Strategic Environmental Assessment Training Manual for South Eastern Europe
About the REC

The Regional Environmental Center for Central and Eastern Europe (REC) is a non-partisan, non-advocacy, not-for-profit international organisation with a mission to assist in solving environmental problems in Central and Eastern Europe (CEE). The center fulfills this mission by promoting cooperation among non-governmental organisations, governments, businesses and other environmental stakeholders, and by supporting the free exchange of information and public participation in environmental decision making.

The REC was established in 1990 by the United States, the European Commission and Hungary. Today, the REC is legally based on a charter signed by the governments of 28 countries and the European Commission, and on an international agreement with the government of Hungary. The REC has its head office in Szentendre, Hungary, and country offices and field offices in 17 beneficiary countries, which are: Albania, Bosnia and Herzegovina, Bulgaria, Croatia, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, the former Yugoslav Republic of Macedonia, Montenegro, Poland, Romania, Serbia, Slovakia, Slovenia and Turkey.

Recent donors are the European Commission and the governments of Austria, Belgium, Bosnia and Herzegovina, Bulgaria, the Czech Republic, Croatia, Denmark, Estonia, Finland, Germany, Hungary, Italy, Japan, Latvia, Lithuania, the Netherlands, Norway, Poland, Slovakia, Slovenia, Sweden, Switzerland, the United Kingdom, and the United States, as well as other inter-governmental and private institutions.

The entire contents of this publication are copyright ©2007 The Regional Environmental Center for Central and Eastern Europe

No part of this publication may be sold in any form or reproduced for sale without prior written permission of the copyright holder


Published by:
The Regional Environmental Center for Central and Eastern Europe
Ady Endre ut 9-11, 2000 Szentendre, Hungary
Tel: (36-26) 504-000, Fax: (36-26) 311-294, E-mail: info@rec.org, Website: <www.rec.org>

Printed in Hungary by TypoNova

This and all REC publications are printed on recycled paper or paper produced without the use of chlorine or chlorine-based chemicals
<table>
<thead>
<tr>
<th>Contents</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>List of abbreviations</td>
<td>6</td>
</tr>
<tr>
<td>Foreword</td>
<td>7</td>
</tr>
<tr>
<td>Introduction</td>
<td>9</td>
</tr>
<tr>
<td>Module 1: Introduction to SEA</td>
<td>11</td>
</tr>
<tr>
<td>What is SEA?</td>
<td>11</td>
</tr>
<tr>
<td>Benefits and costs of SEA</td>
<td>12</td>
</tr>
<tr>
<td>Module 2: Current legal and institutional arrangements for SEA in SEE</td>
<td>13</td>
</tr>
<tr>
<td>General SEA trends and developments in CEE and SEE</td>
<td>13</td>
</tr>
<tr>
<td>Current legal and institutional arrangements for SEA in SEE</td>
<td>14</td>
</tr>
<tr>
<td>Module 3: Introduction to the SEA Protocol</td>
<td>29</td>
</tr>
<tr>
<td>The SEA Protocol and the EU SEA Directive</td>
<td>29</td>
</tr>
<tr>
<td>What plans and programmes require SEA under the SEA Protocol</td>
<td>29</td>
</tr>
<tr>
<td>How the SEA Protocol treats policies and legislative proposals</td>
<td>30</td>
</tr>
<tr>
<td>Main substantive and procedural requirements for SEA of plans and programmes</td>
<td>30</td>
</tr>
<tr>
<td>Module 4: Approaches to SEA</td>
<td>33</td>
</tr>
<tr>
<td>Substantive focus of SEA</td>
<td>33</td>
</tr>
<tr>
<td>Key options for integrating SEA into elaboration of plans and programmes</td>
<td>34</td>
</tr>
<tr>
<td>Key options for integration of SEA elements into elaboration of plans or programmes</td>
<td>35</td>
</tr>
<tr>
<td>Integrating SEA into elaboration of plans and programmes: Practical recommendations</td>
<td>36</td>
</tr>
<tr>
<td>Module 5: Overview of basic applicable tools and tips for SEA practice</td>
<td>39</td>
</tr>
<tr>
<td>Basic analytical tools in SEA</td>
<td>39</td>
</tr>
<tr>
<td>Public participation approaches and tools</td>
<td>39</td>
</tr>
<tr>
<td>Role of relevant environmental objectives in SEA</td>
<td>39</td>
</tr>
<tr>
<td>Post-SEA monitoring</td>
<td>41</td>
</tr>
<tr>
<td>Preparation of Terms of Reference for SEA</td>
<td>41</td>
</tr>
</tbody>
</table>
Module 6: **Capacity development for SEA**

Key message in capacity development for SEA

Module 7: **Practical exercise: group work on integration of SEA into elaboration of plans and programmes**

Module 8: **Practical examples CEE**

- SEA for Czech Energy Policy 1998
- SEA for Czech Sectoral Operational Programme for Tourism
- SEA for Comprehensive Planning of Naissaar Island (Estonia, northern coast)
- SEA for Waste Management Plan of the Plzen Region, Czech Republic
- SEA for Waste Management Plan of the Ostrava Region, Czech Republic
- SEA for the National Development Plan of the Czech Republic (2004-2006)
- Framework SEA for the National Development Plan of Poland (2004-2006)

Module 9: **Conclusions and next steps**

Key conclusions

Key recommendations

Next steps

List of tables

- Table 1. Similarities and differences of SEA and EIA
- Table 2. SEA in CEE before the SEA Directive and the SEA Protocol
- Table 3. A framework for analysis of the planning process
- Table 4. Opportunities for integrating SEA into planning processes in SEE
- Table 5. Basic tools for assessing environmental baseline
- Table 6. Basic tools for assessing relation to relevant environmental/health objectives
- Table 7. Basic tools for assessing specific impacts
- Table 8. Basic tools for presenting assessment results for decision making
- Table 9. SEA methods already used in CEE
- Table 10. Basic tools for dissemination and access to information
- Table 11. Basic tools to collect feedback and for consultations
- Table 12. Basic tools for extended involvement
- Table 13. Possible framework for analysis of the planning process
Table 14. Different types of impacts .......................... 50
Table 15. Evaluation of proposed activities .................... 52
Table 16. Planning, SEA and participation during SEA of the Naissar Island development plan ............ 53
Table 17. Evaluation matrix for each alternative of the Naissar Island case ............................................. 53
Table 18. Environmental effect evaluation scale .................. 55
Table 19. Summary evaluation of Alternative 4 of the Plzen Regional Waste Management Plan .................. 56
Table 20. Final evaluation of all alternatives of the Plzen Regional Waste Management Plan .................. 56
Table 21. Compatibility of relevant environmental objectives and waste management plan targets ............. 58
Table 22. Assessment matrix of proposed actions in the waste management plan ........................................ 58
Table 23. Composition of the team which carried out SPD SEA ................................................................. 62

List of figures

Figure 1. Basic steps of the plan or programme elaboration process .............................................................. 34
Figure 2. Key elements of the SEA process ..................................................................................................... 34
Figure 3. SEA separated from planning .......................................................................................................... 35
Figure 4. SEA partially integrated into planning .............................................................................................. 35
Figure 5. SEA partially integrated into planning: element of the drafting ...................................................... 36
Figure 6. Full integration of SEA into planning ............................................................................................... 36
Figure 7. SEA process stakeholder map ......................................................................................................... 61

List of boxes

Box 1. Article 2.6 of the SEA Protocol .............................................................................................................. 11
Box 2. Article 2.5 of the SEA Protocol .............................................................................................................. 29
Box 3. Article 4.2 of the SEA Protocol .............................................................................................................. 29
Box 4. Article 4.5 of the SEA Protocol .............................................................................................................. 30
Box 5. Article 9.1 of the SEA Protocol .............................................................................................................. 31
Box 6. Article 12.1 of the SEA Protocol ............................................................................................................ 32
Box 7. Article 1 of the SEA Protocol .................................................................................................................. 37
Box 8. Practical tips on public participation ..................................................................................................... 44
Box 9. Tip for setting relevant environmental objective .................................................................................... 44
Box 10. Tips for capacity development ........................................................................................................... 45
### Abbreviations and Acronyms

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art.</td>
<td>Article</td>
</tr>
<tr>
<td>CEE</td>
<td>Central and Eastern Europe</td>
</tr>
<tr>
<td>EC</td>
<td>European Commission</td>
</tr>
<tr>
<td>EIA</td>
<td>Environmental impact assessment</td>
</tr>
<tr>
<td>EU</td>
<td>European Union</td>
</tr>
<tr>
<td>MoE</td>
<td>Ministry of the Environment</td>
</tr>
<tr>
<td>NGO</td>
<td>Non-governmental organisation</td>
</tr>
<tr>
<td>PP(P)</td>
<td>Plans and programmes (policies)</td>
</tr>
<tr>
<td>REA</td>
<td>Regional Environmental Agency</td>
</tr>
<tr>
<td>REC</td>
<td>The Regional Environmental Center for Central and Eastern Europe</td>
</tr>
<tr>
<td>SEA</td>
<td>Strategic environmental assessment</td>
</tr>
<tr>
<td>SEA Protocol</td>
<td>UNECE Protocol on Strategic Environmental Assessment to the Espoo Convention (Kyiv, 2003)</td>
</tr>
<tr>
<td>SEE</td>
<td>South Eastern Europe</td>
</tr>
<tr>
<td>UNECE</td>
<td>United Nations Economic Commission for Europe</td>
</tr>
</tbody>
</table>
Strategic environmental assessment (SEA) was introduced in South Eastern Europe together with the launch of the Sofia initiative on environmental impact assessment (EIA) in 1995 at the Third Environment for Europe Ministerial Conference. The Sofia EIA Initiative was an open-ended forum of Central and Eastern European countries and Newly Independent States, bilateral donors, international organisations and institutions committed to the development of the EIA system in the region. The first workshop of the Sofia EIA Initiative was jointly organised by the Ministry of Environment of Croatia and the Regional Environmental Center (REC) in September 1997. Already during that workshop, among all issues the SEA was discussed as an emerging application in the region. Follow-up work focused on a number of capacity-building activities and exchanges among stakeholders and culminated with the signing of the UNECE SEA Protocol at the Kiev Environment for Europe Ministerial Conference in 2003. All countries in the region signed the protocol. The continuing challenge is the ratification process.

This training manual was produced in 2005 with the support of the Ministry of Housing, Physical Planning and the Environment of the Netherlands. The manual was very well received and has not lost its importance since it contains not only an overview of the legal and regulatory systems of the SEA in South Eastern Europe, but also valuable concepts on SEA implementation systems and practical implementation of two international documents in the region and beyond: the European Council SEA Directive and the UNECE Protocol for Strategic Environmental Assessment. The publication of the manual was made possible by the Ministry of Environment of the Czech Republic.

The developers of the manual are Jiri Dusik, leader of the environmental assessment team of the REC, who received the IAIA Individual Award in 2007 for a major contribution to the advancement of impact assessment theory and practice at an international level; Aursa Jurkevicuute, who carries out the REC’s SEA activities and initiatives in the region and beyond; Barry Sadler, a special environmental assessment advisor and long-term partner of the REC; and internal and external SEA experts Agata Miazga Payne, Simona Kosikova, Tuuli Rasso and Ursula Rzeszot.

This manual is a contribution to SEA development. I would like to thank the donors who made this work possible as well as the authors of the manual for their excellent product. I very much hope that this manual will further strengthen the application of the SEA and its primary purpose of ensuring sustainability of plans, programmes, policies and legislation.

Marta Szigeti Bonifert
executive director
Regional Environmental Center
for Central and Eastern Europe
This training manual was elaborated to provide a flexible framework for trainings on strategic environmental assessment (SEA) in South Eastern Europe. The SEA Protocol to the United Nations Economic Commission for Europe (UNECE) Espoo Convention on Environmental Impact Assessment in a Transboundary Context is used as the main point of reference.

The manual was initiated taking into account the regulatory and environmental situation in South Eastern Europe, which needed a simple and adaptable tool to develop local capacity to work with international instruments aimed at better environmental protection, integration of environmental concerns into decision making and sustainable planning and decision making. It was prepared at a time when SEA was already widely discussed, but the legal framework was not yet prepared for SEA and options for SEA set up and the best transposition of the international requirements were still open in the region. This training manual is still relevant in the current context since, though progress has been made in the development of an SEA regulatory framework in a number of countries in the region, ratification of the SEA Protocol is still ahead for a majority of the countries. Therefore, the information provided here may serve as an interesting comparison of how to address various EA issues. It should, however, not be treated as any form of interpretative guidance for transposition of the SEA Protocol.

The South Eastern European region, for which the training manual was developed, was identified as an extended region. The region includes Albania; Bosnia and Herzegovina; Croatia; the former Yugoslav Republic of Macedonia; Montenegro and Serbia, including Kosovo (territory under UN interim administration). Bulgaria and Romania were included, and as of January 1, 2007, are full members of the European Union.

The manual focuses on practical tips, examples and exercises that can be used in SEA trainings in the SEE region. More detailed and widely applicable information on the SEA Protocol is available in the draft Resource Manual to Support Application of the Protocol on SEA developed by the UNECE and the Regional Environmental Center for Central and Eastern Europe. The draft document can be accessed at <www.unece.org/env/eia/sea_manual/welcome.html>. While the UNECE resource manual explains the application of the SEA Protocol in detail, the training manual outlines the legal basis in each country/territory of the SEE region looking at every element of SEA; serves as a training tool highlighting the key issues in SEA capacity development and provides cases that can be used to demonstrate how SEA works in practice. The examples are collected from the CEE region. This training manual is a ready-to-use tool in capacity development activities, while the UNECE manual is excellent background reading to learn more about the SEA Protocol.

The training manual is organised in modules. This setting enables preparation of individual lectures or exercises on each topic corresponding to a module.

**Module 1** highlights the definition, differences and similarities between EIA and SEA and points out the key benefits of SEA.

**Module 2** presents the current systems of SEA (2005, updated in 2007) for each country and territory in the SEE region. Information may continue to change due to development in regulatory and administrative systems, so this module must be updated with recent information before practical use.

**Module 3** is a summary of the key requirements of the SEA Protocol.

**Module 4** presents how SEA is integrated into the decision-making process. Varied approaches to SEA implementation are presented, along with pros and cons for each. As long as process and outcomes satisfy SEA Protocol objectives, all included approaches are applicable. The diversity of the regulatory and administrative setups in each country defines the diversity of SEA approaches. Those presented in the training manual cannot be used for transposition of the SEA Protocol, but rather should be considered a theory summarising the practice.

**Module 5** provides useful information on the basic applicable tools and tips for the SEA practice. The module gives references to further reading on each element of SEA. It is very useful during scoping, when the decisions are made on the environmental issues to be analysed. Selection of working techniques may influence the quality, the length of time and the assessment costs.

**Module 6** briefly indicates key messages and tips for capacity development in SEA. It is closely linked
with Module 7, which provides the practical exercise for group work on SEA integration into elaboration of plans and programmes. This exercise demonstrates that the plan- or programme-making system largely determines the design of the SEA process.

**Module 8** provides eight real-life examples of SEA carried out in CEE. These are used to illustrate the information in modules 3-7.

**Module 9**, the newest module, was elaborated in 2007. It summarises the key conclusions, makes recommendations and provides follow-up steps in capacity development for the region.

The training manual can be treated as a text version to be used together with the slides prepared for the first edition. This publication and the slides are available in PDF format online at <www.rec.org/environmental-assessment> or can be requested from the authors.

The manual was developed in 2005 by Jiri Dusik, Ausra Jurkeviciute and Agata Miazga Payne, the environmental assessment (EA) experts of the REC head office, with input from Simona Kosikova and Tuuli Rasso, REC EA experts in the Czech Republic and Estonia; Barry Sadler, international EA advisor to the REC; and Urszula Rzeszot, a long-term partner of the REC in EA for the Polish Institute for Environmental Protection.

Elaboration of the manual was financially supported by the Netherlands’ Ministry of Housing, Physical Planning and the Environment. Due to project set up and for financial reasons, the manual was not published at that time; publication in 2007 was made possible thanks to support from the Ministry of the Environment of the Czech Republic. The original version of the training manual has been updated and transformed into a publication for the Environment for Europe conference in Belgrade of 2007. The manual can be freely used and adapted as long as its users acknowledge it as a point of reference. For further information, please contact <environmentalassessment@rec.org>.
Module I
Introduction to SEA

What is SEA?

Why is SEA important? There are two main reasons:
- increasingly, decision-makers must consider cumulative and long-term impacts of multiple proposals; and
- attention is widening from environmental effects to optimal use of dwindling natural resources and concerns related to long-term sustainable development.

Environmental impact assessment (EIA) of projects is an important but insufficient tool for systematically addressing the above issues. SEA of plans, programmes and policies, or PP(P)s, can effectively address these issues, and conclusions can strengthen and streamline project-level EIA.

SEA is a systematic and transparent process with which to assess and consider environmental issues, when all options are open; and when economic and social issues are addressed in elaboration of PP(P)s. Based on the philosophy of project-level EIA, SEA is a more flexible and diversified process for reflecting the nature of strategic decision making.

The definition of SEA is provided by Article 2.6 of the SEA Protocol and contains the key elements of the process. (Please see Box 1.) This definition contrasts with the EIA definition provided in the UNECE EIA Convention on Environmental Impact Assessment in Transboundary Context (Espoo Convention), in which EIA is narrowed to simply “a national procedure for evaluating the likely impact of a proposed activity on the environment” in Article 1, vi.

Table 1 summarises the similarities and differences between the SEA and EIA processes. The characteristics are mapped out based on the key requirements and features of both assessment processes.

### Table 1: Similarities and differences between SEA and EIA

<table>
<thead>
<tr>
<th>Features</th>
<th>SEA</th>
<th>EIA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Key alternatives</td>
<td>Development directions (objectives and scenarios) and multiple activities to achieve them</td>
<td>Locations and technologies</td>
</tr>
<tr>
<td>Impacts</td>
<td>Long-term trends (often related to environmental/sustainable development objectives) – local impacts only if PP contains specific project proposals</td>
<td>Specific impacts on the local state of environment</td>
</tr>
<tr>
<td>Assessment</td>
<td>More qualitative (expert judgements)</td>
<td>More quantitative</td>
</tr>
<tr>
<td>Decision making</td>
<td>Comparison against environmental/sustainable development objectives</td>
<td>Comparison with local environmental quality</td>
</tr>
<tr>
<td>Public concerned</td>
<td>Mainly organised “publics,” e.g. interest groups, think-tanks</td>
<td>Affected public and organised groups</td>
</tr>
<tr>
<td>Quality review</td>
<td>Process management, quality of assessments and their use in the PP</td>
<td>Quality of EIA report and process management</td>
</tr>
</tbody>
</table>
Benefits and costs of SEA

SEA saves time and money in the following ways:

- SEA helps to avoid costs that may be associated with environmentally problematic strategic decisions.
- SEA helps to eliminate unfeasible development proposals, thus saving resources that would otherwise be “wasted” on their elaboration.
- SEA provides input from the concerned public, which may include persons with high expertise, free of charge to the planning process.
- SEA helps to focus and streamline EIA for projects.

SEA improves governance in these ways:

- SEA increases coherence in strategic planning.
- SEA enables early resolution of conflicts that may later slow implementation of strategic decisions.
- SEA may even mobilise support of key stakeholders for implementation of optimised PPs.
- SEA supports a gradual shift in economic planning towards sustainable development.

Very often stakeholders ask questions about the costs of SEA. SEA may add 5-15 percent to the total costs of drafting the PP. The main SEA costs relate to designing the SEA approach and selecting appropriate tools; carrying out analyses and consultations; discussions with the planning team; and contributions to elaboration of alternative solutions, i.e. alternative objectives, scenarios, proposed actions and measures to mitigate their negative effects. SEAs fully integrated into elaboration of PPs tend to be less costly than separate “ex-post” SEAs, which are either completely ineffective (i.e. the results are not used and resources are therefore wasted) or delay the entire plan or programme elaboration and implementation process.

SEA costs are not static. The main costs associated with SEA occur during the first application of SEA when appropriate approaches and tools (SEA “software”) are developed, while subsequent SEAs can be built on previous experience. Future costs will decrease and will constitute the price of standard analytical work and process management (SEA “hardware”).
Module II

Current legal and institutional arrangements for SEA in SEE

General SEA trends and developments in CEE and SEE

Prior to 1990, partial environmental analyses were carried out in land-use planning on the sectoral and spatial planning levels. There were provisions for consultations and partial environmental evaluations.

The 1990s represented the experimentation phase with environmental assessments of spatial plans in Poland, Slovakia, Bulgaria, the Czech Republic, Slovenia, Lithuania and environmental assessments of strategies outside of spatial planning such as in the Czech Republic or Slovakia.

Since 2000, in relation to the accession to the European Union, a number of SEAs have been elaborated on development plans for EU Structural Funds. Additionally, the EC SEA Directive (2001/42/EC) came into force in 2004 and the SEA Protocol was presented for signatures in 2003.

Table 2 summarises the SEA legal framework and its application in the CEE region before the adoption of the SEA Directive and SEA Protocol.

### Table 2

<table>
<thead>
<tr>
<th>SEA</th>
<th>Legal frameworks</th>
<th>Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plans and programmes within spatial planning</td>
<td>Partial environmental analyses required in most CEE countries since early 1980s. New EIA requirements for spatial plans in Poland, the Czech Republic, Bulgaria, Slovenia and Lithuania have been adopted since the early 1990s.</td>
<td>Most extensive practice in Poland. Some practice in Bulgaria, the Czech Republic and Slovenia before 2003</td>
</tr>
</tbody>
</table>
Current legal and institutional arrangements for SEA in SEE

ALBANIA

Legal framework
The SEA legal framework in Albania consists of the Law on Environmental Protection (No. 8934, 2002) and the EIA Law (No. 8990, 2003). The EIA Law is being applied to both the EIA and SEA processes. The SEA process is a copy of the EIA procedure according to the current regulations, and SEA is specified by prescribing minimum procedural requirements (Chapter 5). The EIA Law (Art. 7.4) mandates the Ministry of Environment (MoE) to prepare and a Council of Ministers to approve environmental assessment (EA) guidelines that define specific methodologies and detailed requirements for elaboration of EIA reports. Albania ratified the SEA Protocol on December 2, 2005.

Institutional framework
- The MoE is the responsible authority for SEA.
- Regional inspectorates advise, but do not decide on EIA and SEA.
- A review commission for the quality of the EIA/SEA Report advises the MoE.
- Certified experts prepare the EIA/SEA report.

Field of application
The EIA Law (Art. 5.1) requires SEA for strategies, action plans and for a variety of national and regional plans for territorial adjustment. The key sectors for which SEA must be performed are: energy, mining, industry, transport, agriculture, forestry, natural resources and mining properties’ management and waste management. National and regional territorial plans for which SEA should be carried out are urban and rural centres, industrial areas, coastal areas, tourism areas, protected areas and areas sensitive to pollution and damage.

Screening procedure
The competent authority for screening is the MoE and its regional environmental agencies (REAs). No screening procedure is prescribed in Albania. The MoE and REAs are consulted only after the proposed strategies and action plans are submitted to them, with or without the EIA/SEA report.

Scoping
There are no scoping provisions in the law, only the content of the EIA/SEA report. It is understood that certified experts will know how to scope the EIA and SEA reports. The lack of a scoping procedure is recognised by the practitioners and the MoE as a weakness.

EIA/SEA report
The SEA report should have the same structure as the detailed EIA report. The content of the detailed EIA/SEA report is outlined in articles 8 and 9.

The (abridged) key requirements applicable for EIA/SEA report include:
- an objective and detailed description of the proposal;
- the present state of the environment in the area of the proposal and its vicinity;
- detailed description of all installations that are part of the proposal or will be used during its implementation;
- a construction plan and deadlines for implementation;
- description of engineered values that are constructed or augmented;
- the procedures and reasons for selection of the site and description of at least two alternate locations;
- conformity of the proposal with territory adjustment plan and with the economic development plan of the area;
- direct and indirect environmental and health impacts of the proposal and options;
- the risks of accidents with a significant impact on health and environment, and measures against negative impacts;
- the transboundary impact on the environment, if any;
- technical measures to prevent and mitigate negative impacts on environment;
- rehabilitative measures in case of environmental pollution and damage as well as their cost;
- detailed description of sustainable use of energy, and natural and mining resources;
- a monitoring programme for environmental impact;
- a summary of consultations and opinions of local government organs, the public and environmental NGOs; and
- a copy of the license of the natural or juridical person who prepared the report.
Certification of EIA/SEA experts

The EIA/SEA report can be prepared only by certified natural and juridical persons (Art. 7.2). The MoE is the authority that can endorse the certificate in the fields of EIA and environmental audits. Public or private physical and legal entities, the qualification and professional experiences of which are closely linked with environmental protection, such as research institutes, laboratories, university departments, environmental NGOs and other specialists, can apply for certification. Requests are reviewed and endorsed by the MoE. Certification can be invalidated based on established criteria and procedures. The MoE establishes the national register of certified experts, which is accessible to the public and publishes registration data annually.

Public information and consultations

The proposal and the EIA/SEA report are subject to a public debate among representatives of the MoE, which approves the proposal; territorial adjustment and tourism authorities; local governments; specialised institutions; interested persons; environmental NGOs and the developer (Art. 20). The debate is organised and managed by the local government in which the proposal will be implemented. The local government must notify the public and environmental NGOs, and provide them with the EIA/SEA report. The local government sets the timing of the public debate (in collaboration with the MoE and the developer), notifies the participants and organises the open debate with all interested parties.

Formal review of the EIA report

The formal review of the EIA/SEA report is organised in two stages:

- initial review by the REA; and
- the review by the MoE and its review commission.

Initial review of EIA/SEA report by REA

The REA carries out the initial review of the proposal for completion of documentation (Art. 10) and can:

- accept the request for review if the EIA report addresses key issues stipulated by the EIA Law;
- reject the request for review if the SEA report insufficiently addresses key issues. It must then notify the developer about changes and adjustments to be made in the documents; or
- reject an initial review if the developer does not submit the SEA report.

If the review proceeds, the REA must review the data presented in the EIA/SEA report (Art. 14); must consult with local government units, urban and tourism development authorities; and must prepare a justified opinion with proposed conditions to be placed in the approval documentation, which is forwarded to the MoE.

Review of the EIA/SEA report by MoE

The MoE reviews the proposal through the review commission (Art. 16), whose meetings are open to interested parties including the public, NGOs, the developer and the media. The review commission verifies (Art. 17):

- the level of impact on the environment;
- conformity of the proposal with national and regional plans of social and economic development and with territory adjustment plans;
- the ability of the developer to bear rehabilitation costs associated with damages and pollution caused by its activity; and
- technical and technological characteristics of the proposal to apply requirements for prevention of pollution and damage to the environment.

Decision making

The review commission issues the final report, which contains the proposal for approval or rejection of the proposal (Art. 21). The MoE must issue an environmental declaration about acceptance or rejection of the proposed SEA (Art. 22). The environmental declaration is not binding for decision making on the proposal.

Monitoring

A programme for monitoring environmental impacts is a part of the environmental report. No other provisions are specified in the EIA law.

BOSNIA AND HERZEGOVINA:

Legal framework

The basic legal framework for SEA is defined differently in each entity. In the Federation of Bosnia and Herzegovina basic SEA provisions are defined in articles 51-52 of the Law on Environmental Protection, which was adopted in July 2003. In the Republic of Srpska, SEA is generally defined in articles 60 and 61 of the Law on Environmental Protection adopted in August 2002. Brcko District does not have environmental legislation. These framework obligations for SEA are
not operational yet due to the lack of implementing secondary legislation. BiH signed the SEA Protocol on May 25, 2003 but has not ratified it.

Field of application in the Republic of Srpska

SEA is required for regulations and decisions made by the government of the Republic of Srpska, which may influence the environment and its components, quality of environment and human health in connection with the environment.

Field of application in the Federation of Bosnia and Herzegovina

SEA is required for all physical planning documents (including projects with negative impact on environment, e.g. physical plan of the federation and cantons, regulation plans); economic regulations that could have negative impact on the environment, e.g. customs, taxes; and planning documents that provide development consent to projects in which EIA is needed.

Common institutional framework

The MoE is the responsible authority for SEA. The Environmental Advisory Council is an advisory body that reviews the quality of the SEA report, advises the MoE, and may request expert assistance. The SEA is to be obtained by the developer of a regulation or decision. Certified professionals should prepare the SEA report.

Certified SEA experts

- SEA is arranged by the developer of the given regulation or decision.
- SEA should be prepared by a legal or private person from the list of professionals authorised for preparation of environmental studies.
- The list will be defined by the Minister.

Topics to be covered in the SEA report:

- the extent to which the proposal may have negative or positive influences on the environment;
- consequences for the environment in case the proposal is not implemented;
- the extent to which conditions are adequate for the introduction of the proposal;
- the extent to which the public administration is prepared to implement the planned measure;
- whether the financial, organisational and procedural conditions are adequate for implementation of the proposal; and
- the extent to which the proposal represents deviation from the solutions generally adopted in relevant international plans.

Review of the SEA

The SEA and the proposal are forwarded to the Environmental Advisory Council (EAC), which reviews the SEA report. The EAC is an advisory body to the Ministry of the Environment and is composed of experts selected by governments in each entity. The EAC will state its opinion on the proposal and accompanying SEA and may engage expert assistance during the review process.

Decision making

- When the review by the EAC is completed, the developer forwards the proposal, SEA report and EAC opinion to the body that will decide upon the proposal.
- Outcomes of the SEA must be considered, but are not binding in decision making.
- Detailed arrangements for consideration of SEA in the decision-making process are to be defined.

BULGARIA

Legal framework

The EC SEA Directive is transposed into:

- the Bulgarian Environmental Protection Act (State Gazette No. 91/25 September 2002) Section I, regulations concerning SEA, and Section II of Chapter 6 came into effect July 1, 2004; and

On January 25, 2007, Bulgaria became the second country in the region to ratify the SEA Protocol.

Institutional framework

The Ministry of the Environment and Water (MoEW) or the relevant Regional Inspectorate for the Environment and Waters (RIEW) are the competent authorities to issue a statement on carrying out the SEA (SEA decision) and to review the SEA report. The executive bodies are the Interdepartmental Commission, a special
board of the Supreme Expert Ecological Council (SEEC) to the MoEW and an ecological expert council (EEC) to the RIEW. The developer/assigner of a PP is the person or authority initiating said PP. Only certified experts can prepare the environmental report.

Field of application

- The SEA is required for PPs in the following areas: agriculture, forestry, fisheries, transport, energy, waste management, water resource management and industry, including extraction of underground resources, telecommunication, tourism, spatial planning and land use.
- The regulation determines the types of PPs for which SEA is mandatory (Annex I) and types of PPs for which the need of SEA shall be determined/assessed (Annex II).

Screening procedure

- Screening for projects is done in Annex II of the regulation.
- The MoEW or relevant RIEW issues a statement with the SEA decision that includes the screening decision.
- When SEA is needed, the competent authority issues a decision that includes instructions on the content of the SEA report and the methods for SEA depending on the specific features of the PP.
- The Ministry of Health or, if necessary, the municipal authorities and other specialised bodies are consulted during the screening.

Scoping procedure

- The MoEW or the RIEW is the competent authority for specification of SEA report contents.
- The competent authority informs the PP developer/assigner via formal letter including description of the obligatory report content depending on the specific features of the plan or programme.
- The results of the determination/assessment and the reasons for elaboration of the report are declared to the public through the MoEW/RIEW and developer/assigner’s website and/or publication in a bulletin, media outlet, information campaign, etc.
- It is compulsory to analyse the PP alternatives as part of the environmental assessment report indicating reasons for selecting the alternatives.

Mandatory content (abridged) in the environmental report

- Main objectives of the PP and relationships with other relevant PPs;
- the current state of the environmental media and factors and the likely evolution without implementation of the PP;
- environmental characteristics of areas likely to be significantly affected;
- existing environmental problems ascertained at different levels which are relevant to the PP;
- environmental protection objectives established at national and international levels which are relevant to the PP and the way those objectives and any environmental considerations have been taken into account during preparation of the PP;
- likely significant effects on the environment, including the environmental media and factors (the phenomenon affecting the media), and the relationship among them;
- measures envisioned to prevent, reduce and offset any significant adverse effects on the environment resulting from implementation of the PP;
- reasons for selecting the alternatives dealt with and a description of the assessment process, including any difficulties encountered in compiling the required information;
- measures envisioned in connection with monitoring during the implementation of the PP;
- a non-technical summary of the environmental assessment;
- a list of information sources for the methods used in assessing and forecasting the impact on the environment and source references;
- a list of the experts and the expert team leader, who have prepared the EIA report; where every person shall certify the item(s) he/she has developed with a signature;
- copies of the certificates for entering the registry of the MoEW under Article 83, paragraph 4 of the Law on Protection of the Environment (LPE);
- declarations under Article 16, paragraph 2 hereof; and
- references for consultations, opinions and suggestions obtained thereafter, and the way they have been obtained.
Certification procedure for SEA experts

- The developer/assigner shall assign the elaboration of the SEA report in compliance with the approved terms of reference and the requirements of the Bulgarian Environmental Protection Act to registered experts on EIA/SEA.
- The MoEW maintains a public register of certified independent experts.

Public information and consultation

- The announcement shall include information about the developer/assigner; the public place and announced time for display of the PP draft, the SEA report; methods of communicating the statement on the draft and report (mandatory on the developer's web site and/or via other publicly accessible channels).
- Consultations shall ensure adequate access to the SEA report, the draft PP, each evaluated alternative, and evaluation statements.
- The developer/assigner organises consultations with the Ministry of Health, the public, the interested bodies and persons who may be affected by the PP's implementation.
- Public discussion of the SEA report is mandatory when required under provisions of a specific law for the draft PP or when there are more than two motivated negative statements/suggestions for the alternatives indicated in the SEA report or during the consultations.
- The developer/assigner shall assign an amendment to the EIA report and shall assess the need to continue consultations if, as a result of the consultations, it becomes necessary to consider and evaluate other alternatives, opinions or suggestions to the PP.
- sending opinions, suggestions, statements and recommendations to the SEA report team and the assigner via standard post or email; and
- public discussions.

Transboundary consultation

- The competent body for the SEA procedure in the transboundary context is the MoEW.
- If a PP proposed for SEA is likely to have a substantial impact on the environment of another country/other countries, the MoEW should notify the affected country/countries and set a deadline for the respective country to announce its participation in the procedure.
- If the affected country agrees to participate in the procedure, the transboundary aspects should be taken into account and bilateral or multilateral consultations should be held to reach an agreement.
- The SEA procedure of PPs with a transboundary impact implemented in other countries and affecting Bulgaria is also prescribed by the regulation.

Formal review of the environmental report

Evaluation of the quality of the SEA report is not obligatory in Bulgaria. In compliance with the regulation, the competent authority evaluates the quality of the report submitted by the developer/assigner upon request. The MoEW and the relevant RIEW are the competent authorities responsible for the review of the SEA report. The competent authority is supported by the Supreme Environment Expert Council and the Environment Expert Council, which consist of representatives from MoEW, the Ministry of Health, the Ministry of Agriculture and the Ministry of Regional Development and Public Works.

Decision making

The Supreme Environmental Expert Council in the MoEW and the environmental expert council in the RIEW make decisions on SEA. The mandatory decision/statement should include:

- justification of the selection of the preferred alternative from an environmental point of view;
- measures for prevention, decreasing or possibly complete remediation of the expected negative effects of the PP implementation on the environment; and
- measures for supervision and control of the PP implementation.
The SEA decision/statement is mandatory for the PP developer/assigner, who is obliged to send to competent authorities a summary with analyses of conformity of the PP with the general results and recommendations of the SEA report, results from consultations, and alternatives indicated in the SEA statement.

Monitoring
The regulation (chapter 6) defines the requirements for monitoring and control during the PP implementation. The MoEW and/or the relevant RIEW or a duly authorised person are the competent authorities for review and control of implementation of the measures pointed out in the SEA report in the process of implementation of the PP. The developer/assigner elaborates a report for the review and control in the implementation of the PP, including the reduction or elimination of the environmental damages during the implementation of the PP. The competent authority approves the SEA report or returns with requirements for elaboration. The developer/assigner provides public access to the SEA report.

CROATIA
Current legal framework
Environmental assessment of physical plans is carried out under the Croatian Environmental Protection Act (EPA; Art. 34), which requires the Ministry of Environmental Protection, Physical Planning and Construction (MEPPPC) to give consent to such plans prior to their passing. The EIA procedure is used for assessment of physical plans (i.e. preliminary study for projects not specified in physical planning documentation, upon proposals for amending of a plan) as required for projects under the EIA Rule Book. Croatia signed the SEA Protocol on May 23, 2003.

Future legal framework
- Croatia intends to introduce strategic impact assessment procedures for plans, programmes, and policies into physical planning as well as into other sectors in the future as required by the Environmental Protection Act (EPA), Art. 33.
- SEA is planned for inclusion as an amendment to the EIA Rule Book and also to the EPA, probably in a form that operates more through cooperation and advice rather than rigid requirements.
- The amendment proposal to the EPA (Art. 33; a&b; April 2002) will introduce the SEA legal framework (procedure) and set the legal basis for SEA.
- Detailed implementation arrangements are not yet designed.

Field of application as proposed in the amendments to the EPA
SEA should ensure environmental assessment of strategies, programmes and plans during their drafting and before their adoption.

The strategies, programmes and plans that should be subject to SEA are:
- documents passed by the Parliament and government as well as the plans and programmes passed by the county assembly or the Assembly of the City of Zagreb; and
- documents in the agriculture, forestry, fishery, energy, industry, traffic and telecommunications, waste management, water treatment and physical planning sectors.

Implementation procedures as proposed in the amendments to the EPA
Responsible implementation agencies for SEA:
- SEA for documents passed by Parliament or government will be carried out by the MEPPPC in cooperation with the relevant authority that drafts the document.
- SEA for documents passed by the county assembly or the Assembly of the City of Zagreb is carried out by the County/City of Zagreb office for environmental activities.
- The SEA procedure, data collecting, timeframes for the procedure, public participation model, monitoring of the passed documents and decision making on the impact of the proposed execution in the document will be prescribed by the government.

FORMER YUGOSLAV REPUBLIC OF MACEDONIA
Legal framework
The SEA basic requirements and framework obligations are laid out in the Macedonian Framework Environmental Law (FEL; 2005). The detailed procedures must be set out in the bylaws. The FEL requires SEA for strategies, plans and programmes (i.e. planning documents in the FEL) as well as amendments to such planning documents proposed by a body of the state administration and passed by the government. SEA is to be required for planning documents and amendments thereof which are not required by legal, regulatory or administrative provisions (wider than is required by the EC Directive) and which set the framework for future
development consent. The former Yugoslav Republic of Macedonia signed the SEA Protocol on May 21, 2003.

Institutional framework
depending on the level of planning document being prepared, the government or state environmental authority makes the final decision on the screening. The state environmental body prescribes the content of the environmental report and reviews the quality. Only certified experts can prepare the environmental report.

Field of application
SEA shall be carried out on planning documents prepared:
- in the areas of agriculture, forestry, fisheries, energy, industry, mining industry, transport, regional development, telecommunications, waste management, water management, tourism, spatial and urban planning and land use;
- on the National Environmental Action Plan and local environmental action plans; and
- on all strategic, planning and programme documents for which implementation of projects subject to environmental impact assessment are planned.

Screening
No detailed screening procedure is defined in the FEL; however, it must be developed in the future together with the screening criteria. The screening decisions are taken if:
- the planning documents are not on the FEL’s list, and they shall be subject to SEA only if they are likely to have significant impact on the environment, on human life and health;
- the state environmental authority makes the final screening decision when the planning document is prepared by the municipalities, councils of municipalities and Skopje municipal bodies; or
- the government makes the final decision on the screening in cases where the planning document is adopted by a body of the state administration.

Scoping
The scoping procedure is not prescribed in the FEL, but will be developed in subsequent regulations. Decisions on scoping are made by the body preparing the planning document, which should take into account the opinion of the bodies affected by the implementation of the planning document. The Macedonian government shall prescribe the content of the environmental report upon proposal of the state environmental authority and, at this stage, it is not clear wherever the outline of the report is similar to the annex of the directive. The law does not specify any scope. A detailed scope will be determined in accordance with Articles 67.3 and 67.4 of the FEL.

Environmental report
- The environmental report must be prepared by the body preparing the planning document.
- The body preparing the planning document shall engage at least one person from the list of experts for SEA referred to in Art. 68 of the FEL.

Certification procedure for SEA experts
- The list of experts to prepare the environmental report is maintained by the state environmental authority.
- The state environmental authority shall prescribe the manner, procedure and level of compensation for expenditures related to enrolment and withdrawal from the list.
- Minimum criteria for the enrolment of natural persons onto the list of experts are a university degree in natural science; technical expertise in the field of the environment; and a minimum of five years in the area of the strategy, planning or programming.

Public information and consultation
- Consultation during the scoping with the bodies affected by the implementation of the planning document is prescribed.
- The developer of the planning document shall publish information concerning the draft planning document and the environmental report.
- The developer shall consult the state environmental authority on the draft planning document and the environmental report.
- The developer shall take into account the opinions received in the development of the planning document and prepare a special report thereon (Art. 69.4).
- The FEL will prescribe information dissemination, the public participation procedure and the manner of preparation of future consultation reports.
- The body that adopts the planning document shall
publish the decision on the adoption and make notification of transboundary consultations.

Transboundary consultations
• The FEL prescribes the minimum requirements for transboundary consultations in case the national planning document is likely to have transboundary impact on the environment, human life and health.
• The state environmental authority and the body of the state authority for foreign affairs should prescribe transboundary consultation procedures.
• In cases of notification from a competent authority of another country on a planning document likely to impact the environment, human life and health in former Yugoslav Republic of Macedonia, the body of the state environmental authority shall immediately initiate a procedure for assessment of the impact status in the former Yugoslav Republic of Macedonia from the implementation of said planning document.

Formal review of the environmental report
• The state environmental authority evaluates the adequacy of the environmental report and issues a report.
• The evaluation report as well as the environmental report have to be made public.
• A person from the list of experts who did not participate in the preparation of the report will be appointed to evaluate the environmental report.

Decision making
• The authority that prepares the planning document or the amendment of the planning document shall take into consideration the findings of the environmental report; the opinions and comments obtained from the bodies concerned with implementation of the planning document; and the results of transboundary consultation.
• The authority that adopts the planning document shall also consider the opinion of the body of the state environmental authority on the adequacy of the environmental report.

Monitoring
• The authority that prepares the planning document shall monitor the impact on the environment and human health caused by implementation of the planning documents.
• Detailed monitoring procedures and reporting are not prescribed by the FEL.

MONTENEGRO
Legal framework
Montenegro elaborated the SEA Law in 2005 with the help of the Yugolex project, which developed EIA and SEA regulations for the then Serbia and Montenegro (2002-2005).

The 2005 Law on SEA in Montenegro was prepared transposing the requirements of SEA Directive, the SEA Protocol and other sources, particularly EU guidance on SEA Directive implementation. The Montenegrin Law on SEA defines the complete SEA procedure from screening to SEA approval, including public participation and transboundary effects. The new Montenegrin SEA Law will come into force on January 1, 2008.

Montenegro became a signatory of the SEA Protocol on October 23, 2006.

ROMANIA
Legal framework
The legal basis for SEA is established by the Governmental Decision No. 1076/8.07.2004 (hereafter referenced as the Decision), which sets the environmental assessment procedures of certain plans and programmes adopted in 2004. PPs are specified as documents that are:
• subject to preparation and/or adoption by an authority on a national, regional, or local level;
• prepared by an authority for adoption, through a legislative procedure, by the Parliament or government;
• required by legislative, regulatory or administrative provisions;
• PPs co-financed by the European Community; and/or
• modifications of all of the above.

Order No. 978/2003 (amended with No. 97/2004) outlines the certification regulation for persons who can prepare the EIA, environmental audits and environmental assessments for PPs.

Romania signed the SEA Protocol on May 21, 2003.

Institutional framework
• The central public authority for environmental protection is responsible for SEA of national and regional PPs.
Regional environmental protection agencies are responsible for SEA of lower-level PPs including regional, county, local and Bucharest levels and, in cases of the Danube Delta, the Biosphere Reservation Administration.

The SEA report must be prepared by certified persons, as defined in the Decision.

Field of application

The EA is carried out for PPs which:

- are prepared for agriculture, forestry, fishing and aquaculture, energy, industry including activity of mineral resources extraction, transport, waste management, water management, telecommunications, tourism, town and country planning or land use, or regional development;
- set the framework for future development consent of projects (Annex 1 and 2 to GD No. 918/2002); and
- may have an impact on the special established protection areas and special conservation areas approved with amendments by Law No. 462/2001.

An environmental assessment for any kind of policy is not required to be carried out.

Screening procedure

- The competent environmental authorities make the final decision on screening.
- The screening stage begins with written notification of the competent environmental authority by the PP developer.
- Screening should be carried out in consultation with the PP developer, the health authority and the authorities concerned by the effects of implementing the PP (identified by the competent environmental authority) within a screening committee established for this purpose.
- The screening committee is established by the central environmental authority and/or at the regional, county, local and Bucharest level, including, in cases involving the Danube Delta, the Biosphere Reservation Administration, by competent regional environmental authority.
- The PP developer must submit the first draft of the PP to the screening committee.
- The screening committee carries a case-by-case examination, taking into account the relevant criteria (Annex 1 of the Decision) and consultations with the public. It proposes the screening decision to the competent environmental authority.

Scoping procedure

Scoping is done by a working group composed of the PP developer, the competent environmental and health authorities, other authorities concerned by the effects of PP implementation, natural or legal persons certified according to the legal provisions, and employed experts (articles 15-19).

The working group is established for a respective PP only and should help the PP developer:

- determine the scope of the report;
- establish specific objectives of the PP;
- propose prevention, mitigation and monitoring measures of the significant environmental effects for each alternative and recommendations;
- propose the final alternative of the PP; and
- set the monitoring programme of PP implementation.

Environmental report

The environmental report should contain information prescribed in the Annex II of the Decision, including:

- an outline of the content, main objectives of the PPs and relationship with other relevant PPs;
- the relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the PP;
- the environmental characteristics of areas likely to be significantly affected;
- any existing environmental problems which are relevant to the PP including those relating to any areas of a particular environmental importance;
- the environmental protection objectives, established at international, Community or national level, which are relevant to the PP and the way those objectives and any environmental considerations have been taken into account during its preparation;
- the likely significant effects on the environment, including on issues such as biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage including architectural and archaeological heritage, landscape and the interrelationship between the above factors;
- the measures envisaged to prevent, reduce and off-
set any significant adverse effects on the environment of implementing the PP;

- an outline of the reasons for selecting the alternatives dealt with, and a description of how the assessment was undertaken including any difficulties encountered in compiling the required information;

- a description of monitoring measures; and

- a non-technical summary.

Certification procedure or the SEA experts

The certification commission functions under the Ministry of Environment and Water Management and has seven members. The natural persons are certified on three levels of competence: low, medium and high. The level depends on training and experience in EIA, technical and professional qualifications/expertise and affiliations with professional organisations. The certification commission issues a certificate valid for two years, which can be prolonged three times. After six years, certification must be renewed. The legal persons are certified on a single level of competence, i.e. high. The certification is based on training and experience in an EIA field, technical and professional qualification/expertise of its members and affiliation with professional organisations. The certificate is valid for two years and is renewable. Foreign nationals can be conditionally certified persons.

Public information and consultation

- During the screening stage, the PP developer should make available the first draft of the PP to the competent environmental authority and to the public for written comments and suggestions on possible environmental effects.

- Public participation in the environmental assessment procedure should be carried out early, from the beginning of the PP (Art. 7.3).

- The PP developer must notify the competent environmental authority and the public about starting the elaboration of the PP and development of its first draft, through repeated announcements in a newspaper (Art. 9.1).

- During the EA stage, the public can express their comments on the draft PP and on the environmental report and transmit these comments to the PP developer and to the competent environmental authority.

- The PP developer modifies the draft PP and/or the environmental report based on the justified observations received from the public.

- After submitting the draft PP and the environmental report to the competent environmental, health and other authorities concerned, the developer must organise a public debate.

Transboundary consultation

When a PP might have significant environmental impact on another country or when a potentially affected country requires information about the PP, the developer sends the draft PP and the environmental report before the PP is adopted, to the central environmental authority of that country. If the country receiving the documents makes notification of its intention to start consultations before the adoption of the PP, the developer must make the consultation arrangements within the framework of bilateral relations. The developer notifies any country that has been consulted about the final decision on environmental report.

Formal review of the environmental report

- The competent authority responsible for the review of the environmental report is the environmental authority.

- In order to review the quality of the environmental report and to ensure compliance with the provisions of the present decision, the received points of view of all the other authorities shall be taken into account and a consultancy may be employed (Art. 24).

- The competent environmental authority shall also analyse the results of public consultations and their integration in the environmental report.

- If the environmental report is incomplete or of insufficient quality, the competent environmental authority communicates, in writing, the necessary rectification of the environmental report.

Criteria (abridged) for review of environmental report quality

- compliance with the framework content;

- presentation of technical, procedural or other difficulties, and explanation of uncertainties and hypotheses;

- presentation of the alternatives studied, reasons for choosing one of them, and details as to how envi-
Environmental consideration has been integrated into the draft PP;
• detailed justification of reasons for not considering certain aspects within the assessment;
• taking into account matters encountered during the consultation process with other authorities and the public;
• illustrated presentation of the information (graphs, maps, schemes, etc.); and
• existence of a monitoring programme.

Decision making
The decision on the SEA is presented in the environmental approval, which is issued by the competent environmental authority. If the environmental report or public comments underline a likely significant adverse environmental impact, the competent environmental authority decides, motivates and communicates in writing the necessary rectification of the PP, in order to prevent, reduce or offset the adverse effects. The PP developer must submit to the adoption procedure of the PP and any modification to the PP as approved by the competent environmental authority.

Monitoring
The monitoring programme is attached to the documentation submitted to the competent environmental authority in order to obtain the environmental approval and is integrated in the environmental approval. The implementation of the monitoring programme is the responsibility of the PP developer. The developer must annually submit the results of the monitoring programme to the competent environmental authority that released the environmental approval. The competent environmental authority reviews the monitoring programme results received from the developer and informs the public through its Internet page. The monitoring required under SEA may also be done, as appropriate, using the existing environmental data, other monitoring programmes (e.g. national environmental monitoring) and monitoring equipment, encouraged from the point the view to avoid duplication.

SERBIA
Legal framework
The Law on Strategic Environmental Impact Assessment of Serbia (SEIA Law), adopted in 2004 sets basic conditions, methods and procedures for carrying out strategic assessment (SA). The SEIA Law requires SA for certain plans and programmes, meaning all development and other PPs, sector master plans, and amendments which are prepared and/or adopted by the national, provincial or local authority, which are prepared by the competent authority for the purpose of adoption in the appropriate procedure by the assembly or government of the Republic of Serbia, or the assembly or the executive authority of the autonomous province or self-government units, as well as PPs adopted pursuant to legislation.

Serbia signed the SEA Protocol on May 21, 2003.

Institutional framework
The ministry responsible for environmental protection is the responsible authority for SEA in Serbia. It reviews the SA report and grants approval or refuses the application for the SA report. The decision is mandatory to the competent planning authority, and adoption of PP procedure cannot continue further without obtaining approval for the report. The strategic assessment report can be elaborated by certified experts only.

Principles of strategic assessment as outlined in the SEIA Law:
• Sustainable development: Consideration and inclusion of significant environmental aspects in preparation and adoption of certain PPs and setting of conditions for preservation of values of natural resources, landscapes, biological diversity, wildlife species and autochthonous eco-systems, and rational use of natural resources shall contribute to fulfilment of objectives of sustainable development.
• Integration: The environmental protection policy that is implemented through enactment and adoption of PPs shall be based on the inclusion of environmental protection conditions, and conditions of preservation and sustainable use of biological diversity in the appropriate sectoral and inter-sectoral PPs.
• Precautionary principle: Each activity must be carried out in such a way as to prevent or reduce adverse effects of certain PPs on the environment before their adoption, providing for rational use of natural resources and minimising the risk to human health, the environment and material resources.
• Hierarchy and coordination (tiering): SA should be carried out on different hierarchy levels at which PPs are adopted. The increased level of transparency in decision making within the procedure of
strategic assessment of PPs shall be provided through mutual coordination of the competent authorities and authorities concerned in the procedure of granting approval for the strategic assessment, through consultations, and informing and submission of opinions relating to PPs.

- Public character of work (transparency): Aiming at informing the public about certain PPs and their potential impact on the environment, and at providing complete transparency in the procedure of preparation and enactment or adoption of PPs, the public must have access to information relating to such PPs or their amendments prior to adoption of any decision and after the adoption of PPs.

Field of application
The SA shall be carried out for all PPs, including:

- sectoral master plans in the fields of spatial and town planning or land-use planning;
- planning in the fields of agriculture, forestry, fishing industry, hunting, energy, industry, transport, waste management, water management, telecommunications, tourism, preservation of natural habitats and wildlife (flora and fauna); and
- PPs that set the frameworks for granting the approval for future development projects defined by the EIA-related legislations.

Screening procedure
The developer, in consultation with the competent environmental authority, other authorities and organisations concerned, makes the screening decision and screening decisions on the use of smaller areas, minor modifications or PPs that do not require a formal adoption procedure. The developer may decide not to request the SA based on the opinion of the competent environmental protection authority, other authorities and organisations concerned, but screening decisions must be elaborated regardless. The screening decision should include details based on the screening criteria (Annex 1 of the SEIA Law):

- review of issues and problems related to the environment in the PP to be considered within the SA;
- reasons for omission of certain environmental issues and problems in the PP;
- elements of the SA report;
- selection and obligations of the SA report developer;
- consultation methods with the authorities, organisations and the public concerned in the SA report elaboration and consideration procedure; and
- other data of relevance for the SA elaboration.

The screening decision is an integral part of the decision on preparation of PPs and must be officially published.

Scoping
In the SEIA Law, the environmental report is called a strategic assessment report, the content of which is prescribed by Article 12 of the SEIA Law. The draft scope of the report is prepared by the planning authority and submitted together with the draft screening decision to the competent environmental protection authority, other authorities and organisations concerned for their opinion. If no opinions are received, the content of the report is considered approved. The developer shall provide for participation of authorities, organisations and the public concerned in the procedure of granting approval for the report’s content.

Strategic assessment report
The SEIA law prescribes the content of the report, which should include:

- the background information of the strategic assessment;
- general and specific objectives of the strategic assessment and selection of indicators;
- evaluation of likely impact with the description of measures planned for reduction of adverse effects on the environment;
- guidelines for elaboration of lower-level strategic assessments and assessments of environmental impact of projects;
- the monitoring programme for environmental status during the execution of plans and programmes (monitoring);
- the outline of methodology applied and difficulties encountered during the strategic assessment;
- the outline of decision-making methods, description of reasons vital for selection of the given PP with respect to the alternative solutions considered and the outline of methods in which the environmental issues have been included in plans and programmes;
- conclusions reached in the process of SA report elaboration presented in a fashion so as to be understandable to the public; and
- other data of relevance for strategic assessment.
Specific provision on key elements of the strategic assessment report

The SEIA Law specifies that each strategic assessment should contain the following elements:

- background information (Art. 13);
- general and specific objectives and selection of indicators (Art. 14);
- assessment of potential impacts (Art. 15);
- guidelines for lower hierarchy levels (Art. 16); and
- an environmental status monitoring programme (Art. 17).

Background information in the strategic assessment report (Art. 13)

- the outline of the content and objectives of PPs and relationship with other PPs;
- the outline of the current status and quality of the environment in the area;
- characteristics of the environment in areas likely to be exposed to significant impact;
- environmental protection issues and problems that have been considered in PPs, and the outline of reasons for omission of certain issues and problems from the assessment procedure;
- the outline of prepared alternatives relating to environmental protection in PPs, including the zero alternative and the most environmentally favourable alternative; and
- results of previous consultations with authorities and organisations concerned.

Objectives and indicators in the strategic assessment report (Art. 14)

- Requests and objectives related to environmental protection in other PPs;
- environmental protection objectives set at Serbian and international levels;
- data collected on the status of the environment and significant questions; and
- problems and proposals related to environmental protection in PPs.

Assessment of potential impacts in the strategic assessment report (Art. 15)

- The outline of the assessed impact of alternative solutions of PPs with the description of measures aimed at preventing and limiting adverse effects or increasing positive effects on the environment;
- comparison of alternative solutions and the reasons for selecting the most favourable alternative solution;
- description of environmental measures proposed;
- the way in which the environmental elements have been taken into consideration, e.g. data on air, water, soil, climate, ionising and non-ionising radiation, noise and vibrations, flora and fauna, etc.; and
- the ways in which impact characteristics including probability, intensity, complexity/reversibility, time dimension, spatial dimension, and cumulative and synergistic effects have been taken into account.

Guidelines for lower hierarchy levels in the strategic assessment report (Art. 16)

The SA report shall include the developed guidelines for PPs at lower hierarchy levels that include the determination of the need for strategic assessment elaboration and elaboration of assessment of the environmental impact of projects. The guidelines also define the environmental protection aspects and other questions of relevance for environmental effect assessment of lower hierarchy level plans and programmes.

Environmental status monitoring programme in strategic assessment report (Art. 17)

- description of objectives of PPs;
- environmental status monitoring indicators;
- rights and obligations of the competent authorities;
- action in cases of unexpected adverse effects; and
- other elements, depending on the type and scope of PPs.

Certification procedure for SEA experts

The SEIA Law sets the procedure of selection of the SA report developer. The strategic assessment report developer can be a legal or natural person inscribed in the corresponding register as entitled to execute activities related to spatial planning and elaboration of plan documents, or town planning and elaboration of town plans. Legal or natural persons are entitled to establish
the multi-disciplinary team composed of persons qualified for analyses of each of the strategic assessment elements to elaborate the SA report. Persons with a university degree of the appropriate profile and with at least five years’ experience in the specific field or professional achievements, i.e. participation in at least two realised PPs, are considered qualified for elaboration of the strategic assessment report.

**Public information and consultation**

The developer shall submit the strategic assessment report to the authorities and organisations concerned, requesting their opinion. He must provide for public participation in the strategic assessment report prior to submission of application for granting the approval for the strategic assessment report. The developer must inform the public about the method and deadlines for insight into the report’s content and submission of opinions, as well as the time and venue of public debate organised in accordance with the law regulating PP adoption procedure. Finally, the developer shall compile the report on participation of authorities and organisations and the public concerned, which must include the rationale for all accepted and rejected opinions.

**Transboundary consultation**

Transboundary consultation in Serbia must be carried out when implementation of plans and programmes may have significant adverse effects on the environment in another state, or when requested by the state whose environment could be significantly threatened. The ministry responsible for environmental protection shall submit to another state the following information requesting its opinion on:

- the description of a given plan or programme, together with all available information on its possible effects;
- the nature of the decision that may be adopted; and
- the time frame in which to participate in the decision-making procedure.

These consultations take place during consultations with authorities, organisations the public concerned in Serbia.

**Formal review of the environmental report**

The developer shall submit the strategic assessment report to the competent environmental protection authority for the purpose of evaluation, along with the report on participation of authorities, organisations and the public concerned. The competent environmental protection authority may obtain the opinions of other authorised organisations or experts in certain fields on the strategic assessment report and the report on participation of authorities, organisations and the public concerned. Evaluation of the report should be based on criteria contained in Annex II of the SEIA Law.

**Decision making**

The competent environmental protection authority shall grant the approval of or refuse the application for the strategic assessment report on the basis of evaluation. The developer cannot continue the procedure of adoption of plans or programmes without having obtained the approval from the competent environmental protection authority for the SA report.

**Monitoring**

- The programme monitoring the status of the environment during the implementation of PPs is a part of the strategic assessment report.
- The monitoring programme shall highlight the environmental status monitoring indicators, the rights and obligations of the competent authorities, actions in cases of unexpected adverse effects, and other elements depending on the type and scope of PPs.
- The environmental status monitoring programme can make up an integral part of the existing monitoring programme provided by the competent environmental protection authority.

**KOSOVO (territory under UN interim administration)**

**Legal framework**

- Basic obligations are defined in the Environmental Protection Law and the Administrative Directive on EIA (No. 9/2004).
- The Administrative Directive complies with the amended EC EIA Directive 97/11/EC.
- Certain plans and programmes defined by the EC SEA Directive must undergo thorough assessment, but the SEA procedure is incomplete in relation to the directive.

**Institutional framework**

The Ministry of Environment and Spatial Planning of Kosovo is the key actor in EIA/SEA system. It undertakes screening, provides comments on the contents of
the EIA report, reviews the EIA report with assistance of the relevant bodies and uses outcomes of EIA to issue environmental consent. Kosovo’s Environmental Protection Agency has only an advisory role. EIA reports in Kosovo may be prepared only by certified experts.

Field of application

The Environmental Protection Law (Art. 8) stipulates that spatial plans (regional spatial plans, municipal spatial plans), plans for the management of natural resources, development plans and programmes, and other spatial planning and adjustment acts which affect the environment must include:

- an assessment of planned activities and their impact on the environment; and

- a detailed assessment of their potential positive economic impacts.
The SEA Protocol and the EU SEA Directive

European Union Directive 2001/42/EC is directly applicable in the EU 27 (as of January 1, 2007) and accession countries. The directive came into force on July 21, 2004. The European Commission has produced guidance on implementation which is available at <ec.europa.eu/environment/eia/sea-support.htm>.

The United Nations Economic Commission for Europe adopted the SEA Protocol to the UNECE Espoo Convention on EIA in Transboundary Context, which was signed in May 2003 by 36 UNECE member countries and the European Community. It remains open to signature from other UN countries and will not come into force for some time.

The SEA Protocol is almost identical to the SEA Directive, which served as a benchmark for negotiations by EU member states. It has more detailed provisions for:

- treatment of environment, including health issues;
- non-binding provisions on public participation in screening and scoping;
- non-binding provisions on SEA for policies and legislation (Art. 13); and
- a more linear (EIA-based) procedure open for transposition as integrated procedure into strategic planning.

What plans and programmes require SEA under the SEA Protocol?

Definition of plans and programmes is provided in Article 2.5 of the SEA Protocol (see Box 2). SEA is required for plans and programmes at all levels and for any modifications to them that are:

- required by legislative, regulatory or administrative provisions; and
- prepared and/or adopted by a public authority (at all levels).

Can strategies, policies, concepts and the like be treated as PP? The name itself is not a reliable guide: Documents having all of the above characteristics of a plan or programme as defined in the Directive may be found under a variety of names, e.g. “strategy” or “guidelines.”

Additionally, SEA is mandatory for plans and programmes involving sectors (see Box 3 for details on Article 4.2 of the SEA Protocol) that set the framework for future development consent of projects in annexes I and II of the Protocol or that require EIA under national legislation.

Article 5 (Screening) of the SEA Protocol offers some discretion in the scope of the application of the

---

**BOX 2**

Article 2.5 of the SEA Protocol

“Plans and programmes” means plans and programmes and any modifications to them that are:

- required by legislative, regulatory or administrative provisions; and
- subject to preparation and/or adoption by an authority or prepared by an authority for adoption, through a formal procedure, by a parliament or a government.

---

**BOX 3**

Article 4.2 of the SEA Protocol

A strategic environmental assessment shall be carried out for plans and programmes which are prepared for agriculture, forestry, fisheries, energy, industry including mining, transport, regional development, waste management, water management, telecommunications, tourism, town and country planning or land use, and which set the framework for future development consent for projects listed in Annex I and any other project listed in Annex II that requires an environmental impact assessment under national legislation.
SEA. SEA is required only when the following are likely to have significant environmental effects:

- minor modifications to PPs that require mandatory SEA;
- PPs that require mandatory SEA that determine use of small areas on a local level; and
- other plans and programmes which set the framework for future development consent of projects.

Plans and programmes exempt from the application of the Protocol are identified in Article 4.5 (See Box 4).

When determining whether SEA is needed for these PPs:

- criteria in the Protocol’s Annex III must be considered;
- relevant environmental and health authorities must be consulted; and
- the public must have timely access (through public notices or other appropriate means such as electronic media) to results of this determination, including the reasons for not requiring an SEA.

In determining when SEA is needed, countries use the mandatory application through the list of PPs or discretionary application through a case-by-case screening for each PP. A very common option is a combination of both approaches.

Numbers of annually performed SEAs vary considerably. Before the adoption of the SEA Directive and the SEA Protocol, there were very few SEAs per year, though with new legislation it is expected to have around 50 SEAs each year in the Czech Republic and possibly over 1,000 SEAs annually in Poland.

**How the SEA Protocol treats policies and legislative proposals**

Application to policies and legislation is defined in Article 13 of the SEA Protocol. Definitions of policies and legislation are not defined in the Protocol, but could be referred to as every strategic document which does not qualify as project, plan and programme. Regardless of ambiguity, the Protocol requires that each party “should ensure consideration” of environmental concerns of proposals for policies and legislation, should “determine practical elements” of SEAs of policies and legislation taking into account need for transparency in decision making, and shall “report on application” of this article to the meeting of the parties.

In considering SEA for policies and legislation, the question arises as to the practicality of the following SEA elements, if any:

- screening;
- scoping;
- environmental reports;
- public participation;
- consultation with authorities;
- due account in the decision making; and
- monitoring.

There may be something totally different which would be practical and useful for SEA of policies and legislation.

**Main substantive and procedural requirements for SEA of plans and programmes**

Article 6 of the SEA Protocol is focused on scoping. This is a process of the determination of the environmental report’s content. Environmental and health authorities must be consulted, and public participation should be done “to the extent appropriate.” The SEA Protocol does not require publication of the scoping outcome or report.

**Scoping — key considerations**

No formal scoping decision is required. Scoping is not set as a rigid procedural step. There may be separate scoping consultations in each stage of the SEA or plan- or programme-making process.

Minimum requirements for the environmental report are presented in Article 7 and Annex V of the Protocol, which contains a “rough outline” of the content. Key components of the environmental report should be:

- content of the PP and how it relates to other PPs;
- key environmental (and health) trends and problems;
- screening;
- scoping;
- public participation;
• relevant environmental (and health) objectives and how they were taken into account;
• likely significant environmental (and health) effects;
• measures to offset or mitigate negative effects;
• a comparison of alternatives;
• a monitoring plan; and
• a non-technical summary.

The environmental report should be “fit for purpose” and provide information that can be reasonably required, taking into account:
• current knowledge and methods of assessment;
• contents and the level of detail of the plan or programme and its stage in the decision-making process;
• interests of the public; and
• informational needs of the decision-making body.

The environmental report need not cover all issues outlined in the Protocol. The debate is open on the following issues:
• Should it be a separate document or part of the PP (e.g. annex)?
• How might the requested analyses during the elaboration of PP be most effectively carried out?
• How can quality of the environmental report (including consultation, accreditation of SEA experts, formal reviews at the end of the SEA process) be ensured?

Public participation requirements are described in Article 8 of the Protocol, the key elements of which are:
• identification of the public concerned (affected and interested public and NGOs);
• early, timely and effective opportunities, when all options are open in SEA;
• public availability of proposed PP and of the environmental report; and
• opportunities to express opinion within reasonable timeframes.

The key issues in public participation are the following:
• How can the public concerned, e.g. registers of interested NGOs in Poland, be identified?
• How can we inform and consult? (Public hearings are not prescribed by the Protocol and are usually ineffective. Written submissions complicate the process. New methods are needed, e.g. workshops in Slovakia.)
• What additional stages of consultations would be helpful (e.g. a review of proposed objectives of PPs in Czech Republic)?

Requirements for consultation with environmental and health authorities are described in Article 9 of the Protocol. They must be identified and given an early and effective opportunity to express opinions on:
• screening;
• scope of the environmental report; and
• the draft PP and its environmental report.

Key issues in consultation with environmental and health authorities:
• How can effective consultations between authorities be organised?
• What format should be used to consult the authorities?

Practice demonstrates that formal commenting is not effective. Different means are used in different countries to fulfil the requirement, e.g. roundtables in Austria and workshops in the Czech Republic.

Transboundary consultations in SEA are covered in Article 10 of the SEA Protocol. Notification should be sent to the affected party, if the party of origin determines that the plan or programme is likely to have significant transboundary effects, or if the party likely to be significantly affected so requests (no recourse to an inquiry commission, which is provided by the Article 3 and Appendix IV of the Espoo Convention). The affected party should indicate whether it wishes to be consulted.

Key issues in transboundary consultation:
• What are specific screening criteria for transboundary impacts?
• How can transboundary consultations be organised, e.g. when in the process of elaboration of PP,

---

**BOX 5**

**Article 9.1 of the SEA Protocol**

Each party shall designate the authorities to be consulted which, by reason of their specific environmental or health responsibilities, are likely to be concerned by the environmental, including health, effects of the implementation of the plan or programme.
which level of documentation should be exchanged, etc.?

- Are transboundary scoping consultations needed to obtain data on environment in the affected party’s territory?
- How can transboundary public participation be organised?

Decision making and SEA is presented in Article 11 of the SEA Protocol. The decision on the PP must take due account of:
- conclusions of the environmental report;
- measures to prevent, reduce or mitigate the adverse effects identified; and
- comments received (by public, authorities, transboundary consultation).

Public and environmental/health authorities must be informed how environmental considerations have been integrated into the plan or programme; how the comments received have been taken into account; and why the plan or programme has been adopted in the light of reasonable alternatives.

**Box 6**

**Article 12.1 of the SEA Protocol**

Each party shall monitor the significant environmental, including health, effects of the implementation of the plans and programmes, adopted under article 11 in order, inter alia, to identify, at an early stage, unforeseen adverse effects and to be able to undertake appropriate remedial action.

Key issues in decision making:
- Should there be one single point of “taking account” of the SEA output in the planning/programming process?
- Should information produced within SEA be taken into account in various stages of the planning/programming process?

Monitoring requirements are defined in Article 12 of the SEA Protocol. Monitoring should make it possible to identify and mitigate unforeseen effects. It should be focused on significant environmental effects of the PP. Monitoring reports must be publicly available.
Substantive focus of SEA

SEA inspired by project-level EIA

The presumption of SEA inspired by EIA procedures is that the chief task of SEA is to evaluate possible environmental impacts of activities proposed in the PP. Such SEA starts when draft alternatives of the PP are elaborated. Scoping determines terms of reference (ToR) for the SEA report and can suggest new alternatives. The SEA report describes the key effects of each alternative, compares them and recommends the optimal solution. It is reviewed by relevant environmental and health authorities and by the public concerned. SEA reports are taken into account before adoption of the PP.

Pros and cons of SEA inspired by project-level EIA include:

- SEA enables assessment of likely environmental impacts.
- Impacts become clear when specific alternative(s) have been defined …
- … but by this time, the main strategic choices have been made.
- Such SEA comes too late to influence the PP process.
- SEA input may be ignored: Newly suggested alternatives may be boycotted by planners due to time or resource constraints, etc.

Examples of SEA inspired by project-level EIA included in Module 8 of this training manual:

- SEA of the Czech Energy Policy;
- SEA of the Regional Waste Management Plan of Plzen Region; and
- SEA of Comprehensive Planning of Naissaar Island, Estonia.

SEA inspired by objective-led appraisals

The presumption of SEAs inspired by objective-led appraisals is that the key choices in PP are on the level of objectives and strategic scenarios. These choices must take full account of relevant environmental objectives.

The main steps in such assessment are:

- determination of relevant environmental objectives for the sector/region;
- review of consistency of proposed objectives for the PP with the relevant environmental objectives; and
- analysis of consistency of strategic scenarios with the relevant environmental objectives.

Pros and cons of the SEA inspired by objective-led appraisals:

- Early input from SEA in strategic planning provides environmental ToR for the entire planning process.
- Separate (public) discussion on objectives and on implementation means less scope for lobbying.
- Environmental objectives for the specific sector/region may be poorly defined.
- Poorly defined objectives may misguide the entire SEA process.
- SEA enables only initial evaluation of draft scenarios; detailed assessments must follow.

Examples included in Module 8 of this manual are:

- SEA of Czech Sectoral Operational Programme for Tourism;
- SEA of Land use of Naisar Island, Estonia;
- SEA of Waste Management Plan of Plzen Region, Croatia;
- SEA of Waste Management Plan of Ostrava Region, Croatia;
- the National Development Plan of the Czech Republic;
• the National Development Plan of Estonia; and
• the National Development Plan of Poland.

Recommended reading:

Key options for integrating SEA into elaboration of plans and programmes

There are many ways to carry out plan or programme elaboration. This differs from country to country, sector to sector and institution to institution. The basic structure of the planning process is presented in Figure 1. Specific planning or programming procedures often include additional or different elements. If there are major differences, please generate a structure of your system.

The SEA is a complex process comprised of a number of elements. The key elements of the SEA based on the SEA Protocol are presented in Figure 2.

When designing and implementing the SEA, two basic questions stand out:
• How can SEA elements be integrated into the elaboration of PP in order to achieve Protocol objectives?
• How can a high level of protection of the environment, including health, be provided by ensuring that environmental, including health, considerations are thoroughly taken into account in the development of PP (Art 1).
Key options for integration of SEA elements into elaboration of plans or programmes

There are several options for integration of SEA elements into the elaboration of PPs. The key integration options are:

- SEA separated from planning;
- SEA partially integrated into planning; and
- SEA fully integrated into planning.

Basic elements of the planning process are presented in Figure 1. This scheme outlines common elements in the PP elaboration for the purpose of demonstrating the integration options for SEA into the plan or programme elaboration.

SEA separated from planning

In SEA separated from planning (see Figure 3 for schematic illustration), the first element (screening) starts after the full draft PP is already elaborated, which is followed by scoping and elaboration of the environmental report. PP and SEA consultations may or may not be combined, but there is an opportunity to save time at this stage.

Pros and cons of separation of SEA from planning:
- It usually comes too late; new alternatives and proposals may be boycotted by planners.
- It prolongs the entire planning process.
- Late assessment tends to be more costly.

SEA partially integrated into planning

SEA partially integrated into planning is much more complex. Please see Figure 4 for the general flow of elements of PP elaboration and SEA and Figure 5 for the integration approach during PP and environmental report drafting.

Pros and cons of partial integration of SEA into planning:
- Time is saved (parallel to planning).
- Money is saved by joint use of data by planning and assessment teams.
- Early consultations are facilitated and late surprises are prevented.
- Participation of the SEA team, authorities and the public becomes more demanding.
- Thorough, quality reviews are required.
Full integration of SEA into planning

Figure 6 presents the scheme of full integration of SEA into the planning process. Such planning contains multiple working groups and numerous meetings of various stakeholders to discuss the draft plan or programme and its effects on the environment. The arrow shows time and the flow of the PP elaboration process.

Pros and cons of full integration of SEA into planning:

- SEA is put into the heart of planning, thereby fully internalising SEA.
- The same benefits as those of partial integration are provided, i.e. time and money are saved and late surprises are prevented.
- Mutual trust among planning experts, SEA experts, key authorities and stakeholders is built.
- Possible internal agreements/disputes between team members may be hidden from external stakeholders, and thus may not be understood or appreciated.
- The SEA team may be “fully co-opted” by the planning process or independent vision may be lost; it is important to keep a balance of power between SEA and planning experts.

The main question is, “Which option most effectively achieves the objectives of Article 1 of the SEA Protocol (See Box 7)?”

The following relevant questions could be used for debate:

- Which option is generally most effective?
- Should SEA be driven by the nature of the planning or programming process or by procedural steps in SEA?
- How can substantive tasks in SEA be most effectively linked with substantive tasks in elaboration of PP?
- When should SEA be initiated?
- Should there be stages of consultation or should consultations (scoping or review) occur at different stages of PP formulation?
- How can SEA be related to partial environmental analyses and consultations within the planning process?

Integrating SEA into elaboration of plans and programmes: Practical recommendations

**SEA and existing environmental analyses**

Many planning processes already use limited environmental analyses and consultations. SEA should strengthen rather than replace these systems. To ensure this, one must know:

- What is there?
- What is sufficient?
- What needs improvement?

We suggest starting with a review of the specific strategic...
planning process. One should look at:

- logic, tasks and formal steps in the planning;
- extant environmental analyses; and
- extant consultation mechanisms.

Upgrading these existing provisions to meet requirements of international SEA benchmarks is highly recommended. Table 3 presents a possible framework for analysis of the planning process, at which the SEA is aimed. It should help to identify the stages and steps of preparation of the PP (tasks in the elaboration of the plan or programme); to identify extant environmental analysis built into those tasks; to identify existing provisions for consultation with authorities (especially environmental and health authorities); and any provisions for public access to information and public consultations.

Usual tasks in elaboration of PPs in SEE areas follow:

- initiation (ToR for the PP presenting the aims and relation to other PP(P)s);
- analysis of the current situation within the given area or sector;
- determination of specific development goals to be achieved by the PP;
- development and evaluation of possible strategic alternatives/scenarios to achieve development goals;
- design of the selected alternative/scenario, and mini-alternatives of specific activities and their timing;
- design of the implementation system and monitoring system; and
- the final proposal of PP and justification for decisions.

Based on the usual tasks of elaboration of PPs in SEE, corresponding tasks in SEA have been mapped out in Table 4. These steps and tasks can be adjusted and modified based on the local situation or specific PP elaboration system analysed and specific questions regarding consultations with authorities and public can be answered. This analysis may help to design the system that would enable the transposition of SEA into the national planning systems and implementation of SEA Protocol requirements.
### Opportunities for integrating SEA into planning processes in SEE

<table>
<thead>
<tr>
<th>Usual tasks in elaboration of the PP</th>
<th>Corresponding task in SEA</th>
<th>Consultation with authorities</th>
<th>Consultation with public</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initiation of the PP</td>
<td>SEA screening and scoping</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Analysis of current situation</td>
<td>Analysis of environmental baseline for the PP</td>
<td>?</td>
<td>?</td>
</tr>
<tr>
<td>Determination of specific goals of the PP</td>
<td>Determination of relevant environmental objectives for the PP</td>
<td>?</td>
<td>?</td>
</tr>
<tr>
<td>Strategic scenarios</td>
<td>Review of consistency with relevant environmental objective</td>
<td>?</td>
<td>?</td>
</tr>
<tr>
<td>Design of specific measures/actions</td>
<td>Assessment of possible environmental effects and design of mitigation measures</td>
<td>?</td>
<td>?</td>
</tr>
<tr>
<td>Implementation and monitoring system</td>
<td>Design of environmental monitoring system</td>
<td>?</td>
<td>?</td>
</tr>
<tr>
<td>Final proposal of the PP</td>
<td>Wrap up of SEA by elaboration of environmental report that summarises key conclusions and notes possible uncertainties</td>
<td>x</td>
<td>x</td>
</tr>
</tbody>
</table>
Module V
Overview of basic applicable tools and tips for SEA practice

Basic analytical tools in SEA

Introduction to SEA tools

There is no single best methodology for conducting SEA. A large kit of tools is available for use, derived from EIA and methods used in plan evaluation and policy analysis. SEA methodology and tools should be appropriate to the issues. The choice of an approach can be determined as part of screening or scoping.

Six principles for choice of SEA tools are listed below:

- **Fit for purpose:** SEA tools should be appropriate to the impacts addressed.
- **Simplicity:** Choose the simplest methodology consistent with the task.
- **Data and scale adapted:** The choice of EIA is derived or policy appraisal/plan evaluation tools are based on the type of cause-effect relationship.
- **Credible approach:** Results should be technically robust and defensible.
- **Practicable options:** These must emphasise the alternatives and measures that best mitigate adverse effects and enhance positive effects.
- **Decision-relevant:** Issues and trade-offs at stake must be clarified.

The tools presented are grouped in four categories:

- assessing the environmental baseline (see Table 5);
- assessing relation to relevant environmental/health objectives (see Table 6);
- assessing specific impacts (see Table 7); and
- presenting assessment results for decision making (see Table 8).

Analytical methods already used in SEA practice in CEE are presented in Table 9.

Public participation approaches and tools

Public participation tools presented in the manual can be grouped in the following categories:

- dissemination and access to information (see Table 10);
- feedback and consultations (see Table 11); and
- extended involvement (see Table 12).

It is often difficult to see who may be interested or affected. Participation in SEA requires dedication of time and labour to follow sometimes quite complicated planning, programming or policy-making processes. There is usually less interest in participation in SEAs than expected. Organised groups tend to be more interested and thus take part in the process, unless a very specific local plan in which clear project-level decisions are made is being dealt with.

An interesting example of public participation was observed during elaboration of SEA of the Czech National Development Plan. Some 330 NGOs were regularly invited to take part in consultations. Initially, much interest was demonstrated with 70-80 NGOs taking part in meetings, though only five groups stayed involved to the end.

Role of relevant environmental objectives in SEA

Why is this topic important? Relevant environmental objectives can:

- reflect desired trends in “state of environment” (e.g. decrease noise exposure) or in “sound environmental management” (e.g. support the uptake of environmental management systems);
- inform planners about environmental objectives...
### TABLE 5

**Basic tools for assessing environmental baseline**

<table>
<thead>
<tr>
<th>Task within SEA</th>
<th>Basic tools</th>
</tr>
</thead>
</table>
| Describe key trends and current issues of concern | • Reportage on state of environment  
• SWOT analysis (strengths, weaknesses, opportunities and threats related to environmental issues)  
• Progress reports on relevant environmental policy objectives, standards and indicators  
• Classic environmental/health surveys (very static – to be used only if necessary for very local plans) |

### TABLE 6

**Basic tools for assessing relation to relevant environmental/health objectives**

<table>
<thead>
<tr>
<th>Task within SEA</th>
<th>Basic tools</th>
</tr>
</thead>
</table>
| Identify relevant environmental objectives | • Review of environmental/health objectives (international treaties, environmental policy plans, national environmental health action plans, sustainable development strategies)  
• Reviews of laws and regulations  
• Reviews of limits of use of the territory |

| Evaluate attribution of PP to objectives | • Review of proposed development objectives and actions against relevant environmental objectives (matrices) |

### TABLE 7

**Basic tools for assessing specific impacts**

<table>
<thead>
<tr>
<th>Task within SEA</th>
<th>Basic tools</th>
</tr>
</thead>
</table>
| Identify possible environmental impacts | • Public concerns  
• Case comparisons  
• Networks (secondary impacts) |

| Evaluate environmental impacts and show key trends | • Expert judgements (via workshops and the Delphi technique)  
• Trend extrapolations (assuming that basic correlations remain constant)  
• Predictive and simulation models (numerous causal linkages and correlations)  
• GIS  
• Comparative health risk assessment |
that should be respected in elaboration of strategic alternatives within PP; and
- help the SEA team quickly analyse strategic alternatives, i.e., how they perform against environmental objectives.

Relevant environmental objectives can be general or specific (include quantified targets and timeline).

Key issues of concern when establishing the relevant environmental objectives are the following:
- Applicability for the given PP: Are they relevant to guiding planning and assessment of future development objectives, priorities and actions?
- Are they considered adequate assessment benchmarks by key stakeholders, i.e. planning authorities, relevant environmental and health authorities, and concerned public?
- There is no set of universally applicable environmental objectives; these must be defined for each PP(P) separately.
- Relevant environmental objectives should be identified through critical examination of extant environmental objectives and environmental pressures in the given sector/area.
- Objectives should be agreed upon by environmental authorities, development authorities, and where possible, the public.

Practical recommendations in setting up the relevant environmental objectives:
- identify environmental trends and problems in the given sector/area.
- identify relevant environmental objectives established by:
  - international treaties;
  - national legislation, policies and strategies (e.g. environmental policies, environmental action plans, national environmental health action plans, sustainable development strategies); and
- local decrees, strategies, plans and programmes, where applicable (e.g. Local Agenda 21, air protection plans).
- select the most relevant objectives.

Post-SEA monitoring

Practical recommendations for post-SEA monitoring:
- define indicators to measure attainment of relevant environmental objectives throughout the implementation of the PP;
- request new data sets only if necessary; while linking them to information to be gained from EIA or environmental permitting of individual implementation projects;
- review existing monitoring systems;
- consult with national statistical authorities and extant environmental reporting systems; and
- include periodic reports on implementation with general information as to whether PP meets the objectives and what adjustments (if any) should be made.

Preparation of terms of reference for SEA

Purpose of ToR in SEA

Why?

As a starting point the scope of the assessment must be defined and its linkage to the planning process suggested. It is important to state what is and what is not expected from SEA.

Who?

Draft ToR can be elaborated by the proponent or the SEA team. It should be discussed with relevant environmental and health authorities.
### TABLE 9

#### SEA methods already used in CEE

<table>
<thead>
<tr>
<th>Task within SEA</th>
<th>Basic tools</th>
</tr>
</thead>
</table>
| **Assessment of environmental baseline** | • Review of state of environment reports  
• SWOT analysis (environmental issues) |
| **Determination of relevant environmental objectives for the strategy** | • Review of environmental commitments (international treaties; environmental policy or environmental health action plans; sustainable development strategies)  
• Limits for the use of the territory  
• Analysis of key environmental issues in the given sector/region (see above) |
| **Compatibility of development and environmental objectives** | • Matrices of mutual relationship of objectives (possible synergies and conflicts) to screen out clearly conflicting objectives |
| **Relationship between conceptual alternatives and environmental objectives** | • Indicators to measure attainment of every environmental objective (compiling a long-list and screening it down to a short-list)  
• Evaluation of attainment of environmental objectives by each conceptual alternative |
| **Analysis of possible environmental impacts** | • Collective expert judgement, which is often more precise than modelling  
• GIS, modelling |
| **Environmental management plan** | • Scope of any subsequent environmental evaluations (SEA, EIA or other environmental evaluations)  
• Institutional arrangements (roles of environmental authorities in review of subsequent actions) |
| **Environmental monitoring** | • Adjustments of monitoring/statistical system to measure actual attainment of environmental objectives |

### TABLE 10

#### Basic tools for dissemination and access to information

<table>
<thead>
<tr>
<th>Task within SEA</th>
<th>Basic tools</th>
</tr>
</thead>
</table>
| **Inform the concerned public** | • Internet sites  
• E-mail lists  
• Advertising and media interviews  
• Leaflets  
• Newsletters  
• Non-staffed exhibits (e.g. billboards, models)  
• Use of established means of communications to ask recipients to forward information to concerned parties known to them |
Possible content of ToR for SEA

The overall design of the SEA process can be roughly described as including three major tasks, which must be reflected in the ToR:

- steps and timeline of the PP creation process;
- corresponding tasks of SEA and timeline; and
- consultations with authorities and the public concerned.

ToR must specify the substantive focus of the assessment:

- relevant environmental/health issues and objectives;
- alternatives to be considered;
- desired level of detail in the assessment; and
- possibly recommended assessment techniques and reference materials.

Internal management of the SEA process can also be reflected:

- internal communication between planners team and SEA team;
- contingencies answering to changes in the planning process; and
- resolution of conflicting views between the SEA team and planning team.

A crucial part of the ToR is the allocation of workload and resources. ToR must indicate the estimated workload and direct costs, either for each specific task in SEA or the entire SEA process, and the proposed composition of the SEA team. The expected number of workdays and direct costs are presented in the budget section, which is the final item but not the least important one. Additionally, the budget must identify available financing or a threshold price.

Since SEA must adhere to the PP elaboration process, ToR must reflect the steps and timeline of planning process and the timeline of the corresponding tasks in SEA. When preparing ToR:

- describe the nature and purpose of PP;
- describe the logic of the planning process and its internal steps and timeline;

---

**TABLE 11**

**Basic tools to collect feedback and for consultations**

<table>
<thead>
<tr>
<th>Task within SEA</th>
<th>Basic tools</th>
</tr>
</thead>
<tbody>
<tr>
<td>Make it easy to provide comments and inputs</td>
<td>• Internet</td>
</tr>
<tr>
<td></td>
<td>• Public meetings (not necessarily hearings)</td>
</tr>
<tr>
<td></td>
<td>• Focus groups and interviews</td>
</tr>
<tr>
<td></td>
<td>• Surveys</td>
</tr>
<tr>
<td></td>
<td>• Staffed telephone lines</td>
</tr>
<tr>
<td></td>
<td>• Staffed exhibit</td>
</tr>
</tbody>
</table>

*Note: Formal public hearings do not work well. Recommended instead is to choose problem resolution tools.*

**TABLE 12**

**Basic tools for extended involvement**

<table>
<thead>
<tr>
<th>Task within SEA</th>
<th>Basic tools</th>
</tr>
</thead>
<tbody>
<tr>
<td>Make it easy to provide comments and inputs</td>
<td>• Community advisory groups</td>
</tr>
<tr>
<td></td>
<td>• Consensus workshops or conferences</td>
</tr>
<tr>
<td></td>
<td>• Visioning linked to scenario development</td>
</tr>
<tr>
<td></td>
<td>• Citizen juries in which witnesses may be called</td>
</tr>
</tbody>
</table>

---

**MODULE V: OVERVIEW OF BASIC APPLICABLE TOOLS AND TIPS FOR SEA PRACTICE**

**STRATEGIC ENVIRONMENTAL ASSESSMENT TRAINING MANUAL FOR SOUTH EASTERN EUROPE** 45
• indicate when SEA should start and finish, and how its analyses should be used within the planning process;
• specify input from SEA and its timing;
• fix the moment for final input from SEA experts; and
• formulate provisions for assessing changes that might occur after the SEA process is completed.

Additionally, the ToR should specify the expected level of detail of the assessment; indicate uncertainties in the analysis and findings; and should recommend assessment techniques, if any.

Reference materials should be indicated in the ToR, with a list of all material to be consulted. If there is a need to consult other programmes under development at the same time, these should be referenced as well.

On public participation, the ToR should specify:
• the process of identification of the public concerned;
• the techniques to be used, e.g. public hearings, workshops, and frequency of these (if different from legal requirements);
• documents that must be made available to the public, e.g. final report, intermediate reports; and
• requirements for the production of and easily understandable summary for the public.

Communication between the SEA team and the planning team should be elaborated. In the ToR, describe the mandate of the SEA team in the planning process, including the communication channels, and whether SEA observers may participate in sessions of the planning team and vice versa. An introductory workshop for the SEA team and the planning team is very useful in reaching agreement on modalities of joint work.

Contingency plans should specify how to handle changes in the planning procedure and any mechanisms for flexibility.

---

**BOX 8**

**Practical tips on public participation**

- Approach the public which may be concerned (interested or affected), i.e. NGOs, think-tanks, professional associations, business associations.
- Be honest about the invitation; ask recipients to forward the invitation to others that may be interested.
- Too many invitations to participate may drain the energy of public concerned (e.g. SEA of Development Strategy for Plzen Region had four stages of PP, and participation dropped from 48 to five).
- There are two key stages of participation: analysis of current situation and determination of relevant environmental/health objective; and proposed plan and its alternatives. Do not mix these discussion items!

---

**BOX 9**

**Tip for setting relevant environmental objective**

Establish a long list of the relevant environmental objectives and work out a short list through consultation with planning authorities, environmental and health authorities.

One of the crucial issues during the SEA process is conflict resolution. The ToR could specify the division of responsibilities between planning and SEA team, how disagreements are handled, and what happens if advice from SEA experts is ignored by the planning team.
Module VI
Capacity development for SEA

Key message in capacity development for SEA

The main purpose of capacity development for SEA is to demystify SEA. The key message in capacity development is that SEA is not a “mega-EIA!” One should emphasise that good SEA practice requires:

- adequate integration of SEA into the specific planning and programme-making process;
- the correct choice of assessment methods, i.e. the simplest techniques available to deliver appropriate information; and
- the correct choice of consultation techniques (with a focus on problem solving, which differs from public hearings at the end of EIA process).

The capacity development process is a long-term process and is recommended to design a strategy for SEA capacity development, since atomised interventions usually do not accomplish much. The properly designed SEA capacity building strategy can:

- build a critical mass of promoters of good SEA practice;
- be agreed upon with key stakeholders, i.e. future users of SEA procedures; and
- facilitate in-country policy discussion on SEA.

The focus of the SEA capacity development strategy should be designed through a needs assessment. Careful needs assessment will establish links between stakeholders, motivate partners, and provide for transparency and the methodological capacity development process. Key issues in the needs assessment are:

- identification of gaps and needs in current SEA/environmental assessment and planning systems;
- identification of key institutions, partners, stakeholders and responsible parties;
- planning of capacity development for SEA practitioners and planners; and
- attainment of stakeholder commitment, i.e. involvement in assessment and strategy preparation.

Main capacity development tools:

- pilot projects, to test and develop SEA methods in real-life situations and to establish precedents of good SEA practices;
- professional training, to prepare initial experts for pilot activities and train decision makers on SEA benefits;
- guidelines, to guide SEA for specific types of planning/programming processes;
- promotional materials, to explain benefits of SEA to planners and policy-makers;
- professional networking, to establish professional benchmarks for good SEA practices; and
- periodic evaluations such as annual conferences, to review effectiveness.

Capacity development is a long-term process which takes time and resources. Keep close working links and consult key national institutions responsible for SEA/EIA and planning.

Tips for capacity development

- Prepare a three-dimensional capacity development strategy targeting system, which would cover institutional and human capacities and needs.
- Always plan financial and human resources.
- Prepare a monitoring plan for the capacity development strategy for SEA and identify responsible/recipient institutions.

Main capacity development tools:

- pilot projects, to test and develop SEA methods in real-life situations and to establish precedents of good SEA practices;
- professional training, to prepare initial experts for pilot activities and train decision makers on SEA benefits;
- guidelines, to guide SEA for specific types of planning/programming processes;
- promotional materials, to explain benefits of SEA to planners and policy-makers;
- professional networking, to establish professional benchmarks for good SEA practices; and
- periodic evaluations such as annual conferences, to review effectiveness.

Capacity development is a long-term process which takes time and resources. Keep close working links and consult key national institutions responsible for SEA/EIA and planning.
The objective of the practical exercise is to design an appropriate SEA approach for the selected planning process, including:

- optimal integration of SEA into elaboration of PP; and
- rules for “operational management” of the SEA process.

The exercise can be designed on a hypothetical case or on real-life examples from a specific context chosen before the training or brought by participants.

Key tasks for the group exercise:

- Analyse the planning process.
- Suggest appropriate environmental analyses that should be performed within SEA and how they relate to the key planning tasks.
- Suggest appropriate consultations with authorities.
- Suggest appropriate procedures for public access to information.
- Suggest appropriate consultations with the public.
- Suggest procedures for due account of SEA in the planning process.
- Review the proposed approach.
- Write ToR for such SEA.

**Task 1:** Analyse the given planning process:

- Answer the question “What is the specific role of a chosen plan or programme, i.e. what is it based on and what comes afterward?”
- Identify and review the planning steps and key tasks performed by the planning team.
- Identify and review environmental analyses normally performed within this planning process.
- Identify and review consultations with the environmental authorities normally carried out within this planning process.
- Identify and review current means for public access to information and consultations that normally take place during this planning process.
- Use Table 13 to present the findings of the analysis based on the above questions.

**Task 2:** Environmental analyses to be performed within SEA:

- Determine what types of environmental analyses are required by the relevant SEA framework.
- Determine logical links between required environmental analyses and specific planning tasks.
- Determine what environmental analyses should be performed for the individual planning tasks.

**TABLE 13**

Possible framework for analysis of the planning process

<table>
<thead>
<tr>
<th>Tasks in the elaboration of PP</th>
<th>Extant environmental analyses</th>
<th>Extant provisions for consultations with authorities</th>
<th>Provisions for public access to information and public consultations</th>
</tr>
</thead>
<tbody>
<tr>
<td>.....</td>
<td>.....</td>
<td>.....</td>
<td>.....</td>
</tr>
<tr>
<td>.....</td>
<td>.....</td>
<td>.....</td>
<td>.....</td>
</tr>
<tr>
<td>.....</td>
<td>.....</td>
<td>.....</td>
<td>.....</td>
</tr>
<tr>
<td>.....</td>
<td>.....</td>
<td>.....</td>
<td></td>
</tr>
<tr>
<td>.....</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
• Discuss how the suggested analyses differ from existing environmental analyses, the data the SEA team will need from planners, and what input will be offered from the SEA process in various stages of the planning process.

Task 3: Consultations with authorities:
• Determine what types of environmental and health authorities must be formally consulted within SEA.
• Determine when (in specific stages of the planning or SEA) and how these consultations should be performed in order to provide most effective input.
• Discuss how the proposed consultations differ from extant consultations with environmental and health authorities.
• Discuss whether separate consultations should be organised for SEA and for the planning process or whether to have a single commenting process.

Task 4: Access to information:
• Describe requirements for access to information within SEA.
• Determine when (at what specific stages of planning or SEA) should access to information occur and how it should be most effectively arranged.
• Discuss how these requirements differ from existing provisions for public access to information.
• Discuss whether separate access to information should be organised for the SEA and planning processes.

Task 5: Consultation with public:
• Describe requirements for consulting the public within SEA.
• Determine who should be notified and directly invited to participate.
• Determine when (at what specific stages of planning or SEA) consultations should with the public occur and how these should be arranged.
• Discuss how newly required consultations differ from existing consultations with the public.
• Discuss whether separate consultations are needed for the SEA and planning processes or whether to have a single commenting process for the public.

Task 6: Taking information generated within SEA into account:
• Discuss how the environmental analyses, consultations with authorities and consultations with the public suggested earlier should be taken into account in the planning process.
• Consider whether this input should be considered at the end of the planning process or taken into account during the formulation of the plan/programme.

Task 7: Review the proposed approach:
• Review the proposed approach for conducting SEA within the planning process.
• Review whether the proposed approach meets SEA Protocol requirements. If not, make the final adaptations.
• Prepare key arguments that will help you to explain the proposed system to key stakeholders, i.e. decision-makers, planners and the public.

Task 8: Write ToR for such SEA:
• Propose optimal integration of SEA into elaboration of the PP.
• Recommend an optimal level of detail and assessment techniques.
• Outline expected workload and available budget.
• Recommend the best composition of the SEA team.
• For specific information on ToR for SEA, please see Module 5.
SEA for Czech Energy Policy 1998

Context and key issues

Composed in 1998, the Energy Policy Paper was the first comprehensive document for development of the entire energy sector (electricity, coal and gas) in the Czech Republic, and contained decisions on:

- gradual closure of main coal mines in the country;
- the future of the second nuclear power plant;
- state support for energy savings and alternative energy sources; and
- internalisation of environmental costs in energy prices.

The energy policy was drafted in 1997. The Ministry of the Environment requested the assessment to be carried out, and this became the first large-scale SEA in the Czech Republic.

SEA process

For the purpose of SEA, an independent think tank was hired, the work of which was supported by a scoping team of 13 experts representing various stakeholders, a modelling team to examine the feasibility of three alternatives; and an assessment team of 19 experts from various stakeholders. The study was carried out during a 12-month period of 600 person-days.

The SEA process consisted of scoping, in which 80 participants took part or were consulted; drafting the SEA report; six regional reviews by NGOs involving approximately 150 people; a public review with 170 participants at the Czech Senate; and the preparation of the final SEA report.

Alternatives

The elaboration of alternatives was based on the following presumptions about the state of the economy of the Czech Republic and the process of accession to the EU:

- annual GDP growth of 2-4 percent at the time of policy development;
- steady decrease in energy demand of the economy, as expressed by index of primary energy sources per GDP unit;
- the meeting of all international obligations, including Kyoto targets; and
- all alternatives fully aligned with EU legislation.

Three alternative scenarios were developed. Alternative A, based on domestic sources of black and brown coal, assumed:

- there would be no limits on coal mining, i.e. the number of mines would increase;
- no further internalisation of external costs, i.e. carbon tax and energy tax would not be introduced; and
- a second nuclear power plant would be partly finalised by 2004-2005.

Alternative B was based on locally available sources of black and brown coal. Additionally limits of coal mining would have been enforced. This should have been compensated by import of electricity and gas. This alternative presumed:

- partial internalisation of external costs would trigger changes in structure of existing energy sources;
- more use of energy-saving schemes and alternative energy sources would be increased;
- growing use of cogeneration units, i.e. growth in gas importation; and
- a second nuclear power plant would be partly finalised by 2005.

Alternative C was based on energy savings schemes and a rapid increase of alternative energy sources. Previously established limits of coal mining were enforced, and a second nuclear power plant was not finalised:

- major energy savings in state-owned facilities;
- funding and technical assistance programmes for technological changes in private enterprises;
- alternative energy sources such as biomass, small water plants, wind and solar collectors, combined...
with limited use of photovoltaic cells; and

- energy prices fully internalise external environmental costs, i.e. growing use of cogeneration units.

Three kinds of impacts were analysed: environmental, social and economic. Twenty-five categories of major impacts were established, each with one indicator:

Initial comparison of alternatives

Alternative A was used as a baseline; alternatives B and C were compared against alternative A.

Example: CO₂ emissions

- CO₂ emissions for alternative A were classified as 100 percent.
- Alternative B produced 95 percent of CO₂ emissions compared with alternative A,
- Alternative C produced 87 percent of CO₂ emissions compared with alternative A.
- Alternatives C and B scored much better than A on almost all indicators, with the sole exception of economic indicators, on which Alternative A scored best.

<table>
<thead>
<tr>
<th>TABLE 14</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Different types of impacts</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ENVIRONMENTAL IMPACTS</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Air emissions</em></td>
<td></td>
</tr>
<tr>
<td>CO₂ (tonnes)</td>
<td></td>
</tr>
<tr>
<td>CH₄ (tonnes)</td>
<td></td>
</tr>
<tr>
<td>SO₂, total (tonnes)</td>
<td></td>
</tr>
<tr>
<td>SO₂, local (tonnes)</td>
<td></td>
</tr>
<tr>
<td>NOₓ, total (tonnes)</td>
<td></td>
</tr>
<tr>
<td>NOₓ, local (tonnes)</td>
<td></td>
</tr>
<tr>
<td>Particulate matter (tonnes)</td>
<td></td>
</tr>
<tr>
<td><em>Water pollution</em></td>
<td></td>
</tr>
<tr>
<td>Wastewater from mining (m³)</td>
<td></td>
</tr>
<tr>
<td>Other wastewater (m³)</td>
<td></td>
</tr>
<tr>
<td><em>Impacts on soil</em></td>
<td></td>
</tr>
<tr>
<td>Land occupied by mining (km²)</td>
<td></td>
</tr>
<tr>
<td>Land occupied by flooding (km²)</td>
<td></td>
</tr>
<tr>
<td>Land occupied by landfills (km²)</td>
<td></td>
</tr>
<tr>
<td>Land occupied by new installations (km²)</td>
<td></td>
</tr>
<tr>
<td><em>Annual production of waste</em></td>
<td></td>
</tr>
<tr>
<td>Ash from power plants (tonnes)</td>
<td></td>
</tr>
<tr>
<td>Unused gypsum (tonnes)</td>
<td></td>
</tr>
<tr>
<td>Used nuclear fuel (tonnes)</td>
<td></td>
</tr>
<tr>
<td>Radioactive waste (tonnes)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SOCIAL IMPACTS</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of people to be reallocated</td>
<td></td>
</tr>
<tr>
<td>Employment changes by energy savings</td>
<td></td>
</tr>
<tr>
<td>Employment changes by energy production</td>
<td></td>
</tr>
<tr>
<td>Employment changes by changes in mining</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ECONOMIC IMPACTS</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Investment costs per 1GJ unit</td>
<td></td>
</tr>
<tr>
<td>Running costs per 1GJ unit</td>
<td></td>
</tr>
<tr>
<td>Costs of energy-saving schemes</td>
<td></td>
</tr>
<tr>
<td>Costs of measures to offset and mitigate adverse environmental impacts</td>
<td></td>
</tr>
</tbody>
</table>
Detailed comparison of alternatives

Multi-criteria analysis (MCA) was used to compare the alternatives. A survey was done among a sample of 32 representative respondents to define the social importance/weight of each impact category. Multi-criteria analysis, including sensitivity analysis, resulted in conclusions very similar to the original simple analysis of alternatives. MCA, however, prolonged the SEA process by three months, causing the SEA team to miss the deadline, and the final SEA report was thus never considered.

Lessons for practice

• SEA was of very high quality but could have been concluded much quicker if additional complicated analyses (i.e. MCA) had not been performed.
• The main environmental issues and trends connected with possible implementation of each alternative were evident from first evaluation.
• Always use the simplest technique available to carry out the given task, as this saves time and money.
• SEA does not replace political decision making, and is only a decision-support document that may be disregarded.

SEA for the Czech Sectoral Operational Programme for Tourism

The SEA process

Ex-post SEA was based on intensive consultations with the planning team, the Ministry of Regional Development and the Ministry of Environment. It lasted four months with three expert SEA teams for a total of 70 person-days. SEA was broken down into individual environmental assessments of:

• the current state of the sector;
• specific objectives of the programming document;
• proposed activities;
• the implementation plan; and
• the monitoring plan.

Environmental assessment of the current state of the sector

Review of environmental issues in the analytical part of the programming document (situation analysis and SWOT analysis) were:

• key environmental problems arising from intensive tourism (individual car transport, impacts on protected areas, etc.); and
• key environmental issues (air, noise and water pollution, loss of biodiversity and attractiveness of countryside, etc.) affecting the attractiveness of tourist destinations.

Environmental assessment of objectives

The review of environmental objectives in the programming document was conducted and suggestions of specific environmental objectives for the programming document were made. No environmental objectives were found in the programming document. The SEA team developed a set of 10 specific environmental objectives for tourism based on National Environmental Policy and environmental criteria for tourism developed by the World Tourism Organisation and the 7th Session of United Nations Commission on Sustainable Development (CSD). The SEA team agreed on these objectives with the Ministry of Regional Development and the Ministry of Environment to ensure that both authorities supported the use of the relevant environmental objectives to optimise the programming document.

Proposed environmental objectives for tourism were:

• the support of adoption of ISO 14000 and EMAS environmental management systems in the tourism industry;
• regulation of number of tourists in areas heavily affected by tourism;
• dispersal of tourism in time and space;
• support for environmentally friendly means of transport in areas attractive for tourism, including city centres;
• improvement of local environmental quality, e.g. local air quality, water quality, noise levels and attractiveness of urban areas;
• maintenance of the landscape’s biodiversity and attractiveness;
• protection of local cultural heritage;
• informing visitors about key features of local environment and how to protect them; and
• enhancement of community participation in management of tourist sites.

The following categories of environmental impacts were specified:

• impacts on inhabitants;
• impacts on ecosystems, their components and functions;
• impacts on man-made systems and on the use of the territory;
• large-size impacts on the landscape; and
• other impacts.

Environmental assessment of proposed activities
Assessment of the relationship between environmental objectives for tourism and proposed measures/activities was carried out based on the following scale:
• -2: very negative impact
• 0: neutral impact
• +2: very positive impact

Evaluation results were used to suggest reformulation of measures and to propose conditions for their implementation.

Environmental assessment of implementation arrangements
Designed EIA ToR were recommended for major projects proposed. Environmental scoring sheets were recommended for all projects to be supported by the programme with:
• preliminary scoring to guide the project design; and
• formal scoring to guide selection of projects.

Responsibilities of environmental authorities in light of environmental scoring and selection of projects were proposed.

Environmental assessment of the monitoring plan was carried out, with the aim of measuring whether the programme meets specific environmental objectives. Ten specific monitoring indicators were proposed, with one indicator per environmental objective. Gathering monitoring data through environmental evaluation of each implementation project was recommended.

Strengths of the SEA of the Czech Sectoral Operational Programme for Tourism:
• SEA influenced the entire programming process from problem analysis to design of monitoring system.
• The majority of suggestions from SEA were fully incorporated into the programme text.
• SEA improved previously very tense relations between governmental departments.
• SEA changed the attitude of the tourism department toward treatment of environmental issues.

Weaknesses of the SEA of the Czech Sectoral Operational Programme for Tourism:
• Frequent input from the SEA team into the programming process was very demanding for the SEA team.
• Environmental goals and targets for tourism were poorly formulated; these should have been defined within the SEA process.
• Public participation was organised only in the last stage of the SEA process.

### TABLE 15

<table>
<thead>
<tr>
<th>Proposed activities</th>
<th>Environmental objectives for tourism</th>
<th>Categories of environmental impacts</th>
<th>Reformulations and conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


SEA for Comprehensive Planning of Naissaar Island (Estonia, northern coast)

Context and key issues

Naissaar Island was previously used as a Soviet army base. A number of areas on the island were severely polluted with oil by-products and heavy metals. The rest of the island outside the military base is a nearly virgin natural environment, with 80 percent forest coverage, numerous dunes, mire landscapes and species-rich plant communities. No comprehensive planning had ever been done for this land previously.

Plan features

The comprehensive plan aimed to define the main uses of the territory and to provide restrictions to building activities. SEA was carried out in parallel to planning, which was a pilot project without formalised procedures. The whole planning/SEA process took 17 months including extensive participation of future land-owners, associations of scientists, entrepreneurs, professional societies/unions, movements, and other private or legal persons (see Table 15 for details).

<table>
<thead>
<tr>
<th>TABLE 16</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Planning, SEA and participation during SEA of the Naissar Island development plan</strong></td>
</tr>
<tr>
<td><strong>Planning</strong></td>
</tr>
<tr>
<td>Terms of reference for planning</td>
</tr>
<tr>
<td>Development strategy</td>
</tr>
<tr>
<td>Baseline data and investigations</td>
</tr>
<tr>
<td>Development objectives</td>
</tr>
<tr>
<td>Design of five planning alternatives</td>
</tr>
<tr>
<td>Public discussion</td>
</tr>
<tr>
<td>Draft planning proposal</td>
</tr>
<tr>
<td>Planning proposal</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TABLE 17</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Evaluation matrix for each alternative of the Naissar Island case</strong></td>
</tr>
<tr>
<td><strong>Nature and landscape (biodiversity; ground and surface water)</strong></td>
</tr>
<tr>
<td><strong>Man-made environment (infrastructure; buildings; historical heritage)</strong></td>
</tr>
<tr>
<td><strong>People and society (health; safety; work opportunities)</strong></td>
</tr>
</tbody>
</table>
For the Naissaar Island development plan, five alternatives were proposed:

- **Alternative 0- (or the no-action alternative):** The island is left without any concrete action plan developed.
- **Alternative 0+:** Necessary cleaning and small-scale building activities and use of the island is possible.
- **Alternative 1:** Small increase in local population and tourism/recreation activities.
- **Alternative 2:** Considerable increase in local population and tourism/recreation activities, and construction of new roads on the island.
- **Alternative 3:** Theoretical settlement of tens of thousands of people on the south and north ends of the island.

**Key conclusions for practice**

Public involvement was the most important element of the SEA: It helped to avoid conflicts, to find new creative solutions and to receive information concerning the preferences of interested parties and inhabitants.

Division of the planning and EA process into stages made scoping the topics to be considered easier and focused attention on the key problems in each stage of planning.

Integration of SEA into the very process of development of planning is the optimal means of carrying out SEA.

SEA carried out in parallel to planning considerably facilitated the process of approval of the planning and decision making.

**SEA for Waste Management Plan of the Plzen Region, Czech Republic**

**Background**

The Plzen region has around 450,000 inhabitants. The Waste Management Plan of the region proposed integrated management of 17 types of waste. The plan focused on communal waste, biodegradable waste (including that from agriculture), wastewater sludge, wrappings, construction waste and hazardous waste (e.g. sanitary and veterinary waste, waste with freons, batteries, old cars, tires, industrial oils, oils with PCBs). The plan suggests organisational and investment measures, and has a strong emphasis on citizen awareness-raising and participation during elaboration and implementation of the plan.

One of the plan’s goals was to minimise the amount of industrial and communal waste generated through general measures in industry, e.g. environmental management systems (EMS) accreditation, best available techniques (BAT) technologies, support of reusable wrappings, and raising of awareness of public and small and medium-sized enterprises (SMEs) about waste management issues.

The plan additionally aimed at:

- decreasing the amount of biodegradable waste deposited at landfills to 75 percent by year 2010, to 50 percent by 2013, and to 35 percent by 2020 against the amounts in 1995;
- increasing separation and reuse of waste; and
- ensuring energetic use of untreated and unsorted waste.

**Common elements of communal waste management system**

**Separation of communal waste includes:**

- separation of waste at its sources;
- mechanical sorting of communal waste through ballistic separators and sorting lines near all major cities; and
- stimulation of demand for separated waste, especially glass, metals, etc.

**Treatment facilities for communal waste:**

- centralising of waste treatment facilities in the region at four waste treatment sites near major cities; and
- gradual closure of small waste disposal facilities near smaller cities.

**Key alternatives**

Four alternatives were developed to meet these goals:

- **Alternative 1a:** strategy based on waste separation and its further re-use combined with deposition of unusable materials to landfills.
- **Alternative 2:** strategy based on an incinerator for communal waste with a capacity of 100,000 tonnes per year, and optional energy use of communal waste from the entire region.
- **Alternative 3:** strategy based on separation of communal waste at its source, transport of remaining unusable communal waste into a low-capacity
Alternative 4: strategy based on increased separation of communal waste at its source and treatment of residual communal waste through thermal shrinking of up to 30 percent of its original bulk.

Matrix of general environmental risks of various waste management approaches

The 30-35 management approaches to waste use and waste treatment were impossible to compare in one set. Therefore, waste management approaches were divided into eight general categories:

- collection, separation and transport of waste;
- use of waste as sources of secondary materials;
- incineration of waste for energy production;
- chemical and biological treatment of waste;
- composting;
- incineration of waste without energy production;
- landfills; and
- permanent depository of waste.

Alternative 1a

The main focus: waste separation and its further reuse combined with deposition of unusable materials to landfills.

- Separation of waste at its sources, i.e. mechanical sorting of communal waste through ballistic separator and sorting lines at selected locations;
- use of separated waste, especially glass, metals, etc.;
- depositing of unusable remainder at landfills;
- incineration of inflammable waste such as paper and plastics; and
- composting of biologically degradable waste.

Alternative 2

The main focus: development of an incinerator with a capacity of 100,000 tonnes per year for communal waste.

- Optional energy use of communal waste from the entire region including:
- separation of waste at its sources via mechanical sorting of communal waste through ballistic separator and sorting lines at selected locations;
- use of separated waste, especially glass, metals, etc.; and
- composting of biologically degradable waste.
- incineration combined with cogeneration of heat and electricity; and
- depositing communal waste generated outside of area served by incinerator at landfills and depositing of ash from generator at landfill.

Alternative 3

The main focus: separation of communal waste at its source, transport of remaining unusable communal waste into a low-capacity pyrolysis line with a capacity of 60,000 tonnes of communal waste per year.

- Separation of waste at its sources, i.e. mechanical sorting of communal waste through ballistic separator and sorting lines at selected locations; use of separated waste, especially glass, metals, etc.; and composting of bio-waste;

| TABLE 18 |

Environmental effect evaluation scale

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>-3</td>
<td>Very negative</td>
</tr>
<tr>
<td>-2</td>
<td>Negative</td>
</tr>
<tr>
<td>-1</td>
<td>Partly negative</td>
</tr>
<tr>
<td>0</td>
<td>Neutral</td>
</tr>
<tr>
<td>+1</td>
<td>Partly positive</td>
</tr>
<tr>
<td>+2</td>
<td>Positive</td>
</tr>
<tr>
<td>+3</td>
<td>Very positive</td>
</tr>
</tbody>
</table>
• incineration at gasification facility combined with cogeneration of heat and electricity (with a secondary product - coke; and
• depositing unusable remainder from sorting lines and captured combustion emissions from gasification facility at landfills.

Alternative 4

The alternative offered an increased separation of communal waste at its source and treatment of residual communal waste through thermal shrinking. Waste treated through thermal shrinking can reduce waste up to 30 percent of its original bulk. Waste fractions that fell through screen (small fractions) are used for alterna-

<table>
<thead>
<tr>
<th>TABLE 19</th>
<th>Summary evaluation of Alternative 4 of the Plzen Regional Waste Management Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>WASTE MANAGEMENT APPROACH</td>
<td>CLIMATE</td>
</tr>
<tr>
<td>Collection, sorting and transport</td>
<td>-1</td>
</tr>
<tr>
<td>Thermal reduction of volume (autoclave)</td>
<td>1</td>
</tr>
<tr>
<td>Pyrolysis</td>
<td>1</td>
</tr>
<tr>
<td>Landfills S-NO</td>
<td>1</td>
</tr>
<tr>
<td>Composting</td>
<td>1</td>
</tr>
<tr>
<td>Landfill S-OO</td>
<td>-1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TABLE 20</th>
<th>Final evaluation of all alternatives of the Plzen Regional Waste Management Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alternative 1a</td>
<td>-45</td>
</tr>
<tr>
<td>Alternative 2</td>
<td>-25</td>
</tr>
<tr>
<td>Alternative 3</td>
<td>-64</td>
</tr>
<tr>
<td>Alternative 4</td>
<td>-67</td>
</tr>
</tbody>
</table>
tive fuels and composting (reuse). Waste fractions that stayed above the screen are again separated or deposited at landfills (the remaining waste fractions deposited at landfills are around 10 percent of the original waste volume). Separation is a general preventive measure that is effective if waste is separated at its source by using sorting/separating lines. Separated waste can be reused or part of it can go to the composting.

Categories of possible environmental effects were:

- climate;
- air quality;
- geology and geomorphology;
- water;
- soil;
- ecosystems;
- landscape;
- archaeology, history and culture;
- health and well-being at workplace;
- health and well-being of general public; and
- impacts on past environmental liabilities.

For the evaluation, an environmental effect evaluation scale, which is presented in Table 17, was developed and used. The summary evaluation matrix of Alternative 4 for the Plzen Regional Waste Management Plan can be seen in Table 18, while Table 19 presents the comparative table of evaluation of all four alternatives.

Key neglected issues

SEA ignored management of other waste, namely:

- biodegradable waste, with the SEA concluding that all proposed treatment options (composting, anaerobic digestion, anaerobic fermentation to produce fuel or incineration) are of similar environmental risk;
- wastewater sludge, with the SEA silent on toxicity of wastewater sludge for agricultural lands, while the preferred disposal of sludge is on agricultural lands as fertilisers or anaerobic fermentation to produce fuel; and
- hazardous waste, of which SEA did not review since no new measures were proposed, such as sanitary and veterinary waste; industrial oils including oils with polychlorinated biphenyls (PCBs); waste with Freon; batteries; old cars; tires; and construction waste.

SEA for Waste Management Plan of the Ostrava region, Czech Republic

Background and plan focus

The Waste Management Plan focused on the Ostrava region, which has more than 1 million inhabitants. The plan aimed at integrated management of 17 types of waste. The focus of the plan was communal waste, waste from mining, waste from extensive steel works, hazardous waste (e.g. industrial oils, oils with PCBs), wastewater sludge, etc. The document suggested organisational and investment measures.

Focus of the assessment

Assessment was done regarding whether all components of the plan direct waste management in the region toward environmentally sound management and if the plan properly links with related regional strategic plans in air protection (including transport), energy policy, resource management, and mining policy. Assessment was carried out by four experts during elaboration of the draft plan over five months, representing approximately 60 workdays.

Separate assessments of the current situation of waste management in the region, proposed specific targets for management of different types of waste, proposed actions in waste management and proposed implementation system were performed. The SEA did not comment on locations/technologies to be used in specific waste treatment processes, claiming this to be the task of EIA.

Assessment of current situation

SEA completed SWOT analysis on the following environmental threats:

- emphasis on old-fashioned waste treatment, i.e. landfills, over waste prevention and recycling;
- inappropriate recultivation of old landfills used for communal waste and mining by-product;
- health risks from poor waste collection and treatment;
- contamination of soil and groundwater due to poor deposition of industrial waste in old industrial estates of urban areas; and
- preference of greenfield investments over regeneration of brown-fields.

Links to other strategic documents for the region were established by the SEA, such as:

- energy policy (waste production of ash, use of waste for incineration);
• transport (environmental problems of current transport routes for various types of waste);
• resource management and mining policy (use of composted bio-waste for reclamation of old mines, reuse of waste from mining and thermal power plants); and
• air protection (emissions from incineration and other thermic treatments, emissions from landfills and composting).

Assessment of waste management targets

Eleven referential environmental objectives for waste management in the region were selected by the SEA team on the basis of the 6th Environmental Action Plan of the European Union, State Environmental Policy, and State Action Plan for Health and Environment. Examples of the reference environmental objectives include:
• a decrease in greenhouse emissions (CO₂ and methane);
• improvement to local air quality;
• contribution to savings of energy and natural resources;
• minimisation of waste production;
• minimisation of toxic substances in wastewater;
• a decrease in contamination of soil and groundwater; and
• improvement in public awareness and support of citizen participation in waste management;

The waste management plan itself proposed 26 specific binding targets covering all types of waste. All proposed targets of the plan were screened and 10 “questionable” targets, e.g. for minimising landfills, for application of sludge in agriculture, were selected for detailed review. The matrix presented in the Table 20 is an abridged version of that used to compare relevant environmental objectives and targets of the waste management plan.

TABLE 21

<table>
<thead>
<tr>
<th>Relevant environmental objectives</th>
<th>Proposed waste management targets of the plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>-2</td>
<td>0</td>
</tr>
<tr>
<td>+1</td>
<td>-1</td>
</tr>
<tr>
<td>+2</td>
<td></td>
</tr>
</tbody>
</table>

TABLE 22

Assessment matrix of proposed actions in the waste management plan

<table>
<thead>
<tr>
<th>Proposed activities</th>
<th>Environmental objectives for waste management in the region</th>
<th>Categories of environmental impacts</th>
<th>Conditions for implementation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Assessment of proposed activities

Ninty-four proposed specific activities were evaluated against their contribution to the relevant environmental objectives and their possible impacts. See Table 21 for the assessment matrix used during the process. The environmental objectives were in the fields of:

- population and public health;
- fauna, flora and ecosystems;
- landscape;
- soil and geology;
- water;
- air and climate; and
- anthropological systems and cultural heritage.

Assessment of the implementation system

The SEA team elaborated detailed environmental score sheets for all projects supported by the programme. Two types of scoring sheets were prepared:

- preliminary scoring, to guide design of projects; and
- formal scoring, to guide selection of projects.

Comments on capacities of the regional environmental department to supervise waste management were prepared and suggestions for training of staff were made.

SEA for the National Development Plan of the Czech Republic (2004-2006)

Background

The National Development Plan was developed as a basic strategic document for receiving support from the Structural Funds and the Cohesion Fund. It was drafted on the basis of Government Resolution No. 120 of January 23, 2002, on finalising programming documents for the use of Structural Funds and Cohesion Fund of the European Union. The planned funding framework was estimated at EUR 2.5 billion.

The preparation of the Czech National Development Plan involved:

- the proponent, i.e. government;
- the management and coordination committee (NPC-ESC);
- national-sectoral planning teams;
- an ex-ante team, for socioeconomic analyses; and
- the SEA team, for environmental analyses.

The Czech National Development Plan was prepared in the following stages:

- first draft, 1999-2000;
- submission to the EC, mid-2001;
- EC response, beginning of 2002;
- final version, February-December 2002; and
- SEA, April-November 2002.

The National Development Plan consisted of:

- analysis of the current situation;
- strategic objectives;
- priorities;
- orientation of the operational programmes (OPs);
- a management and monitoring system; and
- financial frameworks.

The legal and methodological basis for SEA comprised the relevant Czech legislation: Article 14 of the Czech EIA Act (No. 244/1992 Coll.); the requirements of the environmental evaluation on the operations of the EU Structural Funds, Article 42.2(b) of Council Regulation (EC) No. 1260/1999, the follow-up guidelines of the European Commission (Handbook on Environmental Assessment of Regional Development Plans and EU Structural Funds Programmes, DG XI, 1998); and the methodology for environmental assessment of regional development concepts (Croatian Ministry of Environment, 2001).

The following approach was applied for SEA of the Czech National Development Plan:

- ongoing assessment of individual parts of draft versions of the NDP leading to recommendations for modifications/amendments;
- outcomes of the assessment provided to the proponent and consultations on working meetings with the proponent and the MoE;
- modifications, reformulations and supplements incorporated in the draft text in the form of revisions;
- development of SEA documentation, i.e. an environmental report; and
- public consultations.

The assessment was composed of:

- assessment of the analytical part of the National Development Plan, i.e. the state of environment, sectoral linkage;
- defining referential environmental objectives for the National Development Plan;
- assessment of the consistency of general and specific National Development Plan goals and priorities;
• assessment of the implementation plan leading to the suggestion of a system of environmental assessment of the projects; and
• assessment of the monitoring system of National Development Plan implementation aimed at the suggestion of a system of monitoring environmental impacts.

Outputs of the assessment comprised the revision of the text of the National Development Plan and the environmental report (SEA documentation). SEA documentation consisted of:

• background for the assessment;
• description of the process;
• reference objectives of environmental protection;
• assessment of individual parts (tables, comments) of the National Development Plan;
• proposal of a system for environmental monitoring and evaluation; and
• a final statement from the SEA evaluators.

The relevant environmental protection objectives proposed and used for SEA of the National Development Plan were:

• reduction in emissions causing climate change;
• reduction in emissions causing local air pollution;
• limitation of point pollution of water and soil;
• limitation of area pollution of water and soil;
• reducing exploitation of non-renewable resources;
• reduction in exploitation of non-renewable sources of raw materials and minimisation of hazardous waste production;
• preservation of diversity of fauna, flora and habitats;
• protection of and improvement to the condition and functions of the ecosystem;
• protection of and improvement to the condition and functions of cultural landscape;
• protection and improvement of conditions of settlements; and
• improvement of inhabitants’ environmentally responsible behaviour.

Environmental evaluation of future projects was proposed in two stages:

• preliminary environmental evaluation, which is a voluntary evaluation of possible impacts of the proposed project on the relevant environmental objectives and recommendations for modifications, preventive measures or mitigation; and
• formal environmental evaluation, a compulsory evaluation of impacts of the planned project on relevant environmental objectives (It should not substitute EIA, but summarise information for the selection process and set obligatory conditions for the implementation.).

The proposed monitoring system was comprised of three to six possible indicators to guage attainment of referential environmental objectives. These basic indicators were to be further developed for operational programmes for infrastructure, agriculture, tourism, etc.

Public discussion

Public discussion was organised by the proponent. All documents and basic information about it were accessible on the Internet and received over 50,000 visitors over one and a half years. The public was notified through an e-mail conference, with over 300 persons participating. Two public hearings were organised, each drawing 60-80 attendees. Comments were collected and processed by the proponent. Shortcomings of the process were:

• accessibility and use of the document, i.e. problems in size, maps, marking;
• poor clarity of the announcements;
• weak management of the hearings; and
• limited mechanisms for due account of comments.

Strengths of the SEA were:

• SEA began at early stage;
• optimisation of the document from the environmental point of view was ongoing; and
• acceptance of the recommendations and suggestions of the SEA evaluators (mainly the system of monitoring NDP implementation) was recorded.

Weaknesses of the SEA were:

• in the planning process, unplanned changes to the schedule occurred;
• coordination of communication among planners and other evaluators was not optimal; and
• public participation was low.

Based on the experience of the National Development Plan of the Czech Republic, the following highlights of a successful SEA were identified:

• proper management of the planning process;
• development of proper methodology;
• understanding of, and being understood by, the public concerned; and
• feedback control through monitoring and evaluation.

Background of the SEA for the Single Programming Document (SPD)

The Single Programming Document is a development plan for activities financed from the state budget of Estonia and co-financed from the EU Phare programme and EU Structural Funds. The main objective of the SPD was fast, socially- and regionally-balanced sustainable economic development.

Figure 7 is a map of SEA of SPD stakeholders, detailing flow of information and interaction among them during the process. The composition of the SPD SEA team is described in Table 22.

SEA methodology and relevant environmental objectives

SPD SEA was integrated into the planning process.
The objective-led assessment approach, which relied heavily on expert opinion and qualitative analysis, was used. General environmental management principles were applied. The process used a flexible methodology which could be modified when necessary. For the purpose of the analysis, relevant environmental objectives were established:

- promotion of environmental awareness;
- safety of environment (air, water, landscapes, man-made environments) with regard to human health and wildlife;
- prevention of environmental accidents, ensuring remediation of such accidents and reduction of environmental risks;
- implementation of environmental management systems and best available technology;
- survival of valuable landscapes and habitats;
- achievement of a good state of environment;
- reconciliation of emissions with EU and Estonian requirements;
- conservation of energy and use of renewable energy sources, if possible; and
- sustainable use of natural resources such as forest, water, and fish.

Achievements of the SPD SEA

The SEA ensured inclusion of some environmental considerations in SPD, such as:

- the proposal for adding the section on past pollution; and
- as recommended in the environmental assessment regarding the mitigation measures of environmental impact, the measure of developing transport infrastructure was considerably complemented.

SEA increased the coherence of SPD, focusing attention of sector ministries on their responsibility for environmental issues and increased communication between governmental authorities responsible for different socioeconomic sectors. Additionally, the SEA indicates shortcomings in addressing environmental issues in national plans and programmes.

A number of lessons learned have been identified:

- SEA should be initiated at the same time as the PP(P).
- Organisation of a preparatory meeting for planners to introduce the purpose and procedure of SEA is beneficial.
- Good communication between the SEA expert team and planning team is a key factor for ensuring the influence of SEA on the PP(P). The use of various tools in passing information is beneficial.
- All stakeholders should be discussed at selection of environmental objectives.
- SEA experts should determine conflicting environmental issues and try to facilitate discussion for finding solutions.
- The importance of public participation should not be overlooked, and public participation should be organised in accordance with the logic of the development of the plan.
- In case of strategic documents, it is necessary to produce a short version of an easily understandable explanation/summary of the planning document for public use.
- SEA activities must be coordinated with other assessments carried out for the PP(P).

### TABLE 23

<table>
<thead>
<tr>
<th>Expertise area</th>
<th>Team leader</th>
<th>Team member</th>
<th>Team member</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water management; natural resources</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ambient air, transport, criteria and indicators</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assessment methods, indicators and criteria, waste management</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Biodiversity, criteria and indicators</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Framework SEA for the National Development Plan of Poland (2004-2006)

Background of the SEA

A draft version of the National Development Plan was the subject of the SEA. The Sectoral Operational Programme was taken into account but not included in the formal assessment, nor was the regional programme.

At the time of the assessment, there were no formal requirements for National Development Plan SEA. To ensure a proper SEA process, cooperation with programming teams was established. The SEA suffered limitations due to time and finance.

The aim of the SEA was to analyse the place and significance of environmental issues in the National Development Plan as a whole, to assess the environmental consequences of proposed actions and to formulate recommendations which would improve the National Programming Reference document, i.e. the “greening” of the National Programming Reference, making it more sustainable.

The focus of the assessment was the National Development Plan as a document and of the sector contents of the National Development Plan. General and detailed recommendations were made to the whole of the National Development Plan and to each sector’s part. The SEA also analysed the methods applied in the plan development, uncertainties encountered, and sources of information used.

Process of the SEA of National Development Plan

The work of the assessment team was carried out in five stages:

- selection of assessment criteria;
- initial assessment;
- integration of selected criteria and sustainability criteria;
- preparation of the final version of the assessment; and
- review of the final version of the National Development Plan.

The SEA team selected the assessment criteria of the National Development Plan. The team reviewed major national and international legal acts, and more than 100 were identified during the brainstorming session. As a next step, the team selected acts to be used for formulation of criteria, with 14 acts selected through the experts’ scoring system. Based on these, 250 detailed criteria were formulated. The final group used in the assessment contained 52 criteria, which were grouped as follows:

Criteria of resource management:
- general and horizontal issues;
- transport;
- energy;
- agriculture;
- nature and landscape;
- forestry; and
- water management and fisheries.

Criteria of the changes in the environment:
- air;
- noise and radiation;
- soil and waste;
- water;
- nature; and
- other.

During the initial assessment, the selected criteria were used to assess the proposed actions through the matrix approach. Consultations with programming teams were carried out and on initial results, corrections were made to the initial assessment informing the programming teams.

As a next step, integration of selected criteria and sustainability criteria was done through the comparison of the sets of criteria. Twenty-three mega-criteria were formulated and were sorted into formal/procedural and issue-oriented.

Formal/procedural criteria:
- Were diagnosis and SWOT prepared taking into account sustainable development?
- Were environmental aims and goals suggested?
- Are proposed actions in accordance with environmental policy documents?
- Were negative environmental impacts quantified?
- Is publicly accountable EIA envisioned for proposed activities?
- Are sustainability indicators taken into account?
- Is “green purchasing” promoted?
- Did the document undergo public consultations and were the results taken into account?
• Are sustainability aims in different sectors coherent?
• Are environmental criteria for the choice of project suggested?
• Are diagnosis, aims, proposed activities and monitoring indications coherent and sustainable?
• Is the role of environmental protection authorities made clear?

**Issue-oriented criteria**

• Will proposed activities result in effective use of resources (production, consumption, management)?
• Will proposed activities result in decreased use of non-renewable resources?
• Is eco-innovation promoted?
• Do proposed activities promote sustainability (including mitigation measures and monitoring)?
• Will proposed activities improve the state of the environment?
• Is nature and landscape protection taken into account (in particular NATURA 2000)?
• Do proposed activities reduce environment-related health risks?
• Do proposed activities maintain cultural values?
• Do proposed activities create conditions for fair competition in the use of the environment?
• Do proposed activities raise environmental awareness?
• Do proposed activities improve the spatial management structure?

As a final step, the National Development Plan was assessed according to the mega-criteria, where assessment and comment were prepared for each criterion. Over 60 general and detailed recommendations were formulated. The draft version of the assessment was made available for public consultations. The final version of the environmental report incorporated comments received.

During the assessment process a number of uncertainties were encountered. No “ready made and formally approved” set of criteria was found. The assessment was carried out only on the draft National Development Plan. It was viewed as a weakness that the Sectoral Operational Programme and Regional Programme were not included in the assessment. Last but not least, public participation was extremely weak in SEA.

The assessment of the strategic document pointed out that, due to uncertain types and location of actions, both strong and weaker effects are possible locally. The team faced challenges due to the lack of environmental criteria for project selection and both long-term and multi-sectoral effects of activities planned under the National Development Plan.

The draft National Development Plan perceived the environment in terms of liability and costs. Environmental protection activities were not considered as a separate issue and had no cross-sectoral approach; neither was sustainability considered. Plan implementation monitoring indicators were weak. The majority of target values in the National Development Plan were EU average. The plan lacked a long-term perspective beyond the completion dates of the plan, and integration of aims among sectors such as transport and agriculture.

SEA, among numerous other proposals, recommended using sustainable rather than “end-of-pipe” solutions. SEA enabled integration of the environmental objectives into the National Development Plan and sectors, and highlighted the environmental limitations in sectors. The assessment proposed the establishment of the National Development Plan Steering Committee, a working group.

Key changes in the National Development Plan achieved by SEA were as follows:

- a broader approach to environment;
- a better structure and more coherence within the document;
- changes in diagnosis, i.e. organic farming now seen as an opportunity, Polish environment considered an asset, and environmental aspects of competitive economy identified;
- a new “axis” in the National Development Plan promoting sustainable development;
- the Sectoral Operational Programme “Environment” was removed/split;
- a number of detailed provisions were made, e.g. on environmental impact assessment, environmental requirements in project implementation, and establishment of the Environmental Monitoring Sub-Committee; and
- environmental issues were given more consideration by sector, e.g. “green jobs” conceived, support to renewable energy sources, and changes in the approach to flood control.

The SEA team considered that the final outcome could have been “even greener,” such as in the overall and sectoral objectives of the National Development Plan. The final monitoring plan elaborated for implementation of the plan lacked sustainability indi-
cators. Innovation promotion could have included the increase of effectiveness of environmental resource use and impact reduction.

Other issues that were “not green enough” related to education and staff training of the planners and the SEA team. The understanding of the idea of sustainability could have advanced more during the process. Environmental preferences in the project selection criteria could have been stronger by setting a clear “YES” to environmental gains and “NO” to environmental losses. On the issue of development of transport infrastructure, there was a lack of environmental and economic justification for strong preference in road building, for motorways in particular.

The SEA brought benefits to the planning cycle in Poland. The same assessment method was used for internal assessment of the Sectoral Operational Programme by the Ministry of Economy, and 250 criteria were made available for future SEAs. Other lessons from a trial run were recorded for future work.

Recommendations formulated by the team for the next programming cycle are:

- Start early, putting assumptions and aims first.
- Get effective and early public involvement.
- A broad consensus on the relevant environmental objectives must be reached.
- SEA must be carried out for the entire National Development Plan and programming cycle, including lessons for future cycles.

**General conclusions**

One of the key conclusions for the SEA process was that one should not underestimate coordination, logistics and communication within the SEA team. In relation to the programming team, the working approach should be cooperative but independent.

It was not difficult to generate environmental criteria, but there is a need to limit criteria due to potential subsequent assessment difficulties. The SEA process encountered a lack of a set of politically approved objectives and targets. In selecting the relevant environmental objectives and criteria, the choice will always be controversial, making active consultation necessary. The SEA is by definition a process that should be purposeful, flexible, relative and iterative. Experience from SEA of the National Development Plan may be used in the assessment of other strategies. Finally, there is no need for formal requirements for SEA in order for it to be practiced effectively, which was demonstrated by the SEA of the National Development Plan.
This chapter was prepared for the training manual in 2007. It summarises the REC experiences and offers some recommendations for SEA activities in SEE. The recommendations came to light in preparing for a milestone event, the Environment for Europe Conference to be held in October 2007. Considering the progress made in SEE in terms of environmental restoration, one can not stop here but must face global challenges. Environment without borders has been one of the notions driving joint work in the environmental field in CEE and SEE since the early 1990s. The same idea must return with the issue of climate change. In tackling the climate change issue, SEA has the potential to and should play one of the key roles.

Key conclusions

SEE countries must put greater effort into compliance with the international standards provided by the Espoo Convention and the SEA Protocol. Faced with many priorities in the field of environment and with completion of the SEA legal framework in most SEE countries, the tool has been pushed off the priority list, although some activities in the field supported and guided by international efforts do take place.

One key issue the region continues to face in the environmental field is a lack of human resource capacity and skills to deal with SEA issues and the SEA Protocol at national and local levels. In this light, one may add that other issues of environmental protection are tackled more rigorously and receive support and capacity development, while SEA has received very little support since 2005. Therefore, this training manual is an attempt to provide assistance and foundation for capacity development of SEA experts in the region.

The above conclusion is linked closely to the capacity development efforts for EIA. The low quality of EIAs in the SEE region can be linked with the absence of SEA in some countries, inadequate capacity development of national environmental experts in EIA and SEA, and insufficient political and capacity development support.

SEE is still an evolving region, not only from the regulatory viewpoint, which opens opportunities for better legal frameworks, but because the region itself is growing geographically. In 2005, we discussed the legal SEA frameworks of Serbia and Montenegro under one heading, while in 2007 we present the new laws of two separate countries: Serbia and Montenegro. Additionally, REC activities have expanded into Turkey and we should look at SEA development in this country, a neighbour of SEE. From this point, there is more work to be done to strengthen the region’s capacity to include the environment into all decision making as a third pillar of sustainable development alongside economic and social decisions.

Key recommendations

In the light of the above conclusions, the following recommendations are offered for SEA in SEE:

- strengthening of resources of the authorities responsible for SEA to enable information sharing and capacity development of other stakeholders. The tool, which enables sustainable development, should not be viewed as an administrative burden;
- Focusing SEA on a limited number of priority spatial plans and economic sectors first, where the greatest added value of SEA is expected and which would enable targeted capacity development in carrying out the process;
- development of screening and scoping requirements to ensure that stakeholders are informed in a timely manner and are not overwhelmed with complex requirements. Public involvement is a crucial element of SEA, having the same weight as elements like assessment of effects and alternatives, preparation of monitoring and an evaluation plan, and consultations with relevant authorities; and
- in cooperation with other countries in the region and with input from international stakeholders, elaboration of national capacity development strategies, which would include a review on a regular basis though the network of SEA experts.
Next steps

The EIA Sofia Initiative, the process which prepared the basis for EIA and SEA in SEE, finished in 2003. Since then there has been no platform to coordinate capacity development activities in SEA and EIA within the region. The REC therefore put forward a proposal for the following activities within the Regional Environmental Reconstruction Programme (REReP) 2007-2008 work plan:

- establishment of a REReP working group on EIA/SEA to enable the regional approach and networking;
- comparative analysis of implementation of EIA directives and the SEA Directive in SEE countries, including pilot studies on SEA regulations and procedures in REReP countries/territories;
- workshops “Strengthening EIA Procedures in SEE” and “Promoting SEA Procedures in SEE;” and
- a workshop on the implementation of the Espoo Convention.

Another activity initiated by the REC is the SEA capacity transfer from CEE to the Eastern Europe, Caucasus and Central Asia (EECCA) region with the SEA Initiative for EECCA. Many lessons learned from CEE as well as from SEE will be used to carry out SEA capacity development activities in a coordinated way, if the initiative is supported by the countries in Belgrade. We hope the training manual will be a useful tool shared and used in any country which wants to promote SEA.
The Regional Environmental Center for Central and Eastern Europe (REC) is a non-partisan, non-advocacy, not-for-profit international organisation with a mission to assist in solving environmental problems in Central and Eastern Europe (CEE). The center fulfils this mission by promoting cooperation among non-governmental organisations, governments, businesses and other environmental stakeholders, and by supporting the free exchange of information and public participation in environmental decision making.

The REC was established in 1990 by the United States, the European Commission and Hungary. Today, the REC is legally based on a charter signed by the governments of 28 countries and the European Commission, and on an international agreement with the government of Hungary. The REC has its head office in Szentendre, Hungary, and country offices and field offices in 17 beneficiary countries, which are: Albania, Bosnia and Herzegovina, Bulgaria, Croatia, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, the former Yugoslav Republic of Macedonia, Montenegro, Poland, Romania, Serbia, Slovakia, Slovenia and Turkey.

Recent donors are the European Commission and the governments of Austria, Belgium, Bosnia and Herzegovina, Bulgaria, the Czech Republic, Croatia, Denmark, Estonia, Finland, Germany, Hungary, Italy, Japan, Latvia, Lithuania, the Netherlands, Norway, Poland, Slovakia, Slovenia, Sweden, Switzerland, the United Kingdom, and the United States, as well as other inter-governmental and private institutions.