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FROM EIA TO SEA

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1. Introduction

The capacity to inform, and influence, sectoral development decision-making, towards more sound environmental and sustainable decisions, is the key *leit motiv* for the development, and improvement, of impact assessment tools. This is valid for different development sectors, as much as for different levels of decision-making, from policy-making to project development.

Environmental Impact Assessment (EIA), which over the years became specialized on the assessment of development projects, was the first formal impact assessment tool, created in the USA in 1970. It was conceived with the broad purpose of assisting all levels of development actions, from legal governmental proposals to concrete project development.

The US National Environmental Policy Act (NEPA) presented EIA as an action-forcing mechanism, shaped as a requirement, to bring about substantive environmental reform through the US federal bureaucracy. It imposed on federal agencies the need to prepare an environmental impact statement for “legislation and other major federal actions significantly affecting the quality of the human environment“ (Section 102(2)(c), National Environmental Policy Act of 1969).

For reasons dealt with in other chapters, EIA evolved with a relatively narrow perspective, considering its original purpose. Such narrow perspective is related to the substantive issues it comprehended, mostly related to physical and ecological impacts, but also to the level of decision to which it then applied – project development.

Reactions against the narrow substantive perspective of EIA resulted in the emergence of Social Impact Assessment, as a new form of impact assessment tool devoted primarily to social impact issues, in the mid-1970’s. Area-wide environmental assessment, first suggested in 1979, was the response to the incapacity of EIA to address levels of decision-making above project level. It eventually evolved to what is now currently known as Programmatic EIA, the form of Strategic Environmental Assessment (SEA) adopted in the U.S.A., mostly applied to plans and programmes.

Other forms of impact assessment have also evolved. These include the focalization into substantive aspects of impact assessment, such as ecological impact assessment, or forms of impact assessment that address specific tools, such as cumulative impact assessment, or sectors of intervention, such as technology impact assessment.

This chapter will address, in particular, the key differences between project's EIA and SEA. It will start by explaining in more detail the evolution of SEA concepts in relation to EIA practice and knowledge. It will attempt to address the current understanding of SEA, in its key and fundamental principles. It will then compare EIA and SEA as to key factors in any impact assessment approach. And finally it will address different forms of SEA as currently understood and discuss whether SEA is actually playing its initially expected role.

2. From EIA to SEA

Significant environmental policy evolution is occurring not only in the developed world but also in the developing and transitional economies. The challenges imposed by emerging global values, new technologies and increased environmental awareness across development sectors, in public, governmental, or private decision-making, are inviting and guiding change in decisional attitudes and its supporting values.

SEA emerged, and has been evolving in this context - an increasing complexity surrounds the decision-making processes to which SEA is expected to apply. The emerging societal values of equity and fairness, the urgency of rational decisions supported by scarce or defective information and conflicting priorities, are trends that call for new forms of proactive intervention in more strategic contexts.

Project's EIA, as currently practiced, has been unable to respond to this increasing complexity and provide for global, sustainable and sound decision-making. Such disillusion with the capacity of project's EIA to assist, as a single tool, sound environmental decision-making in a tiering system was the strongest argument that determined the need for SEA. The reasons are various (Lee and Walsh, 1992; Therivel *et al.*, 1992; Wood and Djeddour, 1992; Sadler and Verheem, 1996) and can be summarized as (adapt. Partidário, 1999):

- 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, which outcome could subsequently influence project planning and design;
- the nature of decisions: the less concrete and more vague nature of policy and planning decisions, often its incremental nature, through small, sequential and iterative decisions that challenge rational and systematic processes was seen as a significant constraint to the operation of a pragmatic, technically focused, and rationally oriented tool such as EIA; a new impact assessment tool, inherently

adaptable to more strategic, and often incremental, levels of decision-making, was therefore needed;

- the level of information: at the policy and planning level often there are serious limitations in the availability of information, and a reasonable uncertainty regarding action implementation and respective timings; this impeded the satisfaction of project EIA needs, in terms of required detailed levels of information and certainty.

Despite initial arguments in the prescriptive literature, the need for SEA does not result from project's EIA insufficiencies only. SEA offers the capacity to assist the development of policy and planning practices, enabling a stronger environmental component to be considered in policy and planning, and ensuring impact assessment to take place earlier, at the policy and planning level. The strongest argument is that SEA may perform a fundamental role in promoting sustainable principles and practices in policy and planning, offering an adequate scale, and decision context, to enable integrated approaches and the consideration of cumulative effects (Wood, 1995; Partidário, 1996; Sadler, 1998; Fischer, 1999; Goodland and Mercier, 1999; Partidário, 1999; Clark, 2000).

This broader perspective on the role of SEA met various skeptics along the way, and especially planners and policy-makers. It was argued that broad principles of impact assessment were already incorporated in the decision-making process at those levels, and that the adoption of an impact assessment tool such as SEA, in a systematic manner, would represent only marginal advantages. Particularly in physical planning, many practitioners would claim that plans already covered project's EIA requirements, using similar methodologies such as scope of analysis (natural, social and economic issues), comparison of alternative solutions and conflict-resolution approaches.

Various reasons could justify this skepticism: a) it means a new demand imposed on the already complex planning and policy-making processes; b) it means an action-forcing mechanism to make policy and planning more accountable; c) but it also means that, because of the inheritance from project's EIA, SEA may become more process focused, bureaucratic and administrative oriented, undermining rather than facilitating, complex policy and planning systems.

The fact is that, as existing practice already demonstrates (Thérivel and Partidário, 1996; Partidário and Clark, 2000), SEA brings a significant difference where spatial, or land-use, and sectoral planning missed to incorporate, in a systematic fashion, environmental and sustainability issues into the planning process, or even where policy and planning missed to identify, and compare, feasible alternatives, based on broad, integrated criteria and accountable processes. Even where policy and planning are already quite integrated and accountable, SEA is helping as an *aide-memoire*, a kind of verification tool.

Another fact contributes to the difficulty in understanding the new and distinctive role associated to SEA. And that is when the **term** SEA is used where the **function** SEA is not really applying.

Many environmental assessment approaches currently identified as SEA could be questioned as to their actual strategic nature. Often it is not easy to decide on the SEA or

project's EIA nature of certain impact assessment approaches, or even if we are dealing only with better environmental planning practices or even general environmental studies.

It is important to stress that SEA should not be seen as a solution to occupy the empty space left by an inadequate conceptualization of project's EIA, or to overcome the difficulties of understanding and implementing project's EIA. SEA should not be reduced to the comparison, and assessment, of major project alternatives, nor should project's EIA be reduced to the single objective of formulating mitigation measures (Partidário, 2000).

Where project's EIA is not effectively performing its role of proactively informing decision-making on comparing and assessing the impacts of real project alternatives, indicating effective mitigation measures, promoting public participation and ensuring monitoring of effects and mitigation, that does not mean that SEA will take its place in resolving those problems. Unfortunately however, this is often the shape and use attributed to SEA. This reveals a deficient understanding of SEA in relation to EIA.

Despite the need for a specific impact assessment tool, which better responds to more strategic levels of decision, EIA and SEA share many characteristics. Both are impact assessment tools, acting proactively and having as a main purpose to enable informed decision-making. Consequently both share broad impact assessment principles (IAIA, 1999), as much as key functions and activities in any systematic impact assessment tool, such as scoping, alternatives comparison and assessment, public participation and post-evaluation, including monitoring. But as indicated in Table 1 the object of assessment in SEA is different from EIA – SEA was conceived to address strategies, concepts of development, while EIA is pragmatically addressing the perceived solution for development.

It can be argued that SEA must be adopted to act upon strategic initiatives, and not to play the role that EIA is already expected to play. There can be no reason for the establishment of new approaches, such as SEA, where situations could be dealt with better planning, with EIA, with cumulative impact assessment or by other forms of well-acknowledged impact assessment mechanisms.

Why should a new mechanism that implies a new legal and institutional order, new timeframes and rules of decision-making, and inherent additional resources, be imposed if there are existing mechanisms that can satisfy impact assessment needs? Why should SEA be introduced if it will do the same that EIA is already doing? What is then the added value inherent to SEA that justifies the effort implied in its adoption?

3. Guiding principles for SEA

The good practice principles for environmental assessment, as adopted by the International Association for Impact Assessment (IAIA) in 1999, have already been indicated as being applicable to both EIA and SEA.

However, specific principles for good practice SEA have been elaborated over the years by different authors, looking into more effective applications of SEA. Box 1 introduces Principles for Good Practice of SEA which were put together after two main sources: the International Study on EA Effectiveness and its Guiding Principles for SEA (Sadler, 1996) and the Key SEA Practical Issues that resulted from a review of international experience with SEA conducted in 1994 (Partidário, 1996).

Box 1 Principles for Good Practice of SEA

Policy framework

- Effective application of SEA requires open and accountable political and organizational systems
- SEA should be undertaken in the context of national and or institutional sustainability policies and strategies
- Action plans for sustainable development can provide specific and quantitative environmental objectives as benchmarks to environmental impacts of strategic actions
- Identify the relationship between SEA and other policy instruments in decision-making and establish mechanisms that ensure integrated decision-making
- Identify criteria and mechanisms to evaluate significance and determine acceptability against policy framework of environmental objectives and standards

Institutional

- Provide for an institutional framework that will facilitate integrated decision-making
- Establish internal and external organizational frameworks that will ensure a continuous flow and interaction along the various stages of the SEA process
- Assign specific responsibilities and accountability relatively to key decision-making points
- Provide for a regulatory framework that is appropriate and necessary

Procedural

- SEA should be an intrinsic element of policy and programme development processes and should be applied as early as possible
- The focus of SEA should be on the fundamental elements of policy proposals
- Establish to what kind of instruments should SEA apply
- Establish when should SEA be applied
- Be focused and ask the right questions when using SEA
- The scope of SEA must be comprehensive and wide-ranging to be able to act as a sustainability tool
- The scope of the assessment must be commensurate with the proposals potential impact or consequence for the environment
- SEA must help with the identification and comparison of equally valid options
- Relevant factors, including physical, ecological, socio-economic, institutional and political factors should be included in the SEA as necessary and appropriate
- Public involvement should be a fundamental element in the process of SEA, consistent with the potential degree of concern and controversy of proposals
- Objectives and terms of reference should be clearly defined
- Develop guidance that will set SEA in motion
- Use simple methodological approaches
- Provide for public reporting of assessment and decisions (unless explicit, stated limitations on confidentiality are given)
- Establish monitoring and follow-up programmes to track proposals
- Establish independent oversight of process implementation, agency compliance and government-wide performance

Sources: Partidário 1996; Sadler 1996

The principles are organized in three main sections: policy framework, institutional and procedural principles. These refer to key conditions that should be met to enable good SEA practice, or that act as a requirement to make SEA different and specific.

While it would not be realistic to impose that all of these principles be met to enable effective SEA, it represents however overall conditions that can already exist in policy or planning decision-making systems or may need to be introduced: (1) as a new policy decision context, incorporating sustainability issues, or enabling inter-sectoral and accountability mechanisms, (2) favouring new institutional architectures, or (3) enabling more effective and flexible procedures, methods and factors in the impact analysis, through increasingly integrated approaches.

More recently IAIA adopted SEA performance criteria, which purpose is to provide rules of thumb to enable the assessment of SEA quality and effectiveness. It focuses on fewer but critical aspects, which were found to sustain SEA good practice. These criteria result from extensive workshop discussions that involved the impact assessment international community, and have run throughout two consecutive years of IAIA annual meetings and electronic debate (1998 and 1999). IAIA performance criteria are shown in Box 2.

4. Key differences between EIA and SEA

The issue about what makes SEA distinct from EIA has been on the table ever since SEA has been suggested as an alternative impact assessment tool to project's EIA. In fact, as above mentioned, it was used as the main argument to justify the reasons why SEA was needed. Many authors have made several comparisons in terms of advantages and disadvantages of SEA with respect to EIA (Wood and Djeddour, 1992; Lee and Walsh, 1992; EU-DGXI, 1998), but often keeping a focus on EIA as being good or bad for specific functions, and suggesting where SEA could improve EIA, or would not represent even a marginal advantage.

Rather than looking at SEA for reasons that justify project's EIA, SEA should be appreciated in absolute rather than relative terms, it should be intrinsically analyzed in relation to its performance in certain impact assessment activities. Table 1 attempts to compare how SEA and EIA act differently provided its intrinsic nature and performance, its response to different functions, and not because one may be better than the other. In Table 1 both SEA and EIA are considered important as assessment tools, in their own place.

Without attempting to fully cover all different aspects, Table 1 shows that there are many aspects in which SEA and EIA act differently. The identified aspects are directly related to the different, yet complementary, role that SEA and EIA play in decision-making, as demonstrated by existing experience.

Box 2 – SEA performance criteria

SEA:

<i>is integrated</i>	<ul style="list-style-type: none">• ensures an appropriate environmental assessment of all strategic decisions relevant for the achievement of sustainable development• addresses the interrelationships of biophysical, social and economic aspects• is tiered to policies in relevant sectors and (transboundary) regions and, where appropriate, to project EIA and decision making
<i>is sustainability-led</i>	<ul style="list-style-type: none">• facilitates identification of development options and alternative proposals that are more sustainable¹
<i>is focused</i>	<ul style="list-style-type: none">• provides sufficient, reliable and usable information for development planning and decision making• concentrates on key issues of sustainable development• is customized to the characteristics of the decision making process• is cost and time effective
<i>is accountable</i>	<ul style="list-style-type: none">• is the responsibility of the leading agencies for the strategic decision to be taken• is carried out with professionalism, rigor, fairness, impartiality and balance• is subject to independent checks and verification• documents and justifies how sustainability issues were taken into account in decision making
<i>is participative</i>	<ul style="list-style-type: none">• informs and involves interested and affected publics and government bodies throughout the decision making process• explicitly addresses their inputs and concerns in documentation and decision making• has clear, easily understood information requirements and ensures sufficient access to all relevant information
<i>is iterative</i>	<ul style="list-style-type: none">• ensures availability of the assessment results early enough to influence the decision making process and inspire future planning• provides sufficient information on the actual impacts of implementing a strategic decision to judge whether this decision should be amended and to provide the basis for future decision

Source: IAIA, 2000

¹I.e. that contribute to the overall sustainable development strategy as laid down in Rio 1992 and defined in the specific policies or values of a country

Table 1 - Main differences between SEA and EIA

	SEA	EIA
Nature of action	Strategy, visions, concepts	Construction / operation actions
Focus	Critical decision moments (decision windows) along decision processes	Products of decision processes (final outcomes)
Level of decision	Policy, planning	Project
Relation to decision	Facilitator	Evaluator, often administrative requirement
Alternatives	Spatial balance of location, technologies, fiscal measures, economic, social or physical strategies	Specific alternative locations, design, construction, operation
Scale of impacts	Macroscopic, mainly global, national, regional	Microscopic, mainly local
Scope of impacts	Sustainability issues, economic and social issues may be more tangible than physical or ecological issues	Environmental with a sustainability focus, physical or ecological issues, and also social and economic
Time scale	Long to medium term	Medium to short-term
Key data sources	State of the Environment Reports, Local Agenda 21, statistical data, policy and planning instruments	Field work, sample analysis, statistical data
Data	Mainly descriptive but mixed with quantifiable	Mainly quantifiable
Rigor of analysis (uncertainty)	Less rigor/more uncertainty	More rigor/less uncertainty
Assessment benchmarks	Sustainability benchmarks (criteria and objectives)	Legal restrictions and best practice
Outputs	Broad brush	Detailed
Public perception	Vague / distant	More reactive (NIMBY)
Post-evaluation	Other strategic actions or project planning	Objective evidence / construction and operation

Source: after Partidário (2001)

One outstanding difference between project EIA and SEA relates to their positioning in relation to decision-making. While project EIA is more often recognized as an administrative requirement that needs to be fulfilled to satisfy licensing / permitting processes, SEA tends to be understood and adopted more as a facilitator of sound,

integrated and sustainable decision-making. The incremental nature of the strategic decision-making, to which SEA applies, calls for this facilitating role, which runs in close articulation with the decision-making process.

It could be argued that project EIA originated also as a facilitator of best practice in project development. It is currently acknowledged that EIA helps to improve the quality of development projects. Unfortunately, however, over the years more investment was made on the liabilities of project's EIA than on its technical contribution to enhance the quality of decision-making towards better projects. The restrictive readings of legal requirements have been imposing over good technical sense and adaptability. This affected project EIA performance and outcomes and resulted into lengthy, bureaucratic, time and resource-consuming processes.

This is one aspect where it is fundamental to learn with experience. Such bureaucratic and short-minded legal and administrative processes, if applied to SEA, can kill the whole nature and purpose of SEA and create yet another endless (and risking to be useless!) instrument which impedes, rather than facilitates, sound and sustainable decision-making. It is important to act with good sense and distinguish what needs to be legally imposed to enable good practice from what may be no more than an expression, and action, of power, through administrative control.

5. The importance of strategic evaluation – the added-value of SEA

As previously argued (Partidário, 2000), the value of SEA is a function of the extent it influences, and adds-value, to decision-making.

Over the years SEA became recognized as a form of impact assessment that can assist managers and leaders in policy, planning and programmatic decisions. The benefits of SEA have long been associated with the key contribution towards more sustainable practices at policy and planning levels and the strengthening of project EIA.

Sadler (2001) recently revised the aims and objectives of SEA, as presented in Box 3. It can be said then that the added value of SEA is associated to:

- Its contribution towards more sustainable and environmentally oriented decision-making;
- The improvement of the conditions in which project' EIA is carried out;
- The promotion of integrated decision-making, which implies a new form of making decisions.

Box 3 – Aims and objectives of Strategic Environmental Assessment

To help achieve environmental protection and sustainable development by:

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

To strengthen and streamline project EIA by:

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

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

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

Source: Sadler (2001)

Table 1 makes it evident that SEA has a role to play at strategic levels, since EIA is already acting at more pragmatic levels of decision. SEA should then be expected to look at strategic impacts and influence strategic decisions.

The notion of **strategic** has been defined in the existing literature very much linked to business management (for example Wheelen and Hunger, 1995). Even though we are now discussing **strategic** in relation to public actions and decisions, those are good sources to learn on how to use the term **strategic** in its correct sense to avoid misunderstandings. The concept of **strategic** implies visions, that look beyond existing facts, implies stating objectives, where possible quantified (namely through targets), and visioning long-term consequences which, by definition, are not more than guesses, intentions, hypothesis for future development. Finally a strategy implies an action plan that will enable the achievement of the vision and the stated objectives.

It is the strategic discussion around these “guesses” that enable “choosing the path”, the strategic option that most satisfactorily enables the achievement of key goals and objectives, and which paves the way towards more concrete decisions later on, at more pragmatic (as opposed to strategic) levels of decision-making (Wheelen and Hunger, 1995).

By doing so, SEA will be proactively acting upon the improvement of the decision-making process, as it will:

- try to find the alternative “route” or “path” that is more sustainable,

- contribute with an outcome that materializes as a different context for the development of projects, as more environmental and sustainable policy and planning settings,
- enable more accountable and participated policy and planning processes, and
- provide additional factors, and values, to be considered in decision-making.

Given discussed arguments, and assuming its larger spectrum (from policies to programmes), SEA can be defined as (Partidário, 1999):

“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”.

SEA has been evolving as a family of tools, covering decision-making levels at policy, planning and programming. This triplet P scope of SEA was so strong that for many years SEA was mentioned as the EA of PPP. While acceptable when SEA was no more than an innovation responding to project EIA insufficiencies, it is now starting to create some discomfort as SEA is more operationalised, and increasingly a practice in place, shaped according to the decision-making contexts to which it applies.

Box 4 shows an array of different forms of SEA as currently implemented in different nations and institutional contexts. Figure 1 indicates how different forms of SEA apply to different levels of decision-making, from policy to project impact assessment.

As argued before (Partidário, 2001), there is a great demand on SEA capacities as it is expected to respond to needs at all levels of decision-making, from policy and planning to programme. It may be very difficult, or even impossible, to have one same SEA model, or approach, that equally satisfies policy, planning and programme impact assessment requirements.

The fact is that each of these PPP levels are different, have different characteristics, different timings, different rationalities, different purposes and outcomes. Programme development is probably as different from policy development as project development. Planning, and especially strategic planning, is probably closer to policy but clearly different from more rationalized approaches typical in programme development or project. Programme development often does not differentiate much from project development. In fact, the impact assessment of project location alternatives is sometimes treated as programmatic (Verheem, 2000).

As we look at how SEA shapes around the world, it clearly shows different forms and dialogues with decision-making processes depending on its strategic or more rationalized nature at any of the PPP levels. Fischer (2001) compared 25 SEA approaches at policy, planning and programme levels in the UK, the Netherlands and Germany and concluded that the same SEA approach may not be usable at any of the PPP level. Policy is clearly a

different notion from the other PP. Programme is where it more evidently interfaces the scope of application of Project' EIA.

Box 4 Main forms of SEA applied to policies, plans or programmes

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)

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)
- Environmental Appraisal of Development Plans – assessment of planning policies as council level, with main biophysical insight (UK)
- Sustainability Appraisal of Regional Planning – assessment of regional policy proposals, attempting a broader environmental sustainability approach (UK)

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)

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)

Adapted from Partidário (2001)

This difference between the three decision-making levels that over the years have been inherent to the notion of SEA application – Policy, Planning, Programme – is illustrated in Figure 1. The arrow shows that indeed the principles of impact assessment apply throughout the different decision-making levels, from policies to projects. However, there is an increasing focus of impact assessment across the various decision-making levels, moving from a very broad scope of issues, and uncertainty, at policy levels, to a more focused approach at programme level, and subsequently at project level. It also shows that each level of decision (policy, planning, programming and project) has been calling for different application tools of impact assessment.

If this model is accepted, then it is clear that any form of impact assessment at the level of policy decision-making needs to be considerably different from project decision-making, as the issues at stake are also considerably different. It also shows that SEA needs to be made adapted to the level of decision to which it will apply.

As previously argued (Partidário, 2000), while bearing strongly on the principles of impact assessment, one form of making SEA more adaptable is to conceive SEA as a framework for better decision-making, which building blocks are core elements strategically placed in the policy, planning and programmatic decision-making process, at strategic moments – decision windows. Acting as a facilitator, SEA will have the capacity to influence decision-making, at these decision windows, and ensure that the principles of sustainability and impact assessment are fully integrated. Like this, SEA will actually be making a difference, and will contribute with an added value to sustainable decision-making.

6. Conclusion

This chapter aimed to demonstrate the key differences between SEA and EIA – how SEA evolved after EIA, how and what makes SEA currently different from EIA as known to date in its specific application to project's EIA.

EIA is basically a technical evaluation tool and process, which final result will influence political decision-making, by influencing project quality. Over the years EIA mainly applied to project development, which implies straight and pragmatic decisions. At the project decision level the decision-makers do not have the opportunity, and sometimes are not even interested, in allowing a wider perspective around the project discussion: timing, inter-sectoral, or even regional geographic perspectives. Time is money, and a decision is needed as quickly as possible. The contribution of project's EIA is therefore essentially through the technical and public analysis of quite pragmatic factors, and the consequent impact assessment, which is strongly technical. The public views are certainly invited and incorporated where project design, and time, allows. However, questions such as “Do we really need this project?” or “Will this project resolve the problem or could there be other solutions?” can hardly be answered with public consultation at the project level. It is then too late to question major decisions!

SEA capacities, as stated in the sections above, intend to respond to strategic needs in impact assessment. That includes enabling more sustainable approaches in decision-making, better integration of environmental issues and satisfying impact assessment needs which are not covered by project's EIA. Acting at strategic level means that information is scarce and deficient, that many alternative options are often more political than technical (for example a decision on an emigration policy, or the preference between thermo power or hydro power where both options are technically feasible) which imply different and more flexible approaches, and many times of a more qualitative nature.

It could then be argued that impact assessment, in the passage of EIA to SEA, implies moving from a technical to a more political level of decision-making. And that means that SEA must adopt a more incremental posture, that is more responsive to such political levels of intervention. By using core elements, that are build into the existing policy and planning decision frameworks, and which act upon decision windows, SEA can be seen as a facilitator for more sound and sustainable decision-making.

SEA capacities, as stated above, also depend on the close articulation of SEA with other policy and planning mechanisms.

It is very important to avoid “instrumental and policy conflict” between mechanisms that enable strong synergisms and which, because of that capacity, should be brought together and made compatible.

Such is the case between SEA and national sustainability strategies, national and regional environmental policy plans, environmental operational plans, sectoral, regional and local Agenda XXI, environmental municipal plans. So far the relationship of SEA with these policy tools have not been explored beyond the point in which the latter act as a policy reference for the strategic assessment.

On the other hand SEA should also be articulated with existing strategic evaluation mechanisms such as, for example, evaluation tools and procedures used at policy, plan and programmes levels. Many times these existing mechanisms can even act as the nest for the seeding of SEA principles, criteria and requirements, providing for greater efficiency in decision-making as decision procedures and timings remain barely the same, thus avoiding the introducing of new procedures that impose significant technical, institutional, and financial requirements.

References

- Clark, R. 2000. Making EIA Count in Decision-Making. in Partidário and Clark (eds). 2000, *Perspectives on Strategic Environmental Assessment*, Boca Raton, FL: CRC-Lewis: 15-27.
- EU - DG Environment, 1998, *Handbook on Environmental Assessment of Regional Development Plans and EU Structural Funds*, Brussels.
- Fischer, T. 1999. Benefits arising from SEA application – a comparative review of North West England, Noord-Holland and Brandenburg-Berlin, *EIA Review* 19(2): 143-173.
- Fischer, T. B., 2001, *SEA in Transport and Land Use Planning*, Earthscan, London.
- Goodland, R. and Mercier, J.-R. 1999. *The Evolution of Environmental Assessment in the World Bank: from “Approval” to Results*, Paper no. 67, Washington, D.C.: Environmental Management Series, World Bank..
- IAIA (International Association for Impact Assessment), 1999, *Principles of EIA and SEA*, IAIA.

- Lee, N. and F. Walsh, 1992, "Strategic Environmental Assessment: an overview", *Project Appraisal*, 7 (3): 126-136.
- Partidário, M.R. 1996. Strategic Environmental Assessment: Key issues emerging from recent practice, *EIA Review*, 16: 31-55.
- Partidário, M. R., 1999, Strategic Environmental Assessment - principles and potential, ch 4, in Petts, Judith (Ed.), *Handbook on Environmental Impact Assessment*, Blackwell, London: 60-73.
- Partidário, M.R. and Clark, R. (eds). 2000. *Perspectives on Strategic Environmental Assessment*, Boca Raton, FL: CRC-Lewis.
- Partidário, M.R., 2000, Elements of an SEA framework – improving the added-value of SEA, *Environmental Impact Assessment Review*, 20: 647-663.
- Partidário, M. R., 2001, *Strategic Environmental Assessment – Training Course Manual*, unpublished.
- Sadler, B. and R. Verheem, 1996. *Strategic Environmental Assessment - status, challenges and future directions*. The Hague. Ministry of Housing, Spatial Planning and the Environment of the Netherlands.
- Sadler, B., 1996. *Environmental Assessment in a changing world: evaluating practice to improve performance*. Final Report of the International Study of the Effectiveness of Environmental Assessment. CEAA-IAIA.
- Sadler, B. 1998. *Report on the International Seminar on SEA*, Lincoln: UK-DETR.
- Sadler, B., 2001, A framework approach to Strategic Environmental Assessment: Aims, Principles and Elements of Good Practice, *Proceedings of International Workshop on Public Participation and Health Aspects in Strategic Environmental Assessment*, The Regional Environmental Centre for Central and Eastern Europe, Szentendre, Hungary: 11-24.
- Therivel, R., Wilson, E., Thompson, S., Heany, D. and Pritchard, D. 1992. *Strategic Environmental Assessment*. London: Earthscan.
- Therivel, R. and Partidário, M.R. (eds). 1996. *The Practice of Strategic Environmental Assessment*, London: Earthscan.
- Verheem, R., 2000, The use of SEA and EIA in decision-making on drinking water management and production in the Netherlands, ch. 13, in Partidário and Clark (eds). 2000, *Perspectives on Strategic Environmental Assessment*, Boca Raton, FL: CRC-Lewis: 185-195.
- Wheelen, T. and Hunger, J., 1995, *Strategic Management and Business Policy*, 5th ed., Addison-Wesley Publishing Company, Reading, Mass.
- Wood, C. and Djeddour, M., 1992. Strategic Environmental Assessment: EA of Policies, Plans and Programmes. *Impact Assessment Bulletin* 10 (1): 3-21.
- Wood, C., 1995. *Environmental Impact Assessment: a Comparative Review*, Longman, Edinburgh.

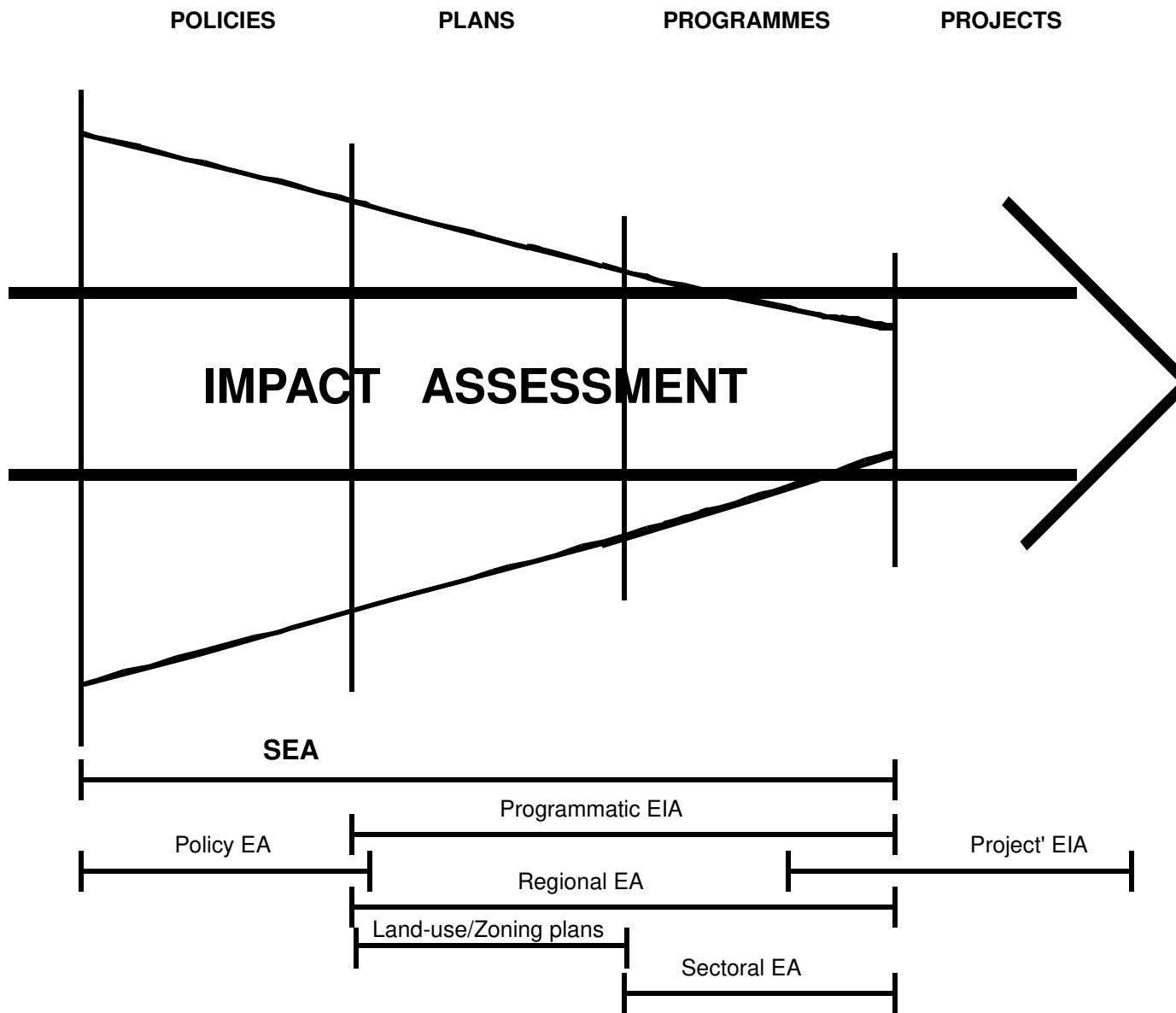


Figure 1 - Focusing impact assessment across decision-making tiers – different forms of SEA adapt to needs at different tiers