Integrating SEA into spatial and regional planning:

Lessons from Central and Eastern Europe

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Key elements of SEA Directive or SEA Protocol

Screening

Scoping

Review

Due account

SEA Report
- evolution of state of environment
- relationship to relevant env. objectives
- assessment of significant env. effects
- mitigation measures
- monitoring
### Difference between EIA and SEA

<table>
<thead>
<tr>
<th>EIA</th>
<th>SEA</th>
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</table>
| - assesses the specific environmental impacts of specific planned development projects. | - evaluates whether planned strategic actions (plans, programmes, policies and legislative proposals) meet environmental goals and targets established by environmental and sustainable development strategies.  
- whenever possible, SEA also assesses likely environmental impacts of specific activities which are implemented as a result of strategic action. |

### Key options for integration

- SEA separated from planning
- SEA partially integrated into planning
- SEA fully integrated
Separation of SEA from planning

😊 Simple and straightforward procedure
😊 Enables detailed assessment of likely environmental effects
😊 Focus on elaboration of environmental report

😊 Usually comes too late - new alternatives and proposals may be boycotted by planners
😊 Prolongs the entire planning process
😊 Late assessment tends to be more costly
**SEA partially integrated into planning**

- **Initiation**
  - Screening

- **Draft P/P**
  - Environmental Report

- **Consultations**
  - Review

- **Adoption**
  - Account

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**Partial integration of SEA into planning**

- **Problem analysis**
  - Env. baseline
  - + Account of relevant env. objectives

- **Strategy**
  - Objectives
  - Scenarios

- **Specific proposals**
  - Projects
  - Supervision
  - Monitoring

  + Assessment of env. effects
  + Mitigation measures
  + Monitoring
Partial integration of SEA into planning

😊 Saves time (parallel to planning)
😊 Saves money (joint use of data by the planning and assessment teams)
😊 Facilitates early consultations and prevents late surprises

😊 More demanding and difficult to manage – for SEA team as well as for stakeholders
😊 Need for thorough quality reviews

Full integration of SEA into planning

- Problem analysis (env. baseline)
- Strategy objectives (account of relevant env. objectives)
- Specific proposals (assessment of env. effects, mitigation measures, monitoring)

cons.
Full integration of SEA into planning

- Saves time, money and prevents late surprises ...
- Puts SEA into heart of planning – it internalises environmental considerations, helps to define environmental ToR for each planning task, etc...

- Possible internal disputes between members of the team in charge of planning and those in charge of SEA may be hidden – external stakeholders get to see only pre-negotiated findings,

or

- SEA team may be fully co-opted by the planning team and loses independent sight

- ...... These problems well illustrated by „fully internalised environmental analyses“ in previous socialistic regimes

Conclusions on integration of SEA

Separation preferred by EIA specialists

Partial integration preferred by env. planners (EAP, LA21, etc.)

Full integration preferred by development planners
Key integration issues

- When to initiate SEA?
- How to relate SEA to partial environmental analyses and consultations within the planning process
- How to most effectively link substantive tasks in SEA with substantive tasks in elaboration of P/P
- One scoping or many scopings at different stages of P/P formulation?

Practical recommendations for integration of SEA into strategic planning

How to customise SEA to provide right environmental analyses within planning process
SEA and existing environmental analyses

- Many planning processes already use limited environmental analyses and consultations
- SEA should strengthen rather than replace these systems

Review the specific strategic planning process:
- logic, tasks and formal steps in the planning
- existing environmental analyses
- existing consultation mechanisms

Upgrade these existing provisions to meet requirements of international SEA benchmarks
Coordination of strategic planning process and SEA

<table>
<thead>
<tr>
<th>Tasks in the elaboration of plan/program</th>
<th>Corresponding tasks in SEA</th>
<th>Consultations with env and health authorities</th>
<th>Public access to info. and public consultations</th>
</tr>
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<tbody>
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Usual tasks in elaboration of plans and programs in CEE

1. **Initiation** (ToR for the plan/programme - its aims and relation to other P/Ps)
2. **Analysis of existing problems within the relevant area or sector**
3. **Determination of specific goals** of the plan/programme
4. Development and **evaluation of possible “strategic” scenarios**
5. **Detailed design** of selected scenario
6. Design of **implementation** system and **monitoring** system
7. **Final proposal** of P/P and **Decision** on P/P (+ justification for decision-maker)
### Coordination of SEA requirements with planning/programming process in CEE – I.

<table>
<thead>
<tr>
<th>Usual tasks in elaboration of the P/P</th>
<th>Corresponding tasks in SEA</th>
<th>Consult. with authorities</th>
<th>Consult. with public</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initiation of the P/P</td>
<td>SEA screening</td>
<td>?</td>
<td>?</td>
</tr>
<tr>
<td>Analysis of existing problems within the area or sector</td>
<td>Analysis of environmental baseline for the P/P - (b), (c), (d)</td>
<td>?</td>
<td>?</td>
</tr>
<tr>
<td>Determination of specific goals of the P/P</td>
<td>Determination of relevant env. objectives for the P/P - (e.1)</td>
<td>?</td>
<td>?</td>
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</tbody>
</table>

### Coordination of SEA requirements with planning/programming process in CEE – II.

<table>
<thead>
<tr>
<th>Usual tasks in elaboration of the P/P</th>
<th>Corresponding tasks in SEA</th>
<th>Consult. with authorities</th>
<th>Consult. with public</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strategic scenarios</td>
<td>Review of consistency of proposed scenarios with relevant env. objectives (e2)</td>
<td>?</td>
<td>?</td>
</tr>
<tr>
<td>Design of specific measures/actions</td>
<td>Assessment of their possible env. effects + design of mitigation measures – (f), (g),</td>
<td>?</td>
<td>?</td>
</tr>
</tbody>
</table>
### Coordination of SEA requirements with planning/programming process in CEE – III.

<table>
<thead>
<tr>
<th>Usual tasks in elaboration of the P/P</th>
<th>Corresponding tasks in SEA</th>
<th>Consult. with authorities</th>
<th>Consult. with public</th>
</tr>
</thead>
<tbody>
<tr>
<td>Implementation and monitoring system</td>
<td>Design of env. monitoring system</td>
<td>?</td>
<td>?</td>
</tr>
<tr>
<td>Final proposal of the P/P</td>
<td>Wrap-up of SEA by report that provides all information, summarizes key conclusions and notes possible uncertainties</td>
<td>?</td>
<td>?</td>
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</table>

### SEA methods used in CEE

<table>
<thead>
<tr>
<th>Task within planning</th>
<th>Task within SEA</th>
<th>Basic methods to carry out the SEA task</th>
</tr>
</thead>
</table>
| Analysis of the current situation | Key environmental issues in the given sector/region | - State of Environment Reporting  
- Analysis of carrying capacity the territory  
- SWOT analysis (env. issues) |
| Objectives of the strategy | Determination of relevant env. objectives for the strategy | - Environmental commitments (international treaties, Environmental Policy, EHAP, Sust. Development Strategy)  
- Limits for the use of the territory  
- Analysis of key environmental issues in the given sector/region (see above) |
| Compatability of economic, social, and env. objectives | Matrices of mutual relationship of objectives (possible synergies and conflicts) – to screen out clearly conflicting objectives |
## SEA methods used in CEE

<table>
<thead>
<tr>
<th>Task</th>
<th>Description</th>
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<tbody>
<tr>
<td>Formulation + evaluation of conceptual alternatives</td>
<td>Review whether alternatives have potential to meet environmental objectives</td>
</tr>
<tr>
<td>Design of specific projects</td>
<td>Analysis of possible env. impacts</td>
</tr>
<tr>
<td>Implement. Plan</td>
<td>Env. management plan</td>
</tr>
<tr>
<td>Monitoring Plan</td>
<td>Env. monitoring</td>
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</tbody>
</table>

- Indicators to measure attainment of every env. objective (long-list – short-list)
- Evaluation of attainment of env. objectives by each conceptual alternative
- EIA techniques (GIS, air quality modelling)
- Collective expert judgement often more precise then modelling
- Scope of any subsequent env. evaluations (SEA, EIA or other env. evaluations)
- Institutional arrangements (roles of env. authorities in review of subsequent actions)
- Adjustments of monitoring/statistical system to measure actual attainment of env. objectives

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### Specific example:

**Comprehensive Planning of the Naissaar Island**

*(Estonia, north coast)*
Key issues

- Island was previously used as a Soviet army base - a number of areas severely polluted with oil products and heavy metals.

- Rest of the island - nearly virgin natural environment (80% covered with forest, numerous dunes, mire landscapes and species-rich plant communities).

- No comprehensive planning before

Features of plan

- Comprehensive plan aims to define the main uses of the territory and provide restrictions to building activities.

- SEA carried out in parallel to the planning - pilot project without formalised procedures

- The whole planning/SEA process took 17 months – extensive participation of future land-owners, associations of scientists, entrepreneurs, professional societies/unions, movements, and other private or legal persons
## Planning, SEA and participation - 1

<table>
<thead>
<tr>
<th>Planning</th>
<th>SEA</th>
<th>Joint public participation</th>
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</thead>
<tbody>
<tr>
<td>- ToR for planning</td>
<td>- ToR for SEA</td>
<td>- Identification of stakeholders</td>
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<tr>
<td>- Development strategy</td>
<td>- Environmental investigations</td>
<td>- Notification about initiation of planning/SEA</td>
</tr>
<tr>
<td>- Baseline data and investigations</td>
<td>- Environmental objectives</td>
<td>- Public discussion on SWOT analysis (strengths, weaknesses, opportunities, threats)</td>
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<tr>
<td>- Development objectives</td>
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## Planning, SEA and participation - 2

| - Design of five planning alternatives        | - Scoping of key impacts                 | - Public meeting to review draft matrices                                                |
|                                               | - draft matrices                         |                                                                                            |
|                                               | - public discussion                      |                                                                                            |
|                                               | - final matrices                         |                                                                                            |
| - Draft planning proposal                     | - SEA report on preferred alternative (draft planning proposal) | - Public discussion on esp. mitigation measures                                         |
| - Planning proposal                           | - SEA report                             | - Public display and consideration of the comments by the public                       |
### Alternatives

| Alt. 0- | The island is left by itself, without any concrete action plan developed (No-action alternative) |
| Alt. 0+ | Necessary cleaning + small-scale building activities and use of the island is possible |
| Alt. 1 | Small increase of local population and tourism/recreation activities |
| Alt. 2 | Considerable increase of local population and tourism/recreation activities. Construction of new roads in the island. |
| Alt. 3 | Theoretical alternative of settlement of tens of thousands of people in the south and north ends of the island. |

### Evaluation matrix for each alternative

<table>
<thead>
<tr>
<th></th>
<th>Duration</th>
<th>Scope and magnitude</th>
<th>Significance</th>
<th>Mitigation possibilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nature and landscape</td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>(biodiversity; ground and surface water)</td>
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<td></td>
<td></td>
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<tr>
<td>Man-made environment</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>(infrastructure; buildings; historical heritage)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>People and society</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>(health; safety; work opportunities)</td>
<td></td>
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Key conclusions for practice - 1

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

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

Key conclusions for practice - 2

- Integration of SEA into the development 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.
Approaches to SEA in their implications on integration

## Approaches to SEA

<table>
<thead>
<tr>
<th>Integration</th>
<th>Level of detail</th>
<th>Assessment approach</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full</td>
<td>Ad hoc</td>
<td>Partial environmental analyses</td>
</tr>
<tr>
<td>Partial</td>
<td>Appraisal</td>
<td>Systematic appraisal against environmental objectives</td>
</tr>
<tr>
<td>Separate</td>
<td>Assessment</td>
<td>Assessment of likely env. impacts of implementing the plan</td>
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</tbody>
</table>
**Approaches to SEA**

- Impact assessment (assessing impacts of implementing P/P)
- Objective-led appraisal (evaluating consistency of P/P with relevant environmental objectives)

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**Assessing impacts of implementing P/P**

- Presumption: the chief task of SEA is to evaluate possible environmental impacts of activities that are proposed in the plan/programme (inspired by EIA procedures)
- SEA starts when draft alternatives of the P/P elaborated
- Scoping determines ToR for the SEA Report and can suggest new alternatives
- SEA Report describes the key effects of each alternative, compares them and recommends the optimal solution
- SEA Report reviewed by relevant environmental and health authorities and by the public concerned
- SEA Reports is taken into account before adoption of P/P
Assessing impacts – comments

😊 Enables assessment of likely env. impacts

😊 Impacts become clear when specific alternative(s) have been defined …

😊 ….by this time, the main strategic choices have been made

😊 Such SEA comes too late to influence the P/P process

😊 SEA inputs may be ignored (newly suggested alternatives may be boycotted by planners - due to time or resource constrains, etc.)

Evaluating consistency with env. objectives

- **Presumption:** The key choices in P/P are on the level of objectives and strategic scenarios. These crucial choices must take full account of relevant env. objectives

- Determination of relevant environmental objectives for the respective sector/region

- Review of consistency of proposed objectives for the P/P with the relevant environmental objectives

- Analysis of consistency of strategic scenarios with the relevant environmental objectives
Evaluating consistency - comments

☺ Early input from SEA into strategic planning - provides environmental ToR for the entire planning process
☺ Separate (public) discussion on objectives and on implementation – 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 need to follow

SEA approaches in EU

- **Evaluation of impacts of implementing P/P - EC - DG**
  TREN: SEA of Transport Infrastructure Plans

- **Evaluating consistency with env. objectives: EC**
  Handbook on EA of RDPs and EU Structural Funds Prog.s

- **Comparison of SEA approaches: Sheate at al (2001)**