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Learning the practice of strategic-based SEA

Abstract

In 2007 the Portuguese Environmental Agency published the Good Practices Guidance on SEA, establishing a common methodology for conducting SEA in Portugal. Founded on strategic based concepts and approaches, this methodology has been followed accross the country by most teams preparing SEA for various types of plans and programmes. A review of some of this practice has been undertaken in view of understanding the results achieved so far and the common criteria adopted by different teams. The review was conducted by the SEA research team based at the Instituto Superior Técnico (IST), Technical University of Lisbon, Portugal. Conclusions are drawn on problems and advantages of using this methodology and what is needed to consolidate good SEA practice in Portugal.

Introduction

Like with any other wide-ranging approach, there is a major challenge with the use of or delivery of Strategic Environmental Assessment (SEA) because of the multiple forms it can adopt, and the need to adjust to different contexts. The fact that there is a family of SEA instruments was recognized more than a decade ago by Goodland (1997), and new types of SEA keep developing now and then as noted by multiple authors and organizations (Dalal-Clayton and Sadler, 2005; OECD-DAC, 2006). Despite the legal requirements that are being set up to enforce, and very often limiting, the application of SEA, it will however be difficult to bind the natural diversity of SEA applications to a standard format, and to deny its great potential as a strategic, flexible and responsive approach as well as a facilitator of different modes and scales in strategic decision-making.

This paper aims to present a brief note on a review undertaken on the practice of SEA in Portugal, where SEA application has suddenly expanded following the passing of legislation in June 2007, which has closely transposed the EU Directive 2001/42/EC. Empirical application of SEA shows that SEA can perform better if it goes well beyond legal requirements, particularly if the links with policy, planning and programme development are well understood and strategically used. A governmental methodological guidance has helped to assist innovative practice towards a strategic-oriented application of SEA.

A review conducted around a sample of SEA cases offers the basis for comparison. Cases following the methodology layed out in the guidance will more directly meet key strategic criteria identified. These criteria will be compared with other international adopted criteria to discuss what is being considered strategic-based SEA, also to show that despite legal requirements formatted around EIA-based concepts of SEA, it is not impossible to use SEA strategically. A fundamental condition, and corner stone, in strategic-based SEA is the strategic nature of the object of assessment in SEA, be it a policy, a plan, a programme, or even a major project.

Legal requirements for environmental assessment of plans and programmes in Portugal

The environmental assessment of plans and programmes is required by Decree-Law 232/2007 of 15 June, following the European Directive 2001/42/EC. It took Portugal six years to transpose European requirements, mostly because an EIA similar system was not desired by government and plan proponents alike. This is why, in face of strategic-based methodologies being advocated and already practiced in Portugal and elsewhere (Partidário, 1999; Kornov and Thissen, 2000; Partidário, 2000 and 2003; Nooteboom, 2006; Cherp *et al*, 2007; Partidário, 2007a; Wallington, Bina and Thissen, 2007), the Portuguese Environmental Agency has decided to commission the preparation of a guide for a more strategic-based approach to SEA,

aimed to assist in the implementation of EU Directive's requirements in Portugal (Partidário, 2007b).

With this methodological guidance it was also possible to make an important distinction between environmental assessment, as required by the European Directive, and SEA, as a methodological approach. To fulfil the EU Directive's requirements various conditions need to be met, most of which relate to the environmental report. Such conditions include: its preparation, its minimum content, the conduction of institutional consultations on the scoping of the environmental report, public as well as institutional consultations once the report has been completed, justification of the alternatives considered and final decision made, as layed out in the environmental report, taking into account comments received during the consultations. In addition monitoring is required on the plan or programme implementation. Concerning the scope of the environmental report various aspects are identified as being part of the environmental concept, including those physical and biological issues which are often taken as standard, together with population and health, as well as material goods.

This is what goes in the environmental report. However, the how the environmental report is done, and most importantly what else need to be done before, and after, issuing an environmental report, and how such assessment process links into the planning and programmes development processes, is largely what SEA is about. Even if absent from the legislation. This is where different methodologies on SEA can make a whole difference not on the content of the environmental report, as this has its minimum requirements established by law, but on how environmental issues can be integrated into the plan and programme development processes, and how choices can be influenced in view of sustainable outcomes.

Strategic-based model for SEA

A strategic-based model for SEA was first introduced as a conceptual model (Partidário, 2004) and then adapted to Guidance for SEA, published by the Portuguese Environment Agency (Partidário, 2007b). Several key principles represent this innovative approach, as presented in Table 1, and discussed in Partidário (2008).

Table 1 - Key principles for strategic-based SEA (Partidário, 2008)

- ✓ It uses dialogue, persuasion and negotiation as techniques throughout the entire process.
- ✓ It establishes a framework of institutional governance and participation and recognizes different perspectives and responsibilities.
- ✓ It creates a strategic reference framework (SRF)¹ - Working for a sustainable future and development objectives and creating an assessment benchmark.
- ✓ It identifies Critical Factors for Decision-Making (CFD)² – an integration of the fundamental strategic issues (SI) in the proposal, the environmental factors (EF) and the context established by the macro-policies identified in the Strategic Reference Framework (SRF).
- ✓ It analyses trends and not current situations. The description of the starting point is based on an analysis of trends. What matters is the dynamic, not the static, analysis.
- ✓ It performs studies that contribute to the analysis of the CFD and provide information to the decision, it is not just an SEA study that ends in an environmental report.
- ✓ It analyses strategies and assesses strategic options for different future scenarios.
- ✓ It prioritises the exploration of options that permit choice, and not only mitigation, foreseeing and avoiding risks and exploring opportunities.
- ✓ It is strongly based on follow-up. It takes on the form of a process: design, assessment, monitoring – following the planning or programming cycle.
- ✓ It produces diverse short and successive opinions and reports that track the various SEA phases and activities and provide information on decision windows.

¹ The strategic reference framework (SRF) is the term adopted to identify the set of meaningful macro-policies that should set the referencial for assessment through global, national or regional objectives and targets (including sustainable development strategies, biodiversity strategies, land-use planning policies, climate change related strategies, etc.), as well as relevant related plans and programmes.

² The Critical Factors for Decision-making (CFD) are transdisciplinary, holistic and integrated themes that structure the whole SEA. They should be very few in number (ideally between 3 and 5, maximum 7) but wide in coverage, and strongly sustainability oriented.

In this model the purpose of SEA is to help find the environmental and sustainable viable alternative strategic options aimed at achieving strategic objectives. It is based on policy processes, generation of knowledge, networks of actors, inter-sectoral cooperation and governance. Key drivers in the strategic-based model for SEA are shown in Table 2.

Table 2 - Key drivers in the strategic-based model for SEA (Partidário, 2008)

- Create strategic thinking and culture, as opposed to a project culture
- Be strategic but not descriptive – use clusters of themes (the CFD), pin-pointed by a quick and sharp diagnosis
- Apply integrative holism – CFD are integrated dimensions
- Be a facilitator of decision-making – enable flexibility and continuity, follow the decision cycle
- Do not try to predict the future, but concentrate in helping to draw an outline of the future, opening ways for sustainability
- Ensure a long term view, but taking short term action following few priority objectives
- Allow and promote early engagement, inclusion, dialogue, community participatory planning, use and enhance communication skills.

A fundamental element in this approach is the critical factors for decision-making (CFD) framework. Founded on the notion of critical factors of success (business management) and clustering (systemic analysis) and metaphorically inspired on the acupuncture method (medicine), the CFD emphasizes holistic patterns, networking, cycles, and processes, in contrast with the rationalistic paradigms based on linear thinking, causality and descriptive explanations. The CFD provides the structure to the strategic assessment and are directly dependent on the scale and context of the SEA (Partidário, 2008).

Key criteria for strategic-based SEA

The CFD approach has been used in a variety of cases and contexts. The IST SEA team has applied it to almost twenty different cases over the past 1,5 years, while other teams have also been applying this same approach to different contexts. Cases of application range from national development programmes, to sector plans and programmes, spatial regional and municipal plans, major energy infrastructure programming and strategic location of major projects. Based on this practice some key criteria are being identified to reveal a strategic-based approach to SEA, a first approach to which is listed on Table 3.

Table 3 – Proposed key criteria for strategic-based SEA

- (1) adoption of a strategic reference framework, including environmental and sustainability framework objectives
- (2) proactive integration and long-term scope (as opposed to reactive effects-based)
- (3) clear identification and assessment of alternative strategic options,
- (4) strong linkage and iterativity of the SEA and planning processes,
- (5) early community and stakeholders engagement throughout the process,
- (6) good communication and capacity to influence decision-making
- (7) guidelines for implementation rather than mitigation of expected effect
- (8) monitoring and evaluation programme, enabling learning processes

These criteria are still a work in progress, but they were used to select comparative parameters in the review of SEA cases, as shown in Table 4. These criteria were compared to other criteria used internationally. Riki Therivel in January 2009 in her e-mail to several hundred

people, asked for recommendations for good SEAs, and invited submissions of favorite SEA reports (http://www.levett-therivel.co.uk/index_files/SEAre08.htm). The criteria adopted then sought to reveal elements of good practice including: (1) good scoping, (2) alternatives, (3) assessment, (4) presentation, (5) links to decision-making and other forms of assessment. Differences reveal that strategic-based SEA puts a lot more emphasis on policy contexts, integration and long-term perspectives, strategic options, participation, communication, guidelines for implementation and monitoring, moving away from traditionally EIA-based SEA.

Application of the strategic-based model for SEA

In order to compare different cases and experiences, the criteria outlined on Table 3 was used to establish a comparative framework, using eight different parameters (Table 4), with the purpose of identifying trends with respect to focus and strategic nature of the different experiences reviewed.

Table 4 - Framework for reviewing SEA practice in Portugal

Assessment parameter		Key-question	Categories
1. Object of assessment		What was assessed?	<ul style="list-style-type: none"> • Strategic objectives • Strategic options • Proposed model • Scenarios • Alternatives • Measures or actions
2. Entry point		At what stage of planning did SEA start?	<ul style="list-style-type: none"> • At start-off • Model • Diagnosis • Development proposals
3. Interactivity		What was the degree of integration and feedback between assessment and planning activities?	<ul style="list-style-type: none"> • High • Medium • Low
4. Scope of assessment		What was the scope of assessment?	Holistic and integrated Physical and territorial Social+biophysic+economic+political
5. Strategic Reference Framework		How was the Strategic Reference Framework defined and used?	<ul style="list-style-type: none"> • Used in the assessment • Only identified • Ignored
6. Process	a. Objective	What was the purpose of assessment?	<ul style="list-style-type: none"> • Strict legal fulfilment • Beyond legal requirements
	b. Consideration of alternatives	How were alternatives considered?	<ul style="list-style-type: none"> • No alternatives were considered • Only zero alternative was considered • Other alternatives were considered
	c. Techniques	What diagnosis and assessment techniques were used?	<ul style="list-style-type: none"> • Analysis of risks and opportunities • Cost-benefit analysis • Analysis of alternatives • Analysis of scenarios • Analysis of impacts/effects • Analysis of current situation and trends
	d. Compatibility	Was there an analysis of compatibility between strategic objectives?	<ul style="list-style-type: none"> • Yes • No
	e. Weighting	Was there any kind of weighting in the assessment?	<ul style="list-style-type: none"> • Yes • No
7. Participation		What was the degree of participation?	<ul style="list-style-type: none"> • Enlarged • Occasional • Strict legal fulfilment • No participation
8. Proposal for follow-up	a. Governance framework	Is there a governance framework to ensure responsibility in SEA follow-up?	<ul style="list-style-type: none"> • Yes • No
	b. Guidelines for planning and management	Are there guidelines for follow-up?	<ul style="list-style-type: none"> • Yes • No
	c. Monitoring	Is there a monitoring plan?	<ul style="list-style-type: none"> • Yes • No

About 12 cases were considered in this review, developed by different teams. Given the small sample, results will be given with respect to dominance of categories considered. Table 5 represents a synthesis of the results, showing a wide range and variation. A finer and more detailed analysis distinguishing particular cases, namely those developed by the IST team, was presented in Partidário et. al. (2008).

Table 5 - Synthesis of results of cases reviewed

Assessment parameter	Findings	
1. Object of assessment	•Mostly - Strategic options and Measures or actions •Few cases - Strategic objectives, Proposed model, Scenarios and Alternatives	
2. Entry point	•Mostly — Development proposals, and at start-off •Few cases - Model, Diagnosis	
3. Interactivity	•Ranging from High to Low	
4. Scope of assessment	Mostly Holistic and integrated or Physical and territorial	
5. Strategic Reference Framework	•Mostly used in the assessment	
6. Process	a. Objective	•Mostly beyond legal requirements
	b. Consideration of alternatives	In most cases no alternatives were considered
	c. Techniques	•Mostly analysis of current situation and trends and analysis of risks and opportunities
	d. Compatibility	•Some yes others no
	e. Weighting	•Mostly No
7. Participation	•Mostly strict legal fulfilment	
8. Proposal for follow-up	a. Governance framework	•Some yes others no
	b. Guidelines for planning and management	•Always yes
	c. Monitoring	•Some yes others no

While the general methodology has remained similar in all cases, its practical application requires adaptation to the nature of plans or programmes, the respective scale and strategic nature, the contextual planning and decision-making processes, the nature and characteristics of teams involved in the processes, and the time available for the whole process.

The object of assessment in SEA has been diverse, including the development of strategic options, scenarios, the strategic concept (such as the territorial model), and development proposals identified by the plan or programme. Occasionally the SEA team can contribute to a substantive identification of strategic objectives and options when these are absent, by close collaboration with the planning team. The strategic thinking enabled by such strong partnership between SEA and the planning or programme development processes in one tested added-value of SEA. The key assessment moment is also variable and depends deeply on the planning or programme process.

Closing remarks

A few learning points can be outlined resulting from the review undertaken:

1. Most successful SEA cases are those that start at early stages;
2. SEA and planning or programming processes must be in close iteration and well articulated, with planning or programming processes leading the way;
3. The most relevant added-value of the strategic-based approach is that SEA can be flexible and act as a facilitator of decision-making;
4. A key condition for SEA success is to act at key decision moments;
5. Reporting on SEA should be frequent and seen as inputs to decision-making at key decision moments;
6. SEA teams should have a variable composition according to needs;

7. The strategic dimension in policy-making, planning and programme development is a catalyst of SEA success;
8. A clear condition for success is the relation of trust with the decision-maker;
9. SEA has a strong capacity to contribute to learning processes on environmental and sustainability boundaries and opportunities;
10. Public participation requires major improvements in SEA.

Many factors influence the success in the application of SEA. Countries, regions and organizations are starting to take a closer look at the effectiveness of SEA, however, what are they seeking to find? This study reveals relevant criteria to look for good practice of SEA: the nature of the object of assessment, the scale of assessment, the timings of the planning and programme decision-making processes, the linkages with the assessment process, the nature and timing of the public and institutional consultation, the participative techniques involved, and also the timing of the entry point for SEA.

This paper suggests that strategic-based approaches to SEA exist and that key criteria can be identified, beyond traditionally-based SEA. A key aspect in such strategic approaches is the capacity of policy-making, planning and programmes development processes to generate information and add knowledge through participative techniques. SEA has a facilitating role in the process, systematically enabling a structured discussion around critical factors for decision-making (CFD), helping to keep the focus on strategic issues throughout the process and contributing to a continuous learning process.

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