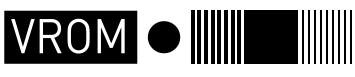
Strategic Environmental Assessment at the Policy Level

Recent Progress, Current Status and Future Prospects

Edited by Barry Sadler

THE REGIONAL ENVIRONMENTAL CENTER
for Central and Eastern Europe



A volume prepared by the Regional Environment Centre for Central and Eastern Europe on behalf of the Czech Ministry of Environment as a contribution to the implementation of the UNECE Protocol on Strategic Environmental Assessment and to the discussion at the IAIA Global Conference on SEA (26-29 September, 2005, Prague). It contains additional materials and updated papers from the proceedings of a workshop on SEA at the policy level organised on behalf of the Netherlands Ministry of Housing, Spatial Planning and Environment (VROM)

The views expressed in this volume are those of the individual contributors and should not be taken to represent the official position of any of the organisations whose names or logos appear on the title page or elsewhere.

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Strategic Environmental Assessment at the Policy Level: Recent Progress, Current Status and Future Prospects

About this Volume

This volume comprises a review of SEA systems that apply primarily or partly to policy or legislation. It takes stock of experience at this level in Canada, Czech Republic, Denmark, Finland, Hong Kong SAR, the Netherlands, New Zealand, Norway, United Kingdom and the World Bank. A major aim in bringing this information together is to provide background material that Parties to the SEA Protocol may find helpful in supporting future work on its application at the level of policy or legislation. This publication also has been commissioned by the Czech Ministry to inform ongoing work on SEA of national policies in the Czech Republic and to contribute to the discussion at the IAIA Global Conference on SEA (26-29 September, Prague). In addition, it is hoped that publication will be of wider interest and prove helpful to SEA practitioners and others active in the field, internationally.

About the Work of the Signatories to the Protocol on Strategic Environmental Assessment

Pending the entry into force of the SEA Protocol, the Meeting of the Parties to the Convention on Environmental Impact Assessment in a Transboundary Context (the mother convention of the Protocol on SEA) adopted a work plan that provides for: (a) the analysis of SEA capacity-building needs in Eastern Europe, the Caucasus and Central Asia; (b) the production of a capacity development manual to support the application and implementation of the Protocol; and (c) institutional and procedural activities in preparation for the first meeting of the Parties to the Convention serving as the Meeting of the Parties to the Protocol. The capacity development manual does not consider in detail the application of the Protocol to policies and legislation; so this volume provides a helpful supplement to the wider work plan of the Convention.

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From the Minister

A number of the papers included in this volume were first developed as part of work commissioned by the Netherlands Ministry of Housing, Spatial Planning and the Environment (VROM). The generous contribution of the Ministry in making this work available for further publication is gratefully acknowledged.

All of the papers for the VROM project have been updated for this volume and others added. The commitment of the individual authors was invaluable in completing this process and thanks are extended to all contributors. The editor also wishes to extend personal thanks for the guidance and input of Mr FMC van Dreumel in developing the original work on which this volume is based, and to Mr JJ de Boer for his initial support.

The production of this volume has been undertaken by the Regional Environmental Centre for Central and Eastern Europe through the Czech National Office with the financial assistance of the Czech Ministry of Environment. The Ministry has sponsored this publication to help support any future work that Parties to the SEA Protocol may decide to undertake on policies and legislation and as a contribution to discussions at the IAIA Global Conference on SEA (26-29 September, Prague).

We also expect to make use of the information and guidance from the other countries and international organisations represented in this volume in implementation of the provisions of the new Czech EIA/SEA Act as they relate to development concepts.

I hope that others will find this information of assistance.

Libor Ambrozek
Minister of the Environment
Czech Republic

Foreword

This volume has several antecedents and precedents. Firstly, it has roots in an international study, which was among the first to address the issue of SEA of policy and the particular features that differentiate this level from SEA of plans and programmes. Secondly, it has current application and possibly future relevance to work underway in a number of countries to address the environmental considerations at the highest level of decision making, including submissions to a cabinet, parliament or an equivalent political executive or statutory body. Thirdly, it may be of interest for any future work under Article 13 of the SEA Protocol signed by member states of the UNECE region at the Ministerial Conference "Environment for Europe" which was held in Kiev in 2003.

An initial version of this volume was prepared in 2001 under contract to the Netherlands Ministry of Housing, Spatial Planning and the Environment (VROM in Dutch). It was commissioned to update an earlier report on SEA of Policy issued as VROM publication no. 54 as part of the Netherlands' contribution to the international study of the effectiveness of environmental assessment. This report and the 1994 workshop on which it was based were also part of the information gathering that the Ministry undertook in drafting the E-test of regulations and policies.

In the interim, there have been significant developments in SEA procedure, methodology and practice internationally and within the European Union. As part of the update of the volume on SEA of Policy, an international workshop was held at The Hague in 2002 attended by participants from ten countries and international agencies. The 2002 workshop was held at a time of considerable activity in SEA development: European Union member states were beginning to address the transposition of the SEA Directive (2001/EC/42); a critical evaluation of the Netherlands' e-test had just been completed; and the SEA Protocol to the Espoo Convention was being drafted by the UNECE Working Party with draft Articles on policy and legal acts proving to be particularly demanding.

The Ministry is pleased to release this earlier material for a wider readership but assumes no responsibility for the contents or purposes of this volume.

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Preface

The Protocol on Strategic Environmental Assessment (Protocol on SEA) was adopted by the Parties to the Convention on Environmental Impact Assessment in a Transboundary Context (the 'Espoo Convention')[1] at their extraordinary meeting in Kiev (Ukraine) on 21 May 2003. Thirty-five States and the European Community (EC) signed the Protocol in Kiev, with one other State signing later. The Parties also adopted a Resolution on the Protocol that determined that a meeting of the Signatories should be held.

For the first preparatory meeting for the first meeting of the Signatories to the Protocol, held in Geneva on 27-28 November 2003, the UNECE secretariat prepared a background paper presenting possible elements for a workplan for the Protocol[2]. The UNECE paper described a number of possible activities that might be considered, among others, for inclusion in the workplan. The Protocol's workplan was later incorporated within the workplan adopted for the Convention at the third meeting of the Parties to the Convention, held in Cavtat (Croatia) on 1-4 June 2004.

Among other issues, the activities described in the paper addressed the application of the Protocol to policies and legislation. The Protocol allows for the application of SEA methodology to policies and legislation, though the provision is flexible: "Each Party shall endeavour to ensure that environmental, including health, concerns are considered and integrated to the extent appropriate in the preparation of its proposals for policies and legislation that are likely to have significant effects on the environment, including health" (art. 13, para.1). Nonetheless, Parties are required to report on their application of the provision (art. 13, para. 4).

The UNECE paper considered that those Parties wishing to consider and integrate environmental concerns in preparing policies and legislation might well require advice. Clear and simple advice was likely to do much to promote the application of the Protocol to policies and legislation. There was already considerable experience within the UNECE member States of applying SEA to policy and legislation, and thus extensive literature and guidance material were available.

Though the Directive does not deal with policies and legislation, the European Commission's intention was to subject all major policy initiatives (including regulatory proposals) to an assessment of their potential economic, social and environmental impacts, and it was preparing technical guidelines for implementation (which were due in September 2002)[3]. Impact assessment would be required for: "regulatory proposals, such as directives and regulations, and, in an appropriate form, other proposals such as white papers, expenditure programmes and negotiating guidelines for international agreements that have an economic, social or environmental impact."

The UNECE paper suggested that a very short questionnaire might be sent to UNECE Member States that already have legislation or guidelines in place for the SEA of policies and legislation. This questionnaire might be used to identify examples of best practice in the application of SEA to policies and legislation, and to identify suitable guidance material for distribution. The European Commission's technical guidelines for SEA of major policy initiatives might also be promoted. Training events and workshops would be needed to develop skills in SEA methods for policies and legislation.

The Signatories did not include the secretariat's proposal in the Protocol's workplan. However, this volume fulfils part of the proposal and provides material to promote the application of the Protocol to policies and legislation.

The workplan did provide for the preparation of a capacity-development manual to support the implementation, and application, of the Protocol. However, at the time of writing, the draft manual provides only limited information on the application of the Protocol to policies and legislation. The workplan also provided for the analysis of capacity-building needs in Eastern Europe, the Caucasus and Central Asia.

For the Protocol to enter into force, sixteen Member States need to ratify it (or accede to it, etc). At the time of writing, one Signatory had ratified the Protocol and there was an expectation that it would enter into force in 2006 or 2007. Once in force, the Parties would meet within one year. At their first meeting, the Parties would be expected to adopt a new workplan, among other things, which might again be incorporated within the workplan of the Convention. The Signatories to the Protocol had yet to decide on activities to be included in the draft workplan, but some might wish to extend the content of the manual to address more fully policies and legislation, as a complement to this volume. It is expected that the development of States' capacities to implement the Protocol will again be the focus of the workplan.

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1) The Convention was adopted in Espoo (Finland) in 1991 and entered into force in 1997. See http://www.unece.org/env/eia.
2) UN document reference MP.EIA/AC.3/2003/2.
3) European Commission, Communication from the Commission on Impact Assessment, COM(2002) 276 final (Brussels, 5 June 2002).

Finally, UNECE Member States (from Canada and the United States of America, through Europe, to the Caucasus and Central Asia) may become Parties to the Protocol pending its entry into force. However, once in force, other UN Member States may accede upon approval (by the existing Parties) to the Protocol, and several States have already indicated an interest in doing so.

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4) The views expressed herein are entirely those of the authors and these views should not be taken out of context or cited without prior permission. They do not necessarily reflect the views of the UNECE, its Member States, the Parties to the Espoo Convention or the Signatories and Parties to the Protocol on SEA.

5) United Nations Economic Commission for Europe. See http://www.unece.org/.

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Chapter 1
Initial Perspectives on SEA at the Policy Level

Barry Sadler

Introduction

In the past ten years, there have been major advances in SEA process development and implementation. Currently, this field is in the midst of further change, particularly in the European Union (EU) where new supra national and international legal regimes have come into force or soon will do so. The SEA Directive (2001/42/EC)[6] and the SEA Protocol to the UNECE Convention on EIA in a Transboundary Context (2003) have major implications for SEA practice in member states and signatory countries, respectively. Many procedural requirements of the Directive and the Protocol are closely aligned and this convergence likely will promote a more standardised, EIA-derived approach to SEA of plans and programmes.

A major issue in the negotiation of both instruments was the scope of SEA application, particularly in relation to policy, which is omitted from the Directive and included in the Protocol (together with legislation) only as a non-binding provision (although there is mandatory reporting by signatories). This issue is far from settled. Questions concerning the role of SEA in policy-making are likely to resurface, by design under a future work programme of Parties to the SEA Protocol[7] or by default under the SEA Directive once plans and programmes 'with policy intent or content' become subject to assessment. In the interim, it may be useful to consider these developments in relation to broader trends and issues in SEA of policy, internationally.

SEA practice at this level is still limited to a relatively small group of countries and international organisations, including those represented in this volume. Yet the number of such jurisdictions has increased markedly in the decade since the Hague forum on SEA of policy (see foreword), which provided an early milestone of progress in this area (de Boer and Sadler 1996). Today, the body of comparable experience is far richer and more diverse, particularly if a broad view is taken of SEA. Beyond designated SEA systems, many other strategic instruments are now used in policy design and new approaches are emerging all the time. These instruments have the same aims but not necessarily all of the features and elements of SEA as formally prescribed in Directive 2001/42/EC or the SEA Protocol.

In this volume, the focus is on SEA systems and process that apply primarily or partly to proposals at the policy level, including draft bills and other legal acts. Key objectives are:

- to review the institutional arrangements that are in place in leading countries and international organizations;
- to identify their main features and elements of approach; and
- to draw lessons of experience from SEA implementation and, where possible, to benchmark good practice.

As indicated in the title, the purpose of this chapter is to provide an initial overview of SEA at the policy level. First, it unpacks SEA terms and concepts and their relationship to policy-making. Second, it surveys our current understanding of the dimensions of policy with reference to SEA application. Third, it outlines evolving approaches to SEA of policy. Fourth, it annotates the opportunities and constraints for applying SEA to policy and law-making, and adapting it to their particularities. Finally, it summarises the rationale of this review and the organisation of the overall volume.

SEA Terms, Concepts and Relationships to Policy

SEA definitions are much like music: minor variations derived from a common theme and compressed into a narrow band width

Many definitions of SEA have been proposed and new ones continue to be introduced in the rapidly expanding literature on the subject. For simplicity, these can be broken down into 'generic' and 'procedural' definitions of SEA. Both attempt to

6) The full title is Directive 2001/42/EC of the European Parliament and of the Council on the assessment of the effects of certain plans and programmes on the environment.

7) The UNECE Secretariat has drafted an informal work programme for possible implementation by the Parties to the SEA Protocol (MP.EIA/AC.3/2003/3).

Box 1: SEA approaches and their application to policy

SEA is interpreted broadly to include the following approaches:

- *SEA as a formally prescribed process* under legal or administrative arrangements established by countries and international instruments
- *Near-equivalent processes that* correspond to SEA in their aims and elements of approach but are applied informally or flexibly as part of policy or law-making
- *Para-SEA* processes and elements, which have the same function as formal SEA processes but only some of their characteristics.

Policy is understood as including the following areas:

- *Legislation* including draft bills, regulations, rules and agreements
- *Government strategies, papers, memoranda or statements* of intent that outline new policies or proposed directions or options at the highest level, and
- *Norms, guides, principles or arrangements* that are understood or acted upon as if they were policy or law.

Sources: adapted from Sadler (1994), Buckley (1998), Dalal-Clayton and Sadler (2005)

capture the fundamental characteristics that are common to all forms of SEA; the former without reference[8] and the latter with reference[9] to particular EIA-related elements as defining (such as preparing a written report). With regard to policy, 'procedural' definitions of SEA may be considered as more restrictive in potentially excluding certain approaches that are used already or potentially apply at this level.

Put simply, SEA is a proactive approach to integrate environmental concerns and standards of due care into policy and plan-making. It is best understood as a generic process that encompasses a family of tools and instruments with different names, forms and areas of application. This extended family can be grouped into three broad categories of *formally prescribed, near equivalent and para-SEA processes* (Dalal-Clayton and Sadler 2005, see Box 1) and into various types of approach (e.g. Goodland 1998, Buckley 1998, Verheem and Tonk 2000). In most classifications, policy-level SEA is recognized as a distinct area that covers the highest echelons of decision-making, including legislation, strategies and government statements (Box 1).

This form of SEA is further elaborated or extended in a number of concepts and terms that focus specifically on policy (Table 1). These include:

- strategic environmental *appraisal*, which denotes an informal, flexible approach, particularly suited to the realities of policy development (Sadler and Brooke 1998);
- policy environmental assessment, which distinguishes a separate process that includes social, cultural and economic issues and
  accommodates both simple and comprehensive (EIA-derived) approaches (Bailey and Dixon 1999);
- strategic environmental assessment redefined as a process that focuses on a 'holistic understanding of environmental and social issues'
  and broadens policy-making beyond 'issues that would be normally considered' (Brown and Therivel 2000)[10];
- policy assessment, which describes a process by which options are continuously identified and analyzed in terms of all higher level social goals (Boothroyd 1995); and

8) For example: "SEA is a systematic process for evaluating the environmental consequences of proposed policy, plan or programme initiatives in order to ensure they are fully included and appropriately addressed at the earliest appropriate stage of decision-making on par with economic and social considerations" (Sadler and Verheem, 1996).

9) For example: "The formalized, systematic and comprehensive process of evaluating the environmental effects of a policy, plan or programme and its alternatives, including the preparation of a written report on the findings of that evaluation, and using the findings in publicly accountable decision-making" (Therivel et al, 1992, 19-20).

10) The full definition proposed by Brown and Therivel (2000, 184) reads as follows: "SEA is a process directed at providing the authority responsible for policy development (the 'proponent') (during policy formulation) and the decision-maker (at the point of policy approval) with a holistic understanding of the environmental and social implications of the policy proposal, expanding the focus well beyond the issues that were the original driving force for new policy."

Table 1: SEA terminology and concepts and their policy orientation

Paradigm/ level	Scope and policy characteristics
Strategic environmental assessment	Strategic environmental assessment (SEA) As currently instituted in law or policy, primarily focuses on the impact of policy, plan and programme proposals on the environment (defined broadly to include risks to human health as in the SEA Directive and SEA Protocol)
Strategic environmental appraisal (SEA)	Informal, flexible process of SEA for policy and plan-making. (Sadler and Brooke, 1998). Applied specifically to UK system for policy appraisal and the environment; now largely incorporated into integrated policy appraisal or regulatory impact assessment (see Chapter 10)
Policy environmental assessments (PEA)	Based on the premise that policies are different from plans and programmes. PEA uses both EIA-based and rapid appraisal to identify their environmental impacts. It "should cover as many policy levels as possible and include implicit as well as explicit policies" (Bailey and Dixon 1999)
Policy assessment (PA)	Focuses on fundamental policy options. PA combines the functions of 'policy vetting' to check consistency with 'highest-level societal goals' and impact analysis to address any potential adverse consequences. In vetting, the focus is on 'the big picture over details' and 'insights over rigour' (Boothroyd 1994)
Integrated assessment (IA) or sustainability appraisal (SA, also sustainability impact assessment)	Addresses environmental, economic and social effects, particularly valuable for weighing competing considerations of macro-policy initiatives (UNEP 2001). SA is an integrated assessment that is carried out within an explicit framework of sustainability objectives and criteria (Sadler 2002) or a structurally integrated assessment and planning system (UNEP 2004).

- integrated assessment, which covers economic, social and environmental aspects of macro policies, particularly for trade and poverty reduction (UNEP 2001). This is one of a number of terms for such an approach; others include sustainability appraisal (OECD/DAC 2004) and sustainability impact assessment (George and Kirkpatrick 2003).

Currently, there is particular debate about the extent to which SEA should move towards an integrative approach and consider economic and social as well as environmental considerations. Such an approach is widely promoted, notably by the International Association for Impact Assessment (IAIA 2002). It has many potential benefits (e.g. increased acceptance and relevance to decision makers) but a number of issues remain to be addressed (see Lee 2002) including the marginalization of the environment when moving from SEA to more integrative approaches (Sheate et al 2001, Sadler 2004). These issues are discussed later in this chapter.

Understanding Policy with Reference to SEA

Policy is the high terrain of decision-making; it lies at the heart of what is strategic about strategic environmental assessment

In general terms, policy can be expressed as a strategic aim, broad vision, proposed direction, legislative or fiscal commitment or course of action that a government intends to pursue. As the apex of the decision-making hierarchy, policy is typified as setting the objectives and measures that guide or set a framework for lower tier decisions, for example the preparation of plans and programmes for a particular sector or area. This is where the maximum opportunity occurs to gain environmental leverage on alternatives and options from a SEA perspective (Sadler 1994 Boothroyd 1995, Buckley 1998).

Policy comes in many guises; it may be general or detailed, government-wide or sector-specific, formal or informal, transformational or incremental in character (Bregha et al 1990). From the standpoint of SEA, major policy reforms or legislative proposals that are environmentally significant will be of most interest. Other types of policy proposals potentially subject to SEA are listed in Box 2 and include government expenditure priorities, procurement strategies and 'standing' arrangements that can have unintended but perverse environmental effects (where policy audit rather than SEA per se may be the more appropriate approach). Early SEA application is facilitated when these initiatives are taken forward through formal, consultative processes with options documented in white papers or proposed in draft bills – where there is less scope for considering alternatives but still opportunity to offset adverse effects (see Elling and Nielsen 1998).

Policy is variably defined in SEA guidance. In the UK, for example, it comprises "the Government's strategic objectives in a particular area and framework for deciding programmes and projects" (DETR 1998). The Regulations for implementing the US National Environmental Policy Act (NEPA) differentiate among policy, plans and programmes as strategic actions

Box 2: Types of policy and legal proposals potentially subject to SEA

- Government proposals and consultative documents that outline new policy directions (e.g. green or white paper, draft national strategy)
- Bills, draft regulations or proposed rules (e.g. relating to private or common property rights)
- International agreements and treaties that a government is negotiating or proposes to enter into (e.g. trade agreements)
- Budget, financial appropriation and expenditure priorities
- Government or departmental purchasing and procurement policies or strategies
- Government or Ministerial statements of intent that are commonly accepted or can be reasonably interpreted to be policy
- Policies that are contained in or govern plans or programmes, including objectives, directives, guidelines, etc.
- Standing policies or arrangements that promote or are permissive with regard to development activities with potential cumulative effects (e.g. land clearance, habitat alteration, wetland loss)

Source: adapted from Buckley (2000), Sadler (1994)

Box 3: NEPA terminology related to policy, plans and programmes

Section 1508.18 (b) of the Regulations for the NEPA implementation defines major federal actions as falling within one of three strategic categories:

(1) Adoption of official policy, such as rules, regulations and interpretations; treaties and international conventions or agreements; formal documents establishing an agency's policies which will result in or substantially alter agency programs.
(2) Adoption of formal plans, such as official documents prepared or approved by federal agencies which guide or prescribe alternative uses on which future actions will be based.
(3) Adoption of programs, such as a group of concerted actions to implement a specific policy or plan; systematic and coordinated agency decisions allocating agency resources to implement a specific statutory program of executive directive.

Source: US Council on Environmental Quality (CEQ 1978)

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11) There is no reference to SEA per se in NEPA or in the Regulations. In the latter, the nearest equivalent terms are 'legislative environmental impact statement' (1506.8) and 'program, policy or plan environmental impact statements' (1500.4(i)), now usually designated as 'programmatic.'

12) The Aarhus Convention does not obligate or even refer to SEA either in Article 7, which concerns plans, programmes and policies relating to the environment, or in Article 8, which concerns laws and rules with potential environmental impact. However, SEA is understood to be a key instrument for satisfying the provisions of the Convention with regard to public participation and to taking account of the outcomes in decision-making. Article 8 applies to 'the preparation of executive regulations and/or generally applicable legally binding normative rules'. It addresses the role of the executive bodies and public authorities in enacting rules of general application, which can be interpreted broadly to include decrees, regulations, ordinances, instructions and other normative acts (Stec and Casey-Lefkowitz 2000).

13) This interpretation is based on the author's participation in a number of the preparatory and negotiation meetings of the UNECE Ad Hoc Working Group on the SEA Protocol. During this process, the application of the Protocol to policy and legislation was the subject of widely divergent views and

subject to SEA (Box 3)[11]. Internationally, there is a brief description of relevant plans and programmes in Article 3 of Directive 2001/42/EC and in Article 4 of the SEA Protocol. The Protocol also has non-binding application to policy or legislation (Article 13) but does not define or describe what is meant by these terms. The Aarhus Convention on *Information on Environmental Matters, Public Participation and Access to Justice on Environmental Issues* applies to but does not define policy (Article 7) although precise language is used in referring to laws and rules (Article 8)[12].

The exclusion of any reference to policy in Directive 2001/42/EC and its inclusion on limited, 'soft law' form in the SEA protocol is indicative that the formal application of SEA to policy still encounters strong resistance. This issue was the subject of protracted discussion during the four-year process of negotiating the SEA Directive (Feldman et al 2001). It was replayed, with a larger cast of countries, in the preparation of the SEA Protocol, when the objections and reservations expressed about applying SEA at the policy level were political and institutional as much as procedural or methodological. They focused on the character of policy-making as being different from plan or project development and inherently unsuited to the application of SEA in legislated or prescriptive form.[13] Such concerns are not new and continue to be discussed (e.g. Bregha et al 1990, Sadler 1994, Verheem and Tonk 2000).

Evolving Approaches to Policy SEA

The ability to anticipate and prevent environmental damage requires that the ecological dimensions of policy be considered at the same time as economic... and other dimensions. This reorientation is one of the chief institutional challenges of the 1990s and beyond (World Commission on Environment and Development 1987)

SEA is such an 'anticipate and prevent' approach. It is designed to identify the environmental effects of proposed policies, plans and programmes at their source rather than treating them only as symptoms. At all levels, the aim is to integrate environmental considerations and safeguards into all phases of decision-making, from initial design to monitoring of impacts and outcomes but with a particular emphasis on consideration of alternatives. For optimal leaverage, SEA is applied early, before key decisions are made, when major alternatives are still open and beginning with policy as the locus of political imperatives that shape development and guide other levels of the planning hierarchy.

In this context, Dovers (2002) makes a distinction between 'deep' and 'shallow' SEA. 'Deep SEA' deals with the root causes of unsustainable development, addressing the impact of policy on the patterns of production and consumption, mobility or settlement.[14] 'Shallow SEA' focuses on the immediate impact of policies on the environment, largely corresponding to the current state of the art. As Dovers' (2002) notes, 'deep SEA' is more complex and challenging than 'shallow SEA' but the latter, when systematically applied to government policies, can still significantly advance the sustainability agenda.

Currently, SEA processes vary widely in their scope, transparency and the stage at which they are applied in the decision-making process. For example, there are noticeable differences between EIA-based and appraisal-based approaches to SEA. In the former model, the emphasis is on identifying and mitigating the environmental effects of implementing strategic proposals and alternatives using EIA procedure and methodology, often as a separate or arms-length activity. This approach is followed for a wide range of plans or programmes and particularly those that initiate or set the framework for major projects as in the SEA Directive. By contrast, appraisal-based SEA is more proactive and iterative, facilitating the integration of environmental aims into the overall process of policy or plan-making. It is often said to be 'objectives-led' in contrast to the 'effects-based' (also called 'baseline-led') approach derived from EIA.

The implications for SEA practice that follow from this distinction have been discussed for some time, generally and with specific reference to policy and its distinguishing features (e.g. Sadler 1994, de Boer and Sadler 1996, Bailey and Dixon 1999, Brown and Nitz 2002). A 'fit for purpose' approach to SEA is often promoted to integrate environmental considerations into policy development, i.e. flexible enough to adjust to these features and robust enough to reflect principles and elements of good practice. In specific instances, the appropriate approach to take can be identified during screening of a policy proposal. Using a simple protocol, either an EIA or appraisal-based analytical track can be selected as part of the identification of the need for and level of assessment.[15] At the scoping stage, the methods that are most suited to address the key issues can be identified.

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more shades of opinion than can be reflected here. Some countries (and NGOs with observer status) supported mandatory coverage of policy and legislation; others wanted to exclude any reference to them. The European Commission and most member states (Italy was a notable exception initially) were strongly against any legally binding obligation to apply SEA to policy and legislation. In these circumstances, their inclusion as discretionary elements was the best that could be expected.

14) There have been many similar calls for strategic assessments to address the root causes of major environmental and resource issues and their policy linkages (e.g. UNEP et al 1998). In many cases, large scale, big picture assessments are global equivalents of state of the environment reports. A recent variant is integrated ecosystem assessment, carried out on a multi-scale, multi-sector basis to identify the linkages between ecological goods and services and development options (www.millenniumassessment.org). The primary audience for this work are parties to multilateral environmental agreements but they also provide a baseline or frame of reference for SEA-specific approaches. Such examples are admissible to the extended family of SEA tools (as described above) if there is a relationship to policy intent or a future process of lending or support as in a number of current World Bank examples (discussed in Chapter 12).

There is now a large suite of such tools and increasing experience in applying them to major development sectors at the policy as well as plan or programme level (see, for example, Fischer 2002, Therivel 2004, Dalal-Clayton and Sadler 2005). In recent years especially, the development and diversification of SEA practice has been impressive, driven by legal and procedural innovations. These include a new generation of instruments and institutionalized processes for policy-based lending and international assistance at the World Bank and other multi lateral financial institutions (see Chapter 12). Several countries have introduced systems for integrated impact assessment or sustainability appraisal that either incorporate or operate alongside SEA as in the UK at the policy and plan level respectively (Chapter 11). Recently, the European Commission (EC 2005) adopted an internal process of 'extended impact assessment' for policy proposals.

Although widely supported, these early-stage innovations also invite critical scrutiny regarding their quality of application and the value added to policy-making. Key concerns and questions fall into four main categories (based on Lee 2002):

- institutional -- how to design build robust arrangements for integrated assessment and decision making;
- methodological -- how to reconcile specialized methods and information needs for the different types of impacts;
- professional -- whether there is sufficient capacity to implement this approach, what new skills and competencies are needed; and
- political -- how to ensure that the environment is not downgraded as a factor in decision-making when moving from SEA to fully integrated assessment.

This last issue has becoming a matter of increasing attention, following a recent study of the use of SEA and other tools in strategic decision-making in all EU member states (Sheate et al 2001). A stronger, environmentally-oriented ('dark green') concept of sustainable development is thought to underpin SEA compared to the weaker ('light green') version inherent in balancing a wider scope of impacts in the SA process, suggesting a divergence of the two fundamental EU policy thrusts of environmental integration and sustainable development (Sheate 2003). In principle, of course, these aims should be

Table 2: The evolving paradigm of SEA

Paradigm	Key characteristics
SEA as currently applied	Second generation process: addresses issues at their source (as opposed to symptoms in project EIA); focuses on proposed policies, plans or programmes; integrates environmental considerations into decision-making; emphasis on consideration of alternatives and mitigation of effects of implementation; limited monitoring and follow up
SEA for environmental sustainability assurance (ESA)	All of the above plus the following: assessment of environmental effects against explicit safeguards for critical resource stocks and ecosystem services; ensuring loss and deterioration are kept within acceptable limits; compensating for residual impacts consistent with either no net loss (strong sustainability) or safe minimum standards (moderate sustainability); systematic monitoring of impacts and outcomes
Integrated assessment for sustainability assurance	All of the above plus the following: identification of key economic and social objectives and thresholds that must be met; assessment of the main types of impacts of proposals and alternatives against the triple bottom line (TBL); evaluation of the significance of impacts against this framework to clarify the trade-offs at stake; striking a best possible balance for sustainability assurance
Source: Sadler (1999, 2002)	

15) In principle, an EIA-based approach will be more appropriate when a policy includes concrete actions that can be connected to particular impacts on the environment. Conversely, an appraisal based approach will be better suited for policies that set out broad visions or directions (Sadler and Verheem 1996). Elements of both approaches can be combined for policies that contain a mix of general intentions and specific actions.

16) From this perspective, sustainable development can be defined as a non-declining natural wealth or constancy of net natural capital over time so that future generations inherit approximately the same resource bequest as the present generation received (Pearce et al 1989). In this formulation, the potential represented by the aggregate stock of natural capital must be kept separately intact as a complement to other types of capital ('strong sustainability') or considered as substitutable only up to certain limits or critical levels of depletion or deterioration ('moderate sustainability'), which is labelled as the 'sensible' approach in the schema developed for the World Bank (Serageldin and Steer 1994).

17) For example, ensure environmental sustainability is the seventh of the Millennium Development Goals goal and the idea of environmentally sustainable development was articulated in the work of the World Bank (e.g. Serageldin and Steer 1994). This concept is stated as sustainable management of natural and physical resources in section 5 of the New Zealand Resource Management Act (1991, as amended) and as ecologically sustainable development in section 3A of the Australian Environment Protection and Biodiversity Act (1999).

convergent and reinforcing, so that SEA in providing for a high level of environmental protection promotes sustainable development (and *vice versa* for SA). In practice, others question whether SEA is meeting *either goal* satisfactorily as exemplified in numerous proposals for process reform and improvement in the literature.

Many commentators consider it is only a matter of time before some form of SEA of policy is introduced at the policy level across the EU (Sheate et al 2003). If so, it might be better founded on the more stringent concept of *environmental sustainability*[16] (Sadler and Goodland 1996). This concept or near equivalents are enshrined as aim or guiding principle in certain international policies and national laws related to SEA[17] and may be elaborated as an evolving framework of safeguard policies, precautionary and capacity-based principles and evaluative criteria (Sadler 1996, 1999). When proposals are tested against such measures, there should be a greater degree of environmental sustainability assurance (ESA) than is the case in current SEA practice. In sum, ESA shifts the SEA paradigm away from mitigating adverse effects and toward maintaining natural capital stock, and, by extension, provides an environmental cornerstone for convergence with sustainability appraisal (see Table 2, which also may be read as a long term research and development agenda with incremental steps).

Adapting SEA to the Context of Policy Making

One characteristic of policy-making...is worth noting here and now: its complexity and apparent disorder...and the consequent strikingly different ways in which policies emerge (Lindblom 1968)

Whatever form SEA takes, an immediate challenge is to accommodate it within the 'multiple housing' or different modes of policy-making (Sadler and Verheem 1996). This begins with a firm understanding of how the policy-making process works (Bailey and Dixon 1999, Nitz and Brown 2001). Some observers have suggested that useful insights can be gained from the theories of the policy and decision sciences when designing or strengthening SEA activities (e.g. Kornov and Thisson 2000). Others have examined the policy-making arrangements of particular jurisdictions to establish how SEA might be best applied or adapted to context (e.g. Bregha et al 1990, Elling and Nielsen 1998, Bailey and Renton 2000).

Early experience with SEA at this level confirms the importance of adapting it to the 'political culture' of norms, rules and relationships that shape national policy-making. Major factors for attention in that regard include the style of national policy making (whether open or closed, pluralistic or elitist), the mechanisms used to monitor and enforce accountability and the opportunities for public and stakeholder involvement or dispute settlement (O'Riordan and Sewell 1981). In this context, constitutional conventions, such as Cabinet confidentiality (in the case of policy) or parliamentary sovereignty (in the case of legislation), are among the arrangements that bear on what is feasible or practical with regard to SEA procedure.

Other aspects and issues that need to be taken into account in tailoring SEA to the policy-making process include the following:

1) Communicating the benefits Even if SEA of policy has gained political acceptance, its application may be resisted or circumvented because it intrudes on territory and prerogatives that traditionally have been off limits to outside scrutiny.[18] Many in government still doubt that SEA can add real value to policy formation or fear that it will metamorphose into EIA 'with all its procedural bells and whistles.' While often overdrawn, these concerns need to be addressed if the SEA process is to work effectively. How to 'sell SEA' has been a perennial theme of discussion among the converted (e.g. at IAIA annual meetings). A much better job needs to be done of communicating the contribution that this process can make to policy-makers (Verheem and Tonk 2000).

2) Dealing with variability Policy-making is a highly variable, often non-uniform process that calls for a range of adjustments to SEA procedure. For simplicity, two main approaches to policy formulation may be contrasted. A structured process follows identifiable steps that lend themselves to some form of SEA application, for example, the formalized procedures for legislation and the centralized policy apparatus of many ex-socialist countries. By contrast, unstructured policy development is fluid, issue-driven and reactive to events as they unfold, likely to be accessed best through the application of simple, rapid appraisal tools that provide immediate insights. Other policy-making processes may combine features of both approaches, for example beginning as unstructured and moving toward greater formality in the final stages when documenting options and consequences (Renton and Bailey 2000).[19]

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18) As Bregha et al (1990) noted, political will is the only pre-condition to the introduction of SEA. However, the responsiveness of the bureaucracy can dictate the tempo and effectiveness of SEA implementation (Sadler 1994). Take for example the implementation of the 1990 Canadian Directive on SEA, which far from being 'immediate' as instructed, was slow and uneven across federal agencies, a pattern that continues to this day (see Chapter 3).

19) Renton and Bailey's (2000) classification of policy development processes was derived from a survey of Australian government agencies. They identified marked differences in formality, duration and timing, as well as other external factors of unstructured as compared to the structured policy development processes. But they also note that certain elements are common to both approaches, namely identification, consultation and documentation.

3) Focussing on realities Often policy making may be not so much the exercise of a specific choice as the creation of what O'Riordan (1976) called a 'decision environment' through which proposals and options are formulated and filtered. In such circumstances, policy and institutional 'mapping' can help SEA practitioners to gain a firmer grasp of the context and nature of policy-making and the agencies and stakeholders involved (see Dalal-Clayton and Bass 2002). This analysis can indicate areas and junctures at which SEA can contribute and add value to government policy-making. A parallel review of environmental law and policy can help to identify the key objectives and policies that should provide the referents for identification and evaluation of effects in SEA.

4) Addressing key issues and linkages Policy initiatives in certain sectors, such as energy, transport and trade, are known to have potential environmental effects or consequences. At this level, cause-effect relationships are modulated by a range of intervening factors and often expressed as implications or issues rather than impacts. In many cases, the environmental effects of policy will be long-term, transmitted through the subsequent preparation of plans or programmes or other processes. These include the 'knock on' effects of policies on environmental objectives across other sectors, which are little discussed in the SEA literature compared to vertical integration or 'tiering'. Further attention should be given to the horizontal dimensions or boundary conditions for SEA.

5) Capitalising on opportunities All reforms of the policy-making process provide an opportunity to introduce or strengthen SEA. Such changes have taken place recently or are underway in a number of countries and international organizations represented in this volume. For example, the recent UK initiative on modernising government and World Bank environment strategy were instrumental in introducing new forms of SEA as reported in Chapters 11 and 12 respectively. In some cases, the implementation of measures may involve long lead times as exemplified by the introduction of the first crop of SEA-equivalent policy statements under the New Zealand Resource Management Act (1991) (Chapter 8). Looking ahead, international trends and developments indicate there will be a number of opportunities for the further development of SEA at the policy level (see Chapters 2 and 13).

6) Learning by doing This will be particularly important in capitalising on opportunities or introducing new systems, e.g. as described in the EU pilot. More generally, the 'variable geometry' of policy-making underscores the need for a flexible, trial and error, learn and adapt approach to SEA (Sadler and Verheem 1996). So far, the means to do so are largely missing. Even though SEA practice at the policy level is increasing and diversifying, there is relatively little systematic monitoring and follow up including ex post-reviews of process effectiveness and performance (Partidario and Fischer 2004, Sadler 2004). Much can be learnt in the first instance from an understanding of current SEA systems and their implementation. This is the point of departure for the present volume.

Rationale and Organisation of this Volume

A strong case can be made for the widespread application of SEA to policies. There is a steady drumbeat on this theme in the literature of the field, accompanied by new concepts and methodologies to address generalized shortcomings in current approaches. More telling is the continuing take up and adaptation of SEA of policy in individual countries and organizations. This trend is particularly evident in the broad frame of SEA as an extended family of tools but it is also apparent through the narrower lens of formally prescribed SEA systems (Box 1).

Much has happened since an earlier volume on SEA policy was prepared when there were only a handful of countries and international agencies with experience at this level (de Boer and Sadler 1996, also Sadler and Verheem 1996). In the interim, however, there has been no comparable review of SEA systems and processes that apply to policy or legislation. An update seemed timely to take stock of recent progress and current practice in the field and to shed light on future prospects. This analysis is intended to support and inform the future work of the parties to the SEA Protocol (see frontispiece). But it also may be of wider interest in taking forward the agenda for policy level SEA, beginning with the IAIA global conference in Prague (September, 2005).

The main body of the present volume comprises reviews of SEA process and practice in nine countries and one international organization. It is prefaced by a broader review of international experience, which includes reference to other jurisdictions with SEA systems that cover policy and legislation (Chapter 2). Chapters 3-12 present SEA profiles for Canada, Czech Republic, Denmark, Finland, Hong Kong, Netherlands, New Zealand, Norway, the United Kingdom and the World Bank. The final chapter considers future directions and prospects for SEA of policy and legislation as exemplified by the work programme of the Parties to the SEA Protocol.

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Chapter 2
The Status of SEA Systems with Application to Policy and Legislation

Barry Sadler

Introduction

SEA systems that apply to policy or legislation are no longer novel as they were at the time of the earlier review of this field (described in Chapter 1) and more extensive than a reading of the literature of the field might suggest. Nevertheless, their number is still relatively small; it is estimated that approximately 20 to 25 countries, states or international organizations have SEA or near-equivalent systems that qualify. Some of these systems apply specifically and only to policy or legislation; others cover this level as an integral part of more comprehensive mandates. At either level, the external (between systems) or internal (within system) interrelationship of proposals subject to SEA at different levels of decision-making has an important bearing on opportunities for achieving a tiered, comprehensive approach.

The purpose of this chapter is to take stock of the status of SEA systems at this level, including, as appropriate, their relationship to other policy appraisal processes or levels of SEA. It describes key trends and developments in this field and identifies the main features of the SEA processes and practices of leading countries and organizations, drawing out their commonalities and differences as they apply to policy. This profile provides a broader, comparative frame of reference for the review of arrangements and aspects of experience of individual jurisdictions in Chapters 3-12. All of these SEA systems can be considered as leading examples of application to policy or legislation. But other jurisdictions have an equivalent level of experience at this level and a wider review is undertaken in this chapter.

Evolution of SEA at the Policy Level

SEA has evolved from the convergence of two broad paths, often labeled as 'top down' and 'bottom up' approaches. The former impetus came from the sustainable development agenda, expressed in international agreements and policies that call for a more strategic, integrated approach to decision-making and in numerous national responses to them. The second impetus came from the development of EIA, expressed particularly in the scaling up of process application from the project to the policy level of decision-making. Both trends have been reinforcing, and the introduction of SEA as a 'second generation' process, distinct from project level EIA, can be traced to the international policy regime agreed at the Earth Summit (1992) and refocused at the 2002 World Summit on Sustainable Development (WSSD).

Yet often overlooked, the antecedents of SEA are firmly rooted in the introduction of EIA and were laid down in the founding legislation. The US National Environmental Policy Act (NEPA, 1969) is important as much for its declaration of purpose and policy (s101) in 'sustainability language' as for its procedural requirement to prepare an impact statement for "proposals for legislation and other major federal actions significantly affecting the...environment" (s102 emphasis added). This provision, according to one of the architects of NEPA, was intended to reform and redirect federal policy-making so as to internalize the enunciated principles of environmental stewardship in all major actions (Caldwell, 1998). The latter term is interpreted as including policies, plans and programmes in NEPA Regulations issued by the US Council on Environmental Quality (CEQ 1978, 1508.18).

Main phases of SEA development

Using NEPA as the reference mark, the chronology of the evolution and take up of SEA is summarized in Annex 1. It can be divided into three main phases (Sadler 2001):

1) Formative stage (1970-1988) – when the legal and policy precedents for SEA were first established and tested in the early phase of EIA implementation, primarily in the USA at the federal level.[20] The Regulations implementing NEPA provide for a uniform procedure with minor adjustments for the preparation of policy, plan and programme and legislative environmental impact statements respectively (CEQ 1978, 1502.4 and 1506.8). In practice, NEPA was applied to plans and programmes but arguably broader policies (other than legislation) were largely excluded as 'non-triggering' actions. During

20) At the state level, there are a number of so called little NEPAs patterned after the federal law. In particular, the California Environmental Quality Act (1970) applies to a broad range of government activities, 'including most plans prepared by state, local and regional agencies' (Bass and Herson 1999).

this phase, the EIA systems adopted by other countries included only occasional application to policy[21] or to plans and programmes until the introduction of the Netherlands EIA Act (1987).

2) Formalisation stage (1989 to 2000) – SEA was instituted by an increasing number of countries and international organizations, beginning with Canada (1990) and the World Bank (1989). It was also enshrined de facto in Article 2(7) of the UNECE Convention on EIA in a Transboundary Context (1991), which requires that the Parties "to the extent appropriate...shall endeavour to apply the principles of EIA to policies, plans and programmes". A pilot study identified an agreed approach and procedures for this purpose based on a number of case studies contributed by participating countries (UNECE 1992). During this phase, however, SEA systems became increasingly diversified in provision, scope and mode of application, far more so than EIA at a comparable stage in its evolution. These form part of a wider range of strategic instruments and mechanisms for policy integration as described later (see Sheate et al 2001, World Bank 2001).

3) Expansion stage (2001 onward) – A new generation of international legal instruments promise have positioned SEA for wider adoption and use, particularly in relation to plans and programmes. First, the transposition of Directive 2001/42/EC by EU member states has increased the number of SEA systems at this level. Second, the UNECE SEA Protocol (agreed by 33 countries at Kiev 2003) on entering into force will extend this trend across a larger number of member countries and potentially beyond to others outside the UNECE region (see preface). As the provisions of the Protocol and Directive are harmonized, they can be expected to lead toward a more standardized approach to SEA of plans and programmes, at least within European sphere. Internationally, the emphasis given to sector and regional assessment as part of World Bank lending activities (Chapter 12) plays an important role in introducing SEA at this level in developing countries, and some have established their own domestic procedures (notably China under the revised EIA law (2003)).

Policy dimensions and drivers

By comparison, the current pattern of SEA take up for policy is more incremental and ad hoc than for plans and programmes and likely to remain so in the immediate future. For UNECE and EU member countries, the SEA Protocol and the SEA Directive do not act as comparable drivers at the policy level. Once the SEA Protocol enters into force, however, there is an obligation on the Parties to endeavour to apply its provisions to policies and legislation, which may be interpreted as 'soft law' that could strengthen over time through the mandatory reporting provision of Article 13(4) (see Box 1). As to the SEA Directive, the debate over the exclusion of policy is now effectively parked until at least 2009 when the Commission must report on the first five-years of application of this framework and, if appropriate, provide proposals for its amendment and possible extension to other areas (Preamble citation). In the interim, the implementation of the SEA Directive will worth monitoring to see if the policies embedded in plans or programmes are captured *de facto* even though excluded *de jure*.

Internationally, major trends that are driving progress in SEA and closely related mechanisms for policy integration include (Sadler 2003, Dalal-Clayton and Sadler 2005):

Box 1: SEA Protocol as it applies to policies and legislation (Article 13)

1. Each party shall endeavour to ensure that environmental, including health, concerns are considered and integrated to the extent appropriate in the preparation of its proposals for policies and legislation that are likely to have significant effects on the environment, including health.

2. In applying paragraph 1, each party shall consider the appropriate principles and elements of this Protocol.

3. Each party shall determine, where appropriate, the practical arrangements for the consideration and integration of environmental, including health, concerns in accordance with paragraph 1, taking into account the need for transparency in decision-making.

4. Each party shall report to the Meeting of the Parties to the Convention serving as the Meeting of the Parties to this Protocol on its application of this article.

21) For example, the EIA systems established in Australia (in law) and Canada (in policy) ostensibly made provision for application to strategic proposals but excluded them as a convention of practice. However, there were important exceptions and precedents in the form of EIA public reviews or comparable inquiries with wide ranging policy implications. In Canada, the Mackenzie Valley Pipeline Inquiry (1977), conducted by Mr. Justice Thomas Berger, was particularly notable for setting the course of native land claims and northern development policy for a generation, and the Beaufort Sea Environmental Assessment Panel Review (1984) is considered to be the first 'concept assessment'.

- the shift toward programmatic and policy-based lending and assistance now well underway at the World Bank and among other multilateral financial institutions and bilateral donor agencies;
- their corresponding focus on the policy opportunities to reduce poverty, improve health and ensure environmental sustainability in keeping with the UN Millennium Development Goals; and
- the development and use of more integrative approaches to address the root causes and linkages across these sectors, as recommended in the WSSD *Plan of Implementation.*

Table 1: SEA arrangements that apply to policy or legal acts/instruments

Country / Organisation	**Provision**	**Application to proposed policies (except legislation)?**	**Application to Legal Acts/ Instruments?**
Australia	Resource Assessment Commission Act (1991)	Yes, but longer used; remains on statute books (approach influential in regional forest policy)	No
	Environment Protection and Biodiversity Conservation Act (1999)	Yes, in principle, s146 allows for Minister to trigger assessment; also mandatory application to fisheries management strategies (ss147-154)	No
Canada	Cabinet Directive (1990; amended 1999)	Yes, applies to policies, plans etc submitted to Cabinet or subject to ministerial decision	Yes (also, SEA findings should be reflected if a regulatory impact analysis is prepared)
Czech Republic	EIA Act (1992; amended 1998); s32 became EIA of Concepts Act (2000), now amended in the EIA Act (2004)	Yes, applies to ”development concepts“ (policies, strategies etc in listed sectors)	No
Denmark	Prime Minister´s Circular (1993, amended 1999, 2004)	Yes, applies to government proposals	Yes, applies to bills and regulations
Finland	Act on Environmental Impact Assessment Procedure (1994)	Yes, applies to policies, plans and programmes	No
	Guidelines on EIA of Legislative Proposals (1998)	No	Yes, applies to laws, decrees, resolutions
Hong Kong SAR	Governor´s Policy Address (1992)	Yes, applies to policies, plans, etc submitted to Executive Council	Yes, applies to draft legislation and regulations
Netherlands	Cabinet Order (1995) Environmental test of draft regulations	Yes, in principle applies to ëpolicy intentionsí but so far not applied other than to test cases	Yes, applies to bills, administrative orders or ministerial decrees

Country / Organisation	**Provision**	**Application to proposed policies (except legislation)?**	**Application to Legal Acts/ Instruments?**
New Zealand	Resource Management Act (1991)	Yes, applies generically via integrated approach and specifically via requirements in s32, s35	No
Norway	Administrative Order on Assessment of White Papers and Government Proposals (1995)	Yes, applies to major policy documents, part of a process of ëconsequence assessmentí	Yes, applies to draft bills to Parliament
Poland	Law on Access to Information on the Environment and its Protection and on Assessment of Environmental Impacts (2000)	Yes, applies to policies, strate-gies in listed areas and where required by law (Article 19)	No
Slovakia	EIA Act (127/1994)	Yes, applies to policies, plans etc in specified sectors (Article 35)	Yes, but so far applied only to a pilot project
United Kingdom	Guidance on Policy Apprai-sal and the Environment (1991, amended 1998, now subsumed in Regulatory Impact Assessment (RIA)	Yes, in principle, RIA applies to the environmental impact of policies as part of integrated methodology	Yes, in principle, RIA applies to the environmental impact of legal acts
USA	National Environmental Policy Act (1969)	Yes, in principle, although policy largely excluded by NEPA case law or agency decision	Yes, applied to draft legislation
Western Australia	Environmental Protection Act (1986, amended 2003)	Yes, now formally applies to ëstrategic proposalsí, previously informal assessments under-taken pursuant to section 16(e)	No
European Commission	Communication on Impact Assessment, COM (2002) 276	Yes, applies to broad, policy-defining documents	Yes, applies to regulatory proposals
World Bank	Operational Policy 8.60 (2004) Development Policy Lending Environment Strategy (2001)	Yes, applies all such loans Yes, promotes wider, discretionary use of SEA for policy-based lending and budgetary support	Indirect application to proposed regulatory actions″ Not applicable

Institutional Arrangements for SEA of Policy and Legislation

In the new generation of SEA systems that emerged from 1990 onward, coverage of policy and legislation was uneven and remains so. Early developments in several jurisdictions (Canada, Denmark, European Commission, Hong Kong, Netherlands, New Zealand and Western Australia) were reviewed in a previous volume (de Boer and Sadler 1996). At that time, with the notable exception of the USA, there were few other countries with comparable arrangements and the Netherlands, for example, was still at the stage of preparing to implement the environmental test of regulations. Since then this initial group has approximately tripled in size and now forms part of a larger roster of countries and international organizations with SEA frameworks that apply to policy or legislation. Major examples are listed in Table 1.

The purpose here is to illustrate the range and diversity of institutional arrangements that have been established at this level, rather than to attempt a comprehensive survey. As indicated, the SEA frameworks that apply to policy and legislation vary in their provision, requirements and scope of application. In this section, the concern is to identify their key features and issues of institutional design and policy integration. These systems also differ in procedure, methodology and relationship to decision-making (described in the next section) and in their profiles of SEA practice and performance (exemplified in the chapters that follow). A sub-text of this present review is to highlight some of the themes for consideration, including the reforms and changes that have taken place since the previous review.

An initial typology of SEA architecture

Viewed broadly, the SEA frameworks outlined in Table 1 can be organised into four main categories or institutional models, which reflect different approaches to policy or legislation (Table 2). These comprise:

Table 2: SEA architecture: institutional models and examples

Institutional model	Examples
EIA-mainframe	SEA Protocol, USA, Czech Republic, Finland, Slovakia, Poland, Australia, Western Australia, World Bank (some cases)
EIA-modified	Canada, Denmark, Finland (legislative proposals only), Netherlands, Norway, UK (limited application), World Bank
Integrated assessment/ sustainability appraisal	European Commission, UK (RIA process), Australia (ad hoc application), Hong Kong SAR
Integrated resource management	New Zealand (comprehensive approach), Australia (fisheries specific), UK (SEA/SA integration with land use planning)

- *EIA mainframe* – SEA is either a) is closely modelled on or b) applied as part of the procedural requirements of EIA legislation. The SEA Protocol exemplifies the first sub-category, and calls on the Parties to 'consider its appropriate principles and elements' when assessing policy and legislation (Article 13(2), Box 1). Several countries have EIA systems that make provision for their application to policy (and, in fewer cases, to legislation) (Table 2).

- *EIA modified/appraisal style* – SEA is carried out a) as a process separate from the EIA system and b) using modified procedure and elements of approach in the manner or having the characteristics of policy appraisal. This convergence of styles is manifest in several processes that are linked to Parliamentary or Cabinet decision making (Table 2). In some cases, SEA is carried out with other policy tests (Netherlands) or as part of a broader assessment (Norway, UK, World Bank).

- *Integrated assessment/sustainability appraisal* (SA) – SEA is superseded by or incorporated within a broader process of impact assessment or appraisal of the environmental, economic and social effects of policy or legislative proposals. Still emerging, forms of this approach are in place in the European Commission, the UK and Hong Kong SAR. Elsewhere, there are examples of ad hoc application, notably in support of regional forest policy agreements in Australia.

- *Sustainable resource management* – SEA is undertaken within an explicit sustainability framework, and either a) woven generically into a tiered system for land use and resource planning or b) applied specifically as part of the

preparation of a specific resource strategy. The New Zealand process of effects-based policy and plan-making to set the context for resource consent corresponds to the former criteria; the mandatory requirement for strategic assessment of all export or federally managed fisheries in Australia meets the latter definition.

These categories are interrelated or overlapping and best considered as a spectrum of institutionalized types of SEA approach. In order of listing above, the shift is from specific, stand alone procedure to more integrated approaches in which SEA is substantively or procedurally part of a larger assessment or policy/planning process. SEA purists may quibble with this latter classification or not admit certain aspects, such as the designation of the New Zealand policy regime as SEA equivalent (see Chapter 9). The new UK system, in merging SA and SEA (consistent with the Directive) into land use planning (which can be said to be policy embedded), represents a new stage of substantive and procedural integration, although the first examples of application have yet to be rolled out (see Chapter 11).

In addition, other countries and international organizations have introduced para-SEA processes and elements (as defined in Chapter 1) as part of the machinery for policy integration. Their number and scope are impossible to determine with any degree of accuracy; collectively, they are diverse and, in many cases, individualistic in approach and specific to a jurisdiction or sector. As such, they lie largely outside the ambit of this review, except for mention of approaches that have generic features or establish possible precedents internationally or regionally. These include (Dalal-Clayton and Sadler (2005):

- systems of state environmental review (or ecological expertise) in newly independent states, many of which reportedly apply to legislative, policy and other strategic proposals;[22]
- rapid appraisal or other forms of SEA that help to develop the policy agenda or framework (rather than inform a specific decision) for major development strategies,[23] water resource allocation and management[24] or regional trans-boundary cooperation;[25] and
- World Bank use of SEA-type instruments has diversified as the range of funded activities has increased, and now extends to the integration of the environment into policy-based lending (Chapter 12). Policy integration tools that correspond to para-SEA include: country environmental analysis (CEA), energy and environment reviews (EER) and, arguably, poverty reduction strategy papers (PRSP).[26]

Statutory versus non-statutory basis

Current provision for SEA of policy and legislation is made through a mix of legal and administrative instruments that impose different obligations on government agencies. In a few cases, SEA systems were initiated through stated policy and elaborated in guidance, for example, the Hong Kong and UK systems began in this way. However, there is a general trend toward greater formalization of non-statutory mandates and more consistent implementation of legally-based SEA frameworks. Despite such realignments, there remains a fundamental distinction between the use of legal and non-statutory instruments and continued debate about their respective efficacy as a foundation for SEA of policy or legislation.

Statutory provision for SEA at this level is made under EIA-specific legislation (e.g. Czech Republic, Finland, Slovakia) or an omnibus environmental protection act (e.g. USA, Australia, Poland, Western Australia). The Czech EIA of Concepts Act (1992 as amended in 2000) was unusual in comprising a single article that applied to listed development 'concepts' (which are understood to include policies and strategies) approved by the central government. Such concepts are retained in the Czech EIA Act (2004), which transposes the provisions of the SEA Directive beyond minimum requirements (as do the Slovak and Polish amendments). NEPA and the Western Australian Environment Protection Act apply generally to major federal actions and strategic proposals respectively, although, in practice, the referral of policy is limited in the former and optional in the latter. The Australian Environment Protection and Biodiversity Conservation Act provides for SEA of policies at the discretion of the Minister of Environment and for mandatory assessment of all federal fisheries.

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22) Despite recent improvements, the frameworks and procedures of these systems have been criticised by regional (NIS) experts and international agencies as falling short of meeting international standards, and in particular, are seen as insufficiently developed and inconsistently applied to strategic proposals. However, there are also important inter-regional variations in that regard and new aspects of SEA are emerging all the time.

23) The SEA of the Chinese Western Development Strategy (commissioned by the State Environmental Protection Administration) provided a broad review of the environmental consequences and risks of what by any standards is a monumental proposal, with a policy framework that links major national priorities for investment in energy, resources, infrastructure, urbanisation, etc to a series of massive construction projects for water diversion, natural gas transfers and new road and rail routes, etc.

24) In South Africa, SEA was used to provide an information and decision-making framework, under the National Water Act, for declaring stream flow reduction activities for forestry and other land-uses that significantly impact on regional catchments, having regard to legal obligation to allocate these resources, first and foremost, to meet primary human needs, the environmental reserve and international obligations.

25) A trans-boundary environmental assessment (TEA) has been carried out as part of the Shared Vision Programme for the Nile Basin Initiative (to achieve sustainable socio-economic development through the equitable utilisation of, and benefit from, the common water resources). It included a synthesis of basin-wide environmental trends, threats and priorities (3million km^2, shared by 10 riparian countries), and outlined the elements for a long-term agenda for environmental management.

26) Most poverty reduction strategy papers (PRSP) have taken little or no account of environmental considerations and rely on poverty and social impact assessment (PSIA) as the main diagnostic tool. However, this is beginning to change and environmental factors have become better integrated in a number of PRSP (Bojo and Reddy 2003)

Non-statutory provision for SEA of policy or legislation is made through administrative order, Cabinet directive or policy edict (e.g. Denmark, Canada and UK respectively). This basis has been chosen for all SEA processes that specifically apply to policy or legislative proposals submitted to Cabinet (Canada, Hong Kong, Netherlands) or to Parliament (e.g. Denmark, Finland, Norway). Although lacking force of law, such instruments establish a requirement to implement the SEA process. Depending on the jurisdiction, this requirement may be interpreted as mandatory or discretionary for government agencies. For example, the circular from the Prime Minister's Office in Denmark is reported to be legally binding and executive instructions on SEA issued by the Cabinet in Canada and the Netherlands can be interpreted as establishing a duty to comply. In practice, however, administrative instruments lack powers to ensure agencies fulfill their responsibilities or to enforce consistency in SEA application. This is especially the case when the SEA process is based only on guidance or communication, such as those issued by the UK and Hong Kong SAR respectively. However, in some cases, independent or third party mechanisms can help reinforce compliance or assure quality (as described later).

The issue of whether or not SEA at the policy level should be place on a legal footing continues to be the subject of continuing debate. As noted in Chapter 1, it came into sharp focus with the negotiation of the SEA Directive and SEA Protocol. Some commentators argue that only a mandatory, legal requirement will ensure systematic and transparent application of SEA to policy and legislative proposals (e.g. Buckley 2000). This principle is important and there is increasing precedent in the EIA legislation of several countries, possibly foreshadowing the wider adoption of similar frameworks. However, such arguments may be difficult to carry for SEA processes that are tied to Cabinet or Parliamentary decision-making, where political or constitutional conventions respectively (e.g. of confidentiality or supremacy) may be considered overriding.

Scope of coverage and application

In approximately one-half of the SEA systems, both policy and legislation are covered, although not necessarily through the same process or with equal emphasis. Some jurisdictions have established different procedures for this purpose (e.g. Finland and the European Commission). Other countries do not subject legislation to SEA (e.g. Czech Republic, Poland) or may do so through a separate process of regulatory impact analysis or assessment (RIA). A common assumption is that RIA lies downstream from SEA, and Canadian guidance calls for RIA to have regard to the findings of SEA, where applicable. Yet in the UK, the RIA process now appears to have largely superseded and incorporated the previously separate process of policy appraisal and the environment and so far the Dutch E-test has applied only to 'executive regulations' and has not moved upstream to 'policy intentions' as originally envisaged.

The type and range of development policies that are subject to SEA differ across the jurisdictions represented in Table1. So far, there are few examples of SEA systems that apply on a comprehensive, uniform and government-wide basis to all

Box 2: Generic framework for SEA of trade negotiations, Canada

Background: The Department of Foreign Affairs and International Trade (DFAIT) established a generic framework for SEA of trade negotiations, which is intended to be flexibly applied and adapted on a case-by-case basis according to the policy context (e.g. multilateral or bilateral free trade agreement).

Rationale and objectives: SEA is used as an instrument to help achieve greater coherence of trade and environmental policy. The primary aim is to provide information necessary to integrate environmental considerations into the decision making process from the earliest stage (and to document for the public how this has been done). A caveat is that the preferred way to mitigate adverse effects is recognised as appropriate domestic policy rather than prescriptive measures within trade agreements.

Challenges of assessing the environmental impacts of trade negotiations: Experience with SEA was limited previously, since Canada has conducted ex post reviews of trade policy issues. Other issues centre around the nature of trade negotiations as a dynamic process in which the SEA process has to focus on a 'moving agenda.' In this context, environmental impacts are difficult to identify and isolate from other factors that are external to trade.

Proposed approach to conduct SEA of trade negotiations: This involves several steps, beginning with the identification of the economic effects of the trade negotiation followed by an assessment of their environmental impacts, noting their potential significance and consistency with Canada's existing commitments under multilateral environmental agreements. On this basis, policy and regulatory options to mitigate adverse effects and enhance positive effects will be established.

Source: DFAIT (2001)

policy-level proposals with potentially significant effects on the environment. In principle, NEPA most closely approximates this standard but, as noted already, falls short in application to policy. Some SEA systems apply to all environmentally significant proposals within a designated process of Cabinet or Parliamentary decision-making, which represents the highest level of policy and law-making respectively but possibly leaves less important but cumulatively significant areas without an appropriate level of assessment. Other SEA cover only a limited range of policies from approximately ten sectors as listed in the EIA legislation of Czech Republic, Slovakia and Poland.

In these countries, proposals subject to mandatory assessment include energy, mining, industry, transport, agriculture, forestry, water, waste and tourism. Although limited in number, these sectors together cover much of the policy field that is environmentally significant. For the same reason, many of them are identified in SEA guidance as priority areas for coverage, for example in Danish, Dutch and UK materials. New areas and aspects, such as international assistance and trade policy, have become subject to SEA, typically with modification of the domestic process for overseas application. For example, in Canada, separate guidance for this purpose has been drafted (Canadian International Development Agency 2003) and a generic framework issued for SEA in support of trade negotiations (Box 2). The European Commission has instituted a separate process for the sustainability impact assessment of the Uruguay round of trade discussions.

Some environmentally important areas of public policy are not usually subject to SEA. These notably include fiscal policy and budgetary allocations. Of the countries listed in Table 1, only Denmark and Norway reportedly assess these aspects for their environmental impact.[27] Yet arguably the budget is the single most important statement of the real priorities of a government and thus represents the 'deepest' form of SEA (in the sense that term is used in Chapter 1). In principle, Goodland (1998) noted it should be relatively easy to identify pro- and anti-environmental expenditures, citing a pilot analysis of the US federal budget. Although not strictly comparable, SEA-type tools are now being used at the World Bank to integrate environmental considerations into budgetary measures in support of client countries as part of an emerging new area of policy-based lending and support for structural adjustment (Green and Raphael 2002).

Table 3: The different forms of SEA procedure

EIA-mainframe (UNECE SEA Protocol)	**EIA modified/appraisal (Canada)**	**Integrated assessment (RIA in the UK)**
Screening: determine whether proposals are likely to have significant effects *Scoping:* determine the relevant information to be included in report *Environmental report:* describe the effects of proposal and reasonable alternatives *Public participation:* ensure timely, effective opportunities including comment on draft proposal and environmental report *Consultation with designated environmental and health authorities:* inform and consult on draft proposal and report *Decision:* take due account of report findings and comments received and provide reasons for decision *Monitoring:* of effects to identify and remedy unforeseen adverse impacts.	A two phase process is outlined: *Preliminary scan* – determine whether important strategic, environmental considerations are likely. If so or if there is a high level of potential uncertainty or risk, conduct a more detailed SEA *Analyzing environmental effects* – undertake on an iterative basis to consider the following aspects: 1) Scope and nature of potential effects 2) Need for mitigation and measures 3) Scope and nature of residual effects 4) Follow up, including effects monitoring 5) Public and stakeholder concerns, identified for decision-makers.	The RIA consists of three phases: *Initial RIA* – prepared for a policy idea to inform and ideally accompany a first submission to ministers *Partial RIA* – prepared prior to consultation exercise, includes refined cost and benefit estimates and options *Final RIA* – prepared with update information from analysis and consultation responses; indicates how they have influenced policy; and compares the benefits and costs for each option considered. When writing an RIA, consider all the impacts of a policy. It is required to accompany Cabinet correspondence for policy clearance and legislation when it is presented to Parliament.
Source: UNECE (2003)	Source: CEAA (2004)	Source: Cabinet Office (2005)

27) Interestingly, the Australian Environmental Protection (Impact of Proposals) Act (1974), inter alia, applied to 'incurring of expenditures', although it appears that an assessment was never triggered under this provision. The Act has been repealed and replaced by Environment Protection and Biodiversity Conservation Act (1999), which makes specific but limited provision for SEA of policy.

SEA Process, Procedure and Methodology

With some exceptions, the SEA process is based on EIA steps and elements, although these are subject to modification at the policy level. In broad, comparative terms, there are evident differences among the procedures associated with the main types of institutional architecture (outlined in Table 2). These are illustrated in Table 3, which delineates the anatomy of three SEA processes that exemplify respectively the EIA-based, EIA-modified/appraisal and integrated assessment approach. Using the SEA Protocol as an international 'reference point', the concern in this section is to annotate the different forms of SEA that apply to policy and legislation and identify generic norms and procedures that constitute the building blocks of good practice.

In its preamble, the Protocol recognizes that: *strategic environmental assessment should have an important role in the preparation and adoption of plans and programmes and, to the extent appropriate, policies and legislation*. The Protocol requires Parties to consider its 'appropriate principles and elements' if policies and legislation are assessed (Article 13). Although these are not specified, several 'principles' can be inferred from the list in Article 1 (a-e) in support of the objective of the Protocol and these are elaborated in the 'procedural' Articles (5-12). Key elements comprise screening, scoping, environmental report, public participation, consultation with environmental and health authorities, decision and monitoring (see Table 3). These measures (together with trans-boundary consultation when such effects occur) are taken here as representing the internationally agreed 'EIA-mainframe' for SEA of policy and legislation. Aspects of this approach are reflected in Czech (Chapter 4) and Finnish (Chapter 6) practice.

Mainframe procedure has been variously amended, combined or adopted in minimum form in EIA-modified/appraisal processes or applied flexibly. This is the case, for example, in the Canadian SEA process, which applies to all strategic proposals (Chapter 3); the 'Nordic approach' to SEA of bills and other government proposals followed in Denmark (Chapter 5), Finland (Chapter 6), Norway (Chapter 10) and Sweden (equivalent level of experience); the recently restructured Dutch E-test (Chapter 8); and the Hong Kong SEA process, now supplemented by sustainability assessment (Chapter 7). In Table 3, the Canadian process illustrates an approximate mid-point on this spectrum, comprised of a) preliminary scan and b) detailed assessment of key issues, broadly correspondent to elements of the SEA Protocol. By comparison, the Danish SEA process has four stages (screening, scoping, assessment and report) and the Dutch E-test is applied in two phases (quick scan and appraisal) as a relatively minimal procedure.

The UK process for regulatory impact assessment (RIA) is an example of an integrative approach. It is now carried out for all major policy changes and not confined only legislative proposals (although these still seem to predominate). The RIA process is formally structured into initial, partial and final phases, which are keyed to UK policy and legislative machinery (Table 3). It addresses economic, social and environmental impacts and their distribution across major groups (although costs borne by the private sector seem to predominate). A range of appraisal tools are used for this purpose, drawing from the government's 'policy hub',[28] which includes links to the SEA-specific guidance (see Chapter 11). The EC process of impact assessment also considers the full range of potential impacts of EU policy and legislative interventions and follows similar steps to the policy appraisal process that underpins SEA in the UK.

SEA objectives, norms and guiding principles

The role of SEA and its relationship to law and policy-making are formally described in statements of purpose, objective and principles contained in provision or guidance. Viewed generically, major aims are common or overlapping, although there are important differences in focus and emphasis that bear on the debate about the role and effectiveness of SEA as a policy instrument for environmental integration (introduced in Chapter 1). Table 4 illustrates a hierarchy of objectives that describe the intended relationship of SEA to decision-making and the benefits that are sought. These incorporate desired policy outcomes, which tend to be broadly recognized rather than explicitly stated.

A uniform *instrumental* aim is to take account of the significant effect of proposals and options on the environment and to integrate these considerations into decision-making. Derived benefits flow from the contribution to more informed policy choices and the demonstration of good governance through openness, transparency and other procedural values. These benefits can also be seen as *transformative* aims, sometimes expressed as improving the quality of policy or legislation and, over the longer term, changing the way such decisions are made. Other *incidental* benefits may include streamlining and focusing any further sequence of assessments (i.e. tiering). The *substantive* aims of SEA are to contribute to environment protection and to the promotion of sustainable development; for example by minimizing adverse effects, warning of potential cumulative effects and avoiding risks and liabilities (as cited in CEAA 2004), recognizing that 'prevention is less costly than clean up' (MOEE 1995a).

28) See www.policyhub.gov.uk/bpmaking/impact_assessment_and_appraisal.asp

The stated objective of the SEA Protocol is to provide for a high level of protection of the environment, including health (Article 1). It also refers to supporting aims, which include contributing to the consideration of environment and health concerns in the preparation of policies and legislation, and to procedural norms of transparency and public participation (see Box 3). The explicit inclusion of health in the SEA Protocol gives added importance to this objective as part of environmental integration and furthering sustainable development, consistent with the WSSD agenda. Further impetus comes from the activities to integrate health into EU policies and European intergovernmental processes, particularly for transport strategies, and the development of health impact assessment procedures for this purpose (see Hubel and Hedin 2003, Dora and Racioppi 2003).[29] Despite these advances, this is recognized as an area requiring further work (Dusik 2001).

Among the strongest goal statements relating to SEA are those in New Zealand and Australian legislation, which promote 'sustainable management of natural and physical resources' and 'ecologically sustainable development'.[30] In these cases, the SEA provision is either a non-specific or a limited part of the policy machinery for implementing an omnibus environmental

Table 4: The hierarchy of SEA aims and objectives

Type of aim	Generic objectives
Instrumental	To identify the significant environmental effects of policy initiatives in support of informed decision-making To integrate environmental considerations into the policy mainstream (across all relevant sectors)
Transformative	To improve the quality and process of law- and policy-making To facilitate decision-making that balances environmental, economic and social objectives
Substantive	To minimize the potentially adverse environmental effects of proposed policies (weak sustainability) To provide for a high level of environmental protection (moderate sustainability) To maintain resource potentials and the life support capacity of air, water, soil and ecosystems (moderate to strong sustainability)

Box 3: Objective and norms of the SEA Protocol (Article 1)

The objective of this Protocol is to provide for a high level of protection of the environment, including health by:

a) Ensuring that environmental, including health considerations are thoroughly taken into account in the development of plans and programmes;
b) Contributing to the consideration of environmental, including health, concerns in the preparation of policies and legislation;
c) Establishing clear, transparent and effective procedures for strategic environmental assessment;
d) Providing for public participation in strategic environmental assessment
e) Integrating by these means environmental, including health, concerns into measures and instruments designed to further sustainable development.

Source: UNECE (2003)

29) These activities implement and follow up on the London Charter on Transport, Environment and Health, Third Ministerial Conference on Environment and Health (www.euro.who.int/document/trt/leginstr.pdf). In addition, addressing threats to public health is one of the six priorities for action identified in the EU Strategy for Sustainable Development (European Commission 2002) and health impacts are considered as part of the internal procedure for impact assessment of policy and legislation. Similar initiatives are reported for other countries, including Canada (Banken 2003) and New Zealand (Public Health Advisory Committee 2004), and at the World Bank in relation to lending at the macroeconomic level (Mercier 2003).

30) Sustainable management is defined in section 5(2) of landmark New Zealand Resource Management Act as "the use, development and protection of natural and physical resources in a way or at a rate that enables ...social, economic and cultural well being ... while a) sustaining the[ir] potential .. to meet the reasonably forseeable needs of future generations, and b) safeguarding the life-supporting capacity of air, water, soil and ecosystems..." Key objectives of the Australian Environment Protection and Biodiversity Conservation Act (1999) as set out in section 3 include: "to promote ecologically sustainable development through the conservation and ecologically sustainable use of natural resources, and to promote the conservation of biodiversity..."

Box 4: Guiding principles for SEA implementation in Canada

In implementing the Cabinet Directive on SEA, federal departments and agencies should be guided by the following principles:

- *Early integration:* beginning in the conceptual stages of policy, plan or programme formulation
- *Examine alternatives:* evaluating and comparing environmental effects of options
- *Flexibility:* agencies have discretion in determining how to conduct SEA
- *Self-assessment:* each agency is responsible for SEA process application and decision making
- *Appropriate level of analysis:* SEA should be commensurate with the level of anticipated effects
- *Accountability:* SEA should be part of an open and accountable decision making process, and
- *Use of existing mechanisms:* for analysing effects, involving the public and reporting results

Source: CEAA, 2004, Section 2.2.1

statute. By contrast, SEA has a wide ranging but open ended role as a policy tool for implementing the multiple objectives and actions of the World Bank (2001) Environmental Strategy, which is intended to help 'to protect the long term productivity and resilience of natural resources and ecosystems'. This aim corresponds to strong sustainability (as described in Chapter 1) compared to the lower threshold of 'to prevent undue harm' for SEA of loans specified in Bank environmental safeguard policies. How SEA delivers on the former objective remains open to question.

Other guidance on SEA variously links the process to sustainable development.[31] For example, this approach is described as an 'integral part of achieving sustainable development' in UK guidelines and as facilitating 'balanced political decision-making' (Netherlands E-test). The Canadian SEA process is designed 'to incorporate environmental consideration into the development of public policy' and support the implementation of departmental sustainable development strategies, although the way and means are unstated (CEAA 2004, 1). Within the European Commission, impact assessment 'contributes to meeting the specific commitments of the Lisbon and Sustainable Development Strategies' (EC 2005, 5), for example by helping to identify win-win opportunities and clarify trade-offs among competing objectives (IEEP 2004).

Box 5: Generic questions addressed in SEA application

- What are the potential direct and indirect outcomes of the proposal?
- How do these outcomes interact with the environment?
- What is the scope and nature of these environmental interactions?
- Can the adverse effects be mitigated?
- What are the overall potential environmental effects of the proposal after mitigation measures have been incorporated?

Source: CEAA (2004, 7)

The hierarchy of objectives and norms in Table 3 may be further elaborated by principles of SEA design, application and good practice. A number of versions of generic principles covering these aspects have been proposed, many of which overlap and build on previous work (e.g. Sadler and Verheem 1996, Dalal-Clayton and Sadler 1998, Partidario 1999, Verheem and Tonk 2000, Sadler 2001, IAIA 2002). Other generic principles have been devised or adapted for developing countries (Abaza et al 2003), to promote a common approach to SEA in individual countries, as in South Africa (DEAT and CSIR 2000) or for use in development cooperation (OECD/DAC 2005). A number of countries have identified guiding principles as part of guidance on implementation of the SEA process. Canadian guidelines, based on the principles outlined in Box 4, are intended for use by non-specialists and to be applicable in different policy settings (CEAA 2004).

31) From an SEA perspective, the concept of sustainable development usually is understood generally, for example, through reference to the 'Brundtland' definition of the term (as in Canadian guidance) or key international documents such as the current EC Environmental Action Programme (cited in Danish guidance).

Box 6: Main analytical steps in integrated impact assessment

- Identify the problem (nature, magnitude and evolution)
- Define the objectives to be pursued
- Develop the main policy options for achieving them
- Analyse their likely economic, social and environmental impacts
- Compare the options in terms of their main advantages and disadvantages
- Outline how policy monitoring and evaluation will be organized

Stakeholder consultation and canvassing expertise can run throughout the process

Source: European Commission (2005, 4)

In all cases, SEA should be adapted to the context and circumstances of law- and policy-making (as outlined in Chapter 1). For example, UK guidance calls for 'a common sense approach' rather than rigid application of procedure (DETR 1998). Canadian guidance notes that there is no single 'best' methodology, rather it encourages federal departments and agencies 'to develop approaches tailored to their particular needs', undertaking SEA 'on an iterative basis throughout the policy development process' (CEAA 2004, 6-7). Even NEPA regulations, which are among the most prescriptive, make certain procedural exemptions with respect to bills or legislative proposals to Congress.[32]

SEA procedure and methodology

The main types of approach to SEA of policy described earlier are characterized by a particular combination of procedural steps and elements, as indicated in Table 3. Applied systematically, the SEA process establishes the basis for good practice, consistent with the purpose and specific provisions. Generic procedure, from screening to monitoring, are described below with particular reference to the key elements cited in the SEA Protocol that Parties shall consider when applying it to policies and legislation (in accordance with Article 14(1)).

These elements are visible in one form or another in most, if not all, SEA processes, although reflected to a lesser degree in integrated assessment processes (and 'threaded into' the New Zealand regime). However, the generic questions addressed in SEA (Box 5) are not dissimilar from the main analytical steps undertaken in integrated assessment (see Box 6), and converge at certain points. In addition, the objectives-led approach of integrated assessment accords with the SEA principle of early application when policy ideas and proposals are first being formulated and links it to an objectives-led approach.

Early application and integration

All policies come from somewhere and may reflect from new circumstances, changing attitudes or emerging issues (DTLR 2002). The notion of strategic assessment means thinking from the outset about when and how to engage in policy formulation, beginning with defining the problem and framing the proposal. Official guidance typically emphasizes the importance of early integration of the SEA process with policy-making or planning (e.g. CEQ 1978, 1501.2).[33] In many cases, a statement of objectives will give an initial focus for the SEA. This provides an opportunity to check for possible conflicts or consistencies with environmental policy and to look for ways for creative intervention (or thinking outside the box). Such information will help in the design of an objectives-led approach to SEA, i.e. carried out against key environmental commitments that are potentially affected by a proposal.

Screening (or preliminary scan)

For Parties to the SEA Protocol, the provisions of Article 5 can be followed to determine whether proposed policies or legislation are likely to have significant environmental effects that should be subject to assessment. This can be done through case-by-case examination or by specifying types of proposals or by combining both approaches, taking into account criteria

32) NEPA regulations (s1506.8) stipulate that a legislative environmental impact statement (EIS) 'shall be integrated with the legislative process of Congress' and that its preparation 'shall conform to requirements' except that 'there need not be a scoping process.' The statement also 'shall be prepared in the same manner as a draft statement but shall be considered the detailed statement required by statute', provided certain other provisos are met (CEQ 1978).

33) This section of NEPA Regulations succinctly states the rationale for early integration. Agencies shall integrate the NEPA process with other planning at the earliest possible time to insure that planning and decisions reflect environmental values, to avoid delays later in the process, and to head off potential conflicts.

set out in Annex III of the Protocol. In applying this procedure, there are also obligations to consult with environmental and health authorities to endeavour to provide opportunities for public participation, and to ensure publication of the results.

In current practice, policy is screened largely on a case-by-case basis, using checklists, matrices, tree diagrams and similar tools. Class screening can be applied to legislative calendars for advance identification of bills that may require further assessment. Danish experience may be of interest in that regard (Chapter 5). Some countries undertake preliminary or quick scans (terms used in Canada and the Netherlands respectively), which combine the screening and scoping functions, recognizing the two steps are closely related. Canadian guidance on the preliminary scan indicates it may take on other strategic or policy functions but practice appears to be incompletely developed. A lack of an appropriate screening procedure reportedly impeded SEA implementation at the policy level for several years following the passage of the 1992 Czech EIA Act (Chapter 4). Over a much longer period, there has been legal and political dispute in determining whether NEPA applies to federal policies.[34]

Scoping

For Parties to the SEA Protocol, the provisions of Article 6 can be followed for policies or legislation. This requires only that they establish arrangements for the determination of the relevant information to be included in the environmental report (in accordance with Article 7(2)) and consult with the designated environmental and health authorities in carrying out such scoping. In addition, each Party, to the extent appropriate, shall endeavour to provide opportunities for the participation of the public in this process.

Article 6 sets out a minimum procedure for scoping and falls short against some statements of principles of SEA good practice or the requirements of certain countries. NEPA guidance on scoping (which applies to policy as well as other strategic actions) remains the classic exposition of how to conduct scoping, seldom cited, frequently appropriated and never bettered (Council on Environmental Quality 1978, s1501.7). It calls for an open and systematic process for identifying the significant issues related to a proposal and narrowing the discussion in the environmental impact statement (or report) to key matters. The lead agency shall invite the participation of the participation of all affected federal, state and local government agencies (and Indian tribes) and other interested persons. NEPA scoping practice for federal land use plans that include policy goals and objectives is described in Bass (2005).

When undertaken systematically, the scoping stage lays the foundations for an effective process of policy or plan assessment as exemplified in the discussion of Finnish experience (Chapter 6). As in screening, checklists, matrices, problem trees and similar methods can be used to focus on the effects that really matter. The Dutch E-test, for example, is based on four basic questions regarding the consequences of proposed legislation for a) energy consumption and mobility, b) use of raw materials, c) waste streams and emissions to air, water and soil, and d) use of physical space (Chapter 8). More detailed questionnaires are included in Danish guidance together with case examples of application to bills and other proposals (see MOEE 1995b; also Chapter 5). In many cases, the entirety of policy assessment may correspond to an extended scoping as compared to setting a term of reference for further, detailed analysis. This latter, classic focus will be appropriate for major initiatives, such as SEA of national energy policies as in the Czech Republic (Chapter 4).[35]

Environmental report (including detailed assessment)

For Parties to the SEA Protocol, the provisions of Article 7 can be followed when preparing an environmental report for policies or legislation subject to assessment. This requires that an environmental report is prepared (in accordance with the scope determined under Article 6) to identify, describe and evaluate the likely significant environmental, including health, effects of implementing the proposal and reasonable alternatives (Article 7(2). Further, this article states:

The report shall contain such information specified in Annex IV, as may reasonably be required, taking into account:

a) Current knowledge and methods of assessment;
b) The contents and the level of detail of the proposal and its stage in the decision-making process;
c) The interests of the public; and
d) The information needs of the decision-making body.

34) For example, some commentators consider NEPA is applied to policies as well as plans and programmes (e.g. Bass et al 2001), consistent with the CEQ (1978, 1508.18) interpretation of major federal action, which can be regarded as definitive. However, others have noted that policy has been treated as non-triggering in standard agency practice and case law precedent, and Clark (cited in Sadler and Brooke 1998) uses national energy policy has an example of a major action that escaped review. At the time of writing, there is reportedly no NEPA of the draft US energy bill (H.R. 6) now being sent to Congress. The bill is designed to ease access to oil, gas, coal and other energy resources and has massive implications for the environment; it also includes sections that waive NEPA provisions relating to these activities.

35) Under the previous Czech EIA regime, scoping was an informal process that included ad hoc negotiation of the type of approach to be applied to development concepts (e.g. EIA-based versus objectives-led appraisal). In the EIA Act (2004), scoping is a mandatory activity, although it is not yet clear how it will be applied in practice and whether this choice of methodology will continue.

Environmental reports must be of sufficient quality to meet the requirements of the Protocol (Article 7 (3)).

Depending on the scope of assessment, the environmental report may range from a brief explanatory section of a policy or legislative document to a sizeable statement comparable. The report procedure and format differs from country to country, and often reflects the particular requirements of the decision-making procedure followed for submissions to Cabinet or Parliament (Chapters 3 and 5 respectively). For example, Canadian guidance emphasizes the use of existing mechanisms to report on environmental effects, although recent amendments to the Cabinet Directive now require the preparation of a public statement when a detailed SEA has been undertaken. Only a small proportion of policy or legislation proposals likely fall within this category in Canada.

When a more detailed phase of analysis and information gathering is undertaken, aspects for consideration may include:

- *Assembly of baseline information* consistent with the 'scope' or term of reference. State of the environment reports and similar documents often provide a background necessary to understand impacts of national policy. For policies with a spatial dimension, baseline data and indicators may be needed for specific areas or critical aspects (e.g. wildlife habitat). For sector policies, the baseline will depend on the main type of environmental impacts anticipated (e.g. emissions-based air quality indicators for energy and transport strategies).

- *Analysis of potential effects* of the proposal and major alternatives. This activity constitutes the technical heart of any assessment; options appraisal is its creative counterpart and nowhere more important than at the policy level. Hong Kong experience can be usefully examined in that regard (Chapter 7). A large kit of tools and methods are potentially available for analyzing the effects of each major alternative (typically including the no action alternative) against the baseline and core objectives. In many cases, qualitative assessment will be sufficient. Policy scenarios and dialogues can helpful if long-term options are being considered.

- *Identify measures to mitigate adverse impacts and enhance beneficial effects*. First and foremost, mitigation and enhancement should be an integral part of the strategic design of policy, built into the generation and consideration of alternatives. The precautionary principle should guide the approach if there is a high level of risk or potential of serious adverse effects. Second, for policy implementation, the mitigation hierarchy (avoid, reduce and offset) should be followed as far as possible to address adverse effects. In many cases, the focus at this stage will be on flanking measures, as exemplified in assessments of trade policies.

Various measures can used to ensure that the environmental report is of sufficient quality. On a basic level, these include guidance and oversight to promote consistency and compliance with procedural requirements. A more proactive example is the help desk to support agencies in carrying out the Netherlands E-test. In addition, a written agreement (equivalent to terms of reference) guides the appraisal and preparation of the Explanatory Memorandum to the draft legislation, which is subject to comment from the Ministry of Housing, Spatial Planning and the Environment and a report by the Ministry of Justice (Chapter 8). In the UK, the Cabinet Office has a role in the RIA process, and in Canada there are limited checks and balances built into the inclusion of SEA reports as part of the memoranda to Cabinet (Chapter 3).

Public participation

For Parties to the SEA Protocol, the provisions of Article 8 can be followed in providing opportunities for public participation in assessment of policies or legislation. As stated in Article 8(1), such opportunities shall be early, timely and effective, when all options are open. Specifically, there must be timely public availability of the draft policy or bill and the environmental report; the public concerned, including relevant non-governmental organizations, must be identified; and have the opportunity to express its opinion on the draft policy or bill and the environmental report within reasonable time frames. When considering detailed arrangements for these purposes, each Party should take into account, to the extent appropriate, the elements listed in Annex V of the SEA Protocol (Article 8(5)), having regard also to the provisions of the Aarhus Convention.[36]

SEA requirements and practice in public participation vary significantly at this level, more so than for plans and programmes and particularly across legal and administratively based systems. In part, this reflects the characteristics and constitutional and political conventions of law and policy-making discussed earlier. Public consultation and hearings are standard procedure in some countries and jurisdictions and undertaken on an ad hoc basis in others. The approach may vary within one country. In the UK, for example, SEA guidance indicates public consultation is optional within the RIA process

36) As the title suggests, the UNECE (Aarhus) Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters rests on three cornerstones. Article 7 refers to public participation concerning plans, programmes and policies, and Article 8 addresses public participation during the preparation of executive and/or generally applicable legally binding normative instruments. The requirements of Article 8 of the Protocol are broadly consistent with these.

(Chapter 11). In Canadian SEA guidance, public consultation is cited only as one of a number of sources of gathering information about the concerns and preferences of affected or interested parties. Other methods include surveys and direct canvassing of views and information. The recently completed SEA of the 30-year policy moratorium on western offshore oil and gas development was carried out as a public review, setting new standards for Canadian and possibly international practice.

Decision making

For Parties to the SEA Protocol, the provisions of Article 11 can be followed with regard to decisions on policies and legislation subject to detailed assessment. Such decisions shall take due account of the conclusions of the environmental report, the mitigation measures identified therein and the comments received from the public and environmental and health authorities.[37] The policy or legislation adopted must be made available to the public and the designated authorities, together with a statement that summarises how the environmental considerations have been integrated, how the comments received have been taken into account, and the reasons for adopting the proposal in light of the alternatives.

Article 11 of the SEA protocol sets a new international standard in respect to decision making on policies or legislation. Other than perhaps as statement of obligation, the 'due account' provisions of Article 11(1) are largely met already in general practice in most of the SEA jurisdictions reviewed here. The requirement to prepare a summary statement of how that obligation has been discharged is another level of transparency again, and possibly relatively few countries meet all of the provisions of Article 11(2). Collectively, they raise the clearance bar for transparency of policy decision-making, possibly to a level that a number of jurisdictions may be unwilling to endeavour to accommodate (or unable to).[38] Time will tell. Meanwhile, decision statements that correspond to the provisions of the Protocol will be particularly challenging for policies or legislation that have undergone detailed assessment.

Monitoring and follow up

For Parties to the SEA Protocol, the provisions of Article 12 can be followed with regard to monitoring the significant environmental, including health, effects of the implementation of policies or legislation. This process is undertaken in order, inter alia, to identify, at an early stage, unforeseen adverse effects and to be able to undertake appropriate remedial action (wording that is nearly identical to the monitoring provision of Directive 2001/42/EC). Monitoring results shall be made available, in accordance with national legislation, to the environmental and health authorities (referred to in Article 9(1)) and to the public (Article 12(2)).

Few countries have made detailed arrangements for monitoring the environment effects of policy or legislation or provided specific guidance on the factors to be taken into account. Finnish guidelines can be usefully reviewed in that regard (Chapter 6). Examples of monitoring of the environmental effects of the implementation of policy or legislation are difficult to locate. In part, this reflects the nature of such decisions, which often take the form of broad strategy or direction (Chapter 1). Often, there can be long chains of connection from intent through further measures or actions to an impact on the ground, with many intervening factors. In such cases, the more practical approach might be to undertake issue tracking rather than effects monitoring per se. This can help to keep policy changes on the environmental radar screen until their consequences become more apparent or bounded, for example, when taken forward through more concrete plans or programmes.

Monitoring is part of the larger process of SEA follow up, which is gaining increasing attention. Broadly defined, follow up also includes process auditing and effectiveness and performance review, where the emphasis is on how well the SEA process works, what factors contribute to success or shortfall and whether the process makes a difference to policy or law-making and achieves the outcomes intended. These are not easy questions to answer but examples of reviews of individual and system-wide applications are given in many of the chapters of this volume. For example, these include the formal evaluations of the Netherlands E-test (Chapter 8) and the Canadian SEA process (Chapter 3), which have provided the basis for undertaking reforms to strengthen their implementation.

Conclusion

SEA systems that are applied primarily or partly to policy or legislation are still at an early stage of process development. Internationally, it is no longer accurate to claim that they are few in number or do not apply at the highest levels of national policy-making (among recent comments found in the SEA literature). However, it is true to say that SEA of policies and

37) If there are transboundary effects, due account must be taken of the comments from affected Parties in accordance with the provisions of Article 10.

38) For example, this may be the case with so-called Westminster parliamentary democracies (which have derived and adapted their basic traditions and conventions of governance from the House of Commons) that follow the convention of collective and confidential Cabinet decision-making. This arguably might be compromised by a strict interpretation of the provisions of Article 11(2), e.g. how environmental considerations were taken into account.

legislation is less advanced than SEA of plans and programmes and there remain greater constraints on its acceptance and application (as exemplified by their differential treatment in the SEA Protocol). At the higher level, SEA arrangements and procedure are also more ad hoc and diversified, especially in the aftermath of the work that has gone into the national transposition of Directive 2001/42/EC. This distinction can be expected to continue for the immediate future, since there is nothing comparable to the Directive or Protocol at the level of policies or legislation.

The arguments continue on the pros and cons of establishing a legal versus administrative basis for SEA at this level. On pragmatic grounds, a case might be made for the use of non-statutory instruments in the initial phase of SEA introduction and application to policy or legislation. This position was in vogue in early provision for SEA of policies and legislation when the focus was on minimum requirements and flexible procedure (de Boer and Sadler 1996). It still affords a viable strategy for introducing SEA at this level. But longer-term experience with the implementation of non-statutory SEA instruments (as in Canada) suggests they lack transparency, integrity and consistency of process application (Commissioner for the Environment and Sustainable Development 2004). So far, however, no country has yet changed from an administrative to a statutory system for SEA of policy or legislation.

More positively, there is a considerable body of principles, guidance and insights on good practice on which to draw. The SEA Protocol calls for the Parties to endeavour to apply its principles and element to policies and legislation and to report on their activities. Whether or not this will be sufficient to catalyze SEA application at this level is a matter of conjecture, but it provides an agreed framework to move forward internationally. As such, the provisions of the Protocol have been used as point of reference for discussing and comparing the SEA arrangements and procedures that are in place in different countries. This review also incorporates pointers to the experience of different countries and agencies.

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Chapter 3
SEA Experience at the Federal Level in Canada

Greg Wilburn

Introduction

The practice of strategic environmental assessment (SEA) in Canada has been underway at the federal level for almost twenty years. The 1984 *Environmental Assessment and Review Process Guidelines Order* provided some early scope for environmental assessment of programs.[39] Specific provision for SEA was made in 1990 under a Cabinet Directive, which established a separate process and requirements at the level of policy and programs (Government of Canada 1990a).

This provision responded to the report of the World Commission on Environment and Development (1987) which identified integrated decision-making as a key element of sustainability.[40] Subsequently, integrated decision-making became a significant component of *Canada's Green Plan* (Government of Canada 1990b), the first comprehensive national environmental policy. This package of reforms included the requirement for government departments and agencies to prepare departmental sustainable development strategies and the appointment of a Commissioner for the Environment and Sustainable Development within the office of the Auditor-General (legislation passed in 1995).

Federal requirements for environmental assessment, planning and decision-making have evolved substantially since that time. In particular, the *Cabinet Directive on the Environmental Assessment of Policy, Plan and Program Proposals* (Government of Canada 1999) was developed to meet the changing needs of federal policy-making and provide clear guidance to government departments and agencies on SEA practice. Although challenges remain, as indicated by the recent audit of the Commissioner of the Environment and Sustainable Development (2004), there has been considerable progress in SEA at the federal level in Canada. These developments and issues are reviewed in the present paper.

Background

In 1988, an extensive review of the Environmental Assessment and Review Process Guidelines Order, which involved broad stakeholder and public consultation, led to a major reform of this regime in 1990 as part of Canada's Green Plan. The reforms included a proposal for a new legislated process for project-level assessment (the Canadian Environmental Assessment Act (which came into effect in 1995) and a non-legislative process for policy and program assessment (the 1990 Cabinet Directive). With the limited exception of the Farm Income Protection Act (1991)41, there are currently no statutory requirements for SEA at the federal level.

Although not legally binding, Cabinet directives place conditions upon how federal officials may conduct their business and compliance with them is not voluntary. In this case, failure to conduct a SEA of a policy, plan or program proposal at an appropriate level prior to Cabinet submission could result in a proposal being sent back to the sponsoring department or agency for additional analysis. Various measures were also put in place to ensure that federal departments and agencies met the requirements of the 1990 Cabinet Directive.

These included the provision of guidance on the SEA process issued by the then Federal Environmental Assessment and Review Office (1993), followed by a review of SEA implementation and practice undertaken by the Canadian Environmental Assessment Agency,[42] (1996). Subsequently, an interdepartmental committee on SEA, chaired by the Agency, was established to support federal departments and agencies in their work. Still in place, the committee advises on the implementation of the Cabinet directive, fosters information exchange and develops guidance material such as the manual for SEA training (issued in 1997).

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39) The 1984 *Guidelines Order* had a broader scope than the *Canadian Environmental Assessment Act* (1995), which replaced it. *The Guidelines Order stated: The Process shall be a self assessment process under which the initiating department shall, as early in the planning process as possible and before irrevocable decisions are taken, ensure that the environmental implications of all proposals for which it is the decision making authority are fully considered and where the implications are significant, refer the proposal to the Minister for public review by a Panel*

40) Specifically: "The ability to anticipate and prevent environmental damage requires that the ecological dimensions of policy be considered at the same time as the economic, trade, energy, agricultural, and other dimensions. They should be considered on the same agendas and in the same national and international institutions... This reorientation is one of the chief institutional challenges of the 1990s and beyond" World Commission on Environment and Development (1987, 10).

41) Farm Income Protection Act, Section 4(2), SC 1991, Chapter 22

In 1998, the Commissioner of the Environment and Sustainable Development conducted an audit of federal environmental assessment processes for projects under the *Canadian Environmental Assessment Act* (1995) and for policy and programs under the 1990 *Cabinet Directive*. The major conclusion was that performance was poor and that the Agency and federal departments needed to work together to improve compliance (Commissioner of the Environment and Sustainable Development 1998). This report echoed concerns noted by the Agency in its earlier 1996 review of SEA implementation. In 1999, the Commissioner's report once again highlighted ongoing concerns with respect to SEA compliance and comprehension of its application to sustainable decision-making (Commissioner of the Environment and Sustainable Development 1999).

These reviews led to the conclusion that the requirements of the 1990 Cabinet Directive needed to be clarified and that better guidance on SEA practice was necessary. The interdepartmental committee on SEA was instrumental in developing options for improvement. Following consultations among federal departments and agencies, the Government of Canada (1999) issued *The 1999 Cabinet Directive on the Environmental Assessment of Policy, Plan and Program Proposals*, and subsequently *Guidelines for Implementing the Cabinet Directive* (Canadian Environmental Assessment Agency, 2000).

Both the Directive and Guidelines represented an important development. First, the 1990 Directive required federal officials to consider environmental effects of policy and program proposals but provided little context. The new directive provided much clearer guidance on when such assessments were necessary. Second, the 1993 guidance, prepared to support the original directive, contained little detail on issues such as scanning, scoping, public involvement and documentation. The new guidelines included information on these key considerations.

SEA requirements have not remained static. Following a review of environmental assessment by a Parliamentary standing committee in 2003[43], the Directive was further amended to try and improve transparency and better account for positive as well as negative impacts of policy, pan and program proposals (Government of Canada 2004). The Guidelines were also revised accordingly with a new foreword from the Clerk of the Privy Council encouraging departments to make use of the material provided.

This indicates challenges still exist with respect to SEA implementation within the federal government. The key challenge is to ensure that policy and program officers are aware of the Directive and its requirements and that they apply the tool effectively to the proposals they are bringing forward. Although progress to date has been slow, there are indications that recognition of the value of SEA is growing within the federal government.

The Institutional Framework

Objectives, scope and principles of application

The goal of the Cabinet Directive is to ensure that policies, plans and programs that are likely to have environmental effects are thoroughly assessed before decisions are sought. This approach was taken, rather than listing the types of decisions that ought to be assessed, to ensure broad and comprehensive coverage of federal policy-making. Similarly, there is no listing of departments and agencies that must comply with the directive. Rather, the Directive states that (Government of Canada 2004, 1):

Ministers expect a strategic environmental assessment of a policy, plan or program proposal to be conducted when the following two conditions are met:

1. the proposal is submitted to an individual minister or Cabinet for approval; and
2. implementation of the proposal may result in important environmental effects, either positive or negative.

Departments and agencies are also encouraged to conduct strategic environmental assessments for other policy, plan or program proposals when circumstances warrant.

The Directive applies only to federal government decision-making and to the laws and policy in areas over which the government has jurisdiction.[44] As described above, it also applies only to proposals submitted to Cabinet or ministerial decision making. Individual ministers are responsible for their respective portfolios and the Cabinet makes collective

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42) The Canadian Environmental Assessment Agency replaced the Federal Environmental Assessment and Review Office on passage of the Canadian Environmental Assessment Act (1995)

43) Report of the House of Commons Standing Committee on the Environment & Sustainable Development: Sustainable Development and Environmental Assessment: Beyond Bill C-9 (2003), Ottawa. [Bill C-9 amended the Canadian Environmental Assessment Act in 2003]

44) Canada is a constitutional democracy composed of a federal government, 10 provinces and 3 territories. Sections 91and 92 of Canada's Constitution Act (1982) establish those areas of jurisdiction exclusive to the federal and provincial levels of government, respectively. For example, the federal government administers areas such as trade and commerce, national defence, foreign affairs, Indians and Indian lands and criminal law. The provinces are responsible for the management and sale of provincial crown lands (land-use planning, resource management), municipal institutions, local works and undertakings, and matters of a local or private nature in the province.

decisions about federal policy, finances or the allocation of resources, usually upon recommendations from Cabinet sub-committees. The Privy Council Office (which is the secretariat for Cabinet and most of its committees) and the Treasury Board Secretariat support the decision-making process, and with the Department of Finance, are referred to as the central agencies.

These agencies coordinate policy development and set requirements for documents used to seek Cabinet decisions. They also have an oversight role and are responsible for ensuring integrated and horizontal policy. Key documents used to seek Cabinet decisions include Memoranda to cabinet (policy and program decisions), Treasury Board Submissions (fiscal decisions) and Regulatory Impact Analysis Statements (regulatory decisions). SEA, where necessary, is integral to all of

Box 1: Main benefits of SEA

"By addressing potential environmental considerations of proposals early, federal departments and agencies will be better able to:

- optimize positive and minimize or mitigate negative environmental effects;
- consider the potential cumulative environmental effects of proposals;
- implement sustainable development strategies;
- save time and money by drawing attention to potential liabilities for environmental clean-up and other unforeseen concerns;
- streamline project-level environmental assessments by eliminating the need to address some issues at this stage;
- promote accountability and credibility among the general public and stakeholders; and
- contribute to broader Governmental policy commitments and obligations.

Source: Government of Canada (2004, 3)

Box 2: Guiding principles for SEA

In implementing the Cabinet Directive, federal departments and agencies should be guided by the following principles:

Early integration - The analysis of environmental considerations should be fully integrated into the development of a policy, plan or program. To support sound decision making that is consistent with the principles of sustainable development, the consideration of environmental effects should begin early in the conceptual planning stages of the proposal, before irreversible decisions are made. In this way, strategic environmental assessment can support the analysis of options and identify issues that may require further consideration.

Examine alternatives - One of the most critical aspects of any strategic environmental assessment is the opportunity to evaluate and compare the environmental effects of alternatives in the development of a new policy, plan or program. This comparison will help identify how modifications or changes to the policy, plan or program can reduce environmental risk.

Flexibility - The guidelines presented in this document are advisory, not prescriptive. Departments and agencies have discretion in determining how they conduct strategic environmental assessments, and are encouraged to adapt and refine analytical methodologies and tools appropriate to their circumstances.

Self-assessment - Each individual department and agency is responsible for applying strategic environmental assessments to its proposed policies, plans and programs as appropriate, determining how an assessment should be conducted, performing the assessment and reporting on the findings of the assessment.

Appropriate level of analysis - The scope of analysis of potential environmental effects should be commensurate with the level of anticipated effects.

Accountability - Strategic environmental assessment should be part of an open and accountable decision-making process within the federal government. Accountability should be promoted through the involvement of affected individuals and organizations, when appropriate, and through documentation and reporting mechanisms.

Use of existing mechanisms - In conducting a strategic environmental assessment, departments and agencies should use existing mechanisms to conduct any analysis of environmental effects, involve the public if required, evaluate performance and report the results. Such mechanisms shall also be used to report statements of environmental effects.

Source: Government of Canada (2004, 4)

these decision-making tools and the Privy Council Office has the primary responsibility for ensuring the *Guidelines* are followed.

The objectives and principles that respectively lay the foundation for SEA of federal policy, plan and program proposals are clearly stated in the *Cabinet Directive and Guidelines* (Box 1, 2). Federal departments and agencies should conduct assessments early, at all levels of decision-making in order to inform the development of policy, plan and program proposals. They should also ensure that recommended positions are consistent with the government's overall environmental and sustainable development priorities.

Similar to project assessment, SEA is a self-assessment process. The federal department or agency developing a policy, plan or program proposal is responsible for determining whether an assessment is necessary, and for conducting the assessment, documenting the results and reporting on them to decision-makers and the public. This is a key consideration with respect to accountability.

SEA arrangements and implementation

The Guidelines do not establish rigid requirements for SEA. Rather, departments are encouraged to work within the broad framework of guidance to adapt the process to suit their requirements and make use of existing mechanisms. As stated in the *Guidelines* (Government of Canada, 2004, 6):

> *There is no single "best" methodology for conducting a strategic environmental assessment of a policy, plan or program proposal. Federal departments and agencies are encouraged to apply appropriate frameworks or techniques, and to develop approaches tailored to their particular needs and circumstances.*

Although not required to do so, some departments and agencies have established their own internal guidance or policy processes to govern SEA (see Appendix A). Others continue to rely on the advice in the existing guidelines.

The Canadian Environmental Assessment Agency has a leadership role in promoting the Directive and provides information and advice on the conduct of SEA. The Agency reports directly to the Minister of the Environment, who is responsible for advising other ministers on potential environmental considerations of proposals before Cabinet decisions are made, and for advising on environmentally appropriate courses of action. As SEA is a self-assessment process, however, individual departments are responsible for completing assessments and submitting the information for ministerial or Cabinet consideration.

There are several checks and balances built into the process for submitting policy, plan and program proposals to Ministers or Cabinet for decision. Cabinet documents must contain specific information to account for environmental considerations, where necessary. Their development is monitored by the Cabinet secretariat, the Privy Council Office, to ensure that appropriate analysis is conducted and a balanced submission is made to Cabinet. In addition, Cabinet documents are subject to broad interdepartmental consultation, which allow officials from Environment Canada (which is a line ministry) and the Canadian Environmental Assessment Agency to flag possible concerns with respect to environmental assessment.

Treasury Board Submissions relating to fiscal decisions follow a broadly similar process. In this case, they are subject to review by the Treasury Board Secretariat, which is responsible for ensuring thorough analysis and for identifying any potential problems with submissions. This includes any environmental concerns.

Regulatory proposals are also subject to the *Directive*. A specific secretariat of the Privy Council Office is responsible for overseeing these submissions and for working with departments to ensure thorough economic, social and environmental analysis. Unlike Memorandums to Cabinet and Treasury Board submissions, regulatory proposals must be published for comment prior to being submitted for decision.

The mandate of the Commissioner for Environment and Sustainable Development provides a final 'check and balance'. The Commissioner audits the environmental performance of federal organizations and reports to Parliament and the public once a year. The most recent report includes the first comprehensive review of the implementation of the SEA Directive (previous audits had examined both EA and SEA). See Commissioner for Environment and Sustainable Development (1998, 1999, 2004).

Procedure and elements of approach

The basic elements of the SEA process are laid out in the Guidelines. The first step is to conduct a preliminary scan, which should occur as early as possible in the development of a proposal and should determine whether important environmental considerations are likely to arise from implementation of a proposed policy, plan or program. During this stage, the focus is

on identifying strategic considerations at a relatively general or conceptual level, rather than evaluating quantitative, detailed environmental impacts, as would be required in a project-level assessment.

In conducting the preliminary scan, policy analysts should:

- identify the direct and indirect outcomes associated with implementing the proposal; and
- consider whether these outcomes could affect any component of the environment (as defined in the *Directive*).

If the preliminary scan identifies the potential for important environmental considerations, either positive or negative, or if there is a high level of uncertainty or risk associated with the outcome of a policy, plan or program, then a more detailed analysis of the environmental effects should be conducted. If the scan does not identify the potential for important environmental considerations, no additional analysis of environmental effects is required.

If additional analysis is required, the *Directive* states that SEA should address the following considerations:

- the scope and nature of environmental effects;
- the need for mitigation;
- the scope and nature of residual effects;
- any requirement for follow-up; and
- public and stakeholder concerns.

The *Directive* states that level of effort committed to SEA should be commensurate with the level of environmental effects anticipated from implementation of the proposed policy, plan or program. Factors that should inform the level of effort include frequency and duration of effects, location and magnitude, timing, risk (e.g. to human health or from accidents), irreversibility and likelihood of cumulative effects. In practice, a broad assessment of environmental impacts is conducted, taking into account environmental priorities as identified in government policy and legislation, bilateral and multilateral international environmental agreements, departmental sustainable development strategies, budget commitments and other high-level guidance.

Analysis of potential effects should indicate, where appropriate, the concerns of those likely to be most affected, other stakeholders and the public. This process of involvement is vital to understanding public concerns and can be an important source of local knowledge. It also can help to build consensus among stakeholders and foster public trust and credibility in the decision-making process. Public involvement in an SEA should be commensurate with the overall development of the policy, plan or program proposal itself and should make use of any public involvement activity that may be under way as part of the decision-making process. Although there are no specific requirements for public consultation during SEA, there are separate guidelines and principles for public consultation during policy development (Privy Council Office, 1992).

There is no requirement for a separate report of SEA findings. As of January 2004, however, departments and agencies are required to issue a public statement of environmental effects when a detailed assessment has been conducted. This is (Government of Canada, 2004, 10):

> *"A statement that is made at the time that the policy, plan or program is announced, indicating the likely environmental effects of the policy, plan or program. The statement may be included as part of a general announcement by the government respecting the policy, plan or program, or it may be a stand alone document that explains the results of the strategic environmental assessment."*

Otherwise, departments are encouraged to determine the content and extent of the public statement according to the circumstances of each case and factor the results into existing reporting mechanisms. When a policy, plan or program has been assessed for environmental effects, submissions to Cabinet or Treasury Board should provide a summary of the analysis and its outcomes. Subsequent communications plans or materials should address public concerns, if any, about the potential environmental effects of the proposal. If a policy, plan or program is assessed that does not require Cabinet approval, the findings should be reported in relevant decision documents. Departments and agencies may also report on SEA findings as part of reporting on sustainable development strategies or in other documents that concern organizational practices and effectiveness.

Relationship to decision-making

SEA at the federal level in Canada is intended to be an integral part of the entire policy development process and to inform the highest level of decision-making. The requirements for conducting such assessments are intended to ensure that environmental factors are taken into account in the same way as economic and social considerations. Ultimately, recommendations to senior decision-makers must provide for a broad and frank accounting of environmental effects, addressing environmental protection and conservation objectives and priorities for sustainable development. Depending

upon the proposal being considered, an assessment might focus on either or both environmental protection or sustainability considerations.

Aspects of SEA Practice

Record of experience to date

At present, there is no central mechanism for recording the applications and results of the SEA process. It is difficult, therefore, to provide an accurate accounting of the numbers of assessments conducted by federal departments and agencies. The Canadian Environmental Assessment Agency informally tracks the use of SEA in Memoranda to Cabinet. Although this is only one area of application of the Directive, it is possible to draw some conclusions. For example, in the Cabinet session conducted between September 2000 and June 2001 approximately 20% of 200 cabinet submissions were subject to environmental assessment.[45] For the same reporting period, Environment Canada (2001) indicated that it had completed or participated in 44 strategic environmental assessments.

Because the process is based upon self-assessment, the focus to date has been on marketing the directive and on developing practical guidance. The interdepartmental committee on SEA increased in membership from 11 federal departments and agencies in 1999 to 20 in 2002. It has overseen the development of a series of hypothetical case studies in support of SEA use and development. The committee is currently working on improved web resources for SEA practitioners and is considering the development of performance indicators for the evaluation of assessments and the processes that are applied.

Other activities to support the use of SEA include a written communication from the Clerk of the Privy Council (the head of Canada's Civil Service) and the President of the Canadian Environmental Assessment Agency to all heads of federal agencies to remind them of their obligations under the Directive. The Agency itself has conducted numerous briefings with federal departments and agencies to raise awareness of the Directive and its requirements and recently hosted the first government-wide conference on SEA.[46] It also continues to provide advice and guidance on an as requested basis and its policy staff review Cabinet business lists and documents in order to offer support where needed.

Use of methods

Basic methodology is set out in the Guidelines for Implementing the Cabinet Directive. In addition, other guidance documents used by federal policy and program officials to prepare Cabinet submissions (Memorandum to Cabinet Drafters' Guide, Regulatory Impact Assessment Writers' Guide, and Guide to the Preparation of Treasury Board Submissions) now make specific reference to SEA requirements.

Although not a clear indicator of improved compliance, certain trends are noteworthy. For example, in 1996, five federal departments had policies in place to govern the conduct of SEA (Canadian Environmental Assessment Agency, 1996). Today, 14 departments have a policy on the use of the SEA or are in the process of developing one (see Appendix A). In addition, the report of the Commissioner for Environment and Sustainable Development (1999) noted that only 12 of 28 federal departments required to prepare sustainable development strategies mentioned SEA (representing roughly 43% of departments). By 2002, Agency research indicated this number had climbed to over 50%.

Quality of SEA practice

There is no system in place to systematically evaluate the quality of SEA practice on an ongoing basis. As noted earlier, central agencies have an oversight role of ensuring thorough and balanced assessments are undertaken. Ultimately, however, individual departments and agencies are accountable for the quality of their strategic assessments and SEA performance across government is reviewed periodically by the Commissioner for the Environment and Sustainable Development (1998, 1999, 2004).

The 2004 audit of SEA implementation is the most thorough completed to date. It found some problems but also noted that considerable improvements had been made since the previous audits in 1998 and 1999. The Commissioner made a series of recommendations for improving the implementation of the Cabinet Directive. Currently the federal government is taking action to respond to these. For example, all departments will be required to establish SEA management systems with clear accountabilities, training and tracking processes to ensure that environmental considerations are brought into the design of public policies.

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45) Canadian Environmental Assessment Agency Research, Spring 2001.

46) Held over two days in Ottawa in March 2004, the conference attracted over 135 participants from across government, with keynote speakers from central agencies, government departments and industry and non-governmental organizations.

Conclusions

The implementation of SEA requirements at the federal level in Canada has resulted in some improvements in the policy process. The Directive has raised the awareness of the need to conduct integrated and balanced policy analysis, which incorporates environmental factors into the highest levels of government decision-making. Although progress has been slow and compliance difficult to determine, these issues themselves have pointed to the need to strengthen the capacity of federal officials to conduct SEA in support of policy, plan and program proposals. The periodic reviews of the effectiveness of SEA implementation completed by the Commissioner for Environment and Sustainable Development have led to the development of additional tools, guidance and approaches to ensure that environmental considerations are taken into account in policy-making in support the goal of sustainable development.

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Appendix A

Strategic Environmental Assessment Policy and Guidance Prepared by Canadian Federal Departments and Agencies

Organization	**Policy/Guidance**
Environment Canada	Guidance on the Preparation of Strategic Environmental Assessments at Environment Canada
Industry Canada	Strategic Environmental Assessment Guideline and Questionnaire
Natural Resources Canada	Environmental Assessment Screening Manual (currently being updated)
Agriculture Canada	Guidelines for the Assessment of Policies and Plans at Agriculture Canada (currently being redrafted)
National Defence	Departmental Administrative Order and Directive 4003-2
Foreign Affairs and International Trade	Framework for the Environmental Assessment of Trade Agreements
Canadian International Development Agency	Guide for Integrating Environmental Considerations in CIDA Policies and Programs (currently being redrafted)
Transport Canada	Strategic Environmental Assessment at Transport Canada
Public Works and Government Services	Under development
Privy Council – Regulatory Affairs	Regulatory Impact Assessment Writers Guide
Treasury Board Secretariat	A Guide to Drafting Treasury Board Submissions
Privy Council	Memoranda to Cabinet – Guidelines for Drafters

Chapter 4
SEA of Development Concepts in the Czech Republic

Martin Smutny, Jiri Dusik and Simona Kosikova

Introduction

This paper provides a review of Czech experience with SEA of 'development concepts'. It describes the legal provision and arrangements that have been established at this level, emphasising the distinctive approach that is taken and the evolving record of SEA implementation and practice. There is now approximately ten years of experience with SEA of policies and other strategic initiatives across a number of sectors. Drawing on this work and case examples, some key issues and aspects of effectiveness with this form of SEA are evaluated. The paper concludes with a summary of the pros and cons of the approach to SEA at the policy level in the Czech Republic and recommendations for the further development of this approach.

The Initial Phase of SEA at the Policy Level in the Czech Republic (1992-2004)

In the Czech Republic, provisions for SEA at the policy level were established in the first EIA Act (No. 244/1992 Coll.). Article 14 of this Act laid down the basic provisions for environmental assessment of 'development concepts' that are submitted to or approved by central administrative authorities in the sectors of energy, transport, agriculture, waste management, mining and processing of minerals, recreation and tourism. The EIA Act identified the National Water Management Plan and regional land use plans as among the "concepts" that needed to undergo assessment. Otherwise, the generic term "concept" was neither defined in this Act nor in any other generally applicable legislation, although it was widely understood to refer to strategies, policies, plans or programmes.

Article 14 of the EIA Act further stipulated that proponent of a concept must prepare SEA documentation, which should be based on the appropriate elements of the project-level EIA documentation (as defined in the Act). The proposed concept and its SEA documentation also had to be made available for minimum of 60 days for public review. The arrangements for public review had to be jointly determined by proponent and the Ministry of Environment (the only SEA supervising authority at that time). Once the public review was completed, the draft concept, its SEA documentation and comments obtained had to be forwarded to the Ministry of Environment which had to issue an SEA standpoint within 30 days. This position was not binding for decision-making; however, the EIA Act stipulated that a concept could not be approved without obtaining the SEA standpoint.

Although the EIA Act came into force in 1992, the implementation of Article 14 was delayed until mid-1990s. The main factors responsible were the lack of a legal interpretation of the term "concept" and very limited elaboration of plans, programs, policies and strategies at that time.[47] Methodological issues also played a minor role in limiting SEA application at this level. These concerned the practical approaches that could be used to assess general development interventions, which neither included specific projects nor had clear spatial projections. For these reasons, SEA for national concepts was not undertaken before 1996, although there was increasing use of SEA for regional land-use plans during that time.

In the period from 1996 to 2004, sixteen national policies or equivalent proposals have been subject of the SEA under the EIA Act (see Table 1). They included two National Development Plans that were prepared for the future use of EU Structural Funds. These proposals were very general in nature, defining the main development goals and priorities for the use of funds and comparable to national policies as understood in the Czech Republic.

Of particular importance was the first application of SEA of national energy policy undertaken between 1998 and 1999 (see Dusik 2003). This SEA was carried out as pilot SEA for a major "policy" document and was accompanied by thorough procedural and methodological discussions. It also involved many elements (such as public scoping, public review at the Czech Senate, etc.) that went beyond legal requirements. This process was never officially concluded because it significantly

47) Experience with socialist planning led to a widespread belief that plans, programs, strategies and policies were inappropriate forms of state interventions into emerging free-marked economy in the early post-socialist reforms in the Czech Republic. Virtually all formalised planning and policy-making processes were abolished. The only exception was land-use planning, although this comprehensive process was weakened as well (see Dusik and Sadler 2004).

Table 1: SEA of policies carried out in the Czech Republic 1996 – 2004

	Document	Submitted by	Year	Final SEA Standpoint
1.	State Energy Policy, version 1998	Ministry of Industry and Commerce	1998	Not issued
2.	Concept for Development of Transport Networks in Czech Republic till 2010	Ministry of Transport and Communications	1999	Approval with major reservations
3.	The Raw Material Policy of the CR in the Field of Mineral Materials and Their Resources	Ministry of Industry and Commerce	1999	Approval
4.	State Energy Policy, version 1999	Ministry of Industry and Commerce	1999	Disapproval
5.	Mid-term strategy for Transport and Telecommunications	Ministry of Transport and Communications	1999	Approval
6.	Concept of Sectoral Policy of the Ministry of Agriculture before accession of the CR to EU	Ministry of Agriculture	1999	Approval
7.	Strategy of Regional Development of the Czech Republic	Ministry for Regional Development	2000	Approval
8.	National Development Plan of the CR for 2000-2006	Ministry for Regional Development	2000	Approval
9.	Concept of radioactive waste treatment in Czech Republic, version June 2001	Ministry of Industry and Commerce	2001	Disapproval
10.	National Tourism Policy	Ministry for Regional Development	2002	Approval
11.	National Development Plan of the CR for 2002 – 2006	Ministry for Regional Development	2002	Approval
12.	State Energy Policy, version 2004	Ministry of Industry and Commerce	2004	Disapproval
13.	The National Cycling Development Strategy	Ministry of Transport and Communications	2004	Approval
14.	National Environmental Policy	Ministry of Environment	2004	Approval
15.	National Water Management Policy after the accession of the CR to EU 2004 – 2010	Ministry of Agriculture	2004	Approval
16.	National Agrarian Policy after the accession of the CR to EU 2004 – 2013	Ministry of Agriculture	2004	Approval

challenged the officially proposed option for future development of the energy sector. However, it established a precedent and proved influential in shaping the approach taken to policy assessment in the Czech Republic (see Table 2).

From 2001, regional level policies have been voluntarily subject to SEA in order to comply with EU funding requirements for projects that are implemented under such initiatives (e.g. regional development strategies, policies for the resource use, etc.). Table 3 summarizes the main features of the SEA of raw material policy for the North Moravia Region. This example of assessment carried out on the voluntary base at the regional level is of particular interest because the SEA team tried to consider the requirements of proposed legislation. At the time, the draft EIA Act with new provisions for SEA was already known but not officially approved by Parliament.

The approach to SEA at this level under guidance prepared by a team of Czech experts and issued as Methodology for Strategic Environmental Assessment of Regional Development Concepts (Dusik et al 2001). This guidance had more widely applicable nature and it has since been updated (Svobodova et al 2004) and extended into generic guidance on the application of SEA in the Czech Republic. Its main dimensions are annotated in Box 1.

During this initial period, the basic approach to SEA at this level evolved significantly, particularly in the use of methodologies and tools for impact assessment and to a lesser degree procedures for public participation. Most notably from an international perspective, SEA has been undertaken using EIA-based approaches and objective-led appraisal. In practice, many assessments combine a mix of elements with perhaps the objective-led appraisals most prevalent. Public participation in SEA of policies differed from case to case (as described below). Some assessments also actively involved the Czech Parliamentary bodies; examples include the SEA of national energy policy of 1998 (Dusik 2003) and the SEA of development of transport networks concept to 2010.

A common characteristic of SEA for policies in the Czech Republic in this period was the apparent low interest and late involvement of the public. In a number of cases, public participation in the SEA process only met the minimal legal obligation of a public hearing and comment, which typically took place near the end of the process after completion of the report and policy document.[48] But also there are examples of more extended public participation that corresponded with internationally accepted notions of good practice. For example, in the SEA of the national waste management plan, a series of regional and national public hearings was organised and drafts of the plan were open to comment. It is possible that public participation in SEA of policies at the national level could be made less passive and more effective and useful by shifting to more active modes of public involvement; for example through using working groups or round tables.

Table 2: SEA of the Energy Policy of the Czech Republic

Type of document	National Policy
Proponent	Ministry of Industry and Trade
Status of SEA	Undertaken pursuant to the EIA Act (No. 244/1992 Coll.)
Planning team	Internal team within the Ministry of Industry and Trade
SEA team	External consultancy
Background information	Drafted in 1998, the energy policy was the first strategic document to set out objectives and measures for development of entire energy sector (electricity, coal and gas). It was a comprehensive proposal without alternatives and the proponent learned of the requirement to apply SEA only during initial submission of the policy to the Czech Government
Timing of SEA	SEA process was initiated after the draft policy had been prepared by the proponent

48) In some cases, the Ministry of Environment concluded agreements with the responsible authorities on the terms for informing and consulting the public within the SEA process.

SEA authority	Ministry of Environment
Approach and Methods	Assessment was based on extensive mathematical modelling (model MARKAL) that provided outputs for three basic alternatives as defined by the SEA team. A set of indicators for analysing the draft policy were developed and used to estimate the effects of specific measures for implementation for each alternative.
Main conclusions of the assessment	The alternatives were ranked from the standpoint of their potential environmental performance. The SEA provided clear recommendation for the decision-making process and it was agreed that proponent would consider these findings and select an optimal alternative. Detailed mitigation and monitoring measures were to be designed for the alternative finally selected.
Final standpoint	None issued
Decision-making	SEA revealed significant environmental problems associated with the proposed energy policy and suggested two alternative options that would score better on majority of environmental and social issues. Bearing in mind that these conclusions may have significant influence on future decision-making in the energy sector, a new incoming Government decided not to continue with the proposed policy. Instead, a new energy policy was drafted in 1999 and a new SEA was undertaken by a UK-based consultancy. Compared to the previous example, the new SEA was considered to be extremely weak and obtained the first disapproval from a SEA Standpoint. This triggered debate about necessity to define rules of SEA good practice for the Czech Republic.
Public participation	The following means for identification and notification of the public were provided: • web page with announcement of the SEA process and background documents for the SEA, and • permanent special e-mail address to gather comments. In addition, NGOs established a network of six regional coordinators to disseminate information about the SEA, organized six regional public workshops and forwarded comments to the SEA team.
Lesson learned	• Use the simplest technique available to carry out the given task. This will save time and money. • SEA does not replace political decision-making; it is a decision-support process only and documentation may be ignored.

SEA of Policies after 2004

Important changes took place in SEA provision and arrangements in the Czech Republic in 2004. Most notably, new amendments to the EIA Act (100/2004 Coll.) were adopted to fully transpose Directive 2001/42/EC into Czech law. The new procedural requirements for SEA laid down in this Act are more extensive and detailed than those contained in the first EIA Act (244/1992 Coll.). They still apply to policies and strategies as well as to plans and programmes as required under Article 3 of the SEA Directive.

SEA procedure is regulated in Article 10a of the new EIA Act. The Act retains the original term "concepts" but clearly defines the term as including strategies, policies, plans and programmes that are prepared[49] or adopted[50] by public authorities and set a framework for activities that require EIA or that are co-financed by the EU. So defined, SEA of concepts also extend to the regional and local levels.

49) or assigned for preparation
50) or submitted for approval

Table 3: SEA of Raw Material Policy for the North Moravia Region

Type of document	Regional policy
Proponent	Policy elaboration was commissioned by the Ministry of Industry and Trade in 2002 and the SEA was ordered by the regional authority (Department of Nature Protection and Agriculture) in 2003
Status of SEA	SEA carried out on voluntary base
Planning team	Czech Geological Survey – Geofond (the state administration body)
SEA team	External consultancy
Background information	The SEA of the Raw Material Policy for the North Moravia Region was carried out as part of a larger project focussed on SEA of four regional concepts. The same SEA team and approach was used in all cases. A major component of the policy was an analysis of raw material sources with a particular focus on black coal. No alternatives were included in the policy document, but the chapter addressing the environmental effects of mining was prepared as part of the policy. Priorities and proposed tasks for further development in the sector were categorised as short-term, mid-term and long-term and mainly focused on the institutional system.
Timing of SEA	SEA was initiated after the draft policy had been prepared. Based on agreement with the regional authority, the SEA team had the opportunity to comment on all aspects of the document.
SEA authority	No responsible authority mandated legally; the SEA procedure was only informally discussed with the Ministry of Environment as the SEA authority on national level.
Approach and Methods	Objective-led appraisal used, beginning with identification of a set of preliminary goals of environmental protection based on relevant policies, plans and legislation at the national and regional level and identification of the main regional environmental problems. For each goal, detailed criteria were identified and used to identify the impact of proposed tasks and, if possible, mitigate adverse effects of policy implementation.
Main conclusions of the assessment	The SEA recommended establishing a system for revising and updating the policy with involvement of key stakeholders, changing the structure of the document in accordance with the usual planning process (i.e., analysis – priorities – measures – activities – implementation – monitoring) and undertaking monitoring of environmental effects.
Final standpoint	Not issued; the regional authority did not officially ask the Ministry of Environment for the final SEA standpoint
Decision-making	The policy was formally "taken into account" by the Regional Government of the North Moravia Region. The SEA outputs (monitoring) should be implemented within the implementation of the policy.

Public participation	An initial public workshop was organised at the beginning of the SEA process to present the proposed approach and timetable. All relevant policy and SEA documents were published on the web for comment to the SEA team. Other relevant information (e.g. invitation to the public workshops) was sent by email directly to all municipalities within region (about 350) and key stakeholders such as industrial companies, NGOs, etc. (identified at the beginning of the SEA process). After the SEA report was completed, a second public workshop was organised to present the results and outputs of the assessment and solicit comments (for a two-week period).
Lessons learned	1) Start the SEA as early as possible. Once a draft document has been elaborated, the planning team usually does not accept proposed changes. 2) Ensure there is good communication among the key stakeholders and particularly with the policy or planning team. In this case, the proponent (Ministry of Industry and Trade) did not communicate with the regional authority or the SEA team. 3) Agree on the use of the SEA results and outputs at the beginning of the process with policy or planning team. This establishes a basis for effective integration of SEA into decision-making. 4) Adapt or modify the assessment to the context and requirements. In this case, the policy was more an analytical document then tool for decision-making

Box 1: SEA methodology for regional development concepts

The first official SEA methodology in the Czech Republic was elaborated for regional development concepts, covering strategies, plans and programmes for EU Structural Funds and land-use plans.

It was developed during 2000-2001 through a wide consultative process among 16 experts – specialists in SEA, EIA, regional development planning, health/safety issues, public participation and environmental management – and representatives of Ministry of Environment and Ministry or Regional Development. Elaboration of the methodology was preceded by a review of lessons learned with SEA for regional development plans in selected EU member states and OECD countries (Dusik and Rosecky 2001). The expert team also reviewed the main strengths and weaknesses of domestic experience with SEA approaches, based on both objective-led appraisal and derived from conventional EIA-based practice.

The expert team concluded that both approaches have their advantages and are not mutually exclusive. Objective-led appraisals can be effectively used in early stages of the planning process when detailed development objectives and priorities are established. Such early appraisals can be complemented by EIA-based assessment for specific actions for implementing development objectives.

Principles of effective SEA practice were stipulated as part of the methodology and recommended:

- parallel undertaking of SEA with the elaboration of the concept
- direct participation of the SEA team in the work of the planning teams, and
- carrying out public participation in the elaboration of the concept and in the SEA through a single procedure that meets consultations requirements for both the planning and SEA regimes.

In order to provide tailor-made advice, separate methodological guidance was provided for SEA of regional development concepts and for SEA of land-use plans. Procedural steps in these planning processes were identified and appropriate SEA steps were recommended to correspond with them. Methodological recommendations reflect both legal requirements and good SEA practice, and each recommendation was classified either as a mandatory task (i.e. rule derived from legal provisions) or a voluntary task (rule derived from principles of good practice).

Once formally issued by the Ministry of Environment, the methodology was widely used and later transformed into guidance that was generally applicable to SEA methodology in the Czech Republic.

Table 4: Annotated summary of the new procedural requirements for SEA in the amended EIA Act (100/2004 Coll.)

Notification about concept (Art. 10c)	• Anyone who intends to elaborate the concept (hereinafter ìproponentî) has to elaborate the notification. • The detail content of the notification is stipulated in Annex 7 of the Act. Notification has to include information on the: – Nature of the concept – Affected territory, and – Possible environmental and health effects (including possible trans-boundary effects). • The proponent has to send the notification in printed and electronic form to the SEA supervising authority (Ministry of Environment for national and regional concepts and the Regional Authorities for local concepts). • SEA supervising authority makes the notification publicly available though the national information system for SEA[51] and forwards it to possibly concerned authorities (state authorities, regions and municipalities). • Anyone may send written comments on the notification to the SEA supervising authority within 20 days of its publication.
Fact-finding (screening and scoping) procedure (Art. 10d)	• Fact-finding procedure determines the need for SEA. If SEA is required, it also specifies the scope for SEA report, advises of practical arrangement for carrying out SEA within elaboration of the concept, stipulates requirements for elaboration of alternatives of the concept and defines the detailed arrangement for public participation. • The SEA supervising authority carries out the fact-finding procedure on the basis of the notification, obtained comments and the criteria set out in Annex 8 to the Act. The fact-finding procedure has to be completed by written conclusion within 35 days of the date of publishing the notification. • If the assessment is not required, the SEA supervising authority has to stipulate the reasons for this decision in the conclusion of the fact-finding procedure. • The SEA supervising authority has to send the conclusion of the fact-finding procedure immediately to the proponent and to the authorities concerned and makes it publicly available.
Procedure of SEA (Art. 10e)	• The proponent has to appoint an SEA expert (person who is authorised to elaborate SEA/EIA) within 30 days of the date of receipt of the conclusion of the fact-finding procedure and informs the relevant authority, which shall immediately publish this information on the SEA system. • Proponent has to cooperate with the SEA expert (especially by providing all relevant documents that generated within elaboration of the concept). • The appointed SEA expert is responsible for the complete and objective elaboration of the SEA report (the content of the SEA report is stipulated in Annex 9 of the Act) • The SEA expert may require information essential for the elaboration of the SEA report from the proponent, the SEA supervising authority and other possibly concerned authorities which are obliged to provide the requested information in the necessary scope.

51) National information system for SEA is a web-based database that provides essential information about completed and ongoing SEAs. It is a part of national information system for EIA which has been established in mid 1990ies and proved extremely effective tool for central registry of information on EIA and SEA matters.

Draft concept (Art. 10f)	• The proponent has to send the draft concept and SEA report (which should be an integral part of the concept) to the SEA supervising authority in printed and electronic form. • The SEA supervising authority has to verify, whether the SEA report is prepared pursuant to the requirements of the Act (Annex 9). If so, the SEA supervising authority sends the draft concept and SEA report to the authorities concerned and makes it publicly available. • Every person may send written comments on the draft concept and SEA report to the SEA supervising authority. • The proponent of the concept has to organize the public hearing. The information on the place and time of the public hearing have to be published on the official notice board of the proponent, national information system for SEA and in at least one other way usual in the affected territory (e.g. in the press). • The minutes from the public hearing have to be made publicly available and sent to the SEA supervising authority by the proponent.
SEA standpoint (Art. 10g)	• SEA supervising authority shall issue (taking into account the draft concept including SEA report, comments and viewpoints received, and the public hearing) an SEA standpoint to the concept within 30 days from the date of public hearing. • The SEA supervising authority may state disagreement with the draft concept from the point of view of potential negative impacts on the environment and public health. It may furthermore propose new information or parts should be add, or, if appropriate, propose compensation measures and measures for monitoring impacts on the environment and public health. • The standpoint is sent to the proponent, concerned authorities and made publicly available. • The concept cannot be approved without the SEA standpoint. The approving authority shall be obliged to take the requirements and conditions resulting from the SEA standpoint into account. • If the standpoint contains requirements and conditions and these are not included or only partly included in the concept (as approved), the approving authority shall be obliged to justify it and make this justification publicly available. • The standpoint is sent to the proponent, concerned authorities and made publicly available. • The concept cannot be approved without the SEA standpoint. The approving authority shall be obliged to take the requirements and conditions resulting from the SEA standpoint into account. • If the standpoint contains requirements and conditions and these are not included or only partly included in the concept (as approved), the approving authority shall be obliged to justify it and make this justification publicly available.
SEA follow up (Art. 10h)	• The proponent has to ensure monitoring and analysis of actual effects of the concept implementation on environment and health • When the proponent finds significant unforeseen effects, it has to: • Ensure mitigation and compensation measures • Notify SEA supervising authority and authorities concerned, and • Decide about modifications of the concept. • Authorities concerned have to monitor the actual effects of the concept implementation on the environment and health and can submit request for modification of the concept to the approving authority

Key features of this legal framework are summarised in Table 4. With the exception of land-use plans, the Act makes no provision for applying different procedures for different types of concepts (e.g. for the policy level).

Anyone[52] who proposes to elaborate a concept that falls within the scope of the EIA Act must notify the SEA supervising authority and provide comprehensive information about the nature of the proposed planning process. This information is used in fact-finding on the proposal (screening and scoping). If SEA is required or is obligatory (as for concepts on the national and regional level), the SEA supervising authority is responsible for determining the scope and manner in which the SEA process is undertaken within the elaboration of a specific concept.

The SEA report is prepared in accordance with a defined format (stipulated in Annex 9 of the Act) and results of the scoping process. Once finalised the SEA report is subject to a public hearing and review by the relevant authorities including those responsible for environment and health.

Simultaneously with the new EIA Act, the amended Act on Nature Protection came into force in 2004. In accordance with relevant EU directives, it contains the requirements for assessment of possible impacts on Natura 2000 sites. Under the amended Act, every concept or project likely to have a significant effect on a designated site must be subject to assessment using SEA or EIA procedure. The arrangements for administration and the methods and approaches to the assessment of Natura 2000 sites were not defined at the time of writing (mid-2005).

Currently, there is little experience with SEA in accordance with this new legal framework. However, one innovative development to facilitate the broad application of SEA may be of interest. An internet-based information system for EIA has been established pursuant to the Act. It requires all responsible authorities to deposit all documents for the SEA process, including notification, SEA report and information about public hearings. Only the SEA supervisory authorities can modify the records but the entire system can be accessed by anyone to review or download relevant documents.

Some Lessons of SEA Effectiveness at the Policy Level

Establishing good communication among the parties involved and especially between the proponent and the SEA team is a key condition for an effective process. This should begin early with a clear and common understanding of the process and agreement on its objectives and outputs. It is important to explain the necessary steps within the SEA process and the tasks associated with them (including monitoring of environmental impacts) to the team within the proponent ministry that will be responsible for preparing and implementing the policy. The Ministry of Environment has a substantial role in such discussions; it also can help to support and reinforce the results of the SEA process in its final SEA standpoint.

The "ideal" conditions described above are generalised from all cases and very difficult to identify their impact in specific instances. The role and contribution of the SEA process to decision-making differs from case to case but an important denominator of this relationship is the timing or staging of SEA application (see also Dusik and Sadler 2004). The SEA procedure must bring the environmental point of view into consideration during policy preparation. Unless the proposal is modified or optimised, the real effect of the SEA is low.

At the level of national policy, the proponent ministries usually try to avoid the conditions and tasks imposed by the SEA report and final standpoint respectively. There are also cases where the SEA process established terms and conditions for the environmentally optimal alternative only and was unable to influence policy or its implementation when another alternative was approved. In this regard, the SEA team cannot substitute for role of the SEA supervising authority (i.e. Ministry of Environment or regional authorities) in the enforcement of the SEA results. Although the SEA standpoint usually contains recommendations and conclusions based on the results of the SEA report, there is little control over their fulfilment. For example, the assessments for National Development Plans (see Smutny, Kosikova and Dusik 2004) recommended systematic environmental monitoring and evaluation of projects initiated through EU Structural Funds. This requirement was included in the final standpoints but was applied very narrowly in practice. More attention needs to be given by the SEA supervising authority to verifying that the requirements in the final standpoint are followed in policy implementation.

Conclusions and Recommendations

Based on the experience to date, discussion with different stakeholders and considering the early applications under the new Act, the main strengths and weaknesses of the SEA process as carried out for national policies in the Czech Republic are summarised below.

52) Literally meaning any physical or legal person

Key strengths of SEA practice at this level are:

- obligatory application for policies on the national and regional level;
- increasing experience with assessment of policy documents;
- examples of good practice;
- national legislation in compliance with the EU SEA Directive;
- established SEA information system;
- basic SEA methodology to identify the impacts of proposed measures; and
- improved understanding of SEA issues in central government ministries.

Key weaknesses of SEA practice at this level are:

- limited understanding of the role of SEA and its possible inputs to shaping the policy;
- low emphasis on assessing the potential environmental consequences of policy objectives or priorities;
- alternatives are often insufficiently considered;
- only some parts of the policy can be assessed (limited consideration was given to assessment of the implementation arrangements or monitoring plan);
- use of ineffective modes of the public involvement; and
- low impact of SEA on policy implementation with insufficient monitoring and lack of capacity for this activity.

Recommended measures and steps for strengthening the SEA process in the Czech Republic include:

- legal reinterpretation of all unclear provisions in the new Act (e.g. links to the assessment of the Natura 2000 sites);
- develop a SEA handbook of tools and methods and examples of their application;
- establish a training system for both government policy officials and SEA experts, preferably linked to existing systems of professional education;
- establish an association of SEA professionals that would facilitate exchange of views and information and define benchmarks for good practice
- improve controls on adherence to conditions identified in the final SEA standpoint; and
- improve systems for monitoring the environmental impacts of policy implementation.

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Chapter 5
SEA of Bills and other Government Proposals in Denmark

Bo Elling

Introduction

This chapter reviews the experience with SEA of bills and governmental proposals in Denmark. It provides an outline of the institutional arrangements for SEA at this level and a profile of the record of implementation and practice, including statistics on the number of assessments carried out on bills and other governmental proposals submitted to the Danish Parliament since the provision was introduced in 1993. Aspects of the effectiveness and performance of this system are also evaluated, focussing on how SEA practice makes a difference on the decision-making and the quality of assessments of environmental effects. Finally, the pros and cons of experience with SEA at the policy level are summarized and recommendations made on how the process might be strengthened in the short term and the long term.

Institutional Arrangements

Provision for SEA

SEA has been applied to bills and other governmental proposals for more than a decade, beginning with the Parliamentary Year 1993/94. The legal provision for SEA at the policy level was made in a Circular from the Prime Minister's Office[53]. Under the terms of the Circular, an assessment of bills and other government proposals was required if they were expected to have significant impact on the environment. An assessment of environmental effects should include all likely significant effects on the environment[54], should be performed with respect to administrative considerations and availability of data, and should declare if no significant effects are likely to occur in the observations on the bill or other government proposal.

These requirements should be applied to all bills submitted from the Government to the Parliament for readings and final approval by the Parliament. The term other governmental proposals refers to proposals from the government submitted to Parliament before their adoption and further implementation. Examples include governmental plans for future energy supply, the adoption of environmental objectives on CO_2 for the year 2005 and other plans or projects proposed by the Government were included. Governmental policies in the broader sense of the term are not subject to the requirement to carry out a SEA.

The current provision for SEA at this level is the original circular from the Prime Minister with minor amendments. These include consideration of visual impacts in the environmental factors to be taken into account and making available on the Internet the obligatory announcement of the environmental statement attached to the bill, at the time it is submitted to the Parliament.[55]

Procedural elements

In 1993, the Ministry of the Environment (1993) issued *Guidance on Procedures for Strategic Environmental Assessment of Bills and other Government Proposals*. This was followed in 1995 by more detailed guidance on *Strategic Environmental Assessment of Bills and other Government Proposals – Examples and Experience* (Ministry of the Environment, 1995). Both documents describe a recommended procedure for the conduct of SEA and include a checklist of 'headline' questions for screening whether or not a bill or governmental proposal should be subjected to SEA. The checklist also includes sub-questions, which are used in determining the scope of the environmental assessment.

Based on the rules in the Circular and the above guidance documents, a four-step procedure can be outlined, comprising screening, scoping, assessment and publication. These steps can be described as follows:

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53) Circular from the Prime Minister's Office No. 31 of February 26th 1993
54) Environmental effects are defined broadly to include human health and welfare, flora and fauna, soil, air, climate, landscape, material resources, buildings, and cultural heritage.
55) The current Circular is Prime Minister's Circular No. 159 of 16th September 1998

Screening – The checklist is used to assess whether a proposal will have a significant impact on the environment. An environmental assessment shall be undertaken for proposals likely to have significant impact. If a proposal will have no significant impact, this must be indicated in the observations on the bill.

Scoping – The subsidiary questionnaire in the checklist should be used to define the scope of the environmental assessment.

Assessment – The Ministry responsible for the preparation of a bill or proposal undertakes the assessment, directly or with the help of consultants, and decides how the assessed impacts are to be described and documented.

Publication – A statement on the environmental impacts will be published in the observations on the bill.

The provision for SEA of bills and other government proposals differs from the provision for SEA made in the Act on Environmental Assessment of Plans and Programmes of July 21st 2004 in accordance with Directive 2001/42/EC. The main differences relate to their legal basis and to their obligations for including alternatives and public hearings during the preparation phase of the SEA process.

Under the Circular from the Prime Minister, as opposed to a statutory act, supervision of the requirement for SEA and its implementation is exercised through the Ministry of the Environment. Nevertheless, the authority to monitor and hold the ministries to account in conducting SEA in accordance with the Circular belongs solely to the Prime Minister. Citizens, stakeholders and institutions, other than the Prime Minister's Office, have no rights or powers to address ministry lack of compliance with the Circular. Consequently non-compliance will not necessarily block the legislative process.

Although procedural steps such as alternatives and public participation are not obligatory, this does not necessarily result in their absence from assessments at the policy level. During the preparation of bills and the observations on them, it is common practice to involve stakeholders and other interest groups. Furthermore, these groups and the general public have the opportunity to comment and become involved during their reading and parliamentary debate. As a result, proposals from the public or interest groups are often appended to the documentation that underlies the debates in the Parliament.

Strategic dilemmas

Elling (1997) examined the possibility of building the primary elements of SEA, such as documentation, procedure, significance, alternatives and public participation, into the process and practice of preparing bills. He concluded that it was possible to bring this process into compliance with the concept of SEA that includes all the above listed principles. Furthermore the study found that three strategic dilemmas played a major role in the political process of shaping the bills and considering environmental concerns. These are (Elling 1997, 167-68):

- the planning dilemma (long term environmental goals contrasted with short term environmental arguments for adoption);
- the political dilemma (environmental arguments for adoption contrasted with other objectives); and
- the system dilemma (environmental narrowing of ministerial framework versus broadened framework with less environmental concern).

These dilemmas highlight the effect of political priorities in the process of environmental assessment at the policy level. It also throws light on the value of the SEA process in making politics transparent and highlighting the costs of technocratic dominance. Furthermore, the study verified that the barriers for performing SEA were administrative rather than methodological. Finally, the study demonstrated that the dynamic character of the process can compensate for the lack of predictability at the policy level and that monitoring can lead to repeated or adjusted assessments that can result in amendments or revisions to the acts in question.

Process Implementation

Overall trends

From the beginning, the Ministry of the Environment has monitored the implementation of the SEA process. This has resulted in information on trends in SEA application in relation to number of bills and other governmental proposals that were submitted to Parliament from 1993/94 to 2003/04. In Table 1, a distinction is drawn among proposals that had a) no statement on environmental effects, b) a statement of no or nil environmental effect (negative declaration) and c) a statement of the environmental effect.

Table 1: Statement of environmental effects in bills and other governmental proposals (1993/94 to 2003/04)

	93/94	94/95	95/96	96/97	97/98	98/99	99/00	00/01	_	02/03	03/04
a) NS	73	54	31	23	18	10	6	8	12	10	11
b) ND	14	26	52	59	66	69	77	72	52	73	73
c) SI	13	20	17	19	16	21	17	20	16	17	16
Total	100	100	100	100	100	100	100	100	100	100	100
NBS	261	254	264	273	300	246	288	242	251	228	255

Source: The Ministry of the Environment, LPA, 2004

Note: a) NS = no statement, b) ND = negative declaration, c) SI = statement of impact (percentages)
NBS = number of bills and other government proposals submitted in Parliamentary Year

As shown below, the percentage of bills and other government proposals having no statement on environmental effects was lowered drastically every year until 1999/2000 when the lowest rate of 6% occurred. Since then a small increase in the number of proposals with no statement at all can be observed and now has stabilized at 10-12%. Correspondingly, the percentage of bills and other government proposals that include a negative declaration of environmental effects has increased significantly, from 14% in 1993/94 to 73% in 2003/04, with a maximum of 77% in 1999/2000. The percentage of bills and governmental proposals that have made a statement of environmental effects has increased modestly, from 13 to 20% in the first two years of practice and then stabilized around 16-20% in the following years.

Overall, these trends indicate SEA practice in government ministries has stabilized and follow the provision for SEA. A key indicator is the consistent trend in the percentage of bills and other governmental proposals that include a statement of potentially significant effects on the environment. This has remained approximately the same from year to year. Although 10-12% of the bills and proposals still do not have any statement, this should not cause concern. It is a stable trend and presumably does not include bills or proposals with serious effects on the environment. Nevertheless, further analyses of SEA application to bills and other governmental proposals can contribute to a more differentiated picture of key trends and the present situation.

Aspects of practice

During 1997-98, the process of implementation and practice in the conduct of SEA was studied in interviews with governmental officers and managers in the ministries of Food, Agriculture and Fisheries, Industry and Taxes (Elling 2000). Except for the Ministry of Environment and Energy and the Ministry of Traffic, these three ministries have the widest SEA experience in the administration with respect to both the number of assessments carried out and their relevance for the environment. The Ministry of Environment and Energy was not included because normally its bills by definition have an environmental objective and because of its role in guiding other ministries in carrying out assessments. Within the Ministry of Traffic, bills with the highest environmental relevance are assessed not in accordance with the Circular but with the legal provision for EIA (Danish transposition of Directive 85/337/EC and subsequent amendments).

The study looked at a) the performance of the assessment, b) the presentation of assessments in the observations to the bills in question, c) guidance and other tools, and d) ministry views on formal requirements, quality of the process and possibilities for public participation. Interview findings were critical in identifying the fulfilment of requirements and on confirming other elements of SEA practice. The results can be summed up in eleven points, which are listed below without priority.

1) *Two approaches to SEA at this level* – The process is undertaken either as a report by a commission or an ad hoc assessment. The former was found to be most fruitful because background material and often assessments are available. In case of ad hoc assessment, it is mostly timing that causes problems and not the lack of data and information.

2) *SEA integrated in the preparation of bills* – In all ministries, officers with the duty to prepare the bills also carried out the environmental assessments and the ministries did not select or train specific experts to do so.

3) *Scoping not used systematically in identification of environmental effects* – Impact identification is mainly based on traditional experience and by consulting with other authorities. No examples were found of a systematic canvass or survey of a broad spectrum of knowledge and interests.

4) Criteria for significance only applied implicitly – Most commonly, assessments only considered if effects were present or not.

5) Positive effects outweighed negative – Ministries were more conscious about positive environmental effects that could promote a proposal than about likely negative effects.

6) Political adaptations made to SEA – Management viewed adaptation of the assessment as a part of the political execution of this process.

7) Often information on environmental effects partly included in other sections of the observation – All ministries agreed that this could not be avoided because certain matters could not be separated.

8) Guidelines are known and used – Ministries were familiar with the guidelines from the Ministry of the Environment and Energy and used them in various degrees. Guidelines could inspire but were seldom utilised directly in conducting the assessment. Also the ministries were reluctant about expressing an opinion on the utility of guidelines during the interviews, which might be associated with points 9 and 10 below.

9) No wish for supplied guidance although examples welcome – None of the ministries wanted to have further guidance supplied but one ministry introduced examples of assessments from its own auspices.

10) No wish for more explicit substantial and procedural requirements for SEA – On the contrary, the ministries all expressed the need for flexibility to take account of the differences among their mandates, types of bills prepared and what could be included in the concept of the environment.

11) No principle reasons against public participation – On the contrary, the ministries considered public involvement enhanced the assessment. Hearings of interest organisations, public concerned and other authorities, already widely practised, were emphasised.

Further investigations, spot tests and contacts with ministry officials involved in environmental assessments have confirmed that these results are still valid and relevant for the present conduct of SEA at the policy level (Termansen 2001).

In general, the above study and other experience confirm that government administrations consider that the framework and requirements for SEA of bills and other government proposals are satisfactory. SEA provides for a flexible process, which takes account of administrative concerns, availability of data and the scope of the concept of the environment. Further, the practice of responsible officers performing the assessment as part of the process of bill preparation can be considered as highly satisfactory. This approach facilitates the integration of environmental concerns into decision-making and measures for environmental protection. Other positive developments are ministry familiarity with and use of the guidance issued.

From an environmental point of view, however, ministry contentment with the framework and requirements for SEA at this level is not necessarily positive. It can reflect concerns other than the protection of the environment. Notably, the lower weight given to negative effects against the promotion of positive effects in the adoption of proposals and the political adaptation of final presented assessments point to non-environmental concerns. Finally, the ministries do not want new guidance or more explicit requirements for assessment, confirming that administrative and political flexibility has the highest priority.

Although this can be viewed as part of the political reality of government administration, it cannot be considered as satisfactory from the point of view of full compliance with the SEA concept. Ideally in SEA, the proponent takes all the significant effects on the environment into account, provides an open process for outside review of proposals and makes key priorities transparent. If political realities prevent the realization of such conditions, there is good reason to establish arrangements to do so and achieve the political purpose of protecting the environment.

In conclusion, more attention should be paid to requirements that can promote: a) the assessment of all significant effects, b) greater transparency in the assessment process, and c) the presentation of all the findings of a SEA for the Parliament as well as for the general public. The study points to two specific actions that should be taken: first, the establishment of an obligatory scoping procedure with outside participation that promotes the assessment of all effects; and second, strengthening the obligation of both the responsible authorities and the proponent to take account of outside input on SEA. Finally, the study concluded that the involvement of the general public in the preparation of bills should be obligatory given its positive effect on the quality of assessments and the presentation of data. This is backed by experience in other fields of SEA and EIA.

SEA Effectiveness and Performance

Focus and scope of approach

Further studies on the quality of SEA of bills and other government proposals, as conducted by Danish ministries, were carried out by Elling (2000). At this level, SEA quality was evaluated in relation to three criteria:

- the compliance of an environmental statement with the *existing requirements* for its performance and substantive content;
- the extent to which an environmental statement *includes an assessment of all actual effects* on the environment; and
- the *effectiveness of the SEA* defined by the extent to which an assessment was employed in accordance with its purpose, i.e. the extent to which the identification of likely environmental effects was taken into account and contributed to final decision-making.

A first study, focussed on criteria 1 and 2, was carried out as a comparative analysis of two different scopes of the environmental impacts of nine selected bills (see Box 1). The objective was to review whether all likely significant effects on the environment were included in the scopes that the responsible ministries included in their statement as compared to an independent analysis carried out by the study team. The two scopes are summarized and compared in Table 2.

A second study focussed on the third criterion above and evaluated the role of environmental statements in the political debate in the Parliament. It considered the same nine selected bills referred to in Box 1. Key concerns related to how the submitted environmental statement had been used or referred to in debates and to what extent environmental issues

Box 1: Bills selected for analysis

From the *Ministry of Industry:*
- L 49 1996-97 on the crew on ships, and
- L 202 1996-97 on change of governmental grants to industrial development activities

From the *Ministry of Food, Agriculture and Fisheries:*
- L 135 1996-97 on change of Act on Purchase of Land and the Planning Act (Regional committees on purchase of land, and
- L 233 1996-97 on change of Act on grants for agricultural structure development and grants for ecological farming, etc. (Grants on development for ecological change in agriculture and fisheries

From the *Ministry of Taxes:*
- L 106 1996-97 on change of Act on tax on waste and raw materials
- L 157 1996-97 on tax according to fuel consumption by certain cars
- L 209 1994-95 on change of Act on carbon dioxide-taxes on certain energy products and Act on accelerated reimbursement of certain taxes (Change of rules for reimbursement)
- L 213 1994-95 on taxes on sulphur , and
- L 252 1996-97 on change of Act on registration fee for motor vehicles etc. and Act on tax on motor vehicles according to weight etc. (Change of taxes on motor vehicles etc.).

Note: The bills should be read as follows: (L[Act] 49[number of act that year] 1996-97 [Parliamentary year]

associated with the bill in question were part of the political debate. One way to assess the quality of the submitted statement might be to analyse the impact of the assessments on the final adoption of the bills. But the material publicly available did not allow for such an analysis. Thus, the character of the debate, its extent and substantive topics, were the sole criteria for the evaluation of how the environmental statement was utilized in the debates in the Parliament.

It was a thesis of this study that the environmental statement influences the debate on environmental issues in the Parliament as a whole. The extremes of influence can be described as widely different foci of political debate. On the one hand, the debate will try to compensate for an insufficient environmental assessment by addressing standpoints on the environmental effects of the bill in question. On the other hand, the debate will use an assessment of high quality to focus on and to define political priorities on the basis of the outlined environmental effects.

Table 2: Comparison of the scopes of selected bills: Ministry and study team identification of likely positive and negative effects on the environment

Act	Positive effects	Negative effects
L 49	prevent disasters/accidents	*As the requirements for seamenís certificate does not apply for foreigners the risk for accidents is increasing*
L 202	grants for production of environmental protection equipment	*Grants for environmental inexpedient production too* *production of environmental protection equipment not necessarily environmental expedient* *no environmental positive list*
L 135	improving run off conditions improving landscape more harmonic shaping of landscape improved possibilities for protection of nature and environment in farming areas	*Run off can result in larger fields that minimise small biotopes and deteriorate landscape and biodiversity*
L 233	improving possibilities for ecological farming *how ecological positive effects can occur* *how ecological fishing can occur*	
L 106	prevent incineration of waste and secure reuse improve CO_2 objectives more flexible switch-over to biomass fuel in power stations sludge contain useful nutrients that will be returned to the soil	*Sludge for reuse of contain heavy metals, medicine residues, other toxic residues, etc. that through the fields are dispersed to the food and to the fodder*
L 157	reduced CO_2 emission *reduced use of fuel* reduced emissions to the air moreover	
L 209	reduced CO_2 emission	
L 213	reducetion of CO_2 emissions reducetion of SO_2 emissions	
L 209	reduced CO_2 emission	

Source: Elling 2000.
Explanatory note: The ministries scope is in normal text; the study scope is in italicised text. However, it is important to note that some of the effects were listed both the ministries and the study team. These areas of overlap are not shown in order to draw out the main contrasts, particularly with respect to the treatment of negative effects

In outline, the analysis of the effectiveness of SEA in the second study involved:

1) Review of reports from debates in the Parliament, conclusions from Parliamentary committee meetings, published statements, etc.
2) Identification of statements on the environmental assessment (type A) and any other statements on the environment (type B).
3) Analyses of statements on the environmental assessment.
4) Analyses of statements on the environment divided into 3 sub-analysis:
   B1: Analyses of type B statements in cases where type A statements also occur.
   B2: Analyses of type B statements in cases where type A statements do not occur.
   B3: Analyses of type B statements no matter if type A statements occur or not.
5) Conclusions on the use of the environmental assessment in the debate in the Parliament.
6) Conclusions on the impact of the environmental assessment on the political process

In sum, the quality of the environmental statements was analysed in two ways:

Study I: Whether the scope of the environmental assessment corresponded to that performed by the study team (meeting criteria 1 and 2).

Study II: The use of the environmental statement in the debate in the Parliament and the extent to which environmental issues were part of the debate (meeting criteria 3).

Study 1: Comparison of the ministries and study team scopes

The ministry and study team scopes of the environmental effects of the selected bills are compared in Table 2. It is remarkable that in every case the ministries scope does not include negative effects, only positive ones. As the study team scope indicates, this is not because negative effects are not likely to occur rather the ministries have simply chosen not to include them in their assessments. In contrast, the study team found that negative environmental effects are likely to be associated with four of the nine bills.

Note that the all of the remaining five bills are aimed at environmental enhancement. Thus it is likely that they are all designed to have positive environmental effects and should not cause negative environmental effects, although this option cannot be excluded beforehand. This last assumption proved to be correct in the case of L 213, L157, L252 and L209. But the study team thought L233 could have negative effects after more intense investigation. This bill was comprehensive in scope making it difficult to establish an overview of its practical consequences, including likely positive and negative effects on the environment.

When comparing the two scopes, it is also noteworthy that the study team was able to identify additional significant positive effects to those already listed by the ministries. This suggests that the lack of assessed negative effects was not only a result of qualified and systematic exclusions of such effects but must be seen as a result of an insufficient scoping process that is randomly carried out in the ministries. This view was reinforced in further comparing the two scopes for each bill and focussing in particular on the single themes included in them. It is especially evident in cases where the ministries' scope did not include negative effects in contrast to the scope of the study team.

The findings from study I can be summarised based on the quality criteria reported above, namely 1) the formal provision for carrying out an assessment and 2) the extent to which the likely effects on the environment are included in the statement. Key conclusions:

- Negative environmental effects were not included in the ministries assessments of bills even in cases where the study team assessed they were likely to occur. There is 100% non-compliance with the formal requirements on this point.
- In large measure, likely environmental effects of all types are not included in scoping by the ministries. There is a 50% omission of thematic issues compared with the study team scopes.
- The ministries' scope and the study team scope are identical in three cases, corresponding to 33% of the sample.

Study II: Analysis of the use of the environmental statements in Parliamentary debate

For the analysis of the debates in the readings in Parliament of the nine bills, the statements are divided into statements of the environmental assessments (type A) and other statements on the environment (type B). There is a clear correlation between the quality of the assessment of likely effects on the environment and how it is employed in the Parliament. However, each type of statement reflects this correlation in different ways.

Even though the statements on the environmental assessment directly refer to substantive elements, it is difficult to evaluate their use solely from these statements themselves. First of all, they are few in number. Moreover they are substantively limited or have a repeating character compared to the environmental statement, although there are two examples of statements in which the substance of the assessment is used in stopping the bill from being passed. In one case, the statement on the effect of the bill concluded that it would be too limited compared with the aim of the bill. Another statement concluded that the bill does not contribute to the achievement of governmental objectives for reduced CO2 emissions in 2005.

In contrast, other statements on the environment closely reflect how the submitted environmental statements were employed in decision-making. Furthermore they reflect a clear correlation between the character of the environmental assessment and how it is employed in the reading of bills and the legislative process. Specifically:

- In cases where the environmental assessment has been insufficient or insubstantial, it has resulted in a political debate on the effects of the bill on the environment. This has been oriented primarily towards the identification of environmental effects and further alternatives that could mitigate particular effects on the environment.
- In cases where the environmental assessment has been of good quality and presented the widest range of likely effects on the environment, it has resulted in a political debate with focus on the desired effects. Moreover, the debate has been oriented towards giving priority to environmental matters before other considerations in the legislation.

Thus in the cases analysed, good quality assessment has not rendered political debate superfluous, rather it resulted in debate with clear focus and perspective on political priorities, relating the environmental values at stake to other values. In contrast, poor quality assessment resulted in political debate characterised by loose claims and detached statements on the environmental substance of the proposal, which fall short on prioritisation of political values. Stated otherwise, the political debate will be disrupted in the case of a poor environmental assessment and lack focus, value and transparency. Irrespective of its quality, whether good or poor, no submitted environmental assessment resulted in a political debate without substantive environmental issues. But the study clearly proved that the quality of the debate, its character and substantive issues, depends in the highest degree on the quality of the assessment.

Main Conclusions and Recommendations

The Danish system for SEA of bills and other government proposals can be said to have been successful. Specifically, it has proven to be practicable approach to the integration of environmental considerations in the preparation of legislation. The process of conducting SEA has been institutionalised within the existing structure of governmental administration and practice has stabilized in relation to the number and percentage of proposals reviewed. SEA at this level has been documented as enhancing the political debate on environmental protection and the administrative preparation of bills in terms of their inclusion of environmental concerns and objectives.

With that said, the study results also demonstrate that the process of policy-level SEA must be improved on several dimensions. Firstly, there is a lack of satisfactory scoping procedure when ministries prepare bills and conduct environmental assessments. Secondly, there is an administrative failure of ministries in excluding negative effects and including only positive effects. This was the situation in all of the case studies and obviously it is unacceptable, given the emphasis on preventing and mitigating negative effects in SEA practice. Thirdly, it appears that political adaptation of environmental assessments often takes place within ministries, sometimes with the result that information on the environmental impact of bills is not submitted to Parliament. At other times, political decision-makers receive environmental information that is unsatisfactory or inconsistent with accepted means of data collection.

Within existing arrangements, an obligatory scoping procedure with outside contributions and review could lead to major improvements in SEA practice. This steps should be guided by the Ministry of the Environment and include the opportunity for the general public to participate. In addition, criteria for determining the significance of impact should be developed and used to a far greater extent than is the case at present.

From a wider perspective, structural or legal changes can be seen as possible actions. First of all, consideration should be given to strengthening the requirements for the conduct of SEA of bills and other government proposals with the aim of emphasizing its obligatory status and to support assessment phases. Further, consideration should be given to how the public could play a more attentive role in the SEA process to help overcome issues of stakeholder dominance and political short-sightedness. Finally, the pending implementation of the new regime for SEA of plans and programmes points toward future co-ordination with the policy level. In any event, the development of SEA at the plan and programme level should be monitored to evaluate its contribution on the policy level and to identify how the practice on both levels could complement and stimulate each other.

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Chapter 6
SEA Experience in Finland

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Introduction

A general requirement to assess the environmental effects of policies, plans and programmes was introduced in Finland by the *EIA Act*, 1994. This requirement to carry out strategic environmental assessment (SEA) was limited to Section 24 of the Act, which did not specify how the process was to be carried out. Subsequently the Ministry of the Environment (1998) and the Council of State (1998) issued *Guidelines* on the assessment of plans, programmes and policies and of government bills respectively. The *Building and Planning Act* (132/1999) also included a requirement for SEA of land use plans. Brief statements on the need to assess environmental effects can also be found in other Acts, e.g. the *Act on Regional Development* (1135/1993).

These activities have lead to the use of different types of SEA in Finland, including policy-level applications. Questions of particular interest have been the following:

- What are the similarities and differences among these assessments and why do these occur? I.what similarities and differences do we find in the assessments and why do these arise?
- Can the similarities be used to standardise SEA procedure and/or methods? II.can the similarities be use to standardise procedures and/or methods?
- How do does Finnish experience relate to the challenge of implementing Directive 2001/42/EC on the assessment of the effects of certain plans and programmes on the environment? III.what do these assessments tell about the challenges in implementing the recent SEA directive (Directive 2001/42/EC on the assessment of the effects of certain plans and programmes on the environment)?

The last question is of particular interest because the SEA Bill (HE 243/2004), which is expected to lead to a SEA Act, has been submitted to Parliament and will probably be approved in the beginning of 2005.

Background to the Analysis

This study is based on data on more than 15 strategic assessments (Table 1), which vary in scale and expenditure of resources and come from different branches and levels of government. The examples discussed here illustrate the assessment of policies, plans and programmes as developed without procedural requirements. Except for the SEA of national land use policy objectives, assessments related to land use plans have been excluded because this procedure is regulated in detail under the *Building and Planning Act* (for an analysis including the latter see Hildén and Jalonen, 2005). Also excluded is the assessment of Government Bills, which has yet to be incorporated into procedural requirements. However, given their obvious links, a general comparison of assessment of policies, plans and programmes and assessment of bills. Many policy documents lead at a later stage to legislation and hence the quality of assessment at the policy stage will influence the assessment of the bill in question.

Although the sample is not necessarily representative of Finnish SEA experience, the analysis includes a number of important case examples. It is based on a systematic reading of assessment documents, on interviews with those involved and, in some cases, on external reviews of the assessments and their use. It aims to illustrate the diversity of issues and to identify some frequently occurring issues and problems. The author has been has been personally involved in some of the assessments (see Box 1). For these cases, the analysis is based on notes made during the SEA process and access to draft assessment reports.

Key Features of SEA practice

The following discussion of Finnish SEA experience focuses on nine key features of practice, which also cover the main contents of the Directive 2001/42/EC on the assessment of the effects of certain plans and programmes on the environment (henceforth the SEA Directive) and the SEA Bill.

Box 1: Assessments reviewed for this study

Transport
Nordic triangle (transport infrastructure along Finland's southern coast)
Helsinki Metropolitan Area Transport Plan 1998
Guidelines for Road Management and Development 2015
Intermediate Term Road Management Plan for Savo-Karjala district 2000-2010
Railnetwork 2020 Programme

Resource management
National Forestry Programme*
Programme for renewable energy
Pirkanmaa waste management
Resource management and areal ecology plans of the National Forest and Park Service

Regional development
Structural Funds Programmes for western Finland 2000-2006, southern Finland 2000-2006 and central Finland 2000-2006
National Objectives for Land Use

Environment and nature protection
Energy Conservation Programme
National Climate Strategy*
Finnish Natura 2000 programme*

** Asterisks denote assessments in which the author has been personally involved.*

Applicability of the Act

Under Section 24 of the Finnish *EIA Act*, all policies, plans and programmes that may have significant effects on the environment required assessment. The authority responsible for drafting the policy, plan or program was obliged to determine the need for SEA. This feature has been maintained in the SEA Bill, which has a broad general Section 3 similar to Section 24 of the EIA Act (which will be repealed when the new act enters into force).

In retrospect, it is evident that all of the policies, plans and programmes examined here meet the criterion of "possible significant environmental effects". However, the SEA Directive and the specific procedural Sections (4-12) of the SEA Bill include more restrictive criteria. The SEA Directive introduces the additional requirement that a plan or program should "set the framework for the consent of projects". This is a crucial question for determining whether a proposal should be subject to assessment according to the SEA Directive and the procedural sections of the SEA Bill.

If the criterion of "setting a framework for development consents" had been used, several strategic assessments reviewed here would have been excluded. These include:

- the National Forestry Programme, which (despite its name) comprises a set of guiding general policies;
- the Energy Conservation Programme, which provides some funds for development work, but does not deal with consent procedures;
- the Finnish Natura 2000 programme, which affects the framework for decisions on consent, but which has not been considered to be a list of areas meeting certain criteria rather than a programme directing activities; and
- the Guidelines for Road Management and Development 2015, which outline the long term policy of the Finnish road administration.

Interestingly, the National Climate Strategy, which is primarily a policy paper, could have qualified for assessment in accordance with the SEA Directive, since it contains an explicit statement regarding possible prohibition on building new coal fired power plants.[56] This particular measure was introduced in the course of

56) The Government's decision to prepare the climate strategy represented an "administrative provision", which in this case required sector Ministries to carry out the preparatory work for the National Climate Strategy. In the preparation of the SEA Bill the concept of administrative provision was, however, problematic, because it does not as such exist in Finnish legislation.

preparing the climate strategy. It shows that strategic documents can qualify for assessment in accordance with the Directive, although policies are intended to lie outside its scope. Possibly, the interpretation of the "setting a framework" criterion could become broader than that envisioned in the negotiation process leading to conclusion of the Directive.

The SEA Bill includes opportunities for a case-by-case consideration of the need for an assessment in accordance with the Directive. This may gradually expand the concept of "setting framework for consent procedures", to include programmes such as the Guidelines for Road Management and Development 2015, which outline what kind of projects will be prepared in the future although they do not directly influence consent procedures.

With hindsight, it is obvious that the proposed policies, plans and programmes examined here required assessment under the Finnish *EIA Act*. However, this was not clear when the preparatory work was initiated. Even the environment sector, represented here by the national Natura 2000 programme, initially opposed the idea of an SEA on the grounds that this was necessary only for those policies, plans and programmes that may have adverse effects of the environment. The same arguments were echoed in the preparatory work for the SEA Directive. After lengthy discussion, the idea of an exclusive focus on "adverse" effect was rejected, because the broad definition of "environmental effects" can mean that there are effects that can be simultaneously adverse and beneficial depending on the viewpoint.[57]

Timing

Although it is obvious with hindsight that the assessments had to be carried out according to the Finnish EIA Act, it was by no means clear that assessments would be carried out, when the preparatory work was initiated for the policies, plans and programmes examined here. Even the environment sector, represented here by the national Natura 2000 -programme, initially opposed the idea of an assessment on the grounds that assessments are necessary only for those policies, plans and programmes that may have adverse effects of the environment. These very arguments were echoed also in the preparatory work for the SEA directive. Eventually the argument that the concept of adverse effect is not meaningful in the context of policies, plans and programmes, given the broad definition of environmentaleffects.

Arguments about the need for SEA delayed the initiation of the process in several cases. Other delays in this regard were caused by arguments over whether or not SEA can be applied before a policy, plan or programme is available, at least in draft form. In the examples listed, this line of argument was made in relation to the National Forestry Programme. In this case, the programme progressed all the way to decision-making at the Council of State level, when the Chancellor of Justice ordered an assessment to be completed before the programme was finally approved.

Various problems were encountered in the cases in which the SEA was severely delayed relative to the other preparatory work. In some cases, the credibility of the planners had been severely questioned and this was channelled into strong opposition against the whole approach. The Natura 2000 programme is an example. In other cases, assessment results were used to a limited extent, because too much prestige had already been built into the programme as drafted before SEA began. The National Forestry Programme is an example.

There are also examples of policies, plans and programmes where the assessment started simultaneously with the other preparatory work. In the energy saving and energy efficiency programmes, SEA was included as part of the preparatory process. The Finnish Forest and Park Service also included assessment as an integral part of resource management plans. Also, the Ministry of Transport and Communication and the Ministry of Environment, in more recent policies, plans and programmes, have respectively moved toward and recognised the usefulness of initiating SEA simultaneously with other preparatory work.

The early initiation of SEA, simultaneously with other processes, does not mean that all problems will be avoided. Other issues remain from an assessment point of view. Notably, the question of integration between SEA and other preparatory work still needs to be addressed (as discussed below).

Tiering

In theory, policies, plans and programmes are considered to form a clear hierarchical structure in which the higher tier directs the lower one(s). In reality, this picture is blurred. First, there are policies, plans and programmes at several hierarchical levels, from the supranational (European Union) to the local (municipal) level. Second, the top down direction may be

57) A simple example is an agricultural programme that supports the conversion of fields into forests. It may be beneficial from the point of view of control of non-point source pollution of waters, but adverse from the point of view of protecting biodiversity.

reversed and programmes or even certain large-scale projects, such as those for harbours or nuclear installations, may drive plans and policies. The picture is further complicated by the fact that local policy may have starting points that differ from, for example, those of national policies. Also, local implementation of a national policy clearly is a political activity that affects the interpretation of that policy.

Thus, the tiering of assessments is not a simple technical exercise. In this regard, the requirement of Article 4(3) of the SEA Directive and the corresponding statement in the SEA Bill should be critically examined. (Article 4(3) states that "Member States shall, with a view to avoiding duplication of the assessment, take into account the fact that the assessment will be carried out, in accordance with this Directive, at different levels of the hierarchy")

In addition to the different "levels of hierarchy", one should recognise "tiering" within regions and links to other plans and programmes that have direct implications for SEA. For example, Agenda 21 programmes and municipal policies have been used as a reference for regional planning, which in Finland are driven by regional councils formed from municipalities, i.e. a bottom - up structure (Ministry of the Interior/Ministry of the Environment 1999). However, funding is channelled through regional government authorities, which represent a top - down structure. These conflicting pressures have to be taken into account in addressing tiering, although they do not represent an orthodox view of what this process is about. Avoiding duplication in data collection is relatively easy, but the main issue and the time consuming phase of SEA relates to the overlapping discussions that take place in the preparation of the policy, plan or programme. This appears to be unavoidable, given the nature of the planning task.

In transport planning, tiering is closer to the ideal. The Ministry of Transport and Communication has a key role at the policy level and these policy lines are transmitted to the administrations for the different transport sectors. However, a break occurs at the municipal level, particularly in urban areas as shown by the transport plan for the Helsinki metropolitan area. Local and national policies meet here, not as well structured tiers but rather as partly competing views that struggle to influence the development (Kaljonen 2000).

Consideration of alternatives

In certain respects, the range of alternatives considered in the preparation of policies, plans and programmes increases when moving to more general levels of decision-making. Theory holds that policy-related alternatives cover the broadest range, whereas alternatives related to programmes are more restricted. In practice, this general view of alternatives is not very helpful. Despite their importance, alternatives have proven difficult to formulate as part of SEA and policy alternatives have not necessarily been broader than programme alternatives.

Although the SEA examples listed in Table 1 all addressed alternatives, there was considerable variation in the role of alternatives and the constraints placed on them. Finnish experience shows that alternatives can play very different roles: exploratory and visionary alternatives map possible worlds; variations on a single theme prepare the ground for a compromise; and demonstrative alternatives serve to prove that the chosen solution is the only possible or clearly best alternative. In several assessments, two of these functions were combined. For example, in the programme for enhancing the use of renewable energy resources, one alternative considered the exclusion of all subsidies, whereas the other alternatives maintained or increased modestly the subsidies. The starting point for the whole program was clearly a modest increase in the subsidies.

In most of the transport plans and programmes, the consideration of alternatives has been fairly exploratory and not overly restricted by what is possible or realistic. In the assessment phase, the aim has been to examine the constraints and conditions that could arise under different scenarios. A key task has been to identify and co-ordinate means for achieving various objectives. The road maintenance policy was developed using such an objectives-based approach.

In this context, alternatives have tended to focus on the needs of different user groups and labelled accordingly. For example, in the capital region transport plan, they were termed "the reference alternative", the "public transport alternative" and the "car alternative". A contrasting approach was used in the natural resources programme for western Finland, with a conservation-oriented and exploitation-oriented alternatives presented for the region's forests. In certain assessments of regional development programmes, alternative visions were developed using strengths, weaknesses, threats and opportunities (SWOT) techniques but these were not carried into fully developed alternatives at the level of measures.

The clearest examples of justifying alternatives were the SEA of the National Forestry Programme and the SEA of the Natura 2000 programme. In both assessments, the chosen alternatives emerged as the best compromise. The compromises, perhaps not surprisingly, were eventually criticised in both hard-line conservationist and hard-line forest exploitation circles.

The National Climate Strategy was based on a comparison of two alternatives with a 'business as usual' scenario. However, the formulation of alternatives was severely constrained by predetermined normative assumptions related to the highly

politicised process for preparing the strategy. The alternatives were only slight variations on the compromise. Interest groups criticised the strategy for being based on tunnel vision and too short a time span. This criticism was also repeated by the Parliament, which debated the strategy and finally approved it.

Assessment methods and approaches

The SEA Directive does not specify the type of methods or approaches that should be used in an assessment of the issues listed in appendix I of the Directive. The assessments examined here have used a wide range of methods, from quantitative modelling to collection of qualitative information and expert opinion. In practice, a combination of methods and approaches is common to all the examples. Also, the assessments indicate that it is not possible to undertake detailed quantitative analyses of all relevant aspects. Several cases hinted at the need to carry out a life cycle analysis (LCA) of some aspects of the policy, plan or programme (e.g. the SEA of the programme for renewable energy resources) but none of the assessments applied this approach. Given the resources available, it is unlikely that LCA could be carried out as part of SEA. The demand for LCA perhaps should be seen as a reflection of the fundamental uncertainty that pervades all assessments of strategic decisions.

Another key methodological issue concerns the scope of SEA, particularly in combination with economic analyses. In all cases, there were clear links to economic activities and some processes used economic appraisal methods, for example the Natura 2000 programme and the National Forest Programme. In these cases, the combined assessment clearly increased the interest in and weight of the overall assessment. The SEA of the National Climate Strategy was carried out separately but co-ordinated with the economic analysis. This arrangement caused some confusion. The main interest was clearly in the economic assessment, but some issues, such as the views of different interest groups, could probably have been better handled through a combined assessment. Similar co-ordination problems were encountered in other policies, plans and programmes for which separate and loosely combined assessments were made on various types of effects. With separate assessments, more effort has to be spent to achieve a final aggregation and synthesis of the different effects.

All the assessments encountered uncertainties and data deficiencies. The uncertainties systematised in some of the assessments. They were also exploited by various groups, which caused conflicts over the validity of various pieces of information: who can speak on what issues and on what grounds, whose information is accepted and who will have to produce extraordinary evidence in order to convince others? These findings show that assessments are closely related to questions of power and authority, although, in turn, they may help to improve transparency somewhat.

In order to achieve a systematic treatment of uncertainties, the Nordic triangle SEA separated the issues influencing the development into background variables and decision variables, thus highlighting more clearly what the assessment was about (Valve 1999). In the assessments of the National Forestry Programme, the Regional Development Programme and the National Climate Strategy, SWOT-type analyses were undertaken and synthesised into best and worst case scenarios. These were used in subsequent public discussion of the effects and helped to diversify the view of what the policy, plan or programme is about.

Reporting

All the assessments were publicly reported and the findings included in the documents on the policy, plans or programme. In some cases, assessments were also published as separate reports. The National Climate Strategy is an example of a case with several types of report. First, the strategy itself includes a brief mention of the environmental effects; second, the background document devotes a chapter to the various assessments that were undertaken; and, finally, the detailed assessments were published separately together with sector-specific material that was used in the preparation of the strategy.

The most common form of publication has been printed reports. More recent assessments have used the Internet to disseminate information, including progress with implementation. This is a cost-effective way of circulating drafts of a policy, plan or programme and the SEA of the proposal. For example, the Internet was used to post the National Climate Strategy and its assessment in draft form and to provide information on the national land use objectives.

The contents of SEA reports have varied from brief descriptions of likely effects to more extensive analyses of consequences and alternatives. The original National Forestry Programme contained a one-page overview of environmental effects based on expert opinion, but the Chancellor of Justice did not consider this to be a sufficient assessment of the likely effects and ordered a detailed assessment of the environmental, economic and social effects.

Public participation

According to the Finnish constitution, everyone has the right to documents and recordings produced by or in the possession of authorities. The Act on Public Access to Information (621/1999) makes it clear that authorities should inform citizens not

only of their decisions but also of the preparatory work leading to decisions. This applies to policies, plans and programmes and gives a strong backing for public participation in SEA.

In structural funds programmes, public participation is based on the concept of partnership. In practice, this meant assembling a broad group of stakeholders, but not providing direct access for individual citizens. A similar approach to representing interests has been used in other assessments as well, but many have also provided broader access for the public. For example, in the resource plan for Ostrobothnia, more than 1000 groups were contacted in order to assemble local working groups. In the intermediate term road plan for the Savo-Karjala district, several consecutive hearings were organised to deal with specific issues.

Organised group discussions have contributed to the process by highlighting the views of different interests and providing them with an opportunity to interact and to understand each other's arguments. In a few assessments, attempts were made to reach the broad public using newspaper advertisements (e.g. in the programme for renewable energy resources). These attempts were not particularly successful; the response was limited and general interest in the programme was low.

Use in decision-making

On paper, all the assessments were used in the decision-making process, in that the results were referred to in the final documentation and approval. It is more difficult to verify the actual influence on the choices made. Due to the nature of the decision-making process, individual findings seldom have a clear-cut effect on the outcome but instead may exert a gradual influence. In order to determine this influence, a separate evaluation to clarify both direct and indirect effects of a SEA would be necessary.

An evaluation of the SEA of the Helsinki Metropolitan Area Transport System Plan 1998 indicates there was little immediate influence on decision-making, primarily because the basic agenda was set using criteria other than that dealt with in the assessment. This does not necessarily mean that the SEA did not influence the planning, only that the influence is slower and more indirect than a rationalistic view of this process would indicate (Kaljonen 2000).

The emphasis has shifted away from viewing SEA as a way of producing specific information and toward a more integrated view in which assessment is part of the preparatory process (Jansson 2000). The assessments examined here contain a mix of both perspectives. In the renewable energy resources programme, the SEA provided information for the discussion of the measures contained in the programme. In the National Forestry Programme, the SEA was more akin to an ex-post evaluation that had little influence on the programme itself, but some influence on its implementation. In the road maintenance policy, the SEA contributed to the discussions on objectives and highlighted various aspects of the planned measures.

Monitoring

All the cases include some reference to monitoring. In simplest form, the reference is a list of matters to be examined further (e.g. the SEA of Pirkanmaa waste management). In most assessments, there are more detailed considerations related to monitoring. Some assessments include a proposal to set up a specific monitoring group that would deal with implementation and effects monitoring (e.g. the renewable energy resources programme, the Pirkanmaa waste management). In other cases, the monitoring plan included indicators and monitoring variables for which data collection is taking place already or would be reasonably easy to organise (e.g. the natural resource plan for western Finland). The references to monitoring, understandably, become vaguer in moving toward the policy level where monitoring largely concentrates on the achievement of objectives that represent intended effects (e.g. the national land use objectives).

Implications of the Findings

Similarities and differences in the assessments

Some commentators (e.g. Fisher 2001) argue that it is possible to distinguish between "policy SEA", "plan SEA" and "programme SEA" and that assessments within each group are similar. In this classification, policy assessments are broad, scenario-driven and examine different types of effects, which are fully integrated into the formulation of the policy itself. The National Forest Programme, the National Climate Strategy, the national objectives for land use and the Guidelines on Road Management and Development 2015 are typical policy documents that aim to influence plans, programmes and even projects at lower tiers and could have played the role envisioned in the above classification.

In practice, the SEA of the road maintenance policy and of the national objectives of land use came closest in establishing a policy dialogue. The SEA of the National Climate Strategy established a dialogue but it was partly set aside from the core discussions, which dealt with the economic effects. Finally, the SEA of the National Forest Programme contributed only to the discussion on the implementation.

These differences can be attributed partly to the novelty of the assessment culture. The Minister in charge of the National Forestry Programme put it explicitly: "when we started I thought that you can't assess anything before its ready; in retrospect this was a too simplistic view". However, it also can be argued that the various degrees of difficulties in achieving integration also reflect power relationships within the field or sector that is subject to SEA. The degree of integration will depend on whether SEA experts are considered to be within or outside the group that is formulating policy.

In Finland, the Road Administration has developed a culture that includes SEA and those responsible are experts within the system. The National Climate Strategy was developed under the leadership of the Ministry of Trade and Industry, which traditionally has had a very strong role in policy formulation although external experts are used. The Ministry, however, is not particularly interested in having results that could question its competence and this affected SEA and economic assessment alike. In practice, the willingness to use SEA in decision-making is an important determinant of what will be assessed. If willingness is lacking, SEA will not be able to influence the policy, even though it aims to assess options. The willingness to use SEA is also linked to the results: a report that supports the main policy line will be extensively used, seemingly strongly influencing the policy, plan or programme.

Similar explanations for differences in the way assessments have been carried out and influence decision-making can be found in other types of SEA. Differences can be observed even with similar tasks. For example, structural funds programmes[58] have differed widely in their environmental approach. In one case, the influence of SEA is easy to trace because the different measures reflect the environmental discussions (e.g. in the justification and in funding criteria). In the other two examples, the environmental aspects are reduced to one particular set of measures and a brief description that meets the letter if not the spirit of SEA.

One important reason for the similarity or difference between assessments appears to be the planning context. If the object to be assessed is clearly defined, in the sense that all of the important stakeholders agree on what the policy, plan or programme is about, SEA is relatively easy to plan and conduct. If there is disagreement on the nature of the policy, plan or programme, SEA will face difficulties. In practice, this means, for example, that some stakeholders attempt to raise broad strategic issues while others wish to make the whole exercise a technical listing of observations, which can be used to justify specific (predetermined) choices. Under such circumstances, SEA will be demanding because it will have to deal with both aspects, leading to a mixed rather than a tiered assessment.

Several of the assessments examined here display these features. The SEA of the Natura 2000 programme had to address both the selection of specific sites and a broad discussion on the need for nature conservation. The National Forestry Programme outlines general forest policies but also specifies sums to be used for particular activities, such as improving forest roads. The National Climate Strategy outlines a path of development towards greater energy efficiency but also focuses on a single project - the question of a fifth nuclear reactor in Finland.

Assessment of bills vs. assessment of policies, plans and programmes

In Finland, all bills submitted to the Parliament are required to include, whenever relevant, a separate subchapter on environmental effects, together with the subchapters on economic effects and administrative effects. This is a clear checkpoint for determining whether or not a SEA has been completed. Except for land use plans, the assessment of policies, plans and programmes lacks a comparable procedure. In this regard, SEA of bills is a more formalized process, although research indicates that often the procedural check is merely a formality. So far, no bill has been returned from Parliament because of a lack of proper assessment. Recently, however, there has been criticism of the quality of bills and their assessment (Ervasti et al. 2000).

Another difference between SEA of bills and of policies, plans and programmes concerns their format and content. The format of bills is strictly controlled and largely standardised, whereas policies, plans and programmes come in many forms. The standardised format of bills limits the presentation of SEA results. The bill and its justification, including the assessment, represent a synthesis of the preparatory work that precedes the bill itself. This work is frequently carried out by ministerial working groups or, on more sensitive issues, by committees or commissions, which include interest organisations. The result is often an extensive report. If the SEA is taken seriously, it should be included in this report. The work of ministerial working groups, commissions and committees resemble more closely the preparatory work for policies, plans and programmes. The time constraints are usually less demanding and often the working groups, commissions and committees, in their letter of appointment, are asked to consider alternatives.

There are frequently links between the preparation of bills and policy documents. Policy documents may identify the need for more detailed legislative work. The National Climate Strategy is a case in point. Many of the measures envisioned in the

58) Although called "programmes", these assessments fall into the category of "plan SEA" as used by Fisher (2001), thereby showing the difficulty related to terminology.

strategy will require amendments to existing legislation or new laws. In these cases, SEA of policy can support the preparation of legislative proposals. It can be argued that this is the real test of their usefulness and use. Only in special cases, however, will a SEA of policy remove the need for an assessment of a bill. Draft legislation is likely to introduce new considerations and alternatives that will require further assessment.

The scope for standardisation

Finnish SEA experience indicates a limited scope for the standardisation of procedures. Probably the most promising opening is in relation to public participation where procedures could be simplified, for example, by setting out clear obligations on how to inform the public and the opportunities for interested parties to provide input into the SEA process. This would help those responsible for SEA to plan the process and could lead to the specification of certain quality criteria for the assessment process.

This is particularly important for policies, plans and programmes that are controversial. Without legal backing, participation may end up being restricted to a negotiation among a few strong interest groups. Standardised procedures can also be envisioned for some negotiations between authorities, and would be particularly useful for the process of trans-boundary assessments. Experience with such assessments at the project level indicates the lack of structured processes that can be clearly described to the authorities and public in the neighbouring country is a common cause of difficulties (Hildén and Furman 2001). The contents of the environmental report can be standardised on a general level, i.e. the type of effects that are examined.

One key issue will be the relationship between environmental, economic and social information. A requirement to include all three aspects provides an incentive to form multidisciplinary assessment teams. If assessment is limited strictly to environmental issues, the synthesis will be left to those drafting the policy, plan or program and they can use a "divide and rule" approach to the different assessments. Restricting SEA to biophysical impacts only will increase the number of specialised assessments (economic, social, cultural and so on). It may be appropriate to combine these different components into a single comprehensive assessment, although such assessments are challenging and require methodological development. The possibilities for standardising them are limited.

Certain basic tools, including economic models and qualitative SWOT analyses, have been found repeatedly useful in SEA of policies, plans and programmes. These can be methodologically standardised to a certain degree, although obviously they have to be adapted to the specific context. Requirements concerning the transparency of the description of methods can also be "standardised" to some degree. However, a significant proportion of the data presented in strategic assessments will represent syntheses of available information or new combinations of older data, rather than new primary data. Therefore, it is equally important that original sources are quoted and critically reviewed.

Challenges in Implementing the SEA Directive

One of the major challenges in implementing the SEA Directive lies in determining its scope at the Member State level. Finnish experience with SEA suggests that many types of plans and programmes will be covered. Although policies are explicitly excluded from the Directive, the dividing line between policies on one hand and plans and programmes on the other may be difficult to specify. As the SEA examples studied here indicate, typical policy documents may contain explicit reference to consent procedures. They are often linked to plans and programmes in such a way that they will be subject to assessment de facto. In this case, however, some of the procedural elements will not apply. For example, some policy documents may be prepared in such a way that full participatory procedures are not applicable, although Finnish law requires general access to preparatory material.

A second challenge relates to the integration of SEA with the preparation of the plan or program so that it improves the preparatory work from a technical information standpoint while simultaneously offering opportunities for public input into the process. It will require political will to initiate and to use the results of such assessments. This political will does not develop overnight. In Finland, the translation of the basic idea of SEA into more or less accepted practice has taken nearly a decade.

The third main challenge lies in developing public participation. In part, the challenges are practical, for example how to reach potentially interested stakeholders and organise their input in such a way that it can be used in SEA. A more fundamental challenge concerns issues of representative democracy, for example which groups can act as spokespersons for the public. These issues are related to the problem of raising interest in abstract plans and programmes, especially those with strong political elements.

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Chapter 7
SEA Experience in Hong Kong Special Administrative Region (SAR)

Elvis Au

Introduction

This paper describes Hong Kong's system of strategic environmental assessment (SEA). It focuses on recent developments in SEA provision and practice including the introduction of sustainability assessment. During the past decade, there has been significant progress in SEA application at the level of both policy and plans and in relation to a wide range of proposals (Au 2004, Au and Yeung 1998). Some aspects of this experience are similar to that elsewhere; other aspects are particular to Hong Kong Special Administrative Region (SAR) as a 'city state' with a limited area, rapid economic growth and high population density. The associated land use and environmental pressures present both special challenges to the use of SEA and underline its importance as an instrument for policy-making and planning in the context of sustainable development (Law 1999). A number of case studies are used here to illustrate this point.

Evolution of SEA in Hong Kong SAR

Beginning in 1988, the EIA directive was applied to development plans and programmes prepared by the government. In 1992, the provision for SEA was broadened through the (then) Governor's Policy Address to include policies and strategies. Under this initiative, papers on major initiatives submitted to the Executive Council (the highest decision making body in Hong Kong) have to contain a section on their environmental implications. This section is intended to facilitate better decision-making by setting out clearly the likely environmental costs or benefits that would arise from a policy, strategy, plan, programme or project. A review of the introduction and early implementation of these measures is provided in Law (1996).

In his Policy Address of October 1992, the Governor stated that:

> *"...I want concern for our environment to enter every corner of Government. One action I have asked to be taken with immediate effect is for an environmental impact assessment to be included in papers submitted to the Executive Council. Currently, this rule applies only to major development projects. From now on, I want this practice to be extended to all policy proposals where there is likely to be a significant cost or benefit to the environment. Where there is likely to be little or no impact that must be clearly stated..."*

Since 1997, Hong Kong Special Administrative Region has operated under China's policy of One Country, Two Systems in accordance with the Basic Law (or Constitution). Article 119 of the Basic Law states that:

> *"the Government of Hong Kong Special Administrative Region shall formulate appropriate policies to promote and co-ordinate the development of various trades such as manufacturing , commerce, tourism, real estate, transport, public utilities, services, agriculture and fisheries, and pay regard to the protection of the environment"* [emphasis added].

In 1997, the EIA Ordinance was enacted to formalize the previous administrative-based EIA system and came into full operation in April 1998. Among other things, it introduces a mandatory EIA requirement, including public consultation and reporting, for designated projects or development plans that fall under the criteria listed in Schedule 3. These comprise:

- urban development projects with a study area covering more than 20 hectares or involving a total population of more than 100,000; and
- redevelopment projects with a study area covering more than 20 hectares or involving a total population of more than 100,000.
  (For details on the *EIA Ordinance* and its *Technical Memorandum*, see www.epd.gov.hk/eia)

The SEA system was further strengthened in 1999 in the Policy Address of the Chief Executive of Hong Kong SAR:

> *"...I intend to set up a Council for Sustainable Development...Within the Administration, all bureaux will in future be required to carry out "sustainability impact assessment" of major new policy proposals. A Sustainable Development Unit will be established to monitor these assessments and provide analysis and support to the Council".*

The Sustainable Development Unit was established in April 2001 and issued Guidelines on Sustainability Assessment in December 2001, together with a set of sustainable development indicators (including environmental measures). With immediate effect, bureaux and departments were required to conduct sustainability assessment of their new and major initiatives or programmes. From April 2002 all major submissions to the policy committees and the Executive Council must include an explanatory paragraph on their "sustainability implications".

Scope of Coverage and Application

SEA is carried out in Hong Kong mainly on an administrative basis. By comparison environmental impact assessment (EIA) is a statutory procedure that is linked to permitting and enforcement powers. The *EIA Ordinance* does not apply to policies, plans and programmes, except where these meet the criteria in Schedule 3 (described above).

Different forms of SEA are used for different types of proposals. SEA as internationally understood is applied to major policies in key sectors such as transport and waste management and to strategic plans (e.g. at the territorial or regional level). A more informal process of environmental appraisal is followed for other less environmentally significant types of strategic proposals. In addition, these processes provide environmental information that forms part of the integrated approach to sustainability assessment.

SEA is the responsibility of the proponent department, with guidance and review provided by an inter-departmental Environmental Study Management Group chaired by the Environmental Protection Department. The environmental implications section to be included in the Executive Council paper is cleared by the Environment, Transport and Works Bureau with advice from the Environmental Protection Department (EPD). This arrangement helps to increase the ownership and accountability of proponent departments on the environmental performance of their proposals, and provides a means of controlling the quality of the environmental information provided.

The Guideline on Sustainability Assessment (SA) applies to all submissions to the Chief Secretary Committee and Executive Council. For major plans, policies or strategies, proponent departments might need to carry out a comprehensive SEA to satisfy the requirements of sustainability assessment and to facilitate integration of environment, social and economic considerations when making important decisions. Under such circumstances, a stand-alone report normally would be required in addition to the summary of SA findings in the relevant decision document. The latter should be cleared with the Sustainable Development Unit (SDU) before it is submitted.

A differentiated approach

In Hong Kong, plans and programmes are treated differently from policies and strategies. Plans and programmes are more amenable to conventional environmental assessment, while policies and strategies require special consideration when applying this process. Often, policies and strategies are decided at a high level within the government hierarchy and many involve complex issues and interactions. Also, there are often constraints on the type or nature of information that can be made available to the public at an early stage of their formulation. In the Hong Kong context, a further distinction can be made between the processes for developing strategies and policies respectively, as certain policies may be subject to restrictions on confidentiality during their formulation and are less concrete than strategies.

Spatial plans and programmes are handled using EIA methodology and steps, except that far more attention is given to the cumulative impacts of various developments in the same area. In Hong Kong, this approach is referred to as environmental assessment to distinguish it from the statutory procedure for EIA of designated projects, which is concerned mainly with their environmental acceptability and implementation of recommended mitigation measures. SEA addresses broad policy issues associated with a proposal and different means of achieving the same need or purpose. Hong Kong experience indicates that addressing sustainability issues and concepts of environmental carrying capacity at an early stage and a strategic level is much more effective than at the project level under the EIA Ordinance.

Guidance on SEA

A one-page checklist, issued in 1998, assists proponents to evaluate the environmental implications of their proposals at an early stage. The checklist is designed for proponents that may not have specialized environmental knowledge. It helps to identify environmental concerns in a structured and systematic manner and to establish the linkages between the proposal and its environmental implications. For example, the checklist prompts users to check whether a proposal would affect transportation, power supply and consumption, major land use and infrastructure developments, ecologically sensitive areas, etc. In addition, proponent departments can also consult the Environmental Protection Department for environmental advice.

For major proposals, such as strategic land use and transport network plans that call for detailed assessment and separate reporting, proponent departments can request the Environmental Protection Department (EPD) to provide a study brief. This is drafted to suit the particular requirements of each SEA; it reflects the variety of policies, plans and programmes that are subject to this process. Usually the brief will set out the major steps to be followed, scope the environmental issues to be addressed, specify methods and criteria to be used and identify reporting requirements.

Practical guidance and baseline information has been prepared to support proponent departments in carrying out a SEA. *Examples of SEA in Hong Kong* illustrate how assessments can be used to facilitate the formulation and selection of strategies and regional development options. For easy reference, both this document and the detailed cases are available through the EPD web-site. Major examples of SEA in Hong Kong are represented and include the Territory Development Strategy Review (1996), the Third Comprehensive Transport Study (1999) and the Second Railway Development Strategy (2000) (all described later in this paper). An interim Manual has been issued to help proponent departments understand the main steps in preparing a good SEA report.

EPD also undertakes professional development activities related to SEA. These have included contributing to the China Mainland-Hong Kong Symposium on Regional Environmental Impact Assessment (1999), sharing information on SEA and EIA practice with agencies that initiate major policies, plans and strategies and collaborating with SEA practitioners in other regions or countries.

Monitoring and follow-up

New types of approaches and tools for SEA follow up are required (Au and Hui 2004). A strategic environmental monitoring and audit (SEMA) framework has been adopted for use in major SEA processes. This requirement usually will be specified in the EPD study brief and the actual parameters to be monitored and audited will be recommended in the SEA report. In general, these will include the implementation of mitigation measures or follow-up actions and a check on whether the findings of SEA are still valid, recognizing that the assumptions adopted in the report may differ significantly from what actually happens.

As an example, the SEA of the Third Comprehensive Transport Study for Hong Kong was completed in 1999. The study used high, medium and low growth scenarios for testing the traffic and environmental implications of the proposed strategy (Cheung and Li 2002). The SEMA framework has been used to follow up on the environmental issues identified and the mitigation measures recommended in the SEA report. The Transport Department, the proponent of the above study, completed the first SEM&A report in 2001. It is continuing with this process to provide an annual update of environmental information as part of the ongoing review of the proposed transport strategy and projects.

Informing and involving the public

Executive Council papers (including their environmental implication section) are classified and unavailable to the public. However, SEA reports are usually presented and discussed at the Advisory Council on the Environment (ACE) or its EIA sub-committee.[59] As noted, the EPD (with the agreement of proponent departments) has uploaded major SEA reports onto its web-site. This mechanism provides public access to SEA information and facilitates consultation activities on environmental issues carried out by proponent departments.

Aspects of SEA Practice

With regard to policy, the exact number of assessments, as indicated by submission of an 'environmental implications" section, fluctuates and is externally driven. For example, in 2001, the EPD vetted 66 'environmental implication' sections submitted to Executive Council as part of policy proposals.

In the past few years, over 30 major environmental assessments of plans and strategies have been carried out. Most of these were part of the main study of the proposals. In 1996, the SEA of the Territory Development Strategy Review was completed as the first comprehensive separate report. Several others have been completed, including the Third Comprehensive Transport Study (1999) and the Second Railway Development Strategy (2000), and more are underway.

Recently, SEA of strategies or major development programmes has been re-focused to take account of environmental considerations at an early stage of decision-making and from a sustainable development. The emphasis is on avoiding major problems and identifying alternatives rather than assessing environmental impacts only after options have been formulated.

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59) ACE is an independent advisory body to the Hong Kong government on matters related to the protection of the environment. The EIA Subcommittee is set up under the ACE to study EIA reports of major development projects. It also comments on SEA reports of major policies and strategies.

By this time, it is usually too late to generate different means to achieve the same ends. For example, this new approach is an integral part of the SEA for *Hong Kong 2030: Planning Vision and Strategy* (see Ng 2002). The study brief for this SEA includes a requirement for the early integration of environmental considerations into the formulation of strategic land use options. A similar general requirement will be included in the final version of the EPD SEA Manual.

Trends and issues of SEA effectiveness

As noted, the Hong Kong SEA system is implemented largely through administrative procedures, which are demanding in terms of the commitment of resources by EPD. These include convincing proponent departments to carry out this process and implement the recommendations in a timely manner. Moreover, the time available for thorough assessment is limited and there is an increasing demand from the public for efficient and prompt decision-making. At the same time, the public and policy-makers also demand more comprehensive and accurate environmental information on proposals and their alternatives.

With the benefit of hindsight, some of the strategic assessments conducted in the past were not carried out early enough and did not integrate environmental consideration into the formulation of options. Because proponent departments focused on detailed assessment of selected options, results became available too late to really influence the outcomes. As noted, recent SEA studies have paid greater attention to avoiding major environmental problems. Their quality could be improved further by:

- proponent departments assuming more ownership of and accountability for the environmental performance of their proposals;
- tighter review exercised by the inter-departmental Environmental Study Management Group; and
- reference to appropriate international or regional standards of good practice.

The final version of the EPD SEA manual is intended to assist proponent departments to improve their practice and performance in early application of the process and preparation of better quality studies and reports.

Case examples of the role and impact on decision-making

In Hong Kong, decisions on policies, plans and strategies usually are made after considering many factors, including economic, social and environmental considerations. Because of their long-term nature, the outcomes of these proposals and the impact of SEA may not be apparent within a short period time, nor can they be identified with absolutely certainty. Nevertheless, below are some examples to illustrate the influence of SEA on decision making.

SEA of the Port and Airport Development Strategy – This strategy included an environmental assessment to find an appropriate site for relocating the previous airport. A number of options were assessed and the strategy finally chosen was the least damaging environmentally. It resulted in noise impacts on 350,000 people being avoided, while preserving environmentally sensitive areas in the eastern and southern part of Hong Kong.

SEA of the Territory Development Strategy Review – The main purpose of the review was to cater for a projected increase of population from 6.4 million in 1996 to about 8.1 million in 2011. SEA was conducted to identify the potential environmental benefits and problems associated with different development options (see Au 1998a). Options that were environmentally unacceptable were ruled out or significantly modified at an early stage. The SEA also recommended the preparation of a 'Broad Conservation Strategy', which subsequently has been used by other studies and projects as useful reference to avoid environmentally sensitive areas.

The SEA also identified potential air pollution problems at specific districts within Hong Kong under various development scenarios to accommodate projected increases in population and activities. This approach lead to the formulation of follow up action plans and the commissioning of additional studies and investigations. Overall, the SEA is considered to have been successful in identifying the potential adverse impacts of the strategy on environmental quality and sustainability and thereby enabling informed decision-making. It also prompted the initiation of a major new study on 'Sustainable Development for the 21st Century (see Ng 2002).

SEA of the Second Railway Development Strategy – This strategy identified options and improvements to the railway network to meet transportation objectives and improve efficiency for the period to 2016. The SEA was integrated with key stages of strategy development (1998 to 2000) with the aim of helping to formulate a 'win-win' strategy that met transport (social), environmental and financial/economic requirements (see Yeung 2002).

This approach emphasized the development of railway options that would meet transport objectives in an environmentally acceptable manner. It involved the preparation of environmental constraint maps for reference by other study teams and environmental appraisal of some generic options, such as underground and above ground railway modes. The SEA provided

information for the options selection process and once a preferred option was chosen focussed on how to avoid and minimise the adverse impacts.

With regard to the financial and economic requirements, the SEA addressed hidden and external environmental costs and benefits of railway proposals, compared them to an alternative road-based approach and in doing so helped to justify the railway strategy. In particular, it helped to clarify the major environmental benefits of the railway proposals, which were not reflected in the financial analysis. Although it is difficult to pinpoint the relationship between the final decision and the SEA recommendations, it appears reasonable to conclude that the SEA contributed to the choice of a policy of "according priority to railways" as the backbone of Hong Kong's transport system for the next two decades.

The recommended railway strategy has an estimated cost of US$10.2 to $12.8 billion. Key features include the following:

- routes through environmentally sensitive areas rejected or modified;
- rail share of the public transport system projected to increase from 31% at present to 43% by 2016 (or in terms of the distance traveled by passengers from 34% to almost 60%); and
- reduction of air pollutants by approximately 600 tonnes of NO_x per year, 60 tonnes of suspended particulates per year and 160,000 tonnes of CO_2 per year.

SEA Challenges and Future Directions

There is a major demand for practical guidelines, methods and tools for applying SEA to different types of policies, strategies and plans (Au 1998b). In this context, a key challenge will be to build closer relationships between SEA practitioners and decision-makers, planners and economists involved in the policy and strategy formulation processes, particularly around the following issues (Au 2004):

- how institutional arrangements and study processes can facilitate efficient and effective flows of information for in-time decision-making;
- how to ensure study methodologies for different streams of policy and strategy formulation are dovetailed and can "talk" to each other, especially SEA and financial/economic appraisal;
- how to promote shared learning and capacity building among different professional disciplines, including international and regional exchange of SEA knowledge; and
- how to use SEA creatively to generate win-win concepts or strategies that facilitate informed decision-making, meaningful trade-offs and genuine integration.

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For other materials cited in this article, see Hong Kong Environmental Protection Department web-site:
http://www.epd.gov.hk/epd/english/environmentinhk/eia_planning/sea/sea.html

Chapter 8
Netherlands' Experience with the Environmental Test

Mari van Dreumel

Introduction

The environmental test is an instrument to promote the external integration of environmental policy at central government level. It is intended to contribute to the so-called 'environmental-inclusive' thinking and to well-balanced political decision-making. This process addresses policy intentions with important effects on the environment. Government departments execute the environmental test for draft legislation, namely the introduction of new bills, general administrative orders or ministerial decrees and orders and amendments.

In 2001, the Ministry for Housing, Spatial Planning and the Environment (VROM in Dutch) undertook an evaluation of the first five years of experience with implementing the environmental test (E-test). This review focussed on the instrumental aspects of the test and the content and quality of the information provided by the appraisal process. It evaluated past performance in the light of other developments and opportunities, including the transposition of Directive 2001/41/EC into national legislation. The critical findings of the evaluation are of interest in light of subsequent changes to the E-test and their implications for SEA of policy and legislation, internationally.

Background on the E-test

A guidance manual has been written to assist departments of the central government in applying the environmental test and carrying out an appraisal of any significant effects (VROM 1995). The substantive information and advice contained in this document remains largely in force, i.e. has not been fundamentally overtaken by the new procedure described later. Part 1 of the guidance provides general information on the environmental test using a series of questions to introduce the requirements and responsibilities as laid down in Instructions for legislation.

Box 1: Appraisal of draft legislation in the Netherlands

The co-ordination point for appraisal of draft legislation involves co-operation between the Ministry for Economic Affairs, the Ministry for Housing, Spatial Planning and the Environment and the Ministry for Justice, which offer guidance on this process and check the results of the analysis. Four instruments are applied to identify the possible effects of draft legislation and ensure that the transparency and quality of decision-making is improved by timely information. These comprise:

- the business effect test (BET) which identifies the consequences for economic sectors,
- the environmental test (E-test) which identifies the potential impacts on the environment,
- the feasibility and compliance test which identifies the consequences for authorities involved in implementing and upholding the legislation, and
- the cost-benefit analysis (CBA) which identifies the capitalized economic consequences for society.

The procedure for testing has been laid down in the mandatory Instructions for the regulations (no. 256) and requires the following:

- the ministry responsible for the draft legislation is also responsible for the choice of instruments and analyzing the possible effects. In some cases, external expertise may be advantageous or is even required,
- quality and objectivity of the appraisal are ensured by the use of reliable information and explicit mentioning of sources, and
- the appraisal process should be started as soon as the decision to draft legislation is known. Early information about the possible effects offers the best opportunity to reconsider decisions and prevents delays at a later stage in the legislation process.

Box 2: Examples of the application of the environmental test

Draft legislation for which an environmental test has been made include:

- Alteration of Decision on emission requirements for fuel plants environmental management A and B (BEES)
- Alteration of Royal Decree 20-06-1962 on compulsory replanting and amendment of Forestry Act (to cancel the exemption from replanting in executing work on the basis of an approved zoning plan)
- Amendment of legislation on inland navigation (liberalization).

Draft legislation for which an environmental test was not necessary include:

- Integration of Immigrants Act
- Revision to Suspension of Payment
- Nationality of Sea-going Vessels Act

Box 3: Criteria for inclusion of draft legislation

The following criteria must be met in order to be included in the survey of legislation:

1) It concerns legislation at the national level (bills, general administrative orders and ministerial decrees and orders) with the exception of budget bills and initiative bills.
2) There are substantial (side) effects on trade and industry, the environment, the judiciary or implementation organizations.
3) There is national policy 'space'. Legislation that results directly from previously established international obligations (for instance EU legislation) with regard to standardization as well as implementation are not included in the survey of legislation.
4) Files which aim at levying taxes, premiums, retributions, legal dues and the like are only included in the survey of regulations if a change of legislation is concerned. If it is purely a tariff adjustment, they are not included.
5) It concerns draft legislation that has not yet been submitted to the Cabinet council or a sub-council of the Cabinet council.

What is the Environmental Test?

The E-test is an instrument for the (ex ante) screening and appraisal of draft laws and regulations. It was introduced as part of the Market Function, Deregulation and Legislative Quality project (1994). Along with the E-test, other policy tests are carried out, for example regarding the business effects and feasibility and enforceability of draft regulations (see Box 1).

The main aim of the E-test is to identify the potential environmental effects of draft laws and regulations in order to inform policy-making. It has been applied to the introduction of new bills, general administrative orders and ministerial decrees and orders and amendments. In addition, other policy intentions can be tested as well, such as plans and notes, for their environmental effects. However, the Minister of VROM preferred in the first period to focus on draft regulations in applying the environmental test.

Why an environmental test?

In many cases, legislation is accompanied by side effects that may unintentionally undermine its main objectives. For a balanced decision-making on draft legislation, an appraisal of the potential side effects, including consequences for trade and industry, the environment and feasibility and enforceability, is indispensable. For example, environmental effects may be directly evident such as emissions to air or water or occur through energy consumption or changes to transportation or mobility.

The objective of this process is to improve the quality of legislation and, in addition, to reduce the administrative, financial and regulatory burden on companies to the minimum necessary. In order to achieve that purpose, the Cabinet required the

evaluation of existing legislation with regard to their necessity, proportion between objective and means and maintainability and established a more severe test of intended legislation. The various tests identified in Box 1 are meant to make key side effects transparent and ensure uniformity in their treatment.

When to test?

It is important that proponents execute the E-test at the earliest possible stage when it is still possible to choose between instruments and between the various forms of legislation. It is then that the results of the E-test are most valuable both for legislation and also for policy notes in which a (future) legal context is established. This approach should not necessarily lead to a delay in the legislation process overall providing the key questions and required information are addressed from the beginning. It also helps to overcome possible resistance from influential people and organizations in society and politics.

Which regulations are to be tested?

The E-test only applies to draft legislation that has substantial consequences for the environment. It does not need to take place in relation to all draft legislation. Examples of draft legislation that were subject to and excluded from the application of the E-test are given in Box 2. The criteria for inclusion are set out in Box 3.

How is legislation to be tested?

The E-test is designed to provide information on the environmental effects of draft legislation in order to improve its quality and to contribute to a balanced decision-making by Cabinet and Parliament. Government departments develop this information by answering a series of questions, which comprise the environmental test. It is not always necessary to address the questions extensively. In many cases, a brief assessment of the environmental effects of the draft legislation will be sufficient, for example by indicating orders of magnitude of the main categories of environmental consequences to be expected.

The potential consequences for the environment should be described in a separate paragraph in the explanatory memorandum or note on the draft legislation. When the consequences for the environment are expected to be important, the test will have to meet more stringent requirements. In that case, it may be useful to call in an external agency to address the questions.

Who is responsible?

The initiating department is responsible for the quality of the draft legislation and for carrying out an environmental appraisal of its side effects. Based on a survey of legislation, the responsible ministry will identify proposals with potential environmental effects. This process is monitored and assisted by the Joint Support Centre for Proposed Legislation, which is staffed from the Ministry of Housing, Spatial Planning and the Environment and the Ministry of Economic Affairs. It maintains a help desk for departments applying the environmental test and judges the quality and informative value of the explanation of draft legislation.

Evaluation of the environmental test

In 2001, VROM commissioned an independent evaluation of the performance of the E-test, focussed on its procedural and organizational aspects and the content and quality of information (DHV 2001). This process has assumed a three-stage form: first, information is gathered; secondly, it may or may not assist the decision-making process; and thirdly, it can help in drafting laws and regulations that take greater account of environmental imperatives. Using the experience gained over the past five years, the evaluation of performance in these areas was intended to plan for the future. The approach and findings of the evaluation are described in this section.

Scope and methods of the evaluation

The evaluation considered opportunities for environmental appraisal in response to a number of recent developments, including:

- development of a sustainability test based on the National Strategy for Sustainable Development (NSSD);
- transposition and implementation of the SEA Directive (EC/2001/42); and
- proposed discussions concerning the future and continuation of the Market Function, Deregulation and Legislative Quality operation.

A variety of sources and study methods (interviews and case surveys) were used to take a broad inventory of the performance of the environmental appraisal. During a subsequent phase, five case dossiers were selected for detailed study to find out how successful this process had been and what results it had achieved. The output of the inventory and case studies formed the basis for the discussion with experts (in a 'group decision room'). The conclusions were based on all three phases of the evaluation, which sought to identify underlying causes and explanations.

Findings of the evaluation

Key findings on the performance of the E-test were organized into two main categories as follows:

1) Strengths that must be maintained:

- selectivity in applying the environmental test only to draft legislation with a potential environmental impact and limiting appraisal to relevant environmental effects;
- continuation of the independent and enabling role of the Joint Support Centre for Draft Legislation in this process;
- policy neutral supervision during the implementation of the appraisal (possibly by the Joint Support Centre); and
- value added to the quality of legislation through information on potential environmental effects.

2) Areas for improvement

- increasing familiarity with environmental appraisal in order to strengthen its influence on decision-making;
- increasing the visibility, accessibility and recognition of the results of the E-test for policy-makers, administrators and stakeholders (possibly through a separate section in the explanatory memorandum);
- increasing the transparency of the impact of the results of the E-test (sufficient documentation and monitoring to make clear its role in the decision-making process);
- promoting a consistent attitude, professional working method and active supervision in order to encourage internalization and throughput (practical involvement by the Joint Support Centre in the implementation of the environmental appraisal);
- timing of the environmental appraisal (to be carried out as early as possible in the legislative process); and
- focussing on the quality of the appraisal and the considerations raised (have the relevant environmental effects been adequately addressed?) as well as on compliance (has the process been carried out?).

The significance of the strengths and weaknesses identified by the evaluation depends on the aims of the environmental test. A distinction is made here between:

- answering the instrumental question of whether the environmental test has been applied to the relevant laws and regulations (is the information available?); and
- assessing the results of the appraisal in terms of the environmental benefits (has the law or regulation become more environmentally friendly as a result and has the environmental appraisal played a role in the decision--making?).

Optimising the E-test in a changing environment

Experts from VROM and those involved in conducting the environmental test (including the members of the monitoring committee) took part in a 'group decision room' (GDR) session to explore the relationship between the E-test and the developments noted previously. The preferred situation is for a high quality, policy process in which environmental aspects are included as an integral aspect and separate environmental appraisal is no longer necessary. However, it is understood that such a situation will arise only in the long term and requires in the language of the National Environmental Policy Plan (NMP4) far-reaching transitions. More immediately, the conclusion of the interviews and the GDR session is that a combination of the implementation of the SEA Directive and the development of a process of sustainability appraisal is the best option. One important advantage of this approach is that it can help streamline the large number of policy tests and appraisals that are currently applied in the Netherlands government system. These tests are regarded as a stumbling block and restricting their number could increase their collective effectiveness and policy impact. If this is to work, it is essential that the aims of environmental appraisal are clarified in relation to sustainability appraisal and the SEA Directive. Within a framework for differentiated appraisal, the use of the E-test as an instrument for promoting external integration of environmental policy requires a different direction and practical interpretation.

Conclusions and implications of the evaluation

The major conclusion of the evaluation was that E-test, in its current form, is used primarily for instrumental purposes and limited in its effectiveness. During the first five years, the E-test has led mainly to the inclusion and highlighting of environment-related information in explanatory memoranda to draft bills. However, this information played only a limited role in policy-making and contributed little to the environmental improvement of draft laws and regulations or to the transparency of this process.

The reasons for the limited effectiveness of the E-test are twofold. First, there is limited external integration and internalisation of the results in laws and regulations and more must be done than simply including the information in explanatory memoranda. A more active role by the Joint Support Centre and greater involvement by the policy units at VROM are needed to address that issue. Specifically, the Centre must take a more independent and critical approach to the content of the information gathered in an environmental appraisal. VROM policy units can then use the information as a basis for discussions with the proponent concerning possible alternatives.

Second, there is limited policy flexibility at the time that the E-test of draft legislation takes place. After all, legislation is a policy instrument that offers little scope for consideration of major options and there are better opportunities for incorporating environmental considerations during policy preparation and formulation. At this an earlier stage of decision-making, there is more room for a proactive approach to address a range of alternatives and their environmental considerations.

For bills that are severely constrained and require a high level of political consensus, it is advisable that the E-test in its current form should no longer be applied. This test is unnecessary first because the information required is often already available (supplying the same information a second time can generate opposition from the legislating ministry) and second, its role in decision-making will be limited by the narrow policy scope. In such cases, the legislating ministry can be asked to compile an overview or summary of available information and of the way in which this has played a part in the legislative process.

Given that the effectiveness of the E-test is restricted by the stage of decision-making at which it is conducted, it is advisable to readjust the process and apply it to policy documents, strategy proposals, plans and so on. If the objective is to strengthen the external integration of environmental policy, it is important to take account of environmental effects at the earliest possible stage of decision-making. However, other than for laws and regulations, the E-test in its present form is not suitable for application to policy proposals and it will be necessary to look for more suitable appraisal instruments.

The evaluators recommended that the number of policy tests and appraisals should be streamlined in order to improve the quality and transparency of decision-making processes and linked to sustainability appraisal (within the framework of the National Strategy for Sustainable Development) and the specifications contained in the Directive 2001/41/EC. In that context, attention also must be given to reporting the results of environmental appraisal to ensure the anticipated environmental effects are clearly recognizable and taken into account in the policy making process in a transparent manner.

The evaluation also showed that the formalization of the E-test would not improve the use of the results of this process in decision-making. Furthermore, imposing such a framework on the legislating ministries would be likely to frustrate the internalization of environmental aspects. Any measures to promote internalization and external integration must be based on the premise that the ministry concerned is best able to define and assess the environmental aspects of legislation. Active support can assist a dialogue in which environmental aspects play a constructive role (in terms of opportunities) in policy preparation whereas strong intervention in this process will lead to the division of responsibilities becoming unclear.

Given these findings, the Ministry of Housing, Spatial Planning and the Environment had four main choices to make with respect to the E-test:

1. Clearly define its policy aims. Specifically, is the E-test:
   - a policy neutral instrument to chart environmental effects;
   - a means to promote the external integration of environmental policy (i.e. environmental effects play a role in decision-making processes), or
   - an opportunity to obtain environmental benefits (measures are based on decisions that take full account of environmental aspects)?
2. Define the scope or 'working sphere' of the E-test (recognizing the form and content of the appraisal will be determined partly by its aims and will help to define). Specifically identify:
   - the type of decisions for which the appraisal must be conducted, and
   - the levels of government involved.

3. In that context, decisions can be made on the way the SEA Directive should be implemented and the significance of the environmental appraisal process. (If the working sphere or scope of the E-test is adjusted, this also affects the form and contentof the appraisal.)
4. Decide the role that environmental appraisal should play in public debate on certain issues or dossiers (in order to improve familiarity and communication).

New E-test Procedure

A new procedure for environmental appraisal was approved by the Council of Ministers in October 2002 and became obligatory on March 1 2003. This procedure includes two main phases and a series of steps, together with a time frame. In phase 1, the reasons for draft legislation are appraised. The co-ordination point acts as the 'front office' for this phase (see Box 1). In phase 2, the appraisal of effects is carried out for designated draft legislation. The Ministry of Justice is the 'front office' for phase 2. When the required time line for an appraisal can not be met, the responsible ministry agrees with the co-ordination point or the Ministry of Justice on an alternative schedule.

Phase 1: the quick scan

In phase 1, the focus is on the reasons for deciding to draw up legislation. A quick scan[60] is used to investigate the need for draft legislation (or changes in existing legislation) in order to realize policy objectives. This scan includes consideration of potential significant effects for economic sectors, the environment, compliance or if there are societal costs that require a cost-benefit analysis. The responsible ministry then prepares a proposal on the tests that should be carried out and the questions that should be answered. The co-ordination point checks that the selection of instruments is adequate and the correct questions are to be applied. A written agreement on this matter is drawn up with the ministry responsible for the draft legislation.

There is no need for a quick scan when new legislation meets with the following conditions:[61]

- there are no reasonable alternatives other than legislation for realizing the policy objectives;
- no significant consequences are expected for economic sectors, the environment or feasibility and compliance;
- no significant societal costs are expected that might require a cost benefit analysis; or
- the legislation in question implements required EU-legislation.

Whether or not a quick scan is required is at the discretion of the responsible ministry. If it becomes clear later that this decision was incorrect, it may be necessary, after consultations with the responsible ministry, to carry out an appraisal. In exceptional circumstances, a quick scan may be applied, albeit much later than normally would be the case.

Phase 2: undertaking an appraisal

In phase 2, the different appraisals are carried out. Guidance for applying the various tests can be obtained from the co-ordination point. Also this process may, should or must (in some cases there is a legal requirement) involve external expertise or support, for example:

- Central Bureau for Statistics in the case of the BET;
- National Institute for Health and Environment in the case of the E-test; and
- Expert Centre for legal compliance or the National Council for Court-law for the burdens on the courts.

When the draft legislation is prepared, it is submitted to the Ministry of Justice, together with the explanatory memorandum for the legislative quality test. The appraisals (and in some cases the cost-benefit analysis) are directed for comments to the Ministries for Economic Affairs (BET), Environment (E-test) and Justice (feasibility and compliance).[62] If an appraisal proves to be incomplete in the explanatory memorandum, then consultation with the responsible ministry is required. This process concludes with a written report. On conclusion of the appraisal, the Ministry of Justice prepares

60) The results of the quick scan may offer input for the starting notice that is discussed with the ministers. In several ministries, it is also used as the starting point for the legislation process.

61) The fact that there is no need for a quick scan of draft legislation does not mean that the reasons for choosing the instrument of legislation or the assessment of possible effects are also not necessary. These obligations remain.

62) When draft legislation may impose an administrative burden on economic sectors, it is sent to the independent advisory body on the assessment of administrative burdens (ACTAL). These burdens are generally quantified in the BET and the ACTAL uses this information as a basis for its advice. Contrary to the procedure described for the other tests, draft legislation to implement required EU legislation is subject to appraisal for its administrative burden.

a legislation report, which indicates if the draft legislation is consistent with the level and quality of the information provided. When there is no agreement, the responsible ministry includes this report in the documents for the Council of Ministers.

Conclusions

Experience with the application of the E-test indicates the need for a 'stick' at the beginning and end of the process before decision-making takes place. Whether legislation is the right instrument for achieving policy objectives depends on the availability of alternative instruments. In the new setting of the E-test, the need to assess policies themselves becomes important; this carried out in the preliminary 'quick scan' phase. There is a need also to have a stick at the end of the process in the form of a legislation report. The process between those two stages follows its normal course. The instrument has sufficient flexibility so an appraisal can be tailored to the information needs and environmental consequences of draft legislation. Of course, combining assessments makes an important contribution to preventing an overload in policy tests and strengthens the importance of the end result.

Acknowledgement

The author acknowledges with thanks the contribution of Paul Klaassens.

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For further information on the new E-test procedure or the quick scan, contact the coordination point for draft legislation at: meldpunt-vr@minez.nl

Chapter 9
SEA Experience and Opportunities in New Zealand

Martin Ward, Alison Dalziel and Ruth Wilkie

Introduction

This paper reviews the elements of strategic environmental assessment (SEA) that are in place in New Zealand. Particular reference is made to the role of the *Resource Management Act 1991* (RMA) in policy development and planning at central and local government level. The legal, administrative and philosophical underpinnings of the Act are described, focusing specifically on those aspects that deliver or correspond to SEA intent. A contrast is drawn between the intent and opportunities provided by the Act and the record of SEA practice.

Other SEA-type activities in New Zealand outside the RMA structure are also described. These include the investigations carried out by the Parliamentary Commissioner for the Environment and other formally appointed bodies, and the role of the Ministry for the Environment pursuant to the *Environment Act* 1986 to provide environmental advice in the internal process of government policy-making. Finally, recent developments in sustainability assessment are discussed.

Background on Environmental Assessment in New Zealand

Environment as a public policy issue emerged during the 1970s and early 1980s. It was marked by the formation of the Commission for the Environment, the first government environmental agency. The mandate of the Commission was biophysical in scope and project focussed with little direct involvement in the policy-making process.

The role of the Commission was exercised under the *Environmental Protection and Enhancement Procedures*, 1974 (EPEP), which were loosely modeled on the US *National Environmental Policy Act* 1969 (NEPA) and introduced environmental impact assessment (EIA) in New Zealand. Other than this, perhaps the greatest achievement of the EPEP was the introduction and entrenchment of public comment on government projects and licensing activities. Like the NEPA, however, any role in policy appraisal was set aside for the more comfortable territory of project review.

The Ministry for the Environment was established in the late 1980s. It had an explicit legislative mandate through the *Environment Act* 1986 to introduce an environmental perspective into government decision-making including policy processes. This mandate was extended by the Resource Management Act 1991, which, inter alia, defined the environment to include social, economic, aesthetic and cultural matters. EPEP requirements for predicting and mitigating the adverse impacts of projects were also transferred to this Act, although in a proscribed and restricted form with any role for environmental assessment in central government policy-making clearly excluded. These procedures remain in place but are moribund.

Some requirements for policy appraisal flow from the *Environment Act* but this activity lacks transparency and there are questions about its scope and effectiveness.[63] Advice from the Ministry for the Environment on the environmental impact of proposals takes place directly or through EPEP requirements (which remain in place but are moribund). From time to time, the government has also limited the scope and extent of this advice through funding decisions. Significantly too the functions of the Ministry for the Environment as set out in its Act are explicit only on biophysical matters as compared to the same wide definition of environment in the *Environment Act* and the *Resource Management Act*.

Introduction of the Resource Management Act (RMA)

The enactment of the RMA in 1991 after a lengthy and consultative development process brought environmental assessment in New Zealand within a formal legal framework, which focused attention on the effects of development activities (see Box 1). The RMA replaced the Town and Country Planning Act and set aside the notion of social and economic based spatial planning. Instead, it had a single purpose: "to promote sustainable management of natural and physical resources".

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63) For example, the Ministry for the Environment contributes to the interdepartmental policy development process under various administrative arrangements broadly similar to the structure and operation of other Westminster style governments. As elsewhere, this process is fraught with all the usual challenges of interdepartmental rivalry, access to information and political influence. These problems are ameliorated in New Zealand to some degree by the *Official Information Act* 1982, which requires the public release of official documents with few exceptions. However, the 'published' record of environmental contributions is of very variable quality.

Box 1: Definitions in the RMA

Purpose: The purpose of this Act is to promote the sustainable management of natural and physical resources.

In this Act, "sustainable management" means managing the use, development and protection of natural and physical resources in a way, or at a rate, which enables people and communities to provide for their social, economic and cultural well being and for their health and safety while:

a) sustaining the potential of natural and physical resources (excluding minerals) to meet the reasonably foreseeable needs of future generations; and
b) safeguarding the life supporting capacity of air, water, soil and ecosystems; and
c) avoiding, remedying or mitigating any adverse effects of activities on the environment

Environment includes:
a) ecosystems and their constituent parts including people and communities; and
b) all natural and physical resources; and
c) amenity values; and
d) the social, economic, aesthetic and cultural conditions which affect the matters stated in (a) to (c) above, or which are affected by these matters

Effects include:
a) positive or adverse effect
b) temporary or permanent effect
c) past, present or permanent effect
d) cumulative effect
e) potential effect of high probability
f) potential effect of low probability which has high potential impact

This legislation was framed against the background of the Brundtland report and the activities leading to the Rio Conference in 1992 and its authors sought to make an explicit distinction between sustainable management and sustainable development. The RMA does not provide for planned development or for intra-generational redistribution. It addresses distribution between generations via the protection of significant ecological bottom lines and the constraint of unsustainable activities. As a product of the laissez-faire government philosophy of the time, development activities are permitted so long as their effects are 'avoided, remedied or mitigated'.

The Resource Management Act and its Relationship to SEA

The institutional framework

The architecture of the Act clearly illustrates why EIA scholars have cited the RMA as a model for integrated decision-making (Sadler 1996, Eggenberger and Partidario 2000, Sheate et al 2001). The Act provides for a hierarchical system of national and regional policy development, regional and district or local planning and the granting of resource consents. With its tiered set of principles, standards, policy statements, plans and rules, the Act is a good example, on paper at least, of an integrated approach to resource management (see Box 2). It is less obvious at first glance why the RMA has been cited as a SEA equivalent process (Sadler and Verheem 1996).

It is worth noting different interpretations of what SEA is and what it is not. Early definitions of SEA refer to it as a more or less linear extension of project EIA to the level of policy, plans and programmes (e.g. Therivel et al 1992). Later versions appear to have been drawn along two directions. A narrower, prescriptive approach emphasizes universal or core components, such as the provision for public participation and the preparation of a report. This can be contrasted with a more open and flexible approach that recognizes multiple types of SEA (Sadler 2001). The New Zealand experience clearly falls in the latter category and corresponds to the view of SEA "as a transitional instrument" that leads toward or is part of a more integrated, sustainability-oriented approach to policy or plan-making (Sadler and Verheem 1996).

New Zealand authors take a cautious view of the SEA character of the Resource Management Act, recognizing that this is a post-hoc view rather than a design objective. As Dixon (1994, 2002) observes that the RMA framework "can be interpreted to present possibilities for SEA from a system, which although oriented towards achieving sustainability, was not specifically

Box 2: Key functions and features of the Resource Management Act

- Single piece of legislation for policy making, planning and controlled use of: land, water and air, discharges of contaminants, noise
- Administered by the Ministry for the Environment and implemented by Regional and District Councils
- Purpose is to promote sustainable management of natural and physical resources
- Main features are as follows: binds government actions (limited exceptions for Defence agencies); open standing for any interested person; extensive devolution to regional and district councils, and effects based
- Environmental assessment implicit in policymaking and planning process and explicit in resource use and allocation decisions (Designated tool is an Assessment of Environmental Effects)
- Requires Regional and Districts Councils to prepare policy statements and plans relating to the resources in their jurisdiction
- Establishes procedure for preparing policies and plans and issuing consents to use resources
- Places restrictions on use and disturbance of any land, reclaiming or draining wetlands, disturbance or introduction of flora, taking or diverting water and discharge of contaminants to water, land or air
- Quasi-judicial hearings by Councils on policies and plans at preparation, and consents on an ongoing basis Provides for heavy penalties based on strict liability
- Appeals on fact and interpretation to an Environment Court.

designed for the purposes of SEA". She compares it with Sadler's (1994) early schematic of SEA (see Figure 1) and lists four requirements to deliver on its potential application:

- effective implementation of the RMA and environmental assessment at local and regional government;
- effective policymaking and use of policy instruments at central government level;
- active commitment to implementing the new mandates and policies by politicians and practitioners at all levels of government; and
- informed practitioners on EIA and SEA concepts and methods.

SEA-type arrangements and tools

Under the RMA, a hierarchy of policies and plans are prepared with reference to principles, duties and specified matters and through an open and consultative process (Figure 2). This process of integrated decision-making incorporates a number of SEA elements, namely:

1) the principles, duties and matters to be taken into account;
2) the preparation of (National) Environmental Standards and Regulations;
3) the preparation of National Policy Statements (including the mandatory New Zealand Coastal Policy Statement); and
4) the s32 requirement to consider alternatives, assess benefits and costs etc before adopting any objective, policy, rule, etc.

Explicit SEA functions are reflected in the last two items above. The RMA prescribes a formal, staged and consultative process for preparing National Policy Statements. Other requirements also contribute to this process; for example, there are clearly recognisable environmental assessment injunctions in Part II of the Act (Purpose and Principles). Nationally set direction is intended to assist the implementation of the processes of regional and district policy-making, planning and consent granting. All of these policies and measures are subject to analysis under the important section 32 of the Act.

National Environmental Standards, Regulations and Policy Statements

With the notable exception of the mandatory National Coastal Policy Statement (1994), no National Policy Statements or National Environmental Standards and Regulations were prepared until 2004. The reasons for the long delay in producing them are several and discussed below. In their absence, it is difficult to analyze the actual or potential effectiveness of policy direction in delivering SEA objectives. This situation, after more than 10 years of RMA operation, is commentary in its own right.

The National Coastal Policy Statement was prepared shortly after the introduction of the RMA. The open and consultative process specified in the Act for all statements meets the SEA criterion of public involvement. In this case, it included formal submissions and cross submissions on a draft policy statement and the release of the final report as a public document. This rather exhaustive process and the time and expense required to prepare this statement is one reason given

for the failure to develop others. In 2003, amendments to the Act introduced a more streamlined process while retaining effective opportunities for public participation.

Another reason cited for not preparing these statements or National Environmental Standards and Regulations was government concern about introducing additional measures that were legally binding and contestable through the courts. This was a particular issue when regional and local authorities and planning practitioners were still coming to terms with the legal, planning and management complexities of the new Act. During this period, air quality and water quality 'guidelines' were issued following an open and consultative process that reflected the legal process for standards and regulations. In 2003, amendments to the Act introduced a more streamlined process while still retaining opportunities for public participation. Currently in preparation are a National Policy Statement on Biodiversity and a National Environmental Standard for certain air pollutants, dioxins and other toxics.

Section 32 requirements

Section 32 of the RMA requires that, before adopting any objective, policy, rule or other method, a Minister or local authority,[64] must:

- have regard to the extent to which the objective, policy, rule or other method is necessary in achieving the purpose of the Act; other means that could be adopted to achieve the desired end; and the reasons for and against the proposed option and its mainalternatives including taking no action;

- carry out an evaluation appropriate to the circumstances on the benefits and costs of the proposed option and principle alternatives; and

- be satisfied that the proposed objective, policy, rule or other method is necessary to achieve the purpose of the Act andit is themost appropriate option having regard to its relative efficiency and effectiveness.

Figure 1: SEA and the Resource Management Act

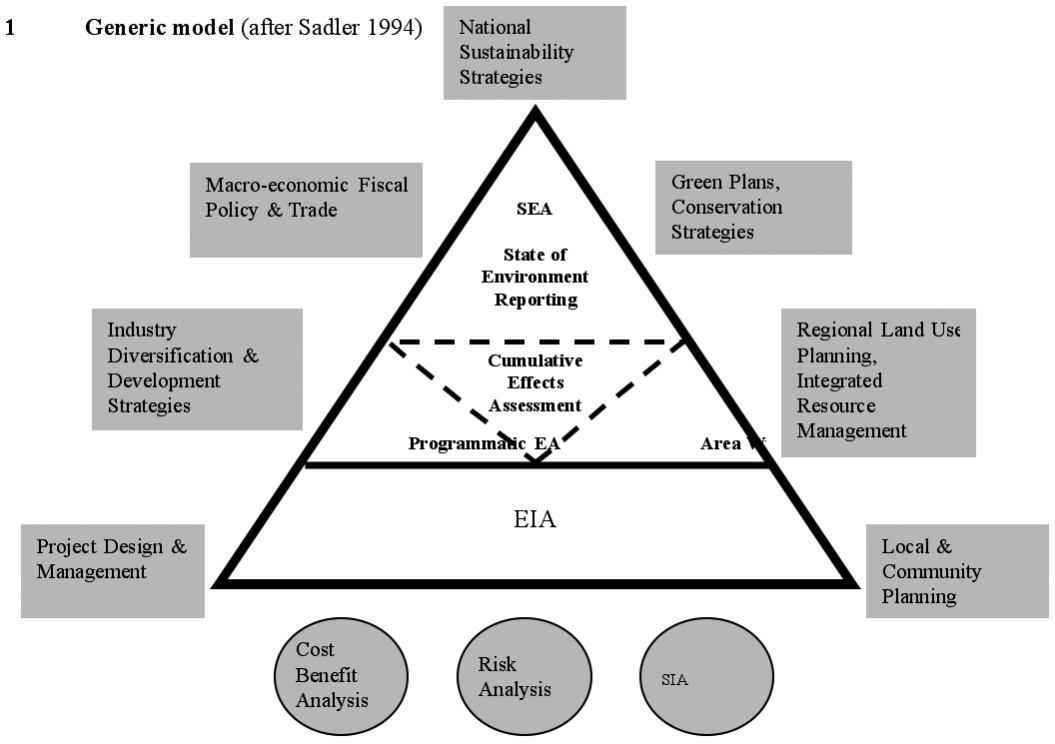
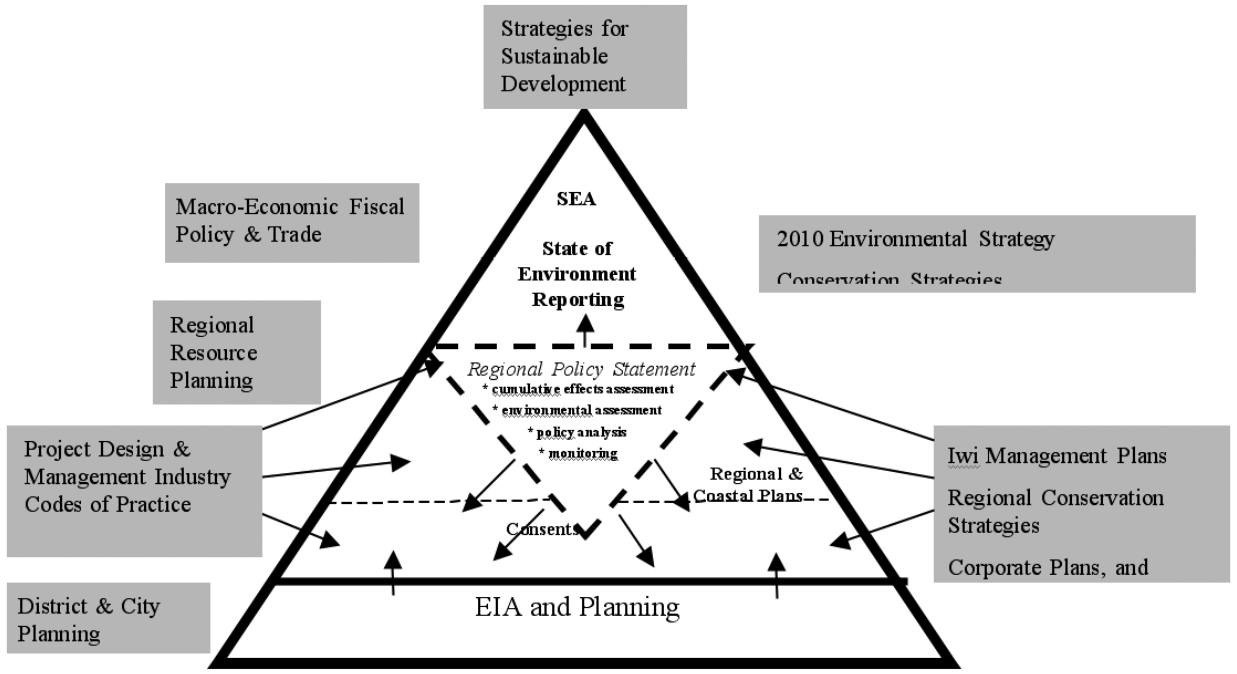


Figure 1: SEA and the Resource Management Act

64) These duties apply to the Minister for the Environment (MfE) in issuing, amending (or revoking) any national policy statement, or making any regulations prescribing national environmental standards. They apply to Councils in relation to setting objectives, policies and rules in their planning instruments.

2 Application to New Zealand (after Dixon 1994)



The detail of a s32 analysis must correspond with the scale and significance of the actual or potential environmental effects anticipated from the implementation of the change, policy statement, or plan.

Good practice guidance issued by the Ministry for the Environment (1993) notes that:
"*Section 32 is an overarching duty for councils when preparing plans. It is not an empowering section that enables councils to do certain things as it sees fit, but is a directive from Parliament to carry out the primary functions under the Resource Management Act in a certain way".*

In updated guidance, the restraining character of the duty is emphasized as follows (Ministry for the Environment, 2000): "The analysis should be systematic and rigorous. Among other benefits:

> ..... *the discipline imposed by performing (s32) duties is calculated to restrain implementation of instruments which may not be soundly conceived or clearly expressed.* Foodstuffs (Otago Southland) Properties Ltd v Dunedin CC W53/93".

Full compliance with s32 requirements would go a long way to meet key assessment criteria. This is certainly so in relation to the preparation of National Policy Statements and National Environmental Standards for which public involvement is mandatory. In the case of regional and local government, public involvement may be subsequent to the s32 analysis of an "objective, policy, rule or other method" rather than part of it and in many instances it is not undertaken as a clearly defined task with a defined report.

The s32 duty requires the development and evaluation of alternatives, the assessment of costs and benefits (including environmental and social costs) and public review of actions proposed in public policies and plans. What happens in practice? Fookes (2000a) has analyzed s32 experience with reference to case law and recent plan changes and concludes:

> *There is a prevailing view amongst practitioners that there is little in the current planning documents or in Section 32 reports that suggests any systematic analysis. It is also questioned whether local body politicians adequately appreciate the questions they should ask when carrying out their duties under Section 32.*
>
> *In their Section 32 reports some councils seem to have described procedure as opposed to presenting a formal test of preferred options against alternatives. Sometimes these documents also double as an extended explanation of the meaning of selected objectives, policies and methods, rather than an analysis of them.*
>
> *Occasionally, but usually without much rigour, they also examine alternatives against some criteria – not usually inclusive of costs and benefits.*

The evaluation of the application of s32 of the RMA includes (and for many is guided solely by) reference to case law. In the absence to date of any National Policy Statements and National Standards, the case law available relates only to council activities. To date, the Environment Court (see Box 2) has taken a rather narrow view that the section operates simply at

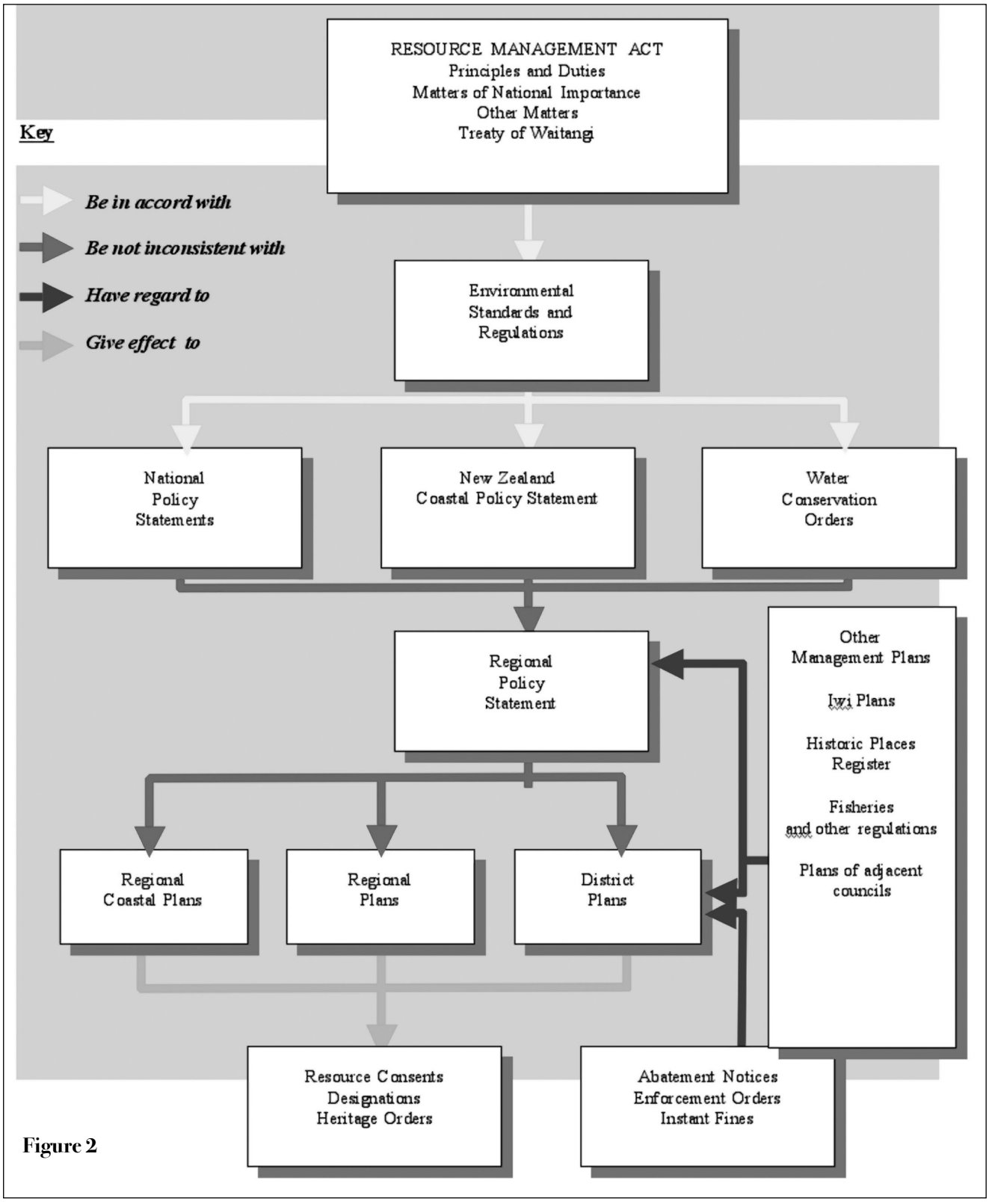


Figure 2

a methodological and procedural level, "a reminder of relevant issues and options under Part II of the RMA" (Grinlinton, 2000). In conclusion with regard to s32 application, the RMA, once again, looks good on paper but works less well in practice.

SEA limitations of the RMA

There remain questions about the extent to which the RMA provides or substitutes for SEA in New Zealand. There is little doubt that the structures are in place that could operate effectively to ensure the adoption of environmentally appropriate plans and programmes at regional and district level, driven by central government policy initiatives to moderate activities that cause resource degradation and adverse environmental impacts. Less clear is whether the RMA contains mechanisms for requiring the policies and programmes of central government to be subject to a SEA-type appraisal.

This issue revolves around mechanisms or procedures to initiate National Policy Statements or National Environmental Standards and the sections of the Act that address their purpose. These range from restrictive to enabling but are not mandatory, except with regard to process. Ministers may avoid and have avoided addressing important national environmental policy issues, most notably in the case of climate change. Soon after the RMA was introduced, ministerial intervention on a large project with significant carbon dioxide emissions led to conditions of approval that included plantation forest absorption. No similar actions or mitigation requirements were made for subsequent similar and larger projects and climate change matters were managed through central government policy processes wholly 'outside' the RMA.

Another view on the effectiveness of the RMA in regard to policy development can be obtained by considering how the Act was not applied but could have been to recent cases. A useful test is provided by a 1998 policy decision to substantially reduce the tariffs on motor vehicle imports. (New Zealand now imports all motor vehicles, while prior to 1999 some were assembled locally). The tariff policy led to a rapid and large increase in the country's motor vehicle fleet with significant increases in local air pollution, national green house gas generation, amenity loss and demand for more and better highways. Public transport use declined. Under the RMA framework provision is made only for environmental assessment of individual new roads and for limited new controls on existing roads (storm water run off, noise mitigation). But no statutory mechanism was in place to ensure that the tariff policy initiative took account of the larger environmental issues.

If there had been, say, a National Policy Statement on Greenhouse Gas Emissions and/or energy use, supported by National Environmental Standards and Regulations for air quality and noise, then the adverse effects of motor vehicle use provided by the reduced tariffs could have been anticipated and measures taken to offset and manage them. For example, motor vehicles could still have been imported into New Zealand but might have been required to meet more demanding emission standards. The social benefits of increased mobility might have been explicitly balanced with the disadvantages of increased traffic and the health problems associated with more air pollution.

Box 3: Parliamentary Commissioner for the Environment Report on Urban Water System Issues for the 21st Century

The purpose of this report, prepared in 2000, was to "identify the key sustainability issues and significant risks affecting the sustainable management of urban water systems". This was in accordance with the provisions of the Environment Act (1986).

It was intended to "...inform, stimulate debate, encourage the consideration of alternative approaches, and contribute to the resolution of urban water system issues".

The report identified a number of major challenges. Chief amongst these is finding common ground on the goals and values of urban water systems. This involves increased understanding of issues and options, and much more extensive community input within each of New Zealand's regions.

Other major challenges include: excessive and inefficient water use, resulting in inadequate water flows, contamination, funding pressures, poor bathing/recreational water quality; and inadequate maintenance of infrastructure in some areas.

The report suggested a number of specific areas for attention:

- improvements to demand management and least-cost planning (with methods including education, economic instruments and regulation);
- better integration of land use and catchment management planning; and
- improved management of water services with efficient water use, reuse and recycling, based on an approach which recognises the inter-linkages between different stages of the water cycle.

The report issued a challenge to both central and local government. Policy issues at the national level were at the time being addressed through a water review, although this was unable to make much progress and is currently on hold. A number of territorial authorities have followed through, however, and the Parliamentary Commissioner for the Environment has provided further advice on a case-by-case basis.

Source: Parliamentary Commissioner for the Environment (2000) *Aging Pipes and Murky Waters - Urban Water System Issues for the 21st Century*, Wellington.

Box 4: Parliamentary Select Committee into the Environmental Effects of Road Transport

The Parliamentary Transport and Environment Select Committee, comprising Members of Parliament from government and opposition parties, established an inquiry into the environmental effects of road transport in 1998. This took place in advance of major transport policy decisions that were pending in relation to possible changes to the ownership (public to private) and extensive user charging.

The Committee noted that Government reports on road reform published to that time had recorded that specific information about the environmental effects of land transport was lacking in the New Zealand context. "For this reason, the lack of environmental sustainability has been largely removed from consideration of the road reform process. It was our increasing concern about this trend that motivated us to initiate this inquiry."

In conducting its inquiry, the Committee's Terms of Reference were to:
- consider the nature and scale of the environmental effects of road transport
- review work currently undertaken by the government to investigate these effects
- consider the management option recommended by the Roading Advisory Group, and evaluate the official assessment of the environmental effects of that option or any variation being proposed by officials
- identify possible mechanisms for minimising the environmental effects of road transport, and
- after examining these matters, to the House with recommendation to the Government.

The Committee was assisted by the Office of the Parliamentary Commissioner for the Environment and an independent adviser. It met regularly and invited submissions and reports from relevant government department and agencies. It did not invite public or expert submissions outside of government.

In an unusual but not unprecedented act, the Committee sought to bring a dimension into the policy -making arena that was not being addressed by the lead policy agencies. In an interim report in 1998, it noted that the Resource Management Act can have only limited influence in the management of environmental effects and that it is not integrated with strategic planning. It concluded that the lack of an integrated legislative framework for managing the environmental effects of road transport poses risks to the environment.

Source: New Zealand House of Representatives (1998) Inquiry into the Environmental Effects of Road Transport, Interim Report of the Transport and Environment Committee

Perhaps this sort of approach to policy-making, an early warning of adverse effects, was contemplated by the architects of the RMA. A more effective approach would be the application of SEA tools directly as part of central government policy-making processes. However, it is clear that the RMA does not extend to this kind of function. In the final analysis, the mandate for SEA under the Act is narrow and evident in elements of approach that are equivalent to this process as applied elsewhere.

Other SEA Activities in New Zealand

Outside the RMA, a diverse range of other SEA type processes are undertaken with little or no reference to the Act. These include activities of various bodies appointed or reporting to Parliament, Central Government and regional governments. In this regard, the most notable examples are:
- independent inquiries by the Parliamentary Commissioner for the Environment (Box 3);
- inquiries by Parliamentary Select Committees (Box 4);
- ad hoc regional planning processes (Box 5); and
- National Interest Analyses of international treaties (Box 6).

The case studies in boxes 3 to 6 illustrate the nature and scope of these approaches. Of the four categories listed above only certain ad hoc regional planning processes can be said to closely approximate to SEA criteria. For example, the options analysis undertaken as part of the Auckland Regional Growth Strategy has close parallels with the SEA approach (Box 5). Other processes described in case materials correspond in varying degrees to this approach (except for public involvement). All involve the preparation of reports, which are available to the public under the Official Information Act.

The most prolific output has been the work of the Parliamentary Commissioner for the Environment who reports on issues of environmental concern. Recent inquiries have ranged from bio-security to urban infrastructure. While the functions

Box 5: Auckland Regional Growth Strategy

Greater Auckland is home to 30% of New Zealanders and generates approx. one third of national income. Territorially, the area is divided among four City Councils, three District Councils and one Regional Council – all with statutory functions under the Resource Management Act. The Regional Council is responsible for preparing a regional policy statement to guide the integrated management of the natural and physical resources of the region. The city and district councils are responsible for controlling land use.

Integrated growth planning in the Auckland region preceded the RMA by more than 20 years and there is a rich record of studies, public involvement and continuing work on the Regional Policy Statement. Recently, the Auckland Regional Council undertook a process of establishing a vision of Auckland in the year 2050 incorporating the views of the local authorities through an ad hoc political organisation known as the Regional Growth Forum.

Project teams drawn from contributing councils worked on the following topics: Regional Planning Overview; National and Physical Resource Constraints; Transport Capacities; Physical Infrastructure; Social Infrastructure; Growth Management Techniques; Intensification; Employment Location; Rural issues; Regional Forum. Reports by each of the project teams were published.

Each step of the process was associated with extensive public consultation. In the first stage, preliminary consultation with groups and the wider public helped to establish the draft strategy. This was then released for further consultation. In this second stage, there were stakeholder and public meetings, formal submissions and public hearings.

Options for accommodating future growth were considered by reference to desired outcomes:

- Safe, healthy communities
- Diversity of employment and business opportunities
- Housing choices
- High amenity of urban environments
- The protection and maintenance of the character of the region's natural environment
- Sustainable use and protection of the region's resources (including infrastructure), and
- Efficient access to activities and appropriate social infrastructure for all.

In addition to the Councils, a key implementation agency was Infrastructure Auckland (the functions of Infrastructure Auckland have subsequently been reintegrated with the Auckland Regional Council), which was established with the principle function of making grants to transport and stormwater projects in the region. The multi-criteria analysis developed by the agency to assess potential projects is one of the most advanced examples of its kind in New Zealand.

of the Parliamentary Commissioner for the Environment are broad ranging, it is clear and repeatedly stated that they are exercised in respect of environmental policies and environmental administration. There is an implied distinction to exclude advice on the environmental implications of government policy, which may or may not have been a deliberate step.

SEA in land transport planning

The introduction of the New Zealand Transport Strategy (NZTS) and the Land Transport Management Act 2003 (LTMA) signaled new potential opportunities for the use of SEA in this policy sector. In particular, sustainability is given a central place in transport policy-making and planning[65] and there are new requirements for taking account of environmental and social impacts. At the national level, the preparation of a national land transport strategy is optional under the Land Transport Act 1998. At the regional level, amendments under the LTMA place specific responsibilities on regional councils to address environmental sustainability in the preparation of Regional Land Transport Strategies (RLTS).

65) The Strategy and the Act are related. For example, the purpose of the Act (s3) reflects the vision statement of the Strategy, namely to contribute to the aim of achieving an integrated, safe, responsive and sustainable land transport system. The Act also incorporates the five objectives of the Strategy and, inter alia, integrates them with requirements relating to the preparation of regional land transport strategies (see text) and transport programmes. The Strategy describes broad policy directions for achieving its objective, for example to ensure environmental sustainability, it states the transport system will have to:
- reduce its negative impacts on land, air, water, communities and ecosystems.
- make more efficient use of its resources, reduce its use of non-renewable resources and shift over time from non-renewable to renewable resources (New Zealand Transport Strategy, p43).

Box 6: National Interest Analyses of International Treaties

In 1997, New Zealand's House of Representatives (the sole house of Parliament) adopted a new procedure in relation to the ratification of international treaties. The National Interest Analysis (NIA) procedure was adopted on a permanent basis in February 2000, by incorporation into Parliament's Standing Orders (numbers 239 – 348 and 384 – 387 refer). Similar procedures exist in many OECD countries.

The NIA procedure does not allow the House to 'approve' the NIA report, but it does provide an opportunity for public input and scrutiny of ratification. Given the increasing number and coverage of international treaties, particularly on environmental matters, this is a significant opportunity for integrated assessment of effects of policy proposals and for public participation in the process.

Under the procedure, whenever the government intends to ratify or withdraw from an international treaty on any issue, it must present a national interest analysis and the Treaty itself to the House. Both are referred to the Foreign Affairs, Defence and Trade Committee.

The National Interest Analysis must address the following issues: the reasons for New Zealand becoming party to the treaty; the advantages and disadvantages to New Zealand of the treaty entering into force for New Zealand; the economic, social, cultural and environmental effects of the treaty entering into force for New Zealand, and of the treaty not entering into force for New Zealand; and the costs to New Zealand of compliance with the treaty.

The NIA process gives the House the opportunity to hear submissions, consider both the treaty and the NIA, and to report back to the house. The government must wait 15 sitting days (in practice about 6 weeks) before ratifying the Treaty, or introducing legislation required to ratify the treaty. The committee reports back to the House and may raise any issue in the treaty or the national interest analysis. The government must respond to any such report within 90 days.

In practice, the impact of this practice has varied. NIAs have been submitted on all manner of treaties, of varying length and quality (examples can be seen on the Ministry of Foreign Affairs and Trade website:). Most NIAs have been reported back to the House with no matters raised, and the committee has not called for submissions. There are some exceptions.

The Foreign Affairs and Defence committee considered an NIA on ratification of the Kyoto Protocol on climate change in 2001-02. It had 35 submissions and heard 20 of those submitted. The report to the House was a split report, with a significant dissenting section by the major opposition party in parliament at the time, including a call for a revised NIA. When the government wished to sign a closer economic partnership agreement with Singapore, there was close analysis and a critical report, which was voted on by the House. The committee is currently considering an NIA on ratification of the Kyoto protocol on climate change. It is hearing public submissions on this matter and is likely to wish to make some report to the House. Recently, when the New Zealand government was wishing to sign a closer economic partnership agreement with Singapore, there was close analysis and a critical report, which was voted on by the House.

Specifically, they are to take into account how the RLTS assists economic development, assists safety and personal security, improves access and mobility, protects and promotes public health, and ensures environmental sustainability. Every RLTS must also:

- avoid, to the extent reasonable in the circumstances, adverse effects on the environment;
- take into account the need to give early and full consideration to land transport options and alternatives; and
- take into account the need to provide early and full opportunities for public participation in strategy development.

As indicated, these provisions of the LTMA incorporate a number of elements of an effective approach to SEA. Recent research indicates that New Zealand's transport policy and planning framework, in general, and the RLTS preparation process, in particular, offer a number of entry points where the use of SEA could add value to decision-making (Sadler et al 2004). For example, the NZTS identifies linkages to a number of other strategies in sectors with implications for transport policy-making. These include the National Energy Efficiency and Conservation Strategy, the New Zealand Biodiversity Strategy and the New Zealand Health Strategy. Every RLTS must take into account the energy strategy, which contains a series of action plans for moving New Zealand towards a sustainable energy future. For the transport sector, the plan addresses alternatives to roads and other issues that draw attention to the wider environmental and social impacts of transport and provide some guidance on the issues that need to be addressed in achieving the NZTS vision.

On further examination, many activities in the process of preparing regional land transport strategies are similar to those undertaken in SEA (Ward et al 2005). These include setting environmental objectives, informal scopes of issues, consideration of alternatives and provision of opportunities for public involvement. In principle, the steps that could be expected to occur in good quality planning and SEA mirror each other. In practice, use of SEA procedure and methods can strengthen the RLTS process, for example through impact analysis of alternatives to compare their implications for environmental sustainability. From a New Zealand perspective, SEA is best integrated within the planning process as a formal but non-statutory requirement.

New Directions in Policy-Making and Sustainability Assessment

In response to the 2002 World Summit on Sustainable Development, the government is working on a range of strategies and policy initiatives. A key document is Sustainable Development for New Zealand Programme of Action (Department of Prime Minister and Cabinet 2003),66 which builds on several other reports including a broad assessment of New Zealand's progress towards sustainable development (Statistics New Zealand 2002). The Programme of Action puts forward some key issues and an approach to infusing the concept of sustainability in policy-making.

A series of operating principles are outlined to take account of the economic, social, environmental and cultural consequences of policy development including (Department of Prime Minister and Cabinet 2003, 10):

- considering the long term implications of decisions;
- seeking innovative solutions that are mutually reinforcing;
- using the best information available to support decision making;
- addressing risks and uncertainty when making choices and taking a precautionary approach;
- considering the implications of decisions from a global as well as a New Zealand perspective;
- respecting environmental limits, protecting ecosystems and promoting integrated management of land, water and living resources; and
- working in partnership to empower Maori in development decisions that affect them.

The programme of action is focused on four 'demonstration' areas (water, energy, sustainable cities and child and youth development) to gain experience with the approach. Although distinct, these areas have common issues and linkages. Specifically, they all touch on one or more of the following elements of sustainable development: intergenerational effects on wellbeing; persistent effects in the environment; and/or significant effects that cut across the economic, social, environmental and cultural spheres of policy-making. By adopting a 'learning-by-doing' approach to developing and delivering policy, the aim of the programme is to foster a culture of sustainable development within the government.

This approach has many productive components including what may be seen as a broad form of sustainability appraisal or assessment. In that regard, a number of questions remain to be addressed; for example, are the best tools and methods being used for analysing the issues? Does sustainability assessment help to bridge the policy 'silos' and build a government-wide approach to sustainable development? In addressing these issues, we consider there is a significant opportunity for instilling sustainability appraisal as a core feature of government policy-making in New Zealand.

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Chapter 10

SEA of Official Studies, Regulations, Propositions and Reports to Parliament, Norway

Ingvild Swensen and Jon Fixdal

Introduction

This paper outlines the Norwegian system for environmental assessment of official studies, regulations, propositions and reports to Parliament (the Storting). It describes the arrangements and procedures that are in place for this purpose and summarises recent experience with their implementation. SEA at this level forms part of a larger process of assessment of policy and legislation, which has been applied in Norway for several years.

The formal provision for this form of assessment is made by the *Instructions for consequence assessment, submission and review procedures in connection with official studies, regulations, propositions and reports to the Storting.* The Instructions were laid down by Royal Decree of 18 February 2000 and came into force on 1 March 2000. They replaced the previous Instructions laid down by Royal Decree of 16 December 1994 (amended on 8 December 1995).

The application of consequence assessment in accordance with the Instructions differs from that under EIA, with respect to scope, the type of decisions that are regulated and the process that is prescribed. As the term indicates, all potential consequences of an initiative are addressed, including financial, social, regional, gender equality and environmental considerations. Both policy and legislative proposals are subject to strategic assessment, and the process followed is far more flexible than the EIA procedure.

The Instructions are similar to EIA arrangements in assignment of responsibility for the assessment, which lies with the line ministry/sector. The Ministry of the Environment has a support and advisory role in the implementation of the process. As part of this function, it has issued a *Guideline on Environmental Assessment in Accordance with the Instructions for Official Studies and Reports* (see Annex 1).

Background

The purpose of the new *Instructions* for official studies and reports is to ensure the proper preparation and administration of all work relating to official reforms, amendments to regulations and other measures. The *Instructions* stipulate that assessment of all significant considerations, including those pertaining to the environment, shall be incorporated into the work and that the agency responsible shall ensure that affected bodies and the general public are included in the decision-making process. The arrangements and procedure for determining whether a matter that is encompassed by the Instructions may have a significant impact on the environment are set out in the *Guideline* issued by the Ministry of the Environment (see Annex 1).

There are two aspects of the *Instructions* that deserve mention in respect to sustainability. First, the *Instructions* are an important tool for assessing at an early stage the possible impacts of policy proposals, which typically may set premises for future developments in sectors or areas with potentially serious consequences for the environment and sustainability. An example is the Norwegian Transport Plan, which establishes premises for the 12-year development of this sector, nationally. Early assessment of the potential consequences of policy proposals allows Norwegian authorities to anticipate and prevent likely significant impacts and integrate central environmental goals into policy design and implementation.

Secondly, where necessary, assessment can be used to determine whether a proposal may influence important *driving forces for environmental change*. Examples include the production of or demand for energy, the transportation and need for transportation, and/or for the production of and demand for goods and services. These aspects are included in a checklist developed by the ministry to help the responsible agency assess whether a matter may have a significant effect on the environment. Focusing upon such consequences can contribute, in the long-term, to more sustainable development in these policy areas.

A Closer Look at the Procedure

Chapter 1.1 of the *Instructions* states that:

"The purpose of these Instructions is to ensure the proper preparation and administration of all work relating to official reforms, amendments to regulations and other measures. The Instructions shall ensure that the institution responsible for the matter assesses all relevant and significant consequences, and that the bodies affected and the general public are included in the decision-making process before a decision is made."

The *Instructions* apply to all official studies, regulations, reforms and measures, and to propositions and reports to the Storting. They also apply to studies carried out by, or at the request of government bodies, i.e. ministries, directorates and other subordinate agencies.

They do not apply to provisional arrangements or matters relating to the Church of Norway or to agreements between the central government and employers' and employees' organizations or to international agreements.

Assessment – process, responsibilities, general review

When a governmental body initiates a process of decision making to which the Instructions apply, the responsible body shall consider the need for an impact assessment (pre-assessment). The ministry concerned is responsible for making the assessments.

If a matter may have a significant environmental impact, it must be submitted to the Ministry of Environment for consideration. Also, the final assessment should be submitted to the Ministry of Environment for an evaluation prior to general review.

When the assessment is completed, it is circulated for general review to all affected public and private institutions and organisations. At the same time, the matter is to be sent to the other affected ministries. Draft White Papers and Parliamentary Bills to the Storting are exempted from the obligation to circulation for general review.

What general consequences should be assessed?

Each matter shall include a consequence assessment, which shall consist of an analysis and evaluation of presumed significant consequences of the proposed decision.

An analysis and evaluation of the financial and administrative consequences shall always be included in the assessment.

Other significant consequences shall be assessed. The consequences that are to be assessed must be evaluated in each case.

The consequence assessment shall evaluate the consequences for central government, counties and municipalities, and for private bodies, including commercial and industrial undertakings and individuals.

The scope and content of the consequence assessment shall be adapted to the importance of the matter and the significance of its impact

Assessment of environmental impacts

If a matter is likely to have a significant environmental impact, the impacts should be assessed. The assessments should be based on current environmental policy objectives and the fact that Norwegian nationals have the right to information about the effects of planned encroachment in nature, pursuant to Article 110b of the Constitution.

The assessment shall in each case be carried out according to a mandate determined for each individual assessment process.

The mandate should account for the purpose or reason for processing the matter and the current situation in the policy area, describe whether the matter may have significant environmental impacts, and give a description of how these impacts are planned and assessed.

The mandate should also account for the process formalities, including plans for co-operation with other authorities, participation of affected parties, and the political processing of the matter.

Box 1: Review of SEA of government proposals submitted to the Norwegian Parliament

This box summarises the results of a study of SEA documentation for proposals submitted to the Parliament, focussing on "how often and in what manner are environmental concerns described in public reports, white papers, and government proposals to the Parliament?" (Husby1997). It covers the period from January 1, 1995 (when the administrative order on assessment of government proposals was introduced) to the end of the parliamentary session in 1997. Altogether 629 cases were reviewed, of which 67 were public reports, 129 were white papers, 221 were proposals for bills (*odelstingsproposisjoner*) and 212 were other proposals to the Parliament (*stortingsproposisjoner*).

Types of proposals subject to assessment: The review identified 66 cases, or slightly over 10 percent of those reviewed, as being appropriate for environmental assessment. Of these cases, almost all referred to the environment (about 97 percent) and only four made no mention of it. White papers were found to be particularly suitable for environmental assessment (23 percent of cases), and so to a lesser degree were government proposals to the Parliament. Most of these cases were from the transport and energy sectors.

Specific features and aspects: In general terms, the review found relatively little explicit discussion of the specific environmental impact of a proposal. Most of the documents include discussion of environmental objectives and considerations in relation to the policy area, although the amount of detail varies considerably and some were lacking in that regard. Aspects and features to note:

- Public reports (NOU), with a few exceptions, do not include discussion of alternatives or comprehensive evaluation of environmental consequences
- White papers that are 'timedefined and delimited' or contain plans for the transportation sector are subject to some form of environmental assessment, whereas this process is less relevant for papers that do not include proposals for action or those that contain annual reports
- Proposals submitted to Parliament (*stortingsproposisjoner*) that apply to the transport and energy sectors are processed according to current regulations on EIA for individual projects (14 of 16 of cases)
- Bills submitted to Parliament (*odelstingsproposisjoner*) appear to have relatively marginal environmental consequences and correspondingly receive little attention.

Some case examples and comparisons: The review identified several cases with certain elements that correspond to SEA procedure and practice as applied internationally. Examples include the public report on measures against flooding and the white papers on the Norwegian road and traffic plan for 1998–2007 (NWP) and the KristiansandBergenTrondheim (Kyststamvegen) trunk road. In addition, the white paper on fish farming did not consider alternatives but contained a relatively explicit assessment of the environmental consequences and measures to mitigate. The proposal to Parliament on the termination of remaining exclusive rights in the telecommunications sector also includes an estimation of possible environmental consequences. However, as in the bill on new housing, no attempt was made to quantify the potential effects.

Conclusions and lessons: The review found that an assessment was made in the majority of cases with potential environmental impacts. Most provided a general description of the environmental consequences of policy proposals, rather than a specific and systematic assessment. The exceptions are cases relating to development proposals, which were subject to some type of EIA procedure.

In conclusion, however, the author argues against an overly narrow approach to SEA development, noting that the importance of evaluating the environmental implications of new proposals and integrating the findings into policy making. This implies that the institutional frameworks for policy formulation are just as important as detailed requirements and methodology for undertaking assessment. Finally, a need is seen to clarify several elements in the administrative order as well as the frameworks the order lays out for SEA.

Source: Husby (1997)

The environmental assessment should include:

- A clarification of important issues concerning the environment and natural resources that should be addressed if/when the suggestion is implemented;
- A description of possible environmental impacts;
- A description of the information base of the assessment; and
- A discussion of mitigating measures, e.g. alternative instruments, and how these measures may be followed up in the succeeding planning and execution of the matter.

An assessment shall cover consequences for central, regional and local administration, as well as for the private sector, including trade and individuals, and contain a discussion of alternative means, including other means than administrative regulation.

It is important, and underlined in the Instructions and the Guidelines that environmental assessment shall be relevant to decision-making.

When are environmental consequences significant?

The Ministry of Environment Guidelines for environmental assessment include a checklist for assessing whether or not matters have potentially significant environmental consequences. In addition, there should be emphasis on impacts that may be especially risky, dangerous or irreversible.

Other ministries have developed similar guidelines with checklists.

Recent Experience with SEA practice

A recent study of experience with SEA in accordance with the Instructions included over 600 cases (Husby, 1997; Box1). Approximately 10% of these proposals had potential environmental consequences. In almost all of these cases, the environmental consequences were subject to comment. However, in only a relatively few cases were the consequences of the policy proposal subject to explicit assessment, rather there was discussion of environmental policy goals in relation to the policy area. There was also a lack of assessment as to the extent of the consequences. The evaluation did not address whether the assessments had focused upon issues related to sustainability.

The present version of the *Instructions* came into force in March 2000, after thorough revision. There are therefore no immediate plans for further revision of the *Instructions*. However, an increased focus upon sustainability may be emphasized and alter how the Instructions are used in practice. Such focus would contribute towards sustainability through the two previously mentioned ways: continued early application and a focus on the driving forces.

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Annex 1

ENVIRONMENTAL ASSESSMENT
IN ACCORDANCE WITH
THE INSTRUCTIONS FOR OFFICIAL STUDIES AND REPORTS
December 2000

Foreword

It is a fundamental principle that government decisions shall be taken as a result of effective processes in which all relevant aspects of a given matter have been explored. Similarly, the formulation of policies in all spheres shall take environmental issues into account. At the same time, it is a key principle, as well as a stated political objective, that each sector is responsible for integrating environmental concerns into its own activities. To achieve this, we must devise constructive procedures that make it possible to clarify and weigh important considerations early on, and that facilitate cooperation, guidance and documentation. The ability to evaluate central considerations at an early stage will also promote efficient decision-making processes.

The Instructions for Official Studies and Reports of 18 February 2000 stipulate that assessment of all significant considerations, including those pertaining to the environment, shall be incorporated into the work on all official studies, regulations, reforms and measures, as well as propositions and reports to the Storting. Thus, assessment activities carried out in accordance with the Instructions comprise an important part of the effort to develop and maintain beneficial patterns of cooperation between the ministries.

The Ministry of the Environment has prepared this guide to facilitate efforts to deal with matters encompassed by the Instructions for Official Studies and Reports that may have a significant impact on the environment. This guide has been designed for use by relevant personnel within the various ministries. It is intended to provide information regarding how to evaluate whether a matter that is encompassed by the Instructions will have a significant impact on the environment, how to determine the content and extent of the assessment activities to be conducted and which procedures are to be recommended.

Siri Bjerke
Minister of the Environment

1. INTRODUCTION

The Ministry of the Environment has prepared this guide to facilitate efforts to deal with those matters encompassed by the Instructions for Official Studies and Reports of 18 February 2000 that may have a significant impact on the environment.

The guide provides answers to the following questions:

- When is it necessary to conduct an environmental assessment?
- What should such assessment activities include?
- How should the assessment process be organized?

Each of these is dealt with in an individual section. In addition, a checklist is provided (see Annex 1) to assist personnel in determining the need to carry out an environmental assessment.

2. WHICH TYPES OF MATTERS REQUIR EENVIRONMENTAL ASSESSMENT?

An environmental assessment (assessment of the environmental consequences of a matter) shall be carried out for all matters[67] encompassed by the Instructions for Official Studies and Reports that may have a significant impact on the environment.

The need to conduct an environmental assessment must be evaluated in each case by the body responsible for initiating the particular matter involved. In order to determine whether a matter will have a significant impact on the environment, the responsible body should ascertain whether it in any way conflicts with the key environmental policy objectives set out in Proposition No. 1 (2000-2001) to the Storting and Report No. 8 (1999-2000) to the Storting on the Government's environmental policy and the state of the environment in Norway. These objectives form the basis of the points incorporated into the checklist attached to this document (Annex 1). This checklist may be used to clarify the need to conduct an environmental assessment (see also subsection 4.1 below).

Environmental assessment is most likely to be needed within defined policy areas, such as energy, transport, agriculture and fisheries. Measures in other areas, however, such as development cooperation, taxation and duties or industrial policy, may also entail a need for environmental assessment.

Specific building measures and other measures affecting the physical environment are often encompassed by the provisions relating to environmental impact assessment in Chapter VII of the Planning and Building Act. If the environmental consequences of a matter encompassed by the Instructions for Official Studies and Reports have been assessed pursuant to the provisions of the Planning and Building Act, then the requirements concerning environmental assessment under the Instructions will in most cases be regarded as fulfilled. The same applies to development of offshore installations that are encompassed by the provisions relating to the plan for development and operation of petroleum deposits of the Petroleum Activities Act. In such cases, the account of environmental impacts contained in the plan will form the foundation for estimating the environmental impacts of the matter.

3. WHAT SHOULD AN ENVIRONMENTAL ASSESSMENT INCLUDE?

3.1 Mandate

Pursuant to subsection 3.1 of the Instructions for Official Studies and Reports, a mandate shall be designated for the environmental assessment of all matters requiring study.

To ensure that the mandate provides a suitable point of departure for identifying the environmental consequences of a matter, the Ministry of the Environment recommends that the mandate specify, among other things, the purpose of initiating the particular matter, the current situation within the applicable area, a description of whether the matter will have significant impacts on the environment, and a description of how these impacts will be assessed and evaluated.

In addition, the mandate should designate the procedures to be used in the assessment process, including plans for cooperation with other public authorities, participation from involved parties where this is applicable, and the political action regarding the matter.

3.2 Account of the environmental consequences

The study should be based on current environmental policy objectives and the fact that Norwegian nationals have the right to information about the effects of planned encroachments in nature pursuant to Article 110b of the Constitution, as set out in subsection 2.3.2 of the Instructions for Official Studies and Reports.

The study should evaluate the consequences for central government, counties and municipalities, as well as for private bodies, including commercial and industrial undertakings and individuals. It should also incorporate an evaluation of alternative instruments, cf. subsection 2.1 of the Instructions. The study shall be relevant to the decision-making process.

An estimate of the environmental consequences of a matter should include:

- Elucidation of important considerations relating to the environment and natural resources that will be emphasized in connection with the implementation of the proposal.

- A description of the potential environmental impacts of the matter. This should focus on the positive as well as the negative, direct as well as indirect, and short- as well as long-term impacts. Information should be provided regarding the manner in which the matter may come into conflict with the objectives and factors mentioned above, as well as the significance of these environmental consequences for the various relevant interests. Consideration should also be given to whether the objectives of the matter can be reached in a more environment-friendly manner, as well as to potential means of ensuring that environmental concerns are taken into account.

- A description of the information base on which the assessment is founded. This should include an account of potential problems that may be encountered in obtaining sufficient information, and of any significant uncertainty in connection with the type or extent of the impacts.

- An account of how to mitigate the environmental impacts, e.g. by employing alternative instruments, and a description of how these impacts will be followed up in the further stages of planning and implementation.

For matters in which alternative strategies and instruments are evaluated, the environmental consequences of the various strategies and instruments should be compared in order to provide a basis for weighing the different alternatives against each other.

The projected environmental consequences of a matter should be presented in a separate chapter of the final document, preferably in connection with the discussion of financial, administrative and any other significant consequences.

The consequences of a matter shall as far as possible be quantified. However, qualitative description and reasoning will also always be necessary. Thus, consideration must be given in each case to determining which consequences should be quantified and how this should be done, as well as which consequences should be dealt with by means of qualitative evaluation.

4. HOW SHOULD THE ASSESSMENT PROCESS BE ORGANIZED?

4.1 Evaluating the need for environmental assessment

The body that initiates a matter is responsible for ensuring that the financial, administrative and other significant consequences are assessed, as set out in subsection 2.1 of the Instructions for Official Studies and Reports.

Thus, as the first step in the assessment process, the responsible body will evaluate the need to study the environmental consequences of the matter (preliminary assessment). Here, the ministry recommends that the checklist attached to this document (Annex 1) be utilized.

When determining the level of significance of an impact on the checklist, consideration should be given to whether the consequences of a matter carry an especially high element of risk, are especially dangerous, or will be irreversible.

If the answer "likely" applies to one or more of the questions on the checklist, then an environmental assessment must be conducted. If the answer "less likely" applies, then environmental assessment will not, under normal circumstances, be

67) The types of matters to which this applies are specified in the Instructions for Official Studies and Reports under subsection 1.2, Scope.

necessary. However, if the answer "less likely" applies to several questions, then the overall impact of the matter on the environment may nonetheless be significant. In this case, the responsible personnel are advised to contact the Ministry of the Environment for further clarification of whether an environmental assessment should be conducted. If the answer "unlikely" applies to the questions on the checklist, then there is no need for environmental assessment. If there is uncertainty regarding whether a proposal will have significant environmental consequences, the Ministry of the Environment should be contacted to evaluate the need to conduct an environmental assessment. It may be useful to obtain this evaluation prior to submitting a preliminary assessment.

When the responsible body is evaluating whether a matter will have significant environmental consequences, consideration should also be given to whether the matter may have an impact on the driving forces for environmental change. Whereas some matters clearly demonstrate a direct connection between the proposal and its environmental impacts, others will have more "indirect" ramifications in that the matter affects the driving forces for environmental change. For example, a matter that leads to significant changes in land use may result in substantial changes regarding transport needs and services, which in turn may have an impact, such as increased pollution levels, on the environment. Similarly, a matter that leads to a substantial increase in the demand for or production of energy may have significant environmental consequences, such as increased emissions of greenhouse gases. A matter may also have an impact on the framework underlying environmental preservation efforts. For example, a matter that affects an owner's ability to administer, operate and maintain archaeological and architectural monuments and sites and cultural environments, or the ability of the public authorities to deal effectively with such issues, will indirectly have an adverse effect on the framework for cultural heritage conservation.

Assessing whether a matter will have an impact on the driving forces for environmental change may help to identify potential environmental consequences at an early stage of the process. If it is likely that a matter will affect the driving forces for environmental change, then it is also likely that the matter may, at some later stage, have one or more of the impacts described in the checklist attached to this document (Annex 1).

4.2 Submission of the preliminary assessment to the Ministry of the Environment before the study is initiated

If the preliminary assessment indicates that a matter may have significant environmental consequences, then the matter shall be submitted to the Ministry of the Environment pursuant to subsection 4.2 d of the Instructions for Official Studies and Reports.

Among other things, submission of the preliminary assessment is intended to:

- provide early elucidation of which impacts should be studied,
- provide information about the data base and methodology that may be useful in elucidating the impacts,
- establish contacts with the Ministry's subordinate agencies, including the Norwegian Pollution Control Authority, the Directorate for Nature Management and the Directorate for Cultural Heritage, for relevant professional assistance,
- provide advice on how to acquire the necessary information.

It is recommended that a draft mandate be included in the submission of the preliminary assessment.

The response period for the submission of a preliminary assessment shall be at least two weeks, unless another deadline has been agreed upon by the responsible body and the Ministry of the Environment, as set out in subsection 4.1 of the Instructions for Official Studies and Reports.

Based on the mandate defined, the responsible body shall undertake the necessary study, cf. subsection 3.2 above.

4.3 Submission to the Ministry of the Environment after a study has been completed but before circulation for general review

Should the preliminary impact assessment reveal that a matter may have significant environmental consequences, or otherwise affect the spheres of responsibility of the Ministry of the Environment to a significant degree, the ministry concerned shall, before circulation for general review, submit it to the Ministry of the Environment for an evaluation as to whether the consequences have been assessed in a satisfactory manner, cf. subsection 4.3 of the Instructions for Official Studies and Reports.

The response period for submission of an environmental assessment shall be at least two weeks, unless another deadline has been agreed upon by the responsible body and the Ministry of the Environment. The response period for draft reports and propositions to the Storting is at least three weeks, cf. subsection 6.2 of the Instructions.

4.4 General review

When the study of a matter has been completed, the matter shall be circulated for general review as set out in subsection 5.1 of the Instructions for Officials Studies and Reports.

The period for review shall normally be three months and no less than six weeks, as set out in subsection 5.2 of the Instructions.

If the response of those consulted or other conditions lead to substantial changes in the matter concerned, the revised matter shall be sent to the bodies most affected by it for further review. The same applies should the estimates of the environmental consequences be substantially changed as a result of the review process.

In order to satisfy the need for information and participation in connection with important environmental issues, the responsible body should also evaluate expanded measures for public participation during the preparation of the matter. This may also prove valuable in the starting phases of the work to prepare reports and propositions to the Storting.

Chapter 11
SEA Developments in the United Kingdom

Barry Sadler

Introduction

Before Directive 2001/42/EC was transposed into legislation, the UK had no statutory provision for strategic environmental assessment (SEA). However, several other forms of SEA were in place on a non-statutory basis including policy-level appraisal. From an international perspective, the UK is distinctive in terms of the number and diversity of SEA processes, their devolved administration among different levels of government and the trend toward sustainability appraisal (SA) of the environmental, economic and social effects of proposals. Despite their different characteristics and names, all of these processes are admissible into the SEA family under a liberal definition of this term (Dalal-Clayton and Sadler 2005).[68]

This paper provides an overview of these developments. First, it delineates the evolution of SEA within the UK context and culture of policy and plan-making. Second, it highlights the multi-faceted regime that is in place at the policy level, where environmental appraisal within central government has been merged into the larger frameworks of integrated policy appraisal and regulatory impact assessment. Third, it describes the SEA regime for plans and programmes that has been introduced in accordance with Directive 2001/42/EC, emphasizing its distinctive aspects and the challenges associated with its implementation. Finally, some of the key lessons of this experience are summarized and parallels drawn with SEA practice internationally.

Background: SEA in the Context of UK Policy and Plan-Making

As the introductory chapter of this volume notes, the prevailing policy and institutional context is critical to understanding SEA progress and prospects. Nowhere perhaps is this better exemplified than in the UK, where the traditional political culture of environmental policy-making has become progressively 'Europeanized' (see Lowe and Ward 1998).[69] This shift, inter alia, is reflected particularly in a much greater degree of legal formality, transparency and certainty in planning and regulatory procedure. It was evident with regard to EIA at the project level following the UK transposition of Directive 85/337/EC and now of Directive 2001/42/EC, which replaces and consolidates the previous informal system of environmental appraisal of development plans and ad hoc assessment of sector programmes while retaining certain aspects of approach and practice (as described later).

Furthermore, this new regime for SEA of plans and programmes was introduced contemporaneously with a macro reform of the UK planning system. The *Planning and Compulsory Purchase Act* (2004) lays down a new statutory framework for regional and local planning in England and Wales that represents the most fundamental change to the structure and style of development plan-making in fifty years.[70] Key changes include the establishment of a new generation of regional and local plans and a mandatory process of sustainability appraisal of new proposals (to be made consistent with SEA requirements). These have been widely discussed[71] but many issues remain regarding the implementation of this system and the proposed approach for combining SEA and SA (reflecting their different nature and scope).

At the policy level, lower key but nonetheless important changes in SEA-type processes also have occurred, driven by an ambitious agenda to modernise central government, which unfolded over approximately the same period as the planning system reform. The *White Paper on Modernising Government* (1999) called for better, more professional process of policy making that shifted the focus from the provider to the customer (i.e. becoming more publicly responsive).[72] It emphasised the need for a strategic focus on "the big picture" and for policies to be evidence-based and outcome focused and, where

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68) This typology of SEA includes: formal procedure; near equivalent approaches and forms of para-SEA, comprising elements and processes, which have the same aims but not all of the features. In the UK, the tradition of major public inquiries on environmental and land use issues may be seen as a form of SEA 'writ large'. For example, the inquiries conducted by the Royal Commission on Environmental Pollution, inter alia, have: a) considered the environmental effects of policy options for nuclear power, waste management, transport and energy: b) involved extensive consultation and deliberation; and c) culminated in lengthy reports and recommendations that were variously adopted by government.

69) The term 'political culture' here refers to customary ways of policy-making and the pattern of roles, rules and relationships that shape attitudes, behaviour and expectations of how environmental issues will be addressed (see O'Riordan and Sewell 1981). In the UK, this traditional process is described by Lowe and Ward (1998) as pragmatic, piecemeal, incremental and elitist, based on the exercise of administrative discretion, selective consultation, reliance on expert opinion and informal regulation. In the environmental arena, Europeanization is shorthand for member states ceding competence in agenda setting to the European Commission.

70) The Planning and Compulsory Purchase Act (2004) provides outline powers and much of the detail will be in the subordinate legislation. It is being

necessary, linked together and delivered through tools for integrated policy making. The so-called Whitehall model of policy-making has been increasingly modified as a result of these modernising trends, although appraisal processes within central government still exhibit traditional hallmarks of flexibility and discretion.

Since 2000, the overall approach to SEA in the UK has been reconfigured as part of the larger change in the culture and structure of policy-making and planning. As it now stands, the UK system is based on three cornerstones (Box 1):

- non-statutory policy appraisal processes that operate independently from and are not affected by the Regulations that give effect to the SEA Directive in the UK;
- SEA of plans and programmes as specified in the Regulations that came into force on July 20 2004, replacing some forms of SEA and allowing for joint procedures with others; and
- SA of regional and local spatial plans as mandated in the *Planning and Compulsory Purchase Act* (2004) and subject to guidance that will incorporate SEA requirements (see ODPM - Office of the Deputy Prime Minister, 2004).

Box 1: UK SEA systems at a glance

- *Non-statutory policy-level appraisal*
  - Guidance on environmental appraisal still in place but also subsumed under the larger frameworks described below
  - Integrated policy appraisal (IPA) methodology established as part of the *Modernising Government* agenda (but variously used and adapted)
  - Regulatory impact assessment (RIA) now applied to major policy proposals as well as legislation

- *Mandatory SEA of certain plans and programmes*
  - All UK Regulations closely follow the provisions of the EC Directive
  - Separate Regulations passed for Northern Ireland, Scotland, Wales and England (or England and any other part of the UK)
  - Except in Scotland, excludes policies and the wider range of plans and programmes addressed previously through ad hoc assessments

- *Sustainability appraisal (SA) of regional and local land use/spatial plans*
  - First used in planning as good practice in late 1990s
  - Now required for development plans and regional spatial strategies under the *Planning and Compulsory Purchase Act* (2004)
  - SEA requirements to be incorporated into SA guidance and procedure

SEA in the UK also takes place within a devolved system of territorial administration. For example, *The Environmental Assessment of Plans and Programmes Regulations* (SI 2004, No. 1668) passed by the central government to implement the SEA Directive apply only to England (or to England along with any other part of the UK). Separate regulations are in force in Northern Ireland, Scotland and Wales for plans and programmes that apply within their respective territories. Except for Scotland, all UK territories have enacted the requirements of the Directive as they stand but with the radical intent of merging the SEA and SA processes. The Scottish Executive (2003) intends to apply SEA as a stand alone process but apply it to a wider range of plans and strategies, including policies. In the remainder of this paper, the focus will be on SEA systems established by the central government.

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brought into force piecemeal through commencement orders and regulations (a process that is likely to extend into 2006). The Act itself was the subject of a lengthy and contentious legislative process (which took eighteen months). It is designed, inter alia, to simplify and improve plan making and development control at the regional and local level, to improve the effectiveness and quality of community involvement and to speed up the handling of major infrastructure projects.

71) The sheer volume of consultation and response papers and draft guidance on or related to SEA and SA is daunting for England alone. It becomes more so when the equivalent documents of the Devolved Administrations are included and the interim and evolving nature of the documents are taken into account. This sequence is described later, see: www.odpm.gov.uk/stellent/groups/odpm_planning/documents

72) The White Paper on Modernising Government (1999) spawned a series of consultation and guidance documents on frameworks for better policy making and methodologies for integrated policy appraisal. These included Standards for Better Policy Making in DLTR (DLTR 2002), Professional Policy Making for the Twenty first Century (Cabinet Office 2001), Better Policy Making: Integrated Policy Appraisal at DLTR (2002)

Policy Appraisal and the Environment

The approach of the UK central government to policy appraisal and the environment has evolved significantly over the past decade. Initially, the impact of proposals on the environment was appraised separately. Now, SEA also forms part of integrated policy appraisal (IPA) and the more formalized procedure of regulatory impact assessment (RIA). Within the UK government, IPA is understood as an umbrella methodology that flexibly brings together a number of impact assessment and appraisal tools in support of sustainable development (Brookes et al 2001). RIA has been extended recently to take account of policy as well as regulatory proposals. In brief, three components (SEA, IPA and RIA) define the cornerstones of the UK system for policy appraisal and illustrate its traditional and emerging forms.

Strategic environmental appraisal (SEA)

A non-statutory form of (strategic) environmental appraisal of policy has been used within the UK central government for some 15 years (programmes were not initially included in the title). This SEA process is based on 'good practice' guidance that promotes a flexible, non-prescriptive approach to assess the effects of proposed policies. It is intended to help departmental officials to advise their Ministers on policy decisions, recognizing the varied ways these are formulated. For example, many policies have broad implications for the environment rather than specific impacts on an area or component. In these cases, EIA-derived procedure is not appropriate.

This flexible approach is in keeping with tradition as described previously but also has parallels internationally. Other countries also apply similar forms of SEA at the policy level or find heuristic value in distinguishing this process from EIA-derived procedure for plans and programmes (see Chapter 1). In UK government circles, the appraisal model is considered to be better adjusted to the nuances of policy-making, largely because it does not impose an undue procedural burden on this process. From an environmental perspective, however, UK style policy appraisal has been criticised as amorphous and insufficiently rigorous in addressing such effects. Recently, the appraisal and impact assessment approaches have begun to converge driven by modernizing trends in government.

Box 2: Steps in policy appraisal

- *Summarise the policy issues* and *list the objectives*, identifying possible trade-offs, conflicts and constraints
- *Specify the range of options* for achieving the objectives, including the 'do nothing' option
- *Identify and list all impacts* on the environment and consider mitigation measures to offset them
- *Assess the significance* of the impacts in relation to other costs and benefits
- *Quantify costs and benefits* as possible or necessary
- Use an appropriate method to *value costs and benefits* including those based on monetary values, ranking or physical quantities
- *State the preferred option* with reasons for doing so
- *Monitor and evaluate the results*, making appropriate arrangements for doing so as early as possible.

Source: DOE (1991), DETR (1998)

Early provision and arrangements

A commitment to undertake environmental appraisal of new policies was contained in This Common Inheritance, the White Paper on the Britain's Environmental Strategy (UK Government 1991). This process was described in the White Paper as 'a more systematic approach within Government to the appraisal of the environmental costs and benefits before decisions are taken' (para 18.6). Guidance on when and how to use this approach (Policy Appraisal and the Environment) was based on an extended cost benefit framework using different techniques to obtain, where possible, a monetary valuation of environmental impacts (DOE 1991).73 With minor revisions, the steps in undertaking policy appraisal are still in use (see Box 2).

In 1994, further advice on the practice of strategic environmental appraisal was issued using a range of case examples from various sectors (DOE 1994). Although expressed primarily in policy terms, the supplementary guidance was

73) The guidance, consistent with the methodology of economic appraisal set out in the Treasury 'Green Book' for UK government departments, also calls for 'those impacts for which no effective measures or values have been derived' to be described qualitatively (DOE 1991, 29).

considered to apply equally to plan and programme preparation (and options appraisal of major projects). This broader scope coincided with the requirement (set out in the *UK Strategy for Sustainable Development*) that all departments "must ensure that papers for Cabinet and Ministerial Committees should, where appropriate, cover any significant costs or benefits to the environment" (UK Government 1994, 29.4, emphasis added).

Implementation concerns and revised guidance

The Strategy also noted that there were 'special problems' in applying cost benefit analysis to environmental issues and called for the effectiveness of this approach to be reviewed. A subsequent evaluation found that progress in the implementation of environmental appraisal was uneven and slower than anticipated with considerable variation across government. It brought into question the extent to which the government-wide commitment to address the potential environmental impact of its own proposals was being met. A further study confirmed that progress with this form of SEA was uneven at best and a more systematic approach was needed (DETR, 1998).

Updated policy guidance on *Policy Appraisal and the Environment* was prepared in response to these concerns (DETR, 1998). Written in straightforward language, this guide promoted a common sense approach to SEA including the use of screening to indicate if further appraisal is necessary.[74] Otherwise, the steps in the process remained the same as those identified in previous guidance (Box 2) and part of a larger process of policy appraisal in support of sustainable development. However, the guide also emphasized that the first task is for departments to carry out the separate components and to understand how the various requirements fit together. Within departments, establishing appropriate systems for SEA was overseen by a new breed of Green Ministers[75] and came under the external scrutiny of the Parliamentary Environment Audit Committee.

In its 1999 report, the Committee echoed concerns of earlier reviews of the SEA process and called for basic improvements in screening, reporting and publication of appraisals (Parliamentary Environment Audit Committee 1999). Overall, its reservations suggest SEA implementation lacked transparency and remained inconsistent across government. More positively, there are examples of SEA that indicate how to undertake a) preliminary assessment (or extended screening) to provide assurance that major policy initiatives have no significant environmental impact (Box 3) or b) in-depth appraisal of proposed strategies with a range of potential effects (Box 4). However, good practice is not widespread and there are concerns that environmental considerations may become further diluted as SEA is subsumed within the larger framework of integrated policy appraisal.

Integrated policy appraisal (IPA)

The White Paper on *Modernising Government* was intended to improve the way policy is made through higher standards, better accountability and greater innovation. It included a commitment to establish "an integrated system of impact and appraisal tools in support of sustainable development covering impacts on business, the environment, health and the needs of particular groups" (UK Government 1999). This approach provides a framework that encompasses this wider range of impacts. IPA methodology does not replace existing types of policy appraisal rather it relates their requirements to each case and adds new material where there are gaps in coverage.

Specifically, the IPA framework is designed to facilitate an approach that is:

- appropriate – addresses the range and type of effects of a proposed policy or programme;
- systematic – assembles the information necessary to document impacts and their characteristics; and
- considered – applies detailed or specialist guidance where in depth assessment of the impact of a policy is needed.

Guidance on approach

An on line, quick reference 'guidance checklist' is available to pre-screen the potential impacts of specific proposals. This does not provide a systematic procedure for this purpose (see below) rather it serves as a 'gateway' that leads as necessary to detailed guidance on the conduct of impact assessment and appraisal. The checklist identifies and has access links to fifteen impact or issue categories that cover most of the concerns and obligations likely to be encountered in policy design. For

74) The updated policy guidance addressed three key questions: 'How do you know if your policy or programme is likely to affect the environment? When do you need to carry out an environmental appraisal? How do you carry out an environmental appraisal? It was supplemented by a review of technical guidance on environmental appraisal for those undertaking more detailed analysis (EFTEC, 1998).

75) Green Ministers, together with a new Cabinet Committee on the Environment, were introduced as part of the reforms made by the Labour Government to integrate the environment into the heart of decision-making. They were responsible, inter alia, for acting as advocates for the consideration of the environmental impacts of their department's policies, ensuring the systems for this purpose were in place and leading on enquiries from the Parliamentary Environment Audit Committee.

Box 3: SEA of Coal Subsidy Policy

Background: In 2000, the UK coal industry sought transitional relief (for a period of two years and at a cost that could exceed £100m) from low world market price and the implementation of New Electricity Trading Arrangements. On EC approval, the UK Coal Operating Aid Scheme was subject to environmental appraisal, which earlier had been deferred pending subsidy details.

Wider significance: The appraisal addressed a complex policy issue. Subsidies can have perverse environmental effects that are uncertain and often unaccounted for. In this case, although no significant environmental impacts were anticipated, the Minister for Energy undertook to carry out a SEA in response to the Parliamentary Environmental Audit Committee.

Approach: A qualitative, initial appraisal was carried out to clarify whether or not the subsidy had environmental implications. This process identified the type of potential effects and their preliminary scope; it corresponds to an extended screening or scanning procedure in other countries.

Key findings: These are summarized in the accompanying table. As indicated, the proponent concluded that the subsidy scheme would not have a significant environmental impact (but would realize social and economic benefits by avoiding premature closure of viable parts of the mining industry) and that carrying out a full appraisal could not be justified since it was unlikely to offer a greater insight into the effect of the coal subsidy scheme than can be gained from this qualitative exercise. For these reasons, the implementation of the subsidy scheme was not monitored for its environmental impact but only for effectiveness against its policy objectives.

Potential environmental impact	Expected significance
CO_2 emissions. These are affected by the level of coal burn. Other fuels (gas, nuclear, renewables) produce less CO_2.	The subsidy will not provide cheaper coal and therefore will not affect the level of coal burn as determined by market price.
CO_2 emissions. UK coal, on average, has higher sulphur content (0.5 to 2.5%) than imported coal (0.7-0.8%).	The subsidy is very unlikely to affect the overall level of CO_2 emissions from UK power stations, which are limited under controls set by the Environment Agency.
Travel: movement of people. Will the scheme result in longer commutes?	The subsidy scheme will not change the pattern of employment in the mining industry. It will have a positive social impact through preserving jobs.
Travel: movement of goods. Bulk coal transport adds a significant cost to purchase price. Energy used is distance dependent.	The subsidy scheme will help to keep short-haul transport from mines to customers.
Use of greenfield sites. Deep and particularly open cast mines have significant surface impacts and local visual, noise and traffic concerns.	The scheme will not subsidize coal production nor increase mining activity that would not have otherwise occurred.
Climate change. Other than CO_2 emissions (covered above), coal mining frequently leads to release of trapped pockets of methane gas.	Whether coal demand is met from UK or imported sources is unlikely to affect the overall production of methane.
Waste/ pollution. Deep mine water is pumped out to prevent it entering the water table. These operations usually continue long after closure.	Prolonging the working life of some deep mines through subsidy will have little effect. Water pollution must be treated irrespective of closure.

Source: Parliamentary Environmental Audit Committee

example, specific reference is made to environmental appraisal, health impact assessment and risk assessment, as well as to the IPA as the primary tool for consideration of sustainable development issues.

In that case, more detailed guidance on IPA is available in two parts: *Better Policy Making*, which comprises a screening checklist and summary appraisal table; and *Supplementary Guidance on Integrated Policy Appraisal*, which

Box 4: SEA of the Strategic Defence Review

Background: The 1998 Strategic Defence Review (SDR) was a major policy and programme initiative to restructure and modernise the British armed forces. Proposed changes included base closure and rationalisation that had a wide range of potential economic, social and environmental implications. A strategic environmental appraisal (SEA) was undertaken of the impact on the Defence Estate in accordance with then updated guidance (DETR 1998).

Wider significance: This was reportedly the first SEA of its type carried out in the UK. It was important for its geographic and programmatic scope, the approach taken and the lessons that can be drawn regarding good practice.

Approach: The Defence Estate is extensive, encompassing 2,400 km² of military installations, housing and training areas, and some 450 activities and changes to use were proposed under the strategic review. A three stage appraisal was undertaken to address the potential scope of impact:

- *Policy screening* – SDR objectives were grouped and screened against government policy for sustainable development. This process resulted in advice to the Minister that overall the SDR was unlikely to have a major environmental impact but certain areas required further study.
- *Programme scoping* – All SDR actions were assessed against detailed criteria to identify the range of potential social and environmental impacts.
- *Higher-level environmental assessment (HLEA)* – The impact of amalgamated activities were analysed for the built and rural training estates respectively as a basis for further work.

Key findings: The main pros of the SEA process:

- informed ongoing decision-making processes related to the SDR;
- established a framework for further assessment, including EIA of projects and activities; and
- led to a follow up activities including evaluation of the lessons for good practice.

The main cons of the SEA process:

- started too late and took too long;
- did not adequately address socio-economic consequences; and
- little influence on choice of policy alternatives or overall direction of the SDR programme.

The SEA process could be improved by:

- early initiation in parallel with policy and programme formulation;
- better integration with the process and timescale of decision-making; and
- systematic appraisal against policy objectives and sustainability indicators.

Source: Whitehead and Saul (2001)

provides further detail on the economic, environmental and social impacts that may require further consideration. Environmental concerns encompass several types of impact (on climate change, biodiversity, air quality, noise, landscape and land use, waster and water). The screening checklist lists key questions to be addressed (see Annex 1) and for each category the supplementary guidance describes the policy context, existing guidance, matters to be considered in appraisal and quantification of impacts.

There is also generic advice on addressing risk and uncertainty, distributional impacts (which are described under nine categories) and valuing environmental and other non-marketed impacts. Wherever possible, monetary values for these effects should be provided to help compare impacts expressed in different units. However, it is also recognized that IPA brings together a mixture of different units – monetary values, quantified data and qualitative concerns. In such cases, multi criteria analysis (MCA) is represented as an appropriate technique for ranking options using relative weighting of relevant criteria (see also DETR, 2000).

IPA process and methodology

The IPA is promoted as a good practice tool that is most useful when applied at an early stage of the policy process and carried out as an iterative process proportional to the likely impact of a proposal. A staged process is outlined in guidance (see Box 5), which corresponds to preliminary impact assessment in most cases. If detailed appraisal is necessary, earlier steps may be revisited as part of an iterative process to ascertain if any significant changes have emerged. The main visible output from this process is a completed appraisal table that summarizes the main impacts and provides 'a useful digest to accompany

Box 5: Guidance on steps in the IPA process

- *Preliminary policy analysis* – Define the need for and context of a policy proposal and the main alternatives. Conduct an options appraisal against the base case (do nothing or do minimum) to judge the impact of the proposal.
- *Screening* – Assess the proposal against the checklist of questions in IPA guidance. Carry out further analysis for each category where the effect is more than negligible.
- *Preliminary impact assessment* – Note what is known already (or can be easily identified) about the impact of the proposal for each screened–in category. Use quantitative indicators if possible; otherwise a brief qualitative assessment will suffice.
- *Distributional impact* – Undertake a similar evidence-gathering process as above to identify how the impact of the proposal is expected to differ across various sectors.
- *Risk* – Note should be made of any uncertainties that need to be addressed in a more detailed appraisal. Some impacts will need to be based on reasonable supposition.
- *Review the proposal* – Consider which adverse effects could be mitigated by modifying the proposal and which have to be traded off against the beneficial effects.
- *Detailed appraisal* – Undertake as the proposal develops and as needed for impacts in relevant categories in the table. Refer to Supplementary Guidance in such cases; either directly or as a guide to appropriate sources and methods.

Source: DTLR (2002)

a submission to Ministers' (DTLR, 2002a). At this stage, the proposal should be reviewed to identify the trade offs that need to be made after impact mitigation. IPA guidance also encourages departments to plan for later policy evaluation, recognizing this is easier if an appraisal has been conducted.

Recent practice and performance

As with all policy guidance, the real test of effectiveness lies in its implementation. Given the thrust of guidance, the IPA framework may be reasonably expected to apply in full to proposals with a wide range of potential economic, environmental and social effects (as compared to its more general role as a reference tool). Yet to date, there seems to be relatively little information on its application across government and worked examples can be difficult to come by. This situation, in itself, may be taken as a telling indicator of the status of IPA although signs of its increasing use and acceptance should not be overlooked either (see Box 6).

Several departments and agencies have refined IPA as a generic tool for their own requirements or published technical guidance on its application in particular sectors. For example, the Environment Agency has reviewed IPA methods for use in addressing regulatory policy issues and risks in areas such as water, waste and industrial pollution (Brookes et al 2001). A comprehensive policy appraisal checklist for screening the impacts of policy options to manage risks has been developed

Box 6: Use of IPA in support of the 2002 Spending Review (SR 2002)

In the 2002 spending review (SR2002), all departmental submissions to Treasury for increased expenditure were accompanied by a report on how sustainable development had been taken into account. The bids covered a wide range of policies and IPA was part of the process of preparing a sustainable development report. Because SR2002 covered the whole of the government's spending programme to Financial Year 2005/6, this represented an important extension in the application of the policy appraisal process to financial issues and their relationship to sustainable development.

A brief assessment was required for all parts of a department's bid that were capable of being individually accepted, rejected or revised. These were then aggregated into an appraisal of the bid as a whole. Generally, IPA was seen as a satisfactory means of demonstrating to Treasury that the applicant departments have carried out the necessary analysis. However, based on the larger reviews of how far SR2002 took account of sustainable development undertaken by the Sustainable Development Commission and the Parliamentary Environmental Audit Committee, it also seems clear that more could be done to strengthen the application of IPA in this area.

Source: adapted from Aspinwall (2002)

and road tested (Pollard and Brookes 2001). This process now forms part of a two-stage approach in which screening is supported by a more detailed appraisal of the potentially significant impacts.

In the transport sector, the evolution of the so called 'new approach to appraisal' can be traced through several white papers and a large number of multi-modal studies of transport strategies and schemes (see Tomlinson 2003, 2004). An IPA was part of the White Paper and the related series of consultation documents on the future of air transport in the UK (DFT 2002). This process included analyses of the impact of the provision of new airports and runways on air quality and global warming. Both the quality of the IPA and the documentation on the costs of global warming were roundly criticized by the Parliamentary Environment Audit Committee (2004).

The Committee's comments reflect a more generalized concern about the quality of appraisal and the lack of consistency in the approach to policy appraisal across government. An earlier report notes that many departments cannot provide a list of new policies or the results of screening them for environmental impacts (Parliamentary Environment Audit Committee 2003). In the same document, the Committee also notes that most government departments devote only limited resources to the sustainable development agenda and progress is slower than hoped for. The latest version of the UK strategy for sustainable development again places this commitment at the heart of government and requires all government departments and public bodies to accept responsibility for the environmental impact of their policies and activities and act to reduce them (UK Government 2005).

Box 7: UK principles of good regulation

The following principles were established by the Better Regulation Task Force (an independent body set up by government):

- **proportionate** – to the risk
- **accountable** – to ministers and Parliament, to users and the public
- **consistent** – predictable, so that people know where they stand
- **transparent** – open, simple and user-friendly
- **targeted** – focused on the problem with minimal side effects

Regulatory impact assessment (RIA)

Regulatory impact assessment (RIA) is a key instrument for law and policy-making (see http://www.hm-treasury.gov.uk/consultations_and_legislation/ria). It is a mandatory, relatively formalized procedure that includes a number of checks and balances including a requirement for ministerial sign-off. This framework applies to:

- all forms of regulatory proposal – laws, rules, codes of practice, etc;
- the full range of potential benefits and costs - economic, social and environmental; and
- the distribution of impacts – whether they affect the public, civic and private sectors (including small business).

In 2004, the RIA system was extended to cover all policies and proposals that have a potentially significant impact on the above sectors. This step was taken following a series of pilot studies and in effect brings together the RIA and IPA frameworks within a unified approach toward better policy-making for sustainable development consistent with the UK Government's five Principles of Good Regulation (Box 7). As now structured, RIA arrangements are stronger than those in place for IPA (albeit with a narrower scope). These include requirements that specify what must be included in the consideration of the rationale, background, options and consequences of the proposal subject to review.

Requirements and guidance

Recently, guidance on RIA implementation has been revised (Cabinet Office 2005). It includes compliance requirements that must be met and step-by-step guidance on how the three phases of the RIA process should be undertaken (see below). For example, the section on costs and benefits includes a checklist to help assess the economic, social and environmental impacts. There are also links to information on various Departmental web-sites about these types of effects and advice on how to carry out other components, including health, rural areas and race equality impacts (which highlights a new statutory duty of policy makers).

The mandatory aspects of RIA include:

- setting out the issue(s) that the policy or regulation will address and the rationale and objectives of the proposal will achieve;
- considering the options for achieving them (at a minimum the 'do nothing' option and non-legislative alternatives to the proposal)[76] and the risks associated with them;
- providing an opportunity for consultation with key stakeholders (at least once during the RIA process with a minimum period for written consultation of 12 weeks);[77]
- recording all responses that are receive during consultation;
- preparing implementation and delivery plans for the main issues (and a plan for post-implementation review of the recommended option in the case of a full RIA); and
- sign-off on a full RIA by the responsible Minister (which is placed in the House of Commons libraries when the regulation/ legislation is presented to Parliament).[78]

In addition, provisions for monitoring compliance and review of the quality of RIA have been established. The Cabinet Office is responsible for ensuring that departments comply with the RIA process as part of its role in promoting better regulation within the UK government. All RIA reports are made public and subject to review by departments so that Ministers have the opportunity to comment on the analysis presented in the RIA. Finally, the National Audit Office has been asked to review the quality of a sample of RIA cases.

RIA process and methodology

RIA guidance with respect to step-by-step requirements is relatively prescriptive and detailed, compared to SEA and IPA guidance. A three phase process is set out comprising:

- *Initial RIA* that informs the responsible minister of a proposal. This analysis should provide a clear statement of policy objectives, issues and options, together with a best estimate of possible risks, benefits and costs and their distribution. It should highlight any unintended consequences and identify any further information that is needed.
- *Partial RIA* that must be submitted with any proposal needing the agreement of the Cabinet, a Cabinet Committee or the Prime Minister's Office. This analysis builds on the initial RIA and should be informed by data gathering, informal consultations and more refined options appraisal and benefit-cost estimates. It should include thinking on implementation and delivery, enforcement, compliance and monitoring (and the outcome of a competition assessment and the Small Firms Impact Test).

Table 1: Level of RIA compliance 2002-2004

Date	Compliance	Written Ministerial Statement
December 2002	92%	Compliance with the Regulatory Impact Assessment process in December 2002
November 2003	100%	Compliance with the Regulatory Impact Assessment process in November 2003
June 2004	96%	Compliance with the Regulatory Impact Assessment process in June 2004
November 2004	100%	Compliance with the Regulatory Impact Assessment process in November 2004

76) This supports the government's aim of only regulating when necessary and, when it is, to do so in a way that is proportionate to the risk being addressed, and to deregulate and simplify wherever possible.
77) In carrying out consultation, departments must follow the Cabinet Office *Code of Practice on Consultation*
78) The responsible minister must sign a final RIA to state that: 'I have read the Regulatory Impact Assessment and I am satisfied that the benefits justify the costs'.
79) Good practice guidance also encourages departments to undertake consultation as an integral part of the RIA process and therefore of policy development; to gather sufficient evidence if necessary by commissioning research; and to plan the information on implementation and delivery that will help to ensure the success of the policy.

Box 8: RIA of SEA Regulations: estimated benefits and costs

A full RIA of the benefits and costs of transposing EC Directive 2001/42/EC into UK law was undertaken by the Office of the Deputy Prime Minister (ODPM). A brief summary of key findings is given below.

An earlier RIA of the proposed EC Directive (as amended in 1999) estimated the total cost of compliance ranged from £10 to £30 million for the UK as a whole. The costs for a SEA of a local authority development plan was estimated to be between £10,000 and £50,000 and for a regional strategy or sector water resources plan between £50,000 to £200,000. The range or spread reflected uncertainties regarding the number and scope of assessments likely to be required, the amount of information to be compiled, the extent to which work is done in-house or by consultants and the types of public consultation involved.

Recent changes to the UK planning system brought new factors into consideration. As in the earlier RIA, however, it remained difficult to put a meaningful figure on the cost of compliance with the Directive. Based on projections of the numbers of plans and programmes likely to be produced and the typical costs identified above, the best current estimate is in the range between £25M and £40M per annum.

Benefits are expected from avoidance of environmental damage and improved consideration of alternative proposals. Many of these benefits would be qualitative, but there would be savings on expenditure that would be avoided, e.g. for pollution clean up. Consent decisions for development plans should be better informed and faster (at least in some cases) through early consideration of environmental issues.

Source: ODPM (2004a)

- *Full RIA* that provide recommendations to the responsible minister and must be signed-off by him/her. This analysis builds on the partial RIA and updates it on the basis of further information and consultation. It should summarize the impacts, compare the benefits and costs for each option, identify a preferred option giving reasons based on the analysis and set out a detailed implementation and review plan.

Similar to IPA, good practice guidance on addressing substantive issues is also outlined (e.g. seek advice from appropriate specialists as early as possible).[79] A checklist of questions on the economic, environmental and social impacts of policy and regulatory proposals is included. This is intended to help policy analysts complete the benefits and costs section of the RIA report, provoking thinking rather than being exhaustive. Currently, the Department of Environment, Food and Rural Affairs (DEFRA) is preparing detailed guidance to identify environmental impacts of policy options (http://www.sustainable-development.gov.uk/sdig/integrating/index.htm).

Recent practice and performance

The level of RIA compliance is very high as indicated by the results of audits carried out by the Cabinet Office Regulatory Impact Unit (RIU) and released in a written ministerial statement (Table 1). As shown, RIA compliance ran between 92 and 100% in the four months reviewed from 2002 to 2004. These figures stand in sharp contrast to the more ad hoc pattern of application reported for IPA and SEA (as a separate process). In that regard, they support the earlier assertion that RIA is a more systematic, transparent procedure. As such, RIA may be seen as an atypical form of UK policy appraisal, one that has moved furthest toward Europeanization (as described in the background).

Beyond compliance, RIA has a well recognized track record with quality of practice reviewed and assured by the Cabinet Office RIU (IEEP 2004). In that regard, RIA represents a significant procedural advance over other forms of policy appraisal. In practice, however, RIA remains centred on the analysis and summary of benefits and costs of proposals with a view to avoiding undue burden or improving certainty for potentially affected sectors. Typically, the emphasis is placed on economic and financial criteria, which can provide useful information and perspectives as in the RIA of SEA Regulations (Box 8). But the treatment of environmental and social considerations remains relatively narrow and the extent to which RIA can or will be adapted to systematically account for these effects remains open to question.

SEA of Plans and Programmes

The SEA system for plans and programmes currently being introduced throughout the UK has a number of policy dimensions. It also represents a distinctive approach, which may be of wider international and European interest. For present purposes, there are three aspects to note:

- the previous record of experience with SEA of plans and programmes and its relationship and relevance to the UK transposition of the Directive;
- the challenges of implementing the UK SEA this system effectively and consistent with the provisions of the SEA Directive; and
- the particular issues associated with integrating SEA and sustainability appraisal (SA) within a reformed planning system. The integrated process is intended to capture the economic, environmental and social effects of plan options and implementation.

Pre-Directive experience with SEA

The translation of the SEA Directive into UK law took place against and was clearly influenced by more than a decade of experience with a near equivalent form of environmental appraisal of development plans. Guidance on this form of SEA was first issued in Policy Planning Guidance Note 12 (PPG12) on *Development Plans and Regional Planning Guidance* (DOE 1992). It required local planning authorities and regional planning bodies to conduct an environmental appraisal of their plans, policies and proposals as they were being prepared. This emphasis on integration of SEA as part of plan-making is continued in the reformed process.

By comparison to the EIA-based model, the previous approach to SEA of development plans has been variously described, for example as 'a less systematic' but 'more integral and iterative process' (Sadler and Brooke 1998) and as 'less comprehensive and onerous' and equated to *partial* SEA Therivel (1998). Other important but often overlooked features of this process were its strong policy dimensions and sustainability orientations.[80] These aspects are embedded in new guidance and potentially extend the SEA/SA process to capture policy aspects of plans and programmes.

In recent years, SEA has been gradually subsumed into an emerging process of sustainability appraisal, particularly at the level of regional development plans as promoted in revised PPG Note 11 (DETR 2000). This required environmental appraisal of development plans but encouraged extending this process to the full range of social and economic effects. For SA and SEA, recent reviews of practice indicate mixed progress, characterized by some innovations but less than rigorous analysis of environmental impacts and limited changes to plan-making (Smith and Sheate 2001, Therivel and Minas 2002, Short et al 2004). In principle, the Directive should lead to a more consistent and systematic approach to SEA.

At the sector level, an ad hoc system of SEA of plans and programmes was in place prior to the introduction of the Regulations. In general, central government sector programmes were subject to the policy appraisal processes described previously and other government agencies variously adapted SEA or SA guidance to their purposes. There is much less experience at this level than for SEA of land use plans and practice is uneven at best, for example with limited consideration of alternatives (Sheate et al 2004). But at least there is a basis of SEA practice in place already for some sectors likely to be subject to the Regulations. These include private company water plans (Sadler 2001), local transport plans (Fundingsland 2003), offshore wind power (Fuller 2003) and offshore oil and gas licensing where more than 20 assessments have been completed (http://www.og.dti.gov.uk/environment/sea.htm).

The challenge of implementing UK Regulations

In keeping with the UK political culture, the concern has been to ensure full compliance with the Directive while not creating additional legal obligations. This principle is reflected in the close modeling of UK Regulations on the procedural requirements of the Directive. However, the scope and style of SEA have been extended significantly in two directions. First, in Scotland, the government intends to replace the existing Regulations with a new Bill that will apply SEA to a wider range of public sector strategies than those specified in the Directive. Second, in England and Wales, new planning legislation and guidance provides for a joint SA/SEA process and moves toward a more integrative form of analysis that presents challenges for its implementation.

The *Planning and Compulsory Purchase Act* 2004 adds a new statutory tier of regional spatial strategies in England to be prepared by regional planning bodies and to which local planning documents are generally required to conform. This is a substantial organisational change. At both regional and local levels, the Act requires plans to undergo sustainability appraisal for which interim, draft guidance has been issued (ODPM 2004b). This guidance emphasizes that SA will be applied as an integral part of regional and local plan-making and in a way that fully meets the requirements of the Directive. A five stage SA process is outlined which systematizes the previous approach (Table 2); it also incorporates and supersedes

80) This process was undertaken in three stages: defining environmental stock for global sustainability, natural resources and local environmental quality; scoping the plan to ensure consistency with required policies and proposed options; and appraising plan content to identify its environmental effects and select policy options to manage them (DOE 1993).

Box 9: UK guidance documents on SEA/SA at a glance

Given the series of citations, a brief 'road map' of the sequence and relationship of UK guidance documents on SEA/SA may be helpful. The stated aim of ODPM was to give a coherent explanation of the requirements of the SEA Directive and to define the terminology, scope and steps of SEA irrespective of the relationship to the wider SA process, and to establish the same approach to information collecting and analysis. The main guidance documents comprise:

1) Interim guidance on the how to comply with the SEA Directive was issued for English planning bodies in draft form in October 2002 with a final version in October 2003. This document was developed in advance of the Directive coming into force to help prepare authorities for meeting its requirements and was framed with reference to the new planning system and the proposed SA process (then going through Parliament). A separate version was prepared for Scotland (Scottish Executive 2004).

2) UK-wide generic guidance on the requirements of the SEA directive, particularly as it applies to plans and programmes not covered under the new land use/spatial planning system (ODPM et al 2004). This was issued in a consultation draft in July 2004; a final version is expected later in 2005. Earlier guidance (above) provided a basis for this second document.

3) Guidance for English planning bodies on sustainability appraisal, incorporating SEA requirements, under the new system was issued as a consultation draft in September 2004 (ODPM 2004); a final version is expected later in 2005. This guidance consolidates the first document in light of the system now enshrined in law. Wales has produced its own parallel guidance (Welsh Assembly Government 20004).

The latest drafts are being finalised to reflect and be consistent with the latest version of the UK Sustainable Development Strategy (issued in 2005).

Source: ODPM information

earlier SEA guidance by ODPM (2003) for planning authorities (see Box 9). As indicated in Table 1, the general process is similar and SEA concepts such as baseline and effects are embedded in SA and presumably apply to social and economic, as well as environmental, considerations.

In addition, draft generic guidance on SEA has been issued jointly by the UK responsible bodies (ODPM et al 2004, final version expected in mid-2005). This advice does not apply if specific guidance has been developed as for land use and spatial plans (above plus separate guidance for the devolved administrations)[81] or transport plans (http//www.webtag.org.uk/sitepages/consult/pdf/ 211consult.pdf). For other sectors, the SEA process is broadly correspondent with the SA process described in Table 1 but with an environmental focus and tasks related to the requirements of the Directive. The generic guidance also includes stage-by-stage advice, methods for assessing cumulative impacts, answers to 'frequently asked questions on the SEA Directive' and a quality assurance checklist to informally test if the requirements of the Directive are being met.

In effect, UK Regulations and guidance have created a two-track SEA process. One track applies to land use and spatial plans that are subject to SA and SEA; the other applies to sector plans and programmes that are subject only to SEA (leaving responsible authorities to broaden these to include social and economic effects at their discretion). This broad distinction has potential implications for procedural consistency, the quality of SEA practice and products and the effectiveness of the overall process (as measured by its contribution to decision-making and environmental outcomes). Also, there is a profusion of guidance on these matters with key documents on SEA and SA still being finalized.[82] When draft guidance and consultation papers on the planning system are added, the effect is overwhelming and potentially confusing for those who must apply this process (Royal Town Planning Institute 2004a,b).

By any standards, the new planning and assessment regime for land use and spatial plans is particularly complex and represents a fundamental reorientation of approach. In principle, integrating the objectives-led (SA) approach with the

81) The Scottish Executive (2004) has issued Interim Guidance on Environmental Assessment of Development Plans (Scotland) and the Welsh Assembly Government (2004) has issued an Interim Good Practice Guide to Strategic Environmental Assessment (SEA) of Unitary Development Plans.

82) Other guidance on SEA in the UK includes that on good practice (Environment Agency 2004), on biodiversity (www.rspb.org.uk/policy/planningpolicy/sea.asp) and on implementation of the SEA Directive (European Commission 2001).

Table 2: SA stages and tasks

Stage	Major tasks	
A Setting the context, establishing the baseline and deciding on scope	A1	Identifying other relevant plans, programmes and sustainability objectives
	A2	Collecting baseline data
	A3	Identifying sustainability issues
	A4	Developing the SA framework
	A5	Testing the plan against SA framework
	A6	Consulting on the scope of the SA
B Developing and refining options	B1	Appraising issues and options
	B2	Consulting on the SA of emerging options
C Appraising the effects of the draft plan	C1	Predicting the effects of the plan, including options
	C2	Assessing the effects of the plan
	C3	Mitigating the adverse effects of the plan and maximizing beneficial effects
	C4	Developing proposals for monitoring
	C5	Preparing the SA report
D Consulting on the draft plan and the SA report	D1	Consulting on the SA report alongside the plan
	D2	Appraising significant changes
	D3	Decision-making and providing information
E Monitoring implementation of the plan	E1	Monitoring the significant effects of the plan
	E2	Responding to adverse effects

Source: ODPM (2004c, 18-19)

effects-based SEA approach is an innovative synthesis. In practice, the delivery of a unified approach is likely to be demanding on all concerned for several reasons. First, there are concerns about the structure and consistency of current guidance with regard to meeting the SEA requirements (see below). Second, there are a large number of new regional and local plans to be prepared in accordance with the new act. Third, the current body of SA/SEA expertise and experience provides a necessary but likely not a sufficient basis for ensuring this new approach is implemented effectively. Fourth, the resources available to support this transition appear to be in short supply.

Some critics consider SA/SEA guidance is procedural rather than practical (conveying what should be done rather than how it should be undertaken) and even on that level does not convincingly demonstrate that key requirements of the SEA Directive will be formally and fully met (e.g. Royal Town Planning Institute 2004b). These reservations echo earlier concerns that environmental considerations may be diluted within the larger framework (e.g. Royal Commission on Environment Pollution 2002) and others have pointed out that pre-reform SA/SEA practice is not reassuring on that score (Smith and Sheate 2001, Short et al 2004). Yet, arguably, the Directive places the assessment of environmental effects of plans and programmes on much firmer basis. By comparison, there is no comparable legal instrument related for the assessment of economic or social effects and these aspects are largely overlooked in the draft SA guidance. In the final analysis, much the bigger challenge revolves around how to develop a robust, integrative approach to SA that considers all three types of effects in the depth necessary for good plan-making.

Conclusion

The UK system of SEA is in the throes of major change, particularly striking in a political culture that values pragmatism so highly and resisted 'Europeanization' for so long. It has evolved from an informal appraisal-based regime for policy and development plans respectively toward a more formalized, multi-level and devolved system of SEA processes that includes:

- SEA of policy, itself relatively diversified and applied on a non-statutory basis;
- SEA of certain plans and programmes applied in accordance with Directive 2001/42/EC/ and UK Regulations that apply territorially; and
- SA of land use and spatial plans, which is mandatory under the new planning act and subject to guidance with regard to meeting the requirements of the Directive. This latter system appears to have few or no equivalent approaches internationally.

At the policy level, environmental appraisal within the central government has been in place since 1990. It is the oldest such process in the UK but now has become subsumed within integrated policy appraisal (IPA) or incorporated in regulatory impact assessment (RIA). This trend, particularly evident in the last few years, was driven by the 'modernising government' agenda. It has been credited with changing the traditional, ad hoc style of UK policy appraisal toward a more transparent, formal and structured approach, particularly evident in the case of RIA.

Despite considerable progress, the *environmental* effects of policy, arguably, are not considered any more systematically within the larger integrative frameworks of IPA and RIA than they were in the earlier, purpose-specific process. Although potentially broad in scope, in practice, the application of SEA at the policy level lacks depth and coherence – horizontally across the different process or vertically tiered to SEA for subsequent plans and programmes. Yet important steps and measures have been taken that can be used to secure these qualities in SEA practice and improve their contribution to informed policy-making. The way forward, according to the UK Foresight programme, lies in sharpening the tools for assessing the environmental effects of higher level policies as part of 'rounded sustainability appraisals' (Environmental Appraisal Task Force 2001).

At the plan and programme level, there have been farther reaching developments in SEA, driven by the transposition and implementation of the requirements of Directive 2001/42/EC and extended in UK planning legislation and guidance for land use and spatial plans that folds these requirements into a more comprehensive process of SA. This process has certain elements of continuity with earlier SEA and SA approaches, notably in maintaining their focus on the policy basis of plans. Looking ahead, policy may assume a higher profile in SEA practice in the UK than elsewhere in the EU, and particularly so in Scotland where SEA will be a separate procedure that includes policy.

By other measures, however, the SA/SEA regime represents a major departure from previous practice and different implementation challenges for the UK compared to other EU member states. There has been extensive consultation on the relationship of SEA and SA and these matters are addressed in detail in the draft guidance (although not always explicitly enough to allay concerns). What is striking by its absence is comparable guidance on the social and economic side of the relationship. Further advice to confirm these matters should be subject to robust assessment on par with that required for SEA would help to bolster an innovative process, which pushes the envelope of this field internationally. As such, its implementation will be closely watched.

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Chapter 12
SEA Experience at the World Bank

Jean-Roger Mercier [83]

Introduction

This chapter describes SEA developments and experience at the World Bank. It reviews recent progress and future prospects in SEA focussing on the following areas:

- background on the World Bank and its activities
- policy and strategy dialogue on sustainable development;
- environmental and social safeguard policies;
- use of SEA in World Bank activities;
- benefits and costs of SEA;
- challenges in application of SEA approaches; and
- perspectives on SEA development in World Bank activities.

Background on the World Bank Group and Activities

The International Bank for Reconstruction and Development (IBRD or the World Bank) was established in 1945. Currently, the World Bank has 184 member countries[84] and assists its client countries (about 100 countries and nearly 5 billion people) in reducing poverty[85] and supporting environmentally and socially sustainable development.[86] The World Bank Group has five member organizations: (i) the IBRD, which lends to client governments; (ii) the International Development Association (IDA), which provides credits to client governments at concessional rates; (iii) the International Finance Corporation (IFC), which lends to the private sector; (iv) the Multilateral Investment Guarantee Agency (MIGA), which guarantees investments in client countries; and (iv) the International Center for Settlement of International Disputes (ICSID), which facilitates the settlement of investment disputes between governments and foreign investors.

The World Bank Group lends to developing countries and those in economic transition. Lending over the last three years has averaged US$20-25 billion per year. The types of loans and credits made by IBRD and IDA are listed in Box 1. These loans and credits are applied for by eligible countries and processed in the framework of a regular dialogue between the World Bank and the borrowing governments concerning development policies and goals. Investment lending is typically for construction, upgrading and/or rehabilitation of infrastructure or support for key development sectors, such as agriculture and rural development, education, health, transport and natural resources management. A fraction of these loans and credits go to enhancing borrowers' institutional capacity to manage their economies, either at the macro or sectoral levels. Recently, lending has increasingly included support for programmatic approaches (development policy lending at the macroeconomic level; and community-driven development (CDD) or social development funds at the microeconomic level).

Borrowers also receive non-lending assistance in the form of economic and sector work (ESW), which is designed to provide a thorough understanding of borrowers' development problems, of the need for and availability of external financing and of the analytical framework for evaluating development strategies and donor assistance activities. An important objective of economic and sector work is to pre-identify high-return projects for which the poor are direct beneficiaries. A significant share of ESW activities is dedicated to understanding the existing environmental management activities and to identify the gaps and shortcomings that need to be addressed to reach a higher and better level of environmental management in the country. Between 1999 and 2003, the World Bank undertook 59 formal environmental ESW activities and a number of informal ones.

Policy and Strategy Dialogue on Sustainable Development

The World Summit on Sustainable Development (WSSD), held in Johannesburg in 2002, emphasized the importance of an integrated approach to reconcile the environmental, social and economic aspects of sustainable development. It also

83) The views expressed herein are entirely those of the author and these views should not be taken of context and cited without prior permission. They do not necessarily reflect the views of the World Bank Group, its Executive Directors, or the countries they represent.
84) See http://www.worldbank.org for a general introduction to the World Bank, its mission and activities.
85) See http://www.worldbank.org/poverty.
86) See http://www.worldbank.org/sustainabledevelopment.

Box 1: Types of World Bank lending

- *Development Policy Loans and Credits* support policy and institutional reforms as well as targeted poverty reduction activities in the management of the economy. This category regroups the previous lending activities in *Structural Adjustment, Sectoral Adjustment and Poverty Reduction Support Credits*
- *Specific Investment Loans and Credits* fund construction and development activities of a specific nature (e.g. roads, dams, water supply and sanitation)
- *Financial Intermediary Operations, Social Development Funds and Community Driven Development (CDD)* provide funding to financial intermediaries or development funds, which is then allocated to final users through selection of sub-projects subject to predetermined rules and criteria
- *Guarantees* include partial credit guarantees covering debt service defaults on a specified portion of a loan or a bond; partial risk guarantees covering debt service defaults on a loan to a private sector project caused by a government's failure to meet its contractual obligations to a private project; and policy based guarantees covering a portion of debt service on a loan by an eligible member country from private foreign creditors in support of agreed structural, institutional and social policies or reforms

underlined the need to understand the impact of policy decisions. These themes are consistent with the Bank's commitment to sustainable development as reaffirmed in its mission statement.

In particular, the Bank recognizes that development is often accompanied by environmental challenges – pollution, the degradation of natural resources and ecosystems, the depletion of the ozone layer and climate change, amongst others. These challenges are generally associated with market failures or externalities and they can involve complex inter-generational tradeoffs. Public sector policies, regulations and institutions have an essential role in addressing environmental challenges by creating incentives, changing behaviour, adjusting markets and mobilizing resources.

As the *World Development Report 1997* pointed out, environmental protection is recognized as one of the five core responsibilities of modern governments.[87] The *World Development Report 2003* also emphasized the broad importance of institutions in managing assets on a sustainable basis and improving well being. Within the institutional framework of any given country, the capacity of public institutions to carry out their responsibilities and implement environmental policies is a critical element in environmental management (Lovai and Pillai 2003).

In 2001, with the adoption of its *Environment Strategy,* the World Bank first attempted to link poverty reduction with environmental management in official development assistance. This is one of sixteen sectoral strategies of the Bank and its implementation is closely monitored (see www.worldbank.org/environmentstrategy). The Strategy stresses the need for systematic and consistent environmental analytical work at both country and sector levels to help contribute to the achievement of the Millennium Development Goals.[88] It promotes the increased and improved use of SEA tools such as the country environmental analysis (CEA). A dedicated annex to the Strategy, prepared by Olav Kjoerven, summarized the state-of-the-art of SEA internationally and suggested directions for further development of SEA in Bank activities. By and large, three years later, this blue print is being implemented.

Environmental and Social Safeguard Policies

World Bank loans and credits are prepared and processed in a manner consistent with policies and procedures generally approved by the Board of Executive Directors (who represent the 184 shareholders). A set of ten safeguard policies, which cover important environmental, social and legal issues,[89] are applied to all investment and sectoral adjustment lending

87) The other four core responsibilities are establishing the country's legal foundation, ensuring macroeconomic stability and a non-distortionary policy environment, providing or ensuring the provision of basic social and infrastructure services, and protecting vulnerable populations.

88) Notably Target 9 of Goal 7: Integrate the principles of sustainable development into country policies and programs and reverse the losses of environmental resources, see http://www.developmentgoals.org/

89) See OP/BP 4.01 Environmental Assessment, OP/BP 4.12 Involuntary Resettlement, OP/BP 4.04 Natural Habitats, OP/BP 4.36 Forests, OP/BP 4.37 Safety of Dams, OPN 11.03 Cultural Property (being converted into OP/BP 4.11 on Physical Cultural Resources), OD 4.20 Indigenous Peoples, OP 4.09 Pest Management, OP/BP 7.50 Projects in Disputed Areas and OP/BP 7.60 Projects in International Waterways. The most current information on the World Bank's safeguard policies can be found at http://www.worldbank.org/safeguard.

activities.[90] These safeguard policies help to ensure that lending programmes of the Bank meet the "do no harm" principle. They also help to identify opportunities for quality enhancement. In addition, a recently enhanced information disclosure policy[91] ensures that the relevant safeguard policy documents are disclosed sufficiently in advance of any submissions to the Board to allow for their meaningful consultation with potentially affected parties and other stakeholders. That disclosure takes place in-country and in a form and manner appropriate to local populations and potentially affected groups, as well as worldwide through the World Bank's InfoShop.[92]

World Bank task teams, in conjunction with management and safeguard specialists, determine the application of the relevant safeguard polices to individual projects and activities and inform the borrower of requirements for compliance. The preparation of the main safeguard policy documents and plans (EA report, which includes an environmental management plan, resettlement action plan, Indigenous Peoples' development plan) and their implementation are the responsibility of the borrowing government. The Bank is responsible for supervising implementation of projects, including ensuring their compliance with safeguard policies.

Box 2: Country environmental analysis (CEA)

Renewed efforts to fight poverty, the rapidly changing global context and emerging lessons on the effectiveness of development aid have underscored the urgency of changes in the way such assistance is delivered. The traditional investment project approach has been supplemented by new instruments to promote long-term programmatic and policy-based lending and by support for community-driven development. In this context, analytical work is playing an increasingly critical role.

The development assistance toolkit provides a foundation for the Bank's policy dialogue with client countries, the development of country strategies and the formulation and implementation of effective lending programs. Environmental analysis at the country level is essential to assess client countries' environmental challenges, to identify their capacity to address these challenges in the context of poverty reduction and sustainable growth, and to evaluate the environmental implications of broader development policies and programs.

The Bank's Environment Strategy emphasizes the need for systematic, diagnostic tools that apply at this level. Country environmental analysis (CEA) has been specifically designed to enhance the Bank's knowledge of the environment in client countries. It has three main objectives:

- to facilitate mainstreaming by providing systematic guidance on integrating information on and analysis of key environment, development, and poverty links into the country policy dialogue;
- to guide environmental assistance and capacity building supported by the Bank or other development partners through an assessment of capacity issues, especially in relation to specific environmental priorities; and
- to facilitate a strategic approach to environmental impact and risk management issues by providing information and analysis of environment-development links at the earliest stage of decisions-making.

For further information, see http://www.worldbank.org/cea

Increasingly, there is a need for strategic or 'upstream' tools to help address the potential impacts of development policy loans and credits that result from a growing demand for institutional and policy reforms in borrowing countries. In addition, various reviews of development patterns have shown that adequate policy frameworks are critically important for borrowing countries to make optimum use of international assistance. Several tools are available to perform this task, including SEA and country environmental analysis (CEA). The selection of tools is made on a loan-by-loan basis. CEA is undertaken by the Bank; SEA, on the other hand, is generally carried out by or on behalf of the borrower. Further information on CEA is given in Box 2.

Use of SEA in World Bank Activities

Review of country experience

The World Bank has drawn on the expertise available in borrowing countries to gain a wider perspective on SEA experience and to help develop guidelines for SEA preparation. A recent dialogue with the World Bank's most experienced client

90) These policies do not apply to macroeconomic adjustment lending activities. In situations of co-financing between the World Bank and other international donor/lending agencies, World Bank policies generally constitute the minimum standards that need to be applied to the project or are to be harmonized with the policies of other agencies.

91) See http://www.worldbank.org/disclosure.

92) See http://www.worldbank.org/pic/ where over 1,500 EA reports are accessible on line.

Box 3: SEA client countries workshop – summary and outcomes

The workshop, held in Washington DC, April 2002, brought together SEA experts from the public, private and NGO sectors and World Bank staff to discuss the state of development of SEA in their respective regions. The two-day workshop focused on SEA case studies and reviews in Central Europe, Pakistan, China, Tunisia, South Africa, and Latin America and the Caribbean. The main findings are summarized below.

Approach
- There is broad support for SEA as a process and particularly for an "objectives-led" approach
- There is a general, though not universal, view that SEA legislation is not essential at this time
- No single model or approach fits all
- It is essential at this stage to retain flexibility, test different approaches and learn from experience
- SEA must address social dimensions in both process and substance, and
- SEA will often raise new questions – it can be an iterative process, which works towards a "sustainability framework"

Ownership
- There is a need to make the business case for SEA ("sell the benefits")
- Awareness raising is a priority – beginning with senior sector leaders, including politicians
- Work should closely involve academics and NGOs
- It should also involve and influence the private sector
- There is a potential to integrate SEA into standard procedures in key sectors
- The World Bank should aim for long-term involvement in key regions/sectors, with selected partners

Capacity
- Building capacity is essential
- It is critical to understand existing institutional capacities for managing environmental and social issues
- Building on existing tools/instruments and good practice examples are priorities
- Existing resources are in limited supply—they should not be overwhelmed with new material
- There is a growing cadre of EA specialists in sector ministries, academia and the private sector, and SEA development strategy should benefit from this expertise
- The skills required can be somewhat different from those relative to EA, for example the role of facilitator/process manager is more important in SEA

Design
- Major effort needs to go into design of the process
- Timing of SEA studies is critical to influence decision making
- The importance of a high quality study brief/terms of reference cannot be overemphasized
- There is also the need for good terms of reference for specialist studies to ensure that outputs are relevant and effective
- SEA can and should be used for robust qualitative analysis of tough issues (more needs to be known about the skills needed)
- It is critical to integrate monitoring, feedback and audit into the future development of SEA

Implications and issues for the Bank
- Compared to EA, the World Bank must relinquish more control over content and timing of studies to client. Would this take away from emphasis on improving safeguards performance?
- What should be the relationship to devolved instruments such as CDD and Social Funds?
- What are the resource implications in terms of professional skills, cost for studies and complexity of the processes? How will the value added be measured?
- Focus on objectives: is there internal coherence in the policies, plans and programs and/or sectoral interventions being studied through the SEA, especially in relation to sustainable development goals?

countries resulted in a number of key findings. It also confirmed the need to continue with the process of learning from relevant SEA experience and adapting it as needed to other situations (see Box 3).

Institutionalization of SEA

Of particular relevance and importance for the World Bank is the rapidly growing institutionalization of SEA in many of its borrowing countries. This change is being fueled in large part through international and national legal instruments. The UN World Commission on Environment and Development (1987) recognized the importance of a strategic approach to EA. The

concept of SEA was also included in the UNECE (Espoo) Convention on Environmental Impact in Transboundary Context (1991) and in 2003 UNECE member states adopted the SEA Protocol to the Convention.

Similar aspirations are also reflected in the major multilateral environmental agreements, such as the UN Convention on Biological Diversity and the UN Framework Convention on Climate Change. Both conventions stress the need to integrate environmental considerations into mainstream of economic aspects of society. The Rio Declaration on Environment and Development also stated in Principle 4 that *"sustainable development requires that the development process include environmental protection as an integral part."*

At the national level, SEA has been a recognized concept going back to the development of the United States National Environmental Policy Act (NEPA 1969). Under NEPA, it was recognized that any major federal action significantly affecting the human environment would be subject to an impact assessment, including federal plans and programs. A similar approach is reflected in EU Directive 2001/42/EC. More recently, the People's Republic of China amended their environmental impact assessment law to apply to certain plans and programmes. While they do not require assessment of policies, these laws at least make clear that in certain cases such an application may be appropriate. Other multilateral financial institutions, such as the European Bank for Reconstruction and Development (EBRD), also recognize that SEA may be an important tool to assist in understanding and managing the environmental consequences of proposed sector or country/regional plans and programmes.

Role and purpose of SEA in World Bank activities

After reviewing international experience and its own practice in SEA, the World Bank defined SEA as *"a participatory approach for upstreaming environmental and social issues to influence development planning, decision- making and implementation processes at the strategic level."*

SEA worldwide and at the World Bank has developed to a stage where it can contribute substantially to sustainable development and it is now recognized as a valuable instrument for this purpose. In particular, SEA is understood to represent a combination of analyses with a common goal and key features. Within the Bank, SEA can be used both to support the objectives of the Environmental Strategy and to improve the effectiveness of project-specific EA. Expanding its use is recommended in order to assist borrowing countries and the World Bank to mainstream environmental concerns and opportunities in the development of policies, plans and programs and to support programmatic lending.

SEA has been developed in three distinct types of World Bank activities:

- as part of the mandatory environmental and social safeguard policies, and more specifically in application of environmental assessment (EA);
- as part of the non-lending economic and sector work (ESW); and
- in the context of institutional building loans and credits of the World Bank (limited number of assessments to date).

Experience with sector and regional EA in application of safeguard policies

Since 1989, all Bank-funded investment and sectoral adjustment loans and credits have been submitted to Environmental Assessment. The EA Policy states that (Paragraph 7):

> *"Depending on the project, a range of instruments can be used to satisfy the Bank's EA requirement: environmental impact assessment (EIA), regional or sectoral EA, environmental audit, hazard or risk assessment, and environmental management plan (EMP). EA applies one or more of these instruments or elements of them, as appropriate. When the project is likely to have sectoral or regional impacts, sectoral or regional EA is required..."*

Since August 2004, the situation has changed significantly with sectoral adjustment now defined as development policy lending and subject to the new Operational Policy 8.60 (August 2004). Investment lending remains subject to safeguard policies.

Although existing internal coding systems do not allow a precise count of the number of loans and credits subjected to sectoral and regional EA, the following statistics indicate the scope of this work:

- Since the adoption of the EA directive in 1989, 249 sectoral adjustment loans and credits were approved by the World Bank, 0.4% of which were categorized as requiring full EA, 13.3% as requiring some form of EA and 86.3% as requiring no additional EA work after the initial screening.
- Experience with sectoral SEA and regional EA was reviewed for the Third EA Review (Green and Raphael 2002), which identified several interesting elements (e.g. analysis of alternatives in the Nepal Power Development

Project, a comprehensive approach with effective operational implications in the Senegal Second Transport Sector Project). The experience with REA was far more limited and insufficient to extract lessons of good practice.
- In the period from 1997 to 2001, some 21 Bank lending operations (SECAL and regular investments) were subject to sectoral or regional EA (or other kind of strategic environmental analysis). The sectors represented were roads, water supply, water resources management, urban development, power and mining.

Experience with SEA in economic and sector work

Currently, there is an ongoing effort to identify examples of SEA and "peri-SEA" studies from a large sample of economic and sector work (ESW). This is done with the help of a simple set of criteria directly drawn from the purpose of SEA (see above). While still in progress, this work:

- covers a variety of countries and sectors from South Africa's Natural Gas investment to Mauritania's Senegal River Water Resources Management;
- indicates drivers for the preparation of such studies vary from country to country, for example, SEA being undertaken because it is required by national laws and regulations, because it "makes sense", because of transnational cooperation (see Box 4) or because the ESW is conducted as a follow-up to an Inspection Panel case; and
- exemplifies some interesting applications and lessons from the cases identified already (see Box 5).

Box 4: Nile River Basin trans-boundary environmental analysis

The Nile River basin provides a home and subsistence to about 160 million people, many of them among the world's poorest. A trans-boundary environmental analysis (TEA) was undertaken as part of the Nile Basin Initiative, which was launched formally in February 1999 as a cooperative effort of the ten riparian countries. The aim of the TEA was to identify the priority trans-boundary environmental issues and define elements of an Agenda for Environmental Action.

The TEA report describes the key environmental issues and threats (land degradation, wetland loss, lake degradation, bio-diversity loss, water quality degradation and natural disasters and refugees). The root causes of these threats can be found in widespread poverty, inappropriate macro and sectoral policies, inadequate regulatory systems, institutional constraints, need for improved land use planning, limited awareness, lack of information, population growth, climatic vulnerability and urbanization.

The elements of the Agenda for Environmental Action prepared in response to this analysis have been grouped into six components: political commitment, outreach activities, preventive and curative measures, resource management programmes and monitoring of environmental change. All these components are being implemented. Of particular relevance to the SEA Structured Learning Program is the preparation of a Sectoral and Strategic Environmental Assessment of the Power Sector in three countries of the Basin: Rwanda, Burundi and Western Tanzania. This analysis is looking into the longer-term effects of several key issues that require rapid decisions (e.g. interconnection and/or increased investment in the three individual grids, potential of demand-side management and impact of environmental limitations on the development of large hydropower facilities).

Source: World Bank, GEF and UNDP (2001)

Rollout of the Development Policy Lending Operational Policy

The biggest impetus for the application of SEA may have happened in 2004. Based on the recognition that good in-country policies and institutions maximize the effectiveness of external assistance, a new policy on development policy lending (DPL) was approved. OP/BP 8.60 represents a significant conversion from Operational Directive 8.60 on adjustment lending. It requires the Bank to determine whether or not specific country policies supported by the operation are likely to have significant effects on the environment and natural resources.

For policies with likely significant effects, the program documentation should then assess the borrower's systems for reducing adverse effects and enhancing positive effects associated with the specific policies being supported, using existing analytical work. If there are significant gaps in the analysis or shortcomings in the borrower's systems, then the program

Box 5: The Palar River Basin SEA, Tamil Nadu, India

The Palar Basin is part of a broader water system in Tamil Nadu, which supports a state population of 60 million and is experiencing rapid population growth and associated environmental impacts. In the case of the Palar basin, a specific pollution problem is linked to the presence of many tanneries along the main rivers of the basin. Sand mining has also added to the decrease in water quality.

While the industries concerned are making a major effort to control and decrease their individual contribution to the pollution of the rivers in the Basin, they have failed to address the bigger issues of cumulative impact. Specifically, residual pollution is combined with the huge quantitative impact of surface water usage by various sectors, notably irrigated farming, which lower water flows.

A SEA, undertaken in late 2002, coincided with the broadening of stakeholder representation in the Palar River Basin management structure. It allowed a more complete description of the present situation, a projection of likely severe environmental impacts and an analysis of their root causes. By using a transparent and inclusive approach, the SEA succeeded in linking analysis with the operational support provided by existing development assistance actions and with preparing future assistance with more local knowledge and support.

Source: World Bank project documentation (2002)

documentation should describe how such gaps or shortcomings would be addressed before or during program implementation, as appropriate.

A number of tools can be used to analyze the environmental implications of reform operations. In the environmental and natural resource area, two broadly accepted and structured analytical tools are CEA and SEA. CEA identifies country priorities, evaluates systematically the environmental implications of key policies and the capacity of a country to address them. SEA, on the other hand, looks at the environmental implications of specific sectoral reforms. It thereby helping to ensure that the environmental consequences of policies, plans or programs are identified before adoption, that feasible alternatives are properly considered and that the public and environmental authorities are fully involved in the decision process.

Following the adoption of OP/BP 8.60, it is expected that the use of SEA as a tool will increase. Examples of sectors in which SEA is expected to grow include agriculture and rural development, energy and mining, transportation and water, sanitation and flood protection. In these cases, SEA can be expected to apply across all the six operational regions of the Bank, with a likely concentration in Latin America and the Caribbean, Sub-Saharan Africa and Europe and Central Asia, since typically there is a higher percentage of development policy lending in these regions. Depending on the magnitude and nature of policy/institutional reforms, SEA also may be required on a case-by-case basis in sectors as diverse as industry and trade, health or law and justice. The Bank is equipping itself with guidance, analysis of good practices and training and capacity building capacities to respond to this increasing demand.

Box 6: SEA conducted as part of capacity building credit, Ghana

As part of the Ghana Environmental Resource Management initiative, approved in 1992 with a credit of US$ 18.1 million, the Government conducted two strategic environmental studies, namely:

SEA of Volta River Basin Development – focused on the environmental aspects of the present, planned and possible future developments in the basin, identifying possible resource use conflicts and formulating a strategy for minimizing adverse environmental effects; and

SEA of Development Options in Coastal Wetlands – focused on sites of special ecological importance designated under the Ramsar Convention. The objectives of the study were to develop proposals that were consistent with the international protection/management status of the sites, as a precursor of the design of possible development of the coastal zone.

Source: World Bank project documentation

Experience with SEA capacity building

The World Bank has been actively cooperating with donors to help build capacity in SEA in client countries, either by providing technical expertise (e.g. Mediterranean Environmental Technical Assistance Program – METAP) or by using Trust Funds (e.g. Bank-Netherlands Partnership Program – BNPP). Though the amount of resources mobilized from these sources is much smaller than that mobilized in loans and credits (see below), the flexibility provided and the adaptation to client needs have been recognized as key factors of success for these initiatives.

The Bank has a number of projects that serve to strengthen public sector institutions responsible for environmental policy, legislation and management at the national and sub-national level. In addition to investment, all such activities include significant technical assistance and training components. Strategic environmental studies, usually in the form of sectoral or regional assessments, have been prepared, with Bank assistance, in the context of institutional development. Examples include those conducted as part of the Ghana Volta River development (Box 6).

Benefits and Costs of SEA

Reviews of SEA experience worldwide have noted four main benefits provided by this approach. First, SEA has a comparative advantage over using only project EIA in evaluation of legal and institutional issues, assessment of development alternatives, identification of cumulative impacts, and integration of broad socioeconomic issues. Second, sufficient baseline data often can be generated at low cost. Third, by providing an "upstream" framework, SEA can reduce the scope of "downstream" project and sub-project environmental assessment work. Finally, SEA provides an important framework for stakeholder consultation and consensus building.

Although the costs of SEA preparation can vary significantly, they do not necessarily have to be high, nor do the timeframes always need to be extensive. Many SEA experts put forward the critical importance of providing integration of environmental and social concerns and risks to decision-makers at strategic moments of the planning or decision-making process, which can be done with limited resources and within a short period of time (Verheem 2002). Other SEA experts even recommend a total seamless integration of environmental and social concerns into the planning process to the point of not producing any discrete SEA output (Brown 2002).

Box 7: World Bank's structured learning programme on SEA

The structured learning programme (SLP) on SEA was launched after the adoption of the Environment Strategy to accelerate the benefits of SEA. Key components include:

- structured approach to the dialogue on environmental issues and priorities, notably at the sectoral level
- potential for early consideration of environmental issues to simplify subsequent operations
- increased World Bank role in helping countries respond to the growing international interest in SEA.

The basic aims of the SLP are:

- to define better how SEA can add value to World Bank operations
- to establish what forms of SEA are most useful to staff and clients
- to help build capacity within the World Bank staff to provide better assistance to countries on SEA.

In 2001, the World Bank commissioned a background paper on SEA, which was discussed internally and published as background to the Environment Strategy. At a series of workshops (internal in April and December 2001, external in Berlin in December 2001 and The Hague in April 2002 and at a client country workshop in April 2002), the World Bank presented and discussed the definition and conceptual boundaries of SEA. Pilot applications of SEA to World Bank operations were conducted in several countries. An extensive amount of material on SEA has been collected and is available on-line (see http://www.worldbank.org/sea).

Since 2003, the Bank has restructured its SEA program. The SLP within the SEA work program remains one mechanism for sharing information and experience through cooperative exchange of information of approaches and methodologies for value-added applications of SEA.

Source: World Bank project documentation

Challenges in Application of SEA Approaches

The principal challenges encountered to date in applying SEA approaches, especially sectoral and regional EA, include:

- lack of resources for perceived "non-essential" studies at early stages of program and project preparation, which frequently are also time-constrained;
- limited interest and willingness by many borrowers to subject strategic development issues to any form of environmental analysis;
- limited appreciation of the potential utility of "upstream" EA among operational staff and doubts about the robustness of results including absence or difficulty in framing clear management and/or mitigation measures; and
- concern that, at the end of the day, pressures from various parties would be directed toward concrete project interventions and not at the more aggregate levels of policy and institutional setting. As a result, project level EA is seen as a more suitable risk management tool.

Perspectives on SEA Development in World Bank Activities

Structured Learning Program on SEA

The use of SEA in borrowing countries is being fostered through a coordinated set of World Bank activities. A systematic structured learning program (SLP) has been in place for this purpose (see Box 7). The basic aims are to define how SEA adds value to World Bank operations and to establish what forms of SEA are most useful to staff and clients. One aspect is to examine the possible overlaps between SEA approaches and other tools, which specifically address the socio-economic aspects of policy-making, planning and programming. This focus is intended to maximize synergies and reduce duplication and possible confusion in SEA applications as part of World Bank operations.

Since 2003, the Bank has restructured its SEA program. The structured learning program continues as an important mechanism for sharing information and experience through cooperative exchange of information about SEA approaches and methodologies.

Linkages to ongoing work on safeguards and other analytical tools

As use of SEA expands, the framework for implementation of World Bank safeguard policies is evolving rapidly. The main short-term development challenges with regard to safeguard policies include further strengthening of compliance with the policies, building an integrated safeguard compliance system within the World Bank and improving results on the ground. In the medium term, the safeguard policies need to adapt to a changing lending profile, continue to move upstream in the decision making process and focus on improved/enhanced client ownership and capacity. This needs to take place in partnership with the parties involved, including cooperating governments, other major international donors, the private sector, and civil society.

Because of this pressure for Bank projects to perform better and more rapidly than in the past, SEA can provide a fruitful upstream method for understanding the application and implementation of the safeguard policies. The optimization of the linkage with poverty and social analyses is also the topic of an active dialogue. Based on the above trends, the Bank's SEA program is building on the past efforts and opens some new key directions, internally as well as externally.

Moving forward internally

The main activities in the SEA Program in the Bank include:

- finalizing the review of Bank experience in a systematic manner with the dual objective of establishing a baseline for future monitoring and learning about good practices and disseminating them;
- developing a comprehensive approach to dissemination of good practices in SEA (including communication, technical guidance, knowledge management, training, quality enhancement of ongoing efforts);
- encouraging new and innovative use of the SEA approach as they occur;
- providing internal (headquarters- and field-based) staff training based on a thorough capacity needs assessment; assisting the future implementation of the new Development Support policy which includes the use of SEA; and
- clarifying the scope of social concerns to be integrated into SEA.

Moving forward externally

- In partnership with other international organizations, the World Bank's external development strategy will focus on knowledge sharing and resource mobilization with a view to:
- participating in harmonization efforts on environmental assessments;
- participating in the development of technical guidance on Strategic Environmental Assessment as well as on Sustainability Impact Assessment;
- identifying SEA regional and local expertise; and
- participating in larger capacity enhancement/awareness building efforts for the benefit of Bank's client countries.

Progress on these internal and external efforts will continue and within the limits of available resources will be shared in real time through a combination of events and tools, including the http://www.worldbank.org/sea Web site.

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Chapter 13
Some Future Directions for Policy-Level SEA

Barry Sadler

Introduction

Many aspects of national and international experience described in this volume augur well for the continuing development of SEA at the policy level. In this concluding chapter, some future directions and prospects for moving ahead in this area are briefly discussed in response to the following sequence of questions:

- Where is SEA going? What do leading trends signal in terms of pending changes?
- What are their implications for our current understanding of policy-level SEA?
- What should be done next to move forward on the SEA agenda?

Signposts of Change

As the chapters in this volume make clear, SEA at the policy level has evolved markedly compared to the situation that existed ten years ago, when only a handful of countries or international organisations had such experience. In the interim, there has been further take up and adaptation and a widening scope of application and practice, although it is evident that the development of policy-level SEA is less extensive than at the level of plans and programmes. Most indications are that this situation will continue in the immediate future, especially given their differential treatment in the SEA Protocol and the SEA Directive respectively (described in Chapter 2).

These above trends also represent harbingers of change in policy-level SEA:

1) Most indications are that this sub-field is likely to continue to develop incrementally but possibly at an accelerating rate. Internationally, no major legal instrument comparable to SEA Directive or the SEA Protocol appears likely in the near future to apply to policy or legislation. However, once in force, the SEA Protocol requires Parties to review progress in applying its principles to policies and legislation, which may aid their further development. The new World Bank operational policy and procedure on development policy lending (OP/BP 8.60, 2004) and the pilot programme for use of country systems (OP 4.00) have potential implications for the greater use of SEA in developing countries (although it is still too early for any conclusions to be drawn regarding implementation of OP/BP 8.60 and OP 4.00 is still in the design phase).[93]

2) Policy-level SEA is also expected to continue to be a relatively diversified approach, with different processes being followed at the national level. This will be the case especially in the short term. It reflects the varying scope and character of policy-making within and across jurisdictions. Whether a more standardised process will emerge in the medium to longer term (e.g. over the next decade or beyond) is open to question. Much may depend on how the SEA Directive is implemented (see below) and on the five-year review of progress that must be conducted by the European Commission (in accordance with Article 12). Similarly, any future work of the Parties to the SEA Protocol on the application of its principles to policies and legislation might help foster progress toward a commonly agreed approach (although probably this area will not be high on their agenda).

3) New areas of emphasis and application will probably result, for example through the use of policy-level SEA in support of international lending and assistance. This is evident already at the World Bank, where a number of SEA-type processes have emerged recently in response to development policy lending and non-lending activities. In addition, the work of the OECD/DAC task team on SEA guidance encompasses development cooperation policy and should promote greater use of this instrument across a range of bilateral actions that are evolving to implement the Millennium Development Goals. A new architecture of aid is being built that centres on poverty reduction, using sector wide approaches and strategies that integrate the key components of and sustainable livelihoods, such health, agriculture and environment.

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93) The application of SEA to development policy lending (DPL) under OP/BP 8.60 is described in Chapter 12. DPL covers disbursements to support macro-economic or sectoral structural reforms in a borrowing country, and requires the Bank to determine if specific policies are likely to have significant effects on the environment and, if so, to assess the borrower's system of environmental safeguards for addressing them. Under OP 4.00, the Bank will pilot the use of domestic systems for this purpose, which if successful will lead to their wider use including the application of SEA to identify the impact of policies.

4) Slow progress may be made toward the use of policy-level SEA as an integrative tool. The evolving system of impact assessment in place within the European Commission provides one potentially important impetus in that direction. Other initiatives that may be influential include the UK process of sustainability appraisal for land use plans, which incorporates the requirements of Directive 2001/42/EC within an objectives led (or policy based) approach, and the UNEP pilot on integrated assessment and planning, which includes a strong policy dimension. In all cases, a critical issue concerns the extent to which environmental effects will be fully and appropriately addressed as part of more integrated approaches (as noted in Chapter 1).

SEA Reconsidered

Because of their diversity and fluid character, policy-making processes often provide a testing arena for the application of SEA. This view, widely reflected in the literature of the field, still holds, particularly in comparison to the level of plans and programmes. At the same time, it deserves closer scrutiny in light of practical experience with policy-level SEA reported in the previous chapters and the emerging directions described above. Specifically, there are sufficient exceptions and qualifications to the above generalisation to provide the grounds for reconsidering and reformulating our current understanding of policy-level SEA. The concern here is to gain a firmer empirical grasp of policy level SEA, preparatory to further discussion of needed directions in the field.

First, the aggregate distinction of SEA into policy, plan and programme level applications is a useful organising framework for discussion of concepts and experience. It is based, inter alia, on a common understanding that 'policy is different' and, by extension, separable as process and product of decision-making. Yet this distinction is not always clearly reflected in SEA arrangements and practice, which are relatively diversified. For example, some SEA systems apply to policy, plans and programmes and do not distinguish among them either in guidance or screening as in Canada. Other systems that apply SEA only to plans or programmes explicitly address their policy context and content as in the UK.

Second, the many distinctions among processes of policy formulation and their resulting content means that a differentiated approach should be followed when subjecting them to SEA. For illustrative purposes, the anatomy of policy level SEA can be represented in three forms (which are artifices and do not necessarily cover the scope of possibilities):

- Quick scan in support of immediate policy response to political stresses and issues that have environmental implications;
- Rapid appraisal carried out as part of an iterative process of policy design to address moderate level environmental effects; and
- More extensive forms of SEA (including application of formal procedure) where policy is likely to have a significant impact on the environment and formulated through a reasonably structured or systematic, evidence-based process.

Third, law-making is a particularly structured process. Other than for unexpected or emergency responses, the legislative calendar is reasonably fixed and definable in advance. Yet typically drafting legislation constitutes a relatively late stage or final act in the policy-making when options have been screened and narrowed. Experience with SEA of bills and regulations, to date, suggests that its role in decision-making is largely fine tuning, although it may promote wider political debate (Chapter 5). However, there has been little or no empirical work to substantiate whether or how legislative enactments are linked to prior policy initiatives, or to consider how SEA of bills and regulatory proposals can inform the work of parliamentary committees or other bodies that are mandated to scrutinise their content. This represents an area for further investigation.

Fourth, SEA provides an entry point for an integrative approach to policy-making, consistent with the agenda for implementing sustainable development agreed at Johannesburg in 2002. It has standing in that regard because SEA is institutionalised already at this level and relatively few fully integrative approaches have been established. This approach is widely, although often indiscriminately, advocated the SEA literature and, in a worst case, merely encourages the superficial review of environmental effects. A disciplined consideration of SEA as an integrative tool is long overdue, and initially might focus on the permutations suggested in the delineation in point 2 above. For example, SEA might be readily folded into an integrated methodology for quick scanning or rapid appraisal but for the present should be applied separately to a major review of policy with significant environmental effects. This notion remains to be tested.

Old Realities, New Opportunities

The SEA agenda can be taken forward in response to both old realities and new opportunities. Key directions include:

1) *Monitoring and review of the implementation of the SEA Directive,* focussing on whether policies are captured by design or by default. Several countries in transposing the SEA Directive into national legislation explicitly provide for coverage of policies, for example, the Czech Republic (Chapter 4) and Finland (Chapter 6). For present purposes, it will be of interest to evaluate the operation of these systems and compare them to others that do not apply ostensibly to policy. Of specific concern will be if and how policy is considered as part of SEA of plans and programmes, either incidentally because policies are embedded in these processes (Chapter 11) or directly because a policy triggers the SEA Directive by establishing a framework for authorisation of projects subject to the EIA Directive (see Chapters 4, 6).

2) *Comparative studies and, where possible, experimental design of SEA adaptations to a spectrum of policy processes* should have a high priority. This work should include examples of quick scan or rapid appraisal approaches, which are indicated for less structured, fluid processes. Relatively little is known about these applications, which are internal to governments, compared to more formalised procedures for policy review and consultation on white papers and similar documents. The UNECE could become an important forum for practical exchange of information and experience on these aspects. The Parties to the SEA Protocol are required to report on their progress in applying its principles to policies and legislation (although it is likely that this area will be a low priority in the programme of work that will be undertaken to help implement the Protocol and its legally binding obligations).

3) *Benchmarking SEA good practice at the policy level* should be continuing focus for IAIA and other professional networks. This is best undertaken as a rolling exercise, building on earlier work in drafting SEA principles and integrating the lessons of policy-specific experience. A starting point might be the SEA performance criteria, which define the elements of a good quality process for use by IAIA members and other interested parties. For example, these could be revisited with a view to checking their applicability to the policy characteristics noted above or used as points of reference to develop insights on SEA good practice at the policy level. This work could draw on previous sources (as with the performance criteria) and materials and outputs from the IAIA global conference in Prague. An aide memoir on indicative outputs is appended (Annex 1 and 2).

4) *A more robust construct of SEA should be built*, grounded on the realities of policy-making and drawing on institutional analysis of the frameworks that guide process application. In the first instance, the concern will be to gain a more discriminating perspective on the relationship of SEA and policy formulation and implementation, which often is represented in an idealised or stereotypical form. The reality is quite the opposite. SEA encompasses a family of tools that are used to gain leverage on the dynamics of policy-making. These decision geometries and their constraints and potentials for SEA need to be better identified and classified. In doing so, reference can be made to the theories and models of the different schools of public policy-making.[94]

5) *Options for pushing the envelope of SEA should be considered* based on closer scrutiny of this type of empirical analysis. For now, SEA practitioners first could look beyond only prescribed applications to specific development proposals, for example, beginning with ecosystem approaches, such as those being carried out as part of the millennium assessment. These not only support multilateral environmental agreements (MEA) but also serve to inform policy thinking and future design of alternative strategies. Like other scenario-based assessment, they provide a means of issue engagement, policy foresight and collective learning. Second, SEA practitioners could explore creative ways of adding value to policy making as a plural process in which the exercise of power is based on bargaining, trade-offs and compromise (rather than the rational objectivity that appears to underpin models of SEA). In that context, for example, they might explore opportunities to link SEA approaches with procedures for joint fact-finding and dispute settlement.[95] The role here will be to improve the quality and transparency of the bargaining process, opening it to better information and clarifying the consequences of choice.

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94) This body of work is also useful for clarifying the implicit and explicit assumptions, norms and values that underpin discourse on how policy-making and, by extension SEA, ought to work or should work. It incorporates both normative and empirical concepts that can be mined as an antidote to the seemingly endless reflections on the nature and scope of SEA that predominate in the literature of the field. The continued redefinition of terminology around minor differences has become a cottage industry.

95) Alternative dispute resolution (ADR) provides a formal model for consensus building, although its full application likely will be resisted by politicians and senior bureaucrats alike. It is based on principled (or interest based) negotiation, often with the aid of a neutral third party or mediator, joint fact-finding on the issues in contention among the stakeholders concerned (e.g. using SEA as a key instrument), creative identification of options for mutual gain and mutual accommodation of interests in a final agreement.

6) *Looking ahead, the fundamental issue is whether and how SEA should be promoted as or subsumed within an integrated approach* that examines the social, economic and environmental consequences of policy options and proposals. The pros and cons of this approach are being given increasing attention and scrutiny, particularly now a new generation of integrated impact assessment and sustainability appraisal processes are being rolled out at both the policy and planning level (e.g. in Hong Kong SAR, the UK and the European Commission). As pilots, these warrant close monitoring and evaluation to either substantiate or discount concerns that environmental considerations will be become diluted within the broader matrix of impact assessment. From a strict sustainability perspective, SEA as presently institutionalised only yields pale green outcomes. Reconfiguring this process as an instrument for environmentally sustainable assurance (Chapter 1) offers a firmer basis for pursuing integrated approaches.

This is easy to say and hard to do (a dilemma too often overlooked in the SEA literature). Although many critics consider SEA falls short of its potential as a frontline tool for promoting sustainability, different reasons and factors are cited as evidence. Most tellingly, the fundamental constraints are structural, deeply rooted in the course of development and the economic, social and political order that underpins it. The reality is that SEA and other forms of policy analysis operate at the margins of this status quo and many statements in the literature about the transformative role of this process are unfounded. Yet there is much that it can achieve incrementally in support of sustainability principles and actions, particularly if a liberal view is taken of the range of the secondary and causation benefits that are achieved through SEA (e.g. learning, education and procedural democracy). These benefits are assumed or stated rather than demonstrated, and comprise an area for investigation (although the challenges of correlation are daunting).

A Next Step

One useful next step might involve the design of an international agenda for action, which could focus research, development and collaboration on SEA, in general, and its policy applications, in particular. For example, drafting such a prospectus could begin at the IAIA (Prague) conference on international experience and perspectives in SEA, where discussion will be organised into five main themes. These provide a potentially rich opportunity for identifying areas for further policy research and action on:[96]

- SEA legislation and policy, including the institutional arrangements in place in different countries and their experience with implementation;
- SEA practice, focussing on key trends and issues in environmentally important sectors (such as agriculture, energy, transport and water);
- Linkages between SEA and other assessment and planning tools, exploring their synergies and differences;
- Cross-cutting issues in SEA practice, addressing aspects and challenges that are common to all areas and levels of application; and
- Standards and capacity building, considering the training, research and networking activities that can help to upgrade SEA internationally.

In that sense, this represents a beginning as much as an end for the present volume.

96) This framework was developed jointly with Jiri Dusik, Co-Chair of the IAIA Global Conference on SEA, with inputs from Ralf Aschermann, Thomas Fischer, Maria Partidario, Urszula Rzeszot and Rob Verheem (members of the IAIA Programme Committee.

Annex 1: Guiding Principles for SEA of Policy and Legislation

The SEA process should be:

- *fit-for-purpose* – adapted to the context and characteristics of the policy or law-making process
- *sustainability-directed* – conducted through the lens of sustainability principles and rules to place the potential effects of a proposal within a long-term, precautionary frame of reference
- *objectives-led* – undertaken with reference to relevant environmental goals, targets and indicators
- *source-focussed* – concentrated on the policy, legislative and other government proposals that are environmentally significant or implicated in unsustainable development
- *decision-relevant* – addressed to the issues and information that matter in law or policy-making
- *outcomes and effects-oriented* – targeted, whenever possible, at promoting good policy outcomes for the environment as well as ensuring adverse effects do the least possible harm
- *integrative* – concerned with policy linkages across sector boundaries and with economic, social, health and other effects as appropriate and necessary (e.g. in the absence of equivalent processes)
- *transparent and open* – based on clear, easily understood requirements and procedures, including provision for an appropriate forms of public consultation
- *quality-assured* – established through arrangements and guidance that meet international standards and fit-for-purpose , and
- *cost-effective* – completed in accordance with terms of reference and within available time, budget and resources

Source: adapted and updated, from earlier work by the author.

Annex 2: Principles of SEA Good Practice

A series of principles for SEA process implementation are put forward below:

- apply SEA to the earliest, appropriate stage or level of decision-making (the broadest options for environmental integration are at the highest tier);
- focus on the policy areas that are most environmentally significant (e.g. energy, transport, utilities and housing) and the issues and cross-linkages that matter;
- provide for a proportionate, tiered assessment if SEA will be applied later to a plan or programme (as described in the Preamble to the SEA Directive);
- recognize that 'one size does not fit all' and customize the scope of approach to the policy issues at stake (e.g. major review versus rapid appraisal);
- seek creative options for environmental gain as well as measures to mitigate adverse effects;
- take account of directly related economic and social impacts if these are not addressed in other processes; and for the longer term; and
- exploit the potential of SEA as a vector for making a difference, procedurally (more transparent, evidence based policy making) and substantively (greening policy content).

Source: adapted and updated, from earlier work by the author.

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