Strategic Environmental Assessment (SEA)

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Background to the Development of SEA

Motivation for SEA

- During the last decade the world has witnessed a rapid, though controversial, evolution of the environmental policy agenda.

Motivation for SEA

- Increasingly, traditional environmental decision-making is being questioned
  - not because it has not developed sufficient legal mechanisms or methodological tools
  - or because it did not seek to find solutions for critical environmental degradation
  - but essentially because it is not efficiently responding to the new challenges of the late 20th century

Motivation for SEA

- In particular, it is not fully achieving the initially expected results regarding environmental soundness and integration with economic and social issues.
- Project EIA, as currently practiced, has been unable to respond to this increasing complexity and provide for global, sustainable and sound decision-making.

Motivation for SEA

- The timing of decisions: project's EIA takes place at a stage when it is too late to consider the effects of policy and planning critical decisions
- These happen in the absence of a systematic impact assessment process with an outcome subsequently influencing project planning and design

Concepts & Notion of SEA

SEA at policy, planning and programme level

- Over the years, SEA became recognized as a form of environmental assessment that can assist managers and leaders in *policy, planning and programmatic (PPP)* decisions.

SEA at policy, planning and programme level

- However, it would be more fair to say that SEA is a member of the family of impact assessment tools, as the range of concerns in SEA go far beyond environmental issues.

SEA at policy, planning and programme level

- It has been evolving as a family of tools, covering decision-making levels from Policy to Programming, where it more evidently interfaces with the scope of project EIA application.

Levels of decision-making in environmental assessment

Policy	Road-map with defined objectives, set priorities, rules and mechanisms to implement objectives
Plan	Priorities, options and measures for resource allocation according to resource suitability and availability, following the orientation, and implementing, relevant sectoral and global policies
Programme	Organized agenda with defined objectives to be achieved during programme implementation, with specification of activities and programmes investments, in the framework of relevant policies and plans
Project	A detailed proposal, scheme or design of any development action or activity, which represents an investment, involves construction works and implements policy / planning objectives

- Practice shows that an effective SEA is *not only about science, but also about values*.
- In assessing the environmental consequences of PPP's, sufficient attention should be given to the values of the affected communities and to the communication mechanisms available or necessary.

- What needs to be stressed is that SEA requires great adaptiveness and flexibility in its decision context
  - as it deals with a range of mixed forces, acting in many fronts, different societal values and high levels of uncertainty in terms of expected outcomes.

Definition of SEA

- "the formalized, systematic and comprehensive process of evaluating the environmental impacts of a policy, plan or programme and its alternatives, including the preparation of a written report on the findings of that evaluation, and using the findings in publicly accountable decision-making"
  - an early and widely quoted definition of SEA, by Therivel *et al., 1992*
  - representing an extension of project EIA to the earlier levels of decision making

Definition of SEA

This concept of SEA persisted in Sadler and Verheem, 1996 proposed definition:

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

Definition of SEA

- SEA is a systematic, on-going process for evaluating, at the earliest appropriate stage of publicly accountable decision-making, the environmental quality, and consequences, of alternative visions and development intentions incorporated in policy, planning or programme initiatives, ensuring full integration of relevant biophysical, economic, social and political considerations (Partidário, 1999).

Definition of SEA

- "SEA is an instrument that must be adapted to existing decision-making processes. It is more political than technical, and is related to concepts, rather than to activities with geographic and technological specifications." (Partidário, 2000).

Basic principles of SEA

- *Fit for purpose:* the process should be customized to the characteristics of policy and plan-making
- *Objective-led:* the process should be undertaken with reference to environmental goals and priorities
- *Sustainability-oriented:* the process should facilitate identification of development options and proposals that are environmentally sustainable
- *Integrated:* the process should be related to parallel economic and social appraisals and tiered to project EIA where appropriate

Basic principles of SEA

- *Transparent:* the process should have clear, easily understood information requirements including provision for public reporting
- *Cost-effective:* the process should achieve its objectives within limits of available information, time and issues
- *Relevant:* the process should be focused on issues that matter
- *Practical:* the process should provide information that is required for decision-making

Evolution, Benefits & Rationale for SEA

- The National Environmental Policy Act (NEPA) is the reference back to which we can find the first requirements for what became known as SEA.

- Since then several international initiatives subscribe the need for SEA.
- The following lists a serious of key events that have contributed to the evolution and consolidation of SEA.

SEA: key historical initiatives

- 1969: The National Environmental Policy Act (NEPA) passed by the U.S. Congress, mandating all federal agencies and departments to consider and assess the environmental effects of proposals for legislation and other major projects.
- 1978: US Council for Environmental Quality (USCEQ) issues regulations for NEPA which apply to USAID and specific requirements for programmatic assessments
- 1989: The World Bank adopted an internal directive (O.D. 4.00) on EIA which allows for the preparation of sectoral and regional assessments
- 1991: The UNECE Convention on EIA in a trans-boundary context promotes the application of EA for policies, plans and programmes

SEA: key historical initiatives

- 1990: The European Economic Community issues the first proposal for a Directive on the Environmental Assessment of Policies, Plans and Programmes
- 1991: The OECD Development Assistance Committee adopted a principle calling for specific arrangements for analysing and monitoring environmental impacts of programme assistance
- 1995: The UNDP introduces the environmental overview as a planning tool
- 1997: The Council of the European Union adopts a proposal for a Council Directive on the assessment of the effects of certain plans and programmes on the environment
- 2001: The UNECE issues a draft protocol on Strategic Environmental Assessment applying to policies, plans and programmes
- 2001: Council of the European Union adopts the Council Directive 2001/42/CE on 27 June on the assessment of the effects of certain plans and programmes on the environment

Aims and objectives of SEA

To help achieve environmental protection and sustainable development by:

- Consideration of environmental effects of proposed strategic actions
- Identification of the best practicable environmental option
- Early warning of cumulative effects and large-scale changes

To strengthen and streamline project EIA by:

- Prior identification of scope of potential impacts and information needs
- Clearance of strategic issues and concerns related to justification of proposals
- Reducing the time and effort necessary to conduct individual reviews

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

- Promoting environmentally sound and sustainable proposals
- Changing the way decisions are made

- The extension of project EIA principles to the policy and planning levels did not succeed without resistance.
- It was argued that broad principles of EA were already incorporated in the decision-making process at that level, and that the adoption of SEA in a systematic manner would represent only marginal advantages.

- Particularly, in physical planning, practitioners claimed that plans already covered project' EIA requirements, using similar methodologies such as scope of analysis (natural, social and economic issues), comparison of alternative solutions and conflict-resolution approaches.
- Currently, there seems to exist a good consensus as to the need for a new form of environmental assessment that runs at higher levels of decision making, tiering to project’s EIA

SEA and Sustainability

- The concept of SEA has been evolving strongly associated to the achievements of *sustainability practices* and the consideration of *cumulative effects*.

- In some cases, *sustainability* remains an implicit background policy.
- In other cases, sustainability issues are used as (Partidário, 1996b):
  - benchmark against which objectives and criteria in SEA can be measured; or
  - a strong policy that helps to shape new forms of decision making in support of sustainable development.

- SEA can play a significant role in enhancing the integration of environmental concerns in policy and planning processes, thereby helping to implement sustainable development.

- A more integrated system of planning means that environmental and sustainability criteria are incorporated throughout the planning process, for example, in the identification of suitable (or unsuitable) locations for development, and in the assessment of policy alternatives.

Main forms of SEA applied to PPP

Policy SEA

- Policy Impact Assessment – environmental assessment of policy proposals to Cabinet approval (Canada)
- Environmental test assessment of government legislation proposals (the Netherlands)
- SEA of governmental proposals - assessment of government legislation proposals (Denmark)

Main forms of SEA applied to PPP

Regional and Spatial Planning SEA

- Regional EA - evaluation of regional environmental and social implications of multi-sectoral developments in a defined geographic area, over a certain period (WB)
- SEAn (Strategic Environmental Assessment Analysis) – based on community involvement applies SEA in developing countries (Dutch Aid Agency)

Main forms of SEA applied to PPP

Sector Planning and Programme SEA

- Environmental Overview - applies to the formulation stages of programmes, leads to early identification of environmental and social impacts and opportunities and incorporation of mitigation measures into programme redesign (UNDP)
- Sectoral EA - evaluation of sector investment programmes involving multiple sub-projects; integration of environmental concerns into long-term development; and investment planning or the evaluation of sector policies (WB)

Main forms of SEA applied to PPP

- **Regional, Spatial and Sector Planning and Programme SEA**
  - Strategic EIA – SEA applied to spatial plans and programmes using the project's EIA procedure (the Netherlands)
  - Programmatic environmental assessment - process of evaluating groups of actions related geographically or having similarities of project type, timing, media or technological character (USA)

Scope of SEA applications

SEA is currently or potentially applied to:

- International Treaties
- Privatization
- National Budget
- Multi-annual investment plans
- Legislative proposals
- Sectoral and global policies
- Area-wide or land-use planning
- Sectoral planning

Why is SEA important?

- Helps to incorporate sustainability principles in the policy-making process
- It can influence and improve decision-making contributing to establish an environmentally and sustainable integrated context for the development of policies and plans
- Enables tiering of environmentally structured actions
- Provides better context for assessment of cumulative effects
- Provides screening context to lower levels EA, particularly project EIA
- Anticipates impacts that can occur at project level, improving and strengthening project EIA

Success factors in SEA

- Basic requirements (legal basis, administrative order, policy or recommended requirements)
- Clear environmental policy objectives
- Good State of the Environment reporting
- Well-structured planning process
- Responsibility for compliance
- Proponent commitment and accountability
- Multiple organizations that work together
- Objectives, criteria and quality standards framework
  - to assess proposal need and justification
  - to assess environmental effects (losses/changes)

Success factors in SEA

- Guidelines for good practice
- Resources availability
- Access to information
- Public interest and non-governmental organizations involvement
- Independent oversight and review of the implementation and performance (quality control)
- Inputs for decision: are SEA results timely, relevant and influential? (use versus non-use of SEA in policy design/approvals)