policy Appraisal and the Environment</b> provides advice for central government agencies (updated by good practice guidance, 1994; amended 1997)
1992	UNECE pilot study <b>EIA of Policies, Plans and Programmes</b> recommends its application by member countries HONG KONG <b>Environmental Implications of Policy Papers</b> by decision of then Governor applies to proposals to Executive Council (later development plans)
1993	DENMARK <b>Environmental Assessment of Government Bills and Other Proposals</b> by Prime Minister’s Office (PMO) circular (amended 1995, 1998 when it became legally binding); applies to draft legislation to Parliament and to strategic proposals on which Parliament must be consulted EUROPEAN COMMISSION <b>Environmental Assessment of Legislative Programme</b> by Internal Communication applies to legislative proposals and other actions by Commission
1994	UK <b>Guide on Environmental Appraisal of Development Plans</b> Advice to local authorities on how to carry out their responsibilities under planning legislation NORWAY <b>Assessment of White Papers and Government Proposals</b> by Administrative Order contains provisions relevant to environment but applies primarily to economic and administrative consequences SLOVAKIA <b>EIA Act</b> contains requirement to assess basic development policies, territorial plans in selected areas and any legislative proposal that may have an adverse impact on the environment (Article 35)
1995	NETHERLANDS <b>Environmental Test by Cabinet Directive</b> applies to draft legislation, part of comprehensive review of enforceability, feasibility and impact on business
1996	<b>Proposal</b> by European Commission for a directive on the assessment of the effects of certain plans and programmes (COM (96) 511; amended by COM (99) 73), hereafter SEA Directive
1998	FINLAND <b>Guidelines on Environmental Impact Assessment of Legislative Proposals by Decision-in-Principle</b> applies to law drafting, also decrees, resolutions and decisions UNECE (Aarhus) <b>Convention on Access to Information, Public Participation in Decision Making and Access to Justice in Environmental Matters</b> provisions for public participation in Articles 7 & 8, respectively, refer to plans, programmes and policies and to laws and regulations relating to environment; UNECE <b>Declaration by the Environment Ministers of the UNECE region on Strategic Environmental Assessment</b> (ECE/CEP/56) invites countries and international finance institutions to introduce and/or carry out SEA “as a matter of priority”
1999	AUSTRALIA <b>Environmental Protection and Biodiversity Conservation Act</b> introduces provisions enabling SEA of policies, plans and programmes FINLAND <b>Act on Environmental Impact Assessment Procedure</b> applies to policy, plans and programmes UK <b>Proposals for a Good Practice Guide on Sustainability Appraisal of Regional Planning Guidance</b>
2000	<b>Common Position</b> adopted by the Council with a view to adoption of an SEA Directive (5865/00)
2001	<b>Decision</b> to negotiate an SEA Protocol by the parties to the Espoo Convention for possible adoption at Fifth Ministerial Environment for Europe Conference (2003)

lation, plans and programmes (terms which mean different things in different countries). It is also widely accepted that SEA should be applied early in the decision-making process, before decisions have been made and when alternatives and options are still open. Within these markers, the boundaries of SEA are only generally drawn in relation to near-equivalent processes, such as policy appraisal and integrated planning, and to emerging approaches to sustainability appraisal (q.v.). Even the interface between SEA of policy, plans and programmes and EIA of projects, clear in concept, can become blurred in practice, particularly when proposals are large, multi-component undertakings.

## 2. Evolution and Status of SEA

The evolution of SEA can be best considered as part of the mainstream of EIA history. Key legal and policy milestones are listed in Box B, dating from the founding US National Environmental Policy Act (NEPA, 1969). Section 102 of NEPA contains the procedural requirements, including the provision for a detailed statement to accompany “proposals for legislation and other major federal actions significantly affecting the [...] environment” (emphasis added). As stated by one of the architects of NEPA, this provision was to be an action-forcing mechanism, intended to reform and redirect federal policy-making (Caldwell, 1998). In practice, however, policy and other strategic decisions were excluded from review, other than for programmatic activities that could be grouped together (as specified in NEPA Regulations).

In broad outline, the path of SEA development can be divided into two main phases:

- **Formative stage (from 1970 to 1989)**  
During this period, certain legal and policy precedents for SEA were established by the introduction and early implementation of EIA. However, their role and scope was limited and restricted to a few countries. Only the USA had what might be termed SEA systems, operating at the plan and programme level under NEPA and CEQA. Elsewhere, elements of SEA were recognisable in certain EIA processes, for example in public inquiries and environmental reviews conducted in Australia, Canada and the United Kingdom, and in regional and ecosystem approaches carried out under regulatory frameworks that mandate or imply consideration of cumulative affects (in Canada, Western Australia and the USA). By the end of the 1980s, other countries and international organisations had begun to make some provision for SEA.
- **Formalisation stage (from 1990 to 2000)**  
During this period, SEA systems were established by an increasing number of countries and became increasingly diversified. In certain countries, provision for SEA of policy, plans and programmes was

made separately from EIA legislation and procedure (e.g. Canada, Denmark), or took the form of environmental appraisal of policy and plans (e.g. UK). Other countries have introduced SEA requirements through legal reforms to EIA frameworks (e.g. Czech Republic, Slovakia) or incorporated them into resource management or biodiversity conservation regimes (New Zealand, Australia).

- **Extension stage (from 2001 onward)**

SEA appears to be on the threshold of widespread adoption and further consolidation as a result of international legal and policy developments. Key driving forces will be the transposition of the European Directive on SEA by member states and accession countries, and the negotiation now underway of an SEA protocol to the UNECE Convention on Transboundary EIA. Together, these frameworks may triple the number of countries that make provision for SEA over the next decade. Elsewhere, the greater emphasis being given to sector and regional assessment under World Bank policy promises to introduce SEA elements more widely in developing countries, and some countries can be expected to introduce their own procedures (e.g. China).

## 3. Rationale, Aims and Benefits of SEA

The purpose of SEA, broadly stated, is to inform strategic decision-making in support of environmentally sound and sustainable development. Specifically, the role of the SEA process in relation to decision-making is delineated by three interrelated functions:

- to analyse and document the environmental effects of proposed strategic actions;
- to identify alternatives and measures to mitigate significant adverse effects; and
- to ensure the relevant findings are considered and integrated in the decision-making process.

Aims and objectives of SEA are summarised in Box C. These also can be divided into three categories, corresponding to:

- substantive goals, achieving environmental protection and promoting sustainable development (the so-called “top-down” strategy);
- instrumental goals, responding to and overcoming the limitations of project-level EIA (the so-called “bottom-up” strategy); and
- institutional goals, integrating environment into the decision-making process (the so-called “mainstreaming” strategy).

The benefits of SEA are derived from meeting the aims summarised in Box C. Above all, SEA of policy, plan and programme proposals provides a means of

TABLE 1

## Selected examples of institutional frameworks for SEA

	<i>Provision</i>	<i>Scope of application</i>	<i>Comments</i>
<b>Australia</b>	Assessment Commission Resource Act (1989); Commission itself disbanded (1993)	Major resource issues referred by Prime Minister's Office	Public inquiry of ecological, social and economic aspects
<b>Canada</b>	Prime Minister's Office circular (1993, amended 1995 and 1998 — when requirement became legally binding)	Bills and other government proposals sent to Parliament or on which Parliament must be consulted	Minimum procedure, separate from project EIA
<b>Denmark</b>	Prime Minister's Office circular (1993, amended 1995 and 1998 when requirement became legally binding)	Bills and other Government proposals sent to Parliament or on which Parliament must be consulted	Minimum procedure, separate from project EIA
<b>The Netherlands</b>	Environmental Impact Assessment Act (1987)	Applies to specified plans and programmes; referred to as strategic EIA (SEIA)	EIA procedure applies in full
	Cabinet Order (1995) for E-test	Applies to law and regulation	
<b>New Zealand</b>	Resource Management Act (1991)	SEA elements provided by policy statements, regional and district plans, which govern consents	No separate provision for SEA; integral part
<b>United Kingdom</b>	Guidance of Policy Appraisal and the Environment (1991; amended 1997)	Policies, plans and programmes developed by central government agencies	Processes operate separately
	Planning and Guidance Note 12 (1992; amended 1998) to local authorities	Development plans prepared under town and country planning regulations	Non-prescriptive procedure of environmental appraisal
	Proposed Guidance on Sustainability Appraisal of Regional Planning (1999)		
<b>USA</b>	National Environmental Policy Act (1969) and Regulations (1978)	Legislation and programmes — actions that can be grouped geographically, generically or by technology	NEPA process applies; specific guidance on preparing generic and programmatic EISs
<b>European Community</b>	Council Directive on the assessment of certain plans and programmes (2001)	Plans and programmes in defined areas, including sectors and land use	Framework law, specifies minimum procedure to be followed by member states
<b>World Bank</b>	Operational Directive on Environmental Assessment (OD 4.00, Annex A 1989; amended as OD 4.01 1991, 1999)	Bank financed plan, programme or series of projects for a particular sector or region	Policy encourages use of sector and regional EA by borrowing country

Source: Sadler and Verheem, 1996 (updated)



addressing issues of environmental deterioration and unsustainable development at source, rather than treating only the symptoms or side-effects. The application of SEA at these higher levels of decision-making facilitates the simultaneous achievement of all three types of goals described above. Many of the supporting objectives are interrelated; for example, consideration of alternatives to proposed strategic actions in terms of their environmental effects lies at the centre of triangulating the aims of SEA. It facilitates the integration of environmental protection objectives into decision-making and the pre-clearance of issues of justification of any subsequent projects subject to EIA, thereby helping to streamline and focus this process.

A number of guiding principles of SEA are gaining acceptance. Eight principles for good process design and implementation are listed in Box D. Collectively, these principles offer guidance on the appropriate scope, orientation and content of the SEA process. No claim is made as to their definitiveness, other than that they have evolved through review and discussion at three international workshops. Others principles could be added, and, no doubt, many SEA theorists and practitioners would want to revise those listed here. It is also expected that further changes will be made as on the basis of evolving experience with SEA practice.

#### 4. Institutional Arrangements for SEA

A small number of few countries and international organisations have made formal provision for SEA of policy, plans and programmes. The SEA processes listed in Table 1 are among the leading examples, internationally. The list is illustrative of the types of institutional frameworks that are in place, rather than a comprehensive listing. Other jurisdictions have introduced SEA systems already (e.g. Hong Kong SAR and Western Australia), or will be required to do so in the near future (e.g. EU member states) or may have to meet particular SEA conditions to comply with international lending and assistance policies (e.g. as established by the World Bank). Many countries also use SEA-type elements informally in EIA or planning processes.

The main aspects of SEA institutional arrangements can be summarised as follows (Sadler and Verheem, 1996; Sadler, 1998; Sadler and Brook, 1998):

##### 4.1 Provision for SEA

Currently, it is estimated that less than twenty countries have made formal provision for SEA of policy, plans and programmes. With certain exceptions, these are UNECE member states. In addition, an increasing number of developing countries are gaining experience of SEA as a result of regional and sectoral EA procedures established by the World Bank.

#### BOX C

##### Aims and benefits of strategic environmental assessment

###### To help achieve environmental protection and sustainable development by:

- consideration of environmental effects of proposed strategic actions
- identification of the best practicable environmental option
- early warning of cumulative effects and large-scale changes

###### To strengthen and streamline project EIA by:

- prior identification of scope of potential impacts and information needs
- clearance of strategic issues and concerns related to justification of proposals
- reducing the time and effort necessary to conduct individual reviews

###### To integrate the environment into sector-specific decision-making by:

- promoting environmentally sound and sustainable proposals
- changing the way decisions are made (long term)

Source: Adapted from Sadler and Brook, 1998.

##### 4.2 Legal versus policy mandate

The mandate for SEA varies. In general, the provision for SEA is based on one of four categories:

1. EIA law (e.g. USA);
2. Planning regulations (e.g. Sweden);
3. Separate administrative order or policy directive (e.g. Canada);
4. Equivalent process of policy appraisal and plan of evaluation (e.g. UK).

##### 4.3 Scope of application

To date, no country appears to provide a comprehensive scope of SEA coverage, i.e. across all levels of proposed strategic action — policies, plans and programmes. A relatively small number of countries apply SEA at the policy level (e.g. Canada) or to draft laws and regulations (e.g. Denmark, Netherlands). Most apply SEA only to plans or programmes. The sectors and activities of SEA are specified in some cases (e.g. Netherlands) but not in others (e.g. USA). In guidance and practice, land-use, water, waste, transport and energy are among the main sectors covered.

##### 4.4 Administration and accountabilities

Typically, the authority responsible for the proposed strategic action carries out the SEA. The responsibility for

## BOX D

### Guiding principles of strategic environmental assessment

- **Fit-for-purpose:** the SEA process should be customised to the configuration and characteristics of policy and plan making
- **Objectives-led:** the SEA process should be undertaken with reference to environmental goals and priorities
- **Sustainability-based:** the SEA process should identify how development options and proposals contribute to environmentally sustainable development
- **Comprehensive in scope:** the SEA process should cover all levels and types of decision-making likely to have significant environmental and health effects
- **Decision-relevant:** the SEA process should focus on the issues that matter in decision-making
- **Integrated:** the SEA process should include consideration of environment related health threats and effects and include other social (equity) considerations as appropriate and necessary
- **Transparent:** the SEA process should have clear, easily understood requirements and procedures, including provision for an appropriate level of public involvement
- **Cost-effective:** the SEA process should achieve its objectives within limits of available policy, information, time and resources

**Source:** Sadler and Verheem, 1996; Sadler, 1998; Sadler and Brook, 1998.

SEA process development, guidance and oversight is normally vested in the Ministry of Environment or an equivalent special purpose body (e.g. Canadian Environmental Assessment Agency, US Council on Environmental Quality). In the Netherlands, the quality of information prepared as part of the SEA process for specified plans and programmes is subject to independent review by the EIA Commission, and advice on the application of the E-test of draft regulations is provided by a Joint Support Centre established by the environment and economic ministries.

#### 4.5 Procedural elements

The SEA process is based on certain EIA steps and elements, including screening, impact identification and report preparation. In some cases, these stages may be applied in practice, even when they are not prescribed or required by law, policy directive or administrative order. The European Directive on SEA of certain plans and programmes (COM (99) 73) is modelled very

closely on the EIA Directive, incorporating the same procedural elements (e.g. requirements related to public consultation and information requirements). Internationally, the provisions of the directive can be expected to apply not only to EU member states but also to accession countries and other UNECE countries and possibly Newly Independent States of the former Soviet Union and certain Mediterranean countries.

EIA-based procedure is subject to considerable modification and flexible application at the policy-level; e.g. as in Danish and Dutch process. Other SEA systems have adopted an integrated regime; for example, environmental appraisal in the UK incorporates Treasury Board guidance on the use of benefit-cost analysis and other economic tools, and the former Australia Resource Assessment Commission undertook public inquiries on policy issues based on ecological, economic and social analysis. In New Zealand, SEA is not a separate or distinguishable process under the Resource Management Act, but is threaded into policy and plan preparation (e.g. to determine which options best achieve the objectives set).

#### 4.6 Information requirements with particular reference to the European directive

This is a cornerstone of the European directive which stipulates that “environmental assessment means the preparation of an environmental statement.” The types of information to be included in an environmental report are described in Annex 1 of the directive (see Box E). Relevant information requirements are to be determined by taking into account “current knowledge and methods of assessment, the contents and level of detail in the plan or programme.” There also must be consultation with authorities (referred to in Article 6(3)) “when deciding on the scope and level of detail of the information to be included.”

#### 4.7 Institutional models

Several overlapping types or institutional models of SEA systems can be recognised in the arrangements described in Table 1. These comprise:

- **EIA-based:** SEA carried out under EIA legislation (e.g. USA) or as separately administered procedure (e.g. Denmark);
- **Regional assessment:** SEA applied to development strategies for a particular geographic area (e.g. World Bank);
- **Environmental appraisal:** SEA covered off by overall process of policy appraisal and review (e.g. UK);
- **Dual or two-tier approach:** SEA undertaken on separate levels (e.g. Dutch E-test of regulations and SEIA of specified plans and programmes);

- **Integrated resource management:** SEA-type elements are part of larger process of policy and plan making and project decision-making (e.g. New Zealand Resource Management Act); and
- **Sustainability analysis:** SEA elements are part of integrated, environmental, economic and social assessment and review of resource policy issues, (e.g. ex-Resource Assessment Commission, Australia and UK regional planning).

## 5. A Differentiated Approach to the Conduct of SEA

SEA processes are far more diverse than is the case with project-level EIA. The above comparison of SEA processes indicate the nature and configuration of policy and plan making has a critical bearing on SEA practice. It means that a “one-type-fits-all” approach cannot work, as exemplified by the varied national experiences summarised in Table 1. A customised approach to SEA is necessary to reflect the multi-storey levels and types of proposed strategic proposals to which it is applied. This aspect brings into focus key trends and issues of SEA practice and methodology.

### 5.1 EIA-based and appraisal processes

A particular differentiation can be made between approaches taken to SEA, most evidently with respect to SEA processes that are applied to broad policies as compared to specific plans and programmes. Where plans and programmes incorporate specific projects and activities and have direct environmental effects, EIA-based procedures and methods have obvious application and are widely used. For broader policies, however, where the environmental effects are indirect and diffuse, more flexible approaches, including those based on environmental appraisal, can be undertaken.

### 5.2 Determining an approach

When selecting an approach and appropriate methods for an SEA, the required level of detail and format (i.e. quantitative or qualitative results) will be important criteria. This distinction also points to the potential of a stepped methodology, in which policy appraisal tools are applied to generic proposals and impact assessment tools are used for policies, plans and programmes that initiate projects and activities. The following question provides a simple *aide memoire* that may help make this determination (Sadler and Verheem, 1996):

Does the policy, plan or programme proposal initiate or fix the type, form, location of concrete projects?

Yes SEA to identify well-defined alternatives and quantitative impacts:  
>> “impact assessment” track

No SEA to discuss issues, broad options and environmental implications:  
>> “policy appraisal” track

### 5.3 Carrying out a policy appraisal

The conduct of an appraisal-based SEA can be described by reference to UK practice, comprising the following steps (UK Department of Environment, Transport and the Regions, 1991, 1998):

- List the objectives of the proposal and summarise the policy issue, identifying possible trade-offs and constraints;
- Specify the range of options for achieving the objectives, including the do nothing option;
- Identify and list all impacts on the environment and consider mitigation measures to offset them;
- Assess the significance of the impacts in relation to other costs and benefits;
- Quantify costs and benefits where possible and appropriate;
- Use an appropriate method to value costs and benefits, including those based on monetary values, ranking or physical quantities;
- State the preferred option and reasons for doing so;
- Monitor and evaluate the results, making appropriate arrangements for doing so as early as possible.

### 5.4 Carrying out a strategic environmental impact assessment (SEIA)

The conduct of an EIA-based SEA process can be summarised by reference to the following steps (UNECE, 1992):

- Screen to trigger SEA and identify likely scope of review needed;
- Scope to identify key issues and alternatives, clarify objectives and to develop terms of reference for SEA;
- Compare alternatives including no action options to clarify implications and trade-offs;
- Involve the public early — for instance already at the scoping stage — and with sufficient access to information that they can make a constructive contribution;
- Impact analysis to examine effects or issues, evaluate alternatives, and identify mitigation and follow-up measures;
- Document the findings of the SEA if necessary with supporting advice and recommendations to decision makers on terms and conditions for implementation;
- Review the quality of the SEA report to ensure it is clear and concise and the information is sufficient and relevant to the decision being taken;

## BOX E

### Information to be provided under the European Directive on SEA

- The contents of the plan or programme and its main objectives.
- The state of the environment and characteristics of any area likely to be significantly affected by the plan or programme.
- Any existing environmental problems which are relevant to the plan or programme.
- The relevant environmental protection objectives, and the way these and other environmental considerations have been taken into account.
- The likely significant environmental effects of implementing the plan or programme.
- The measures envisaged to prevent, reduce and offset any significant adverse effects on the environment of implementing the plan or programme.
- An outline of the reasons for selecting alternatives dealt with, and a description of how the assessment was undertaken including any difficulties (such as technical deficiencies) encountered in compiling the information.
- A description of measures for monitoring the implementation of the plan or programme.

Source: Annex 1, Common Position 5685/00.

## BOX F

### Defining levels of sustainability by reference to natural capital

**Weak sustainability** involves maintaining total capital intake without regard to its composition. Natural capital can and should continue to be converted into economic capital and output (goods and services) governed only by existing environmental policies, regulations and guidelines.

**Moderate sustainability** requires that some attention is given to the level of capital as well. Natural capital is considered to be substitutable only up to certain critical limits — thresholds, which are not yet known. The sensible approach is to adopt the precautionary principle to the use and conservation of natural resources.

**Strong sustainability** means maintaining natural capital at current levels (no net loss). The resource losses and ecological damages resulting from development must be replaced or offset.

Source: Serageldin and Steer (1994).

- Carry out follow up measures as necessary to monitor effects, check on implementation, and track any arrangements for subsidiary level assessment, such as connected project level assessment.

### 5.5 Guidance on SEA methodology and good practice

Internationally, considerable experience with SEA practice has been gained. The analytical methods undertaking SEA are drawn from EIA and policy appraisal/plan evaluation. With some adaptation, many of these have been used successfully already. Examples of methods that may be applied as part of SEA and their relationship to key stages are given in Box G. Selected methods listed here are also cross-referenced in Table 2, which comprises a twelve-step guide to SEA practice.

This framework draws on experience in both EIA-based and policy appraisal experience. For ease of use, this guidance is organised to correspond to key stages and elements of EIA and their equivalents in environmental appraisal. Given the diversity of SEA processes, not all of the steps and actions will be appropriate to carry out a given SEA. Rather they comprise a frame of reference and menu of procedures and methods, which should be adapted to the particular purpose of an SEA and context of a proposal and applied flexibly and pragmatically.

A series of guidelines for SEA practice can be distilled from case experience in a number of countries (Sadler and Verheem, 1996). These identify core elements and some “reality checks” when implementing the guidance in Table 2.

1. Begin as early as practicable in the process of policy or plan formation.
2. Keep in mind the purpose of SEA to inform decisions not to produce a study.
3. Ensure an SEA of a proposal corresponds to its potential environmental effects.
4. Focus on the comparison of major alternatives.
5. Look to gain environmental benefits as well avoid adverse impacts.
6. Build capacity and strengthen process and procedures based on lessons of experience.

### 5.6 Application to sustainability

Currently, SEA is applied primarily as a means of minimising the adverse environmental effects of the implementation of proposed strategic actions. In that regard, SEA can be seen as a necessary but not sufficient mechanism for promoting sustainable development. The relationship of SEA and sustainable development can be strengthened by guidance on sustainability



principles and criteria for evaluating and attributing the “real” or “bottom line” significance of environmental effects. In addition, SEA can be applied as an integral part of integrated resource management, land-use planning and sustainability appraisal.

### 5.7 Benchmark principles

Guidance on SEA can be based on “benchmark principles”, which are robust enough to evaluate the “sustainability contours” of development proposals and choices. This framework would comprise “rules of thumb” to indicate whether or not development options and choices are moving in the right direction, i.e. supportive of established policies, targets and commitments related to sustainable development. Initial perspectives for this purpose can be drawn from four sources:

- fundamentals of sustainable development as outlined in the Brundtland report and Agenda 21;
- “standards” of sustainability as identified by the World Bank and the work of environmental economists;
- demand and supply-side principles for “strong sustainability” to safeguard critical environmental source and sink functions; and
- criteria and indicators to test for environmental sustainability assurance in SEA.

### 5.8 Basis of sustainable development

This is formally stated in the Brundtland report and Agenda 21 as twin principles of intra- and inter-generational equity, i.e. improving the welfare of all people, especially the poor and disadvantaged and maintaining development options and opportunities for the generations who follow. The principle of inter-generational equity is an omnibus test of whether or not development is sustainable. It requires that the next generation receive a stock of assets (resource potentials, created wealth, human capabilities) that is at least equivalent to our own, taking into account population growth (sustainability rule number 1).

### 5.9 A standard of sustainability

At an aggregate level, operational principles of sustainability can be based on valuation of the “capital” stocks that should be passed from one generation to the next (to meet sustainability rule no. 1 above). In this context, three types of capital are recognised as important: man-made capital — the machines, buildings and infrastructure which support the production of goods and services; natural capital — natural resources and ecological processes which provide raw materials and comprise a life support system; and social capital — human capabilities, community networks and institutional systems — that permit a complex society and

## BOX G

### Methods and their usage in SEA

#### Baseline study

- SOE reports and similar documents
- Environmental stock/setting
- “Points of reference”

#### Screening/scoping

- Formal/informal checklists
- Survey, case comparison
- Effects networks
- Public or expert consultation

#### Formulating options

- Environmental policy, standards, strategies
- Prior commitments/ precedents
- Regional/local plans
- Public values and preferences

#### Impact analysis

- Scenario development
- Risk assessment
- Environmental indicators and criteria
- Policy impact matrix
- Predictive and simulation models
- GIS, capacity/habitat analysis
- Benefit/cost analysis and other economic valuation techniques
- Multi-criteria analysis

#### Documentation for decision making

- Cross-impact matrices
- Consistency analysis
- Sensitivity analysis
- Decision “trees”

economy to function. Depending on how their relationship is interpreted, and the importance that is accorded to natural capital, three levels of sustainability can be identified (Box F).

### 5.10 Supply-side principles of strong sustainability

On the supply side, the emphasis is on carrying capacity, maintaining biodiversity, ecosystem integrity and similar concepts are helpful organising coastal zone management strategy and other resource based strategic planning approaches. These principles are difficult to apply to assess the environmental sustainability of development proposals. Environmental deterioration to unacceptable levels is difficult to monitor (let alone predict) so resource managers rely on pragmatism by emphasising conservation of stocks and setting aside sensitive and valued ecosystems. Key supply-side principles of “strong” or environmental sustainability are described in Box H.

## BOX H

**Supply-side principles for environmental sustainability**

*Avoid irreversible or serious environmental damage, including any contribution to cumulative global impacts (e.g. as defined under the Kyoto Agreement).*

*Protect valued resources, heritage sites and critical ecological functions, as defined by national policies for nature protection and the Convention on Biological Diversity.*

*No net loss or deterioration of natural capital, which to become operational requires that environmental impacts are fully mitigated or otherwise offset by providing an equivalent or appropriate replacement for residual damage.*

*Renewable resources should be depleted (harvested or used) at a rate equal to their regeneration.*

*Non-renewable resources should be depleted at a rate equal to their replacement by renewable substitutes.*

*Waste emissions should not exceed the assimilated capacity of the environment or cause harmful effects to human health.*

**Sources:** Sadler, 1999 (adapted from various sources).

## BOX I

**Demand-side principles for environmental sustainability**

*Apply the precautionary principle when development proposals may cause serious or irreversible environmental damage*

*Promote “anticipate and prevent” approaches, which are much cheaper and less risky than “react and cure” solutions once damage has been done*

*Eliminate or reduce environmentally-perverse subsidies or taxes, e.g. that encourage changes in agricultural use of marginal lands (abandonment or intensification)*

*Avoid, as far as possible, the conversion of land to more intensive use, which is pervasive cause of habitat and biodiversity loss, e.g. build on brownfield rather than greenfield sites*

*Apply the “polluter pays” principle so that all types of resource loss and environmental damage incurred through needed economic activity require compensation, either like-for-like replacement of lost habitat or resource values, or, where this is not possible, a comparable offset (e.g. afforestation to sequester CO<sub>2</sub> emissions)*

**Sources:** Sadler, 1999 (adapted from various sources).

**5.11 Demand-side principles of strong sustainability**

On the demand side, the limitations on the application of supply side principles are addressed by taking a precautionary approach to guide decision-making when there is uncertainty about the potential environmental impacts of strategic proposed actions (Principle 15, Rio Declaration on Environment and Development). A strict form of the precautionary principle involves avoiding all actions that might cause serious or irreversible environmental change. Weaker versions involve maintaining “safe margins”, which require the use of SEA and other instruments to err on the side of caution. In combination, demand-side principles (which extend the precautionary approach) can be applied to limit the causes of environmental damage at source and thus reinforce sustainability (see Box I).

**5.12 Criteria and indicators to test for environmental sustainability assurance**

The principles described above can be translated into criteria and indicators for environmental sustainability assurance (see Table 3). The criteria can be applied to SEA of development policies and plans to test them for sustainability assurance. Environmental sustainability assurance (ESA) means that the critical resource stocks and ecological functions must be safeguarded, depletion and deterioration of sources and sinks must be kept within acceptable levels or safe margins and losses of natural capital must be made good (Sadler, 1996). This can be achieved by an impact compensation protocol that can be applied to SEA at all levels of development decision-making. Looking ahead, this is the single most important action that SEA administrators and practitioners could take to apply SEA as a frontline instrument for sustainability assurance.

**6. Conclusion: Strategic Environmental Assessment Revisited**

In conclusion, several immediate lessons can be drawn from international experience for those concerned to introduce, improve or institutionalise SEA (e.g. as part of a multi-lateral protocol). These emphasise:

- promoting SEA as a bonus not a burden;
- encouraging creativity and innovation;
- tailoring the approach to the purpose and context of decision-making;
- providing start-up help and assistance;
- building an empirical knowledge base systematically;
- learning by doing when applying new methods and procedures.

Recently, considerable progress has been made in SEA practice and process development. However, a redefinition of SEA will be necessary if it is to be applied as an instrument for sustainability assurance (as described above). In particular, a duty of care with regard to the environment must be imposed on decision-making bodies. This duty would be additional to a procedural obligation to take account of findings of an SEA and to follow due procedure (which achieve limited ends in relation to substantive decision-making). From this perspective, SEA would be redefined as:

a process to systematically analyse and address the environmental effects and consequences of proposed strategic actions (i.e. policy, plan, programme, legislative and other initiatives above the project level), which should include consideration of major alternatives and specific measures to mitigate significant adverse environmental effects and enhance positive benefits, explicit reference to the objectives, principles and policies for environmental protection and sustainable development that apply within the jurisdiction concerned, and an obligation to take account of the relevant findings prior to and as an integral part of decision-making, consistent with a duty of care for the environment.

These perspectives, once accepted, should help to move from SEA toward an integrated process, consistent with the principles of sustainable development. Looking ahead, a full cost analysis of proposed strategic initiatives would include the following interrelated and supportive components:

- macro-environmental accounting to establish natural capital assets and losses;
- special attention to be given to development proposals that effect critical resources and ecological sources;
- significant environmental, social and economic impacts should be identified and internalised;
- establish safe minimum standards as a basis for making trade-offs;
- impact management to prevent and compensate for damage.

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TABLE 2

## Step-by-step guidance on application and use of procedures and methods in strategic environmental assessment good practice

<p><i>Proposal</i> <b>Establish the need for and objectives of the proposed action</b></p>	<p>Before SEA is initiated, the responsible agency defines the basis for a proposed policy, bill, plan or programme. A preliminary statement should be made of the need, purpose and objectives to be achieved. These aims are not subject to review by an SEA, but the justification of a proposal is conditional on its environmental impact. The SEA process, itself, must be objectives-led in order to fully evaluate the environmental impacts of a proposal. Preparatory methods of identifying environmental objectives include policy and legal review (e.g. goals, standards and targets outlined in government strategy, obligations under international environmental agreements).</p>
<p><i>Screening</i> <b>Determine if an SEA is required and at what level of detail</b></p>	<p>Formal screening procedures can be divided into two types. Listed proposals subject to SEA are specified in legislation or guidelines. Case-by-case screening applies to all proposals to determine which ones have potentially significant environmental effects and warrant full assessment. Screening criteria and checklists from EIA can be readily adapted to this purpose, supplemented, as necessary, by policy tree diagrams and stakeholder consultation. Use of these methods also helps to indicate the type of approach and level of detail required for an SEA (e.g. policy appraisal versus impact assessment). For certain proposals, timing and tiering are important considerations in SEA screening decisions (e.g. at which level is an SEA best carried out, how to relate it to any successive SEA and/or EIA process).</p>
<p><i>Scoping</i> <b>Identify the important issues and impacts that need to be examined</b></p>	<p>EIA scoping procedure can be adapted to the different types of proposal subject to SEA. An early, transparent and systematic process should be followed to focus on the impacts that matter for decision-making and set terms of reference for further study. Modified EIA methods, such as matrices, overlays, and case comparisons can be used to scope the environmental dimensions of specific plans and programmes, e.g. to identify inconsistencies in their objectives, issues that require attention and/or the potential impact of implementing the proposal. Where environmental considerations are generalised and less immediate (e.g. proposed immigration, fiscal or trade policies), appraisal methods can be used, such as environmental scanning to clarify the implications, and/or issue tracking to a stage when key impacts become clarified (e.g. immigration projections linked to housing demand, nationally or regionally).</p>
<p><i>Information</i> <b>Assemble environmental information</b></p>	<p>The general content of information to be gathered in an SEA can be specified in legislation or procedure. The data that need to be gathered for a specific proposal will be clarified during screening and scoping. SEA is carried out against a baseline or profile, typically a description or characterisation of the affected environment or media (e.g. air or water quality). Useful sources of background information include state of the environment reports and country environmental profiles. For plans and programmes with a spatial dimension, the baseline can be recorded as environmental stock and critical natural assets. Key indicators are used to measure change in terms of global sustainability, natural resource management and local environmental quality. Appropriate indicators for sector-specific proposals will depend on the key environmental impacts (e.g. emissions-based air quality indicators for energy, transport strategies).</p>
<p><i>Consideration of alternatives</i> <b>Identify and compare the range of alternatives, including a best practicable environmental option</b></p>	<p>Formulation of alternatives in the SEA process is central to integrating environment considerations into sector policy and plan-making. A first step is to identify the range of alternatives that meet the objectives of the proposal, and summarise their economic, social, and environmental aspects. The alternatives should include a do nothing alternative and best practicable environmental option (BPEO). Where, potentially, a large number of alternatives are open, methods used to systematically compare them include environmental benefit cost analysis and multi-criteria evaluation (e.g. formulation of national energy or water policy). The BPEO helps clarify the environmental trade-offs that are at stake, and the basis for choice. Objectives-led SEA is critical for this purpose, and in certain cases can empower risk and benefit negotiation (e.g. to reduce NO<sub>x</sub> emissions as part transport strategy).</p>

*Continued on next page*



TABLE 2 continued

**Step-by-step guidance on application and use of procedures and methods in strategic environmental assessment good practice****Impact analysis  
Identify, predict and evaluate the effects of the proposal and the main alternatives**

Usually, there is greater uncertainty to contend with in SEA compared to EIA of projects. Often, the relationship of policy-level proposals to environmental effects is indirect or difficult to locate in time or space, mediated by intervening factors. Indicator-based methods can show “direction of movement” for an impact, e.g. increase in habitat loss, reduction in volume of hazardous waste. Projection methods that are used to deal with uncertainty include trend extrapolation and scenario development. For plans and programmes that initiate projects, environmental impacts are more readily identified and predicted. EIA methods that are used, with varying modification, include: impact matrices, GIS and comparative risk assessment. No single method is likely to be sufficient to cover the range of impacts in such cases.

**Significance  
Determine the importance of the residual impacts, and if appropriate, relate these to other benefits and costs**

To determine significance, predicted and residual impacts (that cannot be mitigated) are evaluated against selected environmental criteria and objectives. As in EIA, this test gives decision-makers a key proxy of the environmental acceptability of a proposal. If appropriate, a balance sheet of gains and losses from a proposal also can be drawn up, e.g. in monetary or descriptive terms, to show their distribution among groups, and/or to illustrate the range of uncertainty (worst/best case). If major policy options or critical outcomes are at stake, sensitivity analysis can be used to test the effect of changed assumptions and the robustness of assessment. Alternatively, this test can be based on expert judgement and case comparison with similar actions.

**Mitigation  
Identify measures to avoid, reduce and offset the main impacts identified**

The EIA mitigation hierarchy should be followed in SEA but with eye to the greater opportunities for its creative application. So first avoid, then reduce and next offset adverse impacts, using specific measures and actions that are appropriate to their significance and specificity. A precautionary approach should be taken when information is incomplete but analysis indicates the risk or possibility of large scale, serious or irreversible environmental change. This may entail not going ahead with certain proposals or replacing them with no regrets alternatives. For low-threat situations, standard mitigation measures can be used to minimise an impact to “as low as reasonably practicable” (ALARP level), e.g. using best available technology not entailing excessive cost (BATNEEC) or contingency policies and plans to cope with low probability but highly damaging risks.

**Reporting  
Describe the environmental impacts of the proposal and how they are to be addressed**

Typically, a separate SEA report or statement must be prepared and made available to the public. Other than certain prescribed information content, there is no common format. Depending on the context, a report can be an environmental paragraph in a policy memorandum, a section or chapter in a plan or strategy, or a separate document or annex ranging from a few to several hundred pages. The proposal, itself, should contain or be accompanied by a brief explanation of the SEA process and a summary of findings, e.g. key impacts, preferred alternative, mitigation measures and outstanding issues. Use of impact display and trade-off matrices help to focus decision-making. Change already made to a proposal as a result of an SEA should be noted on a policy record sheet.

**Review of quality  
Check the information is adequate for the purposes of decision-making**

An SEA report should be reviewed to ensure it provides the information necessary for decision-making, prior to its submission. Review procedure can be informal or formal, internal or external, conducted by the competent authority, environment agency or an independent body. Provision for public comment on an SEA report, although not uniform, promotes transparency and robustness. As in EIA, review of quality takes place against terms of reference or other guidance issued for SEA preparation. But the scope of review can differ markedly with the type of proposal and policy context. Use of methods can range from spot checks to comprehensive quality audit.

**Decision-making  
Approve, reject or modify the proposal, with reasons for decision**

On submission to the final decision-making body, a proposal can be approved, rejected or modified (e.g. as a result of condition-setting). When doing so, the decision-making body has a duty or obligation to take account of the results of an SEA, including public consultation. Despite adverse environmental impact, a policy, bill or plan often will be accepted because the economic and social benefits are considered to outweigh the impact. Reasons for decision should be issued, specifying the terms of approval and any follow up requirements.

*Continued on next page*

**TABLE 2 continued**

**Step-by-step guidance on application and use of procedures and methods in strategic environmental assessment good practice**

*Monitoring*  
**Check to see implementation is environmentally-sound and in accordance with approvals**

Monitoring the implementation of a policy, bill or plan can be a simple check to see if environmental objectives are being met, or a systematic programme to measure its impact. Information tracking systems can be used to monitor issues and progress, and to focus and streamline any subsequent SEA or EIA process. Cumulative effects monitoring may be appropriate for plans and programmes that will initiate regional-scale change in environmental stock or critical natural assets. Methods and indicators for this purpose are not well developed.

**TABLE 3**

**Examples of environmental sustainability tests for strategic environmental assessment of policy, plan and programme proposals**

	<i>Sustainability principles</i>	<i>Application to SEA</i>
<b>For use of renewable resources</b>	Harvest rates or renewable resource inputs should be within regenerative capacity of the natural system that generates them.	Identify effect on use of renewable resources (e.g. on timber, fish).
<b>For use of non-renewable resources</b>	Depletion rates of non-renewable resource inputs should be equal to the rate at which renewable substitutes are developed by invention and investment.	Identify effect on non-renewable resources (energy, minerals, raw materials). Also describe effects on energy consumption and mobility.
<b>For waste and pollution emissions</b>	Quantity: Identify the effect on use of space and existing functions (i.e. land-use, wildlife corridors). Quality: Apply provisions of the UN Convention on Biological Diversity	Identify effect on quantity and quality of waste flows and emissions to soil, air and water. Also describe effects on quality of products and production process, e.g. lifespan and composition of product.
<b>For conversion to higher intensity use</b>	Quantity: No net loss of natural habitat. Quality: Conservation of biodiversity (ecosystems, populations, gene pools).	Quantity: Identify the effect on use of space and existing functions (i.e. land-use, wildlife corridors). Quality: Apply provisions of the UN Convention on Biological Diversity
<b>For clarifying opportunity costs</b>	Avoid irreversible changes and maintain future options.	Identify effect on option (non-use) values of the environment, including the benefits of maintaining its current state.

POSTSCRIPT

# Strategic Environmental Assessment: An Aide Memoire to Drafting a SEA Protocol to the Espoo Convention

Barry Sadler

## 1. Introduction

This is a preliminary guide or aide memoir to negotiating an SEA Protocol to the Espoo Convention. It was prepared as a postscript to discussion at the workshop on SEA, Health and Public Participation, and also draws on preliminary discussions at related meetings (Karlovy Vary, September 17, 18 2000 and Geneva, October 28, 29 2000). At these meetings, the focus was on the spirit rather than the language of a protocol, considering aims, principles and core elements that might find expression in the instrument. Some of these possibilities are consolidated here as a point of departure for further work, with suggestions regarding draft text. These citations form a preamble to the main sections, and should be read as indicative.

In this context, particular consideration is given to an instrument that will apply to SEA generally, rather than one that narrowly prescribes a procedure related to trans-boundary effects of certain plans and programmes. The scope of key elements to be included in such a multilateral framework draws from recent aspects of international law and policy, and includes:

- principles of public participation as described in the Aarhus Convention;
- the relationship of health and the environment as endorsed at the London Conference; and
- policy, legislation and other strategic actions that are excluded from the European draft Directive on SEA, but which are subject to review under the frameworks established by certain UNECE member countries.

## 2. Background: Key Legal and Policy Referents for an SEA Protocol

The mandate for drafting an SEA Protocol was given by the decision taken at the Second Meeting of the parties to the Espoo Convention (Sofia, Bulgaria, February 26-27, 2001) for possible adoption at the fifth Ministerial Conference on Environment for Europe (Kiev, Ukraine, May 2003). This decision was based on Article 2 (7) of the convention and paragraph 10 of the Oslo Ministerial Declaration issued at the first Meeting of the Parties.

At an earlier stage, the door was open to a free standing SEA Protocol, as well as one tied to either the Aarhus Convention or the Espoo Convention. These aspects are discussed further in a UNECE background document on the alternative instruments for developing a legally binding instrument (MP.EIA/WG.1/2000/16, CEP/WG 5/2000/9, 3-23). Many of the arguments made in relation to the scope of the instrument and the rules that could apply are relevant still in the context of the recent decision of the parties to the Espoo Convention (above).

The background to and context of these issues can be described by reference to a number of legal and policy instruments:

- **UNECE (Espoo) Convention on Environmental Impact Assessment in a Transboundary Context (adopted in 1991 and entered into force in 1997).**

Espoo is the multilateral EIA treaty to which the SEA Protocol will be annexed. The convention stipulates the responsibilities of signatory countries with regard to proposals that have transboundary impacts, describes the principles, provisions and procedures to be followed in this context, and lists the activities, content of documentation and criteria of significance that are to apply (see Schrage, 1999). As a legal instrument, the convention requires the EIA systems of signatory countries to meet certain principles and standards. It also refers to applications to SEA in article 2, paragraph 7, inviting "parties and non-parties to introduce those principles." (Article 2.7) By doing so, the convention encourages good practice nationally and internationally, and is reported by Rzeszot (1999) to have been important in introducing and strengthening EIA in signatory countries of Central and Eastern Europe. This precedent should be kept firmly in mind in protocol drafting.

- **UNECE (Aarhus) Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in International Environmental Matters (adopted 1998 and expected to enter into force in 2001)**

The Aarhus Convention is the primary reference for developing the elements of public participation to be included in the SEA Protocol. It also underlines

the need for and importance of the systematic development of SEA process and procedure. It does not refer to SEA (or EIA) per se, rather it describes how public participation should apply to different levels of decision-making (see Stec and Casey-Lefkowitz, 2000). Specifically, the provisions relating to public participation in Article 7 refer to the development of plans, programmes and policies relating to the environment and in Article 8 refer to the preparation of laws and regulations. The processes referred to in Articles 7 and 8 of the convention are not restricted to SEA, but this is widely understood to be a primary instrument to enshrine them. With few exceptions, the SEA systems established by countries and international organisations are incomplete in their scope of coverage of these decision-making processes (see below).

- **European Directive on SEA of Certain Plans and Programmes (COM (99)73)+5685/00**

Undoubtedly, the European directive will provide a reference point against which an SEA Protocol to the Espoo Convention will be drafted and compared. However, little value will be gained by duplicating the provisions of the directive. The directive lays down a minimum procedure and requirements for SEA of certain plans and programmes, particularly those which set the framework for future development consent of projects listed in Annexes I and II to the EIA Directive (85/337/EEC) or likely to effect sites subject to Habitat Directive (92/43/EEC). The process and procedures are modelled closely on the EIA Directive, which may be appropriate to the plans and programmes specified. However, the SEA Directive applies only to a relatively limited sub-set of strategic actions. It does not cover policy, legislation or other types of non-conforming plans and programmes. Guidance on these areas must be sought elsewhere.

- **Third European Conference on Environment and Health (London, June 1999)**

The decisions made at the London Conference, *inter alia*, provide a policy mandate to include health considerations in an SEA Protocol to the Espoo Convention. Specifically, the World Health Organisation (WHO Europe) was asked to collaborate with the UNECE work programme under the Espoo Convention to improve EIA procedures, (for example, to assist in implementing National Environmental Health Action Plans). In response, WHO Europe has commissioned the preparation of draft guidelines on incorporating health considerations into EIA. This is part of the larger programme on “integration of environmental health policies

into sustainable development strategies of economic sectors.” At present, there are few or no legal instruments available to meet international policy objectives to integrate health and environment considerations. (Note: the Espoo Convention explicitly cites human health and safety in the definition of impact and in the description of the content of the EIA documentation.)

### 3. On Definition of Content and Scope of Application

Key issues relevant to the scope and inclusiveness of a multilateral instrument that would apply to SEA include:

- substantive aims;
- appropriate relationship of the SEA process to decision-making;
- strategic actions subject to SEA;
- elements of health and public involvement to be incorporated.

#### 3.1 Strategic environmental assessment

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**SEA is a process to systematically analyse and document the environmental effects and consequences of proposed strategic actions (i.e. above the project level), to identify alternatives and measures to mitigate significant adverse environmental effects and enhance positive benefits [with specific reference to the objectives, principles and policies for environmental protection and sustainable development that apply within the jurisdiction concerned], and to ensure the relevant findings are taken into account prior to and as an integral part of decision-making, consistent with a duty of care for the environment. (See also definition and discussion in introductory papers)**

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An inclusive definition of SEA is given above. Specifically, it delineates the role of the SEA process and the relationship to decision-making in terms of three key functions:

1. To analyse and address the environmental effects of proposed strategic actions;
2. To identify alternatives and measures to mitigate significant adverse effects;
3. To ensure the relevant findings are considered fully in decision-making, consistent with policy objectives for environmental protection and sustainable development.

The first two functions are widely accepted. But the caveats related to decision-making, [the bracketed text], are a different matter. If the SEA process is to be applied to real purpose, a substantive duty of care for the envi-

ronment must be extended to decision-making bodies themselves, in addition to the obligation to take account of findings and to follow procedure. By themselves, these latter obligations which are established already as part of international good practice, only give limited direction to informed decision-making.

A duty of care for the environment would act as such a catalyst; it would be non-constraining on discretion of choice of a strategic action, but “action-forcing” with regard to impact management. For example, this duty could be interpreted as requiring the implementation of appropriate mitigation measures to avoid, reduce or offset significant adverse environmental effects that are identified. These measures, in turn, could be given real policy definition and substance by the bracketed requirement to make explicit reference to environment and sustainability aims and principles in the SEA process.

### 3.2 Application to decision-making

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**SEA applies to all types of proposed strategic actions and decisions that are likely to have potentially important adverse environmental effects, both direct and indirect including through setting direction, initiating or giving authorisation to other subsequent decisions and actions that may affect the environment. Where a proposed action forms part of a hierarchy or a series of contingent decisions, the assessment shall be appropriate to the particular stage and context of a proposed action, taking into account any requirements for consideration of effects at a subsequent level of decision-making.**

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The litmus test of whether or not a proposed action should be subject to SEA is the likely affect on the environment rather than a specification of the decision itself. In reality, of course, the types of decisions likely to have environmental effects are well understood and there are efficiencies to be gained by a non-exclusionary listing. However, this approach should be backed by case-by-case or class screening procedures to determine if proposed strategic actions are likely to have potentially important adverse environmental effects and consequences, broadly defined. An indicative listing of categories to be subject to SEA includes trade, budget, macro-economic and population proposals, as well as legislation, regulations, strategies, policies, plans and programmes that apply to the industry, urban, transport, energy, resource and other sectors. Terms such as policy, plan and programme mean different things in different countries and their use is dependent on the political and institutional context.

### 3.3 Relationship to health

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**“Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.”** (World Health Organisation, 1947)

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This multi-dimensional definition is well known and widely acknowledged. It overlaps with the related concepts of human welfare and quality of life. An integral aspect of the WHO definition is the relationship to environment and the physical and biological determinants of human health, see for example Concern for Europe's Tomorrow (WHO 1995). “Environmental health” is the shorthand term used by WHO and others to refer to these linkages, with reference either to the aspects that are affected by development strategies, proposals and actions or the factors that support quality of life (i.e. clean air, drinkable water, uncontaminated soil). In EIA and, by extension, SEA, the relationship of health and environment typically emphasises sanitation, industrial pollution, radioactive, toxic and hazardous wastes and increasingly aspects of food contamination, public risk and occupational safety and psychological and community stress (e.g. from noise, traffic congestion, etc.). Many public health specialists take a broader view of this relationship, for example by considering the capacity of health care systems to respond to environmentally related threats (World Bank, 1997; British Medical Association, 1998). The scope of health considerations to be included in the SEA Protocol can be expected to generate considerable debate.<sup>1</sup>

### 3.4 Importance of public participation

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**Public participation is a process of communication and involvement in the decision-making process by those concerned with, affected by and interested in a proposal (often called stakeholders).**

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Public consultation is an integral element of EIA systems. For example, the Espoo Convention specifies the notification and review procedures relating to transboundary impacts. This process may be distinguished conceptually from public participation (see Bass et al, 1995), which is also one of the three pillars of the Aarhus Convention (environmental information and access to justice being the other two). Despite its title, the Aarhus Convention does not define public participation (for an exposition, see Stec and Casey-Lefkowitz, 2000). At a minimum, however, this process is understood to involve canvassing the views and concerns of the public, taking them into account in decision-making and providing reasons for decisions, including consideration of public inputs. The terminology in the protocol can follow the definition of the “concerned” public in the Espoo and Aarhus Conventions, which are inclusive and can be interpreted to mean anyone likely to be affected by or interested in a proposal.<sup>2</sup>



### 3.5 Promotion of sustainable development

**“Sustainable development is development that meets the needs of the present generation without compromising the ability of future generations to meet their needs.”** (World Commission on Environment and Development, 1987)

SEA is a key instrument for integrating environmental considerations into the highest levels of development decision-making in support of sustainable development. The aim of promoting sustainable development is referential, set out in very general terms in SEA legislation or policy. Understandably so, given the difficulties encountered in translating the principles of inter- and intra-generational equity inherent in the above definition into operational terms. However, there are steps by which the role of SEA as a sustainability instrument could be framed and focussed in a multilateral context.

First, there are selected principles in the Rio Declaration on Environment and Development (1992) that can be put to good purpose, possibly in the recital to an SEA Protocol.<sup>3</sup> Specifically, the precautionary principle is a guide to the use of SEA as a means of testing proposed actions for sustainability assurance. Ways and means of giving effect to this relationship are described below by reference to the aims, principles and elements of the SEA process. In addition, SEA forms part of a larger framework of policy and planning tools to promote sustainable development, and particular reference could be made in an annex of the protocol to the importance of preparing national sustainable development strategies (as required by Agenda 21).

### 3.6 Elements of approach to SEA

**The parties shall ensure that in accordance with the provisions of this protocol an appropriate SEA process is applied to a given proposal, including legislation, regulations, policy, plans and programmes. Early consideration shall be given to the particular distinction that can be drawn between the approach taken to broad policies as compared to specific plans and programmes that initiate and fix the content and location of specific projects and activities, including those subject to EIA.**

General issues that require consideration include:

- **Need for a differentiated approach**

**The parties are invited to recognise that SEA processes are differentiated, and vary in scope and form far more than is the case with project level EIA.**

A particular distinction can be drawn between the approach taken to broad policies as compared to concrete plans and programmes that initiate or fix the location of projects and activities. This distinction has important implications for SEA practice. Generally, policy appraisal can be appropriate when a proposal carries environmental implications and issues and an

EIA-based approach can be used when it has potentially significant impacts. (Sadler and Verheem, 1996) In many cases, the implementation of spatial plans and sector programmes will have impacts that can be identified and predicted, and an EIA model can be applied. Modifications will need to be made to this approach for less specific plans and programmes. A policy appraisal approach can be more appropriate for policy and legislative proposals, which are generalised and longer-term or diffuse in their potentially significant environmental effects (e.g. immigration and taxation).

- **Appropriate provision and procedure for SEA**

**The parties should have regard to the SEA provision and procedure that most appropriately applies to proposed strategic actions at the level of policy and legislation.**

Existing SEA systems are incomplete in their coverage of strategic actions. Although definitive conclusions cannot be drawn, statutory provision is made for SEA of certain plans and programmes and the procedures are based on EIA, including prescribing the types of proposals to be included, the information to be contained in a report, and requirements for public review and comment. Few countries apply SEA to policy and bills. These examples are based on administrative order or cabinet directive and apply either a simplified EIA process (e.g. Canada, Denmark) or a comparable process of policy appraisal which integrates environmental and economic considerations (e.g. UK, Netherlands e-test). A non-statutory mandate and minimum procedure provide greater flexibility and potential linkages to sustainability, but they also can lack rigour, transparency and consistency of application. At this level, the appropriate SEA provision and procedure is open to argument, but the evidence so far suggests that a less formalised approach can work and may be preferable when introducing policy appraisal (Sadler and Brook, 1998). SEA can be legally enshrined and formally prescribed at the level of certain plans and programmes (including those which have the potential to trigger transboundary effects).

- **Opportunities for public and stakeholder involvement**

**The parties shall define an open SEA process, consistent with the three pillars of the Aarhus Convention concerning environmental information, public participation in decision-making and access to justice.**

In addition, these elements will need to reflect the differentiated approach outlined above. For example, public participation should be an integral part of SEA of certain plans and programmes, which will change land use, housing and transportation. At the

TABLE 1

**Testing against environmental, health and sustainability objectives**

<i>Stage of SEA</i>	<i>Sustainability test</i>	<i>Key questions</i>
<b>Screening</b>	Direction toward requirements	Is the proposal consistent with sustainability policies? What are the environmental implications in this regard?
<b>Scoping</b>	Distance to target	How does the proposal measure up against key indicators? What are the significant environmental issues in this regard?
<b>Significance</b>	Determination of significance	What are the environmental impacts of the proposal? How significant are they with reference to sustainability policies and criteria?

Source: Sadler, 1999.

level of policy and broad planning, proposals will be of less immediate concern to the general public and local communities. The current reality is that consultations on policy-making are informal and restricted, typically to key stakeholders and constituencies of interest. In this case, the emphasis should be on ensuring there are appropriate opportunities for a range of values and views to be expressed by key stakeholders and considered when formulating policy proposals and options. A similar approach should apply to legislation. A menu of methods of public involvement, which are appropriate at different levels, is given in the Annex for reference. With regard to both policy and legislation, rights of appeal by third parties are likely to be limited by constitutional law and conventions.

- **Testing against environmental, health and sustainability objectives**

**The parties are invited [urged] to test the proposed strategic actions against environmental, health and sustainability objectives and criteria.**

In particular, the development of national sustainable development strategies should be encouraged as important in their own right and as benchmarks against which development proposals can be evaluated to see whether or not they approximate to key objectives, principles and commitments. Environmental and health policies should also be applied for this purpose. They can be supplemented by other criteria and indicators considered to be relevant by the negotiating parties. A possible framework and procedure that can be used in SEA to test proposals against sustainability objectives is outlined below.

- **Informed decision-making**

**The parties shall prepare a report on the potential significant environmental effects of the proposed strategic action and the alternatives considered, the results of consultation with the affected parties and the**

**public and recommended mitigation and management measures, together with any other advice that is tendered to decision-makers in order to help them come to an informed choice regarding whether or not and how to proceed with a proposal.**

Ideally, the report (which in some cases may be a paragraph or executive summary) should facilitate the integration of environmental and sustainability considerations into the mainstream of development policy and plan-making. The SEA report should be defined as a decision document, which includes the following:

- justification of the need for the proposal;
- review of alternatives and identification of the best practicable environmental option;
- consideration of their relationship to environmental, health and sustainability policy;
- statement of the likely environmental effects and measures to address them; and
- summary of the trade-offs and issues to be resolved by decision-makers.

- **Environmental outcomes**

**The parties shall specify the nature and scope of the relation of SEA to good environmental outcomes and are invited to promote the principles and measures necessary to achieve them.**

Ultimately, SEA of policies, plans and programmes should result in the delivery of an improved level of environmental protection (Sadler et al, 2000). As discussed above, this may be equated with the goal of sustainability assurance and, by extension, the maintenance of natural capital at or near current levels. The no net loss rule can be applied in the SEA process by combining the precautionary and the polluter pays principles. A precautionary approach should be applied to ensure environmental loss and damage is avoided or minimised to an as low as practically possible level. The polluter pays principle

then applies to require in kind compensation for all residual damage, for example resulting from the implementation of development plans and programmes. *Enshrining these dual principles in the protocol would constitute the single most important measure for linking SEA to good environmental outcomes and to sustainability assurance of policy, plan and programme proposals.*

#### 4. A Last Word

##### **The protocol should link together aims, means and outcomes.**

An effective SEA process is one that achieves its purpose and objectives. The procedure adopted is a means to an end (a fact often overlooked or obscured in the literature on EIA and SEA). SEA is an instrument to inform decision-making, to ensure environmental considerations are taken into account in formulating policies, plans and programmes, and, ultimately, to give added protection to human health and the environment. Ideally, the protocol should give clear expression to the aims of SEA, the principles that should guide its application and the relationship to good environmental outcomes, human health and sustainability assurance (perhaps through a set of performance criteria). The requirements and procedure will then have substantive purpose and context. Finally, SEA is only one of a number of instruments for strategic decision-making (as described in the Aarhus Convention). The SEA process must be undertaken in coordination or with reference to other comparable instruments in order to maximise environmental, health and sustainability benefits.

##### **ENDNOTES**

1 One way forward discussed at the Szentendre workshop by a small sub-group of environmental and public health specialists. Under the protocol, environmentally related health threats (to be described in an annex) would be a mandatory requirement of an SEA, with other health aspects to be addressed on a discretionary basis (perhaps in accordance with WHO good practice guidance, which could be referenced).

2 In this context, the public is segmented into individuals, groups, organisations, sectors and other parties or constituencies of interest (i.e. defined by what they have at stake in the decision on a proposal).

3 The following Rio principles could be referenced in an SEA protocol: Human beings are at the centre of concern for sustainable development. They are entitled to a healthy and productive life in harmony with nature. (Principle 1) Each individual shall have the opportunity to participate in decision-making processes, facilitated by the widespread availability of information. (Principle 10) In order to protect the environment, the precautionary approach shall be widely applied by States according to their capabilities. Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation. (Principle 15)

4 Sustainability is defined by the relationship of environment and development; it comprises both a goal (system conditions) and a yardstick (set of measures). The environment is the baseline condition for this purpose. Environmental sustainability assurance (ESA) for development decision making means that the critical resource stocks and ecological functions must be safeguarded, depletion and deterioration of sources and sinks must be kept within acceptable levels or safe margins and losses of natural capital must be made good (Sadler, 1999).

5 Chapter 8 of Agenda 21 states that: "Governments, in cooperation, where appropriate, with international organisations, should adopt a national strategy for sustainable development based on, inter alia, the implementation of decisions taken at the [Rio] Conference, particularly in respect of Agenda 21. This strategy should build upon and harmonise the various sectoral economic, social and environmental policies and plans that are operating in the country. *Its goals should be to ensure socially responsible economic development while protecting the resource base and the environment for the benefit of future generations.*" [Emphasis added].

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TABLE 2

### Menu of methods for different levels of public involvement

<i>Technique</i>	<i>Description and use</i>	<i>Advantages</i>	<i>Disadvantages</i>
<b>Level 1. Education and information provision</b>			
<b>Leaflets/brochures</b>	Written material used to convey information. Care should be taken in establishing the boundaries of distribution.	Can potentially reach a wide audience, or be targeted towards particular groups.	Information may not be readily understood and may be misinterpreted. May be treated as junk mail.
<b>Newsletters</b>	Written material used to convey information that may involve a series of publications. Care should be taken in establishing the boundaries of distribution.	Ongoing contact; information can be updated. A flexible form of publicity that can be designed to address the needs of the audience. Useful to support liaison groups. Potential for feedback.	Not everyone will read a newsletter.
<b>Unstaffed exhibits/displays</b>	Exhibits or displays set up in public areas to convey information.	People can view the displays at a convenient time and at their leisure. Graphic representations, if used, can help people visualise proposals.	Information may not be fully understood or misinterpreted. No staff available to respond to questions or receive comments.
<b>Advertising</b>	Advertisement placed to announce proposals, arrangements for meetings and other activities.	Depending on the circulation of the publication, the advert could potentially reach a large audience.	The information will only reach those who read the publication in which the advert is placed. Only limited information can be provided.
<b>Local newspapers</b>	An article published in a local newspaper to convey information about a proposed activity.	Potentially a cheap form of publicity and means of reaching a local audience.	Circulation may be limited. There may be problems associated with limited editorial control and misrepresentation of information.
<b>National newspapers</b>	An article published in a national newspaper to convey information about a proposed activity.	Potential to reach a very large audience.	Unless an activity has gained a national profile, it may be of limited interest to the national press and a national audience.
<b>Television and radio</b>	Use of television or radio to convey information about a proposed activity.	TV and radio have a potentially large audience. People may be more likely to watch or listen to a broadcast than read leaflets and brochures.	Broadcasts alone may be insufficient. Further information may need to be available in other forms so that people can find more about the issues raised. Relatively expensive.

*Continued on next page*

TABLE 2 continued

<b>Menu of methods for different levels of public involvement</b>			
<i>Technique</i>	<i>Description and use</i>	<i>Advantages</i>	<i>Disadvantages</i>
<b>Video</b>	Production of a video to convey information. May incorporate computer graphics and other images.	Under the control of the producer. Can be watched at the viewer's convenience.	Can be perceived as biased propaganda. Relatively expensive to produce if the final product is going to look professional and credible.
<b>Site visits</b>	Organised case studies through site-oriented meetings to provide first hand experience of a particular activity and the issues involved.	Issues brought to life through real examples.	Often difficult to identify a site which replicates all issues under consideration. Not suitable for large groups of people.
<b>Level 2. Information feedback</b>			
<b>Staffed exhibits/displays</b>	Exhibits or displays set up in public areas to convey information and staffed by specialists who can provide information, answer questions.	People can view the displays at a convenient time and at their leisure. Graphic representations, if used, can help people visualise.	Requires a major commitment of staff time. May attract a small proportion of third parties.
<b>Staffed telephone lines</b>	A telephone number for people to call to obtain information, ask questions or make comments about proposals or issues.	A convenient way of receiving comments from interested parties. Not intimidating, therefore easier for people to participate and provide comments. Promotes a feeling of accessibility.	Discussions over the telephone may not be as good as face-to-face. Operating staff may not have technical knowledge available to respond to questions.
<b>Internet</b>	A Web site on the Internet used to provide information or invite feedback. Care should be taken to keep the information up to date. More interactive forms of participation on the internet may also be developed, e.g. online forums and discussion groups.	The audience is potentially global. Costs are reduced as no printing or postage costs are incurred. A convenient method of participation for those with Internet access.	Not all interested parties will have access to the Internet, therefore alternative means of information dissemination will also be required.
<b>Public meetings</b>	A gathering of interested and affected parties to present and exchange information and views on a proposal.	If run well, can provide a useful way of meeting other stakeholders. Demonstrates that the proponent is willing to meet with other interested parties.	While appearing simple, can be one of the most complex and unpredictable methods. Public meetings may be hijacked by interest groups or vocal individuals. May result in no consultation, only information provision.
<b>Surveys, interviews and questionnaires</b>	Encompasses a range of techniques for obtaining information and opinions. May be self-administered, conducted face-to-face, by post or over the telephone.	Can gather information from people who could not attend public meetings or become involved in other activities. Confidential surveys may result in more candid responses. Can identify existing knowledge and concerns.	Can have a poor response rate. Responses may not be representative and only reflect opinion at that time. Opinions may change. Designing and administering a good survey/questionnaire can be costly and time consuming.

*Continued on next page*

TABLE 2 continued

<b>Menu of methods for different levels of public involvement</b>			
<i>Technique</i>	<i>Description and use</i>	<i>Advantages</i>	<i>Disadvantages</i>
<b>Level 3. Involvement and consultation</b>			
<b>Workshops</b>	Meetings for a limited number of participants which can be used to provide background information, discuss issues in detail and solve problems.	Can provide a more open exchange of ideas and facilitate mutual understanding. Useful for dealing with complex technical issues; allows for more in-depth consideration. Can be targeted at particular stakeholder groups.	To be most effective, only a small number of individuals can participate, therefore, a full range of interests are not represented.
<b>Focus groups/forums</b>	A meeting of invited participants designed to gauge the response to proposed actions and gain a detailed understanding of people's perspectives, values and concerns.	Provides a quick means of gauging what public reaction to a proposal is likely to be.	Selection of group members may exclude some sectors of the community, groups require facilitation and serving, time consuming.
<b>Open house</b>	Interested parties are encouraged to visit a designated location, (site or building), on an informal basis to find out about a proposal and provide feedback.	An effective way of informing the public and other interested parties. People can visit at a convenient time, view materials and ask questions at their leisure.	Preparation for and staffing of the open house may require considerable time and money.
<b>Level 4. Extended involvement</b>			
<b>Community advisory/ liaison groups</b>	Small groups of people representing particular areas of interest or areas of expertise, e.g. community leaders, meet to discuss issues of concern and provide an informed input.	Can consider issues in detail and highlight the decision-making process and the complexities involved. Promotes a feeling of trust.	Not all interests may be represented. Requires commitment from participants. A longer-term process requiring more resources than some other methods.
<b>Planning for real</b>	A community model is made prior to the exercise to identify problems and issues and generate ideas and priorities through group working. Can be used to identify features of importance and collective aspirations.	Allows the community to take control and set the agenda, allows participation without the need for good verbal or written skills.	Community needs to be aware of the constraints. Models need to relate to the real world.
<b>Citizen juries</b>	A group of citizens brought together to consider a particular issue. Evidence is received from expert witnesses and cross-questioning can occur. At the end of the process a report is produced, setting out the views of the jury, including differences of opinion.	Can consider issues in detail and in a relatively short period of time.	Not all interests may be represented. Limited timescale may reduce time available for participants to fully consider information received.

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TABLE 2 continued

## Menu of methods for different levels of public involvement

<i>Technique</i>	<i>Description and use</i>	<i>Advantages</i>	<i>Disadvantages</i>
<b>Consensus conference</b>	A forum at which a citizens panel, selected from the general public, questions specialists on a particular topic, assesses responses, discusses the issues raised and reports conclusions.	Can provide a unique insight into the ways in which issues are perceived by members of the the public. Suited to dealing with controversial issues of public concern.	Not all interests are represented. Limited timescale for consideration of issues.
<b>Visioning</b>	A technique for developing a shared vision of a desirable future for a local community.	Develops a common view of future needs, promotes trust and a sense of purpose.	Lack of control over the outcome. Needs to be used in the early stages of the decision-making process.

**Source:** Fell A. and B. Sadler, (1999). "Public involvement in environmental assessment and management: a preview of IEA guidelines on good practice," *Environmental Assessment*, 7.2: 36-39.

# Key Developments in Strategic Environmental Assessment

**The Future Directive on Strategic Environmental Assessment of Certain Plans and Programmes on the Environment: How this New Instrument will Link to Integration and Sustainable Development** ■

Lieselotte Feldmann, Marc Vanderhaegen and Charles Pirotte, European Commission

**Developments in Strategic Environmental Assessment in Central and Eastern Europe** ■  
Jiri Dusik, Barry Sadler and Nenad Mikulic

**Strategic Environmental Assessment in the Newly Independent States of the Former Soviet Union** ■  
Aleg Cherp, Russia and Belarus



# The Future Directive on Strategic Environmental Assessment of Certain Plans and Programmes on the Environment: How this New Instrument will Link to Integration and Sustainable Development

Lieselotte Feldmann, Marc Vanderhaegen and Charles Pirotte,  
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## 1. Introduction

The European Community made a big step forward in adopting the common position of the future SEA Directive on environmental assessment of plans and programmes. This directive will become an important instrument for ensuring a preventive and structured approach towards protecting the environment. It was a long journey and some steps still have to be done until the directive is finally adopted, but it was worth all the effort and time spent.

Negotiations of the amended Commission proposal started under the German presidency in the course of 1999. They were finalised under the Finnish presidency in a Council of Environment Ministers in December 1999. This success found its grounds on the firm commitment of the Finnish Presidency, of the European Commission and of some key member states. Of course the willingness of all the member states to set an end to theoretical discussions and to finally come up with a concrete instrument which can be actually applied at Community level also played a key role. The many good examples of how SEA can be applied and the need to live-up to commitments to start identifying and evaluating environmental considerations early in decision-making particularly at the strategic level all pointed into the direction of creating a common SEA framework in which to operate.

The steps enshrined in the future SEA Directive are not new to the "EIA/SEA world" and based to a big extent on the existing EIA experience and related legal requirements. However, also other existing instruments served as a reference for developing the SEA Directive, such as the Structural Funds regime, the trans-european networks or the Habitats Directive.

SEA as an instrument has a big horizontal coverage of sectors and inter-links with many other approaches implying some sort of environmental assessment. This is why the future SEA Directive contains specific provisions on interactions with other Community instruments dealing with environmental assessments. The lawmaker has ensured that the application of the future SEA Directive shall not lead to a duplication of assessments even if other requirements for an assessment for the same plan or for related plans would already exist. Steps already carried out and issues already addressed can be made use of and be supplemented by missing elements so that SEA and other approaches co-exist in a complementary way.

Since the entry into force of the Amsterdam Treaty, increasing focus is put on the principle of integrating environmental considerations into all Community policies. Some experience with policy assessment already exists in some member states and at international level, including in the European Commission and the Council. Concrete or measurable results, however, are still few. Flexible practical methods and mechanisms need to be developed or improved to make policy assessment an automatic, integrated and easy applicable part of decision-making. SEA as a process and a method is acknowledged as being one successful way of reaching this goal.

This article will introduce the future SEA Directive, examine its interrelationship with other Community legislation and show how SEA is being developed inside the European Commission and the Council in order to live-up to the commitments made on integration.

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## 2. The Future SEA Directive

### 2.1 History

Due to the rather long period during which the coming SEA Directive was developed and discussed, please get a short reminder of what happened in the past.

Thinking and attempts to introduce a comprehensive assessment system covering all decision-making levels started in the seventies and resulted at Community level in the EIA Directive covering only the project level in 1985. Already the first report on the application and effectiveness of the project EIA Directive showed clearly that project assessment comes too late if one intends to evaluate and compare environmental effects and alternatives at stages where options are still open and to be determined.

These reasons and good experience with SEA in some member states and outside the Community led the European Commission to present a Commission proposal for a SEA Directive in late 1996. This proposal was very welcomed by several member states, the European Parliament (EP) and NGOs which had been pushing for it for a long time. Some problems were discovered, however, as regards the interpretation of the envisaged coverage of plans and programmes of the Proposal. In the course of 1998 via the First Reading in the European Parliament clarifications and certain improvements were introduced into the Proposal which resulted in the amended Commission SEA Proposal of 1999. Already at this stage it became clear that the scope of plans and programmes to which a future directive should apply formed a key issue of debate. The EP asked for a scope broader than the one introduced by the Commission in order to have an efficient instrument which would apply to as many plans and programmes as possible.

Since its introduction in 1996 for quite some time no EU presidency decided to start negotiations at Council level until finally in 1999 the Council under the German presidency started discussing the SEA Proposal. Since the reactions of the member states were quite positive the subsequent Finnish presidency went for negotiations with the intention to reach a positive result. Altogether ten rounds in the Environment Working group of the Council were necessary to reach a compromise text to which Environment Ministers could politically agree to in December 1999.

Although the willingness of the Council, the member states and the Commission existed to finally have a directive in the field of SEA negotiations were not easy since interests of the various member states were quite different. Here again, especially the scope of application of the future directive formed the key issue of concern. Whilst some member states wanted to have a broad coverage of plans and programmes (some even asked to include policies), others wanted the scope to

be very narrow and precisely defined so that the future directive would be easy to fit into their existing national systems. The presidency didn't have an easy task in trying to match these diverging interests. [Finally two solutions seemed to have a chance for agreement at the Environment Council: On the one hand the presidency had a result at hand which was based on a rather limited scope of application but likely to reach unanimity amongst member states. On the other hand the broader scope of application as requested by the European Commission, the EP and some member states was at stake which would have brought a more efficient instrument but would presumably not have reached unanimity in the Council. For information it should be noted that as a general rule the EC Treaty requires qualified majority (and not unanimity) by MS for the adoption of a directive in the environment field.]

At the Environment Council the environment Commissioner Ms Wallström asked her Ministerial colleagues from the member states to make an effort and slightly broaden the scope of application so far achieved during negotiations since the result achieved was inferior to the Commission Proposal. This was suggested also with a view to the upcoming second Reading in EP and a broad integration of environmental considerations as required by the Amsterdam Treaty.<sup>1</sup>

At the end of the day the Finnish presidency finally went for a solution which achieved unanimity amongst member states. Due to reasons explained above and the fact that in the last minute certain types of plans and programmes were additionally excluded from an already limited scope of application the European Commission could not agree with the achieved result, the so-called common position, which it expressed in form of a Commission statement.

After the political agreement was reached the common position was formally adopted at 30 March 2000.

### 2.2 The SEA Common Position

The main features of the Commission Proposal were already lined out in the EIA review 73, volume 18 of January 1998. The current article focuses on main aspects in which the common position differs from the Commission Proposal.

The Amsterdam Treaty in its Article 6 highlights the importance of integrating the environment into all Community policies (the so-called "integration principle"). This principle was added to the future SEA Directive as one of its objectives. Integrating environmental considerations into all decision-making areas is a substantial prerequisite of effective environmental protection and prevention with a view to contributing to sustainable development. This principle has to be followed whilst elaborating the environmental report in the course of the planning process. Also after the adop-



tion of the plan or programme the public has to be informed in a summarised way of how the environmental considerations have been integrated into the plan or programme.

As first piece of Community legislation the future SEA Directive implements relevant provisions of the UNECE Aarhus Convention on access to information, public participation in environmental decision-making and access to justice in environmental matters concerning plans and programmes relating to the environment. This agreement of the UN Economic Commission of Europe was signed in 1998 in Aarhus, Denmark, and will enter into force once 16 ratification instruments are deposited. Other Community legislation also dealing with plans and programmes relating to the environment will be amended in due course in order to take on board the relevant Aarhus requirements concerning public participation.

An important issue during negotiations was how the future SEA Directive would relate to other Community legislation dealing with some form of environmental assessment in cases where a plan or programme would be covered by both the SEA Directive and another piece of Community legislation. To tackle this issue several provisions have been inserted into the common position. Generally the provisions of all legislation applicable to the relevant plan would need to be fulfilled. However, in case of overlap member states have the possibility of having co-ordinated or joint procedures in order to fulfil the relevant provisions. Such approach was also considered necessary for avoiding duplication of assessment.

Avoidance of duplication of assessments was one of the main concerns of the member states during negotiations of the future directive. Since SEA is an iterative process and would need to be applied to the entire planning hierarchy (i.e. plans at national, regional and local level) member states were afraid of too much administrative burden, high cost and duplication of work. This is why apart from the procedural co-ordination possibilities, as described above, additional provisions dealing with this concern have been inserted into the common position. For example, relevant information available about environmental impacts of plans and programmes which was gained at other levels of decision-making or from other Community legislation can be used for the elaboration of the environmental report. Additionally a flexible provision provides that the environmental report only needs to contain such information which can be reasonably obtained at the given planning stage taking into account, inter alia, the contents and level of detail of the plan.

Consultations in case of likely significant transboundary impacts on another Member State are already part of the existing EIA system at project level. In such situation

the affected Member State and its concerned public are involved, provided with the relevant documentation and given opportunities to comment. The results of such consultation need to be taken into account in decision-making. The common position on SEA includes similar provisions.<sup>2</sup> Such approach takes on board the main principle of the UN-ECE Espoo Convention on transboundary project impact assessment and extends it, as suggested in the convention, to the planning/programming level. The Espoo Convention was signed in 1992 and entered into force in 1997. In the Espoo-Convention context it is currently discussed to develop a SEA Protocol attached to the convention with a view to adopting it at the next Environment for Europe Ministerial Conference in Kiev (in 2002 or 2003).

### *2.2.1 What kind of plans and programmes shall be covered according to the SEA Common Position?*

As mentioned before, the scope of application represents the result of a difficult negotiation process. Behind this background it has to be understood that the article dealing with the scope of application constitutes a "building" which was built up step by step and whose pillars are necessary part of the entire complex. Such approach does not necessarily mean that the text becomes easy to read or would not leave any interpretation possibilities open. On the one hand the Community legislator has the duty to formulate legislation in a clear and precise way, on the other hand, however, the reality of 15 different national systems and interests which are behind the result of negotiations has to be taken into account as well.

Basically all plans and programmes are covered, as well as modifications which are likely to have significant impacts on the environment and which fulfil certain criteria. Criteria of a formal nature, such as those required by plans and programmes to fulfil legislative or administrative provisions, and other requirements preceding adoption by authorities or Parliament, apply to all plans and programmes.

One part of the scope of application is formulated in a way that its plans and programmes automatically require SEA. These are plans and programmes of certain areas which are exhaustively listed (e.g. agriculture, energy, industry, traffic, land-use planning) and set the framework for future authorisations of projects listed in the EIA-Directive 85/337/EEC.<sup>3</sup> Such a plan could, for example, be a national traffic plan dealing, inter alia, with the construction of future or changing of existing roads or railways. Plans and programmes which have significant effects on Natura-2000 sites (according to the habitats and birds directives) require an automatic SEA as well.

Plans and programmes other than those shall only require SEA where member states determine, by using

selection criteria, that these are likely to have significant environmental impact (so-called "screening"). How are these other plans and programmes defined? On the one hand, these would again be "plans and programmes which set the framework for future authorisations of projects." In this case, however, not limited to projects listed in the EIA Directive. It remains to be seen, how many plans and programmes beyond the ones covered by the obligatory part will in reality be left to require SEA. On the other hand, the screening procedure shall also apply to certain plans and programmes at local level and to minor modifications.

Finally a number of plans and programmes are explicitly excluded from the scope of application. These are national defence and civil emergency plans, financial and budget plans and plans of the current Structural Funds programming period (from 2000 to 2006/7).

As outlined before, the European Commission could not agree to such limited scope of application.

As regards the remaining content of the future SEA Directive it should be noted that basically the steps of the existing environmental impact assessment system were taken on board and adapted to the conditions at the planning level. Various provisions allow a flexible planning oriented approach in order to address the different planning levels and specifics. This solution has been chosen also with a view to not overburden administrations with the new instrument. On the contrary, useful linkages should be made use of and fostered in order to achieve efficient results and not to create high cost or long planning duration.

### 2.3 Outlook

Several times the question about the impact of the statement of the European Commission not supporting the Common Position declared at the Environment Council in December 1999 was made. Mainly the Commission did not support the Common Position because of its — in comparison with the Commission Proposal and with what the European Parliament had asked for in the First Reading — limited scope of application and the explicit exemption of the Structural Funds which was introduced in the last minute. The Commission stated that such limited scope of application would contradict the principles and goals of the process of a broad integration of environmental considerations as launched in the Cardiff Council and continued in subsequent Councils.<sup>4</sup>

The impact of the Commission statement is mainly of a procedural nature. From a formal point of view such position of the Commission required unanimity amongst member states for the adoption of the Common Position which was achieved. In the remaining legislative procedure, the Commission did not have to defend the Common Position in front of

European Parliament during the Second Reading. In the Second Reading the European Parliament proposed a number of amendments<sup>5</sup> to the future directive regarding the scope of application, the quality of the environmental information to be provided and the introduction of a monitoring system. The final adoption of the directive will take place in spring 2001. After that date the member states will have three years for transposing the directive into their national systems. After so many years of discussion a major breakthrough for the environment!

## 3. Relationship Between the Future SEA Directive and Other Community Legislation

### 3.1 The principles to be applied

The scope of application of the future SEA Directive is to be derived as things stand at the time of writing from Article 3 of the SEA Common Position being understood that one needs to bear in mind the definition given to the notion of "plans and programmes" by Article 2(a) of the SEA Common Position.

If the future SEA Directive will obviously apply to plans and programmes fitting within a purely national framework, the question of its application to plans and programmes deriving from Community legislation has also to be considered.

It seems quite logical that, inasmuch as the plans and programmes concerned fulfil the different conditions set out in the future SEA Directive for it to apply, the mere fact that the "source" of the national legislation providing for the said plans and programmes is Community legislation is legally irrelevant and should not lead to the conclusion that the SEA procedure should not apply.

The situation is quite straightforward where Community legislation provides for plans and programmes without setting out any requirements concerning the environmental evaluation thereof. In such a case, the SEA procedure will simply apply at the national level in the same way it would apply in relation to plans and programmes the source of which is purely national and unrelated to Community law.

Accordingly, any plan or programme which would fulfil the criteria and conditions set out in Article 3 will be subject to the evaluation procedure provided by the future SEA Directive unless the plan or programme concerned could benefit from one of the exemptions set out in the directive.<sup>6</sup>

It is submitted that this general principle still holds true with respect to plans and programmes deriving from Community legislation even though the said legislation provides for some sort of environmental evaluation and/or public consultation.

### 3.2 Other relevant Community environmental legislation

The future SEA Directive will indeed not be the first piece of Community legislation providing for some sort of environmental assessment of certain plans or programmes nor the first one requiring public information on consultation on such plans and programmes.

In the former category, Nature Conservation and Structural Funds legislation should be mentioned, and more precisely the Wild Birds Directive<sup>7</sup> and the Habitats Directive<sup>8</sup> and the Structural Funds Regulation<sup>9</sup> and the Rural Development Regulation while in the latter category falls the Water Framework Directive.<sup>11</sup>

As far as Nature Conservation is concerned, Article 6(3) of the Habitats Directive provides for a procedure whereby plans likely to significantly affect a Special Protection Area<sup>12</sup> or a Special Conservation Area<sup>13</sup> must be subject to appropriate assessment and it is in the light of this assessment that the competent national authorities will either agree to the plan or, subject to the derogation possibilities given by Article 6(4), withhold its agreement should the plan would have effects adversely affecting the integrity of the SPA or SCA.<sup>14</sup>

The Community is entrusted by the Treaty with the task of developing and pursuing a policy of economic and social cohesion<sup>15</sup> to be pursued notably through Structural Funds.<sup>16</sup> The Structural Funds Regulation lays down the general framework within which the various Structural Funds will operate as far as their objectives, means and tasks are concerned while the Rural Development Regulation complements and supplements the above-mentioned framework regulation with respect to rural development.

The Structural Funds machinery provides for several types of plans and programmes, albeit under different names,<sup>17</sup> the role and functions of which are set out more in detail in the relevant provisions of the above-mentioned regulations.<sup>18</sup>

Among these Structural Funds plans, Community Support Framework, Operational Programmes and Single Programming Documents will be subject to an *ex ante* evaluation of the "expected impact" notably on the environmental situation.<sup>19</sup>

As regards public participation, it is to be noted that the Structural Funds Regulation provides for a partnership whereby a "wide and effective association of all the relevant bodies" should be ensured.<sup>20</sup> In addition to this, the Structural Funds Regulation provides that "The plans shall be submitted by the Member State to the Commission after consultation with the partners."<sup>21</sup>

The Rural Development Regulation contains provisions whereby rural development plans will be submitted by the Member State to the Commission "after competent authorities and organisations have been consulted at the appropriate territorial level"<sup>22</sup> as well as provisions requiring "an appraisal showing the expected [...] envi-

ronmental [...] impact" of the rural development plans.<sup>23</sup>

The Water Framework Directive contains several provisions of interest as regards the present discussion: Article 5 deals with the review of the hydrological impact of human activity to be undertaken in accordance with the specifications set out in Annexes II and III; Article 11 provides for the adoption of programmes of measures for each river basin district, the contents of which is specified in Annex VI; Article 13 prescribes the preparation of river basin management plans the contents of which is specified in Annex VII and Article 14 deals with public information and consultation in the adoption and updating of the river basin management plans.

### 3.3 Practical implications

What should the competent authority do in a situation where there are two sets of requirements in relation to environmental evaluation and/or public consultation, one deriving from the future SEA Directive and the other flowing from the other Community legislation concerned?

Facing such a situation will not always be a cause of concern for the competent authority.

A good example of such a situation is given by Article 6(3) of the Habitats Directive which merely requires an "appropriate assessment" of the plan concerned to be made without giving any further details on how this assessment should be made. No conflict can arise here between the future SEA Directive and the Habitats Directive in this respect; both Directives constitute, on the contrary, a perfect example of synergy being borne in mind that the SEA procedure as set out in the future SEA Directive would apply without prejudice of the more stringent provisions of the Habitats Directive as far as the outcome of the assessment is concerned.<sup>24</sup>

In such a context, it is therefore not really surprising that the SEA Common Position links the SEA procedure with the Habitats Directive by providing that a SEA shall be carried out for all those plans "which, in view of the likely effect on sites, have been determined to require an assessment pursuant to Article 6 or 7 of Directive 92/43/EEC."<sup>25</sup>

Setting aside this particular situation, the question when two concurring evaluation regimes are co-existing is to determine whether there is some room for the principle that "the law which is the more specific will prevail over the law which is the more general."<sup>26</sup> It is to be noted in this respect that it is commonly accepted that a more recent law does not prevail over an older law if the former is more general than the latter which is more specific as to the subject matter concerned.<sup>27</sup>

For the above-mentioned principle to apply, it seems logical and reasonable that the other Community legislation providing for a plan or programme, to which

the future SEA Directive should normally apply, should provide for an environmental evaluation procedure the principles of which are such that the main features of the SEA procedure can be found back, with the consequence that (at least) the same level of protection of the environment and consultation of the public concerned is guaranteed.

The fact that the future SEA Directive intends in no way to loosen the Community regulatory framework is confirmed by the fact that the future directive should state that: "An environmental assessment carried out under this directive shall be without prejudice to any requirements under Directive 85/337/EEC and to any other Community law requirements."<sup>28</sup>

If, for example, no public participation was foreseen with respect to the plan or programme at issue — whereas the information and consultation of the public concerned is a cornerstone of the SEA procedure — the other Community legislation governing the said plan or programme could not be deemed as constituting a "more specific law" (*lex specialis*) which could be dispensed from the application of the SEA Directive.

The SEA Directive should therefore either be entirely or partly applicable according to whether the other Community legislation providing for a plan or programme contains no requirements in terms of *ex ante* environmental assessment or some requirements on the subject which do not however provide for a evaluation procedure as comprehensive and detailed as that provided for in the future SEA Directive. In the last case, the future SEA Directive would complement the other Community legislation as regards the environmental evaluation of the plan or programme concerned.

This general principle of interpretation is confirmed by the SEA Common Position which states that: "For plans and programmes for which the obligation to carry out assessments of the effects on the environment arises simultaneously from this directive and other Community legislation, member states may provide for co-ordinated or joint procedures fulfilling the requirements of the relevant Community legislation in order, inter alia, to avoid duplication of assessment."<sup>29</sup>

The foregoing considerations do not of course mean that the Community lawmaker, when adopting a specific piece of legislation, would not be entitled to exclude this specific act from a general regime such as the SEA nor that it could not decide to exempt from applying the SEA procedure plans and programmes deriving from pre-existing Community legislation. As regards the latter situation, the Community lawmaker clearly intends to exclude from the scope of application of the future SEA Directive a certain number of plans and programmes.<sup>30</sup>

### 3.4 Lessons to be drawn

It is of course not possible to draw any definitive conclusions before the SEA Directive is finally adopted; the current wording might be changed through the remainder of the legislative process. Yet, whatever may be the final version, the Community lawmaker has to be aware that for the directive to remain silent does not mean that no solution could be found on the basis of general principles of interpretation as regards the different issues that could arise on the question of the relationship between the SEA Directive and other Community legislation, notably that the SEA regime is likely to apply in a complementary and supplementary way to the concurring environmental assessment and/or public consultation requirements. If the Community lawmaker would wish to set aside this consequence, it would then be necessary to include express provisions spelling out the type of relationship the Community lawmaker would like to see in the application.

## 4. The Contribution of SEA to Environmental Integration at Policy Level and Sustainable Development in the European Union

As lined out in the introduction, the increased emphasis put by the Amsterdam Treaty on the principle of environmental integration has created new dynamics for integrating environmental considerations into a broad range of sectors in the European Union, especially at the strategic decision-making level. This influenced for instance the European Council to launch of a number of initiatives, which include starting the negotiations of the SEA proposal for directive as explained above. In the remainder of this article, various European Union initiatives on integration of the environment into strategic decision making are lined out and it will be shown how they mutually complement and reinforce one another.

### 4.1 Integration of the environment: what happens at the European Council?

The European Council reacted to this new provision in the Amsterdam Treaty on environmental integration by launching a new political process at the summit of Cardiff in 1998.<sup>31</sup> In this process, the different formations of the Council of the European Union (for instance Transport, Industry, Agriculture) establish their own strategies for giving effect to environmental integration and sustainable development within their respective policy areas. The Cardiff process was followed up by the various Council summits<sup>32</sup> that have taken place since then.

The Energy, Transport and Agriculture Councils started the process, soon followed by the Industry,



Internal Market and Development Councils and later on by the General Affairs (external relations and general policy), Ecofin (economic and financial affairs) and Fisheries Councils. These strategies are now gradually developed and vary in content depending on the sector, but they all should identify priority actions, indicators and monitoring arrangements. A number of strategies go beyond these elements and also refer to a timetable for implementation, to the development of specific objectives and targets and to operational measures such as the use of SEA as a means to contribute to the objective of integration of the environment.

This progress on environmental integration strategies for different sectors and related work on indicators is of significant importance for the implementation of SEA. First of all, they could trigger the application of SEA within specific sectors, where they address this issue explicitly. Furthermore, sector specific objectives and targets defined in the sectoral integration strategies can represent useful benchmarks against which strategic decisions can be compared to. Finally the indicators identified and eventually the accompanying measures for information collection would provide useful tools for the monitoring of the effects of the strategic decisions on the environment.

Besides the work on the integration strategies, the European Council organised in the wake of Cardiff other events to support the integration of the environment in strategic decision-making. The UK Presidency organised an International Seminar on Strategic Environmental Appraisal in Lincoln<sup>33</sup> and the Austrian Presidency organised a seminar on Strategic Environmental Assessment in Semmering,<sup>34</sup> focussing specifically on the Proposal for SEA Directive. These events have helped to influence the German Presidency to start the negotiations on the proposal for the SEA Directive, which represented a breakthrough for the debate on SEA that has been lingering on for a long time. In parallel, the German Presidency organised a workshop in Bonn on Best Practise for Integration of Environmental Protection Requirements into Other Policies.<sup>35</sup> The latter workshop covered institutions, structures, procedures and instruments for integration as well as the role of effective information and communication. The most important instruments identified for supporting environmental integration were Strategic Environmental Assessment, monitoring mechanisms based on benchmarking and indicators, greening of government activities and market based instruments.

In the first half of 2001, the Swedish Presidency is expected to make an important step forward on environmental integration: adoption of environmental integration strategies and of a timetable for further measures and indicators on environmental integration and adoption of the SEA Directive.

## 4.2 Integration of the environment: what happens in the Commission?

### 4.2.1 What has happened until recently: a short overview

Before discussing how the Commission approaches internally the integration of the environment, it is necessary to explain shortly the Commission's organisation.

The Commission is composed of 20 members, who have been attributed a portfolio of competencies distributed amongst 36 directorates-general or specialised services. The competencies of the Commission are laid down in the Treaty. They range from Economic and Financial Affairs, over Research to Health and Consumer Protection.

The Environment policy is the competence of the Directorate-General Environment. This Directorate-General ensures that the Commission promotes the protection of the environment through its environmental policies and through its influence on other policies that have an environmental dimension. But it has since long been recognised<sup>36</sup> that this approach is not sufficient for ensuring that environmental protection requirements are fully integrated into the definition and implementation of the European Union policies, with a view to promoting sustainable development. Economic growth stimulated by European Union policies other than environmental policies often reduces or even neutralises the beneficial effects of the European Union's environmental policies and it has become clear that a more systematic and integrated approach is needed for the protection of the environment.

This is the background against which the Commission declaration to the Amsterdam Treaty should be situated. This declaration provides that the Commission would undertake to prepare environmental impact studies when making proposals that may have significant environmental implications. The Heads of State have subsequently endorsed this principle at the Cardiff summit (see above), as part of the measures to pursue the integration of the environment into other policies.

As a follow-up to its commitments, the Commission defined in the mid-nineties a number of internal administrative processes to promote the integration of the environment by the Commission services.<sup>37</sup> One set of measures are of a horizontal nature and include measures on reporting (drawing up of integration strategies and annual reports), on communication (establishment of an inter-service group discussing environment-related issues), on green house-keeping and the carrying out of environmental appraisals of the Commission's policy proposals. The latter measure was called the "green stars" system. According to this system, a green star was attributed to legislative proposals that may have a significant impact on the environment. These proposals needed to be made subject to an environ-

mental appraisal prior to their adoption. Another set of measures resulted in increased collaboration at operational level between the services responsible for the environment and the services responsible for other policy areas. In some cases, this collaboration has worked well and produced clear results (for instance in the field of agricultural policy); in others, there is still a lot of progress to be made.

The implementation of the horizontal measures throughout all services of the Commission proved in practise to be more difficult than anticipated. Indeed, when the Commission evaluated its internal integration measures, it came to the conclusion that these were insufficient or didn't work properly. The Commission reported this conclusion to the European Council in its Cologne Report of June 1999,<sup>39</sup> and announced a review of its internal measures for the integration of the environment as its contribution to the Cardiff process and the implementation of Article 6 of the Amsterdam Treaty.

#### *4.2.2 How to go from here: what is on the drawing board*

The Communication of the Commission lining out its strategic objectives for 2000-2005<sup>39</sup> says clearly that the degradation of the environment is now proceeding at a frightening pace and that the continuation of current development patterns is unsustainable. The Commission therefore calls for decisive collective reaction and a multiple Union response.

The Commission itself is now taking initiatives at different fronts simultaneously. All these initiatives are in one way or another inter-related and should help the Union to achieve the ambitious goals of full integration of the environment in its own major policy areas with a view to promote sustainable development.

The Commission is currently preparing its 6th Environmental Action programme (6EAP). This successor of the 5th Environmental Action programme (5EAP)<sup>40</sup> which is now coming to an end was preceded by a global assessment of the 5EAP. The results of this assessment are now being fed into the work on the 6EAP. This document will contribute to the integration of the environment by setting environmental objectives and targets for the next years to come and by defining an action programme for achieving these objectives and targets. The 6EAP is foreseen to be adopted under the Swedish Presidency.

Another activity closely linked to the preparation is the 6EAP and due for the Gothenburg summit<sup>41</sup> is the preparation of an EU sustainable development strategy. In Rio in 1992, it was recommended that all signatories should have established sustainable development strategies and the Commission was invited at the Helsinki European Council<sup>42</sup> to prepare a proposal for a strategy in time for the Gothenburg summit. Of course, the 6EAP

and the EU sustainability strategy are strongly interrelated. The 6EAP can be seen as the environmental component on which the EU sustainable development strategy will be based and, to make the circle round, the sustainable development strategy will take environmental integration a step further by requiring that social, economic as well as environmental considerations are integrated into policy-making.

But these initiatives alone, although important, will not be sufficient to reach the goals of environmental integration and sustainable development. Action is required at all levels of decision-making and the Commission also intends to make order in its own house. To this end, practical measures need to be taken to ensure that environmental integration is effectively taking place throughout the organisation. For this purpose, the Commission is currently reviewing the green stars system in order to provide a more complete answer to the challenge of integrating the environment into its own activities and policies. Elements to this answer have already been provided in the aforementioned Cologne report of the Commission to the European Council. These are policy assessments supported by guidance on tools and methods inspired from SEA, Green Housekeeping aiming at ensuring good environmental practice in the Commission's internal administration and the participation of the Commission in the Communities Eco-Management and Audit Scheme (EMAS). Central in the new approach is that every Directorate-General should be responsible for the integration of environmental considerations into its own policies and for carrying out environmental assessment. All these measures will need to be supported by an appropriate organisational structure and need to get the necessary political support in order to succeed. We come back on this issue further in this article when dealing with the reform of the Commission.

Given the challenges of fully integrating the environment and the difficulties of introducing to this end a successful environmental assessment system at the strategic level, the Commission has launched a study to investigate in more detail how SEA and integration of the environment into strategic decision-making are interrelated.<sup>43</sup> The results of this study will be useful both for the implementation of the future SEA Directive and for the promotion of integration within the Commission. The outcome of this study will be available on the Environmental Assessment homepage<sup>44</sup> of the Commission around March 2001.

In parallel to the above-mentioned review process, the Environment Directorate-General of the Commission is currently developing guidance to support the environmental assessment of the Commission's own policy proposals. For this purpose, DG Environment has looked at similar guidance developed in the EU member



states and in other countries in the world. The Commission's guidance for internal integration will explain the basic principles of SEA applied to policy making and show how these can be integrated into the internal Commission decision-making process. The guidance will be based on the principles of stakeholder involvement and on transparent decision-making. It will provide checklists that help Commission officials to identify those policy proposals that are most relevant for environmental integration efforts (screening) and that help to determine which issues should be addressed when carrying out an environmental assessment (scoping). As regards the environmental assessment itself, a broad overview of different methods will be provided. Finally the guidance will illustrate the approach with some concrete examples. In line with the devolution of the responsibilities for integrating the environment to every Directorate-General already mentioned above, this guidance is not intended as a prescriptive document but as a framework that can be adapted by the respective Directorates-General to their specific context.

This process of adaptation of the guidance has already started on an informal basis in several Directorates-General (DGs). For instance, DG Enterprise is currently developing a new computer based and Internet compatible tool to assist the screening of its policy proposals and the definition of the scope of their impact both on the environment and on the industry competitiveness and innovation capability. Similarly, DG Development has developed a manual on integrating environmental concerns into development and economic co-operation. In this manual, environmental assessment plays an important role for integrating environmental concerns into all levels of decision-making, from the elaboration of country strategies to the decision on the financing of individual projects. Furthermore, DG Trade has developed a new methodological framework for sustainability assessment of trade related measures in preparation of the next round of World Trade negotiations.<sup>45</sup> Such an assessment follows the same principles as outlined in the previous paragraph, but its scope is wider and covers environmental as well as economic and social issues. DG Trade has subsequently carried out a preliminary sustainability assessment of trade measures that were debated during the third WTO ministerial conference in Seattle in November-December 1999.<sup>46</sup>

It should be lined out that in parallel to these developments, the Commission already carries out Business Impact Assessments of its proposals and that some DGs would like to establish systematic assessments of the impacts addressing other particular sectoral concerns, such as impact on human health and impact on employment. All these issues require a co-ordinated approach and this is where the Commission's reform process comes in. The Commission has issued a white

paper on Reforming the Commission in March 2000.<sup>47</sup> One of the three themes of this paper is the reform of policy planning within the Commission. Relevant issues dealt with in this paper are the need for increased policy co-ordination, accountability and transparency and for better monitoring and evaluation. The Commission is currently undertaking many actions in order to proceed with its reform process.

## 5. Conclusion

At the wake of the new millennium, mankind is facing exciting opportunities as well as huge challenges, of which making quick progress towards a more sustainable development is not one of the least.

If we want to make substantial progress, action is required on a very wide scale at all levels of society. The Commission actively contributes to meeting this challenge through policy initiatives such as the preparation of the Union's strategy for the promotion of sustainable development, through the development of the Community environmental policy which includes powerful instruments such as Strategic Environmental Assessment and, at the level of its own organisation, with initiatives of internal housekeeping. These activities deployed by the Commission will constantly need to be adapted and realigned to order to cope with the fast changes that currently take place within the European Union, not at the least the enlargement process. The Gothenburg Summit in June 2001 will represent an important milestone, but will surely not be the end of the road. Let's hope that the summit will create a new range of incentives to accelerate our striving for a more sustainable future.

## ENDNOTES

1 According to the current Amsterdam Treaty the EP got decisive influence as co-legislator which in last consequence could lead to rejecting the entire directive if EP's concerns are not properly reflected. Before EP was consulted in the framework of a co-operation procedure in which EP had a certain influence and usually managed to introduce a few amendments to a common position. However, EP had no possibility of a final veto in case amendments it considered very important were not taken on board. As mentioned above in the first Reading EP asked for a scope broader than the Commission originally proposed.

2 The Commission Proposal only foresaw transboundary consultation of the likely affected other state.

3 As amended Directive 97/11/EC.

4 See more info on this issue in the chapter on environmental integration.

5 17 all together

6 See Article 3(8) of the Common Position.

7 Council Directive 79/409/EEC of 2 April 1979 on the conservation of wild birds (OJ No. L 103 of 25.4.1979, p. 1).

- 8 Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora (OJ No. L 206 of 22.7.1992, p. 7).
- 9 Council Regulation (EC) No 1260/1999 of 21 June 1999 laying down general provisions on the Structural Funds (OJ L 161, 26.6.1999, p. 1).
- 10 Council Regulation (EC) No 1257/1999 of 17 May 1999 on support for rural development from the European Agricultural Guidance and Guarantee Fund (EAGGF) and amending and repealing certain Regulations (OJ L 160, 26.6.1999, p. 80).
- 11 Directive 2000/60/EC of the European Parliament and of the Council Directive of 23 October 2000 establishing a framework for Community action in the field of water policy (OJ L 237, 22.12.2000, p. 1).
- 12 SPAs are those areas designated in pursuance of the Wild Birds Directive in order to give an enhanced protection to endangered and migratory species.
- 13 SCAs will be those areas to be designated in pursuance of the Habitats Directive in order to give an enhanced protection to natural habitats and habitats of a species of Community importance. It is to be noted that these SCAs are not yet designated at the time of writing.
- 14 Article 6(3) reads as follows: "Any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to appropriate assessment of its implications for the site in view of the site's conservation objectives. In the light of the conclusions of the assessment of the implications for the site and subject to the provisions of paragraph 4, the competent national authorities shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned and, if appropriate, after having obtained the opinion of the general public." Article 6(4) of this directives specifies further that: "If, in spite of a negative assessment of the implications for the site and in the absence of alternative solutions, a plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of a social or economic nature, the Member State shall take all compensatory measures necessary to ensure that the overall coherence of Natura 2000 is protected. It shall inform the Commission of the compensatory measures adopted."
- 15 Article 158 EC.
- 16 Article 159 EC. Those Structural Funds are the European Agricultural Guidance and Guarantee Fund, Guidance Section, the European Social Fund and the European Regional Development Fund.
- 17 Community Support Framework, Operational Programme or even Single Programming Document.
- 18 See in particular Articles 17 to 19 of the Structural Funds Regulation and Articles 41 to 44 of the Rural Development Regulation.
- 19 See in particular Article 41(2)(b) of the Structural Funds Regulation.
- 20 Article 8.
- 21 Article 15(2).
- 22 Article 41(1).
- 23 Article 43(1) third indent.
- 24 Under the Habitats Directive, the competent authority is bound by the outcome subject to the application of the derogation procedure set out in Article 6(4) of the said directive whereby Article 8 of the Common Position only requires the competent authority to take the results of the assessment into account.
- 25 Article 3(2)(b).
- 26 Also known in its Latin version as the *lex specialis derogat legi generali* principle.
- 27 Also known in its Latin version as the "*lex posterior generalis non derogat priori speciali*" principle.
- 28 Article 10(1) of the Common Position on SEA.
- 29 Article 10(2). See also recital 18 of the preamble to the SEA Common Position which reads as follows: "Where the obligation to carry out assessments of the effects on the environment arises simultaneously from this directive and other Community legislation, such as a Council Directive 79/409/EEC of 2 April 1979 on the conservation of wild birds, Directive 92/43/EEC (or Directive .../.../EC establishing a framework for Community action in the field of water policy), in order to avoid duplication of the assessment, member states may provide for coordinated or joint procedures fulfilling the requirements of the relevant Community legislation."
- 30 See Article 3(8) of the SEA Common Position which lists the excluded plans and programmes among which one might find financial or budget plans and programmes and Structural Funds plans and programmes. Concerning the latter category, Article 11(4) of the Common Position states in that respect that: "The Commission shall report on the relationship between this Directive and Regulations (EC) No 1260/1999 and (EC) No 1257/1999 well ahead of the expiry of the programming and the environmental report prepared pursuant to periods provided for in those Regulations."
- 31 Cardiff European Council, Presidency conclusions, June 1998.
- 32 European Councils of Vienna (December 1998), Cologne (June 1999), Helsinki (December 1999).
- 33 Strategic Environmental Appraisal, Report of the International Seminar, Lincoln, 27-28 May 1998, Department of the Environment, Transport and the Regions, DETR, PO Box No 236, Wetherby LS23 7NB.
- 34 Strategic Environmental Assessment, Report of the Workshop, Semmering, Austria, 5-7 October 1998, Austrian Federal Ministry of Environment, Youth and Family Affairs.
- 35 Workshop under the auspices of the German Presidency of the EC Council on Ministers on "Best Practise for Integration of Environmental Protection Requirements into Other Policies", Bonn, 25-26 May 1999, Workshop Documentation.
- 36 Already in 1997, the principle of integration was introduced in the Single European Act (Article 130R(2) EEC: Action by the Community relating to the environment shall be based on the principles that preventive action should be taken, that environmental damage should as a priority be rectified at the source and that the polluter should pay. Environmental protection requirements shall be a component of the Community's other policies.")
- 37 This initiative dates back from 1993 as part of a package of measures to implement the integration objectives of the 5EAP (SEC (93) 785 final) and has been reviewed in 1995 and 1997.
- 38 Commission working paper addressed to the European Council: The Cologne Report on Environmental Integration: Mainstreaming of environmental policy, SEC(99)777.
- 39 Commission Communication, Strategic Objectives 2000-2005. Shaping the New Europe COM (2000) 154 final.
- 40 Resolution of the Council and the Representatives of the Governments of the member states, meeting within the Council of 1 February 1993 on a Community programme of policy and action in relation to the environment and sustainable development.
- 41 European Council Summit under the Swedish Presidency that will be held in June 2001.
- 42 Helsinki European Council, 10-11 December 1999, Presidency conclusions.
- 43 See <<http://www.europa.eu.int/comm/environment/eia/sea-ngo-studies.htm>>
- 44 See <http://www.europa.eu.int/comm/environment/eia/home.htm>.

45 See [http://europa.eu.int/comm/trade/2000\\_round/sia\\_2.htm](http://europa.eu.int/comm/trade/2000_round/sia_2.htm).

46 See [http://europa.eu.int/comm/trade/2000\\_round/sia.htm](http://europa.eu.int/comm/trade/2000_round/sia.htm).

47 White paper, *Reforming the Commission*, Com (2000) 200, 1 March 2000.



# Developments in Strategic Environmental Assessment in Central and Eastern Europe

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## 1. Introduction

Central and Eastern European (CEE) countries recognise environmental assessment as the key tool for the integration of environmental concerns into development planning. Many CEE countries had established their national Environmental Impact Assessment (EIA) systems by 1995, while all CEE countries (with the exception of South-East Europe) had adopted national EIA laws and regulations by end of 2000. In four South-East European countries (Albania, Bosnia and Herzegovina, FYR Macedonia and Yugoslavia) the development of EIA systems was slowed down by sub-regional instability and conflicts, but all national and sub-regional environmental policies indicate that the development of EIA systems is now a top priority in the region.

The first generation of national EIA systems in CEE, which appeared in the early 1990s, was predominantly modelled on the EC Directive on the Environmental Assessment of Certain Projects (85/337/EEC) and on the UN/ECE Convention on Environmental Impact Assessment in Transboundary Contexts (the Espoo Convention). The second generation of EIA laws, which is being prepared within the EU accession process, is typically modelled after the amended EC Directive on Environmental Assessment of Certain Projects (EC/97/11).

National EIA systems in CEE are linked with traditionally well-organised systems of land-use planning and building permitting. While EIA is usually limited to specific projects, there are many elements of "strategic" environmental assessment of land-use planning documents that were provided by the land-use planning legislation of CEE countries before 1990. These provisions remained virtually untouched throughout the 1990s. Some CEE countries (Bulgaria, Czech Republic, Slovakia) also complemented these provisions with a legal duty to undertake EIAs for high-level strategies (i.e. programmes, policies and plans).

The quality of the practical application of the above "strategic" environmental assessments in the CEE region was not systematically evaluated in the 1990s. Lack of

background information in this field was noted at the Second Regional Workshop of the Sofia EIA Initiative, held at Szentendre, Hungary, September 1997. The workshop initiated a comparative review of SEA applications in the CEE region, which was undertaken within the Sofia EIA Initiative in 1997-98, and focused on the following questions:

- Is the environmental assessment of proposed policies, programmes and plans based on formal provisions for SEA application? Is there a connection between the environmental assessment of a policy, programme or plan and the future environmental assessment of related projects?
- Do governments require assessment of alternatives to proposed policies, programmes and plans?
- Do governments require assessment of impacts on ecosystems, human health and socio-economic conditions?
- Does the SEA process provide for public participation?
- Are adequate procedural checks built into the SEA process?
- Is the environmental assessment process taken into consideration in the final development of the policy, programme or plan?
- Is there an opportunity for post-SEA monitoring?

The lessons learned in the above review have been communicated to the Aarhus Ministerial Conference (Croatia and REC, 1998a, Croatia and REC, 1998b) and were used in 1998-2000 to support pilot SEA applications in CEE.

This article summarises the key issues in the development of SEA systems in CEE as of April 2001. Chapter 2 outlines the key driving forces behind the development of national SEA systems in CEE, Chapter 3 outlines the review of national legislation and practice and Chapter 4 summarises the key overall priorities for the development of the national SEA system in the CEE region.

This paper is based on background document no. 17 Sofia Initiative on EIA: Policy Recommendations on the Use of Strategic Environmental Assessment in Central and Eastern Europe and in Newly Independent States to the for the Aarhus Ministerial Conference in 1998 which was prepared together with Susan Casey-Lefkowitz, Environmental Law Institute, Washington D.C.

## 2. Driving Forces Behind the Development of SEA in Central and Eastern Europe

The principle of SEA is becoming widely accepted at an international level. It responds to what the World Commission on Environment and Development (1987) called a chief institutional challenge in the 1990s, namely considering “the ecological dimensions of policy at the same time as economic and other dimensions.” This approach helps society move towards the “sustainability” agenda for environmental protection. Saddler (1998) indicates that SEA:

- promotes integrated environmental decision-making and public participation in environmental policy-making;
- facilitates the design of sustainable environmental policies and plans;
- provides for the consideration of a larger range of alternatives than is normally possible in a projected EIA;
- takes account, where possible, of cumulative effects and global change;
- strengthens and streamlines projected EIA by:
  - the clearance of strategic issues and concerns;
  - prior identification of impacts and information requirements;
  - reducing time and effort involved in EIA reviews.

SEA can be applied to policies, programmes and plans at the local, regional, national and international levels. The nature of an SEA draft policy, programme or plan is sufficiently different from project-level EIA (see Box 1). Based on international experience some common building blocks for an effective SEA system have

### BOX A

#### Key differences in strategic environmental assessment and environmental impact assessment

##### Strategic environmental assessment

- Evaluates whether planned strategic interventions (programmes, policies, plans and legislative proposals) meet goals and targets established by environmental and sustainable development strategies.
- Whenever possible, SEA also assesses the environmental impacts of specific activities and projects which are implemented as a result of strategic intervention.

##### Environmental impact assessment

- Assesses the specific environmental impacts of specific planned development projects.

been identified, which advocate differentiated procedures for SEA.

National SEA systems in the CEE region will be heavily influenced by relevant developments in the European Union. In this respect, however, it should be noted that there are differentiated EU requirements for the integration of environmental matters into development policies, programmes and plans and for the assessment of their environmental impacts.

The EC directive on the assessment of impacts of certain plans and programmes on the environment (EC SEA Directive) provides only one model of environmental integration into development plans and programmes. Other systems for the integration of environmental issues into development policies, programmes and plans that complement the EC SEA Directive are proposed in the EU strategy on the integration of environmental factors into development policies (within the Cardiff Integration Process), in the proposed 6th EU Environmental Action Programme and in the environmental assessment system incorporated in EU Structural Funds (see Box 2 for comparison).

CEE countries are expected to adopt the EU *acquis communautaire* in its entirety. It therefore seems highly desirable that national SEA systems in CEE combine the requirements of the EC SEA Directive with other EU requirements for the integration of environmental concerns into strategic decision-making. The following text proves that CEE countries — with their rapidly developing legislation and institutions — provide numerous opportunities for the adoption of such a system.

## 3. Existing Legal Requirements for SEA in Central and Eastern Europe

### 3.1 General overview

The status of SEA in the CEE region is summarised in Box 3. Currently, the legislative base for SEA of natural policy-making is limited to four CEE countries:

- *Bulgaria*. The Bulgarian EIA system is based on Chapter 4 of the Environmental Protection Act (1991). The stipulations of the Act are elaborated and EIA procedures are defined by Regulation No. 1 (1995). The application of EIA is related to a final decision-making process, such as the approval of a plan or programme, or a specific project. Under the law, an EIA must be carried out for national development programmes, territorial development and urban development plans, as well as for specific projects.
- *Czech Republic*. The Czech Act on Environmental Impact Assessment (No. 244/1992) specifically refers to “development concepts” being subject to EIA regulation. Article 14 of the Act defines a “concept” as one submitted and approved at the



TABLE 1

## Two models of SEA: impact assessment and environmental appraisal

	<i>Goal</i>	<i>Procedure</i>	<i>Key points of international reference</i>
<b>Key elements of the impact assessment approach (EIA model, <i>ex post</i> assessment)</b>	Assess the environmental impacts of the strategy (and potential alternatives) SEA report summarises the key negative and positive impacts	<ul style="list-style-type: none"> <li>• Elaboration of a draft strategy</li> <li>• Screening and scoping of the draft strategy to review its likely environmental impacts and consequences</li> <li>• Preparation of a SEA Report that evaluates the environmental impacts of each alternative and recommends the optimal solution</li> <li>• Public review of the SEA Report</li> <li>• Expert review of the SEA Report</li> <li>• Final SEA Report serves as the key document for decision-making</li> </ul>	EC SEA Directive
<b>Key elements of environmental appraisal (integration model, <i>ex ante</i> evaluation)</b>	Assess the environmental impacts of the strategy (and potential alternatives) SEA report summarises the key negative and positive impacts	<ul style="list-style-type: none"> <li>• Review of environmental problems relevant to the strategy</li> <li>• Review of the environmental objectives and targets of the strategy</li> <li>• Evaluation of how strategic alternatives meet the relevant environmental goals and targets</li> <li>• Input into the formulation of alternatives that meet the relevant environmental objectives</li> <li>• SEA Report summarises the SEA process and the key outstanding issues</li> <li>• Public review organised in the key stages of the interactive process outlined above</li> </ul>	Cardiff Integration Process, Sixth Environmental Action programme, EU Structural Funds

level of the central authorities of State Administration in the fields of energy, transport, agriculture, waste treatment, mining and processing of minerals, recreation and tourism. Under the law, territorial planning documentation and the General Water Management Plan are also concepts. The proponent of a concept proposal must elaborate SEA documentation which addresses the key appropriate environmental impacts as pre-determined for the project-level EIA documentation. The concept proposal and its SEA documentation must be made available for 60 days of public review. It is then sent to the Ministry of Environment for an SEA Standpoint. Governmental bodies cannot decide on the concept before SEA Standpoint is issued.

- *Estonia* passed on 14 June 2000 the Environmental Impact Assessment and Environmental Auditing Act (RT I 2000, 54, 348). The Act defines in its Article 22 Strategic environmental assessment as an assessment of the potential environmental impact resulting from activities proposed by a plan, national development plan or programme. The requires

potential environmental impact resulting from activities proposed by a plan to be assessed in the course of drafting the plan and the assessment shall be published together with the plan pursuant to the requirements of the Planning and Building Act and that a strategic environmental assessment statement constitutes a separate part of a plan, national development plan or programme.

- *Poland* On November 9, 2000, Poland adopted a comprehensive Law on Access to Information on the environment, protection and environmental impact assessment, which incorporates the requirements of the EC EIA directives (97/11, 85/337, 90/311), the Espoo Convention, the Aarhus Convention and the proposed EC SEA Directive (COM/96/511, COM/99/73). The SEA requirements were based on the proposed EC SEA Directive, while the public participation system (uniform procedure for EIA and SEA) is governed by the provisions of the Aarhus Convention.
- *Slovakia* The Slovak Act on Environmental Impact Assessment (EIA Act, no. 127/1994) provides a com-

TABLE 2

### Overview of provisions for SEA in Central and Eastern Europe

Country	EIA law	EIA in other law	EIA regulation or decree	EA of broad strategies	EA of land-use plans
Albania	No	Partial	No	No	No
Bulgaria	No	Yes	Yes	Yes	Yes
Croatia	No	Yes	Yes	No	Partial
Czech Republic	Yes	Yes	Yes	Yes	Yes
Estonia	Yes	No	Yes	No	Partial
Hungary	No	Yes	Yes	No	Yes
Latvia	Yes	No	No	No	Partial
Lithuania	Yes	Yes	No	No	Yes
FYR Macedonia	Not yet	Yes	No	No	Partial
Poland	Yes	No	No	Yes	Yes
Slovakia	Yes	No	Yes	Partial	Yes
Slovenia	No	Yes	No	No	Yes

prehensive approach to SEA. It contains the requirement to assess development policies and legislative proposals in relation to their assumed impact on the environment. Part 4 of the EIA Act (Article 35) presents a brief procedure for environmental assessment which is obligatory for proposed development policies in the areas of energy supply, mining, industry, transport, agriculture, forestry and water management, waste management and tourism. In addition, the Act covers territorial planning documentation for regional and residential settlement in selected areas and any legislative proposal that may have an adverse impact on the environment. Slovakia is preparing draft regulations to implement SEA requirements.

Contrary to the limited legal requirements for SEA application for policy-making and programming in the CEE region, there is considerable experience in the environmental assessment of land-use planning documents. SEA elements are included in the land-use planning of many CEE countries (see Box 3 above). However, only a few countries (such as Poland) require a process that meets most of the internationally accepted elements of environmental impact assessment. Other examples of interest include:

- *Lithuania* The Environmental Impact Assessment Law of 1996 requires initial environmental impact assessment of all territorial planning. This law, together with the Territorial Planning Law of 1995, regulates the EIA process for development. The development process is defined as beginning with planning and continuing to a full EIA on technical

projects, thereby establishing the basis for an integrated approach.

- *Slovenia* Under Articles 53 and 54 of the Environmental Protection Act (nos. 801-01/90-2/107, 1993), EIA is required for physical plans. Specific regulations for EIA of the physical plans have not yet been adopted but according to Article 54.2 a comprehensive EIA study must be prepared by the body responsible for the preparation of the physical planning document or sector plan. Under Article 51, planning, programming and designing of activities shall be based on an environmental vulnerability study. The vulnerability study also serves as the basis for physical planning documents and sector plans for the management of natural resources (pursuant to Article 53.1).

### 3.2 SEA elements in land-use planning

Land-use planning requirements in the region have many elements in common with the SEA procedures. Both procedures require identification of the issues, public participation, a review of draft documents, and submission to a political decision-making process. The missing SEA element in the current land-use planning systems is proper identification of alternatives and thorough assessment of their environmental and social impacts. In this context the Sofia Initiative has concentrated upon whether SEA should be fully integrated into the land-use planning process or whether it should be conducted as a parallel, independent process.

Based on expert evaluations, the following lessons are drawn from SEA practice in land-use planning throughout the CEE region:

## BOX B

**Recommendations for SEA in regional development plans**

Regional development plans (RDPs) and related programming documents (i.e. rural development plans) in CEE are drafted under considerable financial and time constraints. Relatively easy and transparent SEA approaches should be used in order to effectively carry out SEA during the preparation of these plans. Within these simplified SEA procedures, the following principles should apply (it is understood that SEA quality is largely pre-determined by the capacities of the participating stakeholders).

**General principles for SEA of CEE regional and rural development plans**

1. SEA should be carried out by a multi-disciplinary and multi-stakeholder team of experts. The SEA team should be provided a mandate which is sufficient to access information on materials generated by the elaboration of RDPs and for the proposal of changes in their formulation.
2. The SEA team should be formed as soon as possible in the elaboration of RDPs and should work in parallel with the planning teams. The SEA team should work in continuous interaction with the planning team — its goal is to provide an independent environmental review of all documents leading to the elaboration of RDPs. In order to do so, the SEA team needs to be provided with a proper mandate, resources and access to materials developed by the planning team.
3. SEA should be based on thorough public participation held in accordance with the requirements of the Aarhus Convention.

**Strategic environmental assessment focus**

4. SEA should focus mainly on impacts that have been identified as priority concerns by the affected public administration and concerned public (i.e. NGOs, academics, citizens).
5. SEA should address both national and transboundary/global issues.

**Impact assessments**

6. Given the lack of resources, time and information available for the elaboration of complex prognostic models, SEA should use collective expert judgements undertaken by qualified multi-disciplinary and multi-stakeholder teams (see Principle 1 above).
7. Impacts should be evaluated on the basis of:
  - (a) their conformity with formally adopted governmental goals in environmental and health protection (for example, national strategies in the fields of environment and health, global conventions, transboundary issues and EU standards),
  - (b) the degree of public concern associated with the forecast impact.

**Strategic environmental assessment outcomes**

1. SEA should suggest environmentally-friendly modifications of RDPs: this information can be most effectively used during the elaboration of RDPs. Therefore SEA should be undertaken, where possible, in parallel with the elaboration of these development plans (see Principle 3 above).
2. Assessment findings should be documented in a SEA report, which should be made available to the public. The SEA report can be effectively used for monitoring the actual environmental impacts of development plans and for the elaboration of further programming documents.

Conclusions of the Fourth Regional Workshop of the Sofia EIA Initiative, Bratislava, May 19-21, 1999

- environmental assessment of land-use planning is not fully integrated into the planning processes, mainly because of the lack of methodological guidance. Land-use planners in the region typically do not want the land-use planning process to be subject to new procedures, while they tend to be reluctant to modify their existing practices in order to include a thorough environmental evaluation of the proposed plan;
  - environmental impacts are assessed superficially; while particular concerns relate to the quality of the assessment of health and socio-economic impacts, in general little or no attention is given to cumulative effects;
  - there is insufficient opportunity for public involvement, due to an inadequate understanding of the appropriate methods of consultation;
  - the quality of SEA practice is constrained by limited resources, lack of information and insufficient procedural and methodological guidance.
- Experience in the CEE region indicates a preference for the integration of environmental assessment into the land-use planning process. This integration will require the development of clear procedural guidelines and SEA methodologies. It will also be necessary to build the capacity of land-use planners in order to enable them to undertake a standard SEA process within their planning work.

### 3.3. SEA elements in the preparation of strategic interventions, national policies and programmes

The Sofia EIA Initiative produced some interesting findings from the analysis of pilot SEA applications in the preparation of national policies in the CEE region. The pilot cases indicate that it is possible to carry out SEA under basic and often incomplete legal frameworks and that SEA can be initiated at the request of the governmental institutions responsible for the internal environmental appraisal of proposed policies. In such cases, the goal of the SEA was to assist the environmental authority in issuing a well-informed statement on the proposed development strategy.

For SEAs carried out at the instigation of ministries of environment, there was little or no consideration of practical alternatives to the proposed policy and SEA was carried out as an add-on exercise. The overall quality of the environmental assessment process of national policies also illustrated a lack of adequate financial support for teams responsible for the preparation of SEA reports. This situation posed important limitations on the undertaking of a reasonably quick and yet thorough assessment process.

The overall conclusion highlights the need for the development of a flexible legal framework which outlines the types of strategies that require SEA, and defines the basic SEA elements which should be incorporated into the planning framework for strategic intervention.

### 3.4 SEA elements in the preparation of regional development plans in EU accession countries

The EU accession process has provided a strong region-wide stimulus for the application of SEAs in CEE countries, especially within the pre-accession activities related to EU Structural Funds. By March 1999 all PHARE countries had started to elaborate Rural Development Plans (RDP) with two primary goals: to provide a comprehensive framework for the use of EU pre-accession assistance (PHARE II, SAPARD and, partially, ISPA), and to prepare accession countries for the future use of EU Structural Funds after becoming EU member states.

Elaboration of RDPs is governed by the framework regulation no. 1260/1999, which lays out general provisions on the use of structural funds in the period 2000-2006. Article 41 of the regulation requests that applicant countries provide, in addition to RDPs, their *ex ante* evaluation which evaluates potential environmental impacts. The general requirements of Article 41 of the regulation are further developed in:

- Vademecum, Plans and Programming Documents for Structural Funds 2000-2006 (DG XVI, 1999) which requests countries to fully integrate environment assessment outcomes into RDPs;

- Handbook on Environmental Assessment of Regional Development Plans and EU Structural Funds, (DG XI, 1998) which provides the general procedural and methodological guidance for SEA of RDPs in EU member states.

Although the elaboration of RDPs in CEE is not in a strict sense governed by the above regulations and other guiding EU documents, it is highly desirable that all PHARE countries simulate, to the maximum possible degree, the standard operations of EU Structural Funds. In May 1999 the Sofia EIA Initiative organised a large regional CEE workshop to review the role of environmental assessment within the preparation of RDPs in CEE. The workshop brought together 72 participants from ministries of the environment, ministries responsible for regional development, environmental NGOs and environmental consultants in 10 CEE countries to discuss the preparation level of RDPs in CEE countries and the steps taken to apply environmental assessment of RDPs.

The workshop came to the conclusion that the preparation of RDPs in CEE provides a unique opportunity for the development of national SEA systems in CEE. It is, however, unclear whether the European Commission will require proper environmental assessments within *ex ante* evaluation of National Development Plans and related programming documents (i.e. Rural Development Plans and Investment Strategies for ISPA). In this regard, the workshop agreed on a set of policy conclusions and methodological recommendations (see Box 4) that could be respected by the accession countries in the preparation of RDPs.

## 4. Priorities in the Development of SEA in the Central and Eastern Europe

While SEA in the CEE region is being introduced as a new procedure, the philosophy behind the process is not new. Former socialist countries have a tradition of strong central planning that requires or allows preliminary environmental evaluation of proposed plans and programmes with clear spatial implications. The CEE region therefore presents a special opportunity for the wider introduction, further strengthening and continued implementation of SEA. With some exceptions, countries have formalised planning and policy-making processes; a high level of technical expertise and active nongovernmental organisations; and transitional economies which are open to procedural and legislative changes.

Approaches to SEA in CEE, a regional workshop held on April 9-10, 2001 at the Regional Environmental Center for CEE, reviewed SEA case studies in CEE which were implemented in 1999-2000 and which indicated a set of common priorities in the development of national SEA systems in the region. The work-

shop concluded that the following are common priorities in the development of SEA in CEE:

1. National SEA systems in CEE countries should provide a flexible framework for the integration of SEA elements into the development of specific strategic interventions.<sup>1</sup> National framework laws having provisions on SEA may need to be complemented by administrative orders/regulations that interpret general SEA requirements for the most important strategic interventions in the country (e.g. land-use/spatial planning, preparation of national policies, etc.).
2. The SEA process should be initiated at the earliest possible development stage of strategic intervention.<sup>2</sup> SEA should begin at the same time as the preparation of the strategic intervention (ToR for SEA should preferably be adopted at the same time as the ToR for the strategic intervention).
3. The SEA process should run parallel to the planning processes and should be fully integrated into the different development stages of strategic intervention. Annex 1 to these conclusions outlines options for the incorporation of SEA into the development of strategic intervention.
4. Responsibility for carrying out the SEA process should lie with the authority in charge of the strategic intervention. CEE countries should establish systems that ensure the quality of the SEA process. In cases where there is no institutional capacity for carrying out SEAs, a formal review of SEA findings may be needed.
5. The SEA process should typically review:
  - the analysis of existing environmental/health problems relevant to the sector or region covered by the strategic intervention;
  - environmental/health (sustainability) goals and targets of the strategic intervention;
  - key conceptual alternatives of the strategic intervention — attainment appraisal of environmental/health goals (sustainability) and targets;
  - specific environmental/health impacts of suggested implementation measures;
- monitoring system of environmental/health impacts of the strategic intervention.
6. Consultation with environmental and health authorities and the general public should be organised throughout the SEA process. At least two stages of consultation should be carried out: at the review of the environmental goals and targets of the strategy (SEA scoping) and after the completion of the SEA findings. Additional stages of consultation may be organised as required. The SEA process should also enable access to information in accordance with the requirements of the Aarhus Convention.
7. The findings of the SEA process should be published for the purpose of external review (by public bodies, national environmental and health authorities, etc.). SEA findings, whether draft or final, should be made publicly accessible and should be communicated to the concerned public in due time and form.
8. Authorities responsible for development and/or approval of strategic intervention should ensure due account of SEA findings and of public comments in the decision-making on the strategic intervention.
9. Public participation provisions and access to justice is an important element in design of SEA systems in CEE. Given the importance and difficulty of this subject, further detailed CEE-regional discussions should be organised.
10. SEA systems should ensure proper monitoring of the actual effects of strategic intervention on the environment, human health and/or sustainable development. Monitoring reports should be made publicly accessible and should be communicated to the concerned public.

#### ENDNOTE

<sup>1</sup> In this text the use of the term “strategic intervention” covers plans, programmes and policies.



## Annex

TABLE 3

**Incorporation of SEA into planning of strategic intervention**

Plans, programmes and policies

AUTHORITIES RESPONSIBLE FOR ELABORATION OF STRATEGIC INTERVENTION		ENVIRONMENTAL AND HEALTH AUTHORITIES	
<i>Planning of strategic intervention</i>	<i>Strategic environmental assessment</i>	<i>Supervision of process</i>	<i>Public participation</i>
Terms of reference (ToR) for strategic intervention	Terms of reference for strategic environmental assessment	Comments on ToR for strategic intervention and joint preparation of ToR for SEA (incl. specification of public participation system)	Notification and comments on draft ToR for strategic intervention and SEA
Analysis of key issues related to strategic intervention	Review of analysis of existing environmental/health problems relevant to the sector or region which is subject to strategic intervention	Overall cooperation and commenting within SEA process	Access to information, right to submit comments and have them duly taken into account (Aarhus provisions) Formal consultation
Determination of strategic goals and targets for the strategic intervention	Evaluation of key conceptual alternatives of the strategic intervention their relationship to environmental/health goals	Overall cooperation and commenting on the SEA process	Overall cooperation and commenting on the SEA process Formal consultation
Design of implementation measures and monitoring	Assessment of specific environmental/health impacts of suggested implementation measures for the strategic intervention and design of system for monitoring environmental/health impacts	Overall cooperation and commenting on the SEA process	Access to information, right to submit comments and have them duly taken into account (Aarhus provisions) Formal consultation
-	-	Optional external review of SEA report and public comments	-
Decision on strategic intervention	-	-	Access to justice
Monitoring of implementation of strategic intervention	-	Review of monitoring reports on implementation of strategic intervention	Access to monitoring reports



# Strategic Environmental Assessment in the Newly Independent States of the Former Soviet Union

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## 1. Introduction

The main aims of Strategic Environmental Assessment (SEA) are (a) to overcome limitations of the project-level EIA by considering key environmental issues earlier in the planning process and addressing cumulative and synergistic impacts, (b) to introduce environmental and sustainability considerations in the formulation of strategic actions, and (c) to contribute to policy appraisal, thus, making strategic decision-making more structured and transparent (see, e.g. Therivel (1997)). SEA is especially relevant in the context of countries with transitional economies (further, “countries in transition” or CITs) where numerous strategic choices with significant environmental implications are being made and where changing institutions present opportunities for introducing innovative procedures of environmental decision-making.

Most of the countries of Central and Eastern Europe (CEE) and the Newly Independent States (NIS) of the former Soviet Union have adopted legal provisions for some form of SEA within the framework of their Environmental Assessment (EA) legislation (see Table 5 in the Appendix for the list of key EA legislation in the NIS). In addition to adopting these formal provisions, many CITs have acquired some practical experience of using SEA which, probably, has been applied to hundreds or even thousands of PPPs in the region in the last decade. The question is whether these developments have met the expectations of the societies, which have simultaneously been trying to achieve economic, environmental and democratic improvements?

This issue is especially relevant in the context of the current workshop seeking to identify effective and widely applicable SEA practices. Though attempts to systematically evaluate SEA systems have been underway for some time, their specific policy-relevant results remain very scarce. Earlier studies of EA systems in CITs (which mainly addressed project-level EIAs) often focused on legal provisions (see, for example, EBRD (1994) and Bellinger et al. 2000). They demonstrated that many CITs have legal SEA requirements, in some cases, even more “progressive” than the Western countries. However, it was soon realised and documented that “advanced” SEA provisions in CITs are rarely implemented in practice. Another finding was that where SEA regulations are far from perfect the policy-makers have been less committed to “harmonising” them with inter-

nationally accepted norms than in the case of the project-level EIA. Thus, the studies focusing on legal provisions were often considered as having little policy relevance: since, on the one hand, laws and regulations were difficult to “improve” and, on the other hand, they were not universally implemented in practice.

Consequently, the focus of SEA research shifted towards its practical application in individual cases (see, for example, reports of the Sofia Initiative on EIA in REC and DPNE of Croatia 1998, Mikulic et al. 1998, regional overviews such as Lee and George 2000 and individual research papers such as Thérivel 1997). Unfortunately, isolated examples cannot be used to evaluate the SEA practice as a whole because the extent to which SEA procedures are applied (or even can potentially be applied) in the manner illustrated by the “case-studies” remains unknown. Very often, reported “examples” represent unique situations where the developments are financed by large foreign investors or are of strategic national importance, thus, encouraging innovative (but not necessarily typical) procedures and attracting the best (but not necessarily universally available) domestic and international resources and expertise. As a result, according to Sadler et al. 1998, “the quality of [the] practical application [of SEA] in the region has not been systematically evaluated” (p.5).

Both types of studies — reviews of legal frameworks and examinations of individual SEA cases — were useful at the initial stage of accumulating empirical descriptive knowledge about SEA systems in CITs. However, now it seems that more rigorous research frameworks are needed in order to identify the practical ways of improving the effectiveness of SEA systems in CITs. An effective analysis of SEA systems should:

- proceed from policy-relevant objectives and questions; for example, if evaluating SEA systems in CITs against a set of external criteria of “good SEA” it should justify the desirability and feasibility of meeting these criteria in transitional societies;
- be sensitive to the observation that “an EA process can only be understood and evaluated in relation to the policy and institutional framework in which it operates” (Sadler 1996, p.ii), which is especially appropriate in transitional countries with their specific and constantly changing institutions;

- rely on sound research techniques capable of overcoming typical methodological difficulties in researching Environmental Assessment in CITs (such as the lack and secrecy of data and the frequent change of regulatory frameworks).

The current paper is based on a study which aimed to apply the above principles and was undertaken by the author in 1997-2000 in the University of Manchester and Central European University, Budapest. This study utilised a variety of research techniques including a mail survey (addressing 44 respondents from 23 countries), interviews with EA officials and practitioners (involving 36 respondents in 6 countries), review of relevant legal texts and research literature and the analysis of records of individual SEA cases.

This paper aims to examine the origin, the current state and the trends in SEA provisions and practice in the NIS in order to provide practical recommendation on strengthening them. The rest of the paper consists of four sections. The first section describes the origin of the EA systems in the NIS, the second section provides a regional overview of the current state of SEA legislation and practice. The third section explores the routine application of SEA in one selected NIS. Finally, the fourth section concludes the paper by summarising its findings and discussing the relevant recommendations.

## 2. The Origin of SEA in the NIS

The twelve NIS include Russia, the Western NIS (Belarus, Moldova and Ukraine), the Caucasus (Armenia, Azerbaijan, Georgia), and Central Asia (Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan) and Kazakhstan. These countries became independent, for the first time in their recent history, after the dissolution of the USSR in 1991. Their EA systems evolved from EA procedures inherited from the USSR.

Prototype EA procedures existed in the USSR since the 1970s and included some SEA elements. These consisted of planning rules and standards, which comprised not only “physical” standards, but also procedures for conducting site investigations and obtaining relevant permits. In addition, special expert committees of appropriate ministries selectively reviewed proposed individual activities. This expert review procedure (*expertizas* in Russian) served as a co-ordination and control mechanism of the centrally planned economy and could address environmental aspects of planned activities, including the strategic ones. Finally, the Soviet system of environmental planning incorporated so-called “TerKSOPs” (Territorial Integrated Schemes of Nature Protection). These were frequently elaborated alongside spatial plans to address environmental issues at a more strategic level.

Design rules, permits, *expertizas*, and TerKSOPs were substantially different from classic EA procedures used in developed countries at both project and strategic levels. These “socialist environmental appraisals” were “internal” government procedures since all their participants represented the state. This often encouraged closed, non-transparent, and informal processes with no independent procedural checks, no clearly defined responsibilities of participants, and a high degree of discretion of officials in charge. Decisions based on such appraisals excessively relied on technical criteria (i.e. sector- and media-specific norms and standards) rather than on views of affected parties. Interdisciplinary evaluation, as well as the consideration of cumulative, synergistic, and indirect impacts was seldom conducted.

The very important role of planning in the former USSR ensured that many planning tools were routinely practised. However, since sectoral planning was far more prominent than spatial planning, very few of the planning procedures were environmentally oriented, especially in a holistic interdisciplinary and participatory way that modern EA implies. Another obstacle to realising the full potential of socialist appraisals in form of *expertizas* were that they seldom affected the existing goals of strategic plans and, as a result, were not capable of challenging the overall economic supremacy of socialist planning. TerKSOPs were designed in the mid-1970s with a goal to overcome this deficiency by introducing an environmentally-oriented tool of spatial planning. Dozens TerKSOPs of different scale had been developed by the end of the 1980s when the process was largely stopped due to the collapse of the socialist system. Some of the TerKSOPs continued to be elaborated, albeit largely outside the existing EA system, until at least the mid-1990s (see, Elizarova, Bykadorov, et al. 1998 #510). However, the practical effect of TerKSOPs seemed to be limited mainly because of their narrow “environmental” (even nature-protection) focus and frequent failure to be integrated with parallel socio-economic planning.

The reform of the socialist environmental appraisals started in the mid-1980s and proceeded until the dissolution of the USSR in 1991. The principal goals of this reform, partially inspired by Western examples and partially responding to growing domestic environmental concerns, were:

- to expand the coverage of EA procedures so that they address all environmentally significant activities of both project and strategic levels;
- to make EA procedures fully independent of the developers, more transparent and accountable;
- to address all environmental impacts, not just those regulated by sector- and media-specific standards;
- to ensure that EA findings are used in decision-making.

As a result, the USSR introduced a system of the so-called State Environmental Expert Reviews (“Ecological Expertise” in some other translations), further referred to as SER. The SER was a procedure of reviewing environmental impacts of all proposed activities including the ones at the strategic level by environmental authorities or independent expert committees appointed by environmental authorities. The “Conclusion” of such a review was legally binding, i.e. mandatory for developers to implement. However, the introduction of the SER did not initially affect planning procedures still regulated by the old planning rules. This situation at the project level started to change in the early 1990s when the requirements for developers to undertake the so-called OVOS (Assessment of Environmental Impacts) procedure were consolidated in several pieces of secondary legislation. At the strategic level the responsibilities of the proponents were largely unaffected until 1991 when all twelve NIS which emerged after the disintegration of the Soviet Union inherited the SER/OVOS system.

## 2. EA Systems in the NIS and Regional Differences

Since 1991, all 12 NIS have been reforming the SER/OVOS systems inherited from the USSR. However, the reforms proceeded with different speeds and in different directions in different NIS as summarised in Table 1.

The five NIS, Ukraine, Belarus, Kazakhstan, Turkmenistan and Russia, have more or less consistently developed the SER system inherited from the USSR. All of them have passed national Environmental Expert Review (Ecological Expertise) laws in 1993-1997, supplemented by secondary legislation (see Table 5 in the Appendix). The SER procedure has been preserved as the central element of the EA systems in these countries. Formally, the SER must be applied to all planned activities, whereas in practice many strategic activities are implemented without a prior SER and some minor projects may be exempted from it. The other common features of these systems are:

- “competent” environmental authorities play the key role in the EA process, whereas the responsibilities of developers and the rights of the public are not equally clearly defined in the mainstream legislation;
- separate EISs or SEA reports are not produced; the SER applies to the entire project or planning documentation, focusing not only on EA materials, but on the environmental merits of the proposed activity as a whole;
- SER Conclusions are mandatory, in particular, a “negative” conclusion means that the proponent cannot proceed with the proposed activity;

- though the access of the public to the SER Conclusions and other EA materials is limited environmental NGOs have a right to organise so-called Public Environmental Expert Reviews (PERs) under which certain EA-related information may be reviewed independently and formal comments may be submitted.

At the same time, environmental assessment (commonly referred to as OVOS) carried out by developers prior to SER has not been radically reformed in any of these countries. It is still primarily required only for selected project-level activities and regulated by sector-specific design and construction rules, supplemented in some cases by more environmentally-oriented secondary legislation. For example, it was only in 2000 that the Russian federal government formally required different EA procedures for project- and strategic-level activities (Goskomekologia 2000), though the strategic EA has still not been defined in enough detail.

In three NIS: Armenia, Georgia and Moldova, EA legislation inherited from the USSR has been more radically reformed along the lines inspired by Western examples and advisors. Formal EA systems in these countries include such “classic” EA elements as screening, scoping, and production of publicly available EISs. SER is retained as a universal environmental permitting procedure also checking the quality of EA processes. EA procedures in these countries are also mostly focused on project-level activities. In practice, reformed EA procedures have been rarely implemented due to the smaller size of the countries, the lack of major new developments, which could be subject to EA, inadequate institutional capacity for carrying out reformed procedures and some drawbacks of the new legislation which makes it difficult to implement. Thus, the practice in the second group countries is still largely limited to SER procedures inherited from the USSR.

Finally, in four NIS: Azerbaijan, Kyrgyzstan, Tajikistan, and Uzbekistan no specific national EA legislation has been adopted as of 1999. Particularly difficult economic and political circumstances and the relative international isolation of these countries hinder the development of the institutional capacities for implementing a reform of the EA system. Practical procedures in these countries mostly resemble SERs inherited from the USSR, though the extent of their application is not entirely clear.

In summary, in those NIS where practically functioning national EA systems have been established, they are substantially different from their Western analogues. In about one-half of the NIS, the development of the EA systems is at an earlier stage, i.e. there is either no national EA legislation or no sufficient practical experience of its implementation. Despite this diversity, most of the EA systems in the NIS are based on the commonly inherited Soviet SER/OVOS model and share many common features.

TABLE 1

### Features of environmental assessment systems in the Newly Independent States

<i>Countries</i>	<i>Scope of application</i>
Belarus, Kazakhstan, Russia, Turkmenistan, Ukraine	National EA legislation (1993-1997) transposes the Soviet SER/OVOS system. Substantial practice of implementing these provisions.
Armenia, Georgia, Moldova	National EA legislation (1993-1997) introduces some Western elements of EA. practical implementation of these reformed procedures is minimal.
Azerbaijan, Kyrgyzstan, Tajikistan, Uzbekistan	There is no national EA legislation as of 1999. The practice, where it exists, follows the Soviet-style SER procedures.

Source: Sadler and Verheem, 1996 (updated)

TABLE 2

### Commonly mentioned deficiencies of strategic environmental provisions in selected Newly Independent States

<i>Countries</i>	<i>Reported weaknesses of SEA provisions</i>
Armenia	SEA provisions do not contain sufficient detail for their implementation there is no clear distinction between the documentation and the procedure appropriate for individual activities and for concepts
Belarus	No specific provisions are made to organise SER and OVOS for development schemes, regional development plans and other strategic decision-making.
Kazakhstan	A specific SER procedure for strategic actions as distinct from SER and OVOS procedures for individual projects is needed.
Russia	Differentiated approach is needed to specify SER, OVOS and related procedures for strategic developments as distinctively different from project-level.
Ukraine	SEA provisions are "not complete" (there is the expert review, but no OVOS).

#### 4. SEA in the NIS

Strategic Environmental Assessment, in some form, is part of most of the SER systems. All NIS which have specific national Environmental Expert Review laws (i.e. Belarus, Georgia, Kazakhstan, Moldova, Russia, Turkmenistan, and Ukraine) require SER of a broad range of strategic activities (see, e.g., Box 1 listing strategic activities for which SER is required in Russia). These cover development plans, sectoral programmes and policies, legal standards, and mandatory rules with environmental implications and extend to draft legislation with environmental implications (in Kazakhstan, Moldova, Russia, and Ukraine). The SER procedure for strategic activities, if at all specified, is rarely different from SER for project-level activities though, as a rule, OVOS is not required for PPPs and, sometimes, the SER Conclusion is not legally binding for strategic developments. For example, in Russia where SER is conducted, the developer (proponent) has to elaborate and submit "materials on environmental assessment" of the proposed activity, but the actual content of these materials has been clar-

fied only for project-level developments (Goskomecologia 2000 #2460). These provisions were found to be non-specific and rarely implemented in practice in most of the NIS where they had been analysed (i.e. in Armenia (Ter-Nikoghosyan 2000), Belarus (Cherp 2000b and Cherp 1999), Kazakhstan (Cherp 2000c), Russia (Cherp 2000a), and Ukraine (Patoka 2000).

Internal inconsistencies in SEA systems could be analysed by a compilation of the opinions of SEA practitioners, officials and researchers. Table 2 presents such an attempt by summarising comments on SEA provisions in five NIS as reported by (Bellinger et al. 2000).

This approach indicates two closely related weaknesses of SEA provisions:

- the lack of specific procedural and documentary requirements for SEA;
- the mechanical transformation of EIA provisions to the SEA level.

In the first case, the formal provisions provide no clear guidance for SEA practice which is, therefore, likely to be



undertaken by ad hoc rules, i.e. vary according to political and economic circumstances, available resources, etc. In the second case, a similar problem arises because formal provisions set a practically unattainable standard, leaving practitioners without a realistic guidance.

This situation seems to be indirectly confirmed by most of the internationally reported SEA case-studies which, as a rule, were conducted outside the scope of the national legal frameworks, in unique circumstances or within "pilot projects," following the "good will" of proponents or voluntary commitment of researchers. Thus, of the 15 SEA cases, taking place in 12 CITs, as reported in Thérivel (1997), Lee and George (2000) and Mikulic, Dusik et al. (1998), six were apparently undertaken virtually outside any national legal frameworks, six were only partially within the national formal provisions and only three more or less fully followed procedures laid out by the national laws and regulations.

This brief survey of the formal provisions leads to the following conclusions. Though most of the NIS formally require some form of SEA, it often lacks internal consistency. In particular, SEA provisions suffer from a lack of specifics in their SEA requirements or the mechanical transformation of EIA provisions to the strategic level. Both features complicate compliance with SEA laws and regulations: the first one because practitioners have no guidance, the second one because the legal standards are not realistically attainable. As a result, it seems that ad hoc SEA practice prevail: the absolute majority of internationally reported SEA cases were conducted outside national legal frameworks. These findings logically lead to the question: are there any SEAs routinely implemented in CITs following the existing national requirements and, if so, do they make any difference? An attempt to partially answer this question is made in the following section.

## 5. Routine Application of SEA Provisions in a Newly Independent State

SEA in CITs cannot be described, even less evaluated, only on the basis of formal provisions since there are indications pointed out earlier in this paper and elsewhere that the SEA practice does not fully correspond to the existing laws and regulations. The objective of this paper is to make a step towards evaluating SEA practice, using one NIS, as a case-study.

One of the principal approaches to the evaluation of EA practice is reviewing the quality of EISs (Lee and Colley 1992 and Lee et al. 1999). It has been primarily applied to project-level EIAs (also in some CITs, as reported, for example, by Mondok et al. 1998), though the possibility of its adaptation to SEA of land-use plans has recently been demonstrated (Bonde and Cherp, 2000). Unfortunately, the existing techniques for reviewing the quality of SEA documentation have serious limi-

tations in the NIS where, as a rule, separate reports documenting SEA findings are not produced and even the existing SEA materials (i.e. incorporated in the planning documentation) may not be openly available.

Other approaches include analysis of EA processes (not just documentation) and their influence on decisions made in the process of designing and permitting the proposed activity (Kobus and Lee 1993, Lee et al. 1994). A set of criteria to be used in such an approach to evaluate "quality" of SEA procedures in CITs was suggested in Sadler et al. 1998. However, the application of these criteria requires access to extensive process-related information which can only be secured in relation to a limited number of "case-studies." Consequently, applying these criteria does not highlight the features of a routine application of SEA procedures in the NIS.

The analysis offered in this section demonstrates an application of another method which does not require access to SEA documentation or process-related information. To analyse EA practice, 230 SER Conclusions from 1985, 1990, 1994 and 1997 were examined as well as the registry of all SER objects and outcomes for 1989-1997. The following results relate only to strategic actions while the complete analysis of all-level SERs is presented in Cherp (1999).

Table 3 demonstrates the general dynamics of SERs of strategic activities in this NIS. It illustrates the fact that SERs extended to the strategic level in 1989 when the USSR adopted the mandatory SER provisions (Cherp and Lee (1997)). The decline of the total number of SERs may relate to the general fall in the economic activity in the 1990s. Still, for the last decade from 100 to 200 SERs of strategic activities have been conducted in this country. The majority of these, probably, related to "schemes" or other physical plans of the lower level.

Thirty to fifty percent of the reviewed SER Conclusions were negative (i.e. proposed actions were rejected on environmental grounds). Altogether, in 1989-1997, 27 strategic actions received negative SER Conclusions which may represent 15-30% of the total number of strategic actions which underwent SER

Table 4 presents a classification of reasons provided by the Ministry of Environment and Natural Resources for rejecting strategic actions. The most frequent reason for rejection was a violation of a formal nature, i.e. when documentation on the proposed activity was of a wrong format or one of mandatory approvals had not been obtained. This reason was mentioned six times and given for three out of four rejected activities, two activities being rejected exclusively because of this reason. Other reasons for rejection included the violation of environmental quality and design standards and significant (i.e. not "formal") inadequacies in environmental justification provided for the proposed actions.

Four out of five positive Conclusions in the reviewed sample imposed some environmental conditions. In two

TABLE 3

### Number of national SERS of activities of a strategic nature conducted in a Newly Independent State, 1985-1997

<i>Countries</i>	<i>1985</i>	<i>1990</i>	<i>1994</i>	<i>1997</i>
<b>SER Conclusions and records reviewed</b>	<b>30</b>	<b>50</b>	<b>50</b>	<b>100</b>
Territorial schemes (heating, industrial development, etc.)	-	4	1	1
New technologies	-	-	-	1
Master plans	-	-	-	1
Norms and standards	-	-	1	-
<b>Total SER of strategic activities in the sample</b>	<b>-</b>	<b>4</b>	<b>2</b>	<b>3</b>
<b>Negative SER conclusions</b>	<b>-</b>	<b>2</b>	<b>1</b>	<b>1</b>
<b>Projected total of annual SERS of strategic activities</b>	<b>-</b>	<b>40</b>	<b>14</b>	<b>8</b>

TABLE 4

### Reported reasons for rejecting strategic actions by SERs in the sample

Number of times mentioned

<i>Rejected action</i>	<i>Violation of standards</i>	<i>Important omission in environmental substantiation of action</i>	<i>Formal violations</i>
I	1	1	
II	1	2	1
III			1
IV			4

cases these were the requirement to conduct SERs at the subsequent planning stages (an equivalent of "tiering"), in one case the conditions referred to the need to comply with environmental quality standards and to receive necessary formal approvals. Only in one case did the conditions include substantive mitigation measures such as the construction of a new storm-sewage treatment station, reduction of water consumption rates, and discharges and improvement of a landfill.

The reviewed SER Conclusions seem to have only dealt with environmental aspects of the proposed activities, not referring to their social and economic costs and benefits. There was no evidence of public participation presented with any of the proposed activities and the SER Conclusions never commented on this fact.

As elsewhere in CITs, there have evidently been important exceptions from this practice not caught by the author's sample, described, for example, in Elizarova, Bykadorov et al. (1998). However, similarly to most of the internationally reported case-studies, these exceptional applications of SEA were carried out outside the legal framework or established procedures.

## 6. Conclusions

SEA is potentially an effective regulatory tool for addressing environmental problems in transitional countries. Most of the NIS have introduced some legal provisions for SEA, but the extent and effectiveness of its practical application has been largely unknown. However, instead of adapting Western-style EA provisions, most of the NIS attempted to transpose the Soviet system of *expertizas* into new economic and political situations.

The most commonly identified weaknesses in SEA legal frameworks in the NIS are the lack of specific procedural and methodological provisions for SEA and/or the mechanical extension of project-level EIA requirements to all types of strategic actions. Both deficiencies deprive practitioners in the region of clear and realistic guidance. As a result, SEA practice is often conducted outside legal frameworks. The statement of Regional Environmental Center (1998) that "CEE/NIS governments tend to undertake SEA in an ad hoc fashion" (p.6) seems to be confirmed by the bulk of



internationally reported cases of SEA application in CITs, the majority of which did not follow national SEA requirements.

Due to this gap between legislation and practice, the research of the latter becomes particularly important. The author's analysis of routine SEA practice in one NIS has resulted in the following observations:

- certain types of strategic actions are in fact environmentally appraised on a substantial scale even in one of the most conservative EA systems in the NIS; however, this practice is mostly limited to physical plans and is declining with the general economic decline; thus, the requirement of the national legislation for conducting SERs of other strategic actions (such as laws and policies) has not routinely observed; this is supported by author's experience in other NIS, where the application of SER to strategic actions other than plans and programmes is exceptionally rare;
- SERs mostly focus on compliance with formal provisions regarding the content of planning documentation, mandatory approvals and meeting environmental quality and design standards;
- at the same time SERs seem to occasionally reject activities on the grounds of their inadequate "environmental substantiation," i.e. an improper Environmental Assessment; thus, SER can be viewed as a "quality control" tool ensuring that some EA of strategic activities is conducted;
- even in the light of the previous finding, there is no evidence that strategic activities are modified in the course of their preparation as a result of "EA" (i.e. preparing materials for SER);
- the conditions imposed by SERs mostly refer to conducting subsequent project level SERs and to meeting environmental standards, but occasionally require the implementation of mitigation measures;
- socio-economic considerations or public participation do not seem to have any influence on either SER Conclusions or territorial planning documentation.

This analysis further supports the point (expressed, for example, in Stec (1996) and Cherp and Lee (1997) that SER procedures (at project- and strategic-level) are mostly focused on enforcing environmental quality standards and other formal requirements. This feature can be explained by a combination of the following reasons:

- The lack of time and resources of SER competent authorities to investigate the proposed activities in more detail because of the large number of activities being reviewed. Because the SER procedure is formally applied to all developments without discrimination, the number of SERs (at both project and strategic levels) in the NIS tends to be very high.

This wide application of SER naturally requires a simplified procedure which can only be, in most cases, limited to checking compliance with standards and formal requirements.

- The legacy of the Soviet central planning system from where the present NIS SER systems originate. All economic projects and plans in the USSR were highly standardised and appraised using standard criteria which worked relatively well in a society that lacked dynamics and innovation.
- SER experts are in the situation where they have to decide on the environmental acceptability of a proposed development without explicit reference to its social and economic benefits and without clear public participation and consultation mechanisms. The only way to avoid purely subjective judgements in such a situation is to compare the predicted environmental impacts to "objectively" determined norms and standards.

Thus it seems that despite intentions of the post-independence environmental legislation in the NIS to extend SER to all levels of strategic activities, it was the Soviet project-oriented system with its specific set of concepts, procedures and methods that was inherited by the NIS and being practised in reality. The question arises whether SEA elements and principles are incorporated in planning procedures other than SER, for example, in land-use or urban planning. Indeed, in certain cases TerKSOPs are elaborated alongside urban plans and serve to enhance environmental aspects of the latter (see, e.g. Elizarova, Bykadorov, et al. 1998 #510). However, it seems that consistent incorporation of SEA elements in the land-use and similar planning instruments in the NIS is highly unlikely. Most of the spatial planning procedures has been inherited from the socialist time when the development of a structured, accountable and participatory process with strong procedural checks was unlikely. The recently reformed land-use planning procedures could not incorporate strong SEA elements for the same reasons they were not included in the recent EA legislation (i.e. the absence of suitable prototypes and the incentives to replicate them). Furthermore, it seems that in the NIS some of the strategic planning itself has significant deficiencies in its procedural approaches, thus, making it difficult to imagine how SEA can be routinely incorporated in it (see, for example, the paper by Khotuleva and Cherp in this publication).

In addition to the historical explanation for the absence of strong SEA legislation in the NIS, there may be an institutional one. While project-level EIA procedures are "a burden" to individual, mostly private, developers (who until recently did not have a strong voice in law-making processes in the NIS), SEA is often viewed as an "encroachment" on the territory of government agencies who prepare and approve strategic

actions. It is not surprising, therefore, that SEA meets much more effective political resistance than EIA. In particular, spatial planning agencies refuse to “surrender” even part of their authority to other participants in the EA process. This institutional phenomenon even led the Sofia Initiative on EIA (Regional Environmental Center (1998)) conclude that “SEA processes are to be fully integrated within land-use planning processes, mainly because of the resistance of land-use planners” (p.5, emphasis of the author).

To summarise, the resistance of non-environmental governmental bodies and the absence of both a clearly defined international standard and an incentive to comply with it resulted in the SEA provisions in the NIS being much less specific and enforceable than the EIA provisions. The balance of interests may somewhat change in CEE if the draft EU SEA Directive is adopted. In this case, there may be enough pressure to adopt at least SEA provisions for certain plans and programmes. The prospect of introducing meaningful SEA provisions in the NIS is much more uncertain. It is likely that as long as SER remains the preferred model of Environmental Assessment and as long as Ministries of Environment overshadow all other actors in the EA process, there will be no prospects of extending it to strategic actions which are being prepared and approved outside Ministries of Environment. SER of strategic activities may still be routinely applied but is likely to be limited to checking the compliance of the lowest-level plans with formal environmental protection norms.

## 7. Recommendations

There is only a limited number of policy recommendations arising from the findings of the current brief analysis. To introduce meaningful SEA provisions in NIS countries the institutional resistance to it should be overcome. It can only be achieved if the concept of SEA is universally redefined as a tool for informing decision-makers, rather than a part of environmental permitting procedures. Such a change will be especially difficult to achieve because in the NIS environmental assessment (both project- and strategic- level) is traditionally considered as a mere add-on to the process of issuing SER Conclusions. Emphasising those aspects of SEA that contribute to sustainable development, not just to environmental protection, may increase the chance of its acceptance under difficult social and economic conditions of many NIS. Another challenge in introducing SEA will be to preserve the positive features of the existing land-use planning and environmental permitting procedures, neither “replacing” nor “duplicating” them with new SEA requirements.

Any policy recommendation on “improving” SEA systems in the NIS should be sensitive to the fact that key societal factors influencing EA systems vary across the region, thus, presenting different opportunities and

constraints for the development of SEA. Moreover, a researcher of SEA in CITs should be aware that though formal legal provisions may change swiftly in response to changes in the external context, it takes much more time for SEA practices, that are rooted in more conservative institutions, to adjust to the change.

Under any scenario, systematic analysis of SEA quality and effectiveness should guide policy choices in this area. The author believes that policy-relevant research frameworks and techniques should be developed taking into account specific features of transitional societies through applying the principles suggested earlier in this paper. At the same time, international approaches to evaluating SEA practices (e.g. Lee et al. 1999) should be more widely used. In addition, those countries that declare their commitment to sustainable development may want to examine the contribution of SEA through applying the three criteria specified in international studies, such as George (1999). An elementary comparison of EIA and SER systems (at the project level) using these criteria but focusing mostly on project-level activities is offered by the author in Cherp 2000d. However, a more extensive review of practices is needed to identify practical ways of increasing the contribution of SEA to sustainable development.

It seems that in addition to detailed understanding of the current SEA practices and institutions, there is a need to generate a policy commitment to strengthening SEA in the NIS. Such commitment can, for example, result from the adoption of an International SEA Protocol, such as the one currently discussed under the auspices of the Espoo Convention. Capacity building measures also seem to be in “short supply” in the region, particularly, it lacks an international fora, similar to the Sofia EIA Initiative (in CEE) which would allow addressing SEA issues in the specific NIS context.

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## Annex

TABLE 5

**Selected recent legal acts on environmental assessment in the Newly Independent States\***

<i>Country</i>	<i>Legal acts on environmental assessment</i>	<i>Year of adoption</i>
<b>Armenia</b>	The Principles of Legislation "On Nature Protection"	1991
	Law on Sanitary-Hygienic safety of population	1992
	Law on the Expert Review of Impacts on the Environment	1995
	<i>Law on Environmental Protection</i>	<i>DRAFT</i>
<b>Azerbaijan</b>	Law on Environmental Protection and Utilisation of Natural Resources	1992
<b>Belarus</b>	Law on Environmental Protection	1992
	Law on the State Environmental Expert Review	1993
	Instruction on the Order of Conducting State Environmental Expert Reviews	1995
<b>Georgia</b>	Law on Environmental Protection	1996
	Law on Environmental Permits	1996
	Law on State Environmental Expert Review	1996
	<i>Law on Environmental Impact Assessment</i>	<i>DRAFT</i>
<b>Kazakhstan</b>	Law "On the Protection of the Environment"	1997
	Law on Environmental Expert Review	1997
	Tentative Instruction on Procedure of OVOS of Planned Activities	1993
	Instruction on the Procedure of SER for pre-Project and Project Documentation	1997
<b>Kyrgyzstan</b>	Law on Environmental Protection	1991
	Law on Environmental Expert Review	1999
	Law on Environmental Protection	1999
	The Instruction on the Order of Conducting OVOS	1997
	The Instruction on the Order of Conducting SER	1997
<b>Moldova</b>	Law on the Protection of the Environment	1993
	Law on Environmental Expert Review and the Assessment of Environmental Impacts no. 851-XII	1996
<b>Russia</b>	Law on Environmental Protection and amendments	1991, 1993
	Regulations "On the Assessment of Environmental Impacts in the Russian Federation" (in force until May 2000)	1994
	Instruction on Environmental Substantiation of Economic Activities	1995
	Construction Norms and Rules SnIP 11.01.95	1995
	Construction Rules SP 11.01.95	1995
	Federal Law on Environmental Expert Review	1995
	State Environmental Expert Review procedures ( <i>reglament</i> )	1997
	Regulations on the Assessment of Environmental Impacts of Economic and Other Activities in the Russian Federation (Executive Order 372 of 16.05.2000)	2000
<b>Tajikistan</b>	Law of the Republic of Tajikistan on the Protection of the Natural Environment	1993
	Regulation on State Environmental Expert Review (Expertise) No. 156	1994
	<i>Law on State Environmental Expert Review</i>	<i>DRAFT</i>
<b>Turkmenistan</b>	Law on State Environmental Expert Review	1995
	Law of Turkmenistan on Nature Protection	1991
<b>Ukraine</b>	Environmental Protection Act	1991
	Law on Environmental Expert Review (Expertise)	1995
	The Law on Scientific Expert Review (Expertise)	1995
<b>Ukraine</b>	Structure and Content of Documents on Environmental Impact Assessments	1995

*Continued on next page*

TABLE 5 continued

**Selected recent legal acts on environmental assessment in the Newly Independent States\*** continued

continued	(OVOS) in Designing and Construction of businesses, houses and buildings. Main designing principles. DBN A.2.2-1-95	
<b>Uzbekistan</b>	Law on Nature Protection	1992
	Instruction on the Order of Conducting the State Ecological Expertise	before 1995
	Instruction on the Order of Carrying out OVOS	before 1995
	<i>Law on State Environmental Expert Review</i>	<i>DRAFT</i>
<b>Mongolia</b>	Law on Environmental Impact Assessment.	1997
	Law on Mineral Resources	1997
	Law on Environmental Protection (chapter 2. Article 7-9).	1995
	Government Resolution No.121 on EIA (not currently in force)	1994

**Sources:** Cherp 1999, 365; Cherp 2000d, 112-116, Cherp and Bonde 20001

\* For an up-to-date record of legislation, please see <[www.personal.ceu.hu/departs/envsci/eianetwork/legislation](http://www.personal.ceu.hu/departs/envsci/eianetwork/legislation)>.





# SEA Application for Spatial and Regional Plans and Programmes

**The Application of Strategic Environmental Elements in Land-use Planning in Norway: Small Steps to Improvement** ■  
Ingvild Swensen, Norway

**Strategic Environmental Assessment of Regional Land-use Plans: Lessons from Poland** ■  
Urszula Rzeszot, Poland

**Strategic Environmental Assessment of Varna Municipality Development Plan** ■  
Vanya Grigороva and Jacqueline Metodieva, Bulgaria



# The Application of Strategic Environmental Assessment Elements in Land-use Planning in Norway: Small Steps to Improvement

Ingvild Swensen, Norwegian Ministry of the Environment

*In order to be effective, strategic environmental assessment (SEA) needs to be integrated with strategic decision-making. Usually, this integration is supposed to happen "at appropriate stages." (see Lee and Walsh, 1992, and Sadler and Verheem, 1996.) In this article we discuss both the idea and application of these appropriate stages. The idea of appropriate stages indicates an orderly decision-making process, where the most strategic questions are asked and answered at the top of the hierarchy. Our empirical work shows that this is not always the case. The examples are collected from recent research and development of environmental concerns in land-use planning in Norway.*

## 1. Introduction

At a general level, SEA is a structured process intended to strengthen the role of environmental issues in decision-making (see Tonk and Verheem, 1998). The decisions with which — or decision-making processes into which — SEA must be integrated in order to work will vary. Thus there are strong arguments for a description that allows many approaches, designed to obtain the same ends, to live under the same name. The SEA workshop at IAIA's 1997 conference is a case in point: SEA covered the environmental assessment of Sydney's and Cape Town's bids for the Summer Olympics (see Granger, Morris and Cox, 1997), large-scale policy development such as trade agreements (Howell and Shuttleworth, 1997), land-use planning (Therrien-Richards, 1997; Tortto, 1997), and was presented as a means of promoting sustainability (Partidario, 1997).

From the array of decisions and processes it follows that in order to be useful SEA must also be flexible. At the same time we need to define SEA, or failing this, give the process or concept a content that makes it possible to talk about, discuss the development of, and evaluate SEA. Lately this discussion has centred on

SEA elements, and in general the following elements should be included:

- documentation;
- assessment procedure;
- all important impacts should be assessed;
- relevant alternatives should be assessed;
- participation for the concerned public;
- follow-up.

These elements are taken from project EIAs, and should not be assumed that they will work equally well in a less well-defined decision-making setting such as planning. We nevertheless found the above useful in our quest for impact assessment in planning situations.

In addition to these elements, it may be useful to have an idea about the timing of SEA. Exactly when in the decision-making process should SEA take place, or what kind of decisions should be tied to it? A common approach is to state that the SEA should take place early in the decision-making (or planning) process, and necessarily before the consent decision (Lee and Walsh, 1992; Sadler and Verheem, 1996). Given this wide framework, it may be useful to discuss practical applications in this light: where does SEA work, and are there any general conditions that should be met?

This paper covers quite a diverse set of case studies and observations. None of them describes, evaluates or gives conclusions about a formal, initiated SEA process. Rather, we have looked at existing planning procedures at several levels; regional comprehensive planning, local land-use planning, and sector planning, and attempted to find the strategic elements, the SEA elements, and barriers to SEA. Throughout we have attempted to identify limited, practical steps that will enable us to tinker with existing routines, rather than establishing new ones.

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This paper is an abridged version of a paper presented in 1998, when the author worked at the Norwegian Institute for Town and Regional Planning. The paper is based on several case studies and projects in Norway. Some of these are parts of projects in all the Nordic countries, not all of which the author has actively participated in. The work in hand is an attempt to summarise the findings and find some common trends that may tell us something useful about SEA.

**Author's note:** I would like to stress that the ideas presented here are not necessarily in accord with the views of the authors mentioned. I have made my own interpretation of the works of others, and would like to thank the following for their generous support: Tor Lerstang at the Norwegian Institute of Transport Economics, Arne Tesli and Bjorn Moen at NIBR, Erik Plathe in Asplan Viak, and finally the other participants in the Nordic project: Mikael Hilden, Helena Valve, Salvor Jonsdottir and Berit Balfors. The good ideas stem from them; any misinterpretation is solely my responsibility.

### 1.1 Reasons for strategic environmental assessment

There are usually three reasons given to support the application of SEA. The first is to strengthen project EIA. The second is to ensure that environmental issues are raised connected to the important decisions concerning whether, where and what type of development should take place. In this scenario effectiveness is often brought forward, as SEA may significantly reduce the need for and extent of project EIA. (This factor is also referred to as “tiering.”) The third reason put forward is that SEA is needed to address cumulative and large-scale effects (see Sadler and Verheem, 1996).

The first two reasons outlined above are tied to the concept of hierarchic planning and to tiering, and are often associated with the terms “policies,” “plans” and “programmes.” Even though these are not precise terms (see Lee and Walsh, 1992, note 1), they are parts of a decision-making hierarchy where policies usually cover more strategic issues than plans or programmes, and where a plan or programme is often rooted in a policy. Policies will not be dealt with in this article, but it is worth repeating Elling’s cautionary note that “Policies [...] is a term that may cover a host of different proposals, intentions, and ideas, and they are given generalised forms both in means and ends. These are seldom specific to a degree to make SEA meaningful.” (TemaNord 1996: 538, 9). The same issue is raised by Sippe (1996, 7), and by Verheem (1992). However, both plans and programmes are specific enough to be assessed for environmental impacts, and for the purposes of this work the most important aspect is that they normally follow some kind of process into which SEA can be integrated.

## 2. Issues and Experiences in Norwegian Planning

### 2.1 Regional comprehensive planning

Whereas county planning is not formally an SEA process, recent developments and national initiatives — such as guidelines from the MoE — have made the environment a more central aspect of the planning process (see MoE: T-1/94). The guidelines for both the 1992-95 plans and the plans covering 1996-99 stressed that the plans should seek to incorporate economic growth with sustainable development (T-1/94). To what extent this also includes the assessment of environmental impacts is one of the main questions.

### 2.2 Strategic elements?

In this paper, a decision is defined as strategic if it influences subsequent decisions. According to this definition, are county plans strategic? The county plans do fulfil the first premise; that is, they are normally prepared well before local planning processes. Whether

they also fulfil the second is more doubtful, as their control of subsequent plans is of a formal but not legal nature (cf. Ortolano, Sheate and others on the control issue). The lack of legal sanctions applies both sideways and downwards: the State’s regional representatives as well as the municipalities may, in practice, act contrary to the county plans without any serious reaction from the county (see Nenseth and Naustdalslid, 1992, 46). The county can object to municipal plans if the local plans differ significantly from the county plan. In practice, however, it is often hard to define certain developments as “according to” or “differing from” the county plan, as the county plans are traditionally encompassing in nature and treat principal matters rather than land use. However, some county plans, and some regional plans for parts of a county, contain guidelines for subsequent land use. These are easier to use as grounds for objections to local plans. The county has fewer opportunities to formally influence the activities of the state representative bodies.

### 2.3 SEA elements

The county planning processes studied did not include formal environmental assessment. Still, co-ordinated baseline information about the environment provided a good basis for discussions. Also, in more general terms, the alternative future development possibilities were discussed. The attempts at assessment were documented in the plans, as were the descriptions and baseline information. This baseline information was an important starting point for participants. (When/where did the events discussed in this paragraph take place?)

The formal basis for participation lies in the planning and building act of 1985, where the right to be informed and to voice an opinion is set out. Draft plans are made public, and should be in a form suitable for debate. Also, a draft plan must be sent to public and private parties with possible interest in the plan. (PBA, § 19-4). These participants can then comment on the plan. In the county planning processes we studied, the planners more actively sought opinions and support from those they considered important actors, focusing in particular on politicians and the public. The follow-up of the plan, which is included in some SEA definitions, is formally weak. However, the plans are revolving and have their effectiveness assessed every four to five years.

### 2.4 Comments

As noted by Ortolano (1993) and Sheate and Cerny (1993), control and influence comes in many forms. The main categories are legal/judicial control on the one hand, and other methods of influence on the other. In practice, the difference between these two categories will vary. In the context of this report, the lack of legal



influence means that county planning processes must be designed specifically to enhance the influence over planning at lower levels. As the county plans are not legally binding (though they serve as grounds for formal objections at later stages in the planning process), the real strategic power of county planning lies in co-ordination. Co-ordination means priorities between goals/objectives/plans that are in obvious conflict. The county planning process could, and should, be an arena and a stage where politicians can prioritise between conflicting goals (one example being between certain economic developments and infrastructure, and sustainability). However, these processes tend not to contain clear priorities. The plans have strong features of policies. That is, they serve as a basis for activities rather than give detailed preparations for activities.

There are several explanations for this. First, the county's strategic position midway between the national and the local level is not solely positive, and can often be summed up as being "between a rock and a hard place." The counties are supposed to make frameworks for municipalities who would rather not be constrained by county plans and for the regional representatives for national bodies who have long, independent traditions and who may also receive mixed signals from county and central administration. This applies specifically to the transportation and agricultural sectors (see Nenseth and Naustdalslid, 1992, 46, 48; later supported by Falleth and Johnsen, 1996).

Viewed from the outside, the counties' task may seem overly ambitious. Co-ordination horizontally (between sectors) and vertically (between levels within a sector) are well-known solutions to problems, but are also very hard to achieve (see Kleven, 1994, 95, 96). Still, the counties' position and potential is so alluring that serious attempts to introduce formal SEA procedures should take them into account. In order to increase effectiveness, the county planning process would benefit from the description of clear alternatives. These could take the form of scenarios, all with the present situation as their starting point. The scenarios should focus on problem solving; the content should be discussed in the county. Environmental assessment, in some form, should be integrated into this. The scope and detail should be carefully adapted to the kind of choices inherent in the scenarios.

Another necessary element is early and active co-operation with regional state representatives as well as municipalities, in order to create plan ownership which would increase the chances of the plan being followed up.

### 3. Local Land-Use Planning

Local land-use planning consists of a two-tier plan system in which both levels are legally binding. The land-use master plan designates areas to specific pur-

poses. The more project-oriented plans are called city plans. The latter also regulate specific uses at a more detailed level and include regulations of the activity, building style, content, green areas and so forth in the area. Formally, only those plans that are tied to projects that are included in the EIA regulations are assessed for environmental impacts. The Norwegian MoE has commissioned a study in order to sum up the experiences of five municipalities that have independently undertaken some form of SEA.

According to the participants, the local planning processes lacked, both formally and in practice, the following EIA/SEA principles:

- a plan for impact assessment in which the public could influence which impacts to study;
- the discussion of alternatives;
- guidelines for SEA content.

The study concludes with very simple and practical measures that would improve existing planning practice:

- early clarification of important environmental concerns that may give premises to the planning process, and to document the result in a "planning programme";
- political goals and terms clarified as to the environmental "ambitions" of the plan;
- integration of environmental terms, development of alternatives and description of relevant environmental impacts in the plan;
- early consultations with private and governmental stake holders;
- plan description, included the environmental terms, impacts and planning premises to secure environmental concerns;
- important choices with environmental aspects to be published together with the plan.

#### 3.1 Case

An example of the use of these principles is the planning process that took place in a community with conflicting development and environmental interests in an ecologically vulnerable mountain region. The strategic choices were to protect, to develop, or to choose any combination in between. (National guidelines and some formally protected areas restricted the choices.)

The SEA included registration of natural resources (quite good coverage from regional sources, some additional surveys). The impacts generated by changes in existing patterns, single projects, better standards in existing homes, and infrastructure development (especially roads in connection with forestry, and energy transmission lines) were assessed. The process resulted

in some clear strategies that regulate future development in the area. Several stake holder groups participated. However, the participants felt that the time restrictions were severe (six to nine months), and would have preferred a longer planning period.

### 3.2 SEA and plans: conclusions and suggestions

Our main conclusion is that SEA can, with relatively small changes, be integrated with the ordinary planning procedures in regional planning, and sector planning. In addition, we believe that SEA can probably be integrated at all levels, and that the need to fix the appropriate level is less pronounced than we anticipated. The changes required in order to integrate SEA into existing procedures are:

- to state an environmental ambition for the planning endeavour;
- to clarify, through participation, the important environmental issues, and to incorporate the assessment of these into the plan documentation; and
- to make sure the decision is made public.

The important issue, in our opinion, is to keep the approach simple.

## 4. Concluding Remarks

### 4.1 Obstacles to planning and programming strategic environmental assessment

While SEA is often “called in” to solve problems, project EIA is poor at achieving a solution (such as cumulative impacts and alternatives). In addition, SEA is a challenging enterprise. Three challenges are of particular interest.

First, there are institutional/political barriers to SEA. This involves the external framework into which a SEA system is worked, and includes obstacles to open decision-making and lack of political support. Despite SEA's promise to solve many problems in existing planning practice, many actors in the planning and decision-making process are negative about SEA. Most notably there are two types of actors: the sector ministries, which see SEA as a threat to their methods of plan formulation; and the municipalities, which view SEA as a centrally steered planning process which pre-empts their powers to make locally generated and (politically) sound decisions. In both instances, politicians also tend to view SEA rather suspiciously. As a result, it is these actors who need to be sufficiently interested in order for SEA to work.

The second challenge is related to methodological factors, such as how to assess, predict and present the

impacts of relatively broad development choices.

The final challenge confronting SEA practice is its flexibility. Whereas this is necessary in order to integrate SEA with policy-making, flexibility — in the sense of a lack of fixed procedures — is problematic first and foremost in terms of public participation. Lacking formal procedures, it is less clear when, how and to what extent the public can be involved in policy development. In the formulation of policy, openness and participation is problematic, and sometimes participation is not even desirable at this point. However, we find that transparency is a problem more connected to the policy level, and easier to deal with at the plan/programme level.

An additional suggestion to the points made above is to develop procedures to secure follow-up of the intended plans through implementation, in particular mitigation measures agreed upon and adapted through the SEA/EIA process. However, this has not been part of the study undertaken here, and is clearly a stage in the planning/implementation process we should focus on in the future.

This point aside, we have encountered and become more aware of the problems tied to the “strategic power” of different levels. Especially in land-use planning, the power of decisions has relatively little harmony with the idea of hierarchic planning, and thus leaves the later development of strategic choices (in the sense of control) to the local level. Even so, the county plans may be useful, though we suggest that the SEA there should take the form of scenarios, and not necessarily include detailed assessment. At the same time, we see potential for the county plans to become more strategic, through the active use of formal instruments (i.e. the control over local plans) and by seeking integration and co-operation in order to create ownership of the plans.

When we talk of strategic environmental assessment, we most often use strategy in the original sense of the word. This is why we often use the “whether, where, what and how” typology when discussing the kind of decisions we want SEA to be integrated with. This is also why we use effectiveness arguments for SEA, assuming that SEA at the “whether stage” will limit the need for an SEA or EIA at the “where and how stages.” In fact it is not even certain that there are such stages in the decision-making process. Strategic decisions may appear at any geographical level and at any stage in a planning process. Even though a policy decision would influence the field more effectively than decisions at a lower level, even at lower levels choices may be of a more or less strategic nature. One example is transport policy, where decisions at a higher level would (ideally) clarify the ambitions of the relative importance of public transport and private

transport. Regional and local planning decisions may still have an important impact on the public's real choices between the two means of transport, through land-use decisions, the location of public functions, and permitting policy.

An element of strategy is thus connected to all levels of planning. Consequently, we cannot easily state that a regional management plan is at all times more strategic than a local management plan. The main point is to use the plan level that effectively controls the geographical area of the phenomenon/issue. However, if the issue has no real geographical location, the aim should be to treat environmental (and other concerns) at the highest possible level.

In future discussions of SEA it may be useful to make a distinction between the environmental assessment of strategic decisions, or of single events, and environmental assessment as integrated into existing decision-making processes, often as part of a hierarchical planning process such as land-use planning processes. Whereas most countries have hierarchical processes — in either land-use planning and sectoral planning, or both — in practice it is hard to pinpoint the strategic decisions and when and where these occur. As far as we can judge, SEA has so far focused on hierarchies rather than strategies. This could well be worth remembering in future discussions of SEA.

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# Strategic Environmental Assessment of Regional Land-use Plans: Lessons from Poland

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## 1. Introduction

Strategic environmental assessment (SEA) is defined as “the formalised, systematic and comprehensive process of evaluating the environmental effects of a policy, plan or programme and its alternatives, including the preparation of a written report on the findings of that evaluation and using the findings in publicly accountable decision-making.” (Therivel et al, 1992.)

In Poland the practice of EIA is relatively young, starting in the mid-1980s and developing further after the formal introduction of EIA regulations in 1990. Formal requirements for environmental assessment of local land-use plans introduced in 1995 are the only formal regulations of SEA-type currently operating in Poland.

## 2. Environmental Issues in Polish Planning Traditions

While the memory of the centrally planned era is still alive, planning traditions in Poland are actually of an older and different origin. Among many professionals the 1920s are considered a golden age of Polish urban planning. Many cities are still based on the general assumptions prepared then. Despite numerous upheavals and transformations these early methods have stood the test of time. As a general rule the environment was taken into account in the plans of the period as an element vital to human health and well-being. Using today’s terminology this approach can be placed midway between conservation and sustainability. As a result of the approach used in 1920s greenery played an important role in the spatial structure of Polish cities.

It is only during the last decade, when market considerations including the price of land in cities became a paramount element in local decision-making that new developments have replaced green squares. Nevertheless the standard set by the 1920s plans constitutes the reference level for the quality of later plans and has contributed to the level of know-how.

## 3. Timing of Central Planning

The characteristic timing of central planning in Poland in the decades after the Second World War can be discussed using the case study of Nowe Miasto Tychy.

This is based on Hanna Adamczewska-Wejchert’s paper presented at the 26th Congress of the International Society of City and Regional Planners, The Environment and the City, held in Warsaw, August 1990. Nowe Miasto Tychy (the name means “the new town of Tychy”) was built from scratch to serve as one of the “satellite cities” for the mining area of Slask. The idea, popular at the time, was that people working in the mines and heavy industry (the dominant type of employment in the region) would, as compensation for their difficult working conditions, be given accommodation in new towns located in clean environment from which they would commute to work. The “residential” towns would be located in a belt around the industrial/mining region, separated from it by a forest belt.

Nowe Miasto Tychy was planned as a city of 100,000 inhabitants. The plans were prepared in “laboratory” fashion: i.e. using state-of-the-art techniques but with no public consultation. The plan (which won a competition) was based around the natural landscape: an important role was assigned to environmental values. The town was to be located in an existing forest clearing and the design of the city took into account natural watercourses and the immediate landscape.

As the plan was implemented it underwent modifications. Some modifications were caused by changes in economic possibilities (i.e. budgetary restrictions) and administrative regulations (such as restrictions on the opening up of new development areas). Further changes were generated by the “unexpected” element of pressure from inhabitants, who were representing their own interests (the city changed from the object to the subject of the plan). These factors had not been adequately allowed for in the original plans.

The stages of development can be represented as follows:

1951-64: implementation of the project on a budget that was reduced every year;

1964-71: cutting of corners on architectural designs;

1971-80: prefabricated structures built, lack of funds for the maintenance of green spaces;

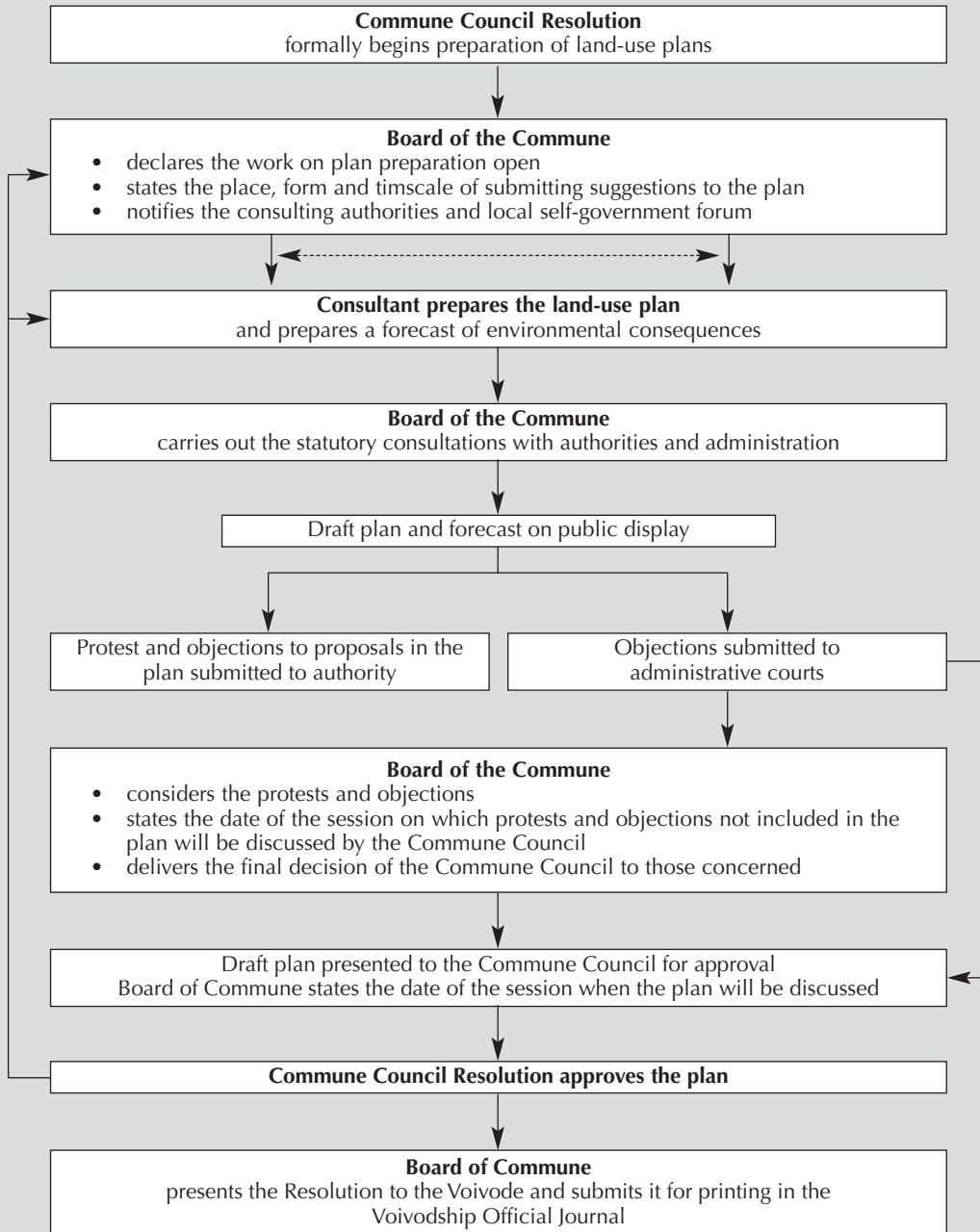
1980-90: new developments encroach on green areas.

Where a conflict situation emerged it was to a large extent perceived as a “battle for the city” between the



FIGURE 1

**Key features of the formal process of preparation of land-use plans**



team of urban planners working on the project and local inhabitants. Public protest took the place of public participation. In time the general assumptions underlying the original location were questioned. Commuting was no longer acceptable for many people and increasing pressure called for significant local employment. The idea of "satellite" cities no longer seemed relevant, and the second generation of Nowe Miasto Tychy inhabitants wanted to find both housing and employment in their home town. Changing legislation imposed severe restrictions on changing land-use from agriculture, which forced implosive city developments and encroachment on city parks, etc. As a result the city reflects more the contemporary power of different pressure groups and changes in government policy rather than a long-term vision of development. Unfortunately environmental issues often gave way to considerations considered more pressing or important, such as meeting the high demand for housing or creating jobs. Illustrations 1 and 2 reflect the difference between the original plan (illustration 1 reflects the situation in 1961) and the resulting implementation (illustration 2 reflects the situation in 1988). White areas on the plan represent housing developments.

#### 4. Transition Period: the 1990s

The period from the second half of the 1980s to the early 1990s is when definite economic transformation started in Poland. This stage in the evolution of the planning system will be discussed using the regional plan for Katowice province, based on Janina Szczepańska and Elzbieta Joseph-Tomaszewska's work presented at The Environment and the City congress mentioned above.

Katowice province lies in the south of Poland. In the mid-1980s the region took the nation's top position in terms of both production coefficients (mainly mining and heavy industry) and indices of environmental degradation. The region covers 2% of Poland's area, is inhabited by over 10% of the entire population and 87% of all residents of the region live in cities. The province generates 98% of Polish coal output and was declared an environmental disaster area due to severe pollution problems.

The regional plan was based on the conclusions drawn up in a catalogue of values recognised by the local community and development conditions of the region. In both cases environmental considerations ranked high. Several scenarios were prepared, ranging from survival to desired quality of life achieved in a sustainable manner. Draft versions of the plan underwent extensive public consultation and only after this process were the corrections approved by the regional council. From the very beginning the plan was approached from the bottom up: a citizens' initiative was one of the main reasons for undertaking the plan.

The methodology of the preparation of the plan is presented in diagram 3. The following strategic aims were set: quality of the environment, maintaining local cultural heritage, access to goods, services and information, socially effective production, local self-government. A set of problems was also identified (which could be resolved through the realisation of the objectives). The problems identified were: environmental, communal (urban infrastructure), integration of regional community, spatial concentration, production restructuring. Because of the importance of environmental issues five groups of environmental policies were adopted: protection of non-degraded areas; limiting the environmental exploitation trends; reducing environmental pollution loads; natural compensation and recultivation; creating conditions for active recreation in residential areas.

The effects of the plan (aided by the recession in heavy industry and the general trends of economic transformation) are apparent today in a perceptible improvement in the state of the environment.

#### 5. Current Regulations

SEA regulations appeared in 1995 and (formally) only concern local land-use plans. A forecast of environmental consequences must be prepared in conjunction with every new plan and this is put through the consultation process (including public display) together with the plan. The responsibility for preparing the forecasts lies with the authority preparing the document. The outline of the preparation process of land-use plans is presented in diagram 4.

The current legislation (i.e. the environmental protection act) also introduced the obligation to prepare park protection plans for landscape parks. Environmental protection (sometimes considered closer to environmental conservation) is the basic aim of the plan. It is often perceived as a second type of mandatory SEA procedure.

For various reasons strategic documents or plans sometimes undergo voluntary procedures very similar to the general idea of SEA. Some examples of this include the National Transport Policy and the Green Lungs of Poland strategy (prepared by an NGO for the Union of Provinces, which ordered the strategy). However, in the case of national policies and other formal government documents the procedure cannot be considered SEA since it is usually prepared after the document has been approved, usually by pressure groups from outside the government. Therefore, regardless of the quality of the work, it may no longer be used as a decision-making aid (the decisions have already been made at this stage). The work, if carried out by a well-connected pressure lobby, can still sometimes influence the modification of the decision (i.e. through the creation of parliamentary pressure).

## 6. Looking to the Future

A project has been undertaken to prepare a framework EIA act, which will include SEA provisions. The project, now at the final consultation stage, concerns a framework EIA and the access to information act. Separate chapters concern EIA and SEA, with delegation for executive orders to fill in the details.

According to this draft, "environmental forecasts" are to be prepared for all drafts of government acts and decisions and all official decisions (at whatever level of government) in relation to: industry, agriculture, tourism, forestry, waste management, land-use plans, transport and water management (including maritime).

Legislators now consider SEAs, or similar provisions, a necessary part of environmental legislation in Poland.

## 7. Conclusions

In order to allow for sustainable long-term implementation, land-use plans have to take into account the following:

- regional and sectoral development plans;
- local residents' priorities;
- various long-term development scenarios.

SEA can play an important role in integrating the concerns of the various actors involved. However, the later the initiation of SEA in the planning process the greater the limitations for possible fundamental alternatives to the problem.

Planners and local authorities should take a more pro-active role in the SEA process. A passive "acceptance" of the right of the public to intervene is clearly not enough.

SEA (and in particular SEA of land-use plans and EIA of individual developments) should be made 'aware' of each other. SEA should take into account the conclu-

sions of EIA in the region, and good EIA practice should refer not just to the land-use plan (which is mandatory) but to the SEA as well.

Two trends are visible in current SEA: one is heavily based on planning traditions and methodology, and the other on EIA methods. Neither can be considered as better or more correct than the other, and the aim should be to integrate the two.

Experience in Poland seems to demonstrate that the application of EIA principles to policies, plans and strategies is possible, even without formal legal requirements to do so. However, the legislation is necessary to make sure that findings and conclusions of SEA are taken into account by decisionmakers.

Many of the planning tools can be adapted to encompass environmental considerations early in the plan preparation process. Whether or not SEA should be separated from the creation of the plan is a matter for further discussion, since SEA is best started at the earliest stages of the process. This would allow the findings of SEA to be used as feedback information in the planning process as it is often difficult to separate the plan from the assessment.

### ENDNOTES

<sup>1</sup> This was the situation as of November 2000. New regulations entered into force in January 2001 and are discussed later in this text.

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# Strategic Environmental Assessment of the Varna Municipality Development Plan

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*The Varna Municipality Development Plan is a part of a project financed by the World Bank for the development of the Bulgarian Black Sea coast. This large-scale World Bank project includes the creation of an Act for Management of the Black Sea Coast and the surrounding area; the elaboration of the regional structure for the development of the Black Sea coast and the municipal development plans of the 14 municipalities on the Black Sea coast. Pilot strategic environmental assessments (SEA) were carried out for 14 municipal development plans. These were the first cases of the practical application of SEA in Bulgaria. When conducting the SEA together with the planning a number of problems arose, especially in the following areas: the determination of the scope of the environmental impact statement (EIS); the organisation of meetings for public discussions on decision-making according to environmental impact assessment (EIA); the fulfillment of the conditions stipulated in the decisions according to EIA.*

## 1. Introduction

### 1.1 Varna Municipality Development Plan

The provisions of the Varna Municipality Development Plan are that the municipality continues to be a resort centre, with tourism in the littoral zone as a priority development. This involves reallocation of some industries away from the coastal area and concentrating them in existing industrial zones, without developing new large-scale production bases.

The social and technical infrastructure is a well-developed one regarding the water supply, sewerage, heat-supply, and transport. No specialised social investigation has been undertaken except for the one referring to the health of the population (high mortality rate) and the development of the health infrastructure (which is very good). The cultural and historical heritage has been well studied and recorded.

The individual components of the environmental setting have also been extensively studied within the Development Plan. The quality of the air and seawater around the city of Varna do not meet the normal requirements. Nevertheless, the municipality as a whole has good natural potential for development in view of

its eastern border with the Black Sea and the presence of areas with preserved flora and fauna.

Environmental assessment has been prepared by independent, licensed EIA experts. The assessment's role is to serve as a basis for a preventive control regarding the foreseen activities.

### 1.2 Position of SEA within planning processes

SEA of plans should be carried out according to the requirements of the Environmental Protection Act, the EIA Regulation, the Territorial and Settlement Planning Act and the special Regulations. The environmental legislation stipulates that the EIA procedure for plans and regional and national policies for development should be determined case by case by the Minister of the Environment and Water, taking into account the opinion of the other ministries concerned. This procedure has not been applied till now. SEA is required for plan approvals as the EIA decision implies the co-ordination of the plan in terms of fulfilment of the environmental requirements.

As EIA is undertaken only in the first phase of planning the conditions stipulated in the EIA decision are compulsory for implementation when assigning the elaboration of the final stage of the plan. The plan approval is the base for the land-use planning at the local level (cities, villages); waste treatment; flora and fauna disturbance/permits; protection of critical geographical features.

### 1.3 EIA process in Bulgaria

The Bulgarian EIA system is based on Chapter 4 of the Environmental Protection Act, adopted in 1991. The stipulations of the Act are elaborated and the procedures on EIA are defined by regulation.

The main purpose of EIA is (through an analysis of the existing environmental conditions) to evaluate the integration of the policy, planning and project provisions with the steady development of the region/territory and the improvement of the surroundings. The key principles of EIA are:

- independence of the experts carrying out EIA, (i.e. they are different from the plan/project designers);
- publicity of the procedure;

- compulsory holding of meetings for the public discussion of EIA results;
- a possibility for a legal appeal against decisions.

The application of the EIA procedure is related to other final decision-making processes and is an obligatory element as the approval of a plan or a programme, issuing of construction licenses, etc.

The EIA is undertaken for national development programmes, territorial development and urban development plans, new buildings, reconstruction and the modification of projects, as listed in the Annex of the Environmental Protection Act. The Annex also determines the threshold limit for projects subject to mandatory EIA.

EIS includes a description of the conditions and the forecast of the impact on the environment according to the following components: air; water; flora; fauna; geological basis, relief and soils; landscape; sanitary-hygienic environmental conditions; cultural heritage.

In terms of the scope of the EIA, it is compulsory to present the reasons for the proposal; alternatives (for place and technology); and measures for decreasing the negative consequences.

The organisation of public discussions is a compulsory element of the EIA procedure. This is an obligation of the competent body, which makes the EIA decisions. The documentation is presented on site, where upon the independent experts publicly present their assessment and respond directly to questions from the public.

In Bulgaria the responsibility for creating a normative EIA settlement lies with four ministries: the Ministry of Environment and Water; the Ministry of Territorial Development and Public Works; the Ministry of Agriculture and Forests; and the Ministry of Health.

The competent bodies for reviewing and evaluating the EIS are the Ministry of Environment and Water, the Regional Inspectorates on Environment and Water (there are around 15) and the municipality bodies (around 250). Nevertheless, an EIA decision can only be taken by the Ministry of Environment and Water and the Regional Inspectorates.

The final decision for the approval of the plan or the permission for the realisation of the project is taken by the Ministry of Regional Development and Public Works and the municipality bodies.

## 2. Analysis of Varna Municipality Development Plan

The subject of the analysis is the procedure of the planning process and the SEA. These refer to the carrying out of the procedures in the spatial planning process with the procedure according to EIA.

### 2.1 Approaches taken

The elaborating of spatial planning is based on the analysis of the possibilities of the territory; the existing environmental conditions and the social infrastructure; the governmental understanding of the territory. The municipality authorities plan activities to encourage steady development of the territory and the improvement of the vital conditions (i.e. a checklist method and GIS).

The elaboration of EIA is based on the analysis of the existing conditions of the environmental elements and the expectations of the project (i.e. a checklist method).

The duplication of the analysis of the existing environmental conditions within the planning as well as EIA causes a discussion who should carry it out — whether both groups at the same time, or whether just by one. The practical approach applied in this case was that EIA experts used mainly to the investigations of the designers and EIA contribution to the detailed analysis was a minimal one.

The discrepancy lies with the procedural basis for planning and for EIA. Both procedures are implemented by different administrations that do not consult each other. For instance, both procedures require public participation when reviewing the final planning and EIA documentations. The preparation and organisation of the public participation is the same one and consists of publishing of an announcement in the press, free access to the documentation during one month, a meeting for discussion of the results. Usually, there may be two different public participation processes. The practical approach applied in this case was that both institutions responsible for planning and for EIA co-ordinated organisation of the public meeting (to discuss the results of the planning and EIA). This can be regarded as a success.

## 3. Major Issues During the SEA Process

Disputable principle moment were:

- determining the scope according of the EIA, and
- information supply.

In determining the scope according of the EIA (and especially of the part: Description and Analysis of the existing environmental conditions) the dispute was based on the non-conformity of the legal provision for territorial planning and environmental assessment. A compulsory condition in the planning is to carry out a study of the existing environmental conditions in order to settle the development framework for the territory. SEA, which carried out on already developed activities, should also reflect the existing situation.

As information supply regards, the method of registering the condition of the environmental components is also open to discussion. The key question is: should the study be based only on the available data, or should



specific research and investigation be used? This is a major question as it applies to all EIA applications and has not been settled yet. For this article only the existing data is used due to the limited time and means.

Under discussion in this case are the following questions:

- deciding on methods of waste treatment, and
- means for water-supply and energy sources.

The Varna Municipality Development Plan does not reserve territory for waste storage. The controversy lies in the approach to deciding on methods of waste treatment. According to planners regional waste disposal should be used due to the lack of free space within the municipality, while EIA experts advocate a local solution, bearing in mind the potential for effective control. Despite the stormy discussions on the issue no concrete solution has been reached.

Water-supply and energy sources (e.g. the Varna thermal-power plant) are out of the municipality's territory and as a result it is not possible to discuss the organisational or technological activities required for their improvement or development. The problem is rooted in the imperfect principle of the territorial division of the municipalities. This has been solved by assigning the organisational planning of the three neighbouring municipalities (Varna, Beloslav and Aksakovo) to one panel of designers, while the elaboration of EIS for the three plans is undertaken by a group of independent experts. In this way territorial scope is widened and the forecast and proposals are made more realistic.

#### 4. Results and Implications

The interested parties provided the following comments on the SEA case.

- *EIA experts*: Implementation of the EIA procedure for plans is necessary. EIA should be prepared at the earliest phase of planning. The scope and the place of EIA in the planning procedure must be regulated correctly in the legislation.
- *Decision-makers*: This was the first attempt at the practical application of SEA in Bulgaria. The major problem is a lack of correspondence between the

Planning Act and the Environmental Protection Act. There was no public interest during the EIS review.

- *Project designers*: The aims of territorial planning and EIA are the same — the sustainable development of territories. The first part EIS scoping completely covers the planning research. The scope of the EIA should be short and compliance with the planning process must be voluntary.
- *NGOs*: The EIA procedure is useful for plans because public access is guaranteed.

As a result of the above findings the Ministry of Environment and Water has changed the EIA Regulation in relation to the scope of EIS and the role and place of EIA in the planning process.

There are many problems regarding the access to background information for EIA (input data and final results of surveys carried for the planning) since most of the information is classified as commercial secret and access to these data is clearly regulated.

#### 5. Lessons Learned

It is beneficial to the decision-making process if all authorities work in coordinate manner with one another.

The EIA must be undertaken either parallel to or before the planning process, but not after. For the successful implementation EIA of territorial plans it is necessary to determine the scope of the EIA and the principles of the process.

In the planning and decision-making process it is extremely useful if the public are given the opportunity to take part in all phases of EIA, and not just the EIS review. Public opinion must be taken into account in the preparation of the environmental impact statement and decision.

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# Application of Strategic Environmental Assessment for National Policies

**Strategic Environmental Assessment of Slovak Energy Policies** ■  
Maria Kozova and Jan Szollos, Slovakia

**Health Impact Assessment and Intersectoral Policy at a National Level in the Netherlands** ■  
Gerard Varela Put, the Netherlands

**Health Impact Assessment and the Potential Application for Agricultural, Food and Nutrition Policies** ■  
Karen Lock, UK



# Strategic Environmental Assessment of Slovak Energy Policies

Maria Kozova, Faculty of Natural Sciences, Comenius University, Slovakia  
Jan Szollos, Institute of Geography, Slovak Academy of Sciences, Slovakia

## 1. Introduction

The adoption of strategic documents for the energy sector has been taking place in the Slovak Republic for some time. The Slovak Republic's first energy policy was adopted in 1991 during the former SFR. It had to be changed after the emergence of the independent Slovak Republic in 1993, as it was based on the assumption of a federal energy system.

In 1993 the Energy Policy for the Slovak Republic to the year 2005 was prepared against the backdrop of an independent Slovak national energy system. The philosophy of the energy policy consisted of a rational approach to both energy production and consumption. The emphasis was on energy saving, which had to be achieved through macroeconomic measures, the modernisation of production processes, pricing policy, and the use of other options.

In 1995 a simple strategic environmental assessment (SEA) was applied to the Updated Version of the Energy Policy for the Slovak Republic to the year 2005 (with a perspective up to 2010), on the basis of Article 35 of the National Council of the Slovak Republic Act No. 127/1994 on Environmental Impact Assessment (EIA Act). Between August 1996 and September 1997 a SEA process was applied to the subsequent version of the updated energy policy.

After the elections in 1998 the new government declared basic goals for the energy sector, which included the preparation of a new energy policy. The government decided to accelerate the preparation of this document in view of the EU accession process. In 1999 the SEA process was applied to the proposal of a new energy policy. The SEA process/The policy included a high level of active public participation. The entire energy policy was adopted by the Slovak government in January 2000.

In this paper, attention is given to the procedural aspects of the SEA applied to the updated energy policy submitted to the Slovak government in 1997 (EP-1997) and to the new energy policy approved by the Slovak government in 2000 (EP-2000). In addition, a comparison is made between the two policies. The specific SEA findings and recommendations and their practical implementation are discussed. The paper covers:

- the main objectives of EP-1997 and EP-2000;
- basic steps of the SEA process, key participants and their roles, the interests and objectives of the main players;
- areas which were the topics of critical comments, statements, recommendations and proposals by interested parties within the framework of the SEA process and identification of the components which influenced successful outcomes of the SEA process (Tables 1 and 2);
- evaluation of the effectiveness of the SEA process (Tables 3 and 4) and broader conclusions on SEA practice in the Slovak Republic.

Information about the existing legal and institutional conditions in the Slovak Republic (on the basis of which the SEA process of EP-1997 and EP-2000 was carried out) can be found in Annex 1. More detailed information about the main steps of the SEA processes applied to EP-1997 and EP-2000 can be found in Annex 2.

## 2. Description of Proposals

### 2.1 Energy Policy 1997

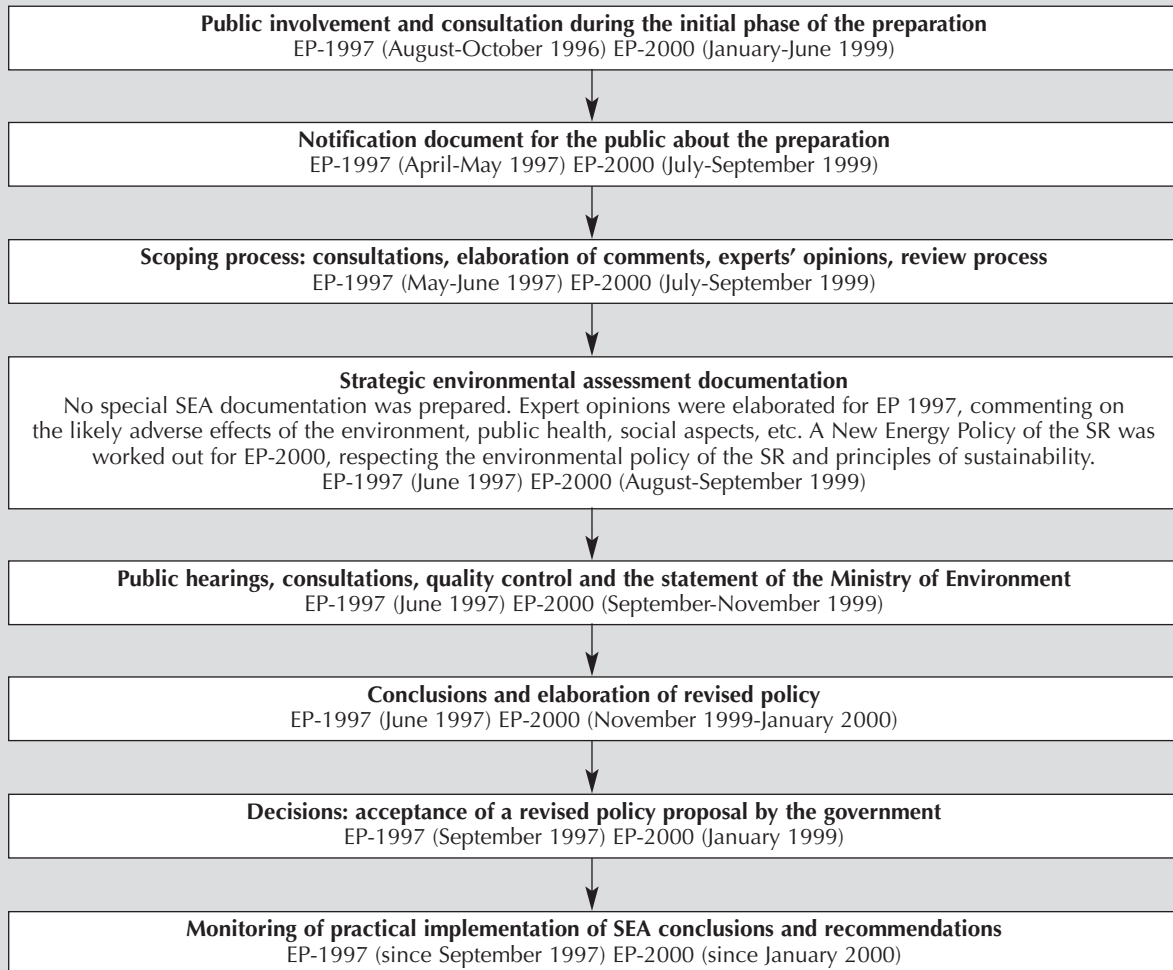
According to the proponent (the Ministry of Economy), EP-1997 determines the strategic intentions within the energy sector (perspective to 2010) in the following areas:

- providing the economy with fuels and energy;
- improving the safety of energy generation with respect to internationally accepted criteria;
- increasing the efficiency of energy transformation;
- decreasing the negative impact of the energy sector on the environment;
- gaining stability of the electric, natural gas and oil systems;
- gradual reduction of energy demand and increased energy saving;
- increasing utilisation of renewable energy sources;
- supporting structural changes in the Slovak economy, which will lead to higher productivity and reduced energy intensity.



FIGURE 1

**Application of SEA process to Slovak energy policies (1997, 2000)**



The proponent submitted two “nuclear” alternatives. The principal difference between the first (basic) alternative and the second was only in the suggested type of the Mochovce nuclear power station. The first option planned to complete all four blocks, the second only two.

**2.2 Energy Policy 2000**

In comparison to the EP-1997 objectives, the EP-2000 objectives are elaborated in more detail and are also broken down into short-term, medium-term and long-term criteria. The short-term category elaborates the objectives for individual energy industries (electric energy, supply of heat, oil, natural gas, coal). Possible tools for the achievement of these objectives are also stated. Strategic goals are:

- to satisfy the energy needs of society in a reliable, safe, effective and ecologically acceptable way, in requested energy types and forms;
- liberalisation of the electricity and natural gas market, harmonisation of Slovak legislation with that of the EU;
- fulfilment of international agreements in the areas of ecology, nuclear safety, investments and energy trade (the Kyoto Protocol, Nuclear Safety Treaty, Supplementary Agreement to Energy Charter Treaty, Protocol on Energy Efficiency and Ecology Aspects of the ECT, etc.);
- reduce the energy intensity to the level of EU member countries;
- build up storage capacities to the volume of 90-days of emergency oil and oil product stocks (until 2010);

- strengthen the strategic position of the Slovak Republic in the area of transit of strategic energy supplies, through the development of gas and crude oil pipeline systems;
- resolve the concept of the back part the radioactive fuel cycle in nuclear power plants;
- increase the share of renewable and secondary energy sources in the consumption of primary energy resources (PER).

It should be appreciated that EP-2000 — as one of the first sectoral politics and/or policies — also deals in detail with the issue of sustainable development (SD). The chapter on SD includes: environment, energy savings, utilisation of renewable energy sources, science and research programmes. As stated in the document, environmental protection is one of the determining factors shaping energy policy. Basic aspects are characterised below.

- Realisation of measures to reduce emissions and basic pollutants will lead to higher utilisation of natural gas.
- Basic conditions for achieving the Kyoto goal will maintain the share of energy generation from sources producing minimum CO<sub>2</sub> levels, and will sharpen the focus on energy intensity reduction, on energy savings and renewable energy sources. Therefore the energy policy in the field of renewable sources ought to utilise individual programmes and other tools to stimulate utilisation of largest possible potential (technically and economically acceptable) before 2008.

### 3. Nature and Scope of Issues

In the SEA of EP-1997 — especially within the framework of the reviewing process and public discussions — the principal questions were concentrated in the following areas:

- to orient, in the long-term perspective, the Slovak energy system to non-nuclear alternatives;
- to create competitive and motivating conditions in environmental management and the effective realisation of energy-saving programmes;
- to cover energy demand through co-generation and improved thermal efficiencies in power plants, as well as through the increased utilisation of renewable energy sources;
- to minimise the negative impacts of the energy sector on the environment;
- to eliminate the monopolisation of the energy sector;
- to improve the relations of the energy sector with the public and to create conditions for public

involvement in the management and decision-making process in the energy sector;

- to increase transparency of the pricing policy in the energy sector.

In the EP-2000 SEA process the circle of issues discussed in 1997 was expanded and some issues were specified into the following areas and issues:

- sustainable development of the Slovak energy sector;
- nuclear energy policy (close down of V1 Jaslovské Bohunice and completion of NPP Mochovce, back-end fuel cycle);
- transformation, restructuring of the energy sector and privatisation;
- pricing and subsidy policy;
- preparation for integration into the internal market of the EU.

## 4. Process and Procedural Context, Case Analysis

### 4.1 Basic steps of the SEA processes applied to Energy Policy 1997 and Energy Policy 2000

The SEA processes of EP-1997 and EP-2000 consisted of the following steps (for further details see Annex 2).

### 4.2 Participants involved in the EIA process, their role; interests and objectives of the main players

Article 35 of the EIA Act (Annex 1) determines the specific duties of the two main participants in the SEA process: the Ministry of Economy as a proponent (i.e. the person drawing up the proposal of the policy) and the Ministry of Environment as the co-ordinator of SEA processes.

The Ministry of Economy was involved in the reviewing process and was invited to the public hearing of EP-1997 and EP-2000 experts. These experts came from energy research institutions, universities, professional organisations directly managed by the Ministry of Economy and other professionals.

The Ministry of Environment was involved in the reviewing process and was invited to the public hearing of EP-1997 and E-2000 experts. These experts came from universities, research institutions, administrative bodies and professional organisations directly managed by the Ministry of Environment (such as competence departments, employees of district and regional authorities, the Slovak Environmental Inspectorate, the Slovak Environmental Agency, etc.). In addition, members of selected non-governmental organisations and other groups (e.g. those engaged in the field of sustainable development, nature and landscape protection, alterna-

tive solutions for Slovak water management, energy supply, etc.) were involved.

Representatives of non-governmental organisations (NGOs) and professionals from universities, research institutions and enterprises (under the umbrella of the Civic Association ENERGY 2000), as well as representatives of other organisations, participated in many discussions at the National Council of the Slovak Republic (NC SR) (organised by the Committee for Environment and Nature Conservation). These discussions covered alternative solutions for energy supply in the Slovak Republic, oriented especially to possibilities of non-nuclear alternatives, nuclear safety, radioactive waste treatment and disposal, public relations, utilisation of renewable sources of energy, programmes for energy saving, energy price policy, etc. A so-called SEA team was created. The team worked parallel to and independently of the proponent team. An important change in approaching the preparation of EP-2000 was very carefully prepared public discussion. The public discussion started in June 1999 with the establishment of a task group for the preparation of the energy policy (with participation of experts from the energy sectors and also representatives of NGOs). The discussion continued with comments from the public during July and August 1999, and was concluded by public hearing with an international forum on September 23, 1999. The draft of EP-2000 was made available to the general public at a regional level (i.e. at regional and district authorities), in the mass media, on the Internet, on the websites of the Ministry of Environment and the Ministry of Economy, on the website of the Faculty of Natural Sciences, Comenius University, as well as on the websites of several NGOs, such as Greenpeace and the Association for Sustainable Living in the Slovak Republic. This allowed for broad public participation and involved various bodies in the discussion about the energy policy.

The utilisation of the Internet in the whole process of EP-2000 public discussion was the significant factor behind the policy's wider accessibility and therefore the improvement in the quality of the SEA process compared to EP-1997. Info-kiosks for the public — organised by NGOs — were an appropriate form of involving the public in the SEA process. Presentation of the alternative EP-2000 draft by NGOs was, from the topical point of view, a stimulating factor of the discussion.

Careful preparation of the public hearing, its content and structure significantly enhanced its effectiveness. The elaboration of the experiences from the previous processes of SEA into case studies, an analysis of their positive and negative elements and identification of the necessary changes has also proved useful.

### 4.3. Results and implications

Table 1 summarises some examples of how the conclusions of the public discussion, expert's opinions, intersectoral discussions and other individual comments and statements influenced the outcomes achieved in the final version of EP-1997, as accepted by the Slovak government in September 1997.

In a positive vein, we can stress some points included in the Resolution of the Slovak Government to EP-1997 (September 1997).

- By December 31, 1997, the Minister of Economy will submit a draft of the Act on Energy Efficiency to the Legislative Council of the Slovak Government.
- By June 30, 1998, the Minister of Economy, in co-operation with the Minister of Environment, will submit an elaborated proposal on the support of rationalisation of consumption of fuels and energy in the Slovak Republic.
- By June 30, 1998, the Minister of Economy, in co-operation with the Minister of Environment, will submit an elaborated proposal on the support of increasing the segment of renewable sources of energy in the Slovak Republic.
- By September 30, 1998, the Regional State Governments will elaborate the Regional Energy Policies (for eight Slovak regions) on the basis of the methodical guidelines published by the Ministry of Economy.
- By October 2000, the Ministry of Economy will elaborate a proposal for the Energy Policy for the Slovak Republic.

As a comparison, Table 2 shows examples of the incorporation of comments and recommendations in the final version of EP-2000.

### 4.4. Evaluation of the effectiveness of the 1997 and 2000 SEA processes

On the basis of the SEA results we can positively evaluate these procedural points:

- During the SEA process in 1997 the Ministry of Economy published the full text of EP-1997 (without appendices), rather than a short information advertisement about the preparation of EP-1997 as required by the EIA Act. The whole text, including appendices, was available on request. Although, during the SEA process, there was only information in the press on the preparation of EP-2000, there was an increase in information for the public; the full text was published on the Internet, the EP text was distributed to the regional and district authorities, and NGOs organised public discussion and workshops.
- A new draft of EP-2000, in comparison with the former proposals from 1995 and 1997, had a more precise and logical structure.

- In addition to obligatory duties for the proponent and following from Article 35 of the EIA Act, the Ministry of Economy and the Ministry of Environment organised (on the basis of the great public interest and strong pressure from NGOs) public discussions (hearings) in 1997 and 1999.
- The Ministry of Environment used the experience of the SEA process and the public discussion — realised in 1995 and 1997 — and also the handbook on SEA of policies, elaborated in 1996-99.
- Experts elaborated opinions on the basis of the request of the Ministry of Environment. In general, in comparison with the public discussion in 1997, more comments and statements (with positive or negative content) were delivered to both the Ministry of Economy and the Ministry of Environment in 1999. The number of comments and the standard of the discussion at SEA of EP-2000 even increased thanks to the use of the Internet and the activities of NGOs in organising meetings with the public and specialised meetings related to EP-2000.
- The Ministry of Environment allowed the experts to present their opinions during the first phase of public discussion (i.e. hearing). The course of the discussion took an unemotional and matter-of-fact course with a better balance in the presentation of both the proponents and opponents. The presentation of all participants in the discussion had the same time limit and each participant had the right to ask for a presentation. Compared to 1997, the quality of the organisation and content of the public hearing on EP-2000 increased thanks to thorough preparation on the part of the Ministry of Economy, the Ministry of Environment and NGOs. Discussions were led by independent moderators and were divided into agreed topical units. Foreign participants were invited for the first time and also took part at the public hearing.

The conclusion of the public hearing, together with the Statement of the Ministry of Environment and the Statement of the Ministry of Economy to EP-1997, was sent to all participants on July 30, 1997 and was available for all concerned. The recording of the public hearing, or the opinion and the Statement of the Ministry of Environment to EP-2000, was not sent to all participants but was available to all interested participants either via the Internet or at the Ministry of Environment and the Ministry of Economy.

Some results of an expert evaluation of SEA components (their shortages and strong points) are illustrated in Table 3.

As explained in Table 3, the SEA process did not influence the basic alternatives of EP-1997 and the time horizon to 2005 was also very short. On the other hand, thanks to the co-operation of parties involved, SEA in

1999 significantly influenced the content of EP-2000. Evidence for the higher quality of the SEA process can also be gained from comparison with the comments on EP-1997 and EP-2000 outlined above. Comments on EP-2000 are more specific, but also comprehensive, and relate to the most important problems of the Slovak energy sector, including sustainable development, while comments from 1997 were oriented mainly towards the non-existence of non-nuclear alternatives in EP.

Neither the proposal of EP-1997 nor EP-2000 contained an assessment of impacts to ecosystems, health assessment and socio-economic assessment in an appropriate scope. During the SEA process and, especially, in the framework of the public discussion, representatives of NGOs presented strong critical opinions. From this viewpoint, the expert opinions, the public discussion and consultations between the Ministry of Economy and the Ministry of Environment were very important, since they complemented some necessary parts of the environmental assessment of EP-1997 and EP-2000. Within the framework of the SEA process, NGOs submitted an alternative non-nuclear alternative to the presented proposal of EP-1997 and gave a comparison with the nuclear options from environmental, economic and social perspectives. Despite all these efforts and relatively effective public discussions, consultations and clearly formulated recommendations, the final version of EP-1997 contained only the nuclear options without any principal changes.

The SEA process on EP-2000 differed in that NGOs submitted to public discussion not only an alternative related to electric energy, but a complete alternative proposal for EP. The entire process of the public discussion and also the public commenting process was organised in a more effective way than had previously been the case. In contrast to 1997, in 1999 several parts of the alternative EP proposal were reflected in the final official EP version adopted by the Slovakian government. The draft of EP-2000, submitted for public discussion in July 1999, was significantly changed and re-worked as a result of the SEA process, and thus benefited from a more sustainable nature.

A review of the compliance of proposed conceptual documents with the principles and criteria of sustainable development form a significant part of the SEA process in Slovakia. Within the proposal of the National Strategy for Sustainable Development in the Slovak Republic (2000), which was submitted for public comment in September 2000 and was subject to the SEA procedure, a set of principles and criteria for sustainable development was developed (the so-called “test of sustainable development”). These are recommended for application in all prepared and existing principal development policies in Slovakia. Within the proposal of the National Strategy this test was verified and



applied on seven principal conceptual documents, including EP-2000. The test is shown in Table 4.

The results of the sustainable development test showed that EP-2000 meets several principles of sustainable development. Compared to the previous energy sector conceptual documents elaborated for Slovakia, this is a significant quality improvement. Although environmental impacts have been analysed in detail, what is missing is the assessment of impacts which occur during the extraction of fuels and waste disposal (especially nuclear waste, impacts from transmission equipment, impact on the health of population, etc.). From the view of sustainable development what is missing is an assessment of the social impacts (links) of energy sector development, risk assessment (e.g. in connection with nuclear energy) and other areas, e.g. education and publicity on energy savings, use of renewable sources of energy, access to information in energy sector, public and NGO relations (forms of stimulation, motivation, support, etc.).

## 5. Lessons Learned for Improving SEA in Slovakia

It is possible to improve the implementation of the SEA procedure in the Slovak Republic through the practical verification of the proposal for 'the SEA Regulation' (under preparation) and the methodological handbooks on selected case studies (policies, plans, programmes, draft of legislation). However, any good methodical procedure or SEA Regulation requires the willingness of all parties involved in the SEA process to co-operate, have goodwill, and possess an interest in realising environmentally friendly solutions with respect to sustainable development principles. The SEA Regulation also needs to accept the public as a partner. The success of the SEA procedure depends mainly on the administrative bodies responsible for preparing proposals, bodies implementing SEA results and bodies responsible for the approval of proposals of sectoral policies, land-use planning documentation and legislation. Once again, active public participation of the public (especially the public affected) is also essential. An effective SEA process needs to make SEA documentation and other related documents available in an appropriate way for the public. The public (especially the public affected) plays an important role in quality control.

Within the framework of the legal and institutional context of SEA in Slovakia, the Ministry of Environment has a key role. The Ministry of Environment objectively has the best chance of initiating the submission of a proposal of policy to a public discussion. (e.g. In the event of the relevance of the proposed policy, or a great number of affected people, or the relevance and scope of impacts on the environment, etc.) The Ministry of Environment can also check the acceptance of the comments submitted during an inter-sectoral discussion, or

during the preparation of the Ministry of Environment statement prior to the submission of the material to the government.

Article 35 of the EIA Act does not determine an arrangement for participation of other subjects besides the Ministry of Environment and the proponent. Taking into account Article 6 of the EC Proposal for a Council Directive on the Assessment of the Effects of Certain Plans and Programmes on the Environment, EC, 2000, the Ministry of Environment should create a list of the following persons authorised to participate in the review of EISs conducted by the Ministry:

- experts in science and practice (chosen for example from physical and legal individuals from the list created according to Regulation No. 52/1995 on authorised persons in the EIA area);
- experts from administrative bodies and professional organisations directly managed by the Ministry of Environment (competent departments, selected employees from district and regional authorities, the Slovak Environmental Inspectorate, the Slovak Environmental Agency, the National Parks Administration, etc.);
- experts of selected NGOs or interest groups (e.g. those engaged in the field of sustainable development, nature and landscape protection, alternative solutions for Slovak water management, energy supply, etc.).

Besides the required expertise and diversity of opinions it should provide some operatives, time saving, co-ordination, etc. A special fund should be created (or to plan yearly financial means) to finance experts' reviews and judgements. We consider it extremely important to make full use of the process of public discussions, seminars and conferences in the SEA process. Emphasis should be placed upon the active inclusion of independent experts, members of NGOs, a broad range of professionals and the general public.

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TABLE 1

**Evaluation of the final version of EP-2000: does the document incorporate principal requirements, comments and recommendations from the statement of the Ministry of Environment?**

PRINCIPAL COMMENTS ON THE DRAFT EP-2000	EVALUATION OF COMMENTS, WHETHER OR NOT ACCEPTED IN THE FINAL VERSION OF EP-2000			<i>Comments regarding government resolution 5/2000, and other resolutions adopted in 1999)</i>
	Yes	Part	No	
To adhere to the requirements of Article 35 of the Slovak EIA Act (NC SR 127/1994)		●		EP-2000 does not contain a complete assessment of expected environmental impacts, as required to exclude or reduce adverse impacts. For example, there is no assessment of impacts which occur in the mining of fuels, waste disposal (especially waste from nuclear energy), adverse impacts from transmission equipment, impact on the health of the population, etc.
EP-2000 should represent a starting point for the principal transition of Slovak energy towards sustainable development. However, this necessitates the exclusion of nuclear energy in the longterm and prohibits the expansion of the six operating NPP units in operation.		●		EP-2000 does not defend the development of nuclear energy; this is a positive development. Instead, it concentrates on the utilisation of RSE and energy saving in detail. EP-2000 defines one of the first policy frameworks to address the question of sustainable development, though not in any degree of complexity. It assesses partially selected impacts of energy on the environment, energy savings (within individual sectors), renewable sources from the view of their prospective use and R&D. However, the framework of analysis is incomplete. There is no consideration of the social impact of energy development (through correlation), assessment of risks (e.g. in connection with nuclear energy) or consideration of other areas, such as information/publicity promoting a reduction in domestic energy consumption, the use of renewable energy sources, access to information on the energy sector, or suggest techniques of public relations. Related government resolutions: B3, B5 (5/2000).
EP-2000 should include requirements from principle environmental documents, such as the Strategy of the National Environmental Policy, the National Environmental Action Programme, the National Strategy on Biodiversity Protection, etc.		●		Some elements of these documents are incorporated in EP-2000. Related resolutions of the government SR: B.9 (5/2000).
EP-2000 should include analysis of relevant international documents (commitments and impacts). It should define, clearly and transparently, strategic plans of the the Slovakian government in terms of stated international commitments (eg., towards the EU).	●	●		EP-2000 gives detailed analysis of international documents and activities in the energy sector (especially in energy savings, energy efficiency) and the environment. The document spends a significant amount of time on the preparation of the Slovak energy system for integration into the internal market of the EU. However, there is no analysis of relevant international conventions, e.g. the Aarhus Convention (with respect to public participation in decision-making and access to information and justice).

*Continued on next page*

TABLE 1 continued

PRINCIPAL COMMENTS ON THE DRAFT EP-2000	EVALUATION OF COMMENTS, WHETHER OR NOT ACCEPTED IN THE FINAL VERSION OF EP-2000			<i>Comments regarding government resolution 5/2000, and other resolutions adopted in 1999)</i>
	Yes	Part	No	
EP-2000 should define policy goals, accountability, time horizon and methodology. It should also explain how core principles have been formalised. EP 2000 should define instruments for the realisation of policy goals, and should be consciously linked to policy on nuclear energy.		●		EP-2000 outlines policy to forward the following priorities: preparation for the internal market of the EU, and security of energy supply and sustainable development. The policy gives details about strategic, medium term and short-term goals. However, it does not clearly define a temporal horizon or indicate how these goals will be reflected in other policies. In several sections, a clear definition of the target condition is missing (e.g the formulation of the percentage of renewable energy sources is unclear). A clear projection of the future direction of the Slovak energy sector is also missing (beyond non-nuclear alternative energy sources for 2020-2030). In addition, the method of monitoring enforcement is not outlined.
EP-2000 should clearly set the manner, procedure and time schedule for all proposed measures: restructuring of the energy sector, de-monopolisation and decentralisation of the energy sector, diversification of energy sources, etc.	●	●		Most of this is already being resolved, or policy is under preparation, mainly within the framework of EU integration. Related government resolutions: No. 37 (90/1999).
EP-2000 should contain possible scenarios for energy sector development and analysis of alternative energy supply.		●		EP-2000 does not formulate detailed projections for energy sector development. This is only given for selected areas, e.g. utilisation of RSE.
EP-2000 should [define a strategic policy for] energy self-sufficiency for localities and regions.		●	●	There is no connection to regional energy strategy (either that already prepared, or proposals for revision). Related resolutions of the SR govt.: B8 (5/2000).
EP-2000 should clearly describe the relation between energy management and environmental criteria, as well as the overall philosophy for building an energy system coherent with societal demand.	●	●		In contrast to previous defining documents, EP-2000 pays a relatively large amount of attention to environmental concerns. However, as noted above, not all environmental questions are taken into account. EP-2000 needs to include decisive environmental criteria and indicators of impact of energy production, consumption and distribution on the environment, in terms of the production and storage of radioactive waste and the production and liquidation of waste related to certain methods of energy production. Related resolutions of the SR govt.: B2, B3, B5, B9 and B12 (5/2000).

*Continued on next page*

TABLE 1 continued

PRINCIPAL COMMENTS ON THE DRAFT EP-2000	EVALUATION OF COMMENTS, WHETHER OR NOT ACCEPTED IN THE FINAL VERSION OF EP-2000			<i>Comments regarding government resolution 5/2000, and other resolutions adopted in 1999)</i>
	Yes	Part	No	
EP-2000 should detail issues of rationalisation of fuel and energy use in SR, to analyse instruments for rationalisation and economic justification of indirect instruments, etc.	●	●		This issue is dealt with predominantly in the energy savings chapter, and also features in other sections. It demonstrates the adverse effects of delaying the adoption of the law on effective use of energy and the related support mechanisms and instruments. Related resolutions of the SR government: B1, B7 (5/2000); No. 56 (90/1999).
EP-2000 should also prioritise a change in the taxation system and an amendment to national legislation relating to the energy sector.	●	●		A modification of tax regulations is included among the short-term measures proposed in EP-2000. The policy also requires the amendment of selected laws. However, a review and overhaul of national legislation referring to the energy sector, is regarded as necessary. Principles of sustainable development (social, cultural, economic and environmental) should be integrated.
EP-2000 should be based on national economic policy, with a particular focus on framework and legislation toward industry; it should be based on cross-sectoral economic analysis.		●		EP-2000 validates national data used for medium term economic planning for industrial development. Other sectors have been addressed in more general terms. The policy lacks a cross-sectoral overview and regional perspective (including related support funds for regional development, and other structural funds).
EP-2000 should create the preconditions for a more fundamental shift in the contribution of the energy sector to GDP, currently minimal.		●		This section is evaluated in certain chapters. It would be desirable, however, for this subject to be explored in more detail to ensure adequate enforcement. [Otherwise, it is unlikely that any shift in energy output will be possible].
EP-2000 should also cover other principal areas of policy, such as projection of energy source capacity to meet current and future demand; a formal model to project development of the energy sector; a coherent approach to pricing policy; evaluation of the process of implementation of new requirements (environmental, legislative, EU accession, etc.)	●	●		Some tasks related to this are being addressed during the process of integration to the internal market of the EU. Despite a certain degree of progress, there are still several questions to be considered (e.g. a projection of energy supply to pricing policy).
EP-2000 should define principles of government policy for the development of primary energy sources in SR, and should provide for future use of foreign sources of coal, uranium, petroleum etc.	●	●		This issue is comprehensively addressed in the policy document, and is reflected in policy targets. Related government resolutions: B2 (5/2000).
EP-2000 should address questions of research and development, and technological development toward the optimisation of energy production and distribution.		●		This lacks analysis of possibilities to involve scientific and research expertise within universities, other institutions and NGOs working in the energy sector.
EP-2000 should define principles for promoting the use of underground cave systems for storage of PES, including heat.		●		This section defines principles for the storage of natural gas and oil. Related government resolutions: B4, B6 (5/2000).

Continued on next page

TABLE 1 continued

PRINCIPAL COMMENTS ON THE DRAFT EP-2000	EVALUATION OF COMMENTS, WHETHER OR NOT ACCEPTED IN THE FINAL VERSION OF EP-2000			<i>Comments regarding government resolution 5/2000, and other resolutions adopted in 1999)</i>
	Yes	Part	No	
EP-2000 should be integrated with regional energy policy. EP-2000 should provide a clear definition of the operation of regional energy policy.			●	This deserves serious critical appraisal; the lack of consideration of framework integration undermines the methodology of assessment. EP-2000 has almost completely disregarded the potential of utilising RES.
EP-2000 should review the timescale of regulated energy price adjustment in terms of social impact.		●		EP-2000 includes a timescale of regulated price adjustments (including domestic heating). However, it does not take social impact into consideration. Related government resolutions: B4, B6 (5/2000).
EP-2000 needs to deal more precisely with the issue of compliance with air protection limits.	●	●		For example, nuclear power stations are not the only energy generating installations which should be expected to meet air protection limits. Installations using Slovakian coal should also be expected to comply; this should be written into the framework document.
EP-2000 should outline measures to enforce energy efficiency as a standard throughout RES. Possible effects on employment should also be explored.		●		This issue has to be dealt with. Consideration of impacts on air quality (e.g. resulting from the extraction of coal, uranium etc.) are still missing. Related government resolutions: B8, B12 (5/2000).

**ABBREVIATIONS**  
**EP-2000** Energy policy of the Slovak Republic adopted by the Slovakian government on January 12 2000.  
**RES** Renewable energy sources  
**PES** Primary energy sources  
**EU** European Union  
**R&D** Research and development

Selected items from the Slovakian government resolution of 5/2000 on the draft EP-2000 and other resolutions related to the energy sector:

**B.1:** to submit to govt. meetings information on the security of fuel supply for SR during 2000-2005 (until June 30, 2000).

**B.2:** to submit to govt. meetings information on the coal-mining programme in Slovakia, including the state participation pilot programme on the liquidation of the Dolina coal mine (by May 31, 2000).

**B.3:** to submit to govt. meetings a proposal of the concept of economic, material and time procedures for spent nuclear fuel disposal and procedures for liquidation of nuclear installations (by October 30, 2000).

**B.4:** to secure for buyers of electricity — according to the appendix of this resolution — conditions for selecting electricity suppliers from among license holders in the territory of the Slovak Republic.

**B.5:** to submit to govt. meetings a proposal for the completion or non-completion of units 3 and 4 of NPP Mochovce (by March 31, 2000).

**B.6:** to develop proposals for the modification of customer categories and tariffs in electric energy and gas industry (by March 31, 2000).

**B.7:** to initiate amendments to Act 303/1995 on budgetary rules so that in budget-funded and contribution organisations either third-party financing or the "contracted energy

capacities and services" for the realisation of energy efficiency projects can be applied, until the time when the project is repaid (by April 30, 2000).

**B.8:** in connection with restructuring the state administration to review the possibility to transfer competencies for issuing prior permits for construction or close down of heat source to the bodies of self-government.

**B.9:** to prepare an environmental assessment of the hydro-energy potential of SR (by December 31, 2000).

**B.10:** to submit to govt. meetings a draft concept for achieving a 90-day stock of oil products and solutions for emergency situations (by February 29, 2000).

**B.11:** to prepare an introduction of short-term reporting for the energy sector in compliance with the EU and IEA methodology (from January 1, 2000).

**B.12:** to develop a programme for the promotion of rationalisation of fuel and energy consumption in connection with competencies in the sector (by June 30, 2000).

**37 (90/1999):** to prepare a bill on the regulation of natural monopolies with the aim of creating conditions for an independent regulator (September 2000)

**56 (90/1999):** to prepare a proposal for a programme of reducing energy intensity and use of alternative energy sources, including support for research and development in this area (September 1999).

TABLE 2

### Expert evaluation of strategic environmental assessment components of Slovakian energy policy, 1997 and 2000

<i>SEA components</i>	<i>Evaluate</i>	<i>Explanation</i>
Formal base for SEA (legal and methodological context)	2	The EIA Act contains, in Article 35, a requirement to assess important development policies, territorial planning documentation and proposals on legislation in relation to their assumed impacts on the environment. A draft of regulations on SEA was elaborated in 1996 together with drafts of handbooks on SEA for policies, territorial planning documentation and proposals of legislation. A new handbook on SEA respecting the most recent version of the Directive on SEA (September 2000) was completed at the end of 2000. The handbook contains some examples of case studies realised in the Slovak Republic (also including case study EP-2000).
Assessment of alternatives	1-2 EP-1997	In EP-1997 two "nuclear alternatives" were submitted by proponents for environmental assessment. Non-nuclear alternatives and comparisons between nuclear and non-nuclear alternative solutions of Slovak energy were not included. This is why NGOs prepared a proposal for non-nuclear variants for comparison and assessment. This was based on an environmental and economic critique.
	2 EP-2000	EP-2000 is positive in the sense that it does not focus only on defending nuclear energy, but deals with the use of RSE and energy saving. Not even EP-2000 solves scenarios of energy sector development in a complex way. However, these are stated for selected areas, e.g. for the utilisation of RSE. Within the public discussion at the beginning of August 1999, ENERGY 2000 in co-operation with independent experts submitted its own alternative proposal New Energy Policy of the Slovak Republic, which was submitted for public discussion together with the government document.
Assessment of impacts on ecosystems	1	Assessment of impacts on ecosystems was not included in either EP-1997 or EP-2000. A few aspects of these impacts were the subject of environmental expert reviews.
Assessment of health impacts	1	Limited information relating to health impact was included in EP-1997 and EP-2000. Potential impact was assessed to a greater extent in some expert reviews in 1997 and through public consultation in 2000.
Assessment of socio-economic impacts	1-2 EP-1997	Limited assessment of socio-economic impact was included in EP-1997 and EP-2000. This was subject to a more thorough evaluation in some expert reviews and comments from specialists in economy and environment.
Relation to decision process	1-2 EP-1997	Some rational comments and recommendations from the SEA process were included in the reworked version of this policy (although some principal ones, relating to the variant solutions, were omitted). Several important points were included in the Decree of the Slovak Government pertaining to this policy (for example, support for the rationalisation of consumption of fuels and energy and support for increasing the amount of energy production from renewable sources).
	2 EP-2000	The government resolution on EP-2000 adopted a various principal points, which will strengthen decisively the direction of the energy sector towards sustainable development. These include: resolutions related to the disposal of spent nuclear fuel; the procedure for liquidation of nuclear energy installations. Other items of this resolution related to assessment of hydro-energy potential (and overall support for the use of renewable sources of energy), the promotion of rationalisation in fuel and energy consumption, etc.

*Continued on next page*



TABLE 2 continued

<i>SEA components</i>	<i>Evaluat</i>	<i>Explanation</i>
Stimulation of public participation	1-2 EP-1997	At the start of the preparation of the policy, NGOs were asked to comment on a draft of EP-1997. Several weeks before the public hearing, a Draft of the Updated Energy Policy was published in two newspapers, to inform the general public about the preparation of the policy. More than 120 groups participated in the public hearing organised by the Ministry of Environment and the proponent. Each participant was able to present their comments on the draft plan. All participants received the conclusion of the public hearing together with a statement from the Ministry of Environment. The final result of the relatively good public consultation process was limited: comments from interested parties were only partly accepted and, despite NGO initiative, a non-nuclear variant was not included in the final version of the policy.
	2-3 EP-2000	An important change in the approach for the preparation of EP-2000 was the much-improved communication between the proponent of EP-2000, the Ministry of Environment, NGOs, and others. All necessary documents were available for the consultation process. Organisations and concerned specialists submitted their own alternative policy for public discussion, there was also a chance to define the framework of the public discussion itself. The quality of preparation for the public discussion (hearing) was very high.
Procedural quality checks	1 EP-1997	In EP-1997 no formal control of SEA procedural quality was realised, although some aspects of it were evaluated by the Ministry of Environment following the public discussion.
	2 EP-2000	During the 1999 SEA process NGOs monitored the effectiveness and quality of the process. This contributed considerably to the seriousness with which the process was undertaken.
Relation to project-level EIA	1 EP-1997	The SEA process had only a basic formal relation to EIA process. (this relates to new projects).  EP-2000 has a much greater relation to individual project EIA. This is a result of resolutions adopted by the government.
Post-SEA monitoring	1 EP-1997	Comparing the final version of EP-1997 with the draft version submitted to the public discussion, we can identify how the comments and recommendations have been accepted. The Decree of the Slovak Government defined the subsequent steps, but there have been only limited opportunities for detailed monitoring of implementation and mitigation measures by the general public and non-governmental organisations. This is the weakest point of present SEA processes in Slovakia.
	2 EP-2000	After the SEA process of EP-2000, NGOs evaluated the quality of the process in the frame of a special project. A publication is being prepared with this evaluation and outlining experience gained.

**SCALE FOR EXPERT EVALUATION**  
**0** Does not exist  
**1** Major problems  
**2** Minor problems  
**3** Functioning well

TABLE 3

### Assessment of Energy Policy 2000: do policy components support the principles of sustainable development?

<i>Principles of sustainable development</i>	<i>Overall assessment of compliance of plans, tasks and measures</i>	<i>Comparison with other development policy and framework documents</i>
Change in behaviour towards the needs of future generations.	In comparison with EP-1997 there has been significant positive progress. The document declares SD as one of its priorities.	Complex assessment of longer term effects and risks.
Change in behaviour and attitudes of major groups towards the practice of liberty and equality of opportunity and before the law.	The principles are adhered to in several criteria. There has been significant progress since EP-1997.	A breakdown of EP-2000 at a regional (or local) level is missing. There is a need for a review of the pressures of immediacy in the adoption/non-adoption of certain measures.
Changes in the behaviour and attitude of citizens towards propelling societal change, towards the respect of rights of future generations, and towards inter- and intra- generational, regional and international solidarity.	This principle was adhered to. EP-2000 went through a process of public discussion and consultation. However, in terms of development, this principle has only been partially fulfilled.	For effective application of this principle it is necessary to: <ul style="list-style-type: none"> <li>• develop coherence in policy at a regional and (eventually) at a local level;</li> <li>• reform public administration and regional policy.</li> </ul>
Changes in values related to the importance of cultural heritage, cultural and societal identity, and education.	Principle only partially fulfilled.	Favourable conditions need to be created at a regional and local level. An increase in sustainable development education in the energy sector is also required.
Change in behaviour and attitudes towards achieving a high and stable level of economic growth and employment, in compliance with the requirements of sustainable development.	The overall focus of EP-2000 enables favourable conditions for a higher rates of growth and employment. (For example, the promotion of RSE should facilitate the creation of new jobs).	Application of this principle will be particularly strengthened by: <ul style="list-style-type: none"> <li>• the restructuring of economic sectors;</li> <li>• implementation of relevant regional policy.</li> </ul>
Change in behaviour and values towards the environment, especially in relation to nature and natural resources.	The overall focus of EP-2000 creates favourable conditions for the fulfilment of this principle. (For example, limiting industrial emissions, use of RSE).	Application of this principle will be particularly strengthened by: <ul style="list-style-type: none"> <li>• reform of public administration;</li> <li>• increasing and improving the quality of supervision by environmental authorities.</li> </ul>
Change in behaviour and attitude with regard to international co-operation and securing global security.	The consistent implementation of the Slovakian Energy Policy should allow this principle to be met.	Application of this principle will be particularly strengthened by: <ul style="list-style-type: none"> <li>• accession to the EU and OECD;</li> <li>• expansion of international co-operation.</li> </ul>

## Annex 1: Legal Process and Procedural Context of SEA for Policies in the Slovak Republic

Article 35 of the Slovak EIA Act contains the requirement to assess important development policies, territorial planning documentation and proposals on legislation in relation to their potential impacts on the environment. Article 35 presents a brief procedure for environmental assessment, which is mandatory for proposals of:

- basic development policies, especially in the areas of energy supply, mining, industry, transport, agriculture, forestry and water management, waste management and tourism;
- territorial planning documentation for regional and residential settlement levels in selected places, especially in the centre of a region, urban conservation areas, resorts, and particularly polluted localities;
- legislation which may have an adverse impact on the environment.

The existing procedure for preparation and approval of development policies in the Slovak Republic now takes into account the requirement of the EIA Act and is similar in nature to the SEA procedure. The body responsible for drawing up a policy proposal (proponent) is required to:

- develop a draft of the policy containing an assessment of presumed impacts on the environment and, if necessary, also a proposal for measures to eliminate or reduce any adverse impacts;
- inform the public, in an appropriate way, about the preparation of the policy at least two months before it is discussed with the Ministry of Environment;
- discuss the proposal in advance (prior to approval) with the Ministry of Environment, including addressing the foreseen impacts and proposed mitigation measures.

The main objective of the environmental assessment (SEA) of policies is to facilitate the incorporation of environmental and sustainable development considerations in the decision-making process. The scope of application of SEA has only advisory power with a link to other approval processes.

The Ministry of Environment is able, according to needs, to call for a debate, or to ask for statements from competent environmental bodies of the state administration, or from experts (or organisations) from the environmental sphere. In the case of wide public interest when significant impacts of the development policy on the environment are forecasted, the Ministry of Environment should initiate and, after agreement with the proponent of the policy, organise a public discussion about this policy. The possibilities and the form of comments from the public depends on the concrete circumstances and other specialised provisions and regulations. The duty of imple-

menting comments into the decision-making process is one of the key steps of the SEA process, which at present is not obligatory in the Slovak Republic and depends on "mutual agreement."

In October 2000 NC SR adopted the governmental bill, which changes and amends NC SR Act No. 127/1994 (EIA Act) on environmental impact assessment. The act came into force on December 1, 2000, and was the result of the negotiations of the bilateral screening of the environment chapter. This act allows full harmonisation with the EU legislation on environmental impact assessment, and that is with the Council Directive 85/337/EEC in the wording of the Council Directive 97/11/EC. After the adoption of the Council Directive on the impact assessment of plans and programmes on the environment, the NC SR Act No. 127/1994 (EIA Act) still needs to be amended.

## Annex 2: The Steps of the SEA Process

### **1. Public involvement and consultation during the initial phase of the preparation of EP-1997 (August-October 1996) and EP-2000 (January-June 1999)**

In August 1996, the Ministry of Economy elaborated a draft of the content of EP-1997 and asked NGOs (joined together in ENERGY 2000) to prepare comments. ENERGY 2000 formulated comments in co-operation with many experts from universities, research institutions and practices. The same step was also taken during preparation of EP-2000, when in January 1999 NGOs received the outline of EP for comment.

In October 1996, ENERGY 2000 obtained a new, completed proposal of the content of EP-1997. In the case of EP-2000, ENERGY 2000 received a new, re-worked draft in March 1999.

These activities were directly connected to the drafting of EP-1997. They initiated more intensive contact between NGOs and professional experts, for example through discussion on the content of EP-1997, statements regarding proposed acts on energy, the exchange of information on the findings of the research project Strategic Environmental Assessment as a Tool of Realisation of Environmental Policy and Strategy of Sustainable Development (Kozova et al., 1996), as well as other important material (e.g. from the discussion in the Committee of the Slovak Parliament for the Environment and Nature Conservation). In May 1997, representatives of NGOs visited the Ministry of Environment and discussed the expected time schedule of the EP-1997 SEA in relation to Article 35 of the EIA Act with officials from the Department of Environmental Impact Assessment and Intersectoral Relationships.

NGOs participated in meetings held by the Committee of the Slovak Parliament for the Environment and Nature Conservation between April and June 1999,

at which the preparation of the new energy policy was discussed. Initiative was taken over, as in case of previous reviews of energy policies in 1995 and 1997, by NGOs and experts associated with the ENERGY 2000 process. A joint meeting was held on June 22, 1999, at which specialists and NGOs discussed the national framework for nuclear energy with the Committee of the Slovak Parliament for the Environment and Nature Conservation and the Committee for the Economy, Privatisation and Enterprise. A draft of this policy was submitted by the Ministry of Economy as a supporting paper to the energy policy under preparation. NGOs commented on the paper: they stated that the Ministry of Economy had a legal obligation to submit the draft framework for nuclear energy for formal environmental assessment (in accordance with Article 35 of the EIA Act) together with the energy policy. For the NGOs, the obligation existed as the document stated a framework for development. However, the Ministry of Economy did not accept that any such obligation existed; the draft document on nuclear energy was withdrawn and was not submitted in the existent form to the government.

The Ministry of Economy provided NGOs with the working draft of EP-2000 for comment as early as June 1999, before it was made public and before the official start of the public discussion — another improvement on the consultation process of EP-1997. Some comments from NGOs were incorporated at this formative stage. At the same time, the first discussions started between representatives of NGOs, the Ministry of Environment and the Ministry of Economy on deadlines and the public discussion procedure.

## **2. Notification document: information for the public about the preparation of EP-1997 (April-May 1997) and EP-2000 (July-September 1999)**

The Ministry of Economy published the full text of draft EP-1997 (without appendices) in the Economic Newspaper on April 25, 1997, and in the newspaper Trend on May 12, 1997. The general public were able to obtain, on request, the full text with appendices at the Ministry of Economy.

In contrast to SEA EP-1997, the full text of the draft EP-2000 was not published in the press. Public information on EP-2000, however, was much broader than in 1997. Public discussion started with the publication of the announcement on preparation of draft of the Energy Policy of the Slovak Republic in the Economic Newspaper on July 9, 1999. The full text of the draft was also published on the Internet sites of the Ministry of Environment, the Ministry of Economy, the Faculty of Natural Sciences of Comenius University and several NGOs (e.g. Greenpeace, Slovakia). The text of the EP-

2000 draft was made available for the public and at all district and regional authorities. Also, the press coverage of topical issues related to the Slovak energy sector was wider than before. The public was also informed through the media about the venue and methodology. A two-month period was allowed for the submission of comments on the draft EP-2000.

During the summer months of 1999 the Za Matku Zem NGO organised 11 info-kiosks on the squares of seven towns in Slovakia. These outlets allowed the public to become acquainted with the draft of EP-2000, to discuss the paper with activists and to express comments.

## **3. Consultations, expert opinions, reviewing and scoping process of EP-1997 (May-June 1997) and EP-2000 (July-September 1999)**

In May 1997 the relevant departments of the Ministry of Environment elaborated comments on EP-1997. In addition, the Ministry of Environment asked eight experts from different areas to submit expert opinions on EP-1997. These experts prepared a presentation of their opinions for the public discussion (hearing). Other comments and statements on EP-1997 were sent directly to the Ministry of Economy or to the Ministry of Environment prior to the public hearing.

Broad public information, and increased NGO and ministry experience with organising SEA, had a big impact on the method of commenting on EP-2000. The Ministry of Environment no longer contracted the opinions of selected experts. The expert opinion was only sought at the end of the process. Despite this, during the public discussion of the EP-2000 draft, the Ministry of Environment received a total 441 opinions and comments. Of these 146 were written opinions, while 295 had been collected by the Za Matku Zem NGO and submitted as comprehensive material to the ministry. All relevant entities presented their opinions on the EP draft. The structure of the 146 comments was as follows: the public (28); firms (33); schools (9); research institutes (4); specialised energy associations (3); specialised other associations (8); unions (9); self-government (3); public administration (34); NGOs (13); other (2) (the Statement of the Ministry of Environment, 1999).

Within the commenting procedure on the draft of EP-2000, NGOs associated under the initiative for an alternative solution for Slovak energy. ENERGY 2000 held a co-ordinating meeting on July 16, 1999 on the process of commenting on EP-2000. The most important outcome was the decision to prepare and submit an alternative draft of the energy policy. This document, entitled the New Energy Policy of SR, was submitted by ENERGY 2000 for public discussion on August 5, 1999. The Ministry of Environment, Comenius University and

NGOs published this alternative proposal on their websites, together with the official draft.

In conclusion to the discussions, in September 1999 NGOs organised an international conference. This comprised a discussion of the new energy policy, renewable energy sources and approximation to EU policy, and other specialised events promoting an alternative energy policy for Slovakia.

Comments from experts and the public were collected at the Ministry of Environment until September 15, 1999. Copies of all opinions submitted within the commenting procedure were provided by the Ministry of Environment, for the Ministry of Economy and for selected key NGOs.

In August and September 1999 there were consultations between the Ministry of Environment and the Ministry of Economy with the participation of representatives of NGOs to determine the scope of assessment, assessment of assumed impacts, the manner in which other documents should be made available. This was the basis for the submitted draft of the energy policy, the precision of the time schedule for environmental assessment, etc.

In September 1999 the discussion focused on organising the public hearing of EP-2000, its scenarios, content, etc.

#### **4. Public hearing, quality control and the statement of the Ministry of Environment on EP-1997 (June 1997) and EP-2000 (September-November 1999)**

The Ministry of Environment, in agreement with the Ministry of Economy, organised the public hearing on EP-1997 in June 1997 at the Faculty of Natural Sciences of Comenius University, Bratislava. The public hearing continued for an entire day. There were more than 120 participants, from the Ministry of Economy, the Ministry of Environment, other bodies of state administration, professional organisations, producers of energy-related equipment, operators of equipment utilising renewable sources of energy, representatives of universities and research institutions, NGOs, and the media.

The preparation and course of the EP-2000 public hearing, which was held on September 23, 1999 at the Ministry of Economy differed greatly from the 1997 event. It was attended by more than 150 participants from Slovakia, Austria and Germany. Experts, representatives of national bodies and the public were also invited through the embassies of countries bordering the Slovak Republic. The structure of participants was similar to 1997 and all relevant parties were represented.

The proponent of the draft energy policy, the Ministry of Economy, NGOs and the Ministry of Environment agreed in advance on the method of

announcing the deadline for the public hearing, for inviting participants, the content and structure of discussion, and rules for the discussion. The discussion was led by two independent moderators. There was a brief introduction covering the SEA procedure itself, the official governmental draft, and the alternative EP-2000 proposal submitted by NGOs under ENERGY 2000 umbrella. The discussion then continued in agreed blocks with determined time limits.

A recording was made of the public hearing (September 1999). From this a 28-page transcript was produced. The full recording is available at the Ministry of Economy and the Ministry of Environment. NGOs received both in full. A selection of the most substantial contributions was used in the statement of the Ministry of Environment on EP-2000.

The Ministry of Economy and the Ministry of Environment discussed the EP-1997 proposal on June 20, 1997. The Ministry of Environment statement on EP-2000 was discussed with the Ministry of Economy on November 12, 1999.

The Ministry of Environment prepared the statement on the basis of the opinions of experts, other comments sent to the Ministry of Economy and the Ministry of Environment, the public discussion, as well as consultations between the Ministry of Economy and the Ministry of Environment.

Based on the analysis of the submitted EP-2000 draft, as well as the opinions and positions submitted within the commenting procedure and the results of the public hearing, the Ministry of Environment prepared a statement. This was discussed with the party preparing the draft Energy Policy (i.e. the Ministry of Economy) — in accordance with § 35, para. 2 — from the viewpoint of its impact on the environment. The Ministry of Environment issued the definitive version of the statement on November 15, 1999.

#### **5. Conclusions and re-worked versions of EP-1997 (July 1997) and EP-2000 (November 1999-January 2000)**

The conclusions of the public hearing, together with the respective statements from the Ministry of Environment and the Ministry of Economy, were sent to all participants on July 30, 1997. With regards to the EP-2000 SEA process, the recording of the public hearing and the opinion and statement of the Ministry of Environment was not sent to all participants. These documents can be obtained at the Ministry of Environment.

The Ministry of Economy submitted re-worked versions of EP-1997 and EP-2000 proposals to the Slovak government, which take into account some SEA conclusions and recommendations (see Tables 1 and 2).



**6. Decision: acceptance of EP-1997 (September 1997) and EP-2000 (January 2000) proposals**

The Slovak government discussed and accepted EP-1997, approved specific points in the Government Resolution on the Updated Energy Policy and commissioned the ministries to implement them.

EP-2000 was adopted by the Slovak government on January 12, 2000. Compared to the original draft the adopted version was substantially revised and included several ideas generated by the public discussion.

**7. Monitoring of practical implementation of SEA conclusions and recommendations**

(Started September 1997 and January 2000): see Tables 1, 2, 3 and 4.



# Health Impact Assessment and Intersectoral Policy at a National Level in the Netherlands

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## 1. Health Impact Assessment at the National Policy Level in the Netherlands

In the Netherlands attention turned towards Health Impact Assessment in the early 1990s. Roscam Abbing, Smits and Tax published an explorative study on behalf of the Ministry of Health (MoH) in 1993, investigating the feasibility of a Health Impact Assessment (HIA) system in the Netherlands. One of the recommendations in the report was to start an experimental period of screening national policy proposals in order to develop and obtain practical experience with HIA.

In 1995, following several policy documents and a discussion in the House of Parliament, an experimental Department of Intersectoral Policy (DIP) was established by the MoH within the Netherlands School of Public Health (NSPH). The assignment was to develop and experiment with HIA as an instrument for the MoH's intersectoral policy. The working relation between the MoH and NSPH-DIP is shown in Figure 1.

Both the MoH and NSPH-DIP make efforts to screen the policies of other ministries which might have an impact on health. In theory this should be a primary activity of the MoH, with NSPH-DIP only giving technical and methodological support, but in practice the NSPH-DIP plays a major role in the process (see the section below on case-finding). After the MoH and NSPH-DIP have agreed upon a topic a superficial Health Impact Screening (HIS) is commissioned (and sometimes conducted) by NSPH-DIP. HIS is more or less comparable to the HIA Rapid Appraisal as discussed in the Gothenburg definition paper (WHO, 1999).

If the HIS indicates that the policy is expected to have a health impact and that an additional study is considered necessary, a more extensive and in-depth Health Impact Assessment (HIA) is commissioned. This HIA is comparable to the HIA Analysis or HIA Review. The main role and expertise of NSPH-DIP in this phase is to scope and commission the HIS/HIA's after finding appropriate research institutes and issuing tenders in order to conduct the HIS or HIA.

The HIS/HIA report will be formally presented by NSPH-DIP to the MoH as a confidential report. It is up to the health minister to decide whether or not to disclose the report. It is also the MoH's responsibility to use the HIS/HIA for Intersectoral Action. The role of NSPH-DIP

is limited but increasing in this phase. It should be mentioned that there is some conflict between confidentiality and the intrinsic need for scientists to publish. After several requests from Parliament, the MoH presented all HIS/HIA's to the lower house in March 2000. As far as future HIS/HIA's are concerned, the Parliament is to discuss potential solutions regarding confidentiality and publicity with the MoH.

The co-operation between the MoH and NSPH-DIP takes place on a very regular basis. Within the MoH's health policy department this is co-ordinated by a 0.5 fte civil servant. After a modest start NSPH-DIP has now produced/co-ordinated 17 experimental HIS/HIA's (see Table 1).

Most of the HIS/HIA's shown in table 1 are *ex ante*/prospective assessments of national policy proposals, and generally include examples of Health Impact Rapid Appraisal, Health Impact Analyses as well as Health Impact Reviews (as distinguished in the WHO Definition paper, 1999). The areas of investigation have been shifting from the MoH's own policies towards the policies of other ministries, and from small experimental set-ups towards more comprehensive HIA's. The HIS on dental care is a retrospective and prospective assessment regarding already implemented policy.

Based on the experiences of NSPH-DIP so far, there are three major advantages in the way HIA is experimentally implemented at a national level in the Netherlands. The first and foremost advantage is that independence is better assured. The NSPH-DIP is financed by the MoH but has independent control over its budget. This independence can become very important in the fragile process of intersectoral policy. Second, as a public health school the NSPH is in a good position to bridge the gap between policymaking/politics and research. Third, establishing a strong force outside the MOH can aid the development of an HIA, especially at a stage where the instrument still has to prove its value. The daily reality within the MoH is that civil servants are occupied with urgent matters. In such a context something as new and difficult as an HIA is likely to take a lower priority than more pressing matters. Furthermore the NSPH is not a research institute and therefore cannot favour itself when issuing HIS/HIA tenders.

Of course, there are also disadvantages to this approach. The most fundamental is that the MoH

should remain responsible for the assessment of health impacts of national policies outside the direct health domain. As this need always present, the most appropriate way to take responsibility in relation to HIA would be to implement the HIA throughout the MoH and make it part of the of the daily workload of all internal departments. Creating an independent screening and assessment facility outside of the ministry might suggest that the MoH is released from responsibility. Second, the NSPH cannot obtain certain information (green papers, strategic cabinet decisions, etc.), while on the other hand this information is available to the MoH's civil servants. Third, from outside of the ministry it should be easier to make formal/intersectoral connections with counterparts within other ministries.

Both aspects suggest an intensive co-operation between the MOH and NSPH, taking into account the separate tasks and responsibilities (MoH: phase 1 and 3, NSPH phase 2).

## 2. HIA Case-Finding on National Level Policies

The NSPH-DIP has put a great deal of effort into developing methods of finding health-relevant policy proposals out of the thousands of national-level policies proposed each year. Because we believe that HIA is much more likely to have an impact at an early stage of policymaking we try to track policy developments as early on as possible. NSPH-DIP believes that it is easier to influence policy when the proposals are still on the drawing board. This assumption is endorsed by an evaluation study on the Liberation Impact Assessment (KUN, 1999). Although the strategies below are still being refined, the basic ideas work quite well and should be applicable to other countries as well as the European Commission.

- Daily screening of all parliamentary documents (e.g. white papers, reports of committee meetings, etc.) which are often available through the Internet, especially in the case of the lower house. This is undertaken in two steps: a first screening on the basis of titles only (50-100 per day) and a second screening for potential health-related documents. A major side-effect of this activity is that the progress in policy dossiers (both old and new) are tracked "automatically." The process also allows the opportunity to evaluate the impact of HIAs in political debates.
- A systematic annual screening of the national budget gives a good overview of forthcoming major governmental policies that could be relevant to health. A close examination of the annual national budget debate in the House of Parliament is also useful in this respect. A summary of the 1999 screening results is shown in figure 3.
- In the Netherlands each ministry has one or more advisory bodies. The reports of these councils are often inputs for new policy. Therefore the monitoring of the activities of these bodies and screening of their working programmes and subsequent reports can help to track forthcoming policies at a very early stage of development.

### 2.1 Screening the National Budget 1999 (Case-finding)

A total of 76 policy developments/proposals have been identified which might have an impact on one or more determinants of health. The figure shows the distribution of these proposals among the ministries included in the screening. Ministries not shown here were not included in the screening.

The basic question put forward in this type of screening is whether or not the proposal has the potential to influence one or more health determinants.

It is clear that the screening of all these documents for health-relevant policy proposals is a huge amount of (often tedious) work, especially when a high degree of perfection is required. However, with more and more policy documents being available via the Internet, an attractive solution could be to use a computer for this routine work. Although the final screening for health relevance always has to be undertaken manually, the documents and/or pages within documents that need to be read could easily be pre-selected by a computer. NSPH-DIP has preliminary plans to develop such a tool.

## 3. Steps in the HIA Process

During the entire HIA process several steps are taken implicitly or explicitly which lead to one of six possible outcomes. Both the steps and the possible outcomes are shown in figure 3.

### 3.1 Six possible outcomes of the HIA process

In progressing through these steps (and moving from HIA Rapid Appraisal to HIA Analysis and HIA Review) more and more information on both the policy proposal and its potential impacts on health are needed. Especially in early phases of HIA (rapid appraisal/case-finding) the number of policy proposals (or areas) to be screened is high and the time available for an initial assessment of health impacts is limited. During case-finding and rapid appraisal it is often quite difficult to quickly find the information needed to take the steps shown in figure 4 and to give answers to the questions shown in table 2. The process is further hampered in two ways:

1. HIA (as discussed at the WHO meeting in Gothenburg, 1999) is a new field of research. The idea is not new,

FIGURE 1

### Working relation of Dutch Ministry of Health and NSPH Department of Intersectoral Policy

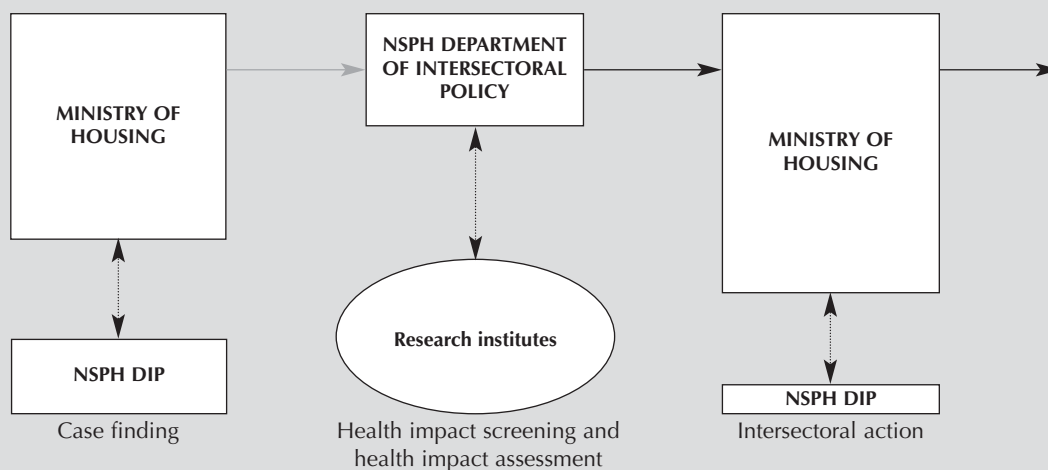


TABLE 1

### Health impact assessments produced/coordinated by NSPH-DIP

Year	Number	Subject
1996	HIS 001	Energy tax regulation (Ecotax)
1996	HIS 002	High speed railway
1997	HIS 003	Tobacco policy (two reports)
1997	HIS 004	Alcohol and catering act
1997	HIS 005	Reduction of the dental care package
1998	HIS 011	National Budget 1997/Annual survey of care
1998	HIA 012	Tobacco policy
1998	HIS 013	Election programmes of political parties
1998	HIS 016	ICES (Operation Interdepartmental Commission for Economic Structural Reinforcement) Two reports
1999	HIS 017	Identification of policy areas influencing determinants of five major health problems
1999	HIS 018	Occupational health and safety act and monitoring (see HIS 021)
1999	HIS 019	24-hour economy (see HIS 021)
1999	HIS 020	Coalition agreement 1998
1999	HIS 021	Occupational policy and health impact screening
1999	HIS 022	National Budget 1999
1999	HIS 023	Regional development policy (pending)
2000	HIS 024	National Budget 2000
2001	HIS 025	Housing policy (in process)

**HIS** Health impact screening (comparable to the HI rapid appraisal)

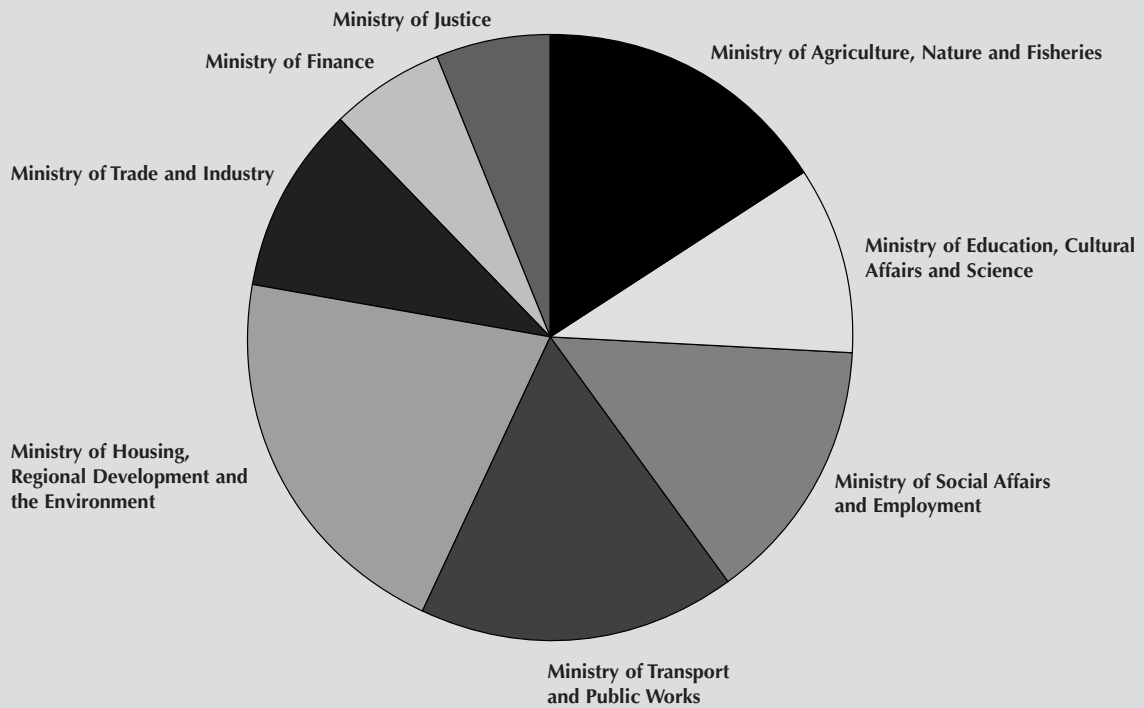
**HIA** Health impact assessment (comparable to the HI analysis or HI review)

**FIGURE 2**

**Screening of the National Budget 1999**

Case finding

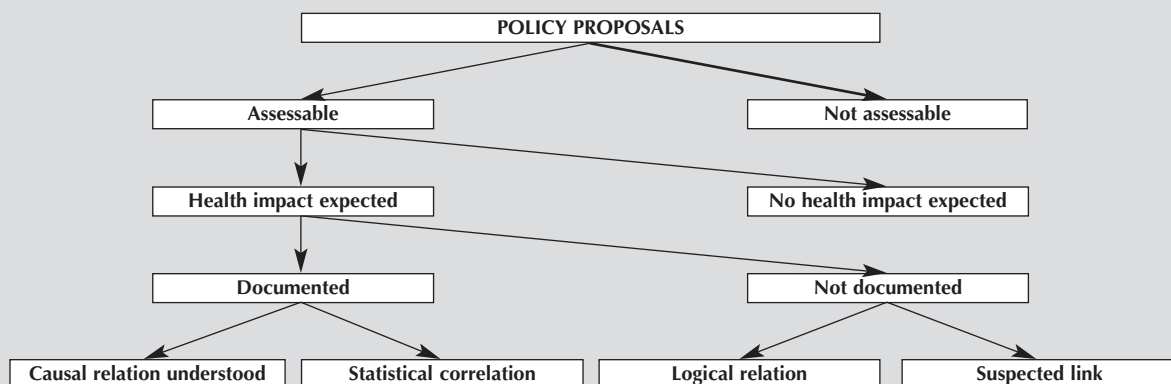
A total of 76 policy developments/proposals have been identified which might have an effect on one or more determinants of health. The figure shows the distribution of the proposals among the ministries included in the screening. Ministries not shown here were not included in the screening.



N=76

**FIGURE 3**

**Steps taken during HIA process resulting in six possible outcomes**



but the systematic way in which HIA is currently approached has changed. One challenge HIA workers now face is to show others how and to what extent HIA can work. During several international meetings last year it became clear that HIA workers are eager to learn from each other's experiences and examples. However, most HIA work only circulates within the "grey circuit." Due to the experimental character of HIA many pilot assessments remain unpublished or are only available in the local language. Also, a lot of work has been done in the past which can be considered HIA but is not labelled as such.

2. Policies, programmes and projects predominantly affect health through an impact on determinants of health. It is often quite difficult to get an overview of what is known about a health determinant and the way it can be affected. There are hundreds of databases and thousands of websites which could contain relevant information. Most of this information is badly organised and cannot be accessed either on the basis of policy areas/keywords or on the basis of health determinants as formulated and used in HIA. It would be very helpful to have available information organised around issues such as health inequalities, health aspects of housing, income or education (policy). While information is often available, it cannot be accessed through an interface which suits the HIA context (especially in the case of rapid appraisal/case-finding). Together with some other European countries the NSPH is working on this topic.

#### 4. The Near Future

In 1998 the MoH decided to implement several evaluations after having experimented for a period of almost four years. The minister of health requested the Dutch Council for Health and Care to formulate a strategic advice on intersectoral policy and HIA in 1999. This report was officially presented to the MoH in November 2000. This advice describes all developments at national and local levels and gives a SWOT-analysis on intersectoral policy over the last decade. In addition, an external evaluation of the activities of NSPH-DIP and the MoH was carried out by a consultancy firm in 1999, followed by an additional report comparing HIA to the impact assessments developed by other ministries.

With these reports and a report on health inequalities (pending) in hand, the MoH intends to reconsider its future strategy and activities with regard to intersectoral policy.

As a result 2001 will be crucial for intersectoral policy and HIA in the Netherlands.

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# Health Impact Assessment and the Potential Application for Agricultural, Food and Nutrition Policies

Karen Lock, London School of Hygiene and Tropical Medicine

## 1. Background

There is increasing scientific and political recognition that health and disease are affected by a wide range of activities in many policy areas, e.g. food and agriculture, housing, transport. The interface of the scientific and political world is not usually a simple linear process between research providing evidence suggesting a policy action. There are many examples where there is no automatic translation of research into policy. Obstacles to the use of information on health impacts in the non-health sector include perceptions of the limited usefulness of health research by the non-health sector, political factors, problems of scientific uncertainty, misunderstood concept of and communication of risks.

## 2. Definition of HIA

Health Impact Assessment (HIA) is a systematic process which considers a range of evidence about the health effects of a proposed project or policy in a structured framework. HIA should be seen as both a political and scientific tool. HIA is a method of collecting and presenting evidence on health impacts in a form that is meaningful for non-health sector decision-makers.

## 3. Implementation of HIA at a Policy Level

Few countries have institutionalised HIA. The Netherlands is one of the few countries in Europe to have implemented national policy level HIA. In many countries there have been recent policy commitments to HIA but no application: for example, in the EU and UK currently health assessment of food policies is a reactive process after food safety scares such as BSE. HIA should ideally occur proactively, and lead to changes to a proposed policy prior to implementation.

## 4. How to Implement HIA

It is important to realise that there is currently no one individual "gold standard" method of conducting HIA. All methods are based on a broad definition of health. Most models of HIA consider the effects of a policy on:

- the determinants of health (e.g. food)
- the determinants of determinants (e.g. agriculture) [cf. Joffe and Mindell, in press].

There are many different levels at which HIA can be carried out; for example, as a screening/rapid appraisal process or as an in-depth project. This will vary depending on the scale of the policy or project and resources available.

There is still a debate about the best means of institutionalising HIA. HIA could be embedded in existing processes (e.g. EIA) or carried out as a stand-alone procedure (HIA). In reality the requirements will probably depend on the type of policy or project under assessment. Not all projects with an impact on health will necessarily be subject to a SEA or EIA process. Other questions about implementation include whether HIA should be an integral part of the decision-making process, or a scientific, external process (as in the Netherlands).

For further reading see: Lock K, *British Medical Journal* 2000 (May 20); 320: pp 1395-1398 <<http://www.bmj.com/cgi/content/full/320/7246/1395>>.

## 5. The Effects of Agricultural Policy on Health

Agriculture can have an impact on human health in many ways. The main issues include:

- Food safety: e.g. BSE/nvCJD, salmonella, E. coli;
- Environmental issues: intensive farming, GM;
- Trade: rural livelihoods, price of food;
- Effects on nutrition.

The above issues can be demonstrated on the health impacts of the EU Common Agricultural Policy. Some of the effects of the EU Common Agricultural Policy fruit and vegetable regime include higher prices, lower availability, destruction of food. This results in reduced consumption of fruit and vegetables. The health effects of low fruit and vegetable consumption in Europe have been studied by Joffe and Robertson (see Box 1).

## BOX 1

**The potential contribution of increased vegetable and fruit consumption to health gain in the European Union**

**Background** The risk of many important diseases can be reduced by consuming a diet rich in vegetables and fruit. For this reason WHO recommends a daily intake of more than 400 grams per person. The pattern of both the supply and intake of vegetables and fruit and the potential health gain achieved by increasing intake in the EU and three accession countries are presented in this paper.

**Methods** Patterns of supply and dietary intake were assessed using (a) FAO food balance sheets, which allow comparison between the levels of supply in countries but do not reflect actual intake; and (b) survey data reflecting dietary intake. Using WHO mortality data for coronary heart and cerebrovascular disease and major cancers up to the age of 65, the number of preventable deaths is estimated, assuming vegetable and fruit consumption were levelled up to that of the highest consuming group, and assuming relative risks of 0.5, 0.7 or 0.9.

**Results** Vegetable and fruit consumption varies considerably between EU member states. The populations of about half (seven) of the EU member states have a mean daily intake less than 275 grams. Using the best current estimates of relative risk, over 26,000 deaths before the age of 65 could be prevented annually in the EU if intake was levelled up to the highest consumption levels (and about double this number of deaths before the age of 75).

**Conclusion** Increasing the intake of vegetables and fruit is feasible and could result in considerable improvements in public health within the EU. Priority should be given to developing methods which demonstrate the burden of disease caused by too low intakes of vegetables and fruit. This would enable the appropriate social, cultural and economic policies to be developed within the EU.

**Source:** Michael Joffe MD, Imperial College, London, and Aileen Robertson PhD, WHO, Europe.

# SEA Application for Sectoral Policies and Programmes

- **Strategic Environmental Assessment, National Sectoral Plans and Programmes**  
David Aspinwall, UK Department of Transport, Local Government and the Regions
- **Strategic Environmental Assessment of the Czech National Development Plan**  
Jiri Dusik and Simona Sulcova, REC
- **Strategic Environmental Assessment in Slovenia: Summary of Methodological Topics**  
Branko Kontic, Slovenia and Milena Marega, REC



# Strategic Environmental Assessment, National Sectoral Plans and Programmes

David Aspinwall, UK Department of Transport,  
Local Government and the Regions

## 1. Introduction

This paper is intended to raise questions about the role of public participation in certain types of strategic environmental assessment (SEA). Its aim is to prompt discussion, not to reach conclusions. It assumes that participants in the workshop neither want nor need to become expert in SEA. But not everyone shares the same understanding of what SEA means, or what it means in different circumstances; and it may be important to be clear about this since the nature of SEA may have repercussions for the way public participation is practised. The paper therefore draws on UK experience to sketch very briefly some different approaches to SEA. In doing this, it deals not only with the national level but also regional and local level SEA where useful contrasts can be drawn.

## 2. Environmental Assessment

What might loosely be termed "high level" environmental assessment (or appraisal) was given a strong impetus in the UK in 1990 when the then government published a comprehensive statement of policy (or White Paper) on the environment.

It contained two statements which are particularly relevant to this workshop. First: "Facts and knowledge can be heavily contested ground in environmental policy-making. There is a temptation, to which some people occasionally fall prey, to exaggerate or distort evidence in order to excite public anxieties and drive policy forward in particular directions. The best defence against these tactics in a free society is to make available the fullest and best information. The answers to environmental questions are not usually straightforward. [...] The best approach to such questions is to tell people the facts and what they mean, and to give them every opportunity to make their views known. That is the way to stimulate sensible public discussion and to earn public confidence in the approach to environmental policies." [This Common Inheritance, para 1.21] This was accompanied by a strong affirmation of the benefits of making detailed environmental information widely available and

a statement about how rights to environmental information were to be improved.

The second statement was a commitment to produce guidelines for policy appraisal, which the White Paper described as "a more systematic approach within Government to the appraisal of the environmental costs and benefits before decisions are taken." [para 18.6 *ibid*]

Policies are developed in a variety of ways. Their implications are often broad. They may raise issues of personal and societal values. Their practical effects (particularly their indirect effects), on the environment or anything else, are often distant and hard to foresee. Techniques for appraising their effects need to recognise these features. The guidelines promised by the White Paper, (which appeared as Policy Appraisal and the Environment, published in 1991) consequently advocated an analytical approach which remained non-prescriptive and flexible. Although they were intended to provide practical help for officials advising Ministers on policy decisions, they apply equally to the drawing up of plans or programmes by all officials.

The guidelines listed the types of impact which officials should consider (for example, environmental receptors, amenity, activities, etc), showed how to gather information on them, and suggested methods of analysis. There was an emphasis on identifying objectives; and the use of cost benefit analysis to make trade-offs between different classes of objective. They did not promote a single, fixed procedure of the sort which is now in the draft European Directive on SEA, and they were not mandatory in the sense of being required by law, although policy-makers were recommended to use them. Indeed it was probably not realistic to make use of them a legal requirement, given the uncertainties inherent in the methodologies available, the differences in approach needed in different cases, and even in the basic concepts themselves. There was a recognition of the need to take account of public concerns but little guidance on public consultation or on improving public participation. Nevertheless, a study of the experience of using these guidelines showed that most appraisals (but not all) involved consultation.

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The views expressed in this paper are those of the author and do not claim to represent those of the UK government.

## 2. Development of Appraisal Frameworks in Britain

In the last three years, the government has strengthened its guidance on policy appraisal, a term which has come to be seen as something different from “assessment”, as that term was used in the newly developing concept of SEA (and as now reflected in the draft EC directive).

The aim has been twofold: first, to ensure that environmental issues are considered in the development of all government policies so as to deliver an improved and lasting quality of life; and second, to improve the process of policy development. Two features of this latest initiative are particularly relevant to this workshop. One is the attempt to bring together various impact assessment and appraisal tools in the drive towards sustainable development. Effort here has been concentrated on bringing the analysis of impacts on business, the environment, health and the needs of particular groups in society into an overall procedure and on applying that procedure in relation to individual policy proposals.

The other feature is the much greater importance attached to listening to people's views and to involving them at appropriate stages in decision-making processes. For example, in its recent SEA of the Strategic Defence Review, the Ministry of Defence placed great emphasis on consultation with its consultants, the statutory bodies for nature conservation, heritage etc, and NGOs, and on open and transparent decision-making; while consultation in the preparation of the government's Transport White Paper elicited over 7,000 written responses from the public and involved consultation meetings and seminars in various parts of the country. This latter example goes beyond SEA of course, but some lessons are relevant.

In particular, one obvious lesson is that it is difficult to elicit the views of ordinary people when developing plans or policies on a national scale. One approach which the government has devised to help to overcome the difficulty is to establish a “People's Panel”, a 5,000-strong group of members of the public. It has a profile which is demographically representative of the UK population in order to collect the full range of views and is used in conducting surveys and inquiries of various kinds into the views of the public. It is understood to be the first such panel established at national level. The Panel supplements research being carried out by individual parts of government, including the use of techniques such as citizens' juries, community fora and focus groups.

## 3. SEA in Local Authorities

The use of an appraisal-based approach to SEA has been encouraged in guidance for local planning authorities on development plans (the UK term for land-use plans at local and sub-regional levels). land-

use planning is being looked at in another session at this workshop, but it is worth mentioning briefly here for two reasons:

- First, because of its clear practical link with project level EIA. Local authorities can draw on their experience of EIA in appraising higher level plans and programmes. The result is that SEA of development plans in Britain is arguably much closer to the less integrated form of SEA reflected in the draft EC directive.
- Second, because of its explicit requirements about public participation.

Local authorities are expected to carry out a full environmental appraisal of their development plan. They are also advised to develop the methodologies they use for this in order to include economic and social issues. The appraisal should apply to all types of plan; it should be a central part of the plan preparation process rather than applied after completion; and be an iterative process of identifying, quantifying (where appropriate), weighing up and reporting on environmental effects of those policies and proposals. At key stages in development plan preparation the appraisal should be subject to public consultation, with the responses to consultation then used to inform the next stage of plan preparation. Authorities are advised to consult specialist environmental agencies.

## 4. Public Participation

Various forms of public participation were required in the UK planning system long before formal environmental assessment acquired its present importance. People (both individuals and representative organisations) have rights to be consulted, both on the plans themselves during their preparation and on individual projects which affect them. The requirements for consultation have been changed fairly recently to encourage local authorities to adopt flexible and innovative approaches and to seek views on particular issues and options, rather than simply issuing the whole draft plan for comment. The latter course can be daunting and can result in apathy. The aim now is to identify the public's concerns and wherever possible to resolve them at an early stage, rather than in the formal proceedings of a public inquiry.

The British system requires authorities to consult on the plan as a whole, and people can comment on whatever seems to them important. The environmental appraisal is an integral part of the plan, and there is no separate provision for consultation on it. In negotiations on the SEA Directive we considered it important to allow for this integrated approach.

There are different formal consultation requirements for development plans at the different levels of the hierarchy. These reflect the nature of the plans. Local plans



(at district level) cover relatively small areas in detail. Consultation is intended to permit objections to the authority's proposals, and people have the right to have their objections considered in a public inquiry. Structure plans (at county level) cover larger areas and are more strategic in their nature. The aim of consultation is to identify key issues (such as the amount and general location of housing provision) to be considered at an "Examination in Public." Anyone can make representations on proposed plans at this level, and the authority must consider them. Participation in the "Examination in Public" is by invitation only, but the public has rights to object to the conclusions before they are adopted.

## 5. Issues

### 5.1 What emerges from this brief discussion?

At the risk of gross over-simplification, it seems that at national level, a form of assessment devised primarily to help decision-makers to produce more robust decisions, in which different trade-offs could be made explicitly (even if not scientifically), has been developed into a tool aimed more particularly at furthering sustainable development. At sub-national level, environmental assessment appears to have been more clearly directed at elucidating environmental protection issues, as a preliminary to decision making. The situation is far from static and it should be noted that other developments at sub-national level pull in the opposite direction, towards greater integration of assessment in the pursuit of sustainable development.

One question to explore is why these differences arise. Are they dictated by the nature of plans and policies at national level compared with regional or local level? Is it no more than a reflection of changing political fashion? Does it reflect the level of engagement of the public in the different issues? What other explanations might there be?

The differing practices of central and local government also raise questions about the nature of consultation. In the UK, there has been a tradition of formal consultation of the public in written form (consultation documents, draft policy papers, draft laws). Increasingly these are also being made available on the Internet. The success of this form of consultation depends on the extent to which the issues interest the public and on the public's ability to consider and comment on the issues.

Pressure groups can usually be relied on to respond to consultation papers — after all, they have a professional interest in so doing. So, for example, the approval of pesticides elicits comments from representatives of farmers, manufacturers, retailers, consumer groups, etc but does it necessarily elicit those of the wider public? There may be particular groups who rarely if ever respond to these tra-

ditional consultations. The absence of comment from ordinary people does not necessarily mean it is safe to assume they are content with the way a given procedure is operated. This has been very clear from the widespread public debate which has taken place about the use of genetic modification and the large-scale rejection of narrowly scientific viewpoints.

In the UK, a realisation of the deficiencies of rather passive, traditional methods of consultation has led to more pro-active attempts by government to obtain the public's views, especially about the degree and nature of the risks it is prepared to accept. For instance, in the example above, in order to examine attitudes towards the wider implications (including ethical implications) of recent developments in the biosciences, the government conducted two separate consultation exercises in 1998/99, both of which issued a traditional consultation document to which written responses were invited, and also used focus groups and interviews with members of the People's Panel mentioned above to explore underlying attitudes.

Experience with the environmental impact assessment of projects makes it clear that an active and fully participatory consultation, using novel and innovative techniques, helps produce better results for the environment and can lead to modifications to the original proposal which make it more acceptable to the people most concerned by it. Discussion in small groups with proponents who are willing to modify their proposals (within limits) seems often to lead to improved outcomes. But how far is this experience transferable to SEA? How could such focused, participative groups be organised at national level to deal with national plans or programmes? What resources (time, money, personnel) is it reasonable or feasible to devote to making novel forms of participation effective?

A frequent complaint among decision-makers is that public consultation rarely elicits unexpected or useful comment, except where individual interests are strongly engaged. What tools, if any, are available to build the capacity (among non-professionals) to respond to consultation? Or, from the opposite viewpoint, how can the necessary skills and motivation be fostered in the relevant authorities?

Consultation documents have the arguable weakness that they may determine in advance the limits of acceptable comment by the way they are presented and in the types of comment they request. In what circumstances is the use of such documents a practical and acceptable way of making progress? What alternatives are feasible?

This question raises in turn the further question of trust in authorities. How can the processes of public participation (and SEA more generally) be designed to improve the trust of ordinary people in decision-

making authorities? Experience in Britain suggests that the mere existence of formal legal rights is no guarantee that people will trust authorities. The ability to see for oneself that authorities are acting fairly and honestly, without abusing their position, appears much more important in this respect.

The timing of consultation is also important. Clearly it needs to be early enough to be meaningful and to exert an influence on the eventual decision. But can any specific rules about timing for SEA be devised? Are there cases when very early involvement — before full information is available, or unrealistic options have not been discarded — does more harm than good? One could cite as examples, unnecessary panic such as health scares, or property blight, in the case of land-use planning.

Other questions arise about the extent to which the procedures of SEA should be set out in legally binding form, and how far the law should be limited to expressing objectives. In Britain, practice varies. For some types of SEA, people's right to be consulted is prescribed in law. When special types of consultation are envisaged, their form, too, may be set down in law (eg public inquiries). In other cases, there is no formal requirement to consult and whether consultation takes place may

depend on custom or political imperatives (it is in fact normal to consult). Does the existence of a right to be consulted ensure that the consultation is effective in terms of the level of response and also the quality of response? And in whose view is it judged to be effective?

## 6. Summary

This paper has alluded to the use of relatively novel techniques for eliciting public views and values. It has suggested that traditional methods of consultation do not always work or do not prompt active public participation. Flexible procedures are a precondition for their development. If a right of consultation is conferred by law, it is important that the law is not drafted so tightly that initiatives such as these cannot develop.

Equally it is important that "the public" is not defined so rigidly as to restrict inadvertently the people who are permitted to respond to, or take part in, consultation. Traditionally the term "the public" has been interpreted in a very broad, inclusive way in Britain. Moreover, there is rarely a single public opinion on any matter; people's interests and expectations differ and it is important to be receptive to these differences.

# Strategic Environmental Assessment of the Czech National Development Plan

Jiri Dusik and Simona Sulcova, REC

*The strategic environmental assessment (SEA) of the draft Regional Development Plan of the Czech Republic<sup>1</sup> was undertaken in the period July 1999–January 2000. The assessment was organised within the planning process for the future use of EU Structural Funds in the Czech Republic. It was based on the combination of SEA provisions in the Czech EIA law, and on the general guidelines for SEA provided for in programming documents for EU Structural Funds. The assessment incorporated both policy appraisals as well as impact assessment elements. The SEA documentation was elaborated by the Regional Environmental Center for Central and Eastern Europe (REC) in co-operation with the Czech Academy of Science.*

## 1. Regional Development Plan of the Czech Republic

The Regional Development Plan of the Czech Republic (RDP-CR) is a major development document for the whole country. It aims to provide a planning framework for the use of relevant EU financial instruments in six sectors and eight NUTS II regions (those are territorial statistical units established for the future regional operations of the EU Structural Funds).

RDP-CR was initiated by Czech Government Resolution No. 40/1999 on “Establishing Conditions for the Use of European Union Structural Funds and Cohesion Fund”. Elaboration of the RDP was co-ordinated by the Ministry for Regional Development and the National Programming Committee for Economic and Social Cohesion.

RDP-CR was prepared for the period 2000–2006. It analysed the key regional development issues in the relevant economic sectors, and outlined key priority measures that could be supported in 2000–2006 within Pre-accession Instruments and, after EU accession, within the EU Structural Funds and Cohesion Fund. RDP-CR consists of:

- Introductory analysis of socio-economic issues and determination of priority areas for interventions under Pre-accession Instrument and Structural Funds
- Six sectoral consultation documents (Human Resources, Industry, Transportation and Communi-

cations, Environment, Rural Development and Multifunctional Agriculture, Tourism). Sectoral consultation documents have been drawn up by the relevant ministries in co-operation with a rather limited number of economic partners.

- Eight regional consultation documents parts were elaborated (eight, based on the statistical division of the Czech Republic into eight NUTS-II regions). Regional consultation documents were elaborated by the Regional Management and Monitoring Committees that included key regional stakeholders in the NUTS-II regions. Regional consultation documents were based heavily on the general regional development strategies in the respective regions.
- Annexes outlining indicators for monitoring implementation of RDP-CR.

The elaboration of the RDP-CR attracted the considerable interest of non-governmental organisations (NGOs), which have demanded since late 1998 that a thorough SEA is undertaken for RDP-CR as stipulated under the Czech EIA Act and as requested within *ex ante* evaluation of programming documents for EU Structural Funds. Based on these requests, a formal agreement on the initiation of the SEA for RDP-CR was reached between the Ministry of Environment and the Ministry of Regional Development. The SEA of the RDP-CR was subsequently officially initiated by the Czech Government resolution No. 714/1999.

## 2. Legislative Framework

The SEA of the RDP-CR for 2000–2006 was based on a combined procedure that incorporated provisions of two principal legislative norms, namely:

- The Czech EIA Act, which lays down in Article 14 general procedures for the environmental impact assessment of governmental concepts; and
- The proposed EC regulation (EC/98/0090) on the EU Structural Funds in the period 2000–2006.

### 2.1. SEA provisions of the Czech EIA Act

Article 14 of the Czech Environmental Impact Assessment Act (No. 244/1992 Coll.) deals specifically

**BOX 1****Contents of the SEA documentation according to the Czech EIA Act**

Annex 3 of the Czech EIA Act, which determined the contents of the EIA documentation, defines the following categories of potential environmental impacts (including direct, indirect, secondary, cumulative, synergetic, short-term, temporary, long-term and permanent impacts) which should be assessed through EIA:

- A. Impact on inhabitants (health risks, impacts on health and well-being of local population, social and economic consequences).
- B. Impact on eco-systems, their components and functions (impact on air, climate, water, soil, territory, geological conditions, flora, fauna).
- C. Impacts on anthropogenic systems, their components and functions (impact on constructions, rural areas, culture values).
- D. Impact on the structure and functional utilisation of the territory (impact on transport, infrastructure development, aesthetic quality of the territory, recreational utilisation of the landscape).
- E. Other impacts.
- F. Large-size impact on the landscape (environmental capacity, overall affect of all spatial impact and factors).

The SEA documentation should also indicate the likely significance of the above impacts, and should also suggest measures for their prevention, elimination, minimisation or compensation.

**BOX 2****Principal criteria of sustainable development**

Defined by the EC Handbook on Environmental Assessment of Regional Development Plans and EU Structural Funds

The Handbook on Environmental Assessment of Regional Development Plans and EU Structural Funds issued by the European Commission–DG Environment in 1998 defines the following set of principal goals of sustainable development that may be relevant to operations of EU Structural Funds:

1. Minimum consumption of the use of non-renewable sources.
2. Consumption of renewable sources within their regeneration capacity.
3. Environmentally friendly management of wastes and pollutants.
4. Protection and support of conditions for fauna, flora, and landscape).
5. Conservation and improvement of soil and water sources quality.
6. Conservation and improvement of historical and cultural heritage.
7. Conservation and improvement of the quality of urban environment.
8. Protection of atmosphere (global warming).
9. Development of environmental consciousness, education.
10. Support for public participation in decision-making regarding sustainable development.

with the assessment of “concepts”. It defines a concept as a strategic proposal submitted and approved by the central authorities of state administration. The Act provides for the assessment of concepts in the following sectors: energy, transport, agriculture, waste treatment, mining and processing of minerals, recreation and tourism. Under the Act, territorial planning documentation and the General Water Management Plan are also defined as concepts.

Article 14 stipulates that a concept cannot be approved before the Ministry of Environment issues a SEA Standpoint for it using the following procedure:

1. The proponent of the concept must prepare an SEA documentation. The scope of the assessment is pre-defined in the Annex 3 to the EIA Act outlining the general scope of EIA documentation. SEA documentation should — as appropriate — address the key environmental impacts, as pre-determined for the project-level EIA documentation (see Box 1 for details).
2. Proponent must make the concept and its SEA documentation publicly available for 60 days of review. The specific procedure for public notification and

collection of comments is jointly determined — on an ad-hoc basis — by the proponent and the Ministry of Environment.

3. Proponent must provide the concept, its SEA documentation and attendant public comments to the Ministry of Environment, which in turn must issue within 30 days its Standpoint to the concept.

## 2.2 SEA provisions in the relevant European Commission regulations and guidance on EU Structural Funds

Requirements for all RDPs and other programming documents for EU Structural Funds are defined by the relevant regulations on the use of EU Structural Funds for the specific programming period. The proposed EC/98/0090 regulation on the Structural Funds for period 2000-2006 included a request in 1998 that countries applying for Structural Funds provide *ex ante* evaluation of RDPs (evaluation of specific economic, environmental and social implications of RDP), which also includes assessment of potential environmental impacts.<sup>2</sup> These general requirements were further developed in:

- Vademecum, Plans and Programming Documents for Structural Funds 2000-2006 (DG XVI, 1999), which requests countries to fully integrate environment assessment outcomes into RDPs;
- Handbook on Environmental Assessment of Regional Development Plans and EU Structural Funds, (DG XI, 1998), which provides the general procedural and methodological guidance for the SEA of RDPs in EU member states. The Handbook advocates for assessments carried out via a policy-appraisal approach: the proponent and the environmental authorities are advised to first define environmental goals and targets for the RDP, and subsequently measure their achievement within the relevant programming stages of the RDP. The Handbook also defines the 10 principles of sustainable development that can be used to guide development of environmental goals and targets for each individual RDP (see Box 2 for details).

Although the elaboration of RDPs in Central-East Europe (CEE) is not in a strict sense governed by the above regulations and other guiding EU documents, it is highly desirable that all PHARE countries simulate, to the maximum possible degree, the standard operations of EU Structural Funds.

## 3. Approach and Methodology

### 3.1. Methodology

The SEA of the RDP-CR was governed by two distinct legal norms: the Czech EIA Act and the proposed EC regulation (EC/98/0090) on the Structural Funds for period 2000-2006.

The SEA of the RDP-CR therefore combined two approaches toward environmental assessment. The first assessment was based on the appraisal of the proposed RDP's compliance with the 10 principles of sustainable development as defined in the EC Handbook (DG XI, 1998). The second assessment of the RDP focused on the evaluation of potential environmental impacts according to the Czech EIA Act.

In addition, the proposed sectoral priorities and RDP measures were reviewed against the goals and measures suggested for each individual sector by the relevant national environmental protection policies and programmes (e.g. the State Environmental Policy and the State Programme of the Protection of Nature and Landscape).

The SEA was carried out only on the level of qualitative assessment; this was a response to sharp time constraints and the general nature of the RDP (many proposed measures in the RDP were very generalised). The intention behind qualitative assessment was that a sufficiently large and qualified SEA team would be able to arrive to quick and qualified expert conclusions on the proposed RDPs. In order to simplify and unify the assessment of each individual component of the RDP, a modified Leopold matrix was developed. The matrix consisted of the assessments outlined in Figure 1. The goal of this assessment was to suggest environmental modifications to the RDP for the planning teams.

### 3.2. Position of the SEA team and its mandate within the planning process

The Ministry of Regional Development sub-contracted the preparation of the SEA documentation to the REC, which in turn established — in cooperation with the Czech Academy of Sciences — an SEA team to assess the entire RDP. The team consisted of 17 experts — approximately half of the team members were recruited from EIA consultants or environmental scientists; the other half of the SEA team was recruited from environmental NGOs.<sup>3</sup>

Each SEA team member was given a role to assess a specific part of the RDP (either sectoral or regional). The duty of these SEA experts was twofold: their first task was to assess the given part of the RDP-CR using the common methodology. Their second task was to communicate their findings to planning teams with in order to provide recommendations for the environmental optimisation of the planning documents.

The original intention was that the entire SEA team would meet regularly to discuss the key issues arising from the SEA (e.g., difficulty with the individual assessments, lack of acceptance of their recommendations by the planning teams, etc.) Given the time constraints and the extent of the assessment, this goal has never materialised, and the SEA team actually met only once to discuss the proposed methodology.



FIGURE 1

Sample matrix: assessment of selected measures proposed in RDP-CR

Measures	POTENTIAL ENV. IMPACTS						RELATIONSHIP WITH PRINCIPLES OF SUSTAINABLE DEVELOPMENT									
	A	B	C	D	E	F	1	2	3	4	5	6	7	8	9	10
Development of small- and medium-size enterprises	-	-	-	-	-	-					-	-	-			
Revitalising of economically unusable areas	-	-	-	-	-	-					-	-	-			
Increase mobility of the workforce							+						-			
Development of specialised trainings in business management and innovation																
Centralisation of heat production and increase in combined production of heat and energy		-	-	-			++						+			
Modernisation of transport infrastructure and development of logistical centers	-	-	-	-		-				--	-			-		
Development of rural forms of tourism	-	-	-	-												

EXPLANATION OF SYMBOLS

The environmental implications of the proposed measures outlined in the RDP are illustrated in the matrix using the following symbols:

- ++ highly positive
- 0 indifferent
- negative
- x irrelevant (not applicable)
- + positive
- highly negative
- ? missing background data



*Suggested modifications of proposed measures and/or criteria for implementation*

Suggested reformulation: Development of small- and medium-size enterprises that meet EU environmental standards.

Conditions for implementation: New facilities must not affect areas that will be protected under EC directives covering habitat and birdlife. Priority support should be given to those activities that regenerate existing or old industrial estates. Uptake of ISO 14 000 should be supported.

Suggested reformulation: Revitalising of existing economically unusable industrial estates.

Conditions for implementation: Priority support should be given to those activities that regenerate existing or old industrial estates. Prefer those activities that undergone EIA with thorough consideration of alternatives.

Suggested reformulation: None.

Conditions for implementation: Support maximal use of public transport. Support and increase attractiveness of trains and of intergrated transport schemes.

Suggested reformulation: None

Conditions for implementation: Include into training curricula education about environment commitments of the Czech Republic and about EU environmental standards and norms (including EU recommendations on environmental condidations in decision-making processes).

Suggested reformulation: Centralise production of heat by use of modern environmentally-friendly technologies and increase combined production of heat and energy.

Conditions for implementation: Implement combined production of heat and energy, whenever possible. Use existing heating facilities as a priority and modernise them and increased their effectiveness through use of best available technologies (BAT). Use effective technologies that decrease the use of non-renewable sources of energy. Do no increase local air emissions. New facilities, when necessary, must not affect areas that will be protected under EC directives covering habitat and birdlife.

Suggested reformulation: None.

Conditions for implementation: Support only those activities that undergone EIA with thorough consideration of alternatives. New logistic facilities must not affect areas that will be protected under EC directives covering habitat and birdlife. Uptake of ISO 14 000 should be supported. Prefer train transport or integrated transport schemes for freight transport. Do not create use new transport corridors and do not increase permeability of the area for truck transport.

Suggested reformulation: Development of sustainable forms rural of tourism

Conditions for implementation: Use the existing buildings for their use by tourism. New facilities must not affect areas that will be protected under EC directives covering habitat and birdlife.

### 3.3. Public participation

The preparation of RDP was based on the so-called “partnership principle”, which enabled a limited set of partners (i.e., state administration, local government, NGOs, academic institutions and business) to provide input into the planning of RDP. In order to ensure maximal transparency, in addition to “partnership” discussions during RDP planning, the SEA team initiated publishing of the draft RDP-CR and open public commenting.

The specific approach employed within the SEA process was agreed by the Ministry of Environment and Ministry of Regional Development. Notification of the general public was arranged through national and regional media and the Internet (mainly via the Web site Ministry of Regional Development). Active notification of the concerned public was targeted at environmental NGOs and relevant state authorities. The relevant state authorities, besides being notified themselves, were also asked to make the notification documents available to the wider public).

Public comments were gathered through an appeal for written comments (direct mail, fax and e-mail). In addition, two national public hearings were held (an SEA scoping meeting, and a review of SEA documentation), and three public workshops were organised in selected regions during the review of SEA documentation.

## 4. Steps of the Strategic Environmental Assessment in the RDP-CR

### 4.1. Initiation of SEA

The SEA of the RDP-CR was officially initiated by Czech Government resolution No. 714/1999, which formalised agreement between Ministry of Environment and the Ministry of Regional Development on the initiation of the SEA. This decision came when the first draft RDP (the regional and sectoral portions) was elaborated.

### 4.2 Initial publicising of the RDP-CR

Draft RDP-CR was publicised and a public discussion initiated in order to identify critical points and issues to be considered within the assessment.

- At the beginning a press conference was organised, which included the deputy ministers of the Ministry of Environment and the Ministry for Regional Development (MMR CR), to publicise and initiate the assessment of the draft RDP.
- Documents were introduced on the Internet, and a specific e-mail address was provided for the submission of comments regarding the possible environmental impact of the first draft RDP-CR.

For the publicising of the first draft RDP-CR on Internet, a MMR CR web page was used, in addition to

other relevant web pages. The Internet page included contact information for submitting public comments of regarding the environmental impact of RDP. The state administration authorities were addressed via direct mail, including an information leaflet for public.

### 4.3 Statement on the scope of the SEA

Based on the expert findings and public comments, a scoping statement for the SEA was developed. The scoping phase of the SEA took place despite the fact that it is not obligatory under Czech legislation.

### 4.4 Elaboration of SEA documentation

Each SEA team member was asked to assess a specific part of the RDP (either sectoral or regional) and to communicate their findings to planning teams in order to provide recommendations for environmental optimisation of the planning documents. The acceptance of comments from the SEA team differed greatly. Suggestions from some SEA team members for reformulation of the RDP were accepted. Others were more disappointed by their contact with the planning teams; occasionally, comments from the SEA were entirely ignored.

SEA documentation summarised the key findings by all SEA team members. It consisted of the following documents:

- assessment of the comprehensive part of the first draft RDP-CR;
- assessment of the informative set of the monitoring and evaluation indicators;
- assessment of the sectoral parts;
- assessment of the regional parts.

### 4.5 Publicising the draft RDP-CR and SEA documentation

The draft RDP-CR, including all annexes and the SEA documentation for RDP-CR, was promulgated for public comment for a 60 days (in accordance with § 14 of the Act. 244/1992 Coll.). Since the Czech EIA Act provided only vague public participation requirements (e.g., details of public notification), a written agreement was made between the Ministry of Regional Development and the Ministry of Environment, regarding the means of notification and public comments. The agreement was signed by the deputy ministers of both ministries.

Public discussion involved a national public hearing and regional workshops. All the public comments received either in writing or through the public hearings were recorded and considered by the SEA team. A report summarising the SEA team's responses to public comments was then put on Internet.

#### 4.6 SEA Standpoint issued by the Ministry of the Environment

SEA documentation, the overview of public comments, and of the SEA team's responses to them were submitted to the Ministry of Environment. The Ministry of Environment issued its official SEA Standpoint to RDP-CR, which generally approved the planning document and outlined a set of measures governing the further development and implementation of RDP-CR.

### 5. Recommendations

A portion of the SEA team internally evaluated the effectiveness of the SEA for RDP, as well as a set of critical elements which should be used to govern the next SEAs for RDP-CR. These elements were then addressed in the SEA Methodology for Regional Development Policies, which was developed under the auspices of the Ministry of Environment and the Ministry of Regional Development in 2001.

The key critical elements for an effective SEA of RDP (and of related documents) are:

1. The SEA should start as early as possible within RDP planning. The SEA should run parallel to the RDP planning process and should provide input into all stages of RDP development. This would increase the efficiency of both the assessment and the formulation of the plan. In addition, it would minimise delays and conflicts which often occur when SEA is undertaken during the later stages of the planning process (e.g. after the draft plan is ready).
2. The SEA team should have a clear mandate establishing its position within the RDP planning team. SEA team members should be allowed to take part and communicate with the developers of the document.
3. The SEA of RDP, which serves as a basic strategic planning document for the socio-economic development of an entire country, is quite an extensive process. The SEA team should have very good system for effective consultation among all members of the SEA team (sectors, regions). The entire SEA team should meet regularly to co-ordinate their assessments and evaluate the relationships between the regional and sectoral parts of RDP.
4. More user-friendly means should be employed for notification, making the SEA documentation accessible, and managing public comments. Standard public hearings did not prove effective since their structure does not enable a detailed, substantive discussion of strategic documents. Conferences and workshops may be used to facilitate an interactive dialogue among planners, the SEA team and the public concerned.
5. The draft RDP-CR outlined a general implementation scheme and monitoring/review systems. The next round of the SEA for RDP should be more explicit. It should also suggest clear and transparent indicators for monitoring RDP implementation.
6. The SEA team should coordinate its activities with teams preparing other parts of *ex ante* evaluation of RDP (clarity of RDP, economic impacts, etc.). Co-ordination between the SEA and *ex ante* evaluation (making sure that they respect each other) can significantly improve the position of the SEA within the overall RDP planning.

#### ENDNOTES

- 1 This can be referred to also as the National Development Plan of the Czech Republic
- 2 This requirement was later confirmed in the Article 41 of the final EC Regulation No. 1260/1999/EC on the EU Structural Funds.
- 3 When analysing retrospectively the quality of individual assessments, it can be concluded that there was no difference in the quality of the assessments performed by professional consultants and NGO-based specialists.



# Strategic Environmental Assessment in Slovenia: Summary on Methodological Topics

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## 1. Introduction

### 1.1 Recent developments

Slovenia currently established administrative and technical measures for introduction of SEA. It is expected, based on the analogy of the EIA, that the Ministry of Environment and Spatial Planning will take over the responsibility and the leadership in carrying out all tasks associated with SEA and will become the responsible administration for the SEA process. No clear decision on division of administrative duties for SEA has however been taken yet by the Slovenian Government.

Pilot SEA projects have nevertheless already been performed. This text summarises one of the pilot project that deals with the development of the SEA methodology for Slovenia. It should be clear that this development is more an adaptation and formalising of the experience which Slovenia has already gained in SEA and EIA, rather than a production of a new methodology. Specific SEA-related experience from other countries and the EU member states (e.g. forthcoming EC Directive on SEA) are also taken into consideration.

### 1.2 Legal framework

Environmental Protection Act, adopted in 1993, introduced the philosophy of strategic environmental evaluations in the framework of spatial planning. There is no doubt about the context of these evaluations as they are defined in the Act, however, the terminology sometimes causes certain confusion. Namely, the context is that environmental assessment should be performed for spatial, as well as related sectoral plans, in the earliest phases of policy development, but the term used for these assessments is comprehensive instead of strategic. This mishap sometimes turns into misguidance, since a number of EIA practitioners understand comprehensiveness as completeness, rather than strateginess. The consequence is that SEA, as a term, is clearly adopted in Slovenia just recently — from 1993, when highway construction project started. On the other hand, it is important to recognise, that the concept of SEA is present in Slovenia from the early seventies.

From the legal point of view it is expected that a Decree on SEA will be adopted in Slovenia in 2002. This decree will be based on Environmental Protection Act and EU Directive on SEA.

Description of the main methodological steps of the SEA in Slovenia

Figures 1 to 4 below schematically illustrate the key SEA steps and the overall procedure in Slovenia which applies to certain plans, programmes or policies (PPP). There SEA process is based on six steps:

1. Screening, i.e. decision-making on the need of SEA for a PPP.
2. Drafting of a SEA study, i.e. documenting of the environmental aspects of a PPP in a form to be suitable in the administrative part of SEA.
3. Scoping, i.e. determining the scope and depth of the environmental analysis under the SEA.
4. Completion of the SEA study, i.e. review and improvement of the analysis of environmental aspects of a PPP performed in step 2; this is to be done in the consultative manner within a peer review of the SEA study.
5. Documentation of the SEA procedure with conclusions regarding environmental analysis and acceptability of a PPP.
6. Decision-making on the acceptability of a PPP.

Screening can be performed in a purely administrative manner, based on a list of PPPs for which SEA is mandatory, or through a case-by-case screening decision based on consultative approach. In the first case a list of PPPs has to be available in advance. In the second case the consultation may develop among environmental administration which is responsible for adequate substantive and procedural application of SEA and a planner or proponent of PPP. The screening in either case ends with a decision on whether SEA for a proposed PPP is needed or not. When SEA is needed, the responsible administration appoints (approves) experts for peer reviewing of a SEA study related to that PPP.

Drafting of a SEA study requires presentation of environmental aspects and considerations associated with a PPP in the form suitable for responsible environmental administration to decide about scope of the SEA. The SEA Study is prepared by and proponent of the PPP, or by an institution licensed for making such a study on behalf of the proponent of the PPP. The completeness and comprehensiveness of a SEA study for a certain PPP in this stage may vary considerably, i.e.

TABLE 1

## Strategic environmental assessment of energy component of the PNDP; improvement of production and economic infrastructure

**Priority:** Improvement of production and economic infrastructure

**Component:** Energy

**Actions:** (i) Increase of electricity production in the hydroelectric power plants and maintaining existing level of production in thermal power plants; (ii) determination of closing down nuclear power plant; (iii) development and further extension of natural gas network; (iv) construction of storage facilities/capacities for oil and gas; (v) improvement of transmission lines and other infrastructure which enables free electricity market and natural gas distribution; (vi) support of investments into energy efficiency and energy savings.

<i>Sustainable development and environmental protection</i>	<i>Negative impacts</i>	<i>Positive impacts</i>
Low exploitation of natural resources	Negative impact Due to operation of power plants which use fossil fuels and increased usage of natural gas	
Exploitation of renewable natural resources	Negative impact Due to uncertainty associated with water use and management, and close down of National Park Krsko	
Environmentally sound managing of hazardous materials and waste	Negative impact Due to fossil fuel power plants; no investments mentioned in terms of energy efficiency	Potential contribution toward achieving goals Due to increase in natural gas
Maintenance and improvement of conditions for wildlife and habitats	Strong negative impact Due to new hydro power plants and transmission lines	
Maintenance and improvement of quality of soil and groundwater	Negative impact Due to hydro power and emission (waste) from fossil fuels power plants	
Maintenance and improvement of quality of historic and cultural heritage	Negative impact Site specific impacts	
Maintenance and improvement of quality of the local environment	Negative impact Power plants bring little benefit to local communities	Potential contribution toward achieving goals Possible investments into infrastructure, employment, substitution of small/local individual power sources
Air quality protection	Neutral implication (negative impact) Hydro power is beneficial; however, the exclusion of nuclear energy production suggests intensification of fossil fuel energy sources	Strong positive impact; contribution toward achieving goals Hydro power, use of natural gas
Strengthening of environmental consciousness, education and awareness		Neutral implication; possible contribution toward achieving goals Support of comparative assessments; development of alternatives
Public participation in environmental decision-making	Neutral implication Indirectly, through education (not explicit in the PDNP 2000-2002)	Neutral implication Indirectly, through education (not explicit in the PDNP 2000-2002)



from a very basic description of the state of environment in the area where the PPP is to be implemented, without any specific consideration of environmental changes, to the very thorough examination of alternatives and goals both environmental and socio-economic. Therefore, scoping on SEA is expected to be a very important step in the overall procedure, where specific requirements regarding scope and content of the SEA study are to be clearly recognised and adopted.

Scoping is a step to determine the scope and depth of the environmental analysis to be carried out within the SEA. Scoping is required and performed by the responsible environmental administration. This authority may be assisted by experienced professional institution(s). In scoping all interested parties as well as the public actively participate. Depending on the nature of the scoping, additional experts as peer reviewers may also be invited.

The review and improvement of the analysis of environmental aspects of a PPP is done in a consultative manner within a peer review of the SEA study. Very important activity in this step is the comparison of the alternatives with a potential result of producing additional ones. Another important task is common discussion among involved experts on the results of the interaction matrices which are produced as a summary of the impact evaluation. It is expected that this particular step will bring improvements of the SEA study. Recommendations are expected in the framework of the peer review. A peer review report accompanies the final version of the SEA study.

Appropriate documentation of the SEA procedure should outline conclusions on acceptability of a PPP from environmental point of view. These conclusions are a basis for final public hearing and discussions on the acceptability of the PPP before formal decision-making (in the Parliament, at the government level, or where appropriate).

The formal decision making on PPP concludes the SEA process.

## 2. Pilot SEA Application for Preliminary National Development Plan of Slovenia

### 2.1 Background

In the year 2000, under the project Sustainable Regional Development Planning a preliminary strategic environmental assessment for the Preliminary National Development Plan 2000-2002 has been done. In the framework of this preliminary SEA, a systematic organisation of the main steps in the process of SEA, called general methodological steps, has been developed. The steps define purpose and content of each of the activities and preliminary identify parties involved. Strong emphasis has been given to active public participation,

while the basis for fruitful SEA is expected to be the partnership among parties.

According to the plan of future activities, in the year 2001 a SEA for National Development Plan 2002-2006 is going to be performed. Based on this a final proposal of the SEA methodology for Slovenia will be produced, also in the form suitable for regulation.

### 2.2 The National Development Plan 2000-2002 for Slovenia

The National Development Plan for the period 2000-2006 (NDP) for Slovenia consists of two parts: the Preliminary National Development Plan 2000-2002 which defines the framework, contents and six priorities of the overall development strategy, and the National Development Plan 2002-2006 which is a detailed description of the actions for the implementation of the six priorities. The six priorities by which the economic and social development is to be achieved, are:

1. Improvement of production capability and capacity of small and medium private enterprises (economy and business priority actions).
2. Improvement of production and economic infrastructure.
3. Development of human resources.
4. Restructuring of the agriculture and associated development of rural regions.
5. Protection of the environment.
6. Regional development.

### 2.3 Approach taken: matrix of environmental implications

The SEA for NDP was carried out mainly as an environmental appraisal of the Slovenian NDP – it was not a full-scale SEA. The environmental appraisal was carried out mainly through matrixes of environmental implications which outlined potential positive and negative impacts of individual measures proposed by NDP. In this context it is important to recognise the following feature of such appraisal process:

- The matrix is a basis for wider discussions in which experts from different fields of profession should participate. This approach has been applied in the case of evaluating NDP for Slovenia.
- For a certain topic of discussion (for example, a comparative assessment of environmental and health effects for nuclear, hydro and coal fired power plants), separate matrixes could be developed, however, when performing SEA it is recommended to remain as general as possible (i.e., to maintain top level policy appraisal). On the other hand, for the purpose of assuring consideration of

specific elements in the assessment, one way is to keep comments in the matrix as to guide further evaluations by applying different methods and tools; the other is to make a textual summary as a condensed view of the matrix which alerts on the main findings giving recommendation regarding mitigation measures and/or alternatives. These two ways are not mutually exclusive but rather complementary. These are recommendations developed in the framework of the SEA for Slovenian NDP.

- Alternatives should be seen as the basic support when assessing implementation of a policy, plan or programme, especially in the presence of considerable uncertainty. In fact, without considering alternatives it seems that no policy appraisal can be done properly, i.e. in a justifiable way that enables proper audit trial to be performed. Audit trial in this case means independent evaluation, including the one performed by the general public or specifically interested social group, or a peer review by appointed independent experts. This is also a recommendation developed under SEA on Slovenian NDP.

Practical application of the matrix can be illustrated on environmental appraisal of priority Improvement of Production and Economic Infrastructure of NDP. Within this priority, there is a component, Energy, for which a matrix of environmental implications is provided in the Box 1 below. Summary on the matrix: It seems that suggested energy actions in Slovenian Preliminary National Development Plan 2000-2002 are not environmentally sound. The actions should be confronted and harmonised with the National Energy Programme which, for example, keeps the NPP Krsko as one of the main producers of the electricity in the country by the year 2023. This seems to be opposite in comparison with what the NDP suggests. Maintaining the NPP Krsko in operation by 2023 looks reasonable since the main

related environmental issue, i.e. radioactive waste management, will not considerably change if the NPP is closed down and ruled out from the system earlier.

Stronger support in the NDP should be given to energy efficiency and free energy market, so the prioritisation of the actions should be changed (see the second row in the matrix). Construction of new hydro electric power plants is not clearly environmentally positive concept because these objects are significant consumers of space and they considerably change character of waterflows and habitats. The impacts of hydro power plants are typically site specific so concluding evaluations could not be reached on a strategic evaluation level, because concrete sites for the implementation of the plan are not defined at this stage yet.

### 3. Conclusions

Conceptually, the proposed methodology for SEA in Slovenia follows the most recent recommendations in the area. It is harmonised with the foreseen EU directive on the topic.

In operational terms the methodology combines two basic approaches for this type of the assessment: policy appraisal and impact assessment. Policy appraisal is implemented at the beginning of the assessment (top level), while the impact assessment is used for the evaluation of specific environmental consequences due to a PPP. The latter is feasible only if a plan, programme or policy is formulated in a way that it enables identification of specific locations where the PPP is going to be realised.

In regard to health implications of a PPP, it is expected that more specific guidelines, including indicators for the evaluation, will be developed during the work on SEA for National Development Plan 2002-2006. Appropriate institutions, like Public Health Institutes, are going to be involved in the assessment.

FIGURE 1

### Integration of SEA into strategic planning

Summary

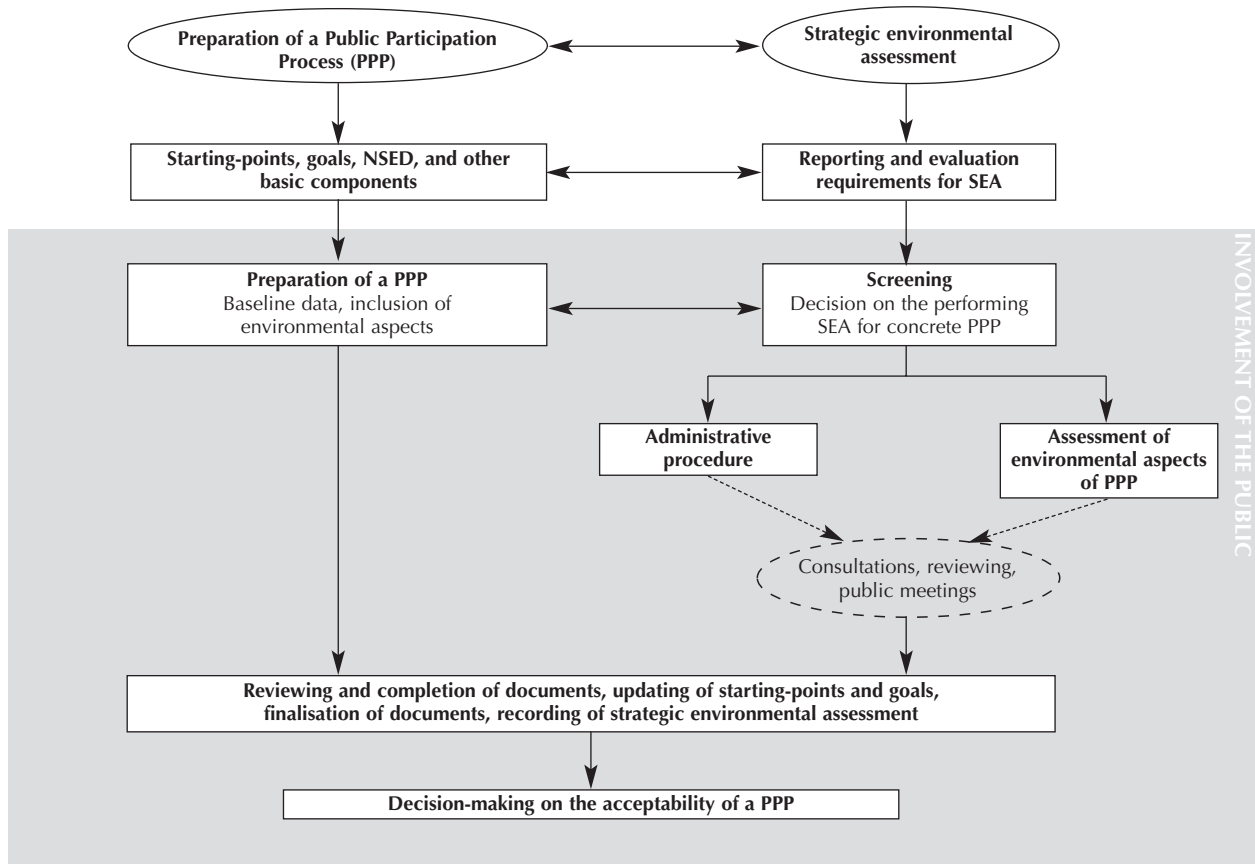


FIGURE 2

### Strategic environmental assessment procedure

Extension of Figure 1

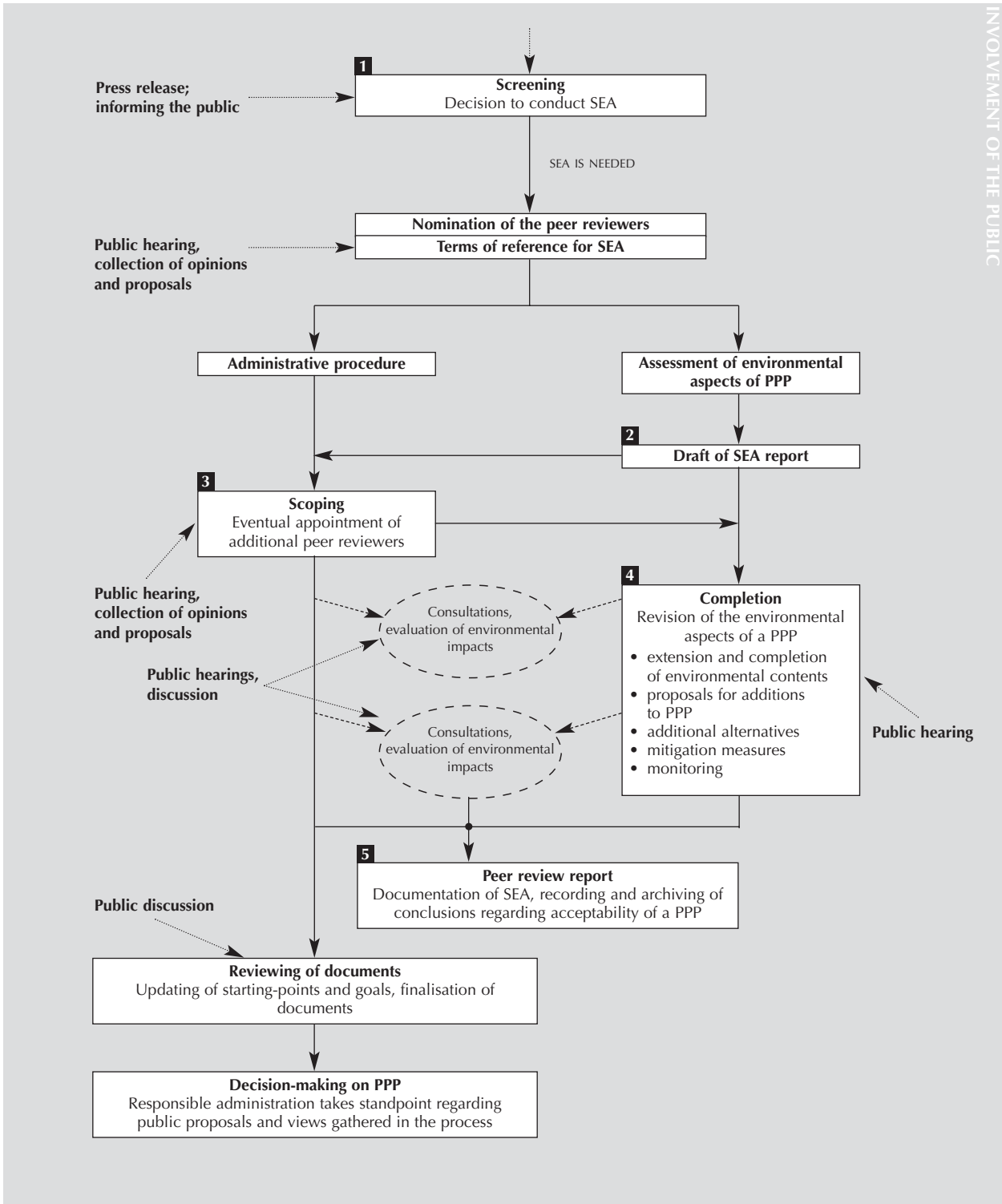


FIGURE 3

### Integration of SEA into strategic planning

Detailed scheme

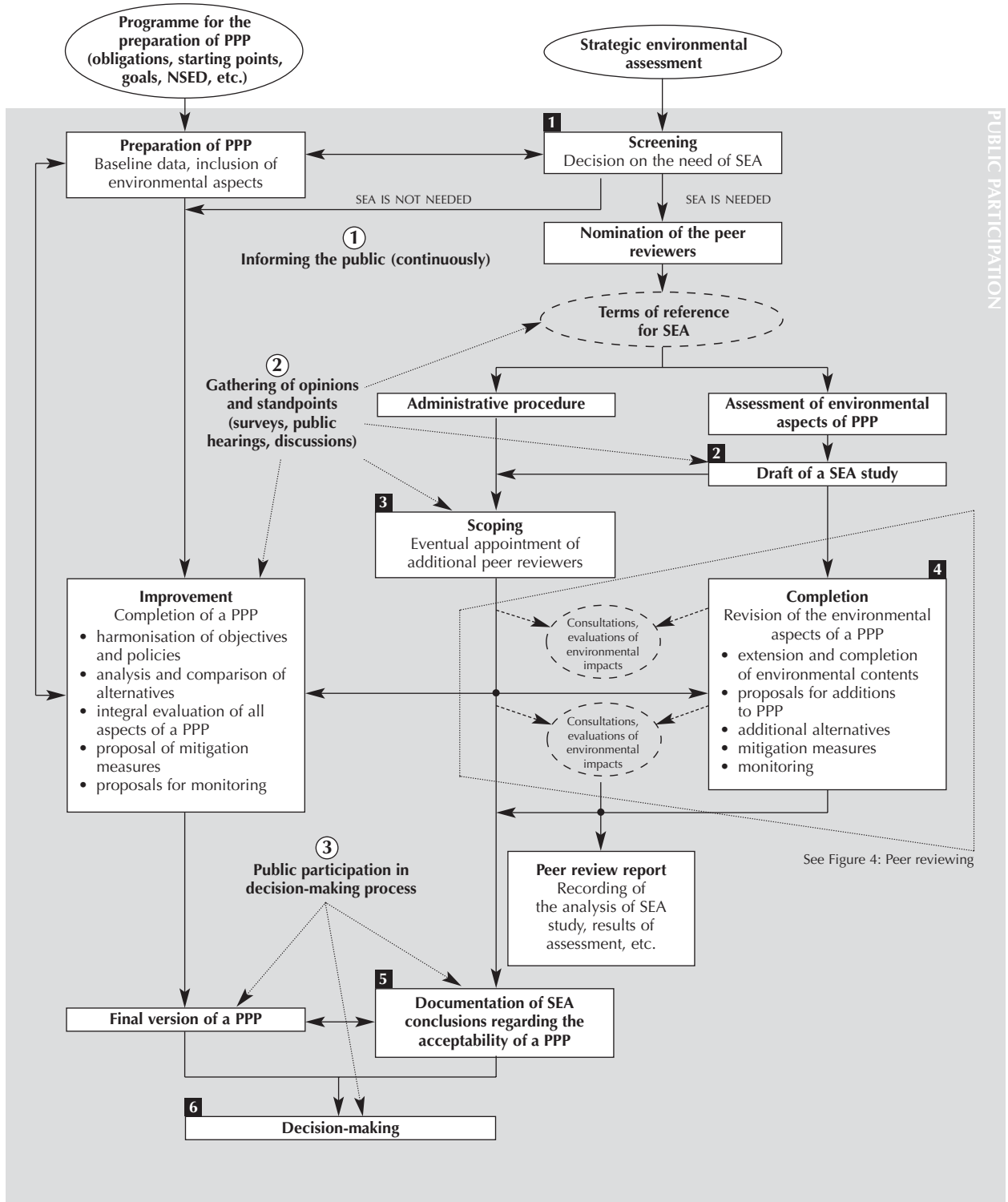
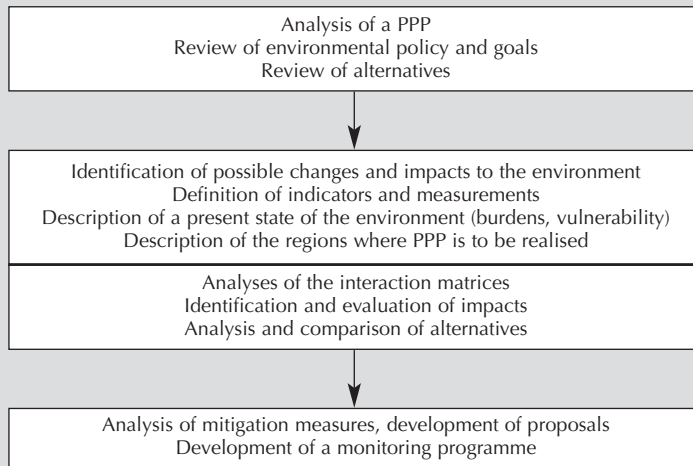


FIGURE 4

### Peer reviewing Components





# SEA Application for Rules and Legislation

**Lessons Learnt from the Strategic Environmental Assessment of ■  
Government Proposals Submitted to the Norwegian Parliament**  
Stig Roar Husby, Norway



# Lessons Learnt from the Strategic Environmental Assessment of Government Proposals Submitted to the Norwegian Parliament

Stig Roar Husby, Norwegian Institute of Urban and Regional Research

## 1. Administrative Order

Environmental assessment of government proposals in Norway has been required by an administrative order since January 1, 1995. The administrative order covers all impacts and sectors, not solely or primarily environmental effects. There are so far three guidelines to the administrative order in addition to cost-benefit analysis: assessment of gender equality, of impact on the districts, of impact on small businesses and of impact on the environment. Guidelines for the assessment of the health effects of government proposals will be developed shortly. Evaluation of how the administrative order's assessments are actually carried out is so far only undertaken in the case of environmental assessments.

The study on how environmental concerns were described in documents put forward to the Parliament included all public reports (NOU), white papers (*stortingsmeldinger*), and government proposals to the Parliament (Storting) during the period January 1, 1995, to the end of the parliamentary session in 1997. Altogether 629 cases were reviewed, of which 67 were public reports, 129 were white papers, 221 were government proposals for bills (*odelstingsproposisjoner*), and 212 were other government proposals to the Parliament (*stortingsproposisjoner*).

## 2. How Often are Environmental Concerns Addressed?

The study shows that there are 66 cases, or slightly over 10 percent of the reviewed cases, for which environmental assessment would be appropriate. The number of relevant cases varies from 17 to 27 for the three years covered by the study. Of the 66 cases, 62 contained references to the environment (about 97 percent), while we identified only four relevant cases (about 3 percent) which made no mention of environmental consequences. We found white papers in particular to be suitable for environmental assessment (23 percent of the cases), and to a lesser degree government proposals to the Storting.

By far the greatest number of cases belonged to the transport and energy sector. A relatively large number of these cases were processed according to current regulations on EIA for individual projects. This applied particularly in the case of *stortingsproposisjoner* among which 14 out of 16 cases were subject to EIA.

## 3. How are Environmental Concerns Addressed?

The general impression gained from the project concerning the way in which the environment is discussed and approached can be enumerated as follows:

- There are relatively few cases, with the exception of project-type cases, which include an explicit discussion of the environmental impacts of the policy proposal.
- Most of the documents contain a discussion of environmental objectives in connection with the policy area. The amount of detail in these discussions varies considerably. In some of them, environmental objectives seem like "late additions" and are somewhat lacking in terms of discussions of policy formulation.
- Most of the documents contain a general mention of environmental challenges and consequences in connection with the policy area.
- Only a very few cases include status reports which say anything about the extent of the effects.
- Specifics regarding the environmental domain are often lacking.
- Many cases contain proposal elements which are grounded in environmental considerations.

As far as the application of EIAs is concerned, we indicate/believe that work on public reports (NOU) takes place within institutional frameworks which should allow discussions of alternative strategies for action and a comprehensive evaluation of the environmental consequences of the proposals. We found that many public reports entailed general policy discussions,

This article summarises findings of Stig Roar Husby of the Norwegian Institute of Urban and Regional Research presented in the report "How often and in what manner are environmental concerns described in public reports, white papers and government proposals to the parliament?" NIBR Report 1997:31.

and that there were few cases in which alternative strategies were discussed. Three of the 10 public reports contained an explicit description of the environmental consequences of the policy proposal.

In analysing the white papers we differentiated them according to four types. The majority of the periodic principle papers imply general policy discussions without actual proposals for action. These, along with the papers containing annual reports, seem less suitable for EIA.

The time-defined and delimited papers, and planning papers for the transportation sector seem to be particularly relevant for EIA. In most cases these groups do contain some sort of EIA.

The majority of the governmental proposals to the Storting (stortingsproposisjoner) include a discussion of the environmental consequences, which have been arrived at by means of the project-level analysis.

The Government submits bills to the Parliament (odelstingsproposisjoner), which we have reviewed, show that environmental consequences connected with these are relatively marginal.

Three of the six cases—the public report on measures against flooding, the white papers on the Norwegian road and traffic plan for 1998-2007 (NWP), and the Kristiansand-Bergen-Trondheim (*Kyststamvegen*) trunk road—cover most of the elements one would expect to find in a SEA document. The white paper on fish farming (a driving force for Norwegian coastal industry) lacks a discussion of alternatives but is relatively explicit with regard to the assessment of environmental consequences and measures with which to counteract them. The proposition to the Storting on the termination of the remaining exclusive rights in the telecommunications sector includes an estimation of possible environmental consequences. However, as in the proposition to the Odelsting on the laws and agreements with consume on the erection of new housing (the Housing Erection Act), no attempt has been made to quantify the extent of the changes which the proposal might cause. This makes it difficult to describe the extent and impact of the environmental consequences. We should emphasise that even though the cases do contain certain SEA elements, this does not necessarily mean that the environmental assessment is satisfactory or well done.

With regard to the extent of environmental assessments, we can conclude that some environmental considerations are included in the majority of cases with potential environmental impacts. As to the question of how the environment and environmental consequences

are described in the documents, it is difficult to draw an unambiguous picture of the status of the various policy types (and their variations) which are included in the study. The overall impression is that most of the documents describe, in a general manner, the environmental challenges and environmental consequences connected with particular policy areas, but few documents give a specific and systematic account of the anticipated environmental consequences of the proposed policy change. The exceptions are those cases dealing with development projects, which have been subject to some type of EIA procedure at the project level.

#### 4. Recommendations for the Future

On the basis of this document-oriented study, and with respect to the types of policy decisions in question, we argue against an overly narrow approach to the further development of an environmental assessment system for politics. An environmental assessment which implies the discussion and evaluation of relevant environmental implications associated with the policy area involved, could be of great significance to the objective of integrating environmental considerations into policy formulation. This implies that procedural elements, or the institutional frameworks, in which policy formulation takes place, are, perhaps, just as important as a focus on sophisticated appraisal methods and detailed requirements to the way in which environmental consequences of the policy proposal itself are presented.

We believe that there is a need to clarify several elements in the administrative order as well as the frameworks the order lays out for EIAs. We propose two types of study: A theoretical study of SEA as an integrated policy instrument for decisions at the policy-making level, and two case studies. One of the latter should be retrospective in approach and investigate how environmental assessments are carried out in practice, while the other case study should be a trial run in connection with a new case. Together these two types of study would contribute to elucidating the political and administrative frameworks for environmental assessments. The studies would also highlight the practical and methodological challenges which must be surmounted if environmental assessments are to be the effective policy instrument for the integration of environmental considerations into policy formulation.

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# Annex 1: List of Participants

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**THE REGIONAL ENVIRONMENTAL CENTER FOR CENTRAL AND EASTERN EUROPE** (REC) is a non-partisan, non-advocacy, not-for-profit organisation with a mission to assist in solving environmental problems in Central and Eastern Europe (CEE). The Center fulfils this mission by encouraging cooperation among non-governmental organisations, governments, businesses and other environmental stakeholders, by supporting the free exchange of information and by promoting public participation in environmental decision-making.

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