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Governance in Strategic Environmental Assessment: Lessons from the Portuguese practice



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ABSTRACT

The analysis of governance in Strategic Environmental Assessment (SEA) can help understand why, whether and how strategic decision-making happens. Understanding the governance context is strategic to improve the role and capacity of SEA to stimulate, and legitimate decisions that integrate environmental issues and are sustainability driven. The objective of this paper is to discuss why governance is important in SEA. In the SEA literature governance is mostly addressed in silos (i.e. public participation or decisions transparency or accountability) rather than in an integrated way. In addition few authors adopt a strategic view to address the governance context within which SEA is used. In this paper we address the heuristics of governance in SEA based on theoretical and empirical evidence, suggesting how SEA may incorporate the governance dimension. First a review of the SEA literature in relation to governance sets the context to the analysis on how governance is approached in practice, based on 60 Portuguese SEA cases. This is followed by the presentation of an empirical SEA case conducted in Portugal to illustrate what, in our understanding, can be an example of good practice in considering governance in SEA. Final discussion reflects on the role of governance in SEA in promoting engagement, enabling collaborative action, learning processes and dialogues, concluding on the relevance of governance in creating development contexts that can deal with change.

1. Introduction

1.1. Overview of governance in SEA

Governance and strategic environmental assessment (SEA) can hardly be dissociated. According to Meuleman (2015) the construction of SEA systems is highly dependent on the procedural, incremental and substantive dimensions of respective governance contexts. Meuleman (2008: 11) defines governance as 'the totality of interactions, in which government, other public bodies, private sector and civil society participate, aiming at solving societal problems or creating societal opportunities'. In the political arena, governance can be tied to three political dimensions as the political system itself (politics), the institutional structures and political instruments (polity) and the political processes and contents (policy) (Meuleman, 2015).

The consideration of governance in SEA gains special meaning in the legitimisation of strategic decisions, based on the relationship between society and decision-makers. This is also because it is through governance that multiple types of knowledge can be better incorporated to enable learning processes. In the context of this paper, governance can be understood as a dimension of analysis that should be strategically positioned in SEA to enable the achievement of desired development objectives. In its essence, governance shapes functioning patterns of the development system, underlying the formulation of public policies and respective regulatory aspects. Thus, addressing governance in SEA can play a pivotal role in defining goals, setting priorities and making choices.

The objective of this paper is to understand why governance in important in SEA. Research on governance in SEA is expanding but still fragmented into single aspects of governance (e.g. public participation, monitoring and follow-up, capacity-building, decisions transparency or accountability). The broad 'match' between governance and SEA is therefore not easy to assess or review. The evolution of SEA theory throughout the years shows an increasing concern with governance issues, however generally looking into particular aspects: the need to understand the context of decisions (Hilding-Rydevik and Bjarnadóttir, 2007; Ahmed and Sanchéz-Triana, 2008; Bina, 2008; World Bank, 2011); the role of communication between actors for a successful

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assessment (Vicente and Partidario, 2006); the importance of considering the political dimension of SEA (Slootweg and Jones, 2011; Jiliberto, 2012; Partidario, 2015); the production of legitimate knowledge to support decision-making (Partidario and Sheate, 2013; Sánchez and Mitchell, 2017); the influence of actors on dynamic processes and influence of SEA in decision-making (Runhaar, 2009; Van Buuren and Nooteboom, 2010; Hansen et al., 2013); the understanding of SEA as a social construction tool with influence in the mediation of power in decision-making processes (Cashmore and Axelsson, 2013). Governance in an integrated way, conciliating these various single aspects, tailor-made to particular circumstances, and addressed broadly to improve the role and function of SEA is yet rather unexplored in the body of SEA literature. This paper aims to contribute to fill in this gap.

We argue that the theoretical evolution in relation to governance in SEA discourse is perhaps nested in the increasing concern with the adoption of strategic perspectives in the SEA literature. However, the still dominant traditional impact assessment feature in the practice of SEA, with an undervalued strategic dimension, well recognized in the literature (Tetlow and Hanush, 2012; Bidstrup and Hansen, 2014; Lobos and Partidario, 2014; Noble and Nwanekezie, 2017), limits SEA ability to understand the governance context of development. And that is because SEA is mostly reactive to concrete planning and programme development proposals, largely using a technocratic and rationalist approach (Lobos and Partidario, 2014), looking for territorial materialized consequences, often limited to biophysical aspects, following what Partidario (2015) called the compliance or marginal approaches as opposed to the constructive approaches.

Meuleman (2015: 13) alerted to the fact that '[impact assessment] IA problems can be related to typical weaknesses of governance styles' and that 'it makes sense to think seriously about governance when IA is carried out, as governance systems offer both constraints and opportunities for the governance of IA systems and procedures'. According to Meuleman (2015) the IA problems (related to scoping, alternatives, uncertainty, public participation or follow-up) can be associated to bureaucratic issues, partitioning of the public administration, centralization of knowledge and power, political struggles or even the culture of participation. Wang et al. (2012: 415) also claim that 'the core reasons of blocking the effective SEA implementation are, in most cases, the issues relating to political cultures and institutional background, such as lack of powerful environmental governance and accountability'.

A critical shift in IA expertise, essential to broaden the understanding of SEA, is needed. An increasing body of knowledge on public administration, political and social sciences, psychology and behavioural economics and management is making way in the range of expertise involved in SEA, beyond the original physical, engineering, biological or geographical based knowledge, enriching the understanding and triggering the potential of SEA (Partidario, 2000; Geneletti, 2015; Partidario, 2015; Runhaar and Arts, 2015). But we argue in this paper that in addition to the expansion of expertise in SEA governance, constructive approaches are also necessary, with positive and strategic thinking adopted in SEA to act as an instrument of change (Partidario, 2015).

Following the above lines of argument, we question why governance is important in SEA. And we address this issue by exploring strategic thinking as an orientation norm and as a SEA approach, because we consider strategic thinking of extreme relevance for adopting a governance perspective in SEA.

1.2. Strategic thinking in SEA: governance as a component of SEA for sustainability

Strategic thinking in SEA implies addressing SEA differently from what has been traditional theory and practice. From early days Partidario (1996: 3) argued that 'SEA must address the strategic component in any of the decision instruments incorporated in its scope', and that SEA should seek to add value to decision-making as a

strategic move to integrate environmental and sustainability issues in development processes. Strategic thinking, as an orientation norm, can help give meaning to complex environments as the ones SEA apply to. It allows to use forward-looking thinking when addressing the consequences of decisions, with the purpose of helping to ensure adaptation to new challenges arising from changes in an uncertain and complex environment. We argue that strategic thinking in SEA can enable a better understanding of governance contexts to drive 'transitions in governance and decision making processes' (Noble and Nwanekezie, 2017: 171).

Three reasons may help to understand the relevance of strategic thinking when discussing governance in SEA: 1) it allows the consideration of a wide range of perspectives and understandings in complex systems, positioning governance at the heart of the strategy itself; 2) it enables focusing on what is critical and what are root causes when addressing the policy and societal challenges; and 3) it provides the capacity to choose and learn when dealing with intended strategies (goal-rational oriented), with deliberative strategies (contextual-oriented) and with emergent strategies (learning oriented) in contexts of high interaction.

We also argue in this paper that governance is an essential dimension in SEA to enable sustainability. Partidario (2000) argued that SEA would fall largely behind its potential by focusing solely on physical and ecological issues and instead 'environmental assessment must understand and integrate sustainable development principles' (Partidario, 2000: 651). However, there are claims that broadening the scope of SEA to integrate other sustainability dimensions, and addressing it holistically, will likely weaken SEA as an environmental assessment instrument, as it will reduce the weight given to the environment in detriment of economic and social issues (e.g. Morrison-Saunders and Fischer, 2006, Sadler, 2016). We are with Sheate (2009) when he points out that sustainability is a basic purpose in all environmental assessment instruments. The issue is how and to what extent sustainability is perceived: embrace sustainability from an environmental perspective, address sustainability based on the 'threepillar model', or approach sustainability in a broadly and integrated manner. We position SEA as part of a sustainability governance system.

Following this line of thought, a Strategic Thinking (ST) approach in SEA to advance sustainability has been developed over the last decade (see, for example, Partidario, 2007a, 2007b, 2009, 2015) motivated by the need to assess how a development context is prepared to deal with change, while keeping an integrated sustainability perspective. This inevitably includes addressing governance. In developing this approach, Partidario pointed out the importance of searching for the drivers of social and/or ecological/biophysical changes in strategic assessments (Partidario, 2007a, 2007b). Governance addresses many of these drivers, expressed through roles and responsibilities, policy priorities or power tensions. There are examples around the world that explicitly recognize governance in national guidance for SEA. Chile, for example, published the Orientation Guidance for the Application of SEA in 2015, giving emphasis to the institutional context, inclusive engagement of stakeholders, and the overall governance conditions of the development context(MMA, 2015).

For Partidário (1996: 9) the 'implementation of SEA depends on effective political will...' needing 'administrative and institutional mechanisms (...) and the most appropriate ways to ensure a certain degree of accountability', a concern subsequently also argued by other authors (Kørnøv and Thissen, 2000; Wallington, 2002; Bina, 2003). This means that governance can be incorporated in SEA as a technical component (context analysis, macro-policies setting direction), as an institutional component (levels of influence, roles and responsibilities), and through engagement and communication (stakeholders' engagement, public participation and learning) with no rigid sequence, recognizing the need to be adjusted to the decision process cycle (Nitz and Brown, 2001; UNEP, 2009).

1.3. Paper outline

Following an emphasis on the need to consider governance in SEA, drawn from literature, an empirical analysis of how governance is dealt in the Portuguese SEA practice, and the role it plays in the assessment, is developed. For that purpose is proposed a composed framework. A recent SEA case is presented to show how governance may be approached in a strategic thinking context, and what has been the added value for the plan formulation. The case is chosen by the role governance played in steering the strategic development process towards sustainability, enhancing the success of the implementation of the Plan. This is consistent with what was discussed in the Workshop on the Application and Effectiveness of the SEA Directive held in May 18th 2016 in Brussels that positioned SEA as a key instrument for good governance (EC, 2016). A discussion is then presented, with some reflections on how governance in SEA can help seek more sustainability-driven outcomes. Finally conclusions are drawn highlighting the insights gained to understand why governance is important in SEA, with suggestions on how to improve the consideration of governance in the practice of SEA.

2. Methods

2.1. Research questions

The objective of this paper is to understand why governance in important in SEA, by producing findings on whether governance is being integrated in the practice of SEA in Portugal, in line with the theoretical grounds above presented. To achieve this objective a review of Portuguese SEA environmental reports was conducted to find out how governance has been addressed by existing practice. An empirical case that used a governance-driven approach integrated in a ST SEA will be presented as a success case. The following questions guided the research:

- (1) Is governance being addressed in the Portuguese practice of SEA?
- (2) How is governance being addressed in the Portuguese practice of SEA?
- (3) How can we address governance in SEA in a way that makes strategic sense?

2.2. Analytical components for empirical analysis

The empirical analysis in this paper has two components. First it builds upon the analysis of 60 environmental reports developed in Portugal of different sectors and geographical areas, and prepared by different teams. Second it uses an empirical case on the application of governance in SEA, developed also in Portugal, to share learning aspects from successful practice in addressing governance in SEA. This dual analysis was chosen to determine if practice regarding governance in SEA follows what is advocated in the Portuguese Guidance on SEA, which was published and formally adopted in 2012 by the Portuguese Environmental Agency (Partidario, 2012), but also to present a case that successfully incorporated governance in SEA, with positive benefits to the development process.

2.2.1. Environmental reports review

For research questions 1) and 2) 60 environmental reports published between 2012 and 2016 were reviewed. These reports address the whole Portuguese territory and different sectors of activity. Not all cases had issued the respective Environmental Statement by the time of the review, but all had the institutional and public consultation phase closed and results incorporated.

The framework to review the environmental reports is presented in Table 1 and is based on the ten checking points for a successful ST SEA of the Portuguese Guidance (Partidario, 2012). One critical vector of

such an approach is the use of 'critical decision factors' (CDF) to enable focus on what is relevant and a priority for long-term sustainable development. These ten checking points have already been used and adapted in other contexts (Lobos and Partidario, 2014; Lamorgese et al., 2015; Carvalho et al., forthcoming).

2.2.2. Empirical case analysis

The research question 3) is addressed using the SEA of the revision of Sintra's municipal master plan as an empirical case. This case involved the active participation of the authors in conducting a ST SEA and is presented as an example of how governance may be successfully incorporated and integrated in the assessment and planning processes. The analysis first follows the elements presented in Table 1. We then reflect on the results following the four actionoriented impact assessment governance principles suggested by Meuleman (2015): a) reflexivity (how the development process adapted to the SEA process); b) governance environment (how the governance environment of the development process works and relates with the ST SEA); c) governance styles (how the governance styles oriented both development process and SEA process); and d) how participation activities were developed and provided appropriate inputs for both the development process and the SEA process. The intention is to explicitly demonstrate what can be expected from considering and addressing governance in SEA processes, and what can be its addedvalue.

3. The Portuguese profile in approaching governance

Portugal cultural tradition reveals a hierarchical administrative culture in its functioning and developments approval (Niestroy, 2005), focusing on short-term results accompanied by a fragile public participation and low level of civic involvement. The Portuguese culture lacks on 'evidence-based instruments to accompany policymaking, with virtually no application of regulatory impact assessments', as well as a weak 'strategic component of decision-making', 'and 'monitoring of institutional governing arrangements' with 'little systematic effort to improve strategic capacity by making changes to these institutional arrangements' (SGI Report, 2016). Also relevant is the high preference for avoiding uncertainty and focus on achieving quick results, and the Portuguese normative culture in thinking tradition (Hofstede et al., 2010).

3.1. Governance analysis in the Portuguese SEA practice

The main observations on how governance is considered in the 60 environmental reports and few examples are presented in Table 2. The results presented in Table 2 are detailed in the following sub-sections, structured according the elements of the framework for analysis.

3.1.1. Expression and entry point

Concerning the use (*expression*) of the word governance, the Portuguese practice is quite encouraging since 75% of the cases make explicit use of the expression at least in one of the elements of the analytical framework. In the same cases governance is also implicitly considered, for example when exploring the functional model of the planning/programmatic system or in relation to the public participation and stakeholders' engagement. In 25% of the cases the word governance is absent, and this occurs mainly when the focus of the assessment is limited to biophysical aspects. It can however be assumed that, even if absent as a term, the governance dimension is always incorporated through the institutional and public consultation of the environmental reports.

On the *entry point* approximately 67% considers governance in the assessment phase, more than 48% of cases in the assessment framework and in 40% of the cases governance makes it entry only in the monitoring and follow-up phase. Very few cases establish an engage-

Table 1
SEA framework for governance analysis in the environmental reports review

Elements	Criteria	Review questions
Expression	Explicit	Is the word governance explicitly present in the report and/or is considered in an
_	Implicit	implicit way?
Entry point	Assessment framework	Where is governance considered in the reports?
	Governance Framework	
	Assessment	
	Engagement and communication framework	
	Monitoring and follow-up	
Assessment framework	Critical Decision Factor	Is governance defined as critical decision factor?
	Assessment criteria	Is governance defined as an assessment criteria?
	Indicator	Are governance-related indicators defined?
Governance framework	Actors	Are the relevant actors and their responsibilities in the planning and SEA processes
	Explicit responsibilities	identified?
	Relationship between actors	Are institutional relationships, between actors and between policies, identified?
	Relationship between policies	
Assessment	Context analysis	Is a governance-related context analysis done?
	Contextualised options of development	Are alternative options of development contextualised to the strategic objectives?
	Guidelines/recommendations	Are guidelines and/or recommendations for the proponent proposed?
Monitoring and follow-up	Guidelines for follow-up	Are guidelines and/or recommendations for the follow-up stage defined?
	Indicators for follow-up	Are governance-related monitoring indicators defined?
	Responsibilities for follow-up	Are responsibilities for the implementation phase exposed?
	Engagement and communication strategy for follow-up	Is an engagement and communication strategy for the follow-up stage created?

 Table 2

 Examples of how governance is used in the assessment framework and in monitoring and follow-up as found in the environmental reports

Elements	Criteria	Statistical results	Examples
Expression	Explicit	75%	
	Implicit	25%	
Entry point	Assessment framework	48,3%	
	Governance framework	0%	
	Assessment	66,7%	
	Engagement and communication framework	6,7%	
	Monitoring and follow-up	40%	
Assessment framework	Critical decision factor	31,7%	Organization and municipal management.
			Governance model.
			Development agents.
			Territorial management.
			Knowledge, innovation and governance.
	Assessment criteria	33,3%	Citizen's culture and participation.
			Financial management and promotion of economic vitality.
			Adaptive management and public-private collaboration.
			Knowledge and capacity-building.
			Efficiency of decision-making structures.
	Indicators	45%	Financial sustainability.
	marcators	1070	Citizen's voter participation.
			Public discussion sessions promoted by the municipality.
			Number of 'single contact points' (costumer services).
			Co-responsibility schemes.
			Number of entities involved in consultation processes.
Assessment	Context analysis	30%	Number of chities involved in consultation processes.
rissessificite	Contextualised options of development	6,7%	
	Guidelines/recommendations	61,7%	
Monitoring and follow-up	Guidelines/recommendations	38,3%	Promote programming transparency and public-private intervention schemes.
Montoring and follow-up	Guidennes/ recommendations	30,370	Bet on concessions to activate co-responsibility schemes.
			Reinforce the effectiveness of inspections and improve the application of existing
			legislation.
			Assure the execution of Civil Participation programmes.
			Invest in the creation of participatory budgets.
			Ensure the establishment of information, awareness and clarification activities
			considering the different subjects to attend.
	Indicators for follow up	41 704	Financial sustainability.
	Indicators for follow-up	41,7%	· · · · · · · · · · · · · · · · · · ·
			Citizen's voter participation. Public discussion sessions promoted by the municipality.
			Plan's degree of achievement.
			Execution projects of sharing and knowledge dissemination at an
			interdepartmental level.
			Level of information available in a transparent way.
	Paramethilista Confess	E0.00/	Degree if stakeholders' influence in decision-making processes.
	Responsibilities for follow-up	58,3%	
	Engagement and communication strategy	3,3%	
	for follow-up		

ment and communication strategy for both the planning and the environmental assessment processes, and when participation is introduced it is most often to comply with the legal requirements (e.g. PDM-VA, PDM-BR). None of the cases reviewed includes a governance framework.

3.1.2. Assessment framework and governance framework: understanding the strategic focus

Getting and understanding a strategic focus is critical in ST SEA and aims to adapt 'to the natural, cultural, political and economic context of the object of assessment' (Partidario, 2012: 33). It includes, but is not limited, to the traditionally labelled "scoping". In 48,3% of the cases governance (or a related expression) is included in the assessment framework. Of these 65,5% (31,7% of total) adopt governance as a critical decision factor and 93% (45% of total) as an indicator. In cases that consider governance as a CDF, 84% also define criteria and indicators for governance. Most indicators address the financial sustainability of the plan or programme (mostly in terms of investments and private partnerships to assure economic stability as for example in PDM-C) and budgeting issues for the proponent (e.g. municipal budget in PDM-RB).

In ST SEA it is vital to ensure that the strategic issues and the objectives of the object of assessment are considered in building the assessment framework. It is about the so called 'tailor-made' or 'fit-topurpose' SEA. Practice reveals some disconnection between what is defined as the object of assessment and what then is the actual focus of SEA. 50% of the cases reviewed reveal that governance aspects are included in the plan or programme stated objectives (for example the achievement of more collaborative functioning models, transparent decision-making, administrative modernization, or capacity-building of human capital, to name few), but only 23,3% build an assessment framework that responds to the plan's governance-related strategy (e.g. PGRH-A, PDM-VA). This reveals that SEA does not really engage with planning, and maintain a distant and separated definition of issues of concern, independent from the planning issues. Two main aspects with this lack of coherence between the assessment framework and what is being assessed regarding governance can be noted, suggesting that there is little awareness on the role that governance can have in SEA:

- When the object of assessment (plan or programme in Portugal) includes governance issues, but the SEA does not consider those issues in the assessment framework, that means governance will not be considered in the assessment in SEA;
- When the object of assessment (plan or programme in Portugal)
 does not include governance issues, normally the SEA assessment
 framework contains an assessment factor that is construct upon
 issues of openness's, transparency, participation, accountability,
 efficiency and effectiveness, and coherence.

As previously mentioned, in no case a *governance framework* is presented, referring to the actors with interest in the development proposal and their responsibilities, or the relationship between policies and macro-orientations important for the design and implementation of the proposal.

3.1.3. Assessment: pathways for sustainability

According to Partidario (2012: 31), assessment in a strategic context 'corresponds to the assessment of possible choices on strategic pathways (...) considering evolving trends, specificity of context, views and expectation of stakeholders and uncertainties'. In the cases analysed we noted the absence of any kind of engagement and incorporation of stakeholders' views and expectations in the identification of different strategic pathways for development (alternative options).

In 30% of the cases a context analysis is developed in terms of the governance system and related aspects (for example, PUSC provides a context analysis for the municipal governance systems, specifically for

the territorial management strategy, existing public-private partnerships, and models of public participation), in line with the plan's strategic objectives. Curiously there are also cases that made an analysis of the governance context without having a governance or governancerelated critical decision factor, criteria or indicator (e.g. PGRIA).

The recognition and assessment of alternative options is one important step for the success of SEA. This is only seen in 6,7% of the cases (with only half constructing and assessing alternative options for the plan's or programme governance objectives, as for example PDM-E and PUSC). This is in line with current claims that the development of 'fit-to-purpose' alternatives is one major problem in SEA practice (e.g. Lyhne, 2012; González et al., 2015). In the majority of the cases the assessment is the materialisation of specific actions and measures (as concrete development projects) or even, the no-action alternative. So alternatives or strategic options are not really being much used in SEA, let alone to address governance objectives.

Lastly, 61,7% of the cases presents recommendations to assist the planning authority to successfully implement the strategy, minimize the risks or potentiate the opportunities, and to deal with uncertainty in the follow-up stage. The recommendations given are governance-related mostly concerned with cooperation and collaboration between the planning authority and the different agents with special interest and formal (or informal) responsibilities in a specific area of activity (e.g. PETI). The inclusion of governance in recommendations is a good practice element that has been well accepted and followed by practitioners and decision-makers in Portugal.

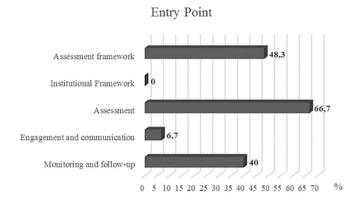
3.1.4. Monitoring and follow-up

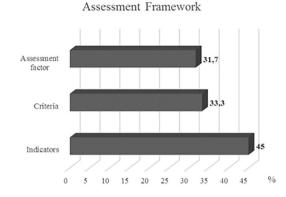
The role of governance in monitoring and follow-up is quite relevant for the success of SEA. As Lobos and Partidario (2014: 41) states 'follow-up in SEA is based not only on monitoring environmental and sustainability indicators, but also on analyzing the governance and processes of action'. To analyse the inclusion of governance-related issues in the monitoring and follow-up, three aspects are considered: 1) the need to have monitoring recommendations and indicators defined in the environmental report, 2) the need to identify formal and informal responsibilities for a successful strategy implementation, and 3) the need to develop an engagement and communication strategy for followup. On the engagement and communication strategy for follow-up, only two cases present an engagement strategy with a concrete methodology to an effective application and engagement of stakeholders and the general public (PDM-I and PANCD). Both justify this strategy with the intention of creating a more inclusive planning process, and also to allocate more responsibilities to the general public on the evaluation of the plan implementation.

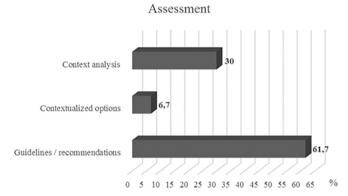
About 42% of the cases defines governance-related monitoring indicators, basically using the same ones identified in the assessment framework. Even with a relatively good number of cases that proposed governance as a theme to be followed, it is normally seen a monitoring and follow-up strategy that does not translate the results of the assessment phase. A smaller number of cases have guidelines for follow-up to understand the development and what was identified as critical for governance in the assessment (e.g. PDM-B). Also, more than half define specific responsibilities for the relevant stakeholders, called as 'Governance Guidelines'. In approximately 30% of all cases it is possible to observe:

- The definition of monitoring guidelines and explicit responsibilities even when no governance assessment factor or criteria is identified (e.g. PETI, PDM-FV); or
- The definition of a governance or similar assessment factor, but no inclusion in the monitoring and follow-up programme, namely in terms of institutional responsibilities (e.g. PGRH-A, PDR-M).

One possible justification why less than half of the cases consider governance issues is uncertainty. And the reason why the other half







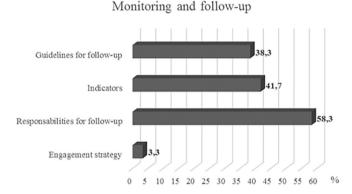


Fig. 1. Sintra geographical context.

consider may be related to the recognition that SEA depends strongly on responsible organizations and other stakeholders. But as mentioned, most of the indicators used in follow-up tend to be quantitative and easy to collect and measure (with already existing data), and rare are the cases that use monitoring as a way to overcome uncertainty, and to deal with the complexity of the context.

4. Empirical case evidence: the case of Sintra's Municipality

The research question 3) is "how can we address governance in SEA in a way that makes strategic sense?". To address it we adopt the case of the SEA of the revision of Sintra's municipal master plan, developed by the SENSU research team, a research group in the Centre for Management Studies of Técnico Lisboa, University of Lisbon.

Sintra is a coastal municipality (Fig. 1) included in the Lisbon Metropolitan Area (LMA), with 377.835 inhabitants, representing about 13% of the LMA population and the second most populous county of Portugal (just behind Lisbon). The Village of Sintra is an UNESCO World Heritage Site, and one of the most relevant touristic sites in Portugal. The first municipal master plan dates from 1999, and after 13 years the executive deliberated its revision. In 2014 a ST SEA methodology for the Plan's revision was approved, following the Portuguese Guidance approach. The case is currently in the process of formal institutional and public consultation (Fig. 2).

Next we show empirical evidence on how governance was considered in the SEA, in a strategic way. The timeline of the SEA case is presented in Fig. 2.

4.1. Allowing space for governance to be considered in the assessment and governance framework

In the revision of the Sintra's municipal master plan, the SEA was initiated with the beginning of the spatial planning process and full alignment was ensured (Fig. 2).

Right at the outset it was agreed to have a collaborative process and an active engagement of stakeholders, including the population, throughout the whole planning and assessment processes altogether. Table 3 indicates the various types of engagement and communication activities used during the process.

The strategic objectives were politically set but open to be revisited and refined by incorporating the citizen's views and opinions, to increase a sense of ownership and commitment towards the Plan. To that purpose two activities were carried out: a) a workshop for strategic focus, with invited stakeholders, reflecting on the main problems and potentialities that express priorities of development in a sustainability context; and b) an inquiry applied to the population to find out what are, in the citizens opinion, the most important aspects to consider, and those that are not of so much importance, to a sustainable development processes in the municipality.

The workshop for strategic focus took place in November 2014. 102 agents were invited and 57 attended, including municipal council officers, local associations, private sector, security forces, regional administration and local agents. The purpose was to agree on priorities for municipal development and to get a strategic focus through a participative planning process. First the problems and potentialities of Sintra municipality were identified with the stakeholders and categorized to define success factors to a sustainable development in Sintra. Second an interactive discussion took place to define the strategic focus, based on the success factors, and define the CDF to the development of Sintra (the outcome of this discussion is presented in Fig. 3). Not only governance was elected as a CDF, but this engagement arena indicated two important aspects to understand the municipal decision institutional context:

- The power struggle between different political factions, with different discourses and strong positions, with the opposition against policies defined by the current Executive Board;
- Hierarchical relations between those with leading positions and

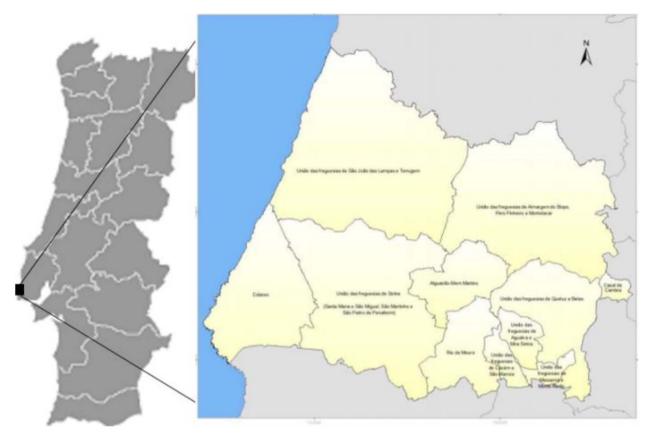


Fig. 2. Procedural alignment of Sintra's case.

 Table 3

 Engagement and communication activities throughout the SEA process.

Engagement and communication activities

Workshop for strategic focus.

Citizen's Inquiry for strategic focus.

Workshop for the definition of alternative options of development.

Questionnaire to the Organic Units of the Municipal Council.

Meetings with the Municipal Council and Sectorial Entities.

trainees, with the trainees feeling constrained in giving their own opinion if someone with a higher hierarchical position was in the group.

It was a challenge to manage both situations, and the SEA served as

a discussion arena to manage different perceptions and opinions. If in the first case the SEA worked as a mediator providing the same level of importance to any contribution, in the second case it worked as an empowerment instrument, levelling every participant and allowing similar roles in the discussion.

Another engagement activity was an inquiry to the general population, applied in December 2014, with two main questions: the five most positive aspects of Sintra and the five aspects that need to be improved. Approximately 1,3% of the Sintra resident population responded, 2.282 answers were received. The inquiry allowed the incorporation of a different type of knowledge with considerations and understandings from those who live the municipality and live through its dynamics. Again the SEA worked as an empowerment instrument and enabled the consideration and integration of a very diverse range of opinions in the planning process.

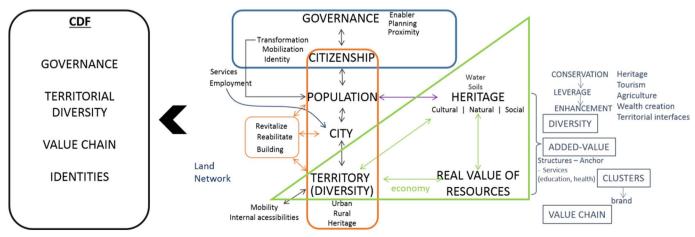


Fig. 3. Result of the Focus Workshop – Systems thinking for context and strategic focus.

Based on these two participative moments, the planning team felt the need to redefine the strategic objectives of the Plan in order to incorporate specific issues that were initially overlooked. This reflexive attitude of critic and reflection from what was initially defined by the municipality, and the new results from the engagement activities, allowed important issues to be incorporated in the planning decisions, enriching the strategy of the proposal. Two of the most important issues were the inclusion of ecosystem services and their valuation, and the promotion of activities associated with the coastal area. Also important was the increased importance given to cultural aspects, as Sintra unique identity is highly recognized. This change in strategic objectives illustrates the capacity of SEA to influence the plan development, which was only possible because the plan was still being conceived.

Both the participative moments fostered the inclusion in the Plan's strategy of important inputs to the municipal sustainability and, at the same time, legitimate the planning process in the eyes of the public and other relevant stakeholders. In addition, the fact that the assessment framework was largely identified in the workshop with contributes from different stakeholders, means the public also influenced the SEA. This can be considered one of the key conditions for the success of the SEA.

Table 4 shows how governance was included in the SEA according to the framework of Table 1. Governance was defined as a CDF to bring attention to the existing social networks, strategies and policies, power relations, as well as the governance model. This enables the analysis of the relationship between different units of the municipality (internal effectiveness), between the municipal council and the community, and between economic agents, public entities, private sector and the contiguous municipalities. Citizenship was a concern widely mentioned, so it was adopted as a criterion to ensure looking into questions of diversity, associations and society initiatives for the promotion of local values.

Crucial in the SEA was the governance framework. As mentioned, this is a generally ignored aspect in the Portuguese practice, maybe because it is not a legal requirement. In this case, the governance framework covered two aspects: actors and relationships between them. The most relevant agents with responsibilities in the territory of Sintra were identified and their formal (and informal) responsibilities in

relation to the strategic objectives of the Plan and decision problem outlined. This allowed the identification of gaps and overlaps in the existing responsibilities (like the concentration of responsibilities in planning activities between the Municipal Council and regional administration) which are important information for the planning authority to consider in the management of the plan, and also for the SEA to assess the existing institutional capacity for a successful implementation. It was also possible to verify the role of each agent in the planning process and consequent implementation, as for example the current passive role of the citizens in planning activities or the active role of economic agents in the promotion of local assets.

4.2. Using governance in the assessment

The assessment phase requires yielding critical trends to be possible to understand the dynamics of what is going on regarding the existing social networks, strategies and policies, power relations and governance model, and assess to what extent the proposed strategies will enhance what is good (opportunity) or, otherwise increase the difficulties (risk). In the case of Sintra it was not easy to obtain an analysis of the existing municipal governance model and the plans governance environment, both in relation to connections and communication between different municipality units, or even in relation to the territorialisation and mainstreaming of local public policies.

To cover this gap of information and knowledge, a questionnaire was directed to the heads of units of the municipality of Sintra to find out about the communication and cooperation between the units. Two objectives steered the construction of the questionnaire: 1) to analyse and understand the internal function of the units of the municipality; and 2) to analyse and understand how the different units communicate and collaborate between them. Of 52 expected answers 29 were obtain (56%). The most relevant results relate to the existence of interdepartmental decisions to allow an understanding of the organisational structure (institutional functions and rational hierarchical roles vs. strategic areas of development), and to the governance model of functioning.

The results allowed to identify several critical trends of the municipality in terms of governance, as:

Table 4Sintra's municipal master plan – examples of governance in the assessment and governance frameworks.

Elements	Criteria	How governance was included in the SEA
Assessment framework	Critical decision factor Assessment criteria and indicators	Governance (To assess efficient and effective planning and management and active engagement). (CDF Governance) Municipal Governance Model: Adequacy of the institutional structure to the development strategy. Communication and cooperation between Organic Units. Schemes of public-private partnership. Level of territorialisation and mainstreaming of public policies. (CDF Governance) Community Proximity: Level of municipal transparency. Coverage and effectiveness of municipal local services. Citizen's engagement initiatives. (CDF Identity) Social Network and Citizenship:
Governance framework	Actors Explicit responsibilities Relationship between actors	Promotion of social entrepreneurship, Associations and Volunteer Programmes. Local authorities (13 actors identifies). Public administration (national and regional) (7 actors identified). Neighbouring municipalities (6 actors identified). Public and private services (4 actors identified). Economic agents (generalised). Associations (generalised). Media (generalised). Local citizens and tourists. Formal responsibilities for each stakeholder group were explicitly outlined according established institutional settlements. Relationship between each stakeholder group formal responsibilities and the strategic areas of development.

- The organisational structure has been based on traditional bureaucratic relationships and defined in terms of rational hierarchical roles; organizing in strategic areas of development would enhance strategic practices, however that does not seem to be the trend as far as structural organization goes at municipal level;
- Low level of interdepartmental communication, despite the efficient and effective internal functioning of the municipality units;
- Increase of the municipal transparency index, in terms of information sharing on the internal functioning of the municipality;
- Improvement of the municipality human capital through professional training:
- Upgrade in the provision of public services, despite the geographical centralisation.

At this point one interesting fact was acknowledged: that even following a hierarchical culture in its functioning system, Sintra's municipality has a great capacity to adapt and complement its culture with broad participatory activities, with a view to ensure a more successful Plan.

Essential in the assessment is to identify what is being assessed. In the case of Sintra a second workshop was held to identify strategic options and assess risks and opportunities.

The strategic objectives of the Plan did not include, in its initial draft, an explicit governance objective, but as shown in Table 5 several alternative options were constructed under a governance theme in the second workshop when relevant stakeholders identified possible alternative options. This assessment workshop engaged 41 stakeholders including local and regional administration, local NGOs, private sector, and municipal services. The strategic objectives of the plan and the critical trends identified in the context analysis provided the support to contextualize the alternative options identified by stakeholders.

Even though governance was not explicitly considered in the proposal draft, results from the trend analysis, as well as from the questionnaire applied to the heads of units of the municipality and personal perceptions of workshop participants determined the identification of issues of transparency in public policy processes, decentralisation, streamlining and process simplification, or new schemes to promote public participation as crucial. The results of the workshop prompted the planning team to incorporate governance issues in the alternative options, as for example, the development of new participatory platforms and promotion of transparent decision-making processes and access to information. The process of constructing the alternative options was therefore a result of a reflexive interaction between the workshop participants, the SEA team and the planning team, paying special attention to incorporating sustainability-contextualised concerns in their construction.

From the point of view of the CDF governance, the assessment of

alternative options resulted in the identification of several opportunities and risks, specifically regarding the promotion of a sense of ownership in relation to the plan, improvement of public-private relationships, increase the engagement of local community in the decision-making process, strategies and policies harmonisation, investment in a proximity policy creating equal conditions of time, costs and quality services, and loss of dialogue between key stakeholders, pressure in the financial sustainability of the municipality, management difficulties due to increasing need of inspection and bureaucratic constraints (Table 5).

Based on the resulting opportunities and risks, governance guidelines were recommended:

- Make clear the investment priorities of actions and measures in the implementation phase;
- Ensure a more active role of all stakeholders in planning and management activities, including the general population, by recognizing its fundamental and structural role to the pursuit of the Plan's strategy:
- Emphasise the need to establish strategic alliances with relevant agents of the society to create projects that can add value to Sintra and can contribute to a sustainable implementation of the strategy;
- Assure that the different municipal public policies are aligned regarding its strategic orientations and intentions;
- Promote transparency and share information about all developments in the implementation process;
- Reduce the administrative red tape cost by betting in the administrative modernisation and simplification of planning processes;
- Promote the creation of networks, and knowledge share, and in its integration in the municipal governance model, moving towards an adaptive management model.

4.3. Monitoring and follow-up strategy with a governance perspective

As mentioned, the plan preparation is still ongoing and is now getting to its negotiation phase, running the formal institutional and public consultation process, in an integrated way. Several public meeting are being held in different parts of the municipal territory to present the Plan to citizens, as the outcomes of the SEA, and gather opinions and views. An open link is also available to all interested public to provide ideas and comments on the Plan and on the SEA. After these activities, the planning and SEA teams will again refine the strategy and the assessment.

To overcome the high uncertainty and complexity concerning governance, a monitoring and evaluation process need to be established as a continuous process. Governance-related indicators (Table 6) will contribute to monitor the extent to which the strategic objectives of the

Table 5Sintra's municipal master plan – Examples of governance aspects in assessment activities.

Elements	Criteria	How governance was included in the S	EA	
Assessment	Context analysis	Was developed a trend analysis focusing on the CDF Governance; was applied a questionnaire to the head of units of the municipality of Sintra; were identified the key critical trends regarding governance.		
	Contextualised alternative options	Plan strategy "Valuation of ecosystem services"	Alternative option 1: The decision on the uses of areas with significant ecosystem services assets should be based on a demonstrative evaluation of their tangible and intangible value.	
			Alternative Option 2: The decision on the uses of areas with significant ecosystem services assets should be based on an adaptive management and incentive generation schemes for their protection and recovery (Transfer Development Rights).	
	Guidelines/recommendations	Plan strategy "Processes and decision – society engagement" (e.g. for the CDF Governance)	Alternative option 1: Develop and boost participatory platforms. Alternative Option 2: Promote the transparency of decisions and access to information.	
		Focus on the Administrative Modernisa	atforms rooted on the assumption of continuous dialogue and cooperation. Ition (licencing, inspection and capital management). It ween properties for an easy, effective, fair and responsible participation in management of	

Table 6Sintra's municipal master plan – examples of governance aspects in monitoring and follow-up.

Elements	Criteria	How governance was included in the SEA
Monitoring and follow-up	Guidelines/recommendations for follow-up and respective indicators for follow-up	Monitor the public participation in the decision-making processes and the effectiveness of the engagement schemes:
		- Number of participatory budgets.
		- Outcomes of local agent's partnerships to territorial development initiatives.
		Monitor the implementation capacity of territorial management strategies:
		- Actions of knowledge dissemination at an interdepartmental level.
		- Degree of achievement of municipal sustainability strategies.
		Monitor the functioning and maintenance of the proposed territorial system:
		- Overseeing the compliance of legal and regulatory provisions, with systematisation and justification of cases of shortcoming and mismatch.
		- Coverage of public services.
	Responsibilities for follow-up	Central Administration:
		 Contribute to the institutional cooperation and articulation, promoting the creation of collaborative platforms and monitoring and provision of information of their areas of activities.
		Municipal Council:
		 Develop capacity-building activities at an internal level to assure an adequate implementation of the proposed management model. Associations and population:
		- Assure individual and community proactive initiatives that value the municipal sustainability.

Plan are met and also to help incrementally integrate in the Plan's implementation unexpected issues that will occur throughout. With governance as a CDF, monitoring guidelines and indicators were therefore defined to "measure" the functioning and maintenance of the proposed territorial system, the implementation capacity of territorial management strategies, and public participation and engagement.

5. Discussion and conclusions

With this paper we intended to share our findings on how governance is approached in SEA using the Portuguese practice as an example that can provide empirical evidence. For that 60 environmental reports were surveyed, and a framework of analysis based on governance elements and criteria was used, as well presented a case that we consider successfully in approaching governance. The use of governance in the case of Sintra allowed to understand the decision-making context, the collection, consideration and incorporation of different perspectives and values in the assessment as well as how the context (governance, social, environmental) may react to future changes. Issues such as participation, uncertainty, complexity, transparency were addressed in the assessment in different ways and produced palpate benefits for both the assessment and the planning processes.

Most importantly we wanted to show the role that governance plays in the assessment. The case of Sintra is a real case. It is not theory, and it is not simulation. It has happened. The quest was not without some constraints and limitations many due to the sensitivity of what analyzing and assessing governance implies.

For each of the research questions we can draw some lessons learnt, allowing us to discuss why is governance important in SEA.

5.1. Is governance considered a relevant factor in the assessment?

Governance is a relatively new subject in the field of environmental assessment and the work development by the World Bank and by several authors demonstrates its relevance in SEA, but results of the review illustrate the still predominant biophysical and territorial

understandings in the SEA practice. The overview of the Portuguese practice suggests that although governance is significantly considered in the assessments, it is not yet acknowledged as a relevant factor. It is mostly used because the Portuguese Guidance indicates governance should be addressed, and then in the review process authorities require to see governance as in the guidelines. But the way governance issues are included show that there is no real acknowledgment of its added value for SEA, as already recognized in the literature, since:

- There is a lack of understanding of the benefits in approaching governance as factor promoting the planning process. The governance conditions are not properly analysed and adapted to the decision problem. Even in cases where governance is a strategic pillar in the plan or programme, most of the times it is not considered in the assessment framework because it is not physical, or materialized on a territorial base with visible impacts or effects. This shows also the little capacity of most SEA to recognize the plan, and to be integrated with what the plan is concerned about. Also sometimes after the SEA process, a lack of knowledge remains about the decision making context and if that context is prepared to deal with the changes proposed;
- A culture of participation and engagement of relevant stakeholders still lacks, with the current practice following a 'blueprint thinking' whereby engagement and communication components are done by regulatory imposition. With such 'blueprint thinking' the opportunity for collaborative assessment is lost, and with it the opportunity to create a shared vision for development and the potential to reduce the level of uncertainty by engaging and committing interested parties.

5.2. How is governance being addressed in the Portuguese practice of SEA?

Results achieved with the review of the 60 environmental reports shows that generally governance issues can, and appear to be considered in different stages of the SEA. Although 75% of the cases explicitly refers to 'governance', only 31,7% address governance explicitly in the focus of the SEA, identifying a governance-related

critical decision factor. The expression is more pronounced in the SEA defined guidelines and recommendations in the follow-up phase.

Even though mentioned in the reports, governance in SEA is still reduced. The fact that governance is mentioned in the official guidance for SEA is probably the reason why some reports use the word "governance". However then governance is not really adopted since it is not a typical issue of analysis. Possible reasons for this to happen is that governance is not legally required and there is insufficient knowledge, experience and practice, together with lack of available data and a high level of uncertainty (for example on the functioning of the governance environment, relationship between stakeholders, coordination and cooperation). Conversely, the importance of this subject for the follow-up stage is higher when referring to the responsibilities of those with interest in the implementation of the plan, since this becomes more tangible. And in fact incorporating governance in follow-up can be a good way to start addressing it in SEA.

We can conclude that governance is being addressed in SEA in Portugal but, as currently practiced, is generally not having a real impact on the development of the planning strategy and its implementation. The lack of concrete governance analysis to understand the context of development inhibits its potential value in improving the strategic assessment process.

5.3. How can we address governance in SEA that makes strategic sense?

We recognize that it is not easy to strategically consider governance issues in SEA - it engages complex systems, and therefore effort and commitment, and it also forces mind-shift towards issues that are not physically or territorially materialized in a direct way. The case of Sintra's municipal master plan was used to show a possible way on how to address governance in SEA in a strategic way. The ST SEA, with its inclusive, creative and adaptive nature, enabled engaging governance in different SEA activities to: 1) understand the development context, 2) integrate different perspectives, 3) achieve a high level of consideration of environmental and sustainable issues in the planning process, and 4) overcome the lack of knowledge regarding specific governance issues as the internal functioning of the municipal council. Each of the activities focused governance in a specific way to enhance a more collaborative, empowered and governance-oriented approach. This 'governance-inclusive approach' allowed:

- The SEA to function as a discussion arena, managing different expectations, and as an empowerment tool;
- Different stakeholders to share their views and to influence the development of the strategy in a constructive way;
- The promotion of dialogues and the creation of a sense of ownership, ultimately providing legitimacy to the final Plan;
- To overcome uncertainty to some degree, on how the development context is prepared to deal with change, by identifying links between governance and planning actions.

The process was very iterative throughout the SEA and in particular during the assessment, with consecutive assessments made in interaction with the development of plan proposals: a total of four versions of the plan were assessed, with the planning team incorporating several SEA recommendations each time, resulting in a more sustainable and environmental oriented Plan.

Worth noting is how the plan revisited and changed their strategic lines of orientation as a result of the inputs brought into the SEA, namely in relation to the consideration of ecosystem services, the use of the coastal area as well as the ways governance issues needed to be incorporated. From a governance perspective, the final Plan promotes: articulation and agreement between public and private entities to establish and potentiate relations; the adoption of an adaptive management model in the internal governance model, looking specifically into interdepartmental relations; coherence between proposed actions and

the development strategy, prompting the planning capacity of the administration; the creation of an informative and management platform to increase the success of the implementation of the plan and more proactive actions and knowledge brokerage; and public participation and engagement in development projects and in the continuous monitoring of the Plan, in order to incorporated non-technical knowledge in the decision-making processes and increase the municipal transparency and access to information.

Concerning the four principles proposed by Meuleman (2015), some considerations were made for Sintra. We conclude that Sintra is a case that positively approaches each of the principles in a way that promoted a sustainability-oriented plan, as well as the governance environment that nested the SEA, ultimately enhancing the success of SEA:

- Reflexivity: the trust established between the two teams and the collaborative attitude that drove the process allowed a close contact and interactivity between teams. Also the political willingness created by the Mayor of Sintra to accommodate this on-going, collaborative process allowed moments of critic and reflection that changed the strategy to a more sustainable design;
- 2) Governance environment: understanding, through a context analysis, how the Sintra governance environment works allowed both planning and SEA teams to adapt and adjust the proposed strategy to reality, since the existing institutional settings, roles and responsibilities of agents, as well as what are the citizens perceptions and development perspectives, became quite clear;
- 3) Governance styles: the political willingness of the Mayor of Sintra allowed to complement and shift between governance styles. The municipality is hierarchically organised and is proposing marketoriented strategies to be incorporated in the Plan (e.g. Transfer Development Rights Strategy to valuate ecosystem services) and promoting broad participatory activities, stimulating the success of both Plan's and SEA processes.
- 4) Participation: during the entire process the participatory activities enriched both planning and SEA processes with new knowledge, new ideas, new perspectives and perceptions, and promoted the socialisation of the development strategy.

5.4. Final remarks and future research

So, why is governance important in SEA? First, any SEA is nested in a specific decision cultural context, where the particular way decisions are made influence the capacity of SEA to achieve its objectives and add value to the decision, determining its effectiveness and success. Second, the characteristics of the decision context are directly related with how SEA is approached and its scope. The actors, institutional settings or political strategies define how a process such as SEA is understood by policy-makers and decision-makers. Third, SEA is in itself a public policy instrument that cannot be dissociated from the political arena and broad governance context since it influences and is influenced by the elements that compose that context. And fourth, the advocated need for a "tailor made" or "fit to purpose" SEA requires (and demands) an analysis of the governance context. Only with this analysis a SEA can be contextualised to where it is applied.

It was not our intention to advocate that all governance issues must fall within the scope of SEA. We do not see it that way. Instead we argue that all SEA should address and incorporate governance issues that are directly related to the strategy being assessed. Since SEA is an instrument oriented to sustainability, it is important to analyse the governance environment in order to understand how the strategy is to be implemented in a sustainable way, and what may be the needed governance conditions for strategic implementation. For example the recognition of what are the relevant agents, and their roles and responsibilities towards the process, is an important first step. Approaching governance in SEA cannot be limited to explicitly

identifying governance as a CDF (or assessment factor). It should also mean constructing and developing an assessment process that provokes self-reflection and self-critic oriented to sustainable outcomes. We suggest that is important to approach governance in SEA in a positive manner, as a relevant factor that will enhance the success of SEA. This perspective may be addressed in future research on comparing these results with the practice of SEA in countries that do not have a focus on governance in their practice, or guidance for SEA. Such research

outcomes may provide further recommendations for policy-makers, decision-makers, and SEA practitioners on how to approach governance in SEA in a successful and contextualised way.

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Appendix A. Appendices

Acronym	Name	Year
POSEUR	Operational Programme of Sustainability and Efficiency in the Use of Resources	2014
PUSC	Urban Plan of Serra da Carregueira	2014
PDR-C	Rural Development Programme of Portugal Mainland 2014–2020	2014
PETI	Strategic Plan of Transports and Infrastructures	2014
PENSAAR	Strategic Plan of Water Supply and Waste Water 2020	2014
POFEAMP	Operational Programme of the European Funds for the Maritime Affairs and Fisheries	2015
PIT-A	Integrated Plan of Transportation of Azores	2015
EFMA	Alqueva Multipurpose Project – Secondary Irrigation Network	2013
PGRH-A	River Basin Management Plan of Azores	2015
PO-L	Operational Programme of Lisbon	2014
PO-C	Operational Programme of the Central Region	2014
POCI	Operational Programme for Competitiveness and Internationalisation	2014
PO-AL	Operational Programme of Alentejo Region	2014
PO-M	Operational Programme of the Autonomous Region of Madeira	2014
PDR-M	Rural Development Programme of the Autonomous Region of Madeira	2014
PDR-A	Rural Development Programme of the Autonomous Region of Azores	2014
PDM-C	Municipal Plan of Cascais	2015
PDM-B	Municipal Plan of Barcelos	2015
PDM-AL	Municipal Plan of Aljustrel	2013
PDM-S	Municipal Plan of Seixal	2013
PDM-FA	Municipal Plan of Fornos de Algodres	2015
PDM-P	Municipal Plan of Penamacor	2015
PDM-O	Municipal Plan of Oleiros	2015
PDM-VNF	Municipal Plan of Vila Nova de Famalicão	2015
PDM-FV	Municipal Plan of Figueiró dos Vinhos	2015
PDM-OF	Municipal Plan of Oliveira de Frades	2015
PDM-I	Municipal Plan of Ilhavó	2013
PU-FZ	Urban Plan of Ferreira do Zêzere	(-)
PP-P	Detailed Plan of Pedregal	2014
PU-CE	Urban Plan of Caliços-Esteval	2013
PDM-V	Municipal Plan of Vinhais	2014
PDM-OE	Municipal Plan of Oeiras	2015
PDM-G	Municipal Plan of Gondomar	2015
PDM-BR	Municipal Plan of Braga	2015
PDM-MC	Municipal Plan of Macedo de Cavaleiros	2015
PDM-CP	Municipal Plan of Castanheira de Pera	(-)
PDM-OV	Municipal Plan of Ovar	2013
PDM-VVR	Municipal Plan of Vila Velha de Rodão	2015
PDM-ER	Municipal Plan of Eco-Park Relvão	2015
PP-FT	Detailed Plan of Fonte da Telha	2014
PDM-RB	Municipal Plan of Ribeira Brava	2014
PDM-VA	Municipal Plan of Viana do Alentejo	2015
PANCD	Action Programme to Combat Desertification 2014–2024	2014
PP-HC	Detailed Plan of Herdade da Cegonha	2014
PDM-OD	Municipal Plan of Odivelas	2015
PDM-E	Municipal Plan of Estremoz	2015
PGRH-T	River Basin Management Plan of Tagus	2012
PERSU	Strategic Plan for Urban Waste 2020	2014
PO-CT	Operational Programme for Cross-Border Cooperation between Spain and Portugal	2014
PU-AEV	Urban Plan of the Business Area of Valença	2014
PDM-M	Municipal Plan of Mafra	2014
PDM-BA	Municipal Plan of Batalha	2015

PDM-BE	Municipal Plan of Beja	2013
PDM-OB	Municipal Plan of Oliveira do Bairro	2015
PGRIA	Flood Risk Management Plan of the Autonomous Region of Azores	2016
PIER	Rural Space Intervention Plan of the Camping Park of Quarteira	2015
PDM-MA	Municipal Plan of Manteigas	2014
PDM-V	Municipal Plan of Viseu	2013
PDM-AC	Municipal Plan of Alter do Chão	2013
PDM-N	Municipal Plan of Nisa	2015

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