

Levett-Therivel sustainability consultants

Report to the South West Regional Assembly:

Implementing the SEA Directive: Analysis of existing practice

1 November 2002

Contact: **Riki Therivel** tel/fax 01865 243488 riki@levett-therivel.fsworld.co.uk
28A North Hinksey Lane, Oxford OX2 0LX

EXECUTIVE SUMMARY

This report is part of a project undertaken by the South West Regional Assembly and funded by the English Regions Network. The project aims to explore and evaluate the effectiveness of strategic environmental assessment (SEA) as a tool for appraising sustainability; examine barriers to implementing European Directive 2001/42/EC on SEA, and test solutions through pilot projects; and establish and promote good SEA practice. Phase 1 of the project established baseline data requirements and identified information gaps. Phase 2 examines current practice and tests implementation of the SEA Directive through six pilots. Phase 3 will promote the outcomes of the project.

This is the first of two Phase 2 reports. The second will consider the pilot results. This report aims to:

- critically review existing practice of strategic environmental assessment (SEA), sustainability appraisal, health impact assessment (HIA), and appropriate assessment under the Habitats Directive;*
- assess how current practice meets the SEA Directive's requirements; and*
- identify potential barriers to implementation of the SEA Directive.*

There are many overlaps between SEA, sustainability appraisal, HIA and appropriate assessment, particularly their emphasis on describing the baseline environment, predicting and evaluating the effects of a proposal on this baseline, mitigating negative effects, and incorporating this information in decision-making. The main differences are that SEA has a wider remit than HIA or appropriate assessment, and sustainability appraisal a wider remit still; HIA and sustainability appraisal focus more on social issues, and particularly distributional issues; and SEA requires more robust baseline data, consideration of alternatives, and explanation of how environmental considerations have been taken into account in decision-making than do the other techniques.

The SEA Directive requires SEA to be carried out for plans and programmes for agriculture, forestry, fisheries, energy, industry, transport, waste management, water management, telecommunications, tourism, town and country planning or land use that are:

- likely to have significant environmental effects; and*
- set the framework for future development consent of projects that require environmental impact assessment or appropriate assessment; and*
- are required by legislative, regulatory or administrative provisions.*

RPGs and development plans clearly fall in this category. They are already subject to sustainability appraisal, and the ODPM is publishing draft guidance on SEA for regional and local land use plans. The main barrier to the implementation of the Directive for such plans is a lack of local authority resources and training.

A brief analysis of how SEA could apply to six sectors – agriculture, energy, minerals, transport, water and waste - shows that it is much less clear what sectoral plans and programmes require SEA, and how such SEAs should be carried out. Immediate barriers include:

- *determining what plans and programmes "are required by legislative, regulatory or administrative provisions" under Article 2 of the Directive, or require SEA under Article 3(4) which notes that "Member states shall determine whether plans and programmes, other than those referred to in paragraph 2, which set the framework for future development consent of projects, are likely to have significant environmental effects". This is a particular problem for national-level and private sector plans and programmes;*
- *determining how best to deal with overlapping plans (e.g. in the water sector), plans with unclear hierarchies (e.g. in tourism), and plans from one sector that affect another sector (e.g. land use and tourism, agriculture and tourism, transport and energy).*

Consideration of what the SEA Directive applies to highlights some major problems with the structure of planning regimes, particularly overlaps and gaps between plans.

The players involved in SEA, and how they are likely to be affected, are:

- *The screening body(ies) – which have not yet been identified - which decide whether SEA is needed. They will need to deal with the issues raised above. They may also want to provide an SEA support and clearinghouse function, review how plans are devised, and/or determine whether plan-making can be streamlined and rationalised;*
- *The decision-maker who writes and implements the plan or programme. They will need to be aware of the SEA Directive's requirements, and consider how best to integrate SEA in their plan-making processes;*
- *The decision-maker or consultant who carries out the SEA will need understanding of relevant databases and prediction techniques, an ability to deal with uncertainty and assumptions, and other SEA and planning skills;*
- *The authorities to be consulted on the scope of the SEA and the final environmental report – a draft list is included in this report - will need resources and training;*
- *The public, who should be consulted and possibly involved more actively; and*
- *The reviewing body(ies) – which also have not been identified - which ensure that the SEAs are carried out, that decisions incorporate the results of the SEAs, and that SEAs are of adequate quality. This may be the same as the screening body. They will need to set up quality control mechanisms.*

Many SEA methodologies and techniques can be adapted from existing assessment systems: sustainability appraisal, New Approach to Appraisal, health impact assessment, appropriate assessment, project environmental impact assessment etc. These should be integrated where possible for the sake of efficiency. SEA should probably be extended to also incorporate social and economic issues.

In terms of SEA methodologies, there is a need to balance the need for detail and quantification (which EIA, NATA etc. deal with well) against the strategic nature of many plans and programmes which requires many assumptions and broad-brush

predictions. Environmental databases will need to be created, and strategic, broad-brush impact prediction and evaluation methods developed.

Next steps for SWRA could involve:

- *Lobbying Government to:*
 - *carry out SEA of national-level plans and programmes*
 - *formally identify what plans and programmes require (and not) SEA*
 - *set up a cross-departmental SEA coordinating body*
 - *consider rationalising plan-making where appropriate*
 - *promote integration of SEA with other forms of assessment:*
 - *Providing training courses/seminars for regional and local planning officers, planners in the other sectors, NGOs and the "authorities consulted", and consultants*
 - *Providing a central SEA support centre that puts out guidance, commissions research etc*
 - *Develop and/or support a central SEA website*
 - *Support the development of SEA guidance*
 - *Use the SEA pilots of Phase 2 to support the above actions.*
-

CONTENTS

ABBREVIATIONS

1.	BACKGROUND	6
	1.1 Project overview	6
	1.2 This report	6
	1.3 Research methodology	7
2.	STRATEGIC ENVIRONMENTAL ASSESSMENT, HEALTH IMPACT ASSESSMENT, APPROPRIATE ASSESSMENT	9
	2.1 Strategic environmental assessment	9
	2.2 Health impact assessment	11
	2.3 Appropriate assessment	12
	2.4 Links between them	14
3.	LAND USE PLANS	16
	3.1 Sustainability appraisal of development plans	16
	3.2 Existing environmental/sustainability appraisal process	18
	3.3 Existing environmental/sustainability appraisal reports	21
	3.4 Potential barriers to SEA	22
4.	SECTORAL PLANS AND PROGRAMMES	28
	4.1 Agriculture	29
	4.2 Energy	32
	4.3 Minerals	35
	4.4 Tourism	38
	4.5 Transport	40
	4.6 Water	43
5.	KEY ISSUES	46
	5.1 Screening: what plans and programmes require SEA	46
	5.2 Issues in (not) planning	47
	5.3 Who is involved in SEA	49
	5.4 SEA methodology	52
	5.5 Next steps	53
	REFERENCES	57
	Appendix A. RSPB preliminary list of UK plans and programmes which the SEA Directive may cover	59

ABBREVIATIONS

Art	Article
CAP	Common Agricultural Policy
CEC	Commission of the European Communities
DEFRA	Department for Environment, Food and Rural Affairs
DETR	Department of Environment, Transport and the Regions
DGXI	Directorate-General for Transport (of European Commission)
DOE	Department of the Environment
DTLR	Department for Transport, Local Government and the Regions
EA	Environmental Appraisal
EC	European Community
EEC	European Economic Community
EIA	Environmental impact assessment
EU	European Union
GOSW	Government Office for the South West
GOMMS	Guidance on Methodology for Multimodal Studies
HIA	Health Impact Assessment
LTP	Local Transport Plan
MPG	Mineral Planning Guidance
NATA	New Approach to Appraisal
NGO	Non-governmental organisation
ODPM	Office of the Department of the Prime Minister
PPG	Policy Planning Guidance Note
Regs	Regulations
RDA	Regional Development Agency
RPG	Regional Planning Guidance
SA	Sustainability Appraisal
SAC	Special Area of Conservation
SEA	Strategic environmental assessment
SPA	Special Protection Area
SWRA	South West Regional Assembly
Sec	Section
TCPA	Town and Country Planning Act
UDP	Unitary development plan
UK	United Kingdom

1. BACKGROUND

1.1 PROJECT OVERVIEW

This is phase 2 of a wider project that is being undertaken by the South West Regional Assembly, funded by the English Regions Network and including a range of partners such as Government Office for the South West, Environment Agency, South West Regional Development Agency, the ODPM and various local authorities. The overall project objectives are to:

- Explore and evaluate the effectiveness of strategic environmental assessment (SEA) as a tool for appraising sustainability;
- Examine the barriers organisations perceive may prevent them from implementing European Directive 2001/42/EC on SEA, and test solutions through pilot projects; and
- Establish good SEA practice in the South West and promote this within and beyond the region.

Phase 1, completed in April 2002 by TRL for SWRA, established baseline data requirements and identified information gaps. The results are available on <http://www.southwest-ra.gov.uk> (under 'environment issues').

Phase 2, this phase, examines current practice and tests implementation of the SEA Directive for a range of plans and programmes through pilots. It aims to

- provide a critical assessment of current SEA practice, and how this complies with the requirements of the SEA Directive;
- test appropriate SEA methodologies through pilot projects and assess whether these methodologies would meet the requirements of the Directive; and
- test the relationship between SEA and sustainability appraisal through pilot projects.

This report deals with the first of these points. The final report, which will cover the last two points, will be completed by end January 2003.

Phase 3 will involve promotion of the outcomes of the project, including key findings and examples of good practice, and dissemination of findings with regional partners, government, and other regions.

1.2 THIS REPORT

This is the first of two reports that deal with Phase 2 of the project. It aims to:

- critically review existing practice in SEA, sustainability appraisal (SA), health impact assessment, and appropriate assessment under the Habitats Directive;
 - assess how current practice meets the requirements of the Directive; and
-

- identify potential barriers to implementation.

It is meant to identify issues for the pilots, rather than to be a comprehensive and detailed analysis.

This report begins with a brief discussion of the requirements of the SEA Directive, health impact assessment, and appropriate assessment.

It then discusses, for land use, agriculture, energy, minerals, tourism, transport and water:

- whether existing plans and programmes are subject to the requirements of the SEA Directive;
- whether they are already subject to SEA-type assessment;
- how these assessments take health and nature conservation issues on board; and
- barriers to implementing the requirements of the SEA Directive, and possible ways of tackling these barriers.

The report concludes by identifying key issues raised by this work. Weblinks are in blue and underlined.

1.3 RESEARCH METHODOLOGY

The core of this report is divided into two main parts: 1. land use plans and 2. all other plans and programmes. This is because about 80-90% of current SEA-type practice in the UK is for land use plans, and much more is known about this than about SEA for other plans and programmes. The research methods used to analyse SEA practice are therefore different for land use plans and all other plans and programmes.

For land use plans, we:

1. Summarised the results of a questionnaire survey of UK English and Welsh local authorities carried out in September 2001, focusing on responses from authorities in the South West where appropriate. The survey examined:
 - how effective planners perceive the sustainability appraisal process to be, and what contributes to making an effective appraisal;
 - what resources authorities use to undertake their appraisals (time, costs, and training);
 - barriers to effective appraisal; and
 - planners' recommendations to others who are undertaking appraisals.
 This survey is one of the comprehensive sources of information on current environmental/sustainability appraisal (EA/SA) practice in England. The survey had a 68% response rate; (including 31 out of the 51 authorities in the South-West).
 2. Carried out a short questionnaire survey of all 51 local authorities in the South West which complemented the previous questionnaire by specifically examining health impact assessment, appropriate assessment, and perceived barriers to
-

implementing the Directives' requirements. The response rate for this survey was 34% (17 replies).

3. Conducted follow-up telephone interviews with three local authority planners and a consultant practitioner with experience of 'Appropriate Assessments'.
4. Reviewed five environmental/sustainability appraisals from authorities in the South West region to see how they would meet the requirements of the SEA Directive.

For sectoral plans and programmes, we:

1. Ran a one-day seminar in Taunton on 2 October. The seminar aimed to identify:
 - existing good practice and possible pilots in the sectors that are likely to be of greatest importance for the South West: water, transport, tourism, agriculture, energy and waste;
 - their links to health impact assessments and appropriate assessments;
 - barriers to the implementation of the Directive; and
 - who would benefit from dissemination and promotion of the project outcomes.About 100 people were invited to the seminar and 35 attended.
2. Carried out a Web search of relevant plans and programmes, and related SEA-type assessments.
3. Received e-mail comments on drafts of this report, and carried out follow-up telephone interviews with six sector-specific experts on planning and sustainability.

ACKNOWLEDGEMENTS

We are very grateful to Cheryl Cowlin for help in organising the seminar; Jo Treweek and Young Associates for providing valuable information about appropriate assessment; Roger Smithson for responding to Sec. 5.5; all the workshop participants; the people who filled in questionnaires; the interviewees; and people who have volunteered to be SEA pilots.

2. STRATEGIC ENVIRONMENTAL ASSESSMENT, HEALTH IMPACT ASSESSMENT, APPROPRIATE ASSESSMENT

To set this report in context, this chapter summarises the background of, and requirements for strategic environmental assessment, health impact assessment, and appropriate assessment.

2.1 STRATEGIC ENVIRONMENTAL ASSESSMENT

Environmental assessment is a tool for integrating environmental considerations into decision-making by ensuring that significant environmental effects of the decision are taken into account. *Strategic environmental assessment* (SEA) is a generic term used internationally to describe environmental assessment as applied to policies, plans and programmes (ODPM, 2002).

The SEA Directive - European Directive 2001/42/EC "on the assessment of the effects of certain plans and programmes on the environment" - was agreed in July 2001, and must be brought into force in all European Member States by 21 July 2004. The full text of the Directive can be found at www.europa.eu.int/comm/environment/eia/full-legal-text/0142_en.pdf. The Directive requires "environmental assessments" to be carried out for a wide range of "plans and programmes". Figure 1 gives the Directive's definitions for these terms, and Figure 2 summarises the Directive's requirements.

Figure 1. SEA Directive definitions

The SEA Directive uses the following definitions:

"Environmental assessment" means 1. preparation of an environmental report, 2. consulting with the public and relevant authorities, 3. taking the report and consultation responses into account in decision-making, and 4. providing information on the decision (Art. 2(b)). Figure 2 summarises the "environmental assessment" requirements of the Directive.

"Plans and programmes" subject to environmental assessment are those which are:

- *"likely to have significant environmental effects"* (Article 3.1) and
- *"prepared for agriculture, forestry, fisheries, energy, industry, transport, waste management, water management, telecommunications, tourism, town and country planning or land use and which set the framework for future development consent of projects listed in Annexes I and II to Directive 85/337/EEC [on environmental impact assessment], or which, in view of the likely effect on sites, have been determined to require an assessment pursuant to Article 6 or 7 of Directive 92/43/EEC [on habitats]"* (Art. 3.2) and
- *"subject to preparation and/or adoption by an authority at national, regional or local level or which are prepared by an authority for adoption, through a legislative procedure by Parliament or Government, and which are required by legislative, regulatory or administrative provisions"* (Art. 2(a)).

This is a horribly complex definition, and subject to much discussion (more on this in Section 5). However local and regional land use plans definitely do come under this definition.

Figure 2. Elements of environmental assessment under Directive 2001/42/EC
(adapted from ODPM, 2002)

Preparation of an environmental report in which the likely significant effects on the environment of implementing the plan or programme, and reasonable alternatives taking into account the objectives and geographical scope of the plan or programme, are identified, described and evaluated. The information to be given is (Art. 5 and Annex 1):

- a) an outline of the contents, main objectives of the plan or programme, and relationship with other relevant plans and programmes;
- b) the relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan or programme;
- c) the environmental characteristics of areas likely to be significantly affected;
- d) any existing environmental problems which are relevant to the plan or programme including, in particular, those relating to any areas of a particular environmental importance, such as areas designated pursuant to Directives 79/409/EEC and 92/43/EEC;
- e) the environmental protection objectives, established at international, Community or national level, which are relevant to the plan or programme and the way those objectives and any environmental considerations have been taken into account during its preparation;
- f) the likely significant effects on the environment, including on issues such as biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage including architectural and archaeological heritage, landscape and the interrelationship between the above factors (these effects should include secondary, cumulative, synergistic, short, medium and long-term, permanent and temporary, positive and negative impacts);
- g) the measures envisaged to prevent, reduce and as fully as possible offset any significant adverse effects on the environment of implementing the plan or programme;
- h) an outline of the reasons for selecting the alternatives dealt with, and a description of how the assessment was undertaken including any difficulties (such as technical deficiencies or lack of know-how) encountered in compiling the required information;
- i) a description of the measures envisaged concerning monitoring;
- j) a non-technical summary of the information provided under the above headings

The report shall include the information that may reasonably be required taking into account current knowledge and methods of assessment, the contents and level of detail in the plan or programme, its stage in the decision-making process and the extent to which certain matters are more appropriately assessed at different levels in that process in order to avoid duplication of the assessment (Art. 5.2)

Consultation:

- of environmental authorities when deciding on the scope and level of detail of the information which must be included in the environmental report (Art. 5.4)
- of environmental authorities and the public, which shall be given an early and effective opportunity within appropriate time frames to express their opinion on the draft plan or programme and the accompanying environmental report before the adoption of the plan (Art. 6.1, 6.2)
- of other EU Member States where the implementation of the plan or programme is considered likely to have significant effects on the environment of those States (Art. 7).

The environmental report and the results of the consultations must be taken into account in decision-making (Art. 8)

Provision of information on the decision:

When the plan or programme is adopted, the public and any EU Member State consulted under Art.7 shall be informed and the following items made available to those so informed:

- the plan or programme as adopted
- a statement summarising how environmental considerations have been integrated into the plan or programme and how the environmental report of Article 5, the opinions expressed pursuant to Article 6 and the results of consultations entered into pursuant to Art. 7 have been taken into account in accordance with Art. 8, and the reasons for choosing the plan or programme as adopted, in the light of the other reasonable alternatives dealt with; and
- the measures decided concerning monitoring (Art. 9)

Monitoring of significant environmental effects of the plan or programme's implementation (Art. 10)

Quality assurance: environmental reports should be of a sufficient standard to meet the requirements of the SEA Directive (Art. 12.2)

Most European Member States, including the UK, are already carrying out partial SEAs of some of their plans and programmes. In the UK, "sustainability appraisal" of land use plans (development plans and regional planning guidance) is widespread; and there is sporadic application of SEA-type approaches for sectoral plans and programmes, particularly in the transport, minerals and water sectors. However these generally do not fulfil the full requirements of the SEA Directive.

The ODPM is currently consulting on draft guidance on how the SEA Directive should be implemented for local and regional land use plans: www.odpm.gov.uk. The draft guidance includes suggestions for how SEA and sustainability appraisal can be integrated.

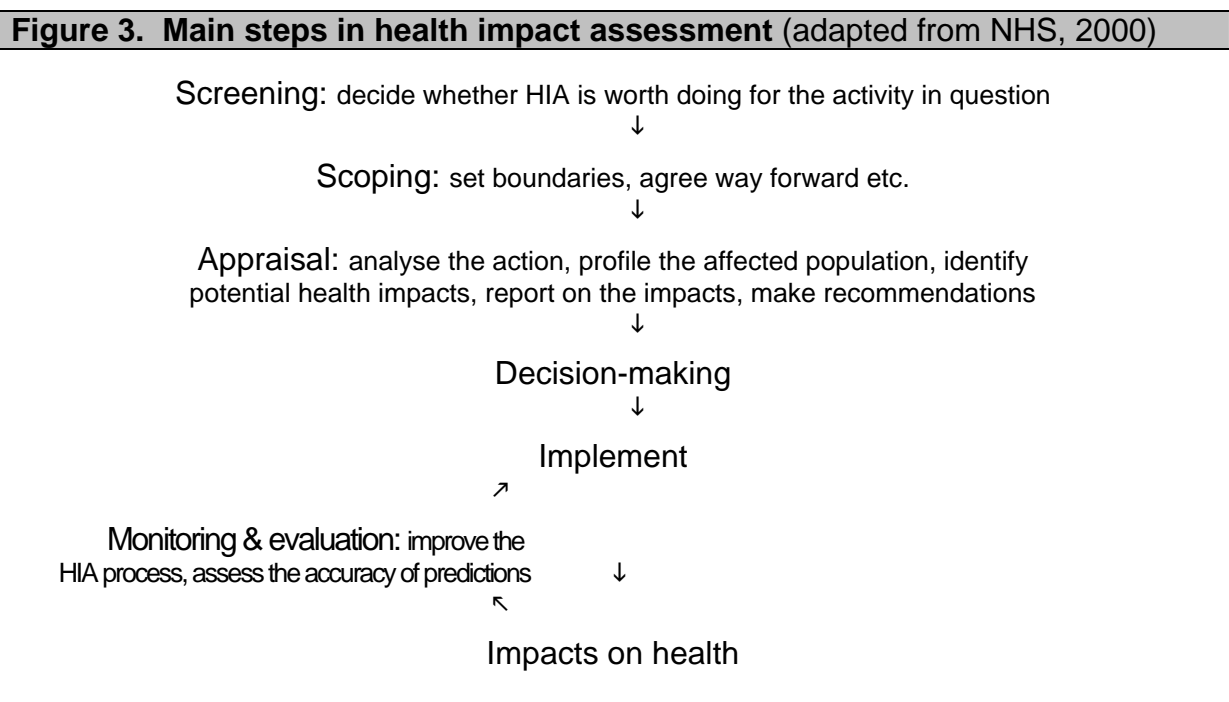
2.2 HEALTH IMPACT ASSESSMENT

Health impact assessment (HIA) is a decision-making tool that takes account of the potential effects of a proposal on the health of its target population. It:

- considers the scientific evidence about the relationships between a proposed policy, programme or project and the health of a population;
- takes account of the opinions, experience and expectations of those who may be affected by a proposed policy decision;
- highlights and analyses the potential health impact of the proposed policy decision;
- enables decision makers to make fully informed decisions and to maximise positive and minimise negative health impacts; and
- enables consideration of effects on health inequalities

(www.ohn.gov.uk/phn/making/impact.htm).

Figure 3 summarises the main steps in HIA.



HIA aims to improve the health of communities and individuals, reduce health inequalities, work towards sustainable development, promote fairness and equity for all, target disadvantaged and marginalised groups, and encourage participation of all affected. It can be used in policy development and analysis, commissioning health services, community development and planning, funding bids, and resource allocation. To date, it has been mainly used for Local Transport Plans (e.g. Devon LTP 2001-2006 Okehampton Local Area Programme; Integrated Transport Proposals for Ashcott and Walton (Somerset)), proposed housing developments and the development of health strategies.

The websites www.ohn.gov.uk and www.londonhealth.gov.uk give particularly useful information on HIA.

2.3 APPROPRIATE ASSESSMENT

The EU Habitats Directive (92/43/EEC) is the key mechanism for protecting biodiversity in European legislation. "Appropriate assessment" is required under Regulation 48 of the Habitats Regulations 1994, which implement Article 6(3) of the Habitats Directive. Figure 4 summarises the key steps in appropriate assessment.

Figure 4. Main steps in appropriate assessment (based on EN, 1997)

The competent authority:

1. Must consult English Nature and may consult the general public
2. Should identify and understand the site's conservation objectives - "*the reasons for which the site was classified or designated*" (PPG9) - having regard to the advice of English Nature
3. Should require the applicant to provide such information as may reasonably be required for the purposes of the assessment
4. Should identify the post-mitigation (residual) effects of the proposal, either alone or in combination with other plans and projects, on the habitats and species of international importance, and how those effects are likely to affect the site's conservation objectives. This will involve considering, for example, the nature, scale, geographic extent, timing, duration and magnitude of direct and indirect effects; the degree of certainty in the prediction of effects; mitigating measures already contained in the proposal and the extent to which these are likely to avoid, reduce or ameliorate adverse effects on the international nature conservation interests.
5. Should decide whether the plan or project, as proposed, would adversely affect the integrity of the site – "*the coherence of the site's ecological structure and function, across its whole area, or the habitats, complex of habitats and/or populations of species for which the site is or will be classified*" (PPG9) - in light of the conservation objectives
6. Should consider the manner in which the plan or project is proposed to be carried out, whether it could be modified, or whether conditions or restrictions could be imposed, so as to avoid adverse effects on the integrity of the site
7. Should conclude whether the proposal, as modified by conditions or restrictions, would adversely affect the integrity of the site
8. Should record the Assessment and notify English Nature of the conclusions

Appropriate assessment must be undertaken for any plan or project which, either alone or in combination with other plans or projects, would be likely to have a significant effect on a European Site. "European Sites" include SPAs, SACs, Ramsar sites, and Candidate SPAs and SACs. "Significant effects" can be direct, indirect, temporary or permanent, beneficial or harmful. The "integrity" of the site means "the coherence of the site's ecological structure and function, across its whole area, or the habitats, complex of habitats and/or populations of species for which the site is or will be classified". A "plan or project" located some distance away could still have significant effects on a site.

Plans and projects can only proceed if the competent authority determines, through appropriate assessment, that they will not adversely affect the integrity of European Sites; or if there are imperative reasons of overriding public interest and no alternative solutions are possible, in which case the Member State must take compensatory measures to ensure the overall coherence of the Natura 2000 network.

The main guidance on appropriate assessment comes from English Nature (1997) and the European Union (<http://europa.eu.int>). The Environment Agency have also recently produced methodology sheets on undertaking appropriate assessment: Appendices 11 and 12 (EA 2001a, b) from that guidance need to be completed by Environment Agency staff (under Section 50 of the Habitats Regulations) for assessing whether an extant consent (e.g. discharge or abstraction) is likely to have a significant effect on a Natura 2000 site (Appendix 11) and producing the Appropriate Assessment if it is needed (Appendix 12).

Appropriate assessments are often undertaken by external consultants, on behalf of the developer or the local authority. Examples of appropriate assessments undertaken in the South West include:

- Fussells Ironworks – A stand alone appropriate assessment was undertaken by Mendip District Council on the effects of the repairs and change of use of a building at Fussells Iron Works on the cSAC, listed for a population of Greater Horseshoe Bats. This assessment consisted of an A4 statement of likely effects and mitigation measures, and was prepared in consultation with English Nature.
 - A similar assessment for bats was carried out by Taunton Deane Borough Council at Hestercombe House near Taunton
 - The Environment Agency carried out an 'appropriate assessment' on the raising of water levels in Somerset Levels and Moors.
 - Environment Act Review of old mineral permissions for a china clay works in Devon, including appropriate assessment as part of the environmental assessment of projected extraction operations at three china clay workings in South Dartmoor and Devon. An appropriate assessments was undertaken as part of this assessment to assess the potential impacts on the adjacent South Dartmoor cSAC. A Scoping Study including an extensive desk study, was completed to determine the extent of the Environmental Assessment, and field surveys were also carried out at key locations. On one of the sites, additional advice was provided on the minimisation of damage to habitats during borehole investigations.
-

The assessments can vary considerably in terms of person-days and the costs involved, from a 1-page letter to a full report that may form part of an environmental impact statement. In part, such details will depend on the development proposal under consideration: the assessments should be appropriate to the proposal in question.

Scott (2002) suggest that the appropriate assessment process is subject to a lack of clarity and good guidance. For instance there is still confusion about when a project is 'likely to have a significant effect'; when a project will affect the integrity of a Natura 2000 site; what constitutes an adequate review of alternatives; and how compensatory measures should be implemented. Different parties interpret the regulations and answer these questions in different ways. They argue that there is a need to develop and agree a standardised nationally applicable strategy for appropriate assessment production in order to limit the extent to which such confusions end up hampering planning applications and ultimately compromising the conservation objectives of the Regulations themselves.

2.4 LINKS BETWEEN THEM

Clearly there are large areas of *overlap* between SEA, HIA and appropriate assessment. Their aims are similar: to respectively integrate environmental, health and nature conservation considerations in decision-making. Their methodologies are similar: description of the current baseline and proposal (policy, plan, programme or project), prediction and evaluation of the proposal's impacts, proposal of measures to mitigate negative impacts, public participation, and conveyance of that information to decision-makers on the assumption that more knowledge should lead to better decisions.

Figure 5 shows that there are also some *differences* between them. In the figure, the darker the cell, the more the assessment focuses on that stage. From this, it is possible to identify particular strengths of certain assessment processes which could usefully be transferred to others. These include:

- HIA's focus on distributional effects and disadvantaged groups, and its focus on public participation
- appropriate assessment's focus on cumulative and indirect effects
- SEA's focus on considering alternatives to the proposal, ensuring that the assessment results are integrated in decision-making, and monitoring

Because of its wider remit – it requires assessment of "*the likely significant effects on... biodiversity, population, human health, fauna, flora...*" - SEA has the potential to integrate HIA and appropriate assessment, although some aspects of SEA would need strengthening (see Figure 5). Advantages of linking SEA and appropriate assessment include:

- Wider habitat needs can be considered
 - Cumulative impacts on integrity can be more effectively considered
 - Economies of scale in mitigation planning can be achieved (eg coordinated action to achieve favourable condition)
 - Monitoring can be implemented ahead of project-level EIA and appropriate assessment
-

The World Health Organisation (www.who.int/en/) gives further information on integrating health impact assessment into SEA in *Health impact assessment as part of strategic environmental assessment* (2001). The report describes methods, procedures and practices to carry out health impact assessment of policies, plans and projects and highlights the similarities with and opportunities for integrating health impact assessment within strategic environmental assessments. It draws attention to the opportunities for achieving health benefits and avoiding health costs by considering health impacts early in the planning process.

Figure 5. Degree to which SEA, HIA and appropriate assessment require different elements of assessment (darker = more required)	SEA	HIA	AA
Screening (deciding whether assessment is needed)	based on type of proposal & effect on AA sites	based on effects on health	based on type of habitat/species
Preparation of an environmental report			
• main objectives of the proposal			
• relationship with other relevant proposals, and relevant environmental protection objectives			
• current state of the environment and likely evolution without implementation of the proposal		not explicitly	
• existing problems relevant to the proposal		not explicitly	
• likely significant effects biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage, landscape and interrelationship between the above		health only	(inter-) nationally important habitats & species only
• likely significant effects on equity, and on disadvantaged groups			
• consideration of secondary, cumulative, synergistic, short, medium and long-term, permanent and temporary, positive and negative impacts		not explicitly	
• measures to mitigate the proposal's adverse effects			
• reasons for selecting the alternatives dealt with			
Consultation			
• of other authorities			
• of the public			
• of other EU Member States where appropriate			
The report and the results of the consultations must be taken into account in decision-making			
Provision of information on the decision			
Monitoring of significant effects of the proposals implementation			

3. LAND USE PLANS

This chapter examines existing practice of environmental/sustainability appraisal of land use development plans to determine whether it fulfils the requirements of the SEA Directive. It considers first the appraisal *process*, and then the resulting *reports*. Traditionally such reviews have focused on reports. However, as the Somerset Structure Plan Review notes in its appraisal report:

'The sustainability appraisal process is not complete. It will continue through the progress of the plan to adoption, and beyond as the plan is monitored and subsequently reviewed, with additional refinements being made and reports produced as deemed necessary'.

This chapter concludes by identifying potential barriers to the implementation of the SEA Directive for land use plans, and suggesting ways to overcome them.

3.1 ENVIRONMENTAL/SUSTAINABILITY APPRAISAL OF DEVELOPMENT PLANS

Already in 1991 the Town and Country Planning (Development Plan) Regulations required local authorities to take account of environmental considerations when preparing their development plans. However, in the absence of guidance on how to do this, local authorities tried *ad hoc* processes for achieving integration of environmental considerations which were more popular than formal tools such as SEA. It was not until 1992, with the publication of PPG12: *Development Plans*, that local authorities were formally required to conduct an environmental appraisal of development plan policies.

In November 1993, the Department of Environment published *Environmental Appraisal of Development Plans: A Good Practice Guidance*. The guide aimed to provide guidance on what was 'practical and achievable' for local authorities with little previous experience of the appraisal process, and it was widely used in the following years by many local authorities. The guide defines the environmental appraisal of development plans as:

- 'an explicit, systematic and iterative review of development plan policies and proposals to evaluate their individual and combined impacts on the environment';
- 'an integral part of the plan making and review process, which allows for the evaluation of alternatives'; and
- 'based on a quantifiable baseline of environmental quality' (DoE, 1993).

In 1999, PPG12 was revised; it now advises authorities to consider a range of social and economic effects as well as environmental ones in their appraisal. This broader "sustainability appraisal" approach was welcomed by local authority planners as a '*better reflection of what the plan was trying to achieve*'. Sustainability appraisal may be simpler and less demanding than SEA, however they share a common approach and many similarities (Figure 6).

Figure 6. Comparison of the requirements of the SEA Directive and planning policy guidance and advice on environmental appraisal

SEA Directive Requirements	Appraisal guidance (PPG12, 1999) and advice (<i>Good Practice Guide (GPG)</i> , 1993)
The Report	
<p>Directive places a legal requirement for authorities to undertake the 'preparation of an environmental report...'. A copy of the environmental report... shall be made available to the environmental authorities and/or bodies concerned and the public concerned. The environmental report shall include a non-technical summary of the information contained within it (Art. 5).</p>	<p>'It is open to authorities to publish a separate report of the appraisal so long as the essential products of the appraisal are set out in the plan' <i>The Good Practice Guide</i></p> <p>In practice most authorities do produce an environmental or a sustainability appraisal report which documents the process and findings.</p>
Scope of assessment	
<p>Includes issues such as biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage including architectural and archaeological heritage, landscape and the interrelationship between these factors.</p>	<p>PPG12 encourages local authorities to consider economic and social issues in their appraisals (4.16).</p>
Scoping Stage	
<p>The competent authority shall consult the environmental authorities/or bodies concerned... when deciding on the scope and level of detail of the information which must be included in the environmental statement (Art. 3).</p>	<p>It is important at the beginning of the appraisal process to undertake a scoping study to review the range of issues to be considered and identify the important ones (PPG12; 4.20).</p>
Baseline Analysis	
<p>The information to be given is ... the relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan or programme (Art. 5 and Annex 1).</p>	<p>To start the appraisal process local authorities will need to be aware of the nature of the environment in the area the plan is to cover. Most local authorities will already have detailed knowledge of this, but it would be worth consulting <i><lists various bodies></i> for up-to-date information (PPG12; 4.19).</p> <p>The <i>GPG</i> sets out methods for characterising the environment – using environmental stock in appraisal.</p>
Alternatives	
<p>...reasonable alternatives taking into account the objectives and geographical scope of the plan or programme, are identified, described and evaluated (Art. 5 and Annex 1).</p>	<p>The <i>Good practice guide</i> defines an environmental appraisal as a process which 'allows for the evaluation of alternatives'.</p> <p>Alternative policies, proposals and locations for development should be evaluated wherever possible (PPG12; 4.20).</p>
Mitigation Measures	
<p>'the measures envisaged to prevent, reduce and as fully as possible offset any significant adverse effects on the environment of implementing the plan or programme' (Art. 5 and Annex 1).</p>	<p>'where policies or proposals are accepted despite their adverse environmental impact, ...the opportunity for some compensatory policies should be considered. This may come about through changes to other policies or by reference in the policy to matters of replacement or reinstatement to be sought by planning agreement as some compensation for the loss' <i>GPG</i>.</p>
Monitoring	
<p>Monitoring of the significant environmental effects of the plan or programme's implementation (Art. 10).</p>	<p>Plans should have key environmental and other indicators built into them which are capable of being monitored throughout the lifetime of the plan. These can then inform the review of plans and the need for subsequent alterations to policies, or the replacement of the plan (PPG12).</p>
Consultation	
<p>Consultation:</p> <ul style="list-style-type: none"> • of environmental authorities when deciding on the scope and level of detail of the information which must be included in the environmental report (Art. 5.4); • of environmental authorities and the public, which shall be given an early and effective opportunity within appropriate time frames to express their opinion on the draft plan or programme and the accompanying environmental report before the adoption of the plan (Art. 6.1, 6.2); • of other EU Member States where the implementation of the plan or programme is considered likely to have significant effects on the environment of those States (Art. 7). 	<p>Appraisals should be informed by and inform the work of other agencies involved in environmental issues, and involvement of outside bodies in the appraisal process can help to validate the whole appraisal process (PPG12).</p>
Results of the Consultations	
<p>The environmental report and the results of the consultations must be taken into account in decision-making (Art. 8)</p>	<p>The appraisal of the plan should be subject to public consultation, with the responses to consultation then used to inform the next stage of plan preparation (4.18, PPG12).</p>
Quality Assurance	
<p>Environmental reports should be of a sufficient standard to meet the requirements of the SEA Directive (Art. 12.2)</p>	

3.2 EXISTING ENVIRONMENTAL/SUSTAINABILITY APPRAISAL PROCESS

The results of the 2001 survey and follow-up questionnaire of September 2002 (see Section 1.3 for survey methodology) are summarised under three main headings:

- A. Extent of environmental/sustainability appraisal practice in England and the South West region;
- B. Links to health impact assessment
- C. Links to appropriate assessment;
- D. Resources used in undertaking appraisal;
- E. Effect on the plan.

Unless noted otherwise, the findings refer to all of the English and Welsh respondent authorities.

A. Extent of environmental/sustainability appraisal practice in England and the South West

Experience: By October 2001 over 90% of English and Welsh authorities had had some experience with appraisal, and of those that had not many had plans to undertake one in the near future. Figure 7 shows the number of authorities in England and Wales that had completed 1 or more EA/SAs by September 2001¹.

Figure 7. Number of appraisals completed for various types of plan in England and Wales				
	Number of authorities that have completed 1 or more appraisals			
Plan Type	1	2	3	4 or more
Structure Plan	22	7	2	
Local Plan	113	17	4	1
UDP Part 1	33		4	
UDP Part 2	32	1	3	
Waste Plan ²	11	1	1	
Mineral Plan	13			

Environmental v. sustainability appraisal: In England about half of the appraisals were considered to be 'environmental' and the other half 'sustainability'. This figure was not significantly different for authorities in the South West region. This figure may be somewhat arbitrary since several authorities said that they had done 'environmental appraisals' but had included social and economic issues.

Integral v. post-hoc appraisal: The survey supported the idea that appraisals conducted as an integral part of the plan-making process are considered by planners to be more worthwhile and allow for more effective integration of sustainability consideration than appraisals written largely after the plan has been prepared. Despite this nearly 50% of the plan appraisals were done after the plan was largely written.

¹ Since the response rate was not 100% this represents the minimum numbers of appraisals.

² Waste and mineral plan appraisals were sometimes combined

B. Links to health impact assessment (HIA)

There are many similarities between the HIA and sustainability appraisal, and there is ample scope for the principles of HIA to be integrated into sustainability appraisal. However, the survey and follow-up telephone discussions with a number of planners revealed that formal HIA is currently rarely carried out on development plans and development plan policies. The most frequently stated reasons for this is that 'there is no legal requirement to carry out HIA' and 'such expertise lies in other departments'.

However the follow up survey of South West local authorities revealed that 'health' is considered more generally as part of the overall plan/policy appraisal process through an examination of *environmental health* issues, such as noise and pollution (Figure 8). Indeed, many respondents commented that 'health and general well-being' was an integral part of sustainable development, for example as one respondent noted '*the benefits of reducing car dependence in urban areas, access to green open space, making walking and cycling safe etc, are all associated with health benefits*'.

Figure 8. Responses to the survey question: How (if at all) do you carry out Health Impact Assessment, either as a stand-alone exercise or as part of sustainability appraisal?
--

None/HIA not a requirement: (9 respondents); Part of sustainability appraisal/overall assessment process: (7 respondents); and Stand alone exercise: (1 respondent).
--

Other authorities addressed 'health' more specifically in the criteria used to appraise plan policies. For example Bath & North East Somerset Local Plan Sustainable Development Appraisal (2002) specifically asked '*will the policy promote and safeguard public health via (for example) improved environmental quality and reduce health risks (e.g. radiation, pollution); and .. enhance recreational facilities etc.*'

One respondent's advice to effectively consider health issues was to '*ensure a multi-disciplinary team with the help of appropriate experts conducts the sustainability appraisal and sets clear objectives and targets*'. However in practice people with health expertise were rarely consulted when plan policies were appraised.

C. Links to Appropriate Assessments

The survey of local authorities (see Figure 9) revealed that Appropriate Assessments are done through consultation with English Nature as stand alone exercises, sometimes as part of a project EIA.

Figure 9. How (if at all) do you carry out Appropriate Assessments under the Habitats Directive, either as a stand-alone exercise or as part of sustainability appraisal?
--

Done in consultation with EN/stand alone exercises: (6 respondents); Don't know/NA: (4 respondents); Part of sustainability appraisal: (4 respondents).

D. Resources used in undertaking appraisal

Guidance: The main guidance for local authorities is still *Environmental Appraisal of Development Plans: A Good Practice Guide*, used by over 90% of authorities. This is frequently the only source of advice planners get on appraisal. One of the most common comments about this guidance was that it was out-dated and that more specific advice was needed on undertaking sustainability appraisals. Some respondents also noted that consultation with other local authorities, and seminars and training were helpful.

Who carries out the appraisal: 83% of appraisal are undertaken in-house by planners themselves, and 14% involve the use of consultants. Figure 10 summarises this.

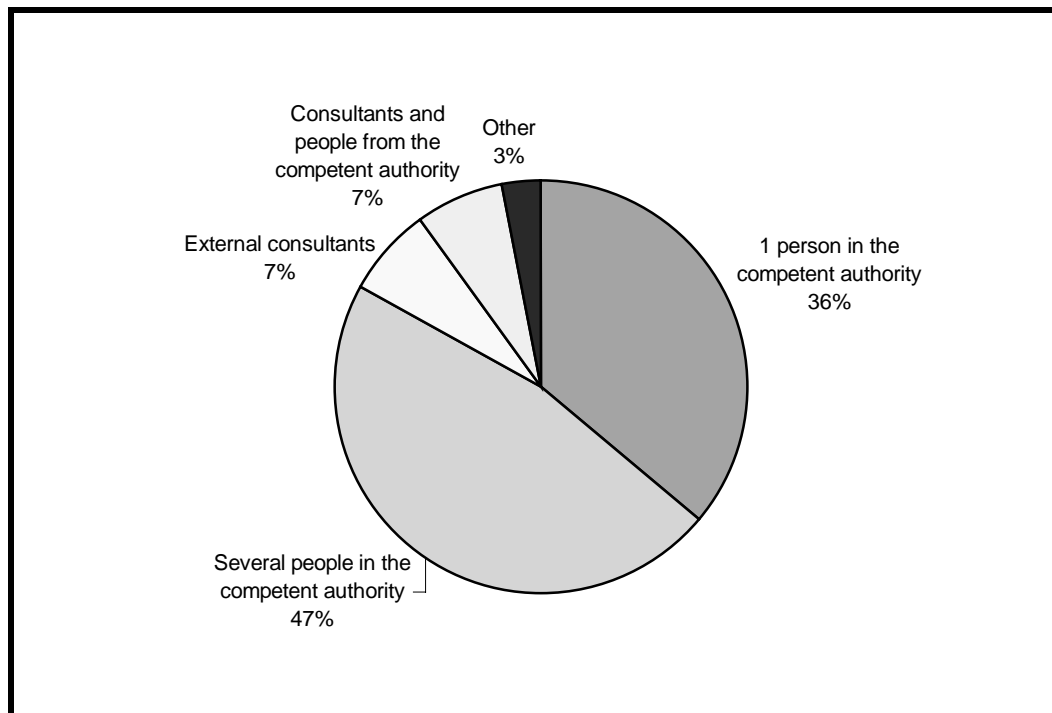


Figure 10. Who carried out the appraisal

Time involved: The mean length of person-days for an appraisal was 32 days, although some authorities took as much as 200 person days and others as little as 2 days.

Public consultation: 77% of respondents indicated that they did not consult the public as part of the appraisal process, as distinct from plan preparation and statutory consultation procedures. Numerous authorities stated that 'they placed the appraisal on deposit with the development plan' although the question sought examples that were distinct from statutory procedures. Consultation was also undertaken by other means, including:

- making the appraisal available on the internet and inviting comments;
- organising public meetings and workshops;
- direct mailing; and
- discussions with representatives of local community groups.

In the vast majority of cases where the public was consulted the response was described as ‘non-existent’, ‘poor’, ‘confused’ and ‘uninterested’, for example “very few people commented, of those that did – about half thought it was okay, the other half were cynical, i.e. planners wrote it, only 1 environmental officer involved etc”;

In sum, the resources currently committed to appraisal of land use plans are very variable: whilst some appraisals can take many person-days, as an integral part of the plan making process and involve various people, others may be done in a matter of days by just one person.

E. Effect on the plan

Although it may be hard to be certain of an explicit link between the appraisal and subsequent changes to the plan, over 70% of planners responding to the survey did indicate that the appraisal resulted in some change to the development plan (figure 11). This is important as it *suggests* that sustainability considerations are being integrated into the plan.

Figure 11. How the development plan was changed as a result of appraisal		
How the plan changed?	Number of responses	% of responses
Not changed	78	32
Policies added/removed	60	25
Policies changed	108	44
New approach to plan	16	7
Other	41	17

3.3 EXISTING ENVIRONMENTAL/SUSTAINABILITY APPRAISAL REPORTS

Five environmental/sustainability appraisals from authorities in the South West region were examined as part of this research to see how they already meet the requirements of the SEA Directive. They reflected a range of local authorities spatially and by authority type. They were:

- Somerset County Council. *Somerset Structure Plan Review - Sustainability Appraisal (date unknown)*.
- Exeter City Council. *Local Plan First Review Sustainability Appraisal (May 2000)*;
- Bristol City Council. *The Bristol Local Plan: Sustainability Appraisal (date unknown)*;
- North Dorset District Council. *Local Plan Environmental Appraisal and Sustainability Appraisal (Sept. 1997)*; and
- Bath and North East Somerset. *Local Plan (inc. Waste and Minerals) Sustainable Development Appraisal Summary (Deposit Draft 2002)*.

They were assessed against the requirements of Annex 1 of the Directive. Figure 12 summarises the results, and Figure 13 identifies elements of good practice from the South West.

Figure 12. How existing sustainability appraisal reports meet the Directive requirements

SEA Directive (2002/42/EC) requirements for environmental reports	Comments	
	★ = the sample EA/SAs rarely meet the SEA requirement ★★★★★ = the sample EA/SAs generally always meet the SEA requirement	
a) an outline of the contents, main objectives of the plan, and relationship with other relevant plans and programmes;	These are usually laid out in the appraisal or within the development plan document itself. References are commonly made to relevant higher/lower tier plans.	★★★★★
b) the relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan;	A baseline analysis of the environment is rarely undertaken, although those preparing the report are obviously familiar with the key issues for the area. Two of the five appraisals did recognise that there was a need for a baseline analysis.	★
c) the environmental characteristics of areas likely to be significantly affected;	Environmental characteristics are usually described within the plan itself, but there is rarely mention of areas significantly affected by the plan.	★
d) any existing environmental problems which are relevant to the plan including;	Not always considered within the appraisal, although may be considered further in the development plan.	★
e) the environmental protection objectives;	Generally well considered. For example, Exeter Local Plan Review scoped the plan against a number of sources including: A Better Quality of Life; Sustainable Development: Towards Better Practice; PPG 1, 3 (and draft), 9, 12, (and revised) 13 (and draft), 14, 22, 23, and 24; RPG 10, Exeter City Council Agenda 21 and Housing Strategy.	★★★★★
f) the likely significant effects on the environment, including on issues such as biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage including architectural and archaeological heritage, landscape and the interrelationship between the above factors;	Focus is primarily on environmental objectives. Issues such as impact on human health is rarely considered as a separate issue, but seen as part of the general sustainability criteria. Existing environmental appraisals may not be as broad in scope as the Directive's requirements, but generally the sustainability appraisals will have consideration for the full range of issues.	★★★★★
g) the measures envisaged to prevent, reduce and as fully as possible offset any significant adverse effects on the environment of implementing the plan;	Some appraisals identify significant adverse impacts, but do not make reference to how these were mitigated, if at all – this may be because a number of the appraisals were undertaken on already completed plans. Other appraisals seem to justify negative scores without examining or openly exploring possible mitigation measures.	★★
h) an outline of the reasons for selecting the alternatives dealt with, and a description of how the assessment was undertaken including any difficulties (such as technical deficiencies or lack of know-how) encountered in compiling the required information;	Appraisals generally provide a good description of how the assessment was undertaken, although few indicate whether any difficulties were encountered. However, Bristol does make useful recommendations from its experience with appraisal. Alternatives are rarely considered as part of the appraisal, which may be a reflection of the nature of appraising plans already completed. Somerset Structure Plan Review did consider three strategic options for development against a range of sustainability objectives (p.7-8).	★★
i) a description of the measures envisaged concerning monitoring;	Links with monitoring progress/indicators are generally weak, with relatively few exceptions. Although, the Sustainability Appraisal of the Bristol Local Plan did suggest steps for setting requirements for monitoring.	★
j) a non-technical summary.	Not all the appraisals examined provided a summary or conclusion, or mentioned the effect of the appraisal on the plan, and even fewer provided a glossary of terms or non-technical summary. Although Exeter Local Plan Review Sustainability Appraisal (2000) was an exception providing a glossary of terms, and the key findings relevant to each chapter of the plan.	★★

Figure 13. Good practice in the environmental appraisal of development plans		
Good/best practice examples	Local Authority³	Comments
Process		
Done as an integral part of the plan preparation process	Exeter	
Involved a range of people and expertise	B&NES	The appraisal was carried out in groups of 3-5 people, with a range of expertises represented in each group. Each group also contained either a consultant or the sustainability appraisal co-coordinator for B&NES. In some cases the planner that wrote policy was not in the group that appraised the policy.
Consultation with relevant authorities and the general public	Bristol	
Report		
Integrated sustainability factors into the appraisal	B&NES	Included themes such culture, education and equality as well as safety and security
Provided baseline information on the sustainability themes (e.g. transport and biodiversity)	Somerset (Appendix 2)	Included a 6-page summary of important baseline trends, such as levels of car ownership, % of woodland cover river quality and so on.
Extensive well documented scoping exercise conducted early in the plan making process and continued at subsequent stages in the adoption process	Exeter	Plan was scoped against PPG's, relevant Government consultation papers, advice notes as well as other relevant local documents such as Exeter Local Agenda 21 and the Environmental Strategy.
Cited criteria for selection of indicators	Bristol (p.18)	Included 10 criteria such as - the indicator should be readily available at reasonable cost; must be about something measurable; and so on.
Indicators specifically adapted to reflect local circumstances	Exeter	The indicators encompassed: global sustainability, natural resources, local environmental quality, and social and economic considerations.
Use of symbols (☺ ☹) to appraise plan policies/proposals	Exeter	The policies/proposals are not scored or weighed but are instead marked according to their weight of impact upon each of the key indicators. The marking system presents no hierarchy of policy and enables judgements about effectiveness and robustness to be individually analysed.
Commentary approach to appraisal of policies and proposals	Exeter	Uses an extensive commentary approach to appraise policies - highlights the need for the policy and the main advantages and disadvantages, also summarises the key findings of the approach. Also appraises proposals for employment and housing sites.
Monitoring regime proposed / suggested		
key proposals to change the plan identified and recorded		
Well presented and easily understood	Bristol	The report was published in preparation for a programme of public consultation on possible changes to the Bristol Local Plan.

Sustainability appraisal of development plans is now common practice in the UK. Best practice techniques have been steadily evolving, and the effectiveness of appraisals and the quality of such reports has been improving. Indeed, appraisal reports prepared under current advice and guidance would meet the requirements of the Directive in several areas, including by describing:

- the environmental protection objectives;
- the likely significant effects on the environment including on issues such as biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage including architectural and archaeological heritage, landscape and the interrelationship between the above factors;
- the main objectives of the plan and its relationship with other relevant plans and programmes; and by
- giving the public an opportunity to express their opinion on the draft plan or programme and the accompanying environmental statement before the adoption or submission to the legislative procedure of the plan or programme.

However, there are areas where existing practice would not meet the requirements.

Sustainability appraisal reports often:

- do not describe the baseline environment;
- include no or limited consideration of alternatives (e.g. proposals for employment sites);
- do not make rigorous quantitative predictions;
- offer little in the way of clear mitigation measures; and
- may not require the production of a written report

The appraisal reports also offer little insight into wider elements of the appraisal process, for instance:

- how the plan's objectives will be monitored; and
- how the public have been consulted.

3.4 POTENTIAL BARRIERS TO SEA

The questionnaires, interviews and reviews of environmental reports identified a range of institutional/political and methodological barriers to the implementation of the SEA Directive. Planners may not be very familiar with the requirements of the Directive, so barriers to effective sustainability appraisal were also examined. A summary of the main barriers is shown in Figure 14.

The most commonly identified barriers were:

- Resources (staff/time). Many respondents commented on the time demands of appraisal and a few authorities felt that they needed more resources to undertake the appraisal task efficiently, for instance *'Allocating resources, given targets for fast track plan preparation. Understanding of process, particularly at member level. Level of skills available to undertake appraisal'* (Cotswold District Council). Figure 15 lists measures that the respondents suggest could make the process of appraisal more manageable

Figure 14. Main barriers to the implementation of the SEA Directive for development plans, and how these are being addressed		
Barriers to implementation	Identified through	Ways in which the issues are being or can be addressed
Institutional/Political		
Ignorance/political will	2001 & 2002 Survey	Dissemination of advantages of SEA to stakeholders and decision-makers
Perceptions of SEAs ineffectiveness	2001 survey	Dissemination of advantages of SEA to stakeholders and decision-makers
Tiering of plans and programmes – how do they all link together and relate to one another?	Pilot studies	
Procedural/methodological		
Familiarity with the Directives' requirements	2002 survey	Phase 3 of this study will promote good SEA practice and advice on implementing the Directive. All local authorities in the South West have received a 1-page summary of the SEA requirements.
Guidance on implementing the Directive and on undertaking SEA	2001 & 2002 survey	The ODPM is publishing guidance on implementing the SEA requirements for land use plans.
Lack of best practice methods	2001 & 2002 survey	Phase 3 will include dissemination of best practice methods.
Complexity of tasks and lack of technical expertise	2001 & 2002 survey, pilot studies	Training events, SEA workshops & seminars, dissemination of good practice etc.
Need for extra resources	2001 & 2002 survey	ODPM are providing extra resources to local authorities from 2003/4 to implement the Directive. However these are not hypothecated to SEA.
Lack of effective public consultation and involvement	2001 survey	Techniques need to be explored as to how to best involve the public.
Lack of baseline information and issues with data collection	Phase 1 of this study, 2002 survey	See Phase 1 recommendations
Lack of monitoring measures	Analysis of appraisals and pilot studies	Addressed in SEA guidance
Dealing with subjectivity and uncertainty	2001 survey, pilot studies	Phase 3 dissemination of results and best practice, ODPM SEA guidance.
Quality control	Pilot studies	ODPM SEA Guidance and Phase 3
Other		
Inadequate time and effort afforded to the process – resulting in ineffective appraisal exercise	2001 survey	Guidance on time and resources that should be committed to get an effective appraisal

Figure 15. Summary of advice from local authorities on how to make the sustainability appraisal process more manageable and effective

- Start early
- Integrate into plan preparation
- Do not underestimate the time that is needed
- Keep it simple, be pragmatic
- Use a standardised approach/model
- Read the guidance, see what others have done, go on a training course
- Try and involve someone independent from the development plan team
- Involve more than one person and all chapter authors
- Involve people from all parts of the council – and get out of the office!
- Talk to adjacent authorities about the usefulness of the techniques
- Make the results as meaningful as possible – rather than just ticks and crosses
- Spend time considering sustainability issues throughout plan preparation rather than learning it all in a separate appraisal at the end

- Guidance: The main complaint was about lack of sufficient guidance from central government as to how the SEA Directive relates to present statutory regulations (e.g. Town and Country Planning Acts) for the preparation of development plans.
- Lack of information (e.g. baseline information): *‘Lack of detailed survey information about the characteristics of the environment may prove a barrier. This may in turn limit the ability to assess the impacts of strategic proposals.’* (Swindon Borough Council).

Although many of the perceived barriers may seem rather predictable, they are nonetheless very real and have significant potential to pose problems for implementing the Directive's requirements effectively. Some of these are being addressed, for instance by the ODPM's publication of guidance on applying the SEA Directive to English land use and spatial plans, and the promotion and dissemination of good practice of by the South West Regional Assembly (as part of Phase 3 of this project).

However, other barriers remain to be addressed. Possibly the greatest barrier to effective SEA is the lack of political will and the perception that the process is a waste of time and resources and just another hurdle, as one planner from the South West commented *“can't ever see how it really helps. It's like methodically writing out the obvious. Can't see where clarity is gained from such simplicity... don't expect it to provide answers or solutions. Its most important role might just be to get people to talk about CO2 emissions”*. This lack of commitment and faith in the process could lead to the SEA and the resultant environmental report having little influence over integrating environmental considerations into the plan. This issue is being addressed partly through making SEA of development plans a legal requirement, but also through dissemination of best practice. However, it may be that the most effective way to address misunderstandings of what advantages the process can bring is through planners sharing their own experiences of the SEA process and its associated outcomes. The effectiveness of the SEA process and planners' experiences with it should thus be monitored and reviewed closely.

Unlike many 'sectoral' SEA practitioners (e.g. in telecommunications and tourism), land use planners have been formally required to take environmental considerations into account in plan-making in a systematic and strategic way for more than a decade. During this time many have been developing best practice methodologies, sharing experiences and pushing the sustainable development agenda forward. Although the implications of the Directive will mean *more work*, planners are certainly well-placed to meet these demands.

Local authority planners not only have the basic SEA appraisal system already in place, but they also have the foundations on which to meet the more challenging Directive requirements. For example, in most councils the basic expertise can already be found, for instance in Economic Planning, LA21, Local Authority Health Officers, and so on. Many also already have access to extensive baseline data (Census Data, Maps, GIS etc).

Those having the greatest difficulty in implementing the SEA Directive may thus well be those practitioners in sectors such as tourism, energy and telecommunications. Such sectors are discussed in the next chapter.

4. SECTORAL PLANS AND PROGRAMMES

This chapter examines existing SEA-type practice for six of the ten sectors identified by the Directive: agriculture, energy, minerals (as a subset of industry), tourism, transport and water. Sectors *not* addressed are fishery, forestry, industry other than minerals, telecommunications, waste management and other sectors likely to have significant effects on the environment.

It was not possible to examine all of the ten sectors within the limitations of this study. Six sectors were chosen which were felt to be significant for the South West, and which represent a range of approaches:

- for some, planning is primarily carried out by public bodies (e.g. transport, minerals) whilst for others it is primarily done by private organisations (e.g. energy, agriculture);
- for some, planning is primarily at the international/national level (e.g. agriculture, energy), for others the main level is regional (e.g. water, minerals) or site (tourism);
- for some there is considerable existing SEA experience (e.g. transport, water) whilst for others there is little (e.g. agriculture, tourism).

For each sector, the chapter considers

- what plans and programmes could require SEA (this is illustrative rather than comprehensive);
- what SEA-type procedures have already been carried out in the UK for that sector and how well they fit with those of the SEA Directive;
- links to health impact assessment and appropriate assessment; and
- potential barriers to implementation of the Directive and ways of overcoming these.

The first of these issues is a key consideration. As was mentioned in Chapter 2, the SEA Directive requires SEA to be carried out for plans and programmes for agriculture, forestry, fisheries, energy, industry, transport, waste management, water management, telecommunications, tourism, town and country planning or land use that are:

- required by legislative, regulatory or administrative provisions (Art. 2); and
- likely to have significant environmental effects (Art. 3.1); and
- set the framework for future development consent of projects that require environmental impact assessment; or require appropriate assessment (Art. 3.2).

For each sector, an initial assessment is made of whether plans and programmes would be subject to SEA under this definition. Matrices show which criteria are likely to be fulfilled by which plans and programmes, and shaded cells shows those plans and programmes that seem to fulfil all of the above criteria. Appendix 1 shows a corresponding list prepared by the RSPB (2002), based on general consensus views.

Both the tables in this chapter and the RSPB's list provide initial classifications for discussion purposes only, not agreed comprehensive lists

This chapter is based on the results of the workshop of 2 October, subsequent telephone interviews, and a Web search. ***It is not comprehensive!*** However it does identify key issues and barriers which will be considered further in Chapter 5.

4.1 AGRICULTURE

What plans and programmes could require SEA

Most agricultural plans and programmes (as opposed to other types of plans and programmes that have an agricultural component) are developed at the European or national level and implemented at the level of individual farms: Common Agricultural Policy subsidies, agri-environment schemes, Foot and Mouth related activities, etc. Regional and local level land use plans affect agricultural operations by, for instance, supporting diversification or preventing certain types of agricultural development in certain areas.

Figure 8 shows agricultural plans and programmes that could *potentially* require SEA, and whether they fulfil the screening criteria of the SEA Directive. The shaded cells indicate plans and programmes that could be subject to the SEA Directive.

Figure 8. Agricultural plans and programmes that could require SEA <i>This figure is not comprehensive, and the cell contents are not definitive</i>				
	formally required to be prepared by national, regional or local authority	likely to have significant environmental effects	sets framework for future devel. consent of projects listed in EIA Directive	could affect site under Habitats Directive
Europe				
Common Agricultural Policy (CAP)	yes	yes	no	yes
Directives affecting agriculture, e.g. nitrates, control of fertilisers, nitrate vulnerable zones, Water Framework Directive	yes	yes	no	yes
UK/England				
England Rural Development Programme (RDP), strategies on diversification, biofuels etc.	no	yes	?	yes
Countryside and Rights of Way Act	no	yes	no	yes
Implementation of CAP in UK, Hill Livestock Compensating Allowances (HLCA)	no	yes	yes	yes
Foot and Mouth Recovery Framework	no	yes	?	yes
Contingency Plan for Foot and Mouth	no	yes	no	yes
Strategy for Sustainable Food and Farming (due autumn 2002)	no	yes	yes	yes
Review of English agri-environment schemes: Environmentally Sensitive Areas, Countryside Stewardship, Hill Farm Allowance, Farm Woodland Premium Scheme (due Dec. 2003)	no	yes	?	yes
Countryside Agency plans	?	yes	?	yes
Regional/local				
National Park mgmt. plans (agric. component)	yes	yes	yes	yes
AONB plans (agricultural component)	yes	yes	yes	yes
RPGs and development plans (agric. component)	yes	yes	yes	yes
SW chapter of RDP	no	yes	?	?
SWRDA Rural Action Plan	?	yes	?	?
Foot and Mouth recovery plans (e.g. Devon)	no	yes	?	?
Site				
Application for agri-environment schemes	no	yes	no	yes

Plans for development of semi-natural habitats	yes	yes	no	yes
--	-----	-----	----	-----

Agricultural plans and programmes prepared at the European level do not set the framework for future development consent. Those at the national level are not legally required (but should they be?). Those at the site level doesn't set framework for future development consent. Only the *agricultural components of non-agricultural plans and programmes at the regional and local levels* fulfil all the Directive's criteria.

What SEA-type procedures are already being carried out and how well they fit with those of the SEA Directive

A DETR-funded report of 1998, *Environmental Effects of Agriculture*, gives a broad-brush SEA-type overview of the entire agriculture sector.

In addition to sustainability appraisal carried out for local and regional authorities (see Section 3) and National Parks (e.g. Dartmoor), we are only aware of two SEA-type analyses carried out for agricultural strategies:

- Environmental appraisal of CAP direct aids, sugar beet regime and dairy regime in UK (DEFRA, 2002, <http://www.defra.gov.uk/farm/sustain/envimpacts/directaids.pdf>), and precursor documents by the Joint Nature Conservation Committee (for the CAP) and Centre for Rural Economics Research (for set-aside). This was a voluntary broad-brush qualitative assessment of the key environmental, landscape and heritage impacts of agricultural subsidies, particular CAP and set-aside.
- Sustainability appraisal of 16 organisations' submissions to the Policy Commission on the Future of Food and Farming (Sustainable Development Commission, 2001, <http://www.sd-commission.gov.uk/pubs/pcfff/pdf/pcfff.pdf>). This appraisal was commissioned by an organisation which was not the decision-maker.

The two appraisals did not discuss the environmental baseline, covered mitigation measures in a very limited way, and were not subject to public consultation.

Life cycle analyses have also been carried out for various agricultural products. These consider, for instance, whether biofuels are a more eco-efficient way of producing energy than using North Sea oil.

Links to health impact assessment and appropriate assessment

The appraisal of the policies for farming and food identified a wide range of health issues related to agriculture: food health and safety (healthy diet, chemical residues, GMOs etc.); food affordability; access to rural services; age balance of the rural community; deprivation; animal welfare (health of animals); and the distributional effects of different impacts.

Appropriate assessment could apply to individual agricultural developments (e.g. proposals to drain or raise land). Environmental impact assessment regulations of early 2002 aim to protect semi-natural habitats.

Potential barriers to implementation of the Directive and ways of overcoming these

Agriculture is included in Directive's scope, but it is difficult to identify statutory strategic plans and programmes in these sectors that would fall under the Directive's requirements: should there be such plans and programmes? should the UK broaden the criteria for applicability of SEA? should the national level plans and programmes be treated as formally required and thus subject to SEA?

A particular issue for agriculture is that plans and programmes (which for agriculture are mostly national-level) have very different effects for different agricultural sub-sectors, e.g. pig and poultry, dairy, beef and sheep, arable and horticulture. To a related but lesser extent, it can also have different effects on different regions. Equity issues – between sectors and regions - can thus be significant in agriculture SEAs.

4.2 ENERGY

What plans and programmes could require SEA

Few energy plans and programmes are formally *required* in the UK, although many are prepared. The privatised nature of energy generation means that energy programmes – the level of planning just above projects – are prepared, if at all, by the energy generating companies. Government plans and policies set the context for the activities of the energy generating companies: constraints in the form of charges and licensing/consents regimes, and carrots in the form of grants, targets, etc. Most are unlikely to directly set the framework for future development consent of projects.

Figure 9 shows energy plans and programmes that could *potentially* require SEA. The shaded cells indicate those plans and programmes that could be subject to SEA under the SEA Directive.

Figure 9. Energy plans and programmes that could require SEA <i>This figure is not comprehensive, and the cell contents are not definitive</i>				
	formally required to be prepared by national, regional or local authority	likely to have significant environmental effects	sets framework for future devel. consent of projects listed in EIA Directive	could affect site under Habitats Directive
UK/England				
Energy White Paper	?	yes	yes	yes
Strategy for Combined Heat and Power	no	yes	?	no
Renewables Obligation Order 2002	?	yes	?	?
Home Energy Conservation Act and similar legislation	?	yes	no	no
Building control regulations (energy (efficiency) component)	?	yes	no	unlikely
Negotiated agreements, ETS, EEC, Warm Front, appliance standards, differential VED, Section 36 consents, NETA				
Capital grants for offshore wind, energy crops etc.	?	yes	yes	yes
Offshore oil and gas licensing	?	yes	yes	?
Consents process for offshore wind or water driven generating sites etc.	?	yes	yes	?
Regional/local				
Energy Strategy for London, Renewable Energy Strategy for the South West, etc.	?	yes	?	?
Energy companies' programmes for power generation, construction or expansion of distribution networks etc.	?	yes	yes	yes
Home Energy Conservation Act Reports	yes	yes	?	no
Regional/local strategies on windfarm siting etc.	no	yes	yes	yes
RPG/development plans (energy component)	yes	yes	yes	yes
Site				
Large energy projects, e.g. offshore windfarms	yes	yes	no	yes

What SEA-type procedures are already being carried out and how well they fit with those of the Directive

The only formal energy SEAs carried out in the UK to date have been those for offshore oil and gas licensing (www.habitats-directive.org): in fact, the DEFRA website on SEA is the website for the oil and gas licensing SEAs. These have been broadly based on the requirements of the SEA Directive: they are very comprehensive, with detailed baseline data and extensive consultation (detailed website, expert meetings etc.).

Many of the requirements of SEA seem to be met by (some of) the regional renewable assessments that were completed in 2000/2001. For instance the South West regional renewable assessment follows the general principles of the SEA Directive: "1. preparation of an environmental report, 2. consulting with the public and relevant authorities, 3. taking the report and consultation responses into account in decision-making, and 4. providing information on the decision (Art. 2(b))". The regional renewable energy assessments have and will form the basis of renewable energy policies in some/all RPG and development plans.

Links to health impact assessment and appropriate assessment

Energy strategies have the potential to affect *health* in many ways including risk of low-level nuclear releases and more serious nuclear accidents; potential risks from electricity transmission (including concerns about electromagnetic effects of high tension cables); fuel poverty; noise and risk from windfarms; oil spills; and air pollution and climate change. The oil and gas licensing SEAs do not consider health effects.

Arguably HIAs should take account of positive as well as negative health effects. For example, renewable energy projects displace electricity generation from conventional sources and thus avoid emissions which are linked to poor health. If done well, HIA could represent one way of addressing and valuing the externalities of conventional forms of generation - nuclear and fossil fuels. However, a comprehensive HIA would require much funding and robust guidance regarding how, for example, one balances the impacts (positive and negative) on health caused by a project which, say, simultaneously increases localised noise levels and reduces global emissions of CO₂, NO_x, SO₂.

Appropriate assessment is likely to take place at the project, not the strategic, level.

Potential barriers to implementation of the Directive and ways of overcoming these

<u>Barriers to implementation</u>	<u>Possible solutions</u>
Lack of understanding of the Directive, lack of good practice information	guidance, workshops/seminars, regional groups to oversee or promote good practice
Unclear what plans and programmes are covered	list of what is and is not covered; sector-specific workshops and information
Lack of baseline data	Provision of data
Lack of a single point of reference or environmental assessment regulator	Directory of experts who could provide advice, national commission to act as quality control regulator
Commercial interests prevent partnership	Advice to sectors from environmental experts or regional organisations
Involving the public in consultation	Process itself promotes transparency
Perceived overlaps with other directives and procedures	Education, training, awareness raising

4.3 MINERALS

What plans and programmes could require SEA

Compared to the other sectors covered in this report, the minerals sector is subject to relatively few plans and programmes, and these follow a relatively clearly-defined hierarchy from the national to the site level. Figure 10 summarises these plans and programmes. The shaded cells indicate those plans and programmes that could be subject to SEA under the SEA Directive.

Figure 10. Minerals plans and programmes that could require SEA <i>This figure is not comprehensive, and the cell contents are not definitive</i>				
	formally required to be prepared by national, regional or local authority	likely to have significant environmental effects	sets framework for future devel. consent of projects listed in EIA Directive	could affect site under Habitats Directive
UK/England				
Minerals Planning Guidance	yes	yes	no	?
Marine dredging of aggregates	no	yes	?	yes
Regional/local				
Decisions by Regional Aggregates Working Parties (RAWPs) RPG (minerals component)	?	yes	?	?
Minerals local plans; combined waste and minerals plans	yes	yes	yes	yes
Site				
Large minerals projects, e.g. superquarries	no	yes	no	yes

What SEA-type procedures are already being carried out and how well they fit with those of the Directive

The minerals sector has a fairly good track record of SEA-type activities. There is considerable local-level SEA-type experience, and environmental impact assessments of individual minerals projects are normally of high quality. However this is not supported by SEA of the national and regional level strategies that set the context for local plans.

Arguably the first priority should be to assess national demand: this is covered by *national*-level Minerals Planning Guidance Note 6, which has not been appraised.

Key decisions on volumes and distribution of aggregates are taken at the *regional* level by Regional Aggregates Working Parties (RAWPs): again, these have not been appraised. Regional Planning Guidance was subject to sustainability appraisal. Debate at the regional level tended towards promotion of a more 'local' reflection of the balance between minerals working and the impacts on the environment.

There is considerable experience of sustainability appraisal of *minerals local plans* and *combined waste and minerals plans*. These include:

- Environmental appraisals of *Berkshire's* replacement minerals local plan (1995 and 2000). The 1995 appraisal was carried out in-house in the very late stages of plan-making and did not influence the plan; the 2000 appraisal was also carried out in-house and influenced the plan.
- "Strategic environmental appraisal" of the Deposit Draft of the *Cornwall* Minerals Local Plan carried out on plan 5 years ago. The appraisal was done in-house and did influence plan production. But 6 years old – carried out on the Deposit Draft. The plan is now being reviewed.
- Sustainability appraisal of the *Devon* Minerals Local Plan (2001): this was carried out in-house and showed that the plan had been changed as a result of the appraisal.
- Environmental appraisal of the *East Sussex* minerals local plan consultation draft (1996). It was carried out in-house, and led to changes in the plan.
- Environmental appraisal of *Lancashire's* minerals and waste local plan 2006 by consultants.
- Environmental appraisal of the *Shropshire* Minerals Local Plan (1996).
- Strategic environmental assessment (not appraisal) of the *Somerset* Minerals Plan, carried out recently. This includes recommendations on setting up a data base and indicators. It also included two rounds of consultations and a minerals workshop involving MPA officers/members NGO's and district council representatives.

Other appraisals include those of minerals (or minerals and waste) local plans for Buckinghamshire, Derbyshire, Dorset, Durham, East Sussex and Brighton and Hove (www.eastsussexcc.gov.uk/env/minerals/appendix1/pdf), Gloucestershire, North Yorkshire, and Wiltshire and Swindon.

The minerals industry has a good track record of carrying out environmental impact assessments of *sites*. A key issue with minerals is that they can only be worked where they occur. Because minerals are often found in remote locations they can be a key employer; but some modern quarrying operations are highly automated (e.g. quarrying unit with 100,000 tonnes/year output but only 4 employees).

The Quarry Products Association commissioned an SEA of aggregate quarrying in National Parks of England and Wales (2000). This considered landscape, biophysical, traffic and socio-economic impacts; alternatives to quarrying in National Parks; and 'winners' and 'losers'. It did not involve public consultation.

The Taunton SEA workshop identified a need to develop a hierarchy of assessments from SEA of Regional Strategies, to mineral development frameworks at County level, and ultimately to Mineral Local Plans (or frameworks). Doing a good SEA would help with scoping – defining the limits – for project EIA, but would not obviate the need for EIA.

Links to health impact assessment and appropriate assessment

Health issues are important to mining communities, e.g. history of tin and lead mining in Cornwall, and studies on health anomalies (e.g. asthma) in China clay areas. Minerals have also been traditionally linked to waste disposal, with issues of water contamination, methane emissions etc.

However health impacts have generally been poorly considered in SEA-type studies to date. Of the nine SEA reports available to us, only Devon's sustainability appraisal specifically mentioned health. However it made up for everybody else's omissions by its very thorough list of possible health impacts of mining:

- effects on communities: noise; dust and related health impacts such as asthma
- pollution impacts: drainage from mineral sites; sediment run off from mineral sites; pollution from mineral operations in river beds; effluent from mineral processing operations; sewage effluent from the site; oil and fuel spills; soil contamination from treatment residues and spillage of chemicals; leaching of pollutants from tailings, disposal areas and contaminated soils; air emissions from mineral processing operations; dust emissions from sites close to living areas or habitats
- occupational health impacts: handling of chemicals, residues and products; dust inhalation; fugitive emissions within the plant; air emissions in confined spaces from transport, blasting and combustion; exposure to heat, noise and vibration; physical risks at site or plant

None of the nine SEAs included an appropriate assessment. It is unclear whether appropriate assessment has been carried out for individual mineral extraction sites. English Nature plays a key role in setting minerals policy in the South West, for instance in interpreting the Habitats Directive in relation to the Severn Estuary.

Potential barriers to implementation of the Directive and ways of overcoming these

Barriers identified at the Taunton SEA workshop are: ignorance about SEA, poor data availability, and administrative inertia.

The workshop participants noted that the minerals sector has the necessary technical expertise to carry out SEAs; that the Minerals Planning Authorities are the obvious organisations to carry out the SEAs (but that all authorities should sign them off); and that full consultation should take place for the draft regulations implementing the SEA Directive for the minerals sector.

4.4 TOURISM

What plans and programmes could require SEA

We were unable to identify any tourism plans and programmes that would clearly fall under the remit of the SEA Directive, although the tourism component of land use plans would. Figure 11 summarises these plans and programmes. The shaded cells indicate those plans and programmes that could be subject to SEA under the SEA Directive.

Tourism strategies at all levels – from national to local -- put forward principles for increasing tourism revenue and managing tourism impacts through marketing, branding, etc., rather than specific proposal for tourism developments. They would probably be termed 'policies' rather than plans or programmes. Unlike other sectors, there does not seem to be a progression from more strategic strategies ('policy') to more specific ones ('plan, programme, project') as the scale of the area decreases.

Figure 11. Tourism plans and programmes that could require SEA <i>This figure is not comprehensive, and the cell contents are not definitive</i>				
	formally required to be prepared by national, regional or local authority	likely to have significant environmental effects	sets framework for future devel. consent of projects listed in EIA Directive	could affect site under Habitats Directive
UK/England				
Tomorrow's Tourism (national tourism strategy)	no	yes	no	?
England Rural Development Programme (tourism component)				
Foot and Mouth Recovery Framework, Contingency Plan for Foot and Mouth etc. (tourism component)	?	yes	?	yes
Countryside and Right of Way Act	no	yes	no	yes
Regional/local				
Regional, county, local tourism strategies (e.g. East of England, South West, Leicestershire, Cheshire, Cambridge, York, Chester); can link to local plans	no	?	?	yes
National Park Management Plans (tourism component)	yes	yes	yes	yes
RPG and development plans (tourism component)	yes	yes	yes	yes
Rights of Way Improvement Plans, Footpath Plans	?	yes	no	yes
Management plans for National Nature Reserves, AONBs (e.g. Mendip, South Devon), etc. (tourism component)	?	yes	yes	yes
Site				
Management plans for World Heritage Sites (e.g. Jurassic Coast, Cornwall)	yes	yes	yes	yes
Large projects, e.g. Eden Project, redevelopment of Torbay harbour	no	yes	no	yes

Tourism strategies are developed on an *ad hoc* basis, when there is a need to bring in tourism revenues or control tourism impacts. There is no consistency about who prepares

tourism strategies: for instance, Cheshire County Council and Chester City Council both have strategies; East of England Region and Cambridge City Council have tourism strategies but not Cambridgeshire County Council (except as part of its structure plan). Most areas have no tourism strategy.

In most cases tourism development is solely 'planned' through the development plan. Where tourism strategies exist, the development should ideally refer to them. The tourism planner that we talked to felt that development planners often do not consult the tourism industry when writing tourism-related policies; and they refer too much to past trends rather than considering how the (different) future of the tourism industry should be like.

What SEA-type procedures are already being carried out and how well they fit with those of the Directive

We were able to identify only very few existing tourism-related SEA-type procedures:

- An assessment of the impacts of entertainment in London's West End (2001) (www.westminster.gov.uk/planningandlicensing/weis/index.cfm). This analysed related policies, identified the impacts of entertainment – particularly late at night – on the West End, and helped to justify LB Westminster's policies on entertainment.
- An appraisal of a tourism award scheme (2000) (www.thencbc.co.uk/body_sustain_projects_09.html). This considered the sustainability of the scheme's mission, programme measures and example project list, and recommended how the scheme could be made more sustainable.
- A sustainability appraisal of the Brecon Beacons National Park management plan (www.breconbeacons.org/parkplan), similar to sustainability appraisal of development plans. Although not a tourism plan *per se*, the plan (like those for other National Parks) almost solely focused on managing visitors' impacts on the park.
- The appraisal of policies for farming and food (<http://www.sd-commission.gov.uk/pubs/pcfff/pdf/pcfff.pdf>) considered impacts *on* tourism.

The English Tourism Council produce a sustainability strategy, which regional tourism boards are expected to follow. However the tourism industry generally considers sustainability issues only to a very limited extent, normally on a project-by-project basis. A rare example is the South Hams 'green tourism initiative' which provides a Green Audit pack for businesses and tourism operators.

Links to health impact assessment and appropriate assessment

Tourism can have positive health effects through reduced stress, opportunities for physical exercise, access to clean environments, etc., and negative ones through the health effects of flying, the indirect effects of transport (air pollution, accidents etc.), the effects of tourists *on* local residents, etc. The West End SEA considered the effect of tourism on local residents, but other tourism SEAs did not consider health.

Although the tourism SEAs did not include appropriate assessments, it is likely that appropriate assessments have been carried out for tourism *projects*.

Potential barriers to implementation of the Directive and ways of overcoming these

The biggest barrier is lack of tourism plans and programmes: none of the existing ones require SEA, and the ones that do exist are ad hoc. Should this be different?

4.5 TRANSPORT

What plans and programmes could require SEA

There are many transport plans in the UK, covering all modes and their integration, all levels of planning from the most strategic to that just above project level, and all scales of planning. Figure 12 lists *some* of these. The shaded cells indicate those plans and programmes that could be subject to SEA under the SEA Directive.

Figure 12. Transport plans and programmes that could require SEA <i>This figure is not comprehensive, and the cell contents are not definitive</i>				
	formally required to be prepared by national, regional or local authority	likely to have significant environmental effects	sets framework for future devel. consent of projects listed in EIA Directive	could affect site under Habitats Directive
Europe				
Trans-European Transport Network	?	yes	yes	yes
UK/England				
Overarching/intermodal policy: New Deal for Transport, Transport 2010 The Ten Year Plan, Transport Act 2000	no	yes	no	yes
Mode-specific strategies: Road Safety Strategy, National Cycling Strategy, Better Role for Bus Travel, New Deal for Railways, night restrictions at airports	no	yes	no	?
Strategies that identify specific projects: New Deal for Trunk Roads, Future Development of Air Transport in the UK	no	yes	yes	yes
Office of Rail Regulator business plans	yes	yes	no	?
SRA Strategic Plan	yes	yes	yes	yes
National Air Quality Strategy (transport component)	no	yes	no	no
Regional/local				
Regional Transport Strategies, Local Transport Plans Regional airports strategies	yes	yes	yes	yes
Multi-modal studies	yes	yes	yes	yes
Local Air Quality Action Plans	yes	yes	no	no
RPG/development plan (transport component)	yes	yes	yes	yes
Private sector transport infrastructure plans or programmes for construction or expansion of railway or tramway networks; ports, harbours, inland waterways; airports; roads	No	yes	yes	yes
Road user charging, workplace parking	No	yes	?	?

levy				
Site				
Major transport projects, e.g. Channel Tunnel Rail Link, Heathrow Terminal 5, Dibden Bay, Central Rail	No	yes	no	yes
Transport-related S106 obligations	?	yes	yes	yes

What SEA-type procedures are already being carried out and how well they fit with those of the Directive

The Department for Transport's *New Approach to Appraisal* (NATA) (www.dft.gov.uk/itwp/appraisal/guidance), which can apply to a range of transport strategies and projects, involves appraising impacts on:

- environment (noise, local air quality, landscape, biodiversity, heritage, water);
- safety;
- economy (journey times and vehicle operating costs, cost, journey time reliability, regeneration);
- accessibility (pedestrian and others, access to public transport, community severance); and
- integration with other policies.

This covers many of the issues covered by the SEA Directive: in the future, the DfT expects to also include more social issues under NATA. Transport planning guidance (e.g. *Guidance on the Methodology for Multi-Modal Studies*, GOMMMS, www.dft.gov.uk/itwp/mms) also promotes public participation and the consideration of alternatives.

There is considerable experience with SEA-type procedures for the transport sector, including:

- NATA analyses of multi-modal studies (e.g. access to Hastings, www.sdworld.net/Atoh). The Department for Transport have commissioned guidance on SEA of MMSs.
- Appraisal of Regional Transport Strategies (e.g. South East, www.southeast-fa.gov.uk/regional_policies/transport/regional_strategy/report_of_2nd_appraisal_final.pdf) using *ad hoc* SEA methods.
- Sustainability appraisal of Local Transport Plans (e.g. Leicester and Leicestershire) using similar sustainability appraisal methodology to that used for development plans. The SEA process can be difficult for LTPs because of they are often a rather diffuse amalgam of policies and funding proposals. The Taunton SEA workshop noted that, because of this, SEA may be needed for the general investment programmes that arise from LTPs.
- A sustainability appraisal of Planning Policy Guidance Note 13 on transport was carried out as part of the PPG's regulatory impact assessment. This unpublished study is a rare example of national-level transport SEA.
- Sustainability appraisal of development plan policies on Section 106 obligations. Much local transport strategy is implemented, and to a certain extent developed, through S106 obligations.
- *Ad hoc* SEA-type studies, e.g. for Railtrack enhancement schemes (www.railtrack.co.uk/pdfs/ourbusiness/social_environmental.seba.pdf), Somerset roads review, Trans-Pennine transportation.
- 'Civilising cities' evaluation framework for designated pilot cities, and evolving appraisal of Clearzones (www.clearzones.org.uk).

Transport strategies for which SEAs are conspicuously absent include *New Deal for Trunk Roads*, and *Future Development of Air Transport in the UK*. Both set the framework for planning consent of projects, and both will have significant environmental effects.

An expanded version of NATA and GOMMMS and/or of the ODPM's guidance on SEA may be adequate for some types of transport plans and programmes. Issues that need to be considered when evolving SEA guidance for transport strategies include:

1. The lack of agreement/understanding on the effects of transport infrastructure on travel patterns, for instance whether new bus lanes increase bus usage. There is a need for research in this area to be compiled and analysed, perhaps by the Planning Officers Society or County Surveyors. Where data are lacking, Oxford's step-by-step continuous approach (plan-monitor-manage) was considered effective in determining what works and what doesn't, and what is needed next.
2. General policies are difficult to assess without knowing how they will be implemented, so do we need to always appraise the policy plus one level further down? Or do SEA techniques for dealing with assumptions and uncertainty need to be developed?
3. NATA currently puts relatively low priority on social -- particularly equity/distributional -- issues, and on long-term impacts. These need to be better covered in SEA.
4. Transport objectives such as those set out in the National Transport Strategy often conflict. SEA can help to integrate social, economic and environmental concerns and achieve win-win-win solutions, but does not necessarily do this. Should SEAs set environmental thresholds that should not be crossed even if that results in economic costs?
5. Links to other levels and other sectors: At the moment regional level plans (in theory) influence LTPs but should the opposite also happen? At the moment LTPs and development plans are generally developed independently from each other: should they be more integrated?

Links to health impact assessment and appropriate assessment

HIAs have been carried out on a range of LTPs (e.g. Okehampton, Ashcott and Walton). NATA considers health implicitly (e.g. air pollution, accidents) but not explicitly. The Civilising Cities and Clearzones frameworks include health effects from pollution and accidents; the latter also (half-heartedly) refers to healthy lifestyles.

Appropriate assessments have been carried out for transport projects and programmes: examples are provided at www.ohn.gov.uk.

Potential barriers to implementation of the Directive and ways of overcoming these

In addition to the work needed to improve the current systems of NATA and GOMMS discussed above, the need for improved expertise in SEA was particularly noted in the Taunton workshop. Improved training in land use and transport interactions; improved dissemination of SEA/HIA methods for transport; and regional transport SEA teams - and government funding for this - were all proposed as ways forward.

4.6 WATER

What plans and programmes could require SEA

Figure 13 lists water-related plans and programmes. Various meetings have been held between the ODP, Environment Agency and water companies, but it is not yet clear which plans and programmes will be subject to the SEA Directive, so the matrix cells have been left blank. The shaded cells refer to plans and programmes that the RSPB has identified as probably requiring SEA (Appendix 1).

Figure 13. Water plans and programmes that could require SEA				
<i>This figure is not comprehensive, and the cell contents are not definitive</i>				
	formally required to be prepared by national, regional or local authority	likely to have significant environmental effects	sets framework for future development. consent of projects listed in EIA Directive	could affect site under Habitats Directive
Europe				
European marine site management plans				
UK/England				
National Water Resource Strategies				
Flood and Coastal Defence Capital Programme				
Capital and revenue programmes for water resources, navigation, fisheries, conservation/ ecology, environmental protection				
Regional/local				
Regional water resource strategies				
Catchment flood management plans (CFMP), coastal and catchment management strategies, shoreline/coastal/beach/water level/Heritage Coast/etc. management plans,				
Programmes of measures and river basin management plans (RMP)				
Coastal Habitat Management Plans (CHAMPs), shoreline management plans				
Flood and coastal defence strategies and maintenance programmes, catchment flood management plans (CFMPs)				
Local Environment Agency Plans (integrated with Community Strategies?)				
Navigation and waterways plans				
Recreation strategies and Action Plans				
Fisheries action plans				
Drought contingency plans				
Catchment Abstraction Management Strategies (CAMS)				
Water company asset management plans, leakage reduction plans, infrastructure plans, abstraction plans				
Water company water resources strategies				
OFWAT price reviews				
ad hoc voluntary plans, e.g. Dorset coastal strategy				

The Taunton workshop noted that many water plans and programmes overlap or have the potential to overlap: for instance is flooding to/from sewers an issue that should be dealt with under an Environment Agency or a water company plan? There may be a need to amalgamate some of the water plans. It also noted that some water 'programmes', for instance Asset Management Plans, might really be a series of projects: this would affect what regulations and guidance apply.

The Taunton workshop noted a lack of consistency in definition of strategies, plans and programmes, making it difficult to streamline the SEA process.

What SEA-type procedures are already being carried out and how well they fit with those of the Directive

The Environment Agency and DEFRA are relatively well-advanced in devising SEA-type methodologies for the water sector, including:

- DEFRA project appraisal guidance notes for flood defence projects (www.defra.gov.uk/environ/fcd/pubs/pagn/fcdpag5.pdf)
- Sustainability appraisal guidance for Catchment Abstraction Management Strategies
- Current draft guidelines for production of Catchment flood management plans includes guidance on SEA, although the guidance does not explain in any detail how SEAs should be undertaken and integrated with the appraisal of flood management options. The Secretary of State has noted that "The CFMP is a policy-level document, suggesting that information for inclusion at the baseline/appraisal stage should therefore be focused at high-level constraints and opportunities", but further guidance will be required.
- Review of abstraction licenses under the Habitats Directive. There are documented examples where the SoS has requested:
 1. monitoring before and during any increased abstraction to detect changes which may be attributable to that abstraction,
 2. operating rules (including any protective measures) to allow increased abstraction only when there is no likelihood of adverse effects
 3. appropriate monitoring and mitigation measures in respect of wider environmental concerns.

These are types of issues that SEA could theoretically address, possibly making case-by-case assessments more efficient.

- Riverbasin management plans will have SEA guidance

These guidance documents are not integrated. The water industry has no SEA guidance, although sustainability considerations are voluntarily taken into account in planning.

A range of SEA-type studies have been carried out for the water sector, including:

- Wyre flood and coastal defence strategy
- Lower Colne River flood alleviation scheme
- Maidenhead, Windsor and Eton flood alleviation scheme
- Datchet, Wraysbury, Staines, Chertsey floodplain management
- River Nene flood defence programme
- Rivers Ely and Ouse ?
- Norfolk Broads flood alleviation strategy
- 'Thames Ahead' plan

These SEAs generally used techniques similar to those used for project EIA. The Taunton working group felt that the competent authorities were disappointed by several SEAs because their objectives, and their expected level of detail, were not clear. Further, in situations where there are a number of existing, complex environmental issues it can be difficult to focus the SEA process on those directly relevant to a particular set of plans. For example most of the flood management plans for the Somerset Levels and Moors are inter-related and difficult to address in isolation.

Links to health impact assessment and appropriate assessment

Provision of enough good-quality water is vital to health, and the water sector is subject to many health-related regulations. The Directives on bathing water, shellfish and drinking water all give rise to water industry projects (e.g. sewage treatment stations). However, at present in the water sector, health and environmental assessment are treated separately.

Appropriate assessments are required for proposed drought orders because they are plans likely to have significant effects on European Sites as defined under the Habitats Directive (92/43/EEC). Proposed orders affected the Wash, the Ouse Washes, the Nene Washes and Rutland Water: SPAs classified under Directive 79/409/EEC. Approval could only be given if the proposals could be shown not to affect site integrity.

Potential barriers to implementation of the Directive and ways of overcoming these

- The many different types of water plans, with separate guidance on sustainability appraisal or SEA, are confusing.
- Are there enough data of the right nature?
- The current separation of health and environmental issues is problematic.
- External effects such as climate change and water level changes affect water quality and thus health. Climate change predictions need to be considered when the environmental baseline is considered: how would things change if the plan did not go ahead? This will be an important issue in evaluating longer-term viability of options.
- English Nature and other agencies will need more resources to perform an effective regulatory role in relation to SEA
- Advice is required concerning the appropriate level of information and detail to include in SEA for different plans within the decision-making hierarchy.

5. KEY ISSUES AND NEXT STEPS

This chapter brings together some of the key issues raised in previous chapters, which affect the implementation of the SEA Directive in the UK. It discusses:

- what plans and programmes need SEA,
- planning and not planning: uncertainties, overlaps, gaps and hierarchies in plan-making, and links between sectors,
- who is involved in SEA, and
- SEA methods.

Possible next steps are discussed at the end of the chapter.

5.1 SCREENING: WHAT PLANS AND PROGRAMMES REQUIRE SEA

Possibly the key issue currently affecting the implementation of the SEA Directive is what plans and programmes the Directive applies to. Chapter 4 summarised the key tests of Articles 2 and 3.2 of the Directive:

- required by legislative, regulatory or administrative provisions (Art. 2); and
- likely to have significant environmental effects (Art. 3.1); and
- agriculture, forestry, fisheries, energy, industry, transport, waste management, water management, telecommunications, tourism, town and country planning or land use and set the framework for future development consent of projects that require environmental impact assessment; or require appropriate assessment (Art. 3.2).

Clearly all of these criteria are fulfilled by Regional Planning Guidance and development plans, including minerals and waste local plans (and their successors), local and regional level transport plans and multi-modal studies, management plans for National Parks and other designated areas, and some water plans. However although many other plans and programmes exist, it is unclear whether they require SEA, chiefly because of difficulties in interpreting the first test.

Many national level plans and programmes have significant effects, set the framework for projects, and/or affect sites under the Habitats Directive. Arguably they set a context for, and have much greater influence than, individual local-level plans and programmes. Examples include the Foot and Mouth Recovery Framework, Strategy for Sustainable Food and Farming, Strategy for Combined Heat and Power, New Deal for Trunk Roads, and Future Development of Air Transport in the UK. The regional working groups that decide on allocations of housing or aggregates have a similarly influential status.

However Government argues that few, if any, of such plans and programmes fulfil the "required" test: they are not "*subject to preparation and/or adoption by an authority at national, regional or local level or which are prepared by an authority for adoption, through a legislative procedure by Parliament or Government, and... required by legislative, regulatory or administrative provisions*" (Art. 2) (my highlight). On the other hand, "required by . . . administrative provisions" could be interpreted to include

everything for which a government minister or department has decided it would be a good idea to have a strategy, or made a public commitment to produce one. Local and regional authorities affected by such national-level plans and programmes could argue that they should be subject to SEA as a matter of good practice even if SEA is not legally required.

Similarly, it is not clear which plans and programmes of (semi-)privatised organisations are "required" and thus are subject to SEA. Those of privatised utilities which are in the nature of a public service and have corresponding rights to go over private land etc. (e.g. water, waste, energy, rail) will probably require SEA. However others – forestry, agriculture, telecommunications etc. – are unlikely to. Some of these plans and programmes now have huge environmental effects. The recent concerns about the visual and possible health effects of telecommunications towers are an example.

Protection of commercial confidentiality may well be an issue for sectors which directly compete for the same market (e.g. telecommunications and energy), although it may be less problematic where companies have quasi-monopolies (e.g. aspects of water and public transport).

The Directive also allows for plans and programmes in other sectors than those listed in the Directive to be subject to SEA under Article 3.4: "*Member states shall determine whether plans and programmes, other than those referred to in paragraph 2, which set the framework for future development consent of projects, are likely to have significant environmental effects*". Such sectors could include health, education and safety/crime. Government will need to determine whether any plans and programmes in such sectors require SEA.

However a key problem is who carries out the screening. Government responsibility for implementing the SEA Directive rests amongst a multiplicity of agencies and departments because so many different sectors are covered by the Directive. The ODPM has a coordinating role, but has no authority over other departments, nor can it provide (even if it had the resources) a central screening and/or quality review function unless agreed by other departments. It is likely that other departments' sustainability or planning departments will provide a screening role.

5.2 ISSUES IN (NOT) PLANNING

Comparison of the planning regimes of the six sectors of Chapter 5 identifies obvious differences and problems:

- The privatised nature of the agriculture and (much of the) energy sectors means that the only effective type of government control over that sector is in the form of fiscal carrots and sticks.
- International and national level agriculture and energy policies (which may well not require SEA) get implemented directly at the site level (which requires EIA at best), with no regional level control (and no SEA).
- Tourism plans and programmes seem to be *ad hoc*, with the same types of issues and approaches dealt with at all levels of planning, from the national to the city level. Is this efficient? Should tourism plans be formally made subject to SEA despite the fact that they are voluntary?

- The water sector is subject to a huge number of potentially overlapping plans and programmes. Rationalisation of these plans and programmes could simplify planning and reduce the costs of SEA.

In most of the sectors, the hierarchies from national to site, and from policy to plan/programme and project are unclear. For instance, the National Cycling Strategy includes targets for increasing cycling, but it is unclear how these should be implemented at the regional and then local level. National government permits local authorities to institute congestion charging and workplace parking levies, but does not compel them to, leading to potential conflict between adjacent local authorities. Arguably a clearer structure of planning is required in many sectors: this could in turn, streamline and reduce the need for SEA.

There are also many cross-overs and areas of duplication between sectors. For instance:

- foot and mouth programmes affect both tourism and agriculture
- transport plans affect energy use, and vice versa
- tourism plans also affect transport and land use

An example of where an SEA would have been valuable, and some of the general principles were followed under other processes, was the development of the Tip and Restoration Strategy in Cornwall, which was linked with the Cornwall Minerals Plan.

This plan was developed to deal with the disposal of China Clay waste. The historic legacy has left many large tips in Cornwall, some of which have been partially reclaimed or landscaped. Cornwall is promoting the secondary use of aggregates. For decades there have been ideas for using this 'waste' -which is actually high grade sand – but the costs of transport to other areas where the demand exists have ruled out these possibilities. Now the introduction of the Aggregates Levy and tougher policies on use of recycled and secondary aggregates is creating a market for the sand. Current sales of sand are around 1.5 million tonnes – may increase to 5-6 m.t. in five years but 18-19 m.t. are still being tipped annually.

Options and alternatives have been assessed for continuing to dump sand and regrade it, to export it by road or rail, and to ship it by sea. The rail option has been dismissed because the Tamar Bridge can only carry 900 tonne trains. Sea offers the most economic and efficient way of shipping the sand to the South East England markets. China clay waste was seriously considered for foundations of the second Seven crossing.

The T&RS was already under EU consultation rules because it was largely EU funded. Consultees included EN/EA/CA – CC members and industry, parish councils and Restormel district. All residents in the area were consulted on the plan. The quasi-SEA shaped the direction of policies and altered the wording on transport policies. It also created demands for data gathering and monitoring

This example highlights the need for sectoral SEAs to be joined up. The study covered minerals, transport, local economics, land use and after use, all at a strategic level.

The problem of duplication/cross-over was particularly highlighted when the link between development plans and Local Transport Plans was discussed at the Taunton seminar. LTPs are bidding documents (and thus subject to a big push each year to get them out on time) with a 5-year horizon, whereas local plan are planning documents (with timing subject to the whims of inspectors etc.) with a much longer time horizon, so there is no obvious incentive to bring the two together despite their obvious interactions. Even the Green Paper does not require integrated land use and transport planning. Should there be a concerted move towards integrating transport and land use plans, particularly at the regional level?

The analysis of individual sectors highlights the need for SEA of policies and budgetary/fiscal measures, which are exempt from the Directive's requirements. This means that some of the most environmentally influential – good and bad – strategic actions are not subject to SEA, including the Climate Change Levy, excise duty for road fuels (and lack thereof for aviation fuels), the Common Agricultural Policy, and policies on road user charging and workplace levies. It also leads to inconsistencies. For instance the Common Agricultural Policy has a huge environmental effect but does not require SEA, whereas local authority policies that try to control the CAP's adverse effects do require SEA. Similar examples include the Energy White Paper and the Foot and Mouth Recovery Programme. Such higher-level SEAs would prevent much duplication at the lower level.

Indeed, the Royal Commission on Environment and Pollution (2002) have recommended that the implementation of the SEA Directive can become an opportunity to rationalise overlapping and inconsistent plans and to ensure that the assessment and planning of all spatial activities in a particular area are brought together:

“If the requirements of the Directive are applied in a formalistic way to the present plethora of partial, overlapping, and often inconsistent plans produced by various bodies, they could become a burdensome charade. We believe, however, that the Directive could be a positive and valuable influence. The recommendations we put forward in this report [which include the introduction of Integrated Spatial Strategies which take account of all spatially related activities] could be positive and valuable influence.” (Key recommendation 12)

Many of the puzzles about what should be subject to SEA and how to ensure consistency between different plans and appraisals that haunt this report are not ‘problems of SEA’, but rather issues where the discipline of thinking about how SEA can sensibly be applied is revealing aspects of current planning that are ramshackle and incoherent. A key issue that sets the context for SEA is thus whether the number of plans needs to be rationalised and the relationships between them clarified.

5.3 WHO IS INVOLVED IN SEA

The players involved in SEA are:

- The screening body(ies) which decides whether SEA is needed;
- The decision-maker who writes and implements the plan or programme. The decision-maker can carry out the SEA or hire...
- The consultant who carries out the SEA for the decision-maker;

- The authorities to be consulted on the scope of the SEA and the final environmental report;
- The public; and
- The reviewing body which ensures that the SEA is carried out, that decisions incorporate the results of the SEA, and that SEAs are of adequate quality. This may be the same as the screening body.

All of these players need to be aware of, and trained in, their roles.

The decision-maker will specify, commission and pay for the SEAs. However there is a clear difference between 'public interest' bodies such as planning departments whose remit (notwithstanding political pressures) is to protect the public interest, and private companies – e.g. energy companies, tourism operators, owners of minerals - whose main remit is to make money. This will influence the amount of resources that they put into SEA, and the weight that they give to the SEA results. Depending on the decision-maker, some issues may be covered more or less comprehensively. The reason why sustainability appraisals to date do not deal more comprehensively with health issues may well be because the process is 'owned' by planners rather than health authorities.

Many sectoral decision-makers also have limited (if any) experience with SEA. Therefore they may well experience many of the early problems that land use planners experienced with sustainability appraisal, including unrealistic expectations of the time needed for an effective appraisal; unwillingness to start the SEA process early, integrate it in plan-making, and change the plan in response to the SEA findings; and lack of faith in the direct and wider benefits of the process. This could result in a tendency to outsource the task to external consultants.

The decision-maker or consultant who carries out the SEA will need to have SEA-specific skills and training. This includes understanding of the relevant sector and related policies; knowledge about appropriate databases and impact prediction models; understanding about the level of detail that is appropriate in SEA; ability to deal with uncertainties and assumptions effectively; etc. SEA practitioners will also need to have access to relevant databases and experts (e.g. health, economic development). There is already considerable existing experience with SEA amongst land use planners and some environmental/planning consultants, but less so with most sector-specific planners and consultants.

The Taunton workshop identified a range of authorities to be consulted as part of the SEA process. They vary from sector to sector, and include some authorities that would probably fall outside the remit of the Directive. The initial Taunton list is:

- Countryside Agency
- English Heritage
- English Nature
- English Tourism Council
- Environment Agency
- Health and Safety Executive
- Highways Authority
- Internal drainage boards
- local & regional planning authorities
- Mines and Quarry Inspectorate
- Ministry of Defence
- National Trust
- Ports Authority
- regional assemblies
- regional development agencies
- regional government offices
- Regional Tourism Board
- Regional Tourism Forum
- Strategic Rail Authority

Some of the issues faced by the screening body(ies) have been discussed in Sec. 5.1. The screening could be done on the basis of general guidelines, or case by case.

The role of the reviewing body(ies) is crucial in ensuring that SEAs are of good quality and are truly taken into account in decision-making. Art. 9 of the Directive requires Member States to

"ensure that, when a plan or programme is adopted... the following items are made available to [consultees]:

- a) the plan or programme as adopted;*
- b) a statement summarising how environmental considerations have been integrated into the plan or programme and how [the SEA was] taken into account... and the reasons for choosing the plan or programme as adopted, in the light of the other reasonable alternatives dealt with, and*
- c) the measures decided concerning monitoring..."*

Art 12.2 of the Directive notes that "*Member States shall ensure that environmental reports are of a sufficient quality to meet the requirements of the Directive*". The ODPM draft guidance on SEA includes an optional quality assurance checklist. At the opposite end of the "checks and balances" spectrum is the possibility for legal challenge in the form of judicial review under existing UK legal provisions (this also touches on Aarhus issues).

Between these extremes, however, is the gap that any reviewing body would need to fill. As with other management systems and appraisal tools, it is the institutional mechanisms for implementing and enforcing SEA recommendations that will make the difference between a robust, consistent SEA system and a weak, disjointed one. Robust systems are needed for (in addition to screening plans and programmes) identifying poor quality SEAs; ensuring that poor SEAs are brought up to an adequate quality; and ensuring consistency between sectors. The reviewing body should have a clear checklist for what SEA should entail, and the sanctions to make organisations change their plans in response to the SEAs where appropriate.

The oversight body's work is likely to be particularly important for those sectors where there is less knowledge/experience of appraisals than in land use planning. The role of the reviewing body could be usefully extended to also provide assistance and support, as is already done in the Netherlands.

In the short term there will be multiple screening/reviewing bodies, possibly one per government department or sector. At present there are no plans to bring these together or ensure consistency between their decisions.

Arguments against the creation of a new dedicated body to screen and review SEAs include the Government's commitment to reducing regulatory burdens (and expenses); the fact that such a body could only be set up by a major political decision with important implications for both policy and resources; difficulties of finding enough trained people to carry out SEAs much less screen and review them (an oversight body would have to recruit from this limited field, in competition with other employers; if it employed consultants, there could be issues of independence and conflict of interest); and the fact that an oversight body with a narrow SEA remit would go against both the integration of SEA into sustainability appraisal and the integration of

both of these into the overall production of plans and programmes (in accordance with both Government policy and good assessment practice). Arguably, if assessment is integrated into the production of plans or programmes, then oversight should also be integrated into whatever system exists for overseeing the production of the plans or programmes.

In the case of land use plans, the Planning Inspectorate and possibly other existing oversight organisations such as the Audit Commission and Best Value Inspectorate could fulfil this oversight role. A similar approach could be applicable for other types of plan/programmes covered by the Directive.

5.4 SEA METHODS

As was noted in Section 2.4, SEA, sustainability appraisal, health impact assessment and appropriate assessment share similar approaches. To date these have not been brought together, but each technique can learn from the others. SEA can particularly learn from HIA's emphasis on equity and participation; appropriate appraisal's focus on cumulative and indirect effects; and sustainability appraisal's social and economic as well as environmental remit. For the sake of efficiency and clarity, it would make sense to integrate these techniques where several are needed for the same plan or programme, instead of carrying them out separately.

Although there also exists considerable experience with project environmental impact assessment, EIA methods arguably do not carry over particularly well to SEA. EIA focuses on details, quantification, mitigation measures for specific proposals; SEA instead focuses on the broad picture, needs to deal with non-quantifiable data and partial data, and considers wider alternatives to proposed plans and programmes. EIA often comes near the end of project planning; SEA should start at the beginning of plan-making.

Discussions surrounding the ODPM guidance also highlighted the logic of extending SEA to also include social and economic issues, even in the absence of other requirements to do so. In tourism planning, for instance, social, economic and environmental effects are intricately connected, and appraising them in isolation from each other is a nonsense.

Many plans and programmes have potentially conflicting objectives, or need to implement higher-level policies with potentially conflicting objectives. The Government's definition of sustainable development is a classic example of this: effective protection of the environment v. maintenance of high and stable levels of economic growth and employment. The Taunton seminar raised this issue but did not come up with answers: Should one leave objectives that conflict, or should one use SEA to help clarify priorities etc? One possible solution would be to treat the Government growth objective as a means, and use as appraisal criteria the ends (in terms of human welfare and quality of life) which it is intended (and often assumed) to promote.

SEA will require much data. Phase 1 of this project identified a terrifyingly wide range of relevant databases. But further work will be needed to find out whether these databases are appropriate to the planning level (can the data be disaggregated down to the local level if needed? aggregated up to the national level?), and whether they

really answer the question (e.g. whether they are based on input v. outcome indicators).

The Taunton seminar also highlighted the relative lack of strategic level prediction and evaluation methods, even for relatively well-understood sectors such as transport. For instance, there is no agreement on what changes in bus use (if any) result from provision of certain types of bus infrastructure. This may require "studies of studies", i.e. compilations of studies that have monitored the actual effects of new infrastructure or of land use changes.

5.5 NEXT STEPS

This section presents some initial ideas for next steps in implementing the SEA Directive, based on the work carried out so far.

Influencing Government

Many of the initial constraints to implementing the SEA Directive identified in this report require action at the national level. They are noted below. The SWRA should consider whether it wishes to lobby Government to carry out these proposed actions:

- SEA of national-level plans and programmes: Government does not perceive national-level plans and programmes as being "required" and thus requiring SEA. Many of these plans and programmes have significant environmental effects, set the framework for future development consent or projects, and/or affect Habitats Directive sites. SWRA should consider whether it should lobby Government to subject national-level plans and programmes to SEA even if they do not fall within the narrow(est) Directive definition of "plans/programmes". In the longer run, SWRA might also wish to lobby for the extension of the SEA Directive to cover policies.
- Identify what plans and programmes require (and not) SEA: There is strong uncertainty in most sectors about what plans and programmes require SEA. The ODPM is encouraging relevant government departments to identify plans and programmes that require SEA, so that appropriate guidance and regulations can be developed: this is an essential first step before much sectoral SEA work can progress.

An easier first step might be for the screening body(ies), where this is relatively straightforward to do, to identify those plans and programmes that definitely do *not* require SEA. Arguably many local and specific tourism, agriculture and energy plans and programmes could be easily "scoped out" because of the definition of plans and programmes to which SEA applies. Others could be "scoped out" because the important decisions have been taken at a higher tier of the decision-making hierarchy, i.e. where for example, they are the means for applying at local or detailed level policies which have are set in higher level plans or strategies which have themselves been subject to SEA. This would provide some certainty for the industry. The SWRA should consider whether it wishes to lobby for this "scoping out" process.

- **Cross-departmental SEA coordinating body:** Government has no plans to set up a cross-departmental SEA oversight body. Although individual government departments have SEA points of contact, they differ widely in terms of the approach, resources, etc. that they are putting into implementing the Directive. This has implications in terms of consistency between sectors (including what private sector plans and programmes need SEA) and quality assurance. SWRA should consider whether it should lobby Government to clarify the name, position and role of the SEA contacts; and whether it should form a central SEA oversight body.
- **Rationalisation of plan-making:** There is no concerned Government push to rationalise and streamline plan-making in response to the RCEP's recommendations. Such streamlining – which could include cross-sectoral rationalisation, for instance between transport and land use plans - could strongly reduce the administrative burden posed by the SEA Directive. SWRA should consider lobbying Government for such streamlining.
- **Integration with other forms of assessment:** Experience in preparing the ODPM SEA guidance suggests that, despite general Government pronouncements about integrating appraisal and reducing regulatory burdens, there is still considerable overlap between SEA, sustainability appraisal, health impact assessment, appropriate assessment etc. SWRA should consider whether they want to lobby Government to integrate these processes, and particularly to require one integrated process of SEA and sustainability appraisal rather than separate processes.

Training and information provision

At the sub-national level, probably the biggest constraint to implementation of the SEA Directive is lack of basic SEA knowledge and practice. The SWRA could help to deal with this through training, provision of a central support centre and/or website, and development of good practice guidance. The Phase 2 pilots should focus on providing information for these initiatives.

- **Training:** It is likely that any Government screening and review bodies will be 'trained' in-house. However the SWRA could provide SEA training for many of the other SEA stakeholders during Phase 3 of this project. For maximum effectiveness, different training sessions should probably be run for different groups:
 - **Regional and local planning officers:** The draft ODPM guidance provides a good starting point for such training, and some courses are already being planned elsewhere, e.g. Herefordshire County Council 8 January 2003, University of Manchester 16 January 2003. The SWRA may wish to provide similar courses. Several early SEA pilots have been of South West authorities: Cotswold local plan, Taunton urban extension, Taunton Local Transport Plan. These could provide case studies for such courses.
 - **Planners in the other sectors:** For some sectors (e.g. transport, water) these can already be identified, and courses specifically devised for them. For other sectors, seminars could focus on basic SEA requirements, how these might affect organisations in the future, and what plans and programmes will require SEA.

- NGOs and the "authorities consulted" identified in Section 5.3 will require some training, but also an impetus and forum for deciding how they will deal with SEAs once they start to be formally carried out, e.g. preparation of internal guidance, review criteria, checklists, and contact points. A good starting point for them could be an "authorities consulted" workshop.
- Consultants: Many planning and environmental consultancies already have skills in sustainability appraisal or project environmental impact assessment: they will need training on the additional requirements imposed by the Directive, and ideas on SEA good practice techniques. Engineering, economic and other 'technical' consultancies will arguably need different training, particularly focusing on the more 'strategic' aspects of SEA, for instance generation of alternatives, how to deal with uncertainty, and how to keep SEA from being the compilation of lots of EIAs.
- Elected representative and the public: There is probably limited interest in formal SEA training amongst the general public and their representatives. Rather, any SEA guidance should include information on how best to involve the public. A brief leaflet about SEA and back-up information on a web-site are probably most appropriate for them.
- Central support centre: Government has no plans to provide a central support centre for organisations carrying out SEA. Such a support centre could compile or commission lists of relevant plans and programmes; provide a data clearinghouse; commission "studies of studies" to inform impact prediction (see Sec.4.5); and possibly develop SEA guidance. SWRA should consider whether it wishes to lobby Government for such a body, or whether it sees a role for itself in providing these functions.
- Website: A central SEA website could provide information on:
 - the SEA Directive and existing and developing regulations and guidance
 - links to other types of appraisal
 - SEA pilots, and examples of existing SEA-type assessments
 - training courses, references etc.
 - other information (e.g. SEA guidance from other countries)

Ideally such a website should be a cross-departmental Government venture. Two key current constraints to this are 1. limited ODPM officers' time, which makes coordinating a website with other government bodies onerous (and not a high priority), and 2. the resource constraints of setting up and maintaining a website, which could make government bodies less willing to support it. SWRA could financially support such a website, and provide staff/consultant time for coordinating the website. Alternatively, SWRA could set up such a website itself.

- Support the development of SEA guidance: To speed up, and sometimes kick-start, practice of sectoral SEA, the SWRA may wish to write SEA guidance (or make recommendations for how SEA should be carried out) for specific sectors, organisations, or impacts. This could take the form of suggested amendments to current appraisal/SEA systems: say, how the current guidance on multi-modal studies could be adapted for transport SEA, or how the draft SEA guidance could be adapted for the tourism sector. Alternatively, it might be possible to propose a simple generic assessment framework, with sector-specific additional information

on e.g. alternatives, relevant plans and programmes, assessment methodologies, and possible mitigation measures.

Use the SEA pilots to support the above actions: The Phase 2 pilots are too short to allow full SEAs to be carried out. However they can provide information to support any training, website, and guidance development that the SWRA wishes to carry out for Phase 3. As such, the pilots should aim to identify:

- what SEA-type activities are already being carried out (and how they would need to be adapted for full SEA),
- sector-specific alternatives, mitigation measures, relevant plans and programmes etc.,
- further examples of good practice SEA-type activities, and
- who might most profit from SEA training etc.

REFERENCES

Department of Environment (1993) Environmental Appraisal of Development Plans: A Good Practice Guide, HMSO, London.

Department of the Environment, Transport and the Regions (2000): Good Practice Guide on Sustainability Appraisal of Regional Planning Guidance, Stationery Office, London, www.planning.detr.gov.uk/gpgsarp/index.htm.

Department of Environment, Transport and the Regions (1999): Planning Policy Guidance Note 12: Development Plans, www.planning.detr.gov.uk/ppg12/index.htm.

Environment Agency (2001a) Appendix 11. Environment Agency Record of Assessment of Likely Significant Effect on a European Site (Form HR01).

Environment Agency (2001b) Appendix 12. Environment Agency Appropriate Assessment Record (Form HR02).

English Nature (1997) The Appropriate Assessment (Regulation 48) The Conservation (Natural Habitats &c) Regulations, 1994, Habitats Regulations Guidance Note 1, Peterborough.

Minas, P. (2001) "The Effectiveness of SEA at Integrating Environmental Considerations into Landuse Development Plans in England and Wales", MSc dissertation, unpublished, Oxford Brookes University, Oxford.

National Health Service Executive (2000) A Short Guide to Health Impact Assessment: Informing Healthy Decisions, www.londonhealth.gov.uk.

Office of the Deputy Prime Minister (2002) Draft guidance on the SEA Directive: Applying Directive 2001/42/EC to English land use and spatial plans

Our Healthier Nation (2002) Health Impact Assessment, www.ohn.gov.uk/ohn.making/impact.htm.

Royal Commission on Environmental Pollution (2002) Environmental Planning, CEP Twenty-third report, London.

Scott, C. (2002) "An Urgent Need for Clarity", IEMA Journal, 23 September.

Therivel, R. and P. Minas (2002) "Ensuring Effective Sustainability Appraisal", Impact Assessment and Project Appraisal, June.

Town and Country Planning (Development Plan) Regulations 1991 (SI 1991/2794).

TRL (2002) Analysis of Baseline Data Requirements for the SEA Directive – Final Report, www.southwest-ra.gov.uk.

World Health Organisation (2001) Health impact assessment as part of strategic environmental assessment, World Health Organisation. www.who.dk/eprise/main/who/progs/hms/MainActs/20011128_1

Appendix A. RSPB preliminary list of UK plans and programmes which the SEA Directive may cover

Plan or programme	covered by Directive?		
	yes	possibly	unlikely
Town and Country Planning			
Regional Planning Guidance (current)	✓		
Regional Spatial Strategies (proposed)	✓		
London Spatial Development Strategy	✓		
Structure Plans / Area Plans	✓		
Local Development Plans	✓		
Unitary Development Plans	✓		
Minerals Local Plans	✓		
Waste Local Plans	✓		
Combined waste and minerals plans	✓		
Subject Plans (Scotland only)	✓		
Local Development Frameworks (proposed)	✓		
Action Plans (proposed)	✓		
Minerals and Waste Plans (proposed)	✓		
National Park Management Plans	✓		
National planning framework Currently under consideration in Scotland		✓	
Regional Development Strategy (Northern Ireland)	✓		
National planning policy guidance		✓ ("set the framework for development consent")	
Supplementary Planning Guidance		✓	
Community Strategies	✓		
Local Agenda 21 Strategies		✓	
Integrated Rural Strategies		✓	
Regional Park Plans		✓	
Water management			
Shoreline Management Plans		✓	
Catchment Flood Management Plans		✓	
Flood & Coastal Defence Strategies		✓	
Flood & Coastal Defence Capital Programme		✓	
Flood & Coastal Defence Operational Maintenance Programmes		✓	
Catchment Flood Management Plans (CFMPs)		✓	
Local Environment Agency Plans (LEAPs)		✓	
Water Level Management Plans		✓	
Water Resource Strategies		✓	
Catchment Abstraction Management Strategies		✓	
Programmes of Measures & River Basin Management Plans	✓		
Fisheries Action Plans		✓	
Recreation Strategies and Action Plans		✓	
Navigation (Waterways) Plans		✓	
Water Company Water Resource Strategies	✓		
Water Company Infrastructure or Abstraction Plans			
Coastal Management Plans		✓	
Beach Management Plans		✓	
OFWAT price reviews (Asset Management Planning)	?		
Coastal Habitat Management Plans (ChaMPs).		✓	
Estuary Management Plans		✓	
Harbour plans		✓	
Heritage Coast Management Plans		✓	

Marine environment			
Regulating Orders for local shellfisheries			✓ (may be considered as project)
No strategic plans for fish farms			✓
Marine dredging of aggregates	?		
Environment			
S39 Management Agreements	?		
Marine SAC Management Schemes	✓		
River Conservation Strategies for SAC rivers		✓	
River SSSI Conservation Strategies		✓	
SSSI Management Statements		?	
Management Plans for NNRs, MNRs		✓	
Regional & Local Biodiversity Action Plans		✓	
Tourism			
Tourism Strategies – national, regional, local		✓	
Recreation/Sports Strategies		✓	
Forestry			
Indicative Forestry Strategies		✓	
Forest Design Plans		✓	
Economic development			
Regional Economic Strategies	✓		
Local Economic Development Strategies		✓	
Regional Skills Strategies		✓	
Regional Innovation & Technology Transfer Strategies			
EU/ Rural Development / Agriculture			
Single Programming Documents	✓ (for future programming rounds)		
Country & Rural Development Programmes			
Rural Development Plans			
Any Countryside Agency PPs?			
AONB plans		✓	
Transport			
TENS-T Transport corridor studies		✓	
10 Year Transport Plan	✓		
Highways Agency trunk road programme	✓		
Office of Rail Regulator business plans	?		
SRA Strategic Plan	?		
Regional Transport Plans	✓		
Local Transport Plans	✓		
Multi-modal & road based studies	✓		
Ports Waste Management Strategies		✓	
Energy			
TENS-energy		?	
Programmes for power generation (Fossil, nuclear & renewables)	✓		
Any OFGEN PPs?			
Offshore Oil & Gas licensing rounds	✓		
PPs for offshore renewables	?		
Regional renewable energy strategies	✓		
Telecommunications			
TENS telecommunications		?	
Defence			
Rural Estate Strategy		✓	
Strategic Defence Review		✓	
Integrated Land Management Plans		✓	
Sustainable development			
Northern Ireland Programme for Government	?		
Central Government Departmental SD strategies	?		