

**PERCEPTIONS ON SEA
NOT ALL THAT GLITTERS IS GOLD**Monteiro, MB¹; Partidário, MR²¹Margarida B. Monteiro, Researcher at SENSU, DECivil e Arquitectura, IST, margarida.monteiro@ist.utl.pt²Maria Rosário Partidário, Coordinator of SENSU, DECivil e Arquitectura, IST, mrp@civil.ist.utl.pt

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Abstract

Multiple decision-makers and uncertainties are involved in SEA. Decisions need to be informed by thoughtful and focused input, especially when we are dealing with high levels of uncertainty. Expectations are high regarding the integration of environmental concerns in strategic decision-making. The rational model has been guiding environmental assessment assumptions for years, based on two critical points: the decision-making process depends on one decision-maker and all the necessary information is available. However, at a strategic level, decision outcomes involve numerous negotiations and are difficult to predict, and information is usually not available. SEA is increasingly perceived as an instrument that helps to facilitate decision-making and, consequently, that contributes to the sustainability of planning processes. Despite the consensus about the main objective of SEA, different perceptions across practitioners and decision-makers reveal ambiguous realities when we try to relate theory and practice. This suggests that there may be a gap between SEA theory and practice. This question motivated an investigation on how practitioners and decision-makers visions of SEA influence the final result of decision processes in Portugal. The different interpretations and opinions on some key points influence the existing approaches, the actor's preferences and perceptions. A survey conducted on the perception of SEA enables a closer examination on the current state of SEA in Portugal and understand the influence of actor's perceptions on the outcomes of planning processes, keeping an eye on the relationship between theory and practice trends in SEA.

Keywords - Strategic Environmental Assessment, Decision, Perception

INTRODUCTION

Strategic Environmental Assessment (SEA) has long been recognized as an essential instrument for achieving sustainability objectives, with capacity to influence decisions and facilitate the integration of environmental and sustainable concerns in the decision-making process (Partidário, 1996; Kornov and Thissen, 2000; Nilsson and Dalkmann, 2001). In a constant changing world and globalized society, different perspectives and understandings on SEA evolved to generate different perceptions on context, aim and approaches.

There is considerable lack of consolidated discussion on the evolution of SEA practices and SEA theories. This paper aims to address the relationship between SEA theory and practice as a contribution to a further understanding of SEA, based on the experience in Portugal. It is divided in four sections: a brief state-of-the-art on SEA and decision-making theory, the study methodology, an examination of the current reality of SEA in Portugal based on the investigation on actor's perceptions, and some key findings on the relationship between theory and practice based on the case of Portugal.

INTEGRATION OF SEA IN DECISION-MAKING

The decision process is characterized by continuous learning and negotiation between the different actors involved (Kornov and Thissen, 2000; Dalkmann et al, 2004). Earlier in the process attention must be given to

the decision nature and context, culture of the actors involved, their mutual dependences and fundamental interests, as well as to the democratic nature of the process, among other equally relevant factors. Many authors discuss features related to decision theories that are associated with SEA such as the complexity, divergences, uncertainties, lack of knowledge and cognitive limitations (Kornov and Thissen, 2000; Dalkmann et al, 2004).

SEA started off under the theory of EIA. It adopted the same backbone regarding methodological principles and steps, terms and approaches as well as the same leading objective: assessment of environmental impacts. As critically revised by different authors, the requirements for an effective integration of environmental concerns at a strategic level of decision cannot be met just by providing decision-makers with the better environmental information in a rational and objective way (Kornov and Thissen, 2000; Nilsson and Dalkmann, 2001).

The rational model has been guiding EA assumptions for many years, expressed in four main points (Bailey, 1997; Kornov and Thissen, 2000; Lobos and Partidário, 2010):

- There is one **single and central decision maker** in an explicit, organized and structured sequence of stages in a **clearly defined decision process**.
- It is possible to **predict** the consequences of decisions with a **reasonable degree of certainty** and therefore to decide on the best course of actions based on those predictions.
- Decision issues depend mostly on the analysis of consequences; **providing information about consequences of a decision** is enough to make “better” decisions.
- The only useful (**legitimate**) **knowledge** to inform the decision is that which has been **scientifically produced**.

Nilsson and Dalkmann (2001) argued that SEA cannot only rely on a rational approach. Decisions need to be based on values installed by society, in presence of rationale criteria and value judgment. SEA should be flexible to decision context variations and should influence the process, priorities, values, visions and behaviors (Nilsson and Dalkmann, 2001; Dalkmann et al, 2004; Lobos and Partidário, 2010;).

The link between SEA and sustainable development has also been progressively strengthened. Earlier perspectives on SEA expressed the aim of assessing environmental impacts of PPP and their alternatives (Therivel, 1993), and some practices still maintain that perspective, while expanding its scope: to assess the environmental consequences of the PPP proposals on par with the economic and social considerations (Sadler and Verheem, 1996). An evolving perspective led to ensure the *‘full integration of relevant biophysical, economic, social and political considerations’* (Partidário, 2000); and as a proactive approach that anticipates future problems and needs to identify the *‘most desirable end’* (Noble, 2000); also to *‘understand and explore environmental and sustainable options in strategic decision-making that help address the problem and meet intended objectives’* (Partidário, 2007a); or to promote a strategic change towards sustainability by influencing *‘selected strategic decisions’* (Cherp et al, 2007); and more recently as an instrument that acts like a *knowledge brokerage platform to achieve environmental and sustainability oriented decision-making* (Partidário and Sheate, 2012).

Current literature address SEA in a wide spectrum with two opposite extremes (OECD, 2006; Partidário, 2007a; Ahmed and Sanchéz-Triana, 2008). Partidário (2007a) describes SEA as a new methodology that address environmental impacts with an integrated approach focused on strategic options (*‘strategic-based’* SEA), and as the extension of an existing EIA methodology adapted to planning and programmatic levels of decision-making (*EIA-based* SEA). Partidário (2007a) argued that a *‘strategic-based’* SEA increases SEA efficiency, with SEA designed to fit the decision-making process (like in a decision-centred model).

The different interpretations of decision-makers and consultants about the role of SEA, scope and contribution to the decision-making process help to explain the different approaches that can be observed today, the hierarchy of preferences, the technical solutions and, ultimately the gap between SEA theory and practice. According to Lobos and Partidário (2010), this gap is strongly motivated by the perceptions of actors that still see the SEA purpose: to provide a rigorous analysis on the environmental effects on PPP based on impacts prediction and the proposal of mitigation measures.

METHODOLOGY

A three-step methodology was used, also with different techniques:

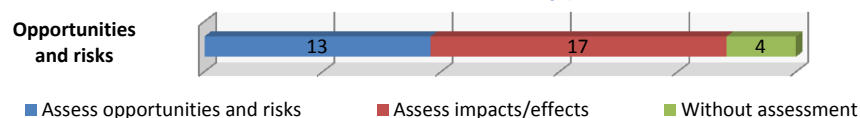
- 1) **Questionnaires** (including environmental consultancy companies, public administration, sectorial institutions, and researchers): A total of 140 questionnaires were sent, having received 21 responses (15%). Actor's perceptions about SEA concept, process and content, as well the role of SEA in the decision-making process were explored based on results;
- 2) **Case reviews:** 34 Portuguese SEA reports between November 2007 and January 2011 with different scales (local, regional, sectorial, and one voluntary case) were reviewed. Review criteria, adapted from Partidário et al (2009) included the SEA approach, object of assessment, perspective, entry point, relation to the decision-making process, assessment, governance and follow-up. The criteria were chosen based on literature review and the Portuguese methodological guidance for SEA by APA (Partidário, 2007b);
- 3) **Interviews:** A total of six interviews to different actors (two consultants, two decision-makers and two experts) were conducted aiming to deepen the analysis of several environmental reports and to obtain personal opinions on SEA process and relation to the P/P process, and the contribution of SEA to the planning process.

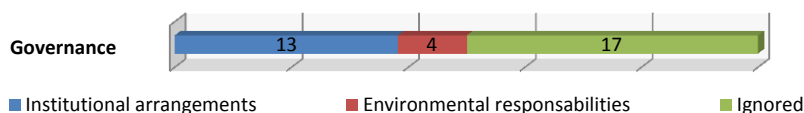
RESULTS ACHIEVED - THE INFLUENCE OF PERCEPTIONS IN THE DECISION-MAKING PROCESS

When the SEA Directive was transposed in 2007 to the Portuguese legislation, guidance was published by the Portuguese Environmental Agency (APA) to support good practice in SEA. Partidário (2007b) sets a strategic-based model to SEA, describing functions and expected outcomes, methodology components and principles, and structural elements. The model lays out the Critical Decision Factors (CDF) approach that represents the fundamental decision-making factors that should be under SEA focus (Partidário, 2008).

In 2010 APA conducted a review of the SEA reports completed in Portugal, between September 2007 and November 2010. Conclusions showed most reports seem to have followed an EIA-based approach, with only few exhibiting elements of the guidance (Partidário et al, 2010).

Research for a master thesis completed in October 2011 included interviews, questionnaires and reports analysis to contribute to understanding the state of SEA in Portugal (Monteiro, 2011). Research was organized around eight themes that had been used in the APA review as well as in previous reviews of SEA in Portugal (Partidário et al, 2009): approach, object of assessment, perspective, entry point, relation with the decision-making process, assessment, governance and follow-up. Results of research confirm previous findings on SEA in relation to how practice differentiates from theory (





SEA practice is still dominated by the EIA-based approach, which reflects the comfort of using prevailing knowledge created by a long culture of EIA compared to recent innovative SEA knowledge. This leads to an existing general idea that SEA can contribute to the sustainability of the planning process by impacts/effects identification and descriptive or diagnosis techniques, which success is debatable.

Other research findings confirm this theory-practice gap in SEA perspective (see Figure 1 and Table 1). While the majority of consultants and decision-makers say that SEA has a holistic character and integrated perspective, it is still largely conducted in a non-integrated way, with low focus and objectivity, using a large number of environmental factors, basically following what the legislation requires. Instead of adopting a facilitating role, SEA is normally seen as a legal requirement that provides baseline information to decision-makers. There is also evidence that little consensus is attempted between different actors about norms and values linked to the object of assessment.

Table 1).

Questionnaires:

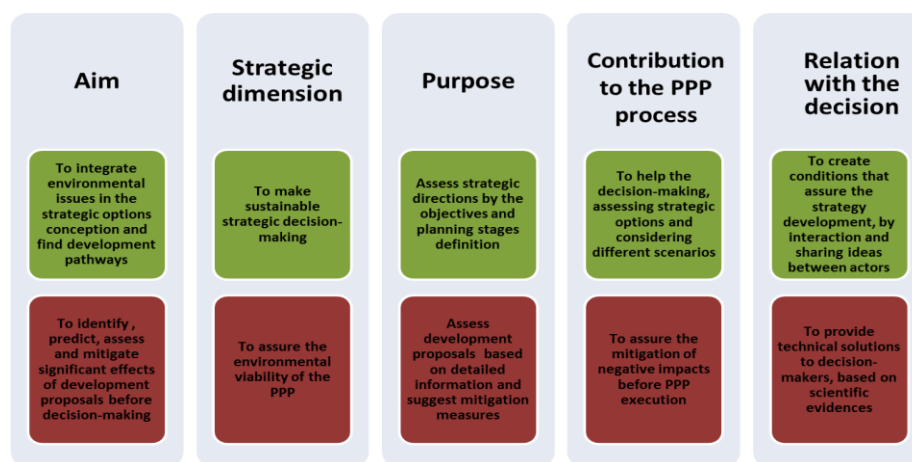
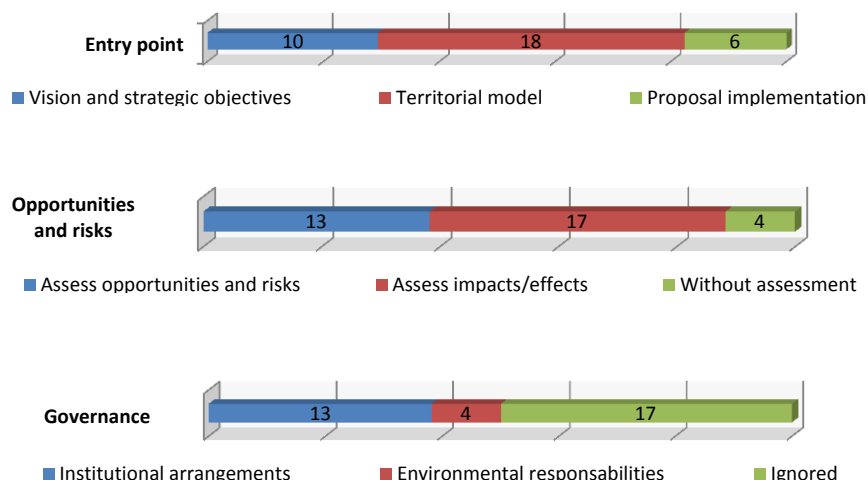


Figure 1 | Questionnaires results¹

¹ Each question was built upon a main theme (aim of SEA, strategic dimension, purpose of SEA, SEA contributions to the PPP process and relation of the SEA with the decision process). In green the responses with more agreement (corresponding to theory) and in red with less agreement between the questionnaires participants (corresponding to the practice observed in the Portuguese SEA reports).

Analysis of SEA reports²:



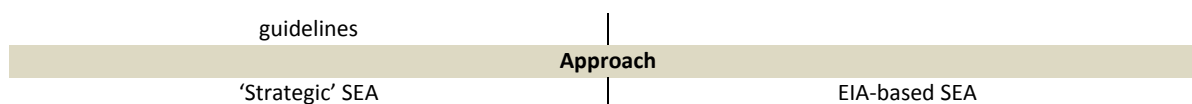
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Table 1 | Perceptual tendencies on SEA theory and practice in Portugal

Theory	Practice
Perspective	
Sustainability (holistic and integrated)	Limited environmental scope
Entry point	
Beginning of the planning process	Late start
Relation with the decision-making process	
Facilitator of the decision-making	Legal obligation Technical assessment
Object of assessment	
Products	Results
Future images / possible choices	Future predictions /choices made
Governance	
Institutional arrangements and participation	Only environmental responsibilities
Follow-up	
Planning, management, governance and monitoring	Indicators and control measures

² Analysis of the 34 Portuguese SEA reports.



LESSONS LEARNED

The outcomes of an SEA always depend on how it is conducted and applied. This relates to actor's interpretations and perceptions. Research conducted reveals two dominantly different cases: an SEA type that adopts a strategic-based approach, contributing with constructive inputs throughout the planning process; and an SEA type that is conducted to establish baseline information, assessment of impact of planning proposals and production of a final report.

In theoretical terms, SEA is recognized to contribute to sustainable development in a rather strategic way. However, current practice with SEA reveals a strong similarity to EIA. In addition SEA is used mainly because it is a legal obligation.

Investigation conducted on theoretical developments and perceptions show there are two dominant different realities: on one hand an extension of EIA to upper decision levels, and on the other an approach to strategic decision-making. We work on the latest as it proves to be more effective from cases observed and experts inquired. To move that way initiatives are needed to promote better practices, specific to each audience: consultants, decision-makers, stakeholders and the general public. It is necessary to change the current thinking so that SEA can be seen not as an attached document to the final plan or programme but as a new platform to think through future development, in a strategic sense.

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