



A comparative analysis on how different governance contexts may influence Strategic Environmental Assessment



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ABSTRACT

This paper explores the relationship between governance contexts and the development and outcomes of Strategic Environmental Assessment (SEA). The main objective of this paper is to understand if, and how, the governance context may influence the system and institutionalisation of SEA, and the capacity of SEA to reach its objectives. The research methodology is based on the comparison of six country-cases that have an established SEA system, including three European countries, two Asian countries and one in Latin American, with distinct national culture and political-administrative setting. Results show that cultural and institutional values impact how SEA is interpreted and carried out, and that SEA systems are facing constraints of a more normative and cognitive nature. Connecting governance contexts and patterns in the SEA systems confirm that SEA is not 'context free', but instead 'context-influenced', while its capacity is dependent on its level of adaptation to the governance environment.

1. Introduction

Literature acknowledges that Strategic Environmental Assessment (SEA) has developed largely under the philosophy of Environmental Impact Assessment (EIA) as designed for development projects (Partidário, 2000; Bina, 2007; Fischer, 2007; Verheem and Dusík, 2011; Tetlow and Hanusch, 2012; Noble and Nwanekezie, 2017) through what has been commonly named 'EIA-based' model of SEA. The EU SEA Directive (Directive 2001/42/EC) is the outstanding landmark of the 'EIA-based' model of SEA (Dalal-Clayton and Sadler, 2005; Verheem and Dusík, 2011; Tetlow and Hanusch, 2012), determining the institutionalisation of SEA within the European Member States, but also influencing how the SEA legal framework has been adopted in many parts of the world.

Internationally SEA systems may target strategies, policies, legislations, plans, and programmes, according to the country of application (Ludovico and Fabietti, 2018). Also the structural dynamics of the SEA systems has been suggested to be largely influenced by governance contexts (Ahmed and Sánchez-Triana, 2008; Bina, 2008; Slunge and Tran, 2014). In this paper we build on the work of Meuleman (2015: 4) who argued that "IA [Impact Assessment] (...) is influenced by (...) the governance environment in which IA takes place". We can assume that governance and IA instruments cannot therefore be dissociated and, in

similar lines, that SEA systems and SEA capacity are highly dependent on the governance contexts (illustrated by specific values, traditions, relationships and dynamics) in which the SEA systems operate. We add that when establishing SEA in a given jurisdiction it is particularly important to address *how* the governance environment can influence SEA. Our argument in this paper, as a consequence of the above, is that SEA will need to learn and adapt to governance patterns (given the existing practice of governing – hierarchical, market or networked according to Meuleman, 2015) that define such contexts if it is intended to more adequately address decision problems.

The main objective of this paper is to understand if, and how, the governance context may influence the system and institutionalisation of SEA, and the capacity of SEA to reach its objectives. This paper takes stock on a long-term discussion around the nature of SEA as a context-specific instrument (Hildén et al., 2004; Fischer and Gazzola, 2006; Hilding-Rydevik and Bjarnadóttir, 2007; Runhaar and Driessen, 2007; Bina, 2008; Noble, 2009; Gibson et al., 2010; Wirutskulshai et al., 2011; Slunge and Tran, 2014; Partidário, 2015; Azcárate, 2015). Such premise is axiomatic in this paper, but we intend to go further by focusing on how a particular governance context may influence the institutionalisation of SEA and consequently the capacity of SEA to act as a decision support instrument.

The following sections of the paper present the paper theoretical

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frame that informs the empirical work around the comparative analysis of the selected cases. The examples selected and the arguments developed aim to critically support the need for SEA systems to be 'reflexive' of the governance context of implementation, and the specific governance patterns, if SEA intends to more adequately address decision problems at a strategic level, in other words, be fit for purpose. A discussion on the implications of the main research findings regarding the functioning of the SEA systems and the importance of the governance context leads to concluding aspects and possible pathways for future research.

1.1. The importance of context for SEA capacity

When discussing the importance of contexts for SEA, [Hilding-Rydevik and Bjarnadóttir \(2007: 668\)](#) defined context as “the set of facts or circumstances that have an impact on the chosen approaches to SEA”. For quite some time SEA researchers agreed that SEA, like other IA instruments, is context-specific, and that context would have an influence on the performance of SEA, seen not only as a procedure but also as an instrument influencing decision-making (e.g. [Hilding-Rydevik and Bjarnadóttir, 2007; Bina, 2008](#)). However, several researchers have shown that SEA often have little influence on the outcomes of decision-making processes ([Runhaar and Driessen, 2007; Lobos and Partidário, 2014](#)) and this may be because of a lack of adequacy of SEA to the case-specific governance in place.

Contextual influence in SEA capacity can be addressed in different ways, as pointed out by [Polido et al. \(2014\)](#): some authors emphasize the influence of the political and planning systems ([Fischer and Gazzola, 2006; Bina et al., 2011](#)), others the decision-making context ([Partidário, 2000; Runhaar and Driessen, 2007; Runhaar, 2009](#)), and also the institutional capacity to deal with SEA ([Hilding-Rydevik and Bjarnadóttir, 2007; Slunge and Tran, 2014](#)). [Bina \(2008\)](#) and [Meuleman \(2015\)](#) also emphasised the cultural dimension as responsible for constraining the interpretation in assessment, public participation or even knowledge management. We highlight the relevance of the inherent system of values, from both cultural and institutional dimensions, on how SEA can be interpreted and carried out. For example [Fischer \(2005: 409\)](#) raised concerns on this aspect: “there are indications that if SEA results contradict values of decision makers, stakeholders and other actors, effective implementation will be very difficult, if not impossible, despite of, for example, high quality documentation and processes”. Also, different views of planning and planning practices are subject to interpretation ([Hildén et al., 2004](#)) thus directly influencing how SEA is perceived, and what it is for, and consequently how it is to be conducted, and even by whom.

In IA the concept of capacity has been addressed by some authors. For example [Kolhoff et al. \(2009, 2018\)](#) discuss the capacity for EIA in developing countries, suggesting that the performance of an EIA system (consisting in EIA regulatory framework, actors and capacities, and processes of capacity development) is context-dependent. Capacity as a concept is referred by [Kolhoff et al. \(2018: 100\)](#) as the “ability of the EIA organisation to achieve their interests and objectives”. Other authors refer to capacity with slight different angles, for example [Kaplan \(1999: 16\)](#) refers to capacity as “the ability of an organisation to function as a resilient, strategic and autonomous entity”; while [Morgan \(2006: 8\)](#) defines capacity as “the emergent combination of attributes that enables a human system to create developmental value”, in other words, the ability of a system to create value.

While [Kaplan \(1999\)](#) and [Kolhoff et al. \(2018\)](#) situate the analysis of capacity at the organisational level, others use different lens to look into the concept of capacity at a more macro institutional level, more in the lines of [Morgan \(2006\)](#), as an imbued system of values. In these cases the analysis of capacity is placed on the functional rules and modes of operation of the SEA system and its contextual culture and governance styles ([Runhaar and Driessen, 2007; Runhaar, 2009](#)). We follow this latter perspective and define SEA capacity as the ability of the SEA

system to create value ([Partidário, 2000](#)), being shaped by the dominant system of values so as to perform and achieve its intended purpose of putting broad sustainability values at the centre of decision-making ([Partidário, 2005; Partidário and Wilson, 2011; Cashmore and Partidário, 2016](#)). [Partidário \(2005: 662\)](#) highlights the “motivations that can enable the positive role of SEA”, [Partidário and Wilson \(2011\)](#) relate the SEA performance with institutional capabilities, while [Cashmore and Partidário \(2016\)](#) identify the politicians' mind-sets and the cultural context of the decision as relevant factors in building SEA capacity.

The variety of concepts and purposes of SEA is further reflected in the chosen SEA approaches that countries select when establishing their SEA models, which should be presumably linked to the dominant decision-making cultures in place, and therefore context-specific, in line with [Hilding-Rydevik and Bjarnadóttir \(2007\)](#) and others (e.g. [Kørnøv and Thissen, 2000; Bina, 2008; Sheate, 2012](#)). However, often adopted SEA models basically replicate SEA systems conceived under other cultural decision contexts. We argue that a capacity gap might then occur between the formal stated aim of the imported SEA model, the expected SEA outcomes, the installed governance capacities for performing SEA and the actual SEA outcomes. This may be the case when, for example, non-European countries replicate the EU SEA model in their own decision context, with limited adaptation, as we will further discuss in this paper.

1.2. Institutionalisation of SEA systems

For [Steinhauer and Nooteboom \(2012\)](#) institutionalising SEA is embedding SEA structurally into a country's planning practice, while the system is institutionalised when there is sufficient expertise in SEA application, a sound legal and financial basis for SEA, and a clear institutional structure with agreed allocation of roles and responsibilities. Referring to the importance of implementation, [Slunge and Tran \(2014\)](#) added the effectiveness of the system as crucial for a complete institutionalisation, with institutionalisation being described as “a process of internalizing a new set of formal norms into an existing system of formal and informal norms so that the new norms become rules that are actually used in practice” (p. 54). The same authors further state that a SEA system that is institutionalised is effective in improving “integration of environmental concerns in strategic decision-making, ultimately contributing to improved environmental outcomes” ([Slunge and Tran, 2014: 54](#)).

However the institutionalisation process is dependent on the institutionalists' perspective adopted, and consequently also dependent on the conceptualisation of what is an institution according to different approaches in the New Institutionalism (NI) theory. NI analyses policy outcomes from the perspective of institutions – how institutions channel, constrain and shape the behaviour of individuals ([Peters, 2012](#)). The main assumption is that institutions matter ([Bulmer, 1994](#)) in structuring political actions and outcomes. [Hall and Taylor \(1996\)](#) distinguished three approaches to NI: historical institutionalism, rational choice institutionalism, and sociological institutionalism. Besides these, [Peters \(2012\)](#) also identified normative institutionalism (very much related to the sociological) and discursive institutionalism.

These different perspectives in the NI provide a framework to understand the institutionalisation of SEA, and ultimately its effectiveness. Considering the institutionalisation process is crucial in creating capacities to make decisions, the institutionalisation of SEA systems will most probably depend on the institutionalist perspective followed. From the historical institutionalism we learn that embodying ideas in SEA structures will create institutions that only exist as long as the ideas are accepted, since those ideas are attached to capacities that maintain the institution functioning; from a rational point of view SEA is fully institutionalised when there is full compliance with established formal rules, irrespective of the decision culture and environmental context; while from a sociological and normative perspective, the process of SEA

institutionalisation imply the infusion of norms and cultural values in the structures of institutions influencing motivations; finally, from the discursive perspective, the institutionalisation of SEA is created through interactions and discussions, meaning that the institutional structure of SEA becomes more informal and is always open to new ideas and debates.

2. Methodology

The paper addresses the relationship between contextual governance and level of SEA capacity, observing the direct link between the dynamics of the SEA system and the political and administrative specificities of the governance context. To that end a comparative analysis of six SEA country systems (Chile, China, Denmark, Netherlands, Portugal and Vietnam) is undertaken to analyse patterns of influence and the sensitiveness of the established SEA systems to its governance context.

The countries are chosen to represent distinct geographical and political-administrative contexts within which SEA systems were established, all largely influenced by the dominant EU SEA model. While three are EU member-states (Denmark, Netherlands, Portugal) and therefore legally mandated to adopt the EU model, they nevertheless show different governance characteristics and institutionalisation of SEA. The other three countries, of which two are Asian (China and Vietnam) and one Latin American (Chile) have established their SEA systems influenced by the EU model through acknowledged working relationships with at least one of the first three countries (respectively). The selected countries intend to illustrate the replication across countries on models and methodologies for SEA, enabling the investigation on the relationship between the specificities of a given governance context and the level of aimed, and established, SEA capacity. A brief description of the countries governance profile is provided in section 2.1.

The research methodology is structured in two components –SEA systems and SEA literature - represented in Fig. 1. Both components are analysed in an integrated manner in Section 3, with the results discussed in Section 4 in light of the description of the countries governance contexts.

For the first component - to analyse the SEA systems - an analytical framework is developed around eight elements inspired in the work of Meuleman (2008, 2015). The framework is used to review the provisions and procedural aspects set by SEA legislation (overall requirements) and regulations (procedures) in each country (the analysed documents and publication year can be seen in “SEA system core legal documents” of Table 3). This analysis is of a qualitative nature and follows an interpretivist position, and it is important to recognize a priori that it relies upon the subjective evaluation of those who read the documents. Also, the data used in the analysis is contextualized since the documents were developed by the countries governmental actors that, theoretically, provide formative impact in the SEA system of

values. All the documents reviewed were obtained from websites of the respective governmental authorities (English version in the case of Denmark, the Netherlands, Vietnam and China) or from FAOLEX database.

Table 1 presents the elements of analysis used in the review of existing SEA capacities and also how the governance contexts are reflected in the respective SEA system.

The second component consists in the review of the state of the art of SEA in published scientific articles in peer review journals and organisational reports. The purpose is to understand the state of play in practice-based experiences with the application of SEA. The SEA scientific articles were selected using two criteria: having been published for less than 10 years and to have the keywords ‘strategic environmental assessment’ and ‘X’ (X being China, Chile, Denmark, Netherlands, Portugal or Vietnam). The results of this literature review will be used along with the analysis of the SEA systems to understand current SEA practice.

2.1. Countries governance profile

For each country in study - China, Chile, Denmark, Netherlands, Portugal and Vietnam – a brief description of the governance environment is provided using two different categories of indicators: The World Bank Governance Indicators (WGI) and the Hofstede Dimensions for National Culture. As indicated by Meuleman (2015: 7) “national cultures may show an underlying ‘default’ governance approach” [emphasis added]. This enable us to develop a description for each country governance context according to the most similar and suitable style of governance (hierarchical, networked or market-oriented).

The WGI is commonly used to identify and describe governance trends while the Hofstede Dimensions explores the tendency of the effects of society in specific cultural values. A total of nine indicators are selected from these two sources and applied as a form of ‘describing’ the governance contexts – from WGI (Kaufmann et al., 2010): voice and accountability (extent of citizens participation in governmental issues), control of corruption (extent to which public power and private interests are exercised), rule of law (extent of agents confidence and abide in rules of society), regulatory quality (ability of government to formulate and implement policies and regulations), and government effectiveness (quality of public services and policy formulation and implementation); from the Hofstede (Hofstede, 2011): power distance (degree to which the less powerful members of a society accept and expect that power is distributed unequally), individualism (degree of preference for a loosely-knit social framework), uncertainty avoidance (degree to which the members of a society feel uncomfortable with uncertainty and ambiguity), and long term orientation (degree to which a society maintain links with its own past while dealing with the challenges of the present and the future).

Table 2 summarizes the application of the nine indicators to the countries in study. The six countries have different approaches in their

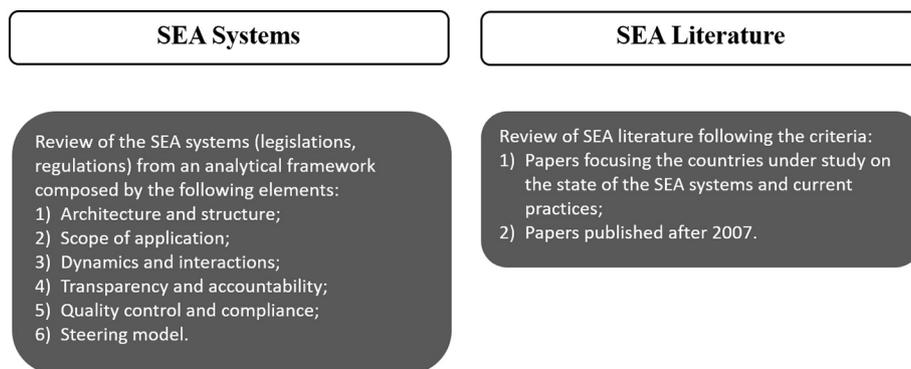


Fig. 1. Methodological components in the SEA comparative analysis.

Table 1
Elements of analysis and respective rationale to review the SEA systems.

Elements of analysis	Purpose	Rationale
Architecture and structure	Understand how the country SEA system is structurally organised (governance structure and operational model).	What elements constitute the SEA main procedural steps and what type of organisational structure characterises the SEA system?
Scope of application	Understand the SEA system conceptual boundaries (stated SEA aim).	What are SEA objectives?
Dynamics and interactions	Understand the system flows of relationships and what type of interactions (degree, between whom, etc.) are demanded.	What relational dynamics characterise the SEA provisions? Are stakeholders' roles and responsibilities in the SEA process clearly defined? How is the public participation process?
Transparency and accountability	Understand the level of transparency promoted by the SEA system and the accountability in terms of actions justification or process performance.	How is disclosure of information being promoted? For whom transparency is promoted? What type of accountability scheme is behind the SEA system?
Quality Control and Compliance	Understand the level of SEA process quality control and existing mechanisms of compliance.	Is there any review process formally established and how it works? What are the compliance mechanisms?
Implicit steering approach	Understand the type of approach promoted.	What SEA approach is followed?

national governance context (e.g. Lijphart (1999), Meuleman (2008)), but are easily coupled in pairs of two given some general similarities: both China and Vietnam follow a hierarchical style of governance, with some mixtures of market-driven aspects (more control-driven approach); Denmark can be said to follow a network-driven style (flexible approach), with Netherlands, besides the network characteristics, also showing some mixture of individual and hierarchical orientation (functionalistic approach); and both Chile and Portugal follow a hierarchical-style even though both present some network-oriented issues in their society (albeit more rigid approach).

3. Results: analysis of SEA systems versus practice-based experiences

The analytical framework of Table 1 was applied to the six country cases. To address the objectives of this paper, the analysis of the SEA systems will be done along with the literature review on published SEA practices. Table 3 summarizes unique features of each country SEA systems.

All countries in the analysis reveal a similar architecture of SEA model, inspired in the EIA-based SEA model of the 2001 EU SEA Directive. The analysis however suggests considerable variations in observed cases, trusting on the achieved results. All the countries in the study have enacted SEA systems, the oldest one with more than 15 years (the Chinese arrangements were regulated via EIA Law in

2002). In all SEA was precluded with a long tradition of EIA instruments and SEA idealisations. For example the concept of EA was introduced in Chile in 1994 (Law 19.300 - General Environment Framework Law), and by that time the need to incorporate the principles of EIA in land planning instruments was recognised. But officially only in 2015 SEA was regulated. Similarly, a SEA idealisation was presented in Vietnam in 1994 in a governmental decree with plans included in the screening categorisation – but only in 2005 SEA requirements were introduced in the national EIA Law.

Regarding the European countries, in Denmark the tradition with EA instruments started in 1989 with the introduction of an EIA system, and shortly after (in 1993) a circular for the EA of Government Bills and Other proposals was published. The EU SEA Directive of 2001 was transposed to the Danish system by a single act, in 2004, but currently SEA and EIA regulations are in a Consolidated Act. In Netherlands EIA was introduced in the late 1980's via The Environmental Management Act, with the EU SEA Directive being formally transposed with the amendment of the Environmental Management Act in 2006. Finally, in Portugal the idea of an EA for plans was introduced in the Environmental Policy Act of 1987, with EIA being first regulated in 1989. But only in 2007 Portugal transposed, by a single act, the EU SEA Directive to its legal system.

Structurally the SEA regulations in all studied countries follow similar procedural elements of an EIA-based SEA: the determination of the need for SEA (screening), the emphasis on the assessment and

Table 2
Countries governance profile based on the WGI (WB, 2017) and the Hofstede Dimensions (Hofstede Insights, 2017).

Country	Description
China and Vietnam	Centralized authority, with autocratic processes of decision-making where final decisions rest on the top of the hierarchy. Lack of formal channels for citizen voice and accountability. Increase perceptions over the quality of public services and policy formulation and implementation. Collectivistic in nature and very group-oriented –emphasis in the obligations towards groups, and in maintaining relationships for the groups' benefits. Pragmatic cultural nature, more focused in long-term benefits and economic growth. Considerable sense of conformity by the society. Light increase in the control of corruption probably related to current economic decentralisation.
Denmark and Netherlands	Danish hierarchical structure of a flat nature, and Netherlands explicit role of actors' in terms of allocation of power, even though dialogue and communication existing at a good level. Individualistic societies that place self-interest over the collective one and have preference on horizontal relationships over vertical. Danes comfortable with uncertain situations, being able to accept change and easily incorporating it in their daily lives. Dutch with the need for rules and policies to overcome uncertain situations. Denmark tends to be more short-term oriented (more normative) and Netherlands more long-term oriented (more pragmatic) in thinking. High culture of public participation, high confidence in the rules of society and high perception of the quality of policy formulation and implementation.
Chile and Portugal	Centralized authority marked by established hierarchical levels with low delegation of power. Collective societies, group-oriented with well-defined social norms that shape the behaviour of individuals. Tendency to avoid uncertainty through rigid rules and codes of behaviour, clearly delineated administrative structures, and resistance to innovation. Normative thinking, with a focus on stability of traditions (tradition and cultural rules play an important role in the behaviour of society). Perception that citizens are given opportunities to actively participate and express their concerns in political matters. Positive perception of provision of public services and policy formulation and implementation.

Table 3
SEA systems – Style of governance, legislation and specific features in countries reviewed.

Country	Style of Governance	SEA system core legal documents	SEA unique features in each country-case
China	Hierarchical-driven with marketization features.	Law of People Republic of China on Environmental Impact Assessment of 2002. Plan Environmental Impact Assessment Ordinance of 2009. Revised Environmental Protection Law of the People's Republic of China from the 24th of April 2014.	Different typologies of plans require different levels of assessment: comprehensive plans must have a chapter of environmental impacts, and special plans an impact assessment statement. Only special plans have explicit requirements for quality control of a group of state representatives and specialists. Half of the group must be composed by specialists.
Vietnam	Hierarchical-driven with marketization features.	Law on Environmental Protection no. 52/2005/QH11 2005, repeal by Law on Environmental Protection no. 55/2014/QH13. Decree no. 18/2015/ND-CP. Circular no. 27/2015/TT-BTNMT.	Establishes important roles for experts throughout the assessment (advisory and review). Agency members in charge of SEA must be Certificate in SEA consultancy by the Ministry of Natural Resources and Environment. Individuals composing the Assessment Council for review must have established experience in the area from two to seven years according to their qualification degree (from Bachelor to Doctor degree).
Chile	Hierarchical-driven with network features.	Law no. 19.300 on the General Bases of the Environment of 1994, amended by the Law no. 20.2017 of 2010. Decree no. 32 of 2015.	The responsibility to assess a request to develop a SEA falls under the Council of Ministries for Sustainability. The competent authority for the development of the plan is stimulated to adopt different forms of engagement to deepen public engagement.
Portugal	Hierarchical-driven with network features.	Decree-Law 232/2007, of 15 June, amended by Decree-Law 58/2011 of 4 May.	The Portuguese Environmental Agency must prepare and present on an annual basis a report on the state of SEA and quality of environmental reports.
Denmark	Network driven.	Executive Order no. 1533 of 10 December 2015 (Consolidated Act Environmental Assessment of Plans and Programmes). Law no. 425 of 18 May 2016 (General Act of Environmental Assessment of EIA and SEA), amended by Executive Order no. 448 of 10 May 2017.	The competent authority must conduct an institutional consultation before the screening decision.
Netherlands	Network driven with hierarchical features.	Environmental Management Act amended in 2006 (Act that includes EIA and SEA arrangements). Environmental Assessment Modernisation Bill of 1 July 2010.	It is mandatory for the competent authorities to ask the Netherlands Commission for Environmental Assessment (NCEA – independent body) advice on the environmental report (a review recommendation). Mandatory public consultation on both the scoping and environmental report phase.

mitigation of impacts on the environment, the development of an environmental report, a public consultation prior to the approval of the proposal, quality review processes and requirements for follow-up. Despite these structural patterns in the regulations, there are three relevant differences: 1) Vietnam has unspecific requirements regarding the scope of the assessment; 2) both China and Vietnam lack concrete requirements for the consideration of alternatives and give greater emphasis to the assessment of impacts and mitigation measures; and 3) both Chile and the Netherlands mandate a public consultation in the scoping phase.

The institutional model established by the EU SEA Directive is profoundly influenced by the technical-scientific philosophy of EIA (Tetlow and Hanusch, 2012; Lobos and Partidário, 2014; Bidstrup and Hansen, 2014) and has been successfully implemented in several EU countries, particularly in the Netherlands that has served as a role model for many countries in the world. The EU SEA Directive model could be seen as relatively flexible, setting minimum requirements and opening to consideration the coordination arrangements for an effective function of SEA regarding the countries administrative culture. However what we observe is that while the common EU inspirational model sets the architecture and structure of responsibilities of the respective SEA systems, there is limited adaptation according to specific governance features. The analysis showed that while the SEA model is replicated, the implementation of SEA varies across the six countries, showing distinct levels of success. Results achieved suggest that, as discussed in the following paragraphs, the governance environmental context seems to determine the performance of SEA.

The SEA system in both China and Vietnam reveals reduced flexibility, with coordination largely controlled by direct supervision of the State (power centralized at State level), limiting SEA influence in decision making (Bina et al., 2011; Che et al., 2011; Zhu et al., 2010; Victor and Agamuthu, 2014; Slunge and Tran, 2014; Gao et al., 2017). This may result in a lack of systematic coordination and collaboration at administrative levels (Bina et al., 2011; Che et al., 2011; Clausen et al.,

2011; Victor and Agamuthu, 2014), influencing institutional relationships that may be crucial for a successful application of SEA. In China for example, the control of the State is usually linked to a game of interests that influences the scope, range and openness of the assessment, leading to low coordination and collaboration between governmental bodies (Bina et al., 2011; Che et al., 2011). Also, the SEA regulation lacks on a clear identification of roles and responsibilities of governmental bodies in the SEA process (Bina et al., 2011), with implications in the necessary dynamics that influence both assessment and decision capacities. This situation is quite similar with what happens in Vietnam (Victor and Agamuthu, 2014).

In Chile there is an idealisation of a strategic SEA approach (based on Partidário, 2012) that can open the possibility for SEA processes to be adaptable to the strategic objectives of a development proposal. However the system is highly characterised by standardised routines, formalised procedures, and functional group tasks, sign of the rigid environment in which SEA operates. On the other hand, in Netherlands, Denmark and Portugal, probably influenced by the multilevel governance structure of the EU, the coordination of the system is based on a standardisation of professional skills, where expertise is of professional nature through formal autonomy. This facilitates adjustments in the process depending on the development context to which SEA is applied (as happens in the Dutch case [Van Burren and Nooteboom, 2009]).

The purpose of SEA, as stated in the countries regulations, is to integrate environmental considerations in decision-making, assess potential environmental impacts and propose mitigation measures. A common pattern is observed in the six countries with environment being conceptualized more restrictively as biophysical in character, incorporating some social and economic aspects, but through environmental lens.

Concerning institutional and public consultation the six countries have requirements for screening (Denmark and Portugal, in the latter only institutional consultation), scoping (Chile, Denmark, Netherlands and Portugal) and environmental reporting (all the six). While in the

Dutch case stakeholders are actively involved throughout the SEA process (Van Burren and Nooteboom, 2009; ACEE and NCEA, 2014; EC, 2016), in China the high sense of confidentiality and the governmental control of the SEA process are set as obstacles for effective public participation (Bina et al., 2011; Wu et al., 2011; Victor and Agamuthu, 2014; Ogihara et al., 2016). This contributes to a lack of public participation and publicity of SEA, sometimes developed after the decision is made (Che et al., 2011; Wu et al., 2011). The importance of public participation (and the lack of) is also highlighted in the Vietnamese practice of SEA (Slunge and Tran, 2014; Victor and Agamuthu, 2014), in Denmark (EC, 2016; Elling and Nielsen, 2017) and in Portugal (EC, 2016; Polido and Ramos, 2015), as well in Chile (Sanhueza and Fuentes, 2016; Bustos et al., 2017).

Regarding accountability, both China and Vietnam frame their accountability process on the basis of political authority, with the State playing the role of decision-maker responsible for quality control. Chile, Denmark and Portugal give more importance to following the established procedures through the action of the administration, while Netherlands subjects the SEA process to professional expertise of external control bodies. In both Portugal and Chile the Ministry of the Environment is highly accountable for the quality of the SEA process, namely in terms of the required level of involvement in the review of the environmental report. On transparency, China and Vietnam do not present requirements for disclosure of information on the SEA process (Wu et al., 2011; Slunge and Tran, 2014). For example, the Chinese arrangements promote transparency for political purposes only, namely by exposing assessment results and SEA process development to departments under State authority (Che et al., 2011; Bina et al., 2011; Li et al., 2016; Wu et al., 2011). The three European countries, as in Chile, have similar transparency arrangements following the Directive requirements, stating the need to disclose information throughout the SEA process, that according to recent reports seem fully accomplished (EC, 2016).

Comparing the SEA processes of review and compliance, we found the following outstanding features:

- Institutional consultation and public scrutiny as forms of quality control throughout the SEA process, with the competent authority having the responsibility for the quality of SEA in a non-binding basis seem to take place in Chile, Denmark and Portugal;
- Administrative, public and regulatory levels of review and compliance, all together with the quality control of the SEA report laying down on an independent control body seems to characterise the Netherlands);
- Regulatory, administrative and professional control for review and compliance, with SEA report quality review relying on expertise, with explicit conditions established for the composition and functioning of the review group, as in China and Vietnam.

For example in the case of Vietnam, where explicit requirements for an experts-based Assessment Council exist (perhaps inspired in the Dutch model), the situation is then affected by a lack of expertise and knowledge on SEA (Clausen et al., 2011; Victor and Agamuthu, 2014). SEA practitioners and governmental bodies have a quite good background on EIA development, with this possibly leading to a low quality of SEA appraisal (Slunge and Tran, 2014).

In conclusion, the more control-driven the governance context is, the more closed and rigid is the SEA system, influencing SEA performance (for example in China) and limiting flexibility and capacity in the adjustment of imported requirements for SEA. Networking characteristics appear to promote more open and flexible features influencing SEA, such as for example the positive philosophy of institutional collaboration and cooperation in the Netherlands and Denmark. It is clear that all countries are formally positioning SEA as a *post de facto* instrument to analyse the environmental implications of development proposals. China and Vietnam appear to emphasize expertise in SEA to

give credit to development proposals and the efficient use of the existing information; Chile intends to drive environmental sustainability thinking in transparent and open SEA processes; Portugal and Denmark focus on the nature of decision-making and accountable and transparent SEA processes; and in the Netherlands, besides accountability and transparency, the highlight is broad consultation. The difference between what is expected and how SEA is being practiced seems to be related to the established institutional specificities that determine functional and technical capabilities, as well the values and motivations to perform an SEA.

4. Discussion

Three patterns of governance styles can be observed in the six countries: China and Vietnam (more hierarchical and market oriented, but control driven), Denmark and Netherlands (more networking and flexible, with the Netherlands revealing hierarchical functionalistic features), and Chile and Portugal (hierarchical but with network solutions, – although still rigid). Regardless these different styles, all the countries appear to follow the model set by the EU SEA Directive. In other words, countries may be adopting a model considered ‘adequate’, because it works well elsewhere, because it is recommended by international experts or because it is readily available as a model to be followed, regardless of the contextual circumstances and the consequences on the institutionalisation of SEA. In this section we will reflect and discuss on what appears to be influencing SEA capacity considering the relationship between governance contexts and SEA systems.

Selznick (1957: 17) argued that institutionalisation involves “to infuse [something] with value” to be more than simply mechanical. Institutional structures (in formal and informal terms) such as SEA are socially constructed (Berger and Luckmann, 1967) and require individuals for the on-going reproduction of their settings. We argued that context matters in influencing SEA capacity in terms of participation, flexibility, coordination, autonomy, and transparency values. Research results suggest that the adoption of SEA in non-European countries appear to neglect the contextual governance characteristics that should influence SEA institutionalisation, specifically the substantive conditions for SEA.

All the countries have some sort of arrangements for public and institutional consultation. But while some structurally promote consultation of a pluralistic nature (as Netherlands), others tend to close the SEA process to single consultation actions (as China or Vietnam). More hierarchical countries, such as China and Vietnam, have the tendency to conceptualise their institutional structures in a more rational and restrictive way, aligning their cognition with the idealisation that open spaces of discussion require more bargain and possibly more conflict management. Scaling down such moments would then lead to more reliable results of the assessment, and to a more effective implementation of the proposals. Similar parallelism can be made for Portugal and Chile. Both abide by strict rules, while expressing the need for clarity and structure and the importance of traditions and stability. While in Portugal arrangements for public consultation is regulated in one single stage, in Chile the process is more open and mandates a public consultation phase in the beginning of the SEA. But more requirements for public participation process does not necessarily mean better practice. Chile is a country with poor public participation and citizen engagement, associated to the society low confidence in public authorities (OECD, 2017) and, together with Portugal, is at the bottom of the OECD countries for civic engagement (OECD, 2017). This indicates a gap between regulatory rhetoric and reality in practice regarding participation, with possible influence in SEA capacity.

The transdisciplinary nature of SEA (Jha-Thakur et al., 2009; Runhaar and Arts, 2015) implies the need for highly coordinated and collaborative agency, as coordination between government departments of sectorial nature. Our results suggest that coordination issues,

aligned with agency autonomy, are highly sensitive to the characteristics of the governance context. Countries that are characterised by power decentralisation, relatively high individualism, moderate to high long term orientation, a good rule of law and regulatory quality are expected to bond relations through influence and interests among organisations or departments. More consensual politics of both Denmark and Netherlands stress out horizontal relationships, as also reported in SEA literature (Van Burren and Nooteboom, 2009; Lyhne et al., 2017).

Studies indicate that in Portugal, despite the innovative national guidance that promotes a strategic-thinking based SEA methodology (Partidário, 2007, 2012), the use of an EIA-based SEA approach still prevails (APA, 2010). Even though the new terminology for SEA set in the guidance is extensively used because of authorities demand, the spirit followed in practice and the assessment philosophy has not changed in practice. Similar situation occurs in Chile where SEA regulation was constructed with an idealisation of strategic thinking SEA, influenced by from the Portuguese SEA national guidance, but practice falls short of such strategic SEA idealisation. This indicates a gap in the capacity and commitment for conducting strategic SEA, and creates difficulties in practice. The low agency capacity for conducting SEA (possibly) due to lack of knowledge, incentives and willingness to act, may lead to an implementation trap with short coping ability. A centralisation of power and responsibilities can decrease departmental autonomy to act, which is linked to lower levels of competences to perform SEA, to resistance to change in institutional settings, and a lower capacity to respond to changes reflecting limits in institutional autonomy. Autonomy is an essential element of institutionalisation, representing the capacity of institutions to make and implement their own decisions (Peters, 2012). And these can well be reasons behind difficulties in adopting strategic thinking SEA both in Portugal and in Chile.

Partidário (1996: 40) referred in the early days of SEA that “countries with open and flexible political and cultural structures are more likely to have established conditions to develop sound environmental policies”. Flexible structures are more capable of adapting to changes in the substantive environment, but the degree of flexibility is highly connected to the countries governance context. Countries with more centralized power of decision and political authority show a lower level of flexibility in SEA formal institutional structure and arrangements, such as the case of China. In contrast, more flexible governance styles (as in Denmark and Netherlands) enable the scale up of SEA in order to achieve better performance and broader results. Van Burren and Nooteboom (2010) noticed that the collaborative nature of planning processes is translated to the practice of SEA in Netherlands, with the flexibility of the SEA process leaving room for manoeuvre. Additionally, it is also observable that more closed cultural contexts, as the case of China and Vietnam, tend to have high sense of secrecy and confidentiality of policies and strategies (Victor and Agamuthu, 2014). There is a lack of political will to conduct SEA through transparency principles and, in this particular case, there is a deficit of baseline information also due to the privatisation of data (WB, 2011). The general lack of transparency might limit the capacity of SEA to influence decision-making (also acknowledge by Slunge and Loyaza, 2012).

We consider that a ‘capacity gap’ exists in the way SEA is conceptualized and implemented in a given context. This gap has been expressed by issues of flexibility, coordination, autonomy, transparency and participation, highly dependent of the established motivations to conduct SEA. The European countries focus on democratic principles and flexible formal institutional structures that presumably create conditions for SEA to perform, of which the Netherlands is the most outstanding example in the countries reviewed. In fact the EU SEA Model seems to be more compatible with the functional rationality of the Dutch governance environment, and less compatible with the other two European countries. The rationalistic characteristic of the EU SEA Model is similar to the cultural governance environment of the Netherlands, where the EIA-based SEA approach seems to fit well. That

fit is not obvious in Demark and in Portugal and constraints seem to exist in the institutional dynamics in these countries, with the philosophy of EIA-based SEA not in line with the planning philosophy and decision culture practices. Another situation appear to reveal a clear capacity gap in China and Vietnam where the focus on expertise, possibly inspired in the Dutch practice, finds an absence of governance conditions, resulting in inefficient and inadequate institutional capabilities, trusting on the literature. Chile idealises a strategic thinking SEA, but regulates standardised and tough procedures and functions through highly bureaucratic routines, indicative of a mismatch between what is intended and what subsists.

Three reflections can be made: first, current SEA systems seem to continue locked into a traditional practice of environmental assessment established according to the philosophy, the rules and the practices for EIA; second intangible agency and structural capacity elements, such as values, management styles, cultural traditions or governance settings appear to affect how SEA is perceived and carried out, no matter the formal arrangements established; third the institutionalised context for SEA is different from the practical context of SEA due to a possible detachment between structural norms and agency of SEA.

5. Concluding remarks

In this paper we focused on how governance contexts influence SEA systems and SEA capacity to reflect on the claims that ‘context is crucial’ for SEA. Our findings show that there is a gap between the aimed SEA capacity (how the SEA system was intended to work, as stipulated by formal institutional structures) and how it works in practice (the actual SEA capacity). This ‘capacity gap’ is influenced by the governance context of SEA implementation and reflects the lack of adjustment of formal SEA model requirements in relation to the need to fit for purpose in specific governance contexts.

It is important to reinforce that the main objective of this paper was not to compare full SEA systems but rather to reflect upon particular cases of analysis. The review of the six countries illustrates that countries with similar SEA model tend to favour the application of what is perceived as the ‘best practice’ SEA. The dominance of the technical-rational perspectives in the design and shape of formal SEA presumes that similar resources and constraints might be put effectively in place, establishing SEA as a standard instrument, independent of its context. We saw that the SEA systems follow a similar structure for implementation (in terms of screening, scoping, assessment, mitigation and monitoring) and particular requirements concerning expertise, baseline data requirements, reporting and consultation, despite differences in terms of structural flexibility, participation philosophy, or quality control, resulting in different levels of development and implementation that symbolise full institutionalisation. This may be due to the fact that the value of SEA is not equally internalised in the SEA systems, missing to influence the SEA capacity to achieve its purposes. Results achieved suggest that a capacity gap takes place when countries absorb imported models and ‘best practice’ lessons without having installed capacities for practical implementation. A good example could be the import of expert-based review systems in countries where sufficient expertise is not available and where inherent flexibility and transparency requirements are absent in the governance model.

The overall findings suggest that the governance context seem to influence SEA capacity particularly in terms of the flexibility of institutional structures, the dynamics of coordination, the autonomy to engage in steering processes and use relevant decision windows, the transparency of both SEA and proposal processes, and the role of participation in SEA. In general, we are facing more constraints of a more normative and cognitive nature than a structural one.

Any process of change begins with the willingness to reflect and question current practices, and then accept that change is needed. In the adoption and review of SEA systems it may be important to understand first what is wanted from SEA and what might be needed to fit

to governance conditions. This appears to be needed to ‘enhance’ SEA capacity and improve the level of SEA institutionalisation that will enable the achievement of SEA purpose. And then explore and search for the adequate model of SEA that fits with the existing governance conditions. For example, to understand what are the values and expectations of actors, institutional capabilities, the cultural context, and the dynamics of the governance environment can provide positive lessons on what is influencing SEA and what might be the constraints and the enablers of a full institutionalisation of SEA.

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