

**Customers as decision-makers: strategic environmental assessment in the private sector**

JAY, S. A.

Available from Sheffield Hallam University Research Archive (SHURA) at:

<https://shura.shu.ac.uk/78/>

---

This document is the

**Citation:**

JAY, S. A. (2007). Customers as decision-makers: strategic environmental assessment in the private sector. *Impact assessment and project appraisal*, 25 (2), 75-84. [Article]

---

**Copyright and re-use policy**

See <http://shura.shu.ac.uk/information.html>

**Customers as Decision-makers:  
Strategic Environmental Assessment in the Private Sector**

**Stephen Jay**

Stephen Jay is a senior lecturer in Urban and Regional Studies, Sheffield Hallam University, Howard Street, Sheffield, United Kingdom, S1 1WB; Tel: +44 114-225 3211; E-mail: [s.a.jay@shu.ac.uk](mailto:s.a.jay@shu.ac.uk).

# **Customers as Decision-makers: Strategic Environmental Assessment in the Private Sector**

## **Summary**

Despite its diversification and global spread, strategic environmental assessment (SEA) remains limited mainly to activities characterised by well-defined planning processes, typically within the public sector. This article explores the possible application of SEA within certain private sector contexts where higher level strategy-making itself is inherently weaker and development is often piecemeal and reactive. The possible adaptation of SEA to the preparation of a strategic document by a particular industrial concern in the UK is examined, which draws attention to the multi-actor nature of development processes within the industry. This leads to the suggestion that SEA in this setting should be thought of as a form of environmental advocacy oriented towards industrial customers, who are understood as sharing a decision-making role in infrastructure development.

## **Keywords**

Strategic environmental assessment, decision-making, private sector, electricity industry, transmission companies, Seven Year Statement

## Introduction

The notion that strategic environmental assessment (SEA) should be sufficiently flexible in its approach for it to be adapted to a diverse range of strategic actions is now broadly accepted (Marsden, 1998; Partidário, 1999, 2000; Verheem and Tonk, 2000). This principle is now being demonstrated in a multiplicity of contexts, as SEA is being applied in different settings around the world, at various levels of strategic planning and in relation to a wide range of activities (Dalal-Clayton and Sadler, 2005; Jones *et al*, 2005; Schmidt *et al*, 2005). This reinforces an underlying conviction that environmental assessment should be practiced ever more widely and should bring its influence to bear upon all development processes that have significant environmental implications.

Along with this drive for the diversification and spread of SEA, attention has turned to the decision-making processes that the proponents of SEA are ultimately seeking to influence (Kørnørv and Thissen, 2000; Nilsson and Dalkmann, 2001). It is increasingly felt that the earlier focus of SEA, on simply shaping the formation of strategic proposals, was naïve, as it neglected the realities of how strategic proposals are handled in wider decision-making arenas. So there has been a growing consensus that decision-making processes themselves need to be better understood, and even carefully analysed, so that SEA can be designed to maximise its influence within them (Nitz and Brown, 2001; Partidário, 2005).

However, underlying this shift of focus to the decision-making dimension of strategic planning, and the willingness to shape SEA accordingly, there is a danger of assuming that ‘decision-making’ itself is a coherent and unified exercise, carried out by an authoritative body. Previous notions about the logical formation of strategic proposals and their translation into decisions may simply be transferred to the newly identified process of decision-making, which is now seen as SEA’s principal target. For example, one approach to SEA currently being advocated requires a careful analysis of ‘the decision-making process’ which, it is assumed, necessarily contains ‘decision windows’ “where critical choices are made”, and where SEA should therefore concentrate its efforts (Caratti *et al*, 2004, page 45).

In many contexts, the assumption that decisions are made in direct response to strategic options, and are made by bodies with the authority to implement them, may be justified. To date, SEA has been practiced mostly in relation to activities that come within relatively

centralised planning structures. This has typically involved the public sector or other institutions in which there are well-established, strong decision-making procedures. This expectation is reflected in the European Union's 'SEA Directive' (EC, 2001) (referred to below as the Directive), which places SEA in the hands of authorities with the competence to adopt the plans or programmes to which it applies.

However, when attention turns away from clearly defined processes of this kind, to more open-ended and diffuse activities, strategic 'decision-making' may be much more difficult to locate. There may be no authoritative proposals or documents on which individual decisions are based, and strategic decision-makers may not be clearly identifiable. It is possible, for example, that the planning of some activities takes place in a piece-meal and highly localised fashion, in the absence of adequate strategic frameworks. Here, there may be no clear strategic decisions to guide development, let alone that SEA can seek to shape. This is particularly likely to be the case in relation to activities which lie outside strong, centralised planning structures – most notably in the context of some private sector activities. So in considering the 'realities' of decision-making, its weakness and ill-defined nature in certain settings must be taken into account.

This is a feature that has, in fact, come to light in studies of possibly applying SEA to the activities of privatised utilities in the UK (Byron and Sheate, 1997; Sheate *et al*, 2004; Jay and Marshall, 2005). Here, private companies are responsible for large-scale and dispersed infrastructure usually inherited from state-owned enterprises, but which now operate in a business-oriented and competitive environment. This significantly complicates the forward planning of their activities, not to mention the overall strategic planning of the industrial sectors of which they form a part. This is unpromising ground for SEA so long as it is conceptualised as an accompaniment to authoritative, high-level planning.

This could lead to the conclusion that SEA is inappropriate in these settings, and that it should limit itself to the public sector activities to which it is best suited. Despite the difficulties involved, however, there is a need to address the application of SEA in contexts characterised more by private enterprise and market opportunity than by centralised planning. The most immediate argument in favour of this is the current global trend of the transfer of major industries into the private sector through national programmes of privatisation. This includes many sectors that have wide-ranging environmental consequences, and several that are

specifically named as coming within the scope of the Directive – waste management, water, telecommunications, etc. (EC 2001). Moreover, it can be shown that even in radically privatised settings, there are, at least, discrete opportunities for SEA to become established (Jay and Marshall, 2005, page 321). Finally, the adaptability of SEA to widely differing contexts has already been demonstrated, as indicated above, and suggests that its application to commercial activities should be within its reach.

This paper presents the findings of a study into the possible introduction of SEA in a privatised setting. The focus of this study is the UK electricity transmission industry, and, in particular, the challenges facing the application of SEA to the preparation of a regulatory document known as a Seven Year Statement. This study involved a careful analysis of the document's contents, the process by which it is prepared and its place within company-level decision-making, determined partly through interview of industry officers. This was followed by a systematic consideration of the applicability of a recognised form of SEA to the document. Along with this analysis, the nature of infrastructure development that operates within the sector is explored, and shown to be fundamentally different to that assumed in much SEA practice. This diverts the focus of SEA towards the external actors in development processes, and leads to a reinterpretation of the decision-making processes that SEA is seeking to influence.

## **Seven Year Statements: a Private Sector Opportunity for SEA?**

### Privatised Electricity Transmission

The UK electricity industry has undergone a radical form of privatisation and liberalisation since 1990. This has involved its break-up into separate commercial entities, so that its connected physical components<sup>1</sup> are no longer managed in an integrated manner, but are owned and operated by private companies with a considerable degree of competitive behaviour between them.

The high-voltage electricity transmission component of the system was placed in the hands of three regulated companies, which were given responsibility for networks in different geographical areas<sup>2</sup>. Each of the companies holds a transmission licence and has statutory

responsibilities. Their primary duties are “to develop and maintain an efficient, co-ordinated and economical system of electricity transmission; and... to facilitate competition in the supply and generation of electricity” (Electricity Act, 1989, section 9). This reflects, on the one hand, the regulated nature of transmission, which has continued as a monopoly activity, and on the other hand, the introduction of competitive behaviour into the wider industry, especially at the points of generation and supply. In this context, transmission companies provide a service to two groups of customers: generators, who feed into the system, and suppliers, who use the system in order to sell electricity to consumers. The transmission arrangements have recently undergone a further liberalising step; the three transmission systems are now being operated as a single entity, in order to facilitate competition across the whole of Great Britain (DTI, online). The system is now being managed by the main transmission company, National Grid, although the other companies retain ownership and development of their networks.

Transmission networks consist of overhead lines, their supporting towers (‘pylons’) and associated equipment, such as electricity substations. A diverse range of environmental concerns are often raised in relation to this infrastructure. These include: the despoilment of landscapes, especially in scenic areas; damage to the amenity of residential areas, through visual intrusion, noise, etc.; possible harm to wildlife, especially to birds that risk colliding with overhead lines; and the alleged risk to human health posed by the electro-magnetic fields emitted by the lines (Goult, 1990; Jay and Wood, 2002; Jay, 2006). Moreover, because transmission networks operate on large geographical scales, and consist of dispersed, linear infrastructure, these effects are extremely widespread and commonly experienced, and so lend themselves to being considered at a strategic level.

### Seven Year Statements

Under the conditions of their licences, and as a means of fulfilling their statutory duties, the transmission companies have had to draw up plans known as Seven Year Statements (SYS). A SYS is a strategic overview of a transmission system covering a period of seven years, though it is produced on an annual basis (and may be revised more frequently) (DTI, 2001). Until 2004, each licence holder produced its own SYS; however, National Grid is now responsible for drawing up a single ‘GB SYS’ to cover the three transmission networks, with

the assistance of the other license holders. A SYS is a public document, and is approved by the official industry regulator.

In broad terms, a SYS must include, firstly, technical information about the current transmission system, and secondly, an indication of where there is the greatest potential for new generating plant and increased use of the network. Beyond this, there are no precise requirements of what a SYS should contain, though there are common elements to the SYSs that licence holders have prepared since privatisation. An analysis of recent SYSs shows that they present several categories of information (National Grid Company, 2004; Scottish Hydro-Electric Transmission Limited, 2003; SP Transmission & Distribution, 2003).

1. Information about the current network. This provides a description and assessment of current infrastructure, such as:

- the type and location of transmission installations, and their linkages with generation plant and distribution networks;
- the performance of installations, possibly indicating reinforcement needs;
- the inter-regional transfer of electricity from areas of surplus generation to areas of high demand.

2. An account of projected works on the system, of an increasingly provisional nature over the SYS period:

- intended maintenance, upgrade, development etc., of transmission equipment;
- projects are typically ranked according to how far they have progressed through internal procedures, from those that are fully authorised to those at an early stage of planning.

3. An indication of possible future development of the system, taking into account current trends and system constraints:

- projections of electricity demand over the SYS period, and likely patterns of generation;
- possibilities for new connections to, and greater use of, the existing system (with planned works in mind);
- longer term possibilities for system development in the light of current trends, such as the accommodation of major sources of renewable energy.



SYSs therefore have a number of important forward-looking dimensions, of varying degrees of certainty and covering different time-scales, but with clear implications for the future shape of transmission networks. It is perhaps surprising, therefore, that licence holders tend not to assign clear planning functions to SYSs, but to see them as essentially descriptive documents. Officers typically refer to a SYS as a 'snapshot in time' of the state of a network, which indicates no more than the constraints and opportunities for development (personal communication).

This perspective is largely a consequence of the fragmented nature of the privatised industry, which means that the transmission companies have no ultimate control over the connections that are made to the system (of either generating plant on the one hand, or distribution and supply on the other). The transmission licence holders are under a statutory obligation to provide a connection to their networks for any customer who requests one, regardless of how well this may or may not coincide with optimum network development. A SYS cannot therefore be a determinative plan of action; it is more of a report on the current state of a network and on projects that implement agreements already made with customers. At most, it provides a rough guide to development, indicating where the technical feasibility, and therefore most cost-effective opportunities, exist for future connections. From a transmission company's point of view, a SYS can be seen as a means of advertising spare capacity on its network and inviting interest from potential customers, in line with the statutory duty of facilitating competition in the supply and generation of electricity. This is a very different context to that of the previously nationalised industry, in which greater strategic planning was possible; under privatisation, the 'unbundling' of the industry into independent components has made electricity networks into largely reactive businesses in which customer behaviour plays the primary role in network development. This lies behind the fact that SYSs have not, to date, been brought within the scope of the UK's SEA requirements.

#### Seven Year Statements and the SEA Directive

Hence SYSs do not carry the obvious planning authority necessary for them to be fall unquestioningly within the terms of the Directive (they are not included in the UK's 'indicative list' of plans and programmes subject to the Directive (ODPM *et al*, 2005, page

44)). In many other respects, however, SYSs could be considered candidates for SEA under the Directive (EC, 2001), because the Directive applies to plans and programmes which:

- are prepared for the energy sector (Article 3). Although electricity transmission is not specifically referred to in the Directive, the cross-reference to environmental impact assessment (EIA) legislation (see below) clearly brings transmission within its scope.
- are required under legal or administrative structures (Article 2). This captures SYSs, as they are required under the terms of a transmission licence.
- are prepared by an authority (Article 2), which is taken to mean “a body... which has been made responsible... for providing a public service under the control of the State” (EC, 2003, page 8). This includes privatised utilities when carrying out statutory duties, such as providing a supply of electricity.
- are likely to have significant environmental effects (Article 1). SYSs have important environmental implications, because of the potential environmental effects of transmission infrastructure (see above).
- set the framework for the future development consent of projects, specifically of project types listed in the EU's EIA legislation (Article 3). This draws into the Directive's territory any plans and programmes that set the conditions for the development of transmission infrastructure, especially overhead power lines as described in the EIA directive (EC, 1997).

If SYSs have so far escaped the scope of the Directive, it is because of the last of the above points, relating to plans and programmes that "set the framework for future development consent". This is understood to mean that "the plan or programme contains criteria... which guide the way the consenting authority decides an application for development consent" (EC, 2003, page 10); these criteria could include location and size of developments, cumulative effects, vulnerability of affected areas, etc. (as indicated in Annex II of the Directive). The question, therefore, is whether or not a SYS sets out a consenting framework in this way. Given that the development of a transmission network is determined by the requests that customers make for connections, at whatever points on the network they see fit, it is difficult to see how a transmission company could set out a strategic development framework, in a SYS or any other document. Any provisions laid down in a SYS could be overridden by customers making other choices, which the transmission licence holder would be under a statutory duty to facilitate.

Moreover, authorities that grant planning consent for transmission developments (usually central government bodies) do not refer to SYSs when considering applications. Transmission projects are considered in the light of government policy and local land-use plans, but SYSs do not currently assist the planning of transmission infrastructure, except in the sense of giving developers information about the possible use of the system (Marshall, 2003). Hence a SYS does not provide the level of authoritative, strategic planning that is needed for a plan or programme to fall within the scope of the Directive. This is symptomatic of the wider difficulties associated with infrastructure planning within the now fragmented and competitively-oriented electricity industry. It appears that this type of business-driven development context was not envisaged in the drawing up of the Directive. More generally, this also illustrates the difficulty facing the application of SEA in situations where strategic planning itself is weak and ill-defined (Jay and Marshall, 2005).

#### The Strategic Planning Role of Seven Year Statements

Despite the difficulties involved in capturing SYSs within all the necessary criteria of the Directive, there are features of SYSs that do, or could, fulfil strategic planning functions, and which therefore make SYSs amenable to SEA. The planning functions of a SYS can best be seen in relation to the three categories of information contained in a SYS described above.

1. Information about the current network. An account of the current state of a transmission system is an important preliminary stage of planning, as it provides baseline information at a regional or national scale that shapes the issues and options to be considered. From an SEA perspective, this aspect of a SYS could easily be extended to cover the current state of the environment as affected by the system (von Seht, 1999, page 6).

2. An account of projected works on the system. The projects described in a SYS effectively constitute a programme of works for the seven-year period, progressing from the most immediate that have been agreed, to those of a more provisional nature that depend at least partly upon future agreements with customers. This provides a strategic overview of actual and potential projects, which can be referred to when considering individual schemes. In SEA terms, this aspect of a SYS is effectively a programme, “a set of projects in a particular

area” (Wood and Djeddour, 1992, page 8). SEA could provide an assessment of the environmental implications of the full range of projects in view, and of possible cumulative effects. It is true that many of the projects indicated in a SYS are provisional, and likely to change according to customer behaviour, but it is in the nature of SEA to deal with tentative proposals, as strategic planning itself involves considerable levels of uncertainty (Partidário,1999).

3. An indication of possible future development of the system. The description of the technical potential for new connections and greater use of the system shows a SYS at its most strategic and forward looking. The focus is on the future shape of the transmission system as a whole, taking into account current and possible future trends, such as the expansion of renewable sources of energy. For instance, a SYS can indicate the most favourable locations for new connections and increased capacity on the network, because of more favourable geographical, environmental or technical conditions, and, conversely, can indicate where there are serious limitations for development. Proposals for development that are in line with these signals are likely to find applications for consents easier to negotiate. So although actual development will rely upon customer initiatives, a SYS provides an influential guide, which represents proactive, long-term thinking on the part of the licence holder. In SEA terms, this can be defined as policy, the “inspiration and guidance for action” (Wood and Djeddour, 1992, page 8). SEA could provide an assessment of the broad environmental implications of new connections and increased use of the network. This would then give signals to customers about the most environmentally acceptable options for development.

There are, therefore, important planning functions embodied in a SYS, even though its purpose is not overtly stated to be one of strategic planning, and despite the deciding role of customer initiatives in network development. Even though a SYS may not have as strong a role in decision-making as the plans and programmes envisaged by the Directive, it indicates, at the very least, preferences for future development, and expresses the licence holder’s influence over the shaping of its network. It could even be said that a SYS does set ‘a framework for development consent’ in the sense that it provides guidance to the wider industry about the preferred locations for system development, in a way that is analogous to a spatial plan indicating preferred patterns of land-use to private developers. Certainly, the limitations of a SYS in planning terms do not militate against carrying out an SEA exercise, which has the potential for incorporating environmental considerations more explicitly into

the document. In order to carry this out, however, SEA would need to be carefully tailored to the specific characteristics of a SYS, and, in particular, to its decision-making context (Nilsson and Dalkmann, 2001); this is explored below.

## **SEA for Customers**

SYSs are important public and strategic documents within the electricity industry, which are potentially amenable to SEA, and could then be a vehicle for environmental improvements in transmission networks and the wider industry. However, questions remain about the applicability of SEA in this setting, given the customer-oriented nature of the documents and the ensuing divergence from the more public forms of decision-making to which SEA has generally been applied.

In order to explore the possible adaptation of SEA in this context, an assessment was made of the practicalities of carrying out a recognised form of SEA on SYSs. The SEA process chosen was that recommended by the UK government for generic use in relation to plans and programmes that fall within the scope of the Directive (and which also fulfils the requirements of the UK SEA regulations). This guidance (ODPM *et al*, 2005) is based upon previous guidance issued to planning authorities for the assessment of land-use plans (ODPM, 2003), which in turn followed more widely advocated principles of SEA (Thérivel, 2004). At present, this ‘UK guidance’ would apply to the energy sector for any plans and programmes that were identified as coming within the scope of the Directive.

The UK guidance consists of a number of stages, each with key tasks that sometimes go beyond the strict requirements of the Directive. Overall, the guidance assumes that SEA will be carried out alongside the preparation of the plan or programme, in a closely integrated manner; it is fundamentally an assessment of a draft plan or programme. This fits in well with the preparation of land-use plans, where draft versions are clearly defined and open to consultation, public comment and revision. One of the questions that immediately arise is whether this approach is practical for other types of plan and programme.

Hence the feasibility of following the UK guidance in relation to a SYS was assessed, and any particular problems that might be encountered were considered. This included difficulties

associated with the privatised nature of the electricity industry, as well as those that arise from the particular features of a SYS. The analysis showed that in principle, many of the stages and tasks are feasible for a SYS, though a number of difficulties emerged, relating to the following issues.

### *1. Resources*

The application of the UK guidance to a SYS would be a resource-intensive and time-consuming exercise (especially in relation to baseline information and prediction of effects). It would require the commitment of substantial resources, which may be difficult to square with business objectives. However, it is increasingly accepted that SEA should be tightly focused on certain key issues, partly by ensuring that SEA is “customized to the characteristics of the decision making process” (IAIA, 2002). As far as a SYS is concerned, this means focusing on the environmental issues that are of greatest importance to network development, and which should be brought to the attention of customers. This should help to ensure the value of committing resources to SEA, and bring the SEA within the context of wider business objectives (Partidário, 2005, page 655).

### *2. Time-frame and Modifications*

A SYS is prepared on an annual basis, and may be revised more frequently than this. There would be considerable difficulties carrying out SEA within this time-frame and modifying the SYS accordingly. The UK guidance is more geared towards the lengthy process of preparing land-use plans, which allows for extensive consultation, than the relatively rapid compilation of a private-sector plan. For SEA to be conducted within a tighter time frame, a more streamlined SEA process would need to be put in place, by focusing on key issues and by reducing the number of SEA steps where possible. For example, consultation could be carried out speedily, and in a single step rather than the two steps recommended in the UK guidance. These short-cuts would be counterbalanced by the fact that the preparation of a SYS takes place frequently, on an annual cycle, so that if it is not possible to implement fully the findings of one year’s SEA immediately (such as consultation responses), they can feed directly into the following year’s revision. SEA would thus be a rolling programme accompanying the SYS’s own annual review. Each environmental report would provide an important resource for the preparation of each subsequent SYS, and could be widely disseminated within the company for this purpose.

### 3. *Reliance on Customer Initiatives*

Because a transmission licence holder has only limited control over its network, a SYS can only present tentative proposals for network planning. Actual development relies upon, or is subject to, customer initiatives. This restricts the licence holder's ability to consider, for example, strategic alternatives, as required by the UK guidance. This is the most fundamental difficulty facing SEA of a SYS, as SEA practice generally assumes that the body responsible for a strategic action has the freedom to shape that action in the light of SEA. This shifts the decision-making element of strategic planning partly away from the licence holder, and onto the customers; it is their business initiatives which will, to a large extent, determine the future shape of the network. They are "key stakeholders in the decision-making process" (Partidário, 2000, page 660). SEA of a SYS must be sensitive to this decision-making context, and must turn its focus towards this commercial setting. The priority should be to concentrate on environmental issues which are of most relevance to potential customers, and to present environmental information that will help them in considering their plans for development. In this way, SEA can complement a SYS's regulatory purpose of providing customers with the technical information that will assist them in knowing where there is greatest potential for development. Indeed, it could be argued that systematic knowledge of environmental issues and constraints is currently missing, and that by providing this, SEA will facilitate future development (and therefore competition) in the sector. SEA, when linked to a SYS, could enable a licence holder to give a stronger lead to customers regarding the parameters of environmentally acceptable development. This would then facilitate consent procedures for both customers and the licence holder when providing new connections. Along these same lines, SEA could be a means of bringing to the attention of customers the wider environmental policy and planning framework within which they must operate.

### 4. *Weakness of Strategic 'Decision-making'*

The UK guidance tacitly assumes a well-defined 'decision-making' stage, at which the plan or programme is given final approval, and to which the SEA contributes the relevant environmental information. In the case of a SYS, however, there is not a strong element of decision-making of this kind; the only hierarchical decision-making is in the form of minor input to the content of a SYS from the regulator and from company management. This is a reflection of the licence holder's relatively weak role in forward planning; a SYS is designed primarily to give information to third parties, rather than definitively direct future development. This is again a reflection of the dependence on customer initiatives; 'decision-

making' effectively lies beyond the organisation. But one decision-making element remains within the remit of the licence holder, which is to decide, through the SYS, what signals to give to potential customers. This element of decision-making could be strengthened if it included clear environmental guidance. This could be facilitated by a final version of a SYS, along with its environmental report, receiving high-level backing from within the company, as well as approval from the regulator.

#### 5. *External Involvement and Commercial Confidentiality*

The UK guidance assumes a considerable degree of external consultation and opportunity for public comment throughout the SEA process. Public justification also has to be given for the final decisions made about a plan or programme. This is in line with more general principles of SEA, which stress the importance of taking into account the views of official and other interested bodies and the wider public (Verheem and Tonk, 2000). However, the preparation of a SYS is an essentially internal process not given to external consultation of this kind. There may also be issues of commercial confidentiality involved in the thinking behind a SYS, regarding, for example, negotiations with customers for possible future connections to the system. In principle, a published SYS is in the public domain, but SEA effectively requires greater openness and public scrutiny in the preparation of the SYS. There should, therefore, be a consultation phase in the preparation of a SYS, with the intention that responses are carried over to the following year's SYS if they cannot be incorporated more immediately (Thérivel and Minas, 2002, page 82). The importance of external involvement in SEA makes issues of commercial confidentiality more acute; this may, at least, be acknowledged in the environmental report.

#### 6. *Company Image*

Certain aspects of SEA may be seen as compromising company image. For example, the identification of 'environmental problems', as recommended in the UK guidance, may lead to a company's activities being projected as harmful to the environment. The explicit acknowledgement of poor environmental performance would be unattractive to a licence holder. However, existing environmental conditions that fall short of desired standards may be used as the basis for setting achievable targets for improved performance. This corresponds with SEA's role of setting in train better practice (Partidário, 2000), which can deliver improvements on the ground, and also advance an organisation's environmental



profile. Moreover, a strong commitment to SEA can be projected, and contribute positively to a company's environmental image.

Hence there are difficulties associated with the application of the UK guidance to a SYS, partly due to the nature of the guidance itself, which is not well adapted to a document like a SYS. The guidance is designed more to fit in with the iterative, consultative, publicly accountable character of local authority plan-making than the relatively rapid, regulatory, internal approach to preparing a SYS. The above analysis therefore implies that current, official approaches to SEA may be unduly restricting the application of SEA. But the analysis also brings to light issues related more fundamentally to the character of the industry responsible for SYSs. Its business objectives, the restricted remit of its activities and the competitive environment in which it operates do not sit easily with the assumptions underlying the UK guidance, nor, in fact, with some of the tenets of SEA in general. However, there are indications of how SEA could be adjusted to this context. In summary, the following points should be considered.

- Streamline the SEA process, bringing it within a rapid timeframe, conceiving of it as a rolling programme to accompany and inform the frequent review of a plan.
- Direct the SEA to actual or potential customers, by concentrating on key environmental issues that should be brought to their attention, and which will enable them to work within the limits of environmentally acceptable development.
- Bring the SEA within the context of an organisation's wider environmental commitments, thus justifying the necessary resources, providing the basis for improved environmental performance and contributing to a company's environmental policy and image.
- Address possible reluctance for greater openness and public scrutiny in the preparation of a plan, and enable wider consultation.

## **Conclusions**

To date, there has been extremely limited interest shown by private sector organisations in SEA, and little expansion of SEA to cover their activities. Although project-level environmental assessment is well established within certain sections of industry, there has been a reluctance to acknowledge the possible relevance of SEA to many industrial concerns

(Ertel, 2005). It has been suggested that difficulties of this kind are likely to arise because of the more confidential and economically-driven nature of the private sector (Thérivel and Brown, 1999, page 445). However, the example of a privatised utility explored in this article suggests that resistance to SEA may also be more fundamentally a reflection of the broader difficulties of strategic-level planning within certain contexts. Strategic management and planning is of course an important activity within business organisations (eg. Cole, 1994; Thompson and Martin, 2005). However, this operates within the relatively narrow confines of the interests of individual companies, which are typically operating in competition to similar organisations, and does not generally contribute to any planning of the wider sectors of which they are a part. Strategic thinking at this higher level, particularly insofar as it has implications for infrastructure development which may have significant environmental effects, is inherently difficult where activities are fragmented across different organisations, as epitomised in the case of privatised utilities. So although private organisations may pursue strategies that aim to achieve their individual goals, they are likely to have a much more limited role with regard to broader strategic initiatives.

Nonetheless, individual companies in settings of the kind explored in this article may not be as constrained with regard to strategic planning as at first appears. For example, organisations that rely heavily upon third parties to determine future development still have an important part to play in providing signals about the most feasible and acceptable options open to them. This guiding role may be a significant factor in shaping patterns of development, and one that is likely to operate at a strategic level - as illustrated by the case of a transmission company's SYS. Moreover, leads of this kind are potentially amenable to environmental input through SEA, as has been demonstrated above. This is a weaker planning context than that envisaged by the Directive, and is difficult to capture within the strict terms of the Directive. (Questions can also be raised about the applicability of official guidance designed for public sector activities to very different development contexts of this kind.) But the formation and communication of signals for development opens up the possibility of applying SEA in contexts where that development is determined primarily by business-led initiatives.

Seeking appropriate forms of SEA for private sector activities of this kind is in line with the broader SEA principle of flexibility and adaptation to ever more diverse planning contexts (Verheem and Tonk, 2000). This approach focuses on seeking to understand the decision-making framework within which SEA might be practiced. In this regard, formally

documented, strategic decision-making procedures are less likely to be in evidence than in more familiar SEA settings (though where they do exist, such as the preparation of a SYS, this may be a valuable starting point for SEA). It could even be questioned whether strategic decision-making occurs in any meaningful way in certain contexts, given the piecemeal, and reactive or opportunistic, manner in which development may proceed, as illustrated above.

However, an open and diffuse form of ‘decision-making’ may well be discernable, as opposed to the more systematic and authoritative processes to which SEA has generally been applied. This comes to light particularly if consideration is given to the various actors involved in development processes, and if their roles and interrelationships are explored. So in the example above, the crucial element to network planning was the organisation’s relationship with external actors, i.e. the customers whose initiatives determine to a large extent the future shape of development. Although the (transmission) company that operates at a strategic-level has limited ability to set its own strategic goals, it is nonetheless in a position to negotiate with potential customers, and these negotiations give rise to outcomes with strategic consequences. This provides the key to the role that SEA might play: “there is a need to identify... who is involved and who is making the decisions implicit in the policy making, and the type and form of environmental information that is pertinent to this decision-making” (Nitz and Brown, 2000, page 332).

In this regard, Kørnø and Thissen (2000) have drawn attention to multi-actor understandings of decision-making, in which “mutual dependencies and the distribution of power amongst participants characterise the process” (page 194). This underlies a number of distinct theories of decision-making; of these, the notion of policy networks may be particularly relevant, as this highlights the importance of relationships between bodies that come together to address specific issues, especially in relation to relatively discrete, sectoral areas of policy (John, 1998, page 78). Although different bodies will have their own interests, they have broad objectives in common, and there is some degree of mutual dependence as they seek to advance their goals, expressed by the exchange of information and other resources (Kickert *et al*, 1997). This model is exemplified by the interdependence of industrial bodies - such as a transmission company and its customers, particularly when the development of large scale infrastructure serving those customers is under consideration.

In addition, within this understanding, it is assumed that each participant will attempt to influence decisions in favour of its more specific advantage. “Actors need each other because of the interdependencies that exist, but at the same time try to steer towards their own preferences” (Kickert *et al*, 1997, page 32). This opens the door for environmental interests to be promoted by certain bodies within a network, via SEA for example. Here, SEA is itself understood to play an environmental advocacy role (Kørnø and Thissen, 2000, page 197). It is, perhaps, for the actor with the strongest voice in strategy-making to adopt this stance, and to pursue the environmental priorities implicit in SEA. As far as the development context described in this article is concerned, the clearest opportunity for this approach lies with regulated transmission companies, who act as focal organisations and continue to hold some strategic responsibilities, ultimately managing whole systems for the benefit of their users. (There is also scope for drawing into the notion of a network the official industry regulator.)

For such an advocacy role to be assumed, however, there needs to be a clear interest for an actor taking this position. In a business context, this stance is unlikely to rely purely on an actor being environmentally-proactive, but will need to be based on wider business interests. This will mean demonstrating the commercial, and possibly competitive, advantage of adopting a strongly environmental position of the kind presupposed in SEA. In other words, direct links need to be made between SEA and business objectives, so-called win-win situations where SEA may facilitate development processes (Partidário, 2005, page 655). Suggestions have been made in this regard, whereby SEA may assist compliance with environmental regulations, facilitate consents procedures for development projects, reinforce corporate environmental policy and image, attract investment and influence stakeholders (Jay and Marshall, 2005; Marshall and Fischer, 2005, 2006). Again, the opportunity exists for a key organisation within a multi-actor setting to assert the benefits to the industry as a whole of prioritising environmental considerations.

It is possible, therefore, to envisage an organisation taking a position in favour of environmental protection via an SEA framework, and seeking to influence its customers via the SEA process. Moreover, this need not be limited to an information-providing exercise, in which customers are simply informed of the possible environmental constraints and consequences of the options open to them. An SEA process itself could be a means of negotiating with customers agreed positions with regard to environmental protection, especially through the mechanism of consultation, and therefore be a process of dialogue and

learning amongst multiple actors (Owens *et al*, 2004). Key to this application of SEA, however, is the recognition that those actors that lie beyond the normal reach of strategy-making are in fact shared decision-makers, and that there is a mutually dependent role of all actors in the shaping of future patterns of development.

## Notes

<sup>1</sup> The *generation* of electricity in power stations, etc., the long-distance, high-voltage *transmission* of electricity, usually on overhead power lines, and the more localised, lower voltage *distribution* of electricity to consumers. In addition, the sale of electricity to consumers is treated as a separate *supply* function.

<sup>2</sup> National Grid covered England and Wales, and Scottish Hydro-Electric and Scottish Power covered different parts of Scotland. These arrangements therefore covered Great Britain (GB), rather than the whole of the UK (different arrangements were applied in Northern Ireland).

## References

Byron, H and W Sheate (1997), "Strategic environmental assessment: current status in the water and electricity sectors in England and Wales", *Environmental Policy and Practice*, 6 (4), pages 155-165.

Caratti, P, H Dalkmann and R Jiliberto (editors) (2004), *Analysing Strategic Environmental Assessment; Towards Better Decision-making* (Edward Elgar, Cheltenham).

Cole, GA (1994), *Strategic Management: Theory and Practice* (GP Publications, London).

Dalal-Clayton, B and B Sadler (2005), *Strategic Environmental Assessment: a Sourcebook and Reference Guide to International Experience* (Earthscan, London).

DTI, Department of Trade and Industry (online), "British electricity trading and transmission arrangements", available at <<http://www.dti.gov.uk/energy/markets/electricity-markets/betta/page30130.html>>, last accessed 12 December 2006.

DTI, Department of Trade and Industry (2001), *Electricity Transmission Licence: Standard Conditions* (DTI, London).

EC, European Commission (1997), "Council Directive 97/11/EC of 3 March 1997 amending Directive 85/337/EEC on the assessment of the effects of certain public and private projects on the environment", *Official Journal of the European Communities*, L 73, 14 March 1997, pages 5-15.

EC, European Commission (2001), "Directive 2001/42/EC of the European Parliament and of the Council of 27 June 2001 on the assessment of the effects of certain plans and programmes on the environment", *Official Journal of the European Communities*, L 197, 21 July 2001, pages 30-37.

EC, European Commission (2003), *Implementation of Directive 2001/42/EC on the Assessment of the Effects of Certain Plans and Programmes on the Environment* (European Communities, Luxembourg).

Ertel, J (2005), "A critique of SEA from the point of view of the German industry", in M Schmidt, E Joao and E Albrecht (editors), *Implementing Strategic Environmental Assessment* (Springer, Berlin) pages 665-672.

Gouly, G (1990), *Visual Amenity Aspects of High Voltage Transmission* (Research Studies Press, Taunton).

IAIA, International Association for Impact Assessment (2002), "Strategic environmental assessment performance criteria", Special Publication Series No. 1 (IAIA, Fargo), available at < [http://www.iaia.org/Members/Publications/Special\\_Pubs/sp1.pdf](http://www.iaia.org/Members/Publications/Special_Pubs/sp1.pdf) >, last accessed 15 December 2006.

Jay, S (2006), *High Voltage Electricity Installations: a Planning Perspective* (John Wiley & Sons, Chichester).

Jay, S and R Marshall (2005), "The place of strategic environmental assessment in the privatised electricity industry", *Impact Assessment and Project Appraisal*, 23 (4), pages 315-324.

Jay S, and C Wood (2002), "The emergence of local planning authority policy on high voltage electricity issues", *Journal of Environmental Policy and Planning*, 4, pages 261-274.

John, J (1998), *Analysing Public Policy* (Continuum, London).

Jones, C, M Baker, J Carter, S Jay, M Short and C Wood (editors) (2005), *Strategic Environmental Assessment and Land-use Planning: An International Evaluation* (Earthscan, London).

Kickert, W, E Klijn and J Koppenjan (editors) (1997), *Managing Complex Networks: Strategies for the Public Sector* (Sage, London).

Kørnø, L and W Thissen (2000), "Rationality in decision- and policy-making: implications for strategic environmental assessment", *Impact Assessment and Project Appraisal*, 18 (3), pages 191-200.

Marsden, S (1998), "Importance of context in measuring the effectiveness of strategic environmental assessment", *Impact Assessment and Project Appraisal*, 16 (4), pages 255-266.

Marshall, R (2003), "SEA and energy part 1: the application of statutory and non-statutory SEA in UK electricity transmission and distribution network plans and programmes", paper

presented at the International Association for Impact Assessment Conference, Marrakech 17-20 June.

Marshall, R and T Fischer (2005), "Best practice use of SEA: industry, energy and sustainable development", in M Schmidt, E Joao and E Albrecht (editors), *Implementing Strategic Environmental Assessment* (Springer, Berlin) pages 673-690.

Marshall, R and T Fischer (2006), "Regional Electricity Transmission Planning and SEA: The Case of the Electricity Company ScottishPower", *Journal of Environmental Planning and Management*, 49 (2), pages 279 – 299.

National Grid Company (2004), *National Grid Seven Year Statement for the Years 2004/05 to 2010/11* (National Grid Company plc, Warwick).

Nilsson, M and H Dalkmann (2001), "Decision making and strategic environmental assessment", *Journal of Environmental Assessment Policy and Management*, 3 (3), pages 305-327.

Nitz, T and A Brown (2001), "SEA must learn how policy making works", *Journal of Environmental Assessment Policy and Management*, 3 (3), 329-342.

ODPM, Office of the Deputy Prime Minister (2003), *The Strategic Environmental Assessment Directive: Guidance for Planning Authorities: Practical Guidance on Applying European Directive 2001/42/EC "on the assessment of the effects of certain plans and programmes on the environment" to Land Use and Spatial Plans in England* (ODPM, London).

ODPM *et al*, Office of the Deputy Prime Minister, Scottish Executive, Welsh Assembly Government, Department of the Environment, Northern Ireland (2005), *A Practical Guide to the Strategic Environmental Assessment Directive: Practical Guidance on Applying European Directive 2001/42/EC "on the assessment of the effects of certain plans and programmes on the environment"* (ODPM, London).

Owens, S, T Rayner and O Bina (2004), "New agendas for appraisal: reflections on theory, practice, and research", *Environment and Planning A*, 36(11), pages 943 – 1959.

Partidário, M (1999), "Strategic environmental assessment: principles and potential", in J Petts (editor), *Handbook of Environmental Impact Assessment* (Blackwell Science, Oxford) Volume 1, pages 60-73.

Partidário, M (2000), "Elements of an SEA framework: improving the added-value of SEA", *Environmental Impact Assessment Review*, 20 (6), pages 647-663.

Partidário, M (2005), "Capacity building and SEA", in M Schmidt, E Joao and E Albrecht (editors), *Implementing Strategic Environmental Assessment* (Springer, Berlin) pages 649-663.

Schmidt, M, E Joao and E Albrecht (editors) (2005), *Implementing Strategic Environmental Assessment* (Springer, Berlin).

Scottish Hydro-Electric Transmission Ltd (2003), *Seven Year Transmission Statement 2003: for the years 2003-2004 to 2009/2010* (Scottish Hydro-Electric Transmission Ltd, Perth).

Sheate, W, H Byron and S Smith (2004), “Implementing the SEA Directive: sectoral challenges and opportunities for the UK and EU”, *European Environment*, 14, pages 73-93.

SP Transmission & Distribution (2003), *Transmission Seven Year Statement for the Years 2003-2004 to 2009/2010* (SP Transmission Ltd, Glasgow).

Thérivel, R (2004), *Strategic Environmental Assessment in Action* (Earthscan, London).

Thérivel, R and AL Brown (1999), “Methods of strategic environmental assessment”, in J Petts (editor), *Handbook of Environmental Impact Assessment* (Blackwell Science, Oxford) Volume 1, pages 441-464.

Thérivel, R and P Minas (2002), “Ensuring effective sustainability appraisal”, *Impact Assessment and Project Appraisal*, 20(2), pages 81-91.

Thompson, J and F Martin (2005), *Strategic Management: Awareness and Change*, 5th edition (Thompson, London).

von Seht, H (1999), “Requirements of a comprehensive strategic environmental assessment system”, *Landscape and Urban Planning*, 45, pages 1-14.

Verheem, R and J Tonk (2000), “Strategic environmental assessment: one concept, multiple forms”, *Impact Assessment and Project Appraisal*, 18 (3), pages 177–182.

Wood, C and M Djeddour (1992), “Strategic environmental assessment: EA of policies, plans and programmes”, *Impact Assessment Bulletin*, 10 (1), pages 3-22.