



SCOTTISH EXECUTIVE
Development Department



PLANNING

ENVIRONMENTAL ASSESSMENT OF DEVELOPMENT PLANS

INTERIM PLANNING ADVICE



ENVIRONMENTAL ASSESSMENT

OF DEVELOPMENT PLANS

David Tyldesley and Associates



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INTERIM PLANNING ADVICE

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All references to Annexes and Articles are references to annexes and articles in the EC Directive 2001/42/EC. All references to Appendices are to appendices in this Interim Advice.

Introduction

1. The environmental assessment of development plans is often referred to as “strategic environmental appraisal” (or assessment). It is a process for identifying and assessing the environmental effects of a development plan so that they may be taken into account before the plan is approved or adopted. It involves examining a plan’s objectives, policies and proposals in relation to broader environmental aims, identifying their likely consequences and, through an iterative process of assessment and adjustment, preventing or reducing the likely significant effects of the plan on the environment.
2. Directive 2001/42/EC of the European Parliament and Council, “on the assessment of the effects of certain plans and programmes on the environment”, is often referred to as the “Strategic Environmental Assessment (SEA) Directive”, although that is not its title. It must be transposed into Scottish law by July 2004. All new and replacement structure and local plans, including subject local plans, and any other types of land use and development plan introduced as a result of the review of strategic planning, started after 21st July 2004 must be subject to an assessment of their likely significant effects on the environment. However, the Directive also requires that any plans started before July 2004 but not adopted until after 21st July 2006, must also be subject to assessment. The requirement will also apply to alterations of development plans. The only exceptions may be for plans for small areas at local level and minor alterations that could not have any significant effects on the environment, or local plan alterations where all the significant environmental effects have already been subject to assessment in the structure plan.
3. This Interim Advice Note is in two parts.
Part 1 provides an overview and:
 - explains the origins of environmental assessment;
 - describes the benefits of assessment;
 - outlines the environmental policy context;
 - introduces the main requirements of the Directive;
 - addresses the main issues to be considered in approaching the assessment process;Part 2 describes how to undertake an assessment and:
 - outlines the key stages in the assessment process,
 - sets them within the development plan process; and
 - provides detailed advice on each stage drawing on case studies and examples of assessments already carried out.

4. Furthermore, this advice is concerned with environmental assessment in structure and local plans as required by the Directive. However, several planning authorities in Scotland have already extended the assessment process to include a full "Sustainability Appraisal" i.e. assessing the likely significant economic and social effects of the plan as well as its environmental effects. Advice on this extended process of assessment is contained in Appendix I.
5. The advice has been prepared in advance of the legislation which will transpose the Directive into Scottish law. Consequently it has made some assumptions about the interpretation of the Directive that may differ from those included in the Regulations.
6. Environmental assessment is a process, not a product. It will be most effective when it is part of plan preparation from the beginning and integral to every stage in the cycle of plan preparation, implementation, monitoring and review. As an ongoing process, the method should therefore be suited to the skills and knowledge of planning staff, although other specific experts will be involved.
7. It will, therefore, be necessary for all planning authorities embarking on the preparation of a new or replacement plan, or a significant revision not already assessed, to allocate sufficient resources to ensure the environmental assessment is completed in accordance with the Directive. When considering the Notice of Intention to Prepare a development plan, key decisions in resource allocation will include:
 - the method by which the assessment will be carried out;
 - who will carry it out;
 - the programme; and
 - who will be consulted.
8. The advice presents the key steps likely to be common to all assessments, whatever method is selected. David Tyldesley and Associates have utilised their experience of development plan assessment and developed a technique that integrates the requirements of the Directive with the development plan making procedures in Scotland. Case studies and examples are used throughout to illustrate the process. The Bibliography also includes references to alternative approaches and background reading. Some planning authorities may see advantages in elaborating some aspects of the method used here, using a more sophisticated technique, or extending the assessment to include a full sustainability appraisal as indicated in Appendix I and as used in a number of the case studies. These are matters for planning authorities to decide.

PART 1

AN OVERVIEW OF ENVIRONMENTAL ASSESSMENT FOR PLANS

Background

The origins of environmental assessment of development plans

9. It has been normal practice for those preparing and commenting on development plans to consider their likely environmental effects. The principle of assessing the environmental consequences of plans is therefore not new. What the Directive requires, and this IPA explains, is the use of an explicit and systematic method to comprehensively and impartially identify and assess the environmental consequences of the plan.
10. The origins of environmental assessment of development plans lie in the limitations of environmental impact assessment on a project by project basis. Environmental impact assessment of projects has been criticised on the grounds that because it is a response to a specific development proposal, it may not address some wider or more fundamental considerations such as alternative solutions or strategic locational issues. Neither can it fully appraise the cumulative impact of a number of proposals, especially when they are individually too small to warrant an environmental assessment. Environmental assessment of development plans can help to address these matters by assessing alternative strategies or land uses and by considering the overall environmental effects of implementing a plan.
11. Environmental assessment, as a means of improving the environmental credentials of development plan policies and proposals, is also important because S.25 of the Town and Country Planning (Scotland) Act 1997 requires that decisions on planning applications have to be made in accordance with the development plan, unless material considerations indicate otherwise.

The benefits of assessment

12. The potential benefits of assessing a development plan include:
 - clarifying the plan's environmental aims and objectives;
 - identifying aspects of the plan which may be inconsistent or in conflict with the planning authority's wider environmental aims;
 - increasing the plan's sensitivity to environmental issues, particularly outwith designated environments;
 - helping to choose between policy options and alternative locational strategies;
 - explicitly considering the possible environmental consequences of policies and proposals;
 - considering whether additional measures are needed to prevent, reduce or off-set adverse environmental effects;
 - improving people's ability to participate in plan making by showing how environmental issues have been taken into account;
 - ensuring that all stakeholders can engage in the process of helping to achieve a plan more in accord with the environmental aims of sustainable development;
 - helping to prevent avoidable environmental damage; and
 - influencing subsequent development proposals.

Case Study 1

Benefits of assessment

The Conclusions of the Sustainability Appraisal of the Finalised **Fife Structure Plan**, 2001, reflected on the benefits of the assessment process. It concluded that the process had delivered added value to the Structure Plan, especially by providing the Council and the Scottish Ministers with more information about the contributions and implications of the plan. It had led to greater consistency throughout the plan and raised several issues that needed to be further addressed in the structure planning process. It had proved a useful tool in cataloguing, in a systematic way, those broad areas upon which the structure plan policies and objectives contribute to, or impact upon, achieving the Council's sustainability principles. Lessons learned would be used to improve the assessment process, and the plan, in the future.

13. Environmental assessment should also provide a source of information and analysis for any subsequent environmental assessment of a specific project. A project environmental impact assessment (EIA) is likely to involve more detailed work, but it should not have to duplicate work already undertaken. An applicant ought to be able to draw upon and quote the environmental assessment of a development plan where relevant. It is, however, possible that an EIA of a particular project, drawing on more information and analysis, could yield conclusions which are at variance with the findings of a development plan assessment. Providing the results are well founded, an EIA should be seen as a positive contribution to the continuing assessment process and one which could be fed into the next review of the development plan.

The environmental policy context

Sustainable development

14. As indicated in Scottish Planning Policy (SPP) 1, the Scottish Executive is committed to integrating the principles of sustainable development in its policy agenda. The Scottish Ministers expect the planning system to support and inform this wider policy agenda, linking principles and actions to enable sustainable development. Co-ordinated action between different programmes and priorities is essential to increase effectiveness and value. Development plans are an important link in the policy chain and their compatibility with sustainable development principles is essential. They are important as a means of integrating policies and decision making through their influence over the location of development and other changes in the way land is used.

15. Enabling sustainable development requires co-ordinated action, combining economic competitiveness and social justice with environmental quality and justice. In particular development plans should encourage sustainable development by:
- promoting regeneration and the full and appropriate use of land, buildings and infrastructure;
 - promoting the use of previously developed land and minimising greenfield development;
 - conserving important historic and cultural assets;
 - protecting and enhancing areas for recreation and natural heritage;
 - supporting better access by foot, cycle and public transport, as well as by car;
 - encouraging energy efficiency through the layout and design of development;
 - considering the life-cycle of development from the outset; and
 - encouraging prudent use of natural resources.
16. Development plan policies should address sustainable development at the local level whilst reflecting national and international goals. Both the short-term and the long-term consequences of policies must be considered from the outset. The following **sustainable development principles** may be relevant to environmental assessment and it is for planning authorities to apply them in a manner appropriate to all the circumstances:
- where potential damage to the environment is both uncertain and significant, precautionary action may be necessary (the precautionary principle);
 - decisions should be based on the best possible scientific information and analysis of risks;
 - ecological impacts must be considered particularly where resources are non-renewable or effects may be irreversible; and
 - cost implications should be brought home directly to the people responsible – the “polluter pays” principle.

National and international environmental policy context

17. The Directive requires that the “environmental report” (see glossary) of the assessment should state how any environmental protection objectives set at international, Community or Member State level, which are relevant to the plan, have been taken into account during the preparation of the plan. The Scottish Executive’s priorities, actions and targets for sustainable development in Scotland are published in “*Meeting the Needs*” Paper 2002/14 of the Scottish Executive Environment Group dated April 2002. This reflects some of our environmental commitments to the international community with which development plans should be consistent and which should be used to inform their assessment. The environmental objectives and criteria set out below (Appendix B) are intended to be comprehensive of the wider environmental protection objectives and should form an adequate basis for compliance with Article 5 and Annex 1 (e) of the Directive.

The approach to assessment

Key elements of the process

18. The Directive requires that the assessment must include a number of specific elements, the more important of these include:
- a screening process to determine whether alterations and plans for small areas at local level should be subject to assessment;
 - the collation, forecasting and presentation of baseline environmental information;
 - deciding the scope and likely level of detail for the assessment i.e. the likely significant environmental effects of the plan;
 - the opportunity for designated consultation authorities to influence the assessment from an early stage;
 - the carrying out of an environmental assessment during the preparation of a plan and before its adoption;
 - the publication of an environmental report with the consultation draft plan;
 - the publication of an environmental report (or revised report) with the submission of a structure plan to the Ministers or the deposit of a finalised local plan;
 - an early and effective opportunity for the public (see glossary) to comment on the environmental report, as well as the plan, before the plan is adopted;
 - taking into account the environmental report and the results of consultations in decision making;
 - provisions for considering the transboundary effects of the plan and consultation with those affected;
 - establishing a monitoring procedure for the plan; and
 - publication of information about the adoption of the plan.

Integrating the assessment with the development plan process

19. It will be apparent from paragraph 18 above, that the environmental assessment process must be integrated into the development planning process. It is not simply an “add-on” or separate process. The method explained below is intended to fit the environmental assessment process into the existing stages of development plan making and revision, as shown particularly in Table 1 below. It is unlikely that any new stages will need to be introduced into the development plan procedures. Nevertheless, it will be important for planning authorities to anticipate where the requirements will fit in and to check that each step required in the environmental assessment process is accommodated, at an appropriate time, in the preparation or modification of every development plan. It is never too early to start the assessment process. Some Councils have started by assessing their existing plans so they can build on their strengths, fill gaps and otherwise improve their weaknesses.

Case study 2

Starting the assessment process

East Dunbartonshire Council started the assessment process for its replacement local plan, in 2001, by commissioning an assessment of all the **East Dunbartonshire Local Plans** currently in force: the Bearsden and Milngavie and Strathkelvin Area Local Plans and the Forth and Clyde Canal (Subject) Local Plan.

Structure and local plans

20. An environmental assessment must be part of both structure and local plan preparation (including subject local plans), and the method can be adjusted to recognise that local plans are site specific and structure plans, generally, are not. The approach set out below is designed to be suitable for both types of plan. Ideally, structure plans should be assessed before local plans, though this may not always be possible. Whatever the order, assessments of the two levels of plan should, wherever possible, use the same or very similar methods and share common objectives in respect of sustainable development. Local plans are required to conform to the approved structure plan, so a local plan assessment should not result in policies counter to those in the structure plan. However, it could raise questions or provide information of importance to the next structure plan review.

Team approach and expert advice

21. Carrying out an environmental assessment involves decision making based not just on hard information but also on values. Whether a particular policy is thought likely to have a positive, neutral or negative effect can depend on the values held by the assessor(s) and the knowledge they have of the policy area and the environment. An assessment can be undertaken by an individual or a team. An individual is likely to take less time but a team approach is more likely to give results that are based on shared values and a common understanding. A small team would bring a range of resources to the task, including staff with a particular expertise, and could debate the potential effects of policies and proposals amongst itself. If a team is not used in the assessment, the draft results should ideally be critically reviewed by someone who was not directly involved in the plan making process. For example a senior member of staff, a colleague from another section or an expert from outwith the authority.

22. During the process of assessment, including scoping, preparation of a methodology and the assessment itself, planning staff may feel that their work would be enhanced if they sought expert advice. The most easily accessible sources will probably be current literature or other professionals working for the same authority, but it will be important for the assessment to be seen as impartial, with results that are credible and realistic about the likely effects of the plan, both positive and negative. Key stakeholders should be involved in the process. Bodies such as Scottish Natural Heritage (SNH), the Scottish Environment Protection Agency (SEPA), Historic Scotland and some interest groups may also be able to contribute and, in any event, most of the statutory bodies are likely to be selected as the designated consultation authorities required by the Directive.¹ There may also be opportunities where experts could be brought together in a workshop. The public must also be consulted at specific stages, defined in the Directive to include non-governmental organisations.²
23. The methods of consultation and the range and number of locally selected consultees will need to be considered in light of the wider development plan consultation processes. Again, it is emphasised that the assessment process should be fully integrated with the development planning process and additional consultation stages should not normally be necessary.

Case study 3

Participation in the assessment process

The **Clackmannanshire and Stirling Structure Plan** Sustainability Appraisal, 2000, involved two working groups which critically evaluated the assessment of the two Council officers who initially undertook the assessment. One group included other officers of the two councils engaged in archaeology/historic built environment, ecology/landscape, economic development, environmental health, planning, social inclusion and transport. An external group included East of Scotland Water, Forth Valley Enterprise, Forth Valley Health Board, Historic Scotland, SEPA, SNH and Scottish Sports Council.

The **Highland Structure Plan** Sustainability Appraisal 1999, included an appendix listing the participants in the assessment process. This included Council officers covering a wide range of interests (Chief Executive, Housing, Planning and Development, Property and Architectural, Protective Services, Roads and Transport Services, and Social Work Services) plus officers from Highlands and Islands Enterprise, Northern Constabulary, Scottish Homes, SEPA and SNH.

¹ The designated consultation authorities **must** be consulted at specific steps, namely: if screening plans to decide whether they should be subject to assessment; scoping the content of the Environmental Report; at Deposit Stage of the Finalised plan and when considering transboundary effects. They must also be informed upon adoption of the plan.

² The Directive requires consultation with the public when the draft or finalised plan is placed on deposit and also in any consideration of transboundary issues. The public must be informed upon adoption of the plan. The public are defined in Article 2(d) as “one or more natural or legal persons and, in accordance with national legislation and practice, their associations, organisations or groups”. In Article 6.4 the public is further defined as “including the public affected or likely to be affected by, or having an interest in, the decision-making subject to this Directive, including relevant non-governmental organisations, such as those promoting environmental protection and other organisations concerned.” Paragraphs 33 – 45 of PAN 49 are relevant here.

Choice of method

24. Before deciding on a method, practitioners may find it helpful to refer to the sources and examples given in the bibliography. It is important to be alert to the resource implications of an over-complex method and the consequent risk of introducing delay into the plan preparation. There is a range of issues to consider but the method should be:
- a. **compliant** – with the requirements of the Directive;
 - b. **straightforward** – in concept, in its relationship with working practices and the planning process;
 - c. **clear** – in its assembly and presentation of information;
 - d. **comprehensive** – considering all relevant aspects of the environment and the plan;
 - e. **adaptable** – capable of being started at any stage in the process, and of evolving as the process unfolds;
 - f. **economic** – in the use of skills, knowledge and other resources available, especially by fully integrating the assessment process with the development plan making process;
 - g. **flexible** – capable of informing decision making in a changing policy context; and
 - h. **progressive** – able to embrace new information, predictive techniques and ideas as knowledge and experience develop.
25. In its application the method should also be:
- **systematic** – thorough and rigorous in its assessment of all aspects of the plan, in an even-handed way or, if focused, concentrating on the environmental effects that are likely to be most significant;
 - **transparent** – so that the users of the plan can understand how and why it has been influenced by the assessment;
 - **objective** – so that bias and subjectivity are minimised, the assessment is seen to be honest, for example, by conceding deficiencies or uncertainties in the assessment process or outcomes and acknowledging adverse effects where these are likely to be significant and the plan cannot avoid or further reduce the effects by mitigation measures; and
 - **internally consistent**, the assessment should demonstrate strong links between the plan and the assessment process, for example, wherever possible, the criteria used to test the plan should be explicitly and directly related to the fundamental principles of sustainability on which the plan itself should be founded.

Case study 4

Selection of method

The Sustainability Appraisal of the Finalised **Fife Structure Plan**, 2001, included an explanation of methodology that systematically linked the criteria applied in the assessment to the ten sustainability principles embodied in the plan itself. For each principle a checklist of questions was created, each with an indicator of whether the policy would be consistent with each principle.

An example of this for one of the principles is included in Appendix I.

Overview of assessment method

26. The method and assessment process set out in Part 2 of this advice has been prepared by David Tyldesley and Associates based on their experience of environmental (and sustainability) assessment and taking account of other UK and international examples. Like all assessments of development plans in Scotland to date, it uses a series of simple matrices and checklists to assess the policy coverage of the plan and to compare a plan's aims, locational strategy, policies and proposals with the environmental objectives of sustainable development. The matrices list the plan's policies/proposals on one axis and the environmental objectives on the other, as shown in Figure 1. The assessment is recorded in the cells, usually using symbols. Thus the matrix provides a structure for assessing environmental effects and recording the results. Nevertheless it will not always be easy to decide on what the environmental effects of the plan are likely to be. Part 2 and the Appendices provide detailed advice.

Figure 1 Illustration of a matrix using simple symbols

Policies	Compatibility with environmental assessment objectives									
	1	2	3	4	5	6	7	8	9	10
Housing HO20	✓✓		✓	✓	X	✓		✓	X	✓
Housing HO21	✓✓		X	✓	✓			X	✓	✓
Employment EMP3		?	✓	X	X	X		✓	✓	✓✓
Tourism TM5		X	?	✓✓	?	✓		✓✓	X	✓
Open Space OS12		?	✓✓	✓	✓✓	✓	✓✓	✓✓	✓	?

Key:

- ✓✓ Close compatibility/Major beneficial effect
- ✓ Partial compatibility/Beneficial effect
- ? Uncertain effects/Lack of adequate information
- Blank No interaction/no effect/no relationship/neutral
- X Incompatible – potential policy conflict/Adverse effect

27. Obviously, the fewer the objectives and criteria, the less time will be needed to carry out the assessment but, if an assessment is to be comprehensive, fewer criteria tends to mean that each criterion has to cover more issues and becomes more complicated, and therefore more difficult to apply. The number of environmental objectives and criteria in Appendix B Table B1 below would adequately cover the key issues in most plans. Some may not be applicable to some plans, some could be amalgamated but others may need to be divided to adequately test particular plans. Many local authorities will already have their own statement of sustainable development and environmental objectives, though these may need to be restated to be in a form suitable for environmental assessment.

Case Study 5

Symbols used in assessment matrices

The Sustainability Appraisal of the Draft **Aberdeen/Aberdeenshire Structure Plan** used the simplest form of assessment symbols in the matrices, recognising that, in a structure plan, some effects may depend on how the policy is implemented in local plans:

- ✓ positive
- X negative
- I depends on how implemented by local plans
- ? unknown
- N/A not applicable

28. The method in Part 2 is designed to identify the general direction set by the policies and proposals and not to show whether specific environmental targets will be met. Those carrying out the assessment have to make an informed judgement. For example, they may ask “is the plan aim, policy or proposal compatible with each environmental objective of sustainable development?” The answers are entered in the matrix using symbols, words or a combination of both. To appraise the effects of site specific proposals a matrix or checklist can be used, also completed using symbols.

Case Study 6

Symbols used in assessment matrices

The Sustainability Appraisal of the Finalised Fife Structure Plan used the following symbols in the assessment matrices indicating whether the contribution to achieving the sustainability principle (criterion) was:

- ✓ positive
- ✓/o positive although limited
- X adverse
- X/o adverse though likely to be limited
- ✓/X both positive and adverse
- ? uncertain
- outwith the scope

Case Study 7

Symbols used in assessment matrices

The **Highland Structure Plan** Sustainability Appraisal 1999, used a more sophisticated approach using the following symbols in both policy and proposal matrices, notably identifying indirect effects:

- ++ Highly significant positive benefit for sustainability which is of considerable importance in terms of its overall policy implications
- + Significant and measurable positive benefit for sustainability
- 0 Neutral effect
- Significant or measurable adverse effects on sustainability but not so serious as to demand mitigation through policy revision
- Highly adverse impacts on aspect(s) of sustainability which seriously demand to be addressed through revision of current stated policy
- +/- Policies which have mixed positive and negative implications
- (+) (-) Indirect positive or negative impacts on sustainability

29. As an alternative to using symbols the entries made in the matrix could instead simply be "yes", "no" or "no interaction". The symbols could be elaborated with short explanatory notes, in an end column, as shown in Appendices D – F.
30. The important point is that the entries in a matrix or checklist should not purport to be more sophisticated than the judgements on which they are based. It would be wrong and misleading, for example, to use an elaborate numerical grading.

PART 2

THE ASSESSMENT PROCESS

The key stages of assessment

31. The assessment process involves the 14 key stages set out in Figure 2. They are necessarily presented as a sequence but assessment works best as an iterative process. For example, as the assessment reveals potentially significant environmental effects, the plan makers will return to earlier stages to consider whether policies and proposals need altering in light of the assessment findings, they may adjust the plan accordingly and where necessary will need to reassess the environmental effects of the alterations. The rest of the advice explains what is necessary at each stage.

Figure 2 Key stages of the assessment process



32. The assessment process has to be integrated into the wider process of plan preparation while also satisfying the requirements of the Directive. This is summarised in Table 1 which sets the 14 key stages alongside the planning process and the requirements of the Directive. It also refers to the detailed steps in the assessment process. It is based on local plan processes but is applicable to structure plans.

Table 1
Plan making and the assessment process

The relationship between the 14 key assessment stages and the plan making process

Development plan process	Key assessment stage (Figure 2)	Requirements of the Directive	Steps in the assessment process	
Intention to alter/review plan, identify likely nature and scale of revisions	1. Screening alterations of plans potentially subject to assessment	Testing whether plan alteration requires assessment (Article 3.3-6)	Screening process for application of Directive	
		Mandatory consultation with designated authorities (Article 3.6)	Consult designated consultation authorities before making screening decisions	
		Publish decisions (Article 3.7)	Publish screening decisions	
Surveys required by TCP(S) Act 1997 Publicise report of survey	2. Collating and forecasting baseline environmental information	Annex I(b) requires environmental report to include relevant aspects of current state of the environment	Collation and updating of baseline environmental information relevant in nature and scale to the development plan	
		Annex I(b) requires environmental report to include likely evolution of environment in the absence of plan implementation	Forecast of environmental change relevant in nature and scale to the development plan	
Publicise matters to be included in the plan	3. Scoping the environmental report and likely significant environmental effects	Scoping with consultations (Article 5.4)	Identify significant environmental issues	
			Identify scope and level of detail of information to be included in environmental report	
			Consult designated consultation authorities and agree scope of environmental report	
Issues paper, developing a vision and aims for the plan, consideration of alternative policy frameworks and spatial strategies	4. Adopting environmental objectives and criteria	Defining environmental protection objectives and how they have been taken into account (Annex I(e))	Develop and adopt environmental objectives	
	5. Assessing the plan's vision and aims		Develop and adopt environmental criteria	
	6. Consultations and consideration of transboundary effects	Consider any likely transboundary effects, consult if necessary (Article 7)	Assess the vision and aims of the plan	
	7. Assessing alternative policy frameworks and locational strategies	Assess reasonable alternatives (Article 5.1)	Consider any likely transboundary effects, consult if necessary (Article 7)	Consider any likely transboundary effects
			Assess reasonable alternatives (Article 5.1)	Assessing alternative policy frameworks and spatial or other locational strategies
			Select and justify preferred policy framework and spatial strategy	

Table 1 (continued)			
Development plan process	Key assessment stage (Figure 2)	Requirements of the Directive	Steps in the assessment process
Prepare the consultation draft plan	8. Checking the policy range of the plan	Undertake assessment of environmental effects of the plan (Articles 1 and 3.1 and 4.1) identify mitigation etc (Annex I(g)) and prepare environmental report (Article 5)	Checking the range of development plan policies
	9. Assessing the plan's policies and proposals		Assess the plan's policies
			Assess the plan's proposals
			Identify uncertainties and mitigate adverse environmental effects
Consultation Draft Plan/pre-deposit consultations on emerging policies and proposals	10. Preparing and publishing the environmental report with the consultation draft plan	Assess existing and required monitoring (Article 10)	Develop proposals for monitoring
		Complete environmental report (Article 5 and Annex I)	Complete environmental report and finalise plan
Revision and preparation of finalised plan	11. Modifying draft plan and revising environmental report		Assess effects of revised policies and proposals and revise the environmental report
Submission of structure plan to Ministers, deposit of finalised local plan	12. Depositing environmental report with submitted/finalised plan	Deposit of finalised environmental report and consultation with public and designated authorities (Article 6.1-2)	Deposit finalised local plan or submit structure plan with revised environmental report, consulting designated authorities and the public
Consideration of objections, pre-Inquiry modifications, Public Inquiry or consideration by SE, post-Inquiry modifications, preparations for adoption, notice of intention to adopt/ approve	13. Procedures in respect of adoption of the plan	Consideration of environmental report, representations of consultees and opinions of the public before plan adopted (Article 8)	Duties to consider results of the assessment process before plan adopted
		Article 9.1(b) statement and monitoring proposals required in time for adoption	Prepare Article 9.1(b) statement
		Inform public etc and make available a) the plan b) a statement in accordance with Article 9.1(b); and c) proposals for monitoring (Article 9.1)	Adopt/approve plan, inform consultees and the public and make available Article 9.1(b) statement and monitoring proposals
Ongoing monitoring and review process	14. Monitoring and review	Monitoring of significant environmental effects (Article 10)	Monitor and review results of monitoring and consider need for review of plan
Cycle complete – Survey of baseline data will inform review process and intention to prepare alteration/modifications to the plan			

NB. Whilst the method set out in this guidance is intended to help to ensure compliance with the Directive, planning authorities are encouraged to adapt it to suit local circumstances and priorities. Most of the steps in Table 1 must be completed to ensure compliance, but there is some flexibility in, for example, the setting of criteria, the scope and format of the environmental report and the determination of methods and scope of monitoring.

Stage 1. Screening alterations of plans potentially subject to assessment

33. This step only relates to cases where a planning authority resolves to prepare an alteration or any other modification of an existing plan, whether or not that plan, originally, was subject to assessment during its preparation. All new and replacement structure and local plans will require to be assessed in accordance with the Directive.
34. Article 3.3 of the Directive provides for *“plans ... which determine the use of small areas at local level and minor modifications to plans ... Shall require an environmental assessment only where the Member States determine that they are likely to have significant environmental effects.”* The determination may be made on a case-by-case basis or the Member State may determine that all plans or programmes of a specified type must be subject to assessment, or they may combine both approaches.
35. It is expected that almost all revisions will need to be subject to assessment. It is for the planning authority to satisfy itself that a particular revision is exempt from assessment for one of two reasons: firstly, the revision is a very minor one that could not have any significant effects on the environment; or secondly, the revision to a local plan has already been assessed at structure plan stage. It may also be appropriate not to assess again a structure plan alteration relating only to a new proposal already assessed in a local plan.
36. In considering whether the alteration would have significant environmental effects, the planning authority must take account of Article 3(5) and every relevant criterion in Annex II of the Directive. These include consideration of the characteristics of the plan itself, or in this case, the alteration, having regard, in particular, to the following points.
37. Firstly, the degree to which the plan alteration sets a framework for development and land use change with regard to the location, nature, size and operating conditions of its proposals, or by allocating resources. Most development plan alterations will fall to be assessed under this criterion because they are likely to allocate land for development or provide a framework, which will influence the determination of planning applications.
38. Secondly the degree to which the plan influences other plans including those in a hierarchy. Many development plan alterations will fall to be assessed under this criterion because of the influence of development plans on other plans and strategies. Conversely, where a local plan alteration is only to include a proposal set out in a structure plan, that has already been assessed in accordance with the Directive, it is unlikely it will need further assessment at local plan level unless there is reason to believe the significant environmental effects may be different, or there has been a substantial lapse of time since the assessment of the proposal in the structure plan.

39. Thirdly, the relevance of the alteration to the integration of environmental considerations, in particular with a view to promoting sustainable development. Almost all development plan alterations are likely to fall to be considered for assessment under this criterion because of their integration with the sustainable development objectives of SPP/NPPG and other development plans.
40. Fourthly, environmental problems relevant to the plan alteration. Thus, if the alteration is intended to address a particular environmental problem it is highly likely it will fall to be assessed under this criterion.
41. Fifthly, the relevance of the plan alteration to the implementation of Community legislation. For example, a plan alteration introducing or modifying policies for the protection of internationally designated nature conservation sites, or project environmental impact assessment policies, or water protection/improvement or waste management is highly likely to fall to be assessed under this criterion.
42. Merely dealing with a small area of land at a local level, or a minor modification (see Article 3(3)) are not, in themselves, enough to exempt a plan alteration from assessment. The test is whether the alteration would be likely to have significant environmental effects, irrespective of its nature, location or size, and taking account of the five factors discussed above.
43. The designated consultation authorities must also be consulted in any case where it is considered that an alteration may be exempt from assessment, and the planning authority must have regard to their representations. However, consultation with the designated consultation authorities is not required where a planning authority resolves that a development plan alteration will be subject to assessment. Where a planning authority decides that a development plan alteration does not need to be appraised in accordance with the Directive it must publish the decision and the reasons for it.

Stage 2. Collating and forecasting baseline environmental information

Collation and updating of environmental information

44. Article 5.1 and Annex I of the Directive require the environmental report to include relevant aspects of the current state of the environment. These requirements should be seen in the context of the obligations on planning authorities to review and maintain up-to-date environmental information, relevant to the preparation of their development plans required by sections 4 and 11 of the Town and Country Planning (Scotland) Act 1997. The planning authority must carefully review and consider what surveys may need to be carried out and what further information may be needed to inform the development plan process, including the assessment. PAN 49 at paragraphs 14-16 provides further guidance on the reviews and surveys for development plans.

45. Article 5.2 indicates that the environmental report should include information that *“may reasonably be required taking into account current knowledge and methods of assessment, the contents and level of detail in the plan programme”* so recognising that there are limitations to the information that can be collated. The baseline environmental information should be matched to that reasonably available and necessary for the assessment.
46. Environmental information already held by planning authorities in existing data and records (though not always in the planning department) are likely to be sufficient to provide the information required by the environmental report. Most development plans already contain a summary of environmental information which usually covers most of these aspects at a level of detail likely to be sufficient for the environmental report or requiring only modest expansion. For example, it may be necessary to be more explicit about how the environment of the plan area may change in the absence of the implementation of the development plan. There is no requirement to produce complex data, the information presented in the report should be that most relevant to the issues and the use of existing environmental information is encouraged by the Directive.
47. The information required for an environmental report will vary from area to area and it is likely that the information required for a structure plan will not need to be as detailed as that for a local plan. Consequently, no fixed specification can be provided. However, as a general guide, planning authorities may find the following points helpful in reviewing the environmental information to be included in the environmental report and therefore to be collated at this stage to ensure it fully influences the assessment.
48. Annex I (c) and (d) of the Directive require the environmental report to include information about the environmental characteristics of areas likely to be significantly affected and any existing environmental problems which are relevant to the plan including in particular, those relating to any areas of particular environmental importance, such as Special Protection Areas under the Birds Directive (79/409/EEC) and Special Areas of Conservation under the Habitats Directive (92/43/EEC). This may imply that, whilst the environmental report should have a general overview of the environment of the plan area, and how it may evolve in the absence of plan implementation, there should be a more detailed examination of the areas likely to be affected by the plan and specially designated areas.
49. The environmental report should be comprehensive in its coverage of existing significant environmental issues and should reflect the Directive’s requirement for the assessment to report on *“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”* (Annex I (f)). The planning authority may wish to add to them but should not omit any without good justification. Designated areas and other areas of special sensitivity, such as those where environmental limits, classifications or thresholds of air or water quality are exceeded, should be featured in the environmental report, illustrated by maps or spatial diagrams as appropriate.

50. The information should be relevant to land use planning and to matters which the development plan will address, at a scale appropriate to the scale of the plan. The information should include, as relevant, that indicated in Appendix A (which is drawn primarily from the relevant NPPGs/SPPs and PANs) and which is relevant to the plan and its area. Appendix A is intended to provide a starting point rather than a complete and fully inclusive list. Again, the level of detail and possibly the scope of issues appropriate for a structure plan is likely to be less than that required for a local plan.
51. Some planning authorities will be able to draw extensively on existing work such as published or draft "State of the Environment Reports" where these are up-to-date. Where such a document is published, and still obtainable by the public, it may be sufficient to summarise its contents in the environmental report and provide a cross-reference to its availability. However, care should be taken to ensure the information is as up-to-date as possible and in checking this, SEPA, for example, will be generating more readily available and up-to-date data about the water environment, as a result of the Water Framework Directive, than may have been available at the time of the State of the Environment Report
52. There is a very large volume of environmental information available and planning authorities will need to be selective about the type of information and the level of detail they collate and include or summarise in the environmental report. A useful question to ask in gathering the information is *"will this be likely to influence land use planning policies, or spatial strategies, or allocations, or the assessment of any of them for their significant environmental effects?"*. If the answer is "no" it is highly unlikely that the information will be required for the environmental report.
53. Thus, for example, areas of contaminated land should be included perhaps with a general indication of the nature of the contamination, but a detailed analysis of the contaminants would not be necessary. Similarly, areas with poor levels of air quality should be identified with a brief indication of the likely causes, but the details of the discharges of each individual source of air pollution is unlikely to be necessary. Watercourses, or parts of them, that will be graded by SEPA below the target "good" category, under the provisions of the Water Framework Directive should be included but, in most cases, it will be sufficient to summarise the reasons for degradation, rather than detailing them. Natural and cultural heritage designations should be included with an indication of the reasons for the designation and whether the interests are of international, national or local importance. This is particularly important to comply with the requirements of Annex I(d).

Forecast of environmental change

54. Article 5.1 and Annex I(b) of the Directive require the environmental report to include how relevant aspects of the current state of the environment may evolve without the implementation of the plan. Thus, it is appropriate to consider trends and pressures on the environment of an area and what may happen if the plan's proposals and policies, including the environmental protection policies, were not implemented, ie in the absence of planning control.

55. It is important to undertake an analysis of environmental change over the plan period because this will influence the assessment of the effectiveness of policies in avoiding or reducing significant environmental effects. It will help to highlight potential gaps in the scope of the plan's policy framework and improve the ability of the plan to make positive contributions to environmental protection and enhancement that may otherwise be overlooked.
56. There are likely to be some important environmental trends and changes, which may be evident despite the development plan already being in place. It may be that some of these changes are directly relevant to land use planning (e.g. increasing levels of urban dereliction or loss of townscape or landscape character through poor design and use of inappropriate building materials). Others may not be directly attributable to the planning system but may be capable of being remedied, at least in part, by new or different planning policies (eg planning permission will not be given for development involving the loss of ancient or long-established, semi-natural woodlands and conditions will be imposed to restrict the felling of trees in new planning permissions where there is a trend of such losses).
57. Whilst some effects, for example those resulting from climate change, may be only slightly detectable over a normal plan period they should nevertheless be included in the projection of environmental change where relevant. For example, any increased incidence or risk of coastal or fluvial flooding, or the effects of rising sea level requiring the raising of sea defences, would be relevant changes to include.

Case study 8

Example of forecasting environmental change

For each environmental aim selected in the **Clackmannanshire and Stirling Structure Plan** Sustainability Appraisal, 2000, key issues and trends were identified, together with the role of the structure plan in achieving the aim, and characteristics of policies that would indicate they would make a positive contribution to the aim.

For example, Aim 1 was:

“Protection and conservation of environmental quality, distinctiveness and diversity and adoption of the precautionary principle.”

It identified increasing threats to the natural heritage, decreasing environmental quality in some areas, especially outwith designated areas. The structure plan could help protect designated sites, promote a strategic land use framework that steered development to appropriate areas, protect strategic open spaces and require that the environmental effects of development should be fully assessed with the application of the precautionary principle where necessary. Indicators of policies, which would positively contribute to the aim, would include (amongst many) policies that afforded full consideration of the whole environment for development proposals; policies that protected non-designated areas of local environmental value and policies that provided clear guidance about the importance of assessing environmental impacts and effective mitigation.

Case study 9

Forecasting environmental change

The Sustainability Appraisal of the **Dundee and Angus Structure Plan**, 2001-2, included a baseline summary of social, economic and environmental conditions and trends to inform the assessment process and recommendations. Including this information also helped to clarify how criteria should be applied and where the absence of a strategic aim or policy might be of particular concern.

58. PAN 49 paragraph 49 explains that a separate Report of Survey is not required, but publicity should be undertaken in respect of surveys for new or replacement plans. The publicity could be achieved by way of consultation draft plans. The Directive will not change this, but planning authorities may wish to carry out some consultation with bodies that are well informed about the environment to help to improve the forecasting involved, see Case study 9.

Stage 3. Scoping the environmental report and likely significant environmental effects

59. Planning authorities must consult the designated consultation authorities (likely to be SEPA and SNH and the Scottish Ministers (Historic Scotland)) and are urged to consult any others who might usefully contribute to defining the scope of the assessment. The object is to seek consensus of opinion about the scope of environmental issues and the level of detail to be included in the environmental report. The consultation at this stage might usefully also include reference to the adequacy of the baseline information and forecasts of environmental change, before these are finalised, and could further extend to include discussion on environmental objectives and criteria to be used in the assessment process.
60. It will be evident that the development plan cannot address every environmental issue. Neither can the environmental report or the assessment process. The critical point is to be clear about what may comprise **a likely significant effect** in the context of the Directive. A key message of this advice is to urge planning authorities to maintain an overview of the influence of development plans on the environment. It will be necessary to scope the report in terms of its content and how it will address the significant environmental effects. Obviously, this can only be done when there is at least a general indication of what the plan is likely to cover, but that will be reasonably apparent in the case of most development plans at an early stage in the plan process. The sooner the environmental report can be scoped the better. As experience of assessment and monitoring improve it is likely that development plans will improve in their effectiveness for protecting and enhancing the environment. In the early stages of applying assessment, often for the first time in the plan-making process, authorities will need to consider which environmental effects are likely to be significant in the context of the development plan. The Directive does not require effects other than significant ones to be considered but determining significance in this context is not always easy.

61. "Significant" is not defined in this Directive, or the Directive relating to project environmental impact assessment, so it has to be a case-by-case judgement. However, as a general guide, an example of a significant adverse environmental effect likely to arise from implementing a development plan, might be an adverse effect on a feature which led to a statutory designation (for example, a National Scenic Area, Site of Special Scientific Interest, Conservation Area or Scheduled Monument). Another example might concern policy for employment sites and the likely effects of large scale industrial buildings on a landscape character of small scale. It is likely that such effects would be internally inconsistent with the plan's own policies for environmental protection. Inconsistency with one of the plan's environmental protection policies may be one useful indicator of a significant adverse environmental effect.
62. Clearly "significant" effects will not include trivial, negligible, inconsequential or other minor effects – they are insignificant. Likely significant effects will be those that can reasonably be predicted as a consequence of the plan's policies or proposals (not fanciful possibilities) that may affect the environment in ways that are noteworthy and important in the circumstances. An effect that would be of a nature, scale or duration that would not trigger any need to avoid or reduce it (by mitigation measures) in a planning application decision, would probably not be a significant effect in this context. Equally, however, any effect that, if considered in the context of a planning application would be capable of leading to a refusal of planning permission, or the imposition of a condition to substantially restrict its nature, scale or duration, would be likely to be significant.
63. Where a judgement about significance is marginal or uncertain, the precautionary principle should be applied. Thus, despite uncertainty, or relatively low risk of occurrence, if the effects could be of importance if they did occur, the principle would indicate that the effect should be regarded as a significant effect to be assessed.
64. Significance will depend on many factors. It is a judgement to be made in each case. It will depend on, amongst other things, the nature, scale and duration of the effect, whether the effect will be reversed (and if so, how quickly) how sensitive to change or recovery the environmental factors affected (eg wildlife or landscapes) may be and how important they are. Significance can also depend, in some cases, on the type of development or land use change that is proposed and its location. For example, the proposed use of land for a noisy recreation or sport would be more significant if located near to housing areas or a hospital, or in an area enjoyed for its tranquility. If located next to a site of heavy industry the increase in noise may not be significant.

65. It is not possible to identify in this guidance the full range of all development plans' potentially significant environmental effects, be they positive or negative. In some cases the significance of an effect may be affected by local environmental priorities. For example, in some areas the priority will be to improve the quality and safety of the urban environment in town centres, or to reduce the amount of derelict or contaminated urban land. In other areas the priority may be to enhance wildlife habitats or restore the distinctiveness of local landscape character. In these cases any effects that would exacerbate the problems may be more significant than they would be elsewhere but, equally, any effects that would reduce these problems may be significant positive environmental effects.
66. Whilst the effects on all relevant environmental factors (see Annex I(f) of the Directive) must be considered in the assessment process, it is important to identify which of these are likely to be *significantly* affected by the plan, either negatively e.g. by development proposals; or positively e.g. through the application of environmental enhancement policies. The significant environmental effects and local environmental priorities are likely also to influence the selection and wording of environmental objectives and criteria and should be considered again in monitoring (see stages 4 and 14 below).
67. In determining what is significant planning authorities should also guard against trying to offset adverse environmental effects with compensation measures. They are to be welcomed where environmental effects are likely to be significant and cannot be avoided or further reduced by mitigation measures. However, they should **not** be used to argue that the effects on the environmental resource would not be significant, because they have been offset.
68. If the harm that needs to be offset is significant it should be recorded as a negative effect in the assessment, with an explanation as to how any proposed compensation measures will help to compensate for the harm or loss. Similarly, mitigation and compensation measures should only be taken into account in the assessment where they are explicitly proposed in, or required by, the plan.

Identifying the scope and level of detail of information to be included in the environmental report

69. Planning authorities will need to consider and identify the scope and level of detail of information to be included in the environmental report. This should flow from the previous steps which should have collated and forecast the relevant information about the current and future state of the environment and identified the scope for significant environmental effects.
70. Each environmental report is likely to be different and to reflect the house style and local circumstances of the planning authority. As a general guide, the relevant aspects of the current state of the environment, as required by Annex I(b) to (d), (NB. not the whole Environmental Report) may be adequately covered in about 5 to 10 pages. Maps, plans, diagrams, charts and other illustrations will help to present the information succinctly and effectively, in addition to the text.

Stage 4. Adopting environmental objectives and criteria for use in assessment

71. This stage defines an agreed set of environmental objectives and the criteria for testing the plan against the objectives. Article 5.1 and Annex I(e) of the Directive require the environmental report to include *“environmental protection objectives, established at international, Community or Member State 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”*. In light of the fact that all development plan assessments completed in Scotland to date have adopted a method using environmental or sustainability objectives and criteria, it is recommended as an appropriate, and well tried method.
72. This is a critical part of the assessment process and Appendix B and Table B.1 provides recommended environmental objectives and criteria appropriate for the assessment of all Scottish development plans, derived from international, European and national environmental policies. Whilst they are not comprehensive of every environmental issue, at each of these levels, they cover all of the environmental factors listed in Annex I(f) of the Directive. They are not confined to environmental protection aims but include environmental enhancement and restoration.
73. Table 2 below summarises the number of criteria used in a selection of assessments of development plans in Scotland between 1995 and 2002. It distinguishes between environmental assessment (EA) and fuller sustainability appraisals (SA) where, on average, about half the criteria used related to environmental issues and half to socio-economic issues. Examples of objectives and criteria are provided in the Appendices.
74. In this context “objectives” are synonymous with “aims”, both here meaning simply “that which it is intended to be achieved, what is being aimed at”. In order to ensure the development plan is moving towards sustainable development, the planning authority should be clear about what it wants to achieve in terms of the protection, conservation, restoration and enhancement of the environment. Unless the planning authority has a clear environmental vision and a set of environmental objectives it is not possible to formulate criteria that can be used to assess the development plan’s environmental performance.

Table 2 Summary of criteria used in a selection of assessments in Scotland 1995 – 2002

Plan	Assessment date	Assessment type	No environmental criteria	Total No. of criteria
Aberdeen/Aberdeenshire SP	2000	SA	11	22
Aberdeenshire LP	2000	SA	5	10
Clackmannan LP	1995	EA	16	16
Clackmannanshire/Stirling SP	2000	SA	5	9
Dundee and Angus SP	2001/2	SA	12	22
East Dunbartonshire LPs	2001	SA	4	8
Falkirk SP	2001	EA	11	11
Fife SP	2001	SA	5	10
Highland SP	1999	SA	6	15
Midlothian LP	1999	EA	7	7
Perth Kinross SP	2002	SA	10	20

75. There are a total of 18 environmental objectives suggested in Table B.1 (Appendix B). In any particular assessment some will be more important than others. One or two may be irrelevant, or not likely to relate to significant environmental effects in the local circumstances. It is for the planning authority to judge which environmental objectives should be adopted and which criteria flowing from them should be applied, or whether some may be merged or separated to suit local circumstances. However, compliance with the Directive's requirements is essential and planning authorities must ensure that all relevant environmental factors listed in Annex I of the Directive are covered. Clearly, it would aid consistency of assessment, monitoring of assessment standards and research involving many development plans if the objectives (and the criteria) in Table B.1 were adopted widely.
76. The objectives and criteria in Table B.1 are considered to include all the factors listed in the Directive. If planning authorities use these criteria it is expected that they would comply with the requirements of the Directive. Using more criteria, or making them more explicitly relevant to the policies or proposals to be assessed would make the assessment more detailed but more than about 20 criteria will make the assessment process more time consuming and cumbersome. On the other hand, reducing the number of criteria whilst maintaining comprehensive coverage of issues tends to make each criterion longer, more complex and more difficult to apply. Generally it will be inadvisable to try to combine more than one main environmental factor into a single criterion and those indicated in Table B.1 should be regarded as the most complex that can be managed in most assessments.

77. If alternative, or fewer criteria are used it is for the planning authority to satisfy itself that the assessment would be compliant. Planning authorities should, therefore, only depart from the scope of the objectives and criteria in Appendix B where they have good reason to do so, related to the nature of the plan or issues it has to address or to the area.
78. It will be appreciated that the development plan may have little scope to significantly influence some environmental factors such as human health, compared to other plans or programmes. It must be recognised that development plans are only one way, albeit a very important one, of achieving environmental objectives. It may be more practical to apply some objectives and criteria only to the specific proposals, rather than general policies. There are limits to the scope, influence and effect of development plans. They cannot be expected to achieve more for environmental protection and enhancement than they are designed and intended to do. Consequently, the environmental objectives should represent a set of relevant, realistic and practical aims, which the development plan might reasonably be expected to help to achieve.
79. In respect of some objectives we do not always understand the links between some factors, such as human health and the location of some developments and land uses, such as mineral or waste management operations and differing types of industrial activity. In order to comply with Annex I(h) the environmental report will need to refer to limitations in the selection of environmental objectives and other constraints on the assessment process.

Adopting the environmental criteria

80. In order to test the plan's content against the environmental objectives it is necessary to draw up a list of environmental criteria. These are derived directly from the environmental objectives as shown in Table B.1. The criteria take the form of a question which is then used to test the environmental effects of the plan's vision and aims, and later its policies and proposals.
81. A great deal of energy and resources has been expended, in some past assessments, generating the environmental criteria with which to test the plan. Whilst planning authorities may wish to adapt the criteria in Table B.1, they are considered to comprise a satisfactory basis on which to test any development plan in Scotland. Again, as explained above, consistency between plans in respect of the environmental objectives and criteria applied in assessments would be advantageous. However, if the environmental objectives are adapted to suit local circumstances, then the environmental criteria must be similarly adjusted; there should always be a clear relationship between the environmental objectives required by Annex I(e) and the environmental criteria used to test the plan.

Case study 10

Example of a clearly constructed methodology

The Sustainability Appraisal of the Finalised **Fife Structure Plan**, 2001, included an explanation of methodology that systematically linked the criteria applied in the assessment to the ten sustainability principles embodied in the plan itself. For each principle a checklist of questions was created, each with an indicator of whether the policy would be consistent with the principle.

An example of this, for the principle “To conserve and enhance biodiversity” had the following procedure:

Does the policy or project have significant implications for the conservation or enhancement of biodiversity (eg habitat protection, designated sites etc)?

If no move to next principle; if yes go to next question.

Does the policy or project protect or create designated sites?

Indicators would be the creation or protection of nature reserves, Special Protection Areas etc.

Does the policy or project provide information on environmental impacts and support mitigation?

Indicators of compliance would include a requirement to submit detailed information eg environmental or ecological assessments.

Does the policy or project encourage the proper assessment of the biodiversity/ecological implications of future development?

Indicators would be a requirement for proper ecological assessments and consideration of mitigation and enhancement in the consideration of proposals and reference to the precautionary principle.

Does the policy or project encourage the protection of existing natural habitats and the creation of quality sustainable habitats?

Indicators of compliance would include protection of named habitat types, use of native species in landscaping schemes, and sustaining sufficient areas of habitats for target species, together with the production of sustainable management plans.

Does the policy or project encourage increased biodiversity in terms of numbers of species, population of species and area of quality habitat?

Indicators would be whether any quality habitat would be destroyed or created, the number of key species for which habitat enhancement was proposed with account taken of any impact on other key species.

Stage 5. Assessing the plan's aims and vision

82. Many recent development plans in Scotland have contained a vision, and/or a set of aims, which the planning authority aspires to achieve through the preparation, adoption and implementation of the plan. These aspects of the plan are often focused on the goal of sustainable development. Most plans explicitly state that these aspects underpin the plan as a whole. It is, therefore, vital that these aspects are tested specifically in the assessment, as soon as they are derived, or transferred or adapted from another plan.
83. This part of the assessment process is a straightforward test of the consistency of the plan's vision and aims with the environmental criteria. This is obviously a very general test, at a broad level, to see if the plan is inherently consistent with the environmental objectives set by the planning authority and to highlight any potential areas of conflict or tension between the overall aims of the plan. At this broad level of assessment it is likely that the plan's vision and aims will be generally compatible with each other and with the environmental objectives, but there may be some potential areas of conflict or uncertainty.
84. As with the subsequent assessment of policies and proposals, to keep the assessment process systematic, structured, transparent and manageable in its method, it is usually best to use a matrix to steer the assessment. To ensure the results are understandable and not unduly complex, it may be best to use symbols in the presentation. Alternatively, brief standard word descriptions could be used but they tend to lead to considerable duplication. Although marginal notes can be helpful explanation, lengthy text is rarely needed to express the general findings of an assessment of this kind. Indeed, there is a danger of complex presentations or prolix tables or texts, giving the impression that the assessment is more sophisticated than it is. This would be misleading.
85. Examples of symbols that may be used to express the judgement made in respect of each criterion are shown in Case Studies 5 to 7 above and in the Appendices. It will be noted that the ? symbol is used. This is intended to indicate uncertain or unpredictable effects and/or some potential for policy divergence or conflict with environmental objectives; it might indicate a high level of reliance on cross compliance in the application of the policy, or the outcome of the assessment of the specific proposals promoted by the policy.
86. Assessment of aims and visions is necessarily general in nature. It is not like the later stage of assessing specific proposals. As with the assessment of policies it is a judgement, preferably a consensus judgement of an informed group of professionals, who know the area, and its environment and the plan.
87. Sometimes the plan's vision or aims will be referred to as the plan's "strategy" but, in this context, we define the "strategy" as the overall pattern of development locations – the spatial strategy, which will deliver the vision and aims of the plan. Whilst terminology differs between planning authorities, the aspects of the plan to be examined in this stage will normally be readily identified.
88. Examples of an assessment of a plan's vision and aims are given in Appendix D.

Stage 6. Consultations and consideration of transboundary effects

89. Transboundary effects means effects on other Member States. They are likely to be rare in Scottish development plans. The planning authority should consider whether there are, or are likely to be, any significant transboundary environmental effects arising from the plan. If there may be such effects as a result of policies or proposals in a development plan the planning authority should consult the Scottish Executive as soon as possible who would consider any necessary consultations (with the designated consultation authorities and other Member States) and advise the planning authority how to proceed, in compliance with Article 7. Normal consultations with adjacent planning authorities are not included here but will be part of the normal plan making procedures.

Stage 7. Assessing alternative policy frameworks and locational strategies

90. This important element of the assessment process is intended to identify, describe and assess *reasonable* alternatives for the plan's policy framework and the plan's spatial strategy and choices about general locations of development. It is to ensure compliance with Article 5.1 of the Directive as defined in Article 5.2 as "information that may reasonably be required taking into account current knowledge and methods of assessment...". Specific policies and allocations will not normally be assessed at this stage because they will not have been identified until the spatial strategy has been selected.
91. The *significant* effects have to be identified and assessed including likely secondary, cumulative, synergistic, short, medium and long-term, permanent and temporary, positive and negative effects on the environment (as listed in the footnote to Annex I). It should also reflect the Directive's requirement to report on factors such as those listed in Annex I (f). See the glossary below for an explanation of these terms, including some examples.
92. Whilst planning authorities will normally have considered alternatives to policies and spatial strategies or allocation options in preparing development plans in the past, it will now be necessary to be more explicit about the alternatives considered. They will need to be identified, defined, described and assessed. It is unlikely that there will be no alternative approach to consider but alternatives must be reasonable. They should be realistic, practicable and relevant. In many cases policy and spatial options will be quite limited in the light of policies in higher tier plans such as structure plans and in SPPs/NPPGs and the National Planning Framework. There is no expectation on planning authorities to assess options that would be incompatible with national planning guidance or the structure plan. Neither is there any expectation that options or alternatives must be generated merely for the sake of assessment. In practice, few plans in Scotland have considered more than three alternative policy approaches or alternative spatial strategies.

93. However, all alternatives spanning the range of reasonable options should be identified and assessed, even those rejected at an early stage because they were considered feasible but inappropriate. The environmental report should include an outline of the reasons for selecting the alternatives dealt with so there is the opportunity to indicate why some apparently reasonable options were not included in the assessment. The Directive does not require the assessment of each and every alternative policy wording.
94. However, the Directive is unclear about whether, in the context of a development plan, it would be reasonable to limit assessment of alternatives to the main, overall policy approach and spatial strategy, or whether alternative policy approaches for each main topic require to be assessed, eg housing, employment, retailing etc. In any particular case a judgement will need to be made but, on balance, it is considered that, in the context of a development plan in Scotland, reasonable compliance with the Directive would be assured by the planning authority assessing the alternatives to the main spatial strategy of the plan and alternatives to the main policy approaches rather than each and every policy or policy topic. Examples of assessments of alternative policy approaches are discussed in case studies 11 and 12.

Case study 11

Assessments of policy options and alternative spatial strategies

Falkirk Council Structure Plan Environmental Appraisal, 2001, assessed three potential strategic choices for the scale and pattern of development: No Growth, Low Growth and Growth Strategies. The growth strategy had potential for significant adverse effects, including increased trips by private car with consequent increase in emissions; possible loss of landscape quality and open land; possible loss or damage to the quality and liveability of settlements; increased consumption of minerals and threats to protected areas. However, the assessment recognised that these potential effects could occur anywhere that the growth took place, whether it was in Falkirk or not. It was preferable to accommodate growth generated by Falkirk within Falkirk rather than displace it elsewhere and an alternative of resisting growth could increase the magnitude of some of the impacts on areas outwith Falkirk.

Case study 12

Assessments of policy options and alternative spatial strategies

The Report of Survey for the **Perth and Kinross Structure Plan**, 2001, records the examination of three development strategy options to accommodate future growth: Option 1 Concentration – focusing development substantially on Perth, its immediate edges and key transport corridors; Option 2 Dispersal – spreading new development widely across the area in other towns and villages whilst tightly constraining Perth; and Option 3 Selective Growth – of Perth and key towns. Each option was appraised against eight sustainability criteria, namely: existing development pattern; energy efficiency; efficient use of infrastructure; access to employment; relationship to services and amenities; reducing travel; impact on the landscape and impact on the cultural heritage. Option 3 emerged as the favoured option and was promoted in the Strategy of the Consultative Draft Structure Plan.

95. This step emphasises the desirability of subjecting alternative approaches to the plan's overall strategies to assessment as soon as they emerge. They can then be used to generate and underpin the plan's more detailed policies and proposals confident in the knowledge that they are compatible with the environmental objectives, or at least potential conflicts are recognised at an early stage, can be considered throughout the remaining stages and are more likely to be avoided or reduced.
96. The planning authority will select the preferred policy framework and spatial strategy and set out the justification for that decision. The justification is likely to need to refer to socio-economic issues, as well as environmental issues.
97. Whilst the need to balance socio-economic and environmental objectives is fundamental to the plan-making process, it should normally be evident in this decision that the best environmental option has been selected, unless there is a clear and well justified reason for not doing so. Where a policy or spatial option that could have significant environmental effects is chosen, or likely to be chosen, it should be examined with great care and tested rigorously and impartially in comparison with less environmentally harmful options.
98. It is also possible that the planning authority will need to choose between potentially conflicting environmental objectives. For example, the best location for development from the point of view of travel reduction may be an area valued for its landscape character or wildlife habitats. Choices should be explained and justified. In cases of potential policy conflict, priority should normally be given to the protection of environmental resources which are rare, or of the highest quality, or irreplaceable, often characteristics reflected in international and national designations. The precautionary principle may need to be applied.

Stage 8. Checking the policy range of the plan

99. It is important to check the development plan to see if all of the environmental issues and objectives are covered by policies, before assessing the policies themselves. In part, this helps to ensure the plan is consistent with higher tier policy frameworks such as SPPs, NPPGs and structure plans. In assessments carried out previously, it has often been this stage that proved to be of greatest value. This is because the range of policy issues is so wide that it is highly unlikely that any plan will have complete coverage before this check is completed.
100. The method is straightforward. A list of all potentially relevant policy topics is prepared, for example, as shown in Appendix C. The list may be derived from a variety of sources including, as in the case of Appendix C, the expectations of SPPs and NPPGs but there are other sources such as published good practice guides (including PANs) and policies drawn from a selection of other recent development plans.

101. A checklist is then developed such as the one shown in Appendix C. Using either the existing plan (where it is being reviewed) or the draft plan (where it is being generated as a new plan) the policies in the plan are checked to make sure that each topic is adequately covered. If there is a policy, which fully meets the checklist entry, the policy reference is recorded, if not the absence, or inadequacy of the policy is recorded. Comments can be added in the end column.
102. It follows that gaps in policy range should be filled by amending or adding new policies.

Stage 9. Assessing the plan's policies and proposals

Assessing the plan's policies

103. In this part of the assessment the object is to assess each policy in the plan if it is likely to have significant effects on the environment. These may, of course, be either positive or negative effects. Equally, many policies will have no effects on the environment or only a benign or neutral effect. In many cases there may be uncertainty about the effects, for example because there is insufficient information or understanding about the likely effects, or about the environmental resource, or because the effects may depend on how the policy is implemented. However, it is again emphasised that the assessment should focus on the significant effects likely to be generated by the plan and under planning control. It is not possible, or necessary, for the assessment to try to assess every conceivable environmental effect, especially those that are outwith the planning system and controlled by other statutory bodies such as SEPA.
104. The wording of policies is also important. They must, of course, follow the established principles required by legislation and government policy. However, policies should be clear and unambiguous (see SPP 1 paragraph 27 and PAN 49) and minor changes may be needed to ensure that they fully meet the environmental objectives set out for the assessment.
105. It should also be emphasised that, whilst all the potential effects must at least be considered it is only significant effects that need to be fully assessed and recorded, that is, effects that are significant in the context of the development plan. It is probable that an initial consideration will identify policies which are unlikely to have significant effects. Also, to be practical, the assessment can only consider likely effects that, reasonably, may be predicted. There is little point spending a lot of effort considering obscure, highly uncertain or unpredictable effects.
106. The actual effects of a policy cannot, of course, be assessed in the assessment because any effects will depend on how the policy is applied in relation to any planning applications made. It is a predictive, case by case judgement and the question in the assessor's mind may need to be: "if a planning application is made and determined in accordance with this policy, what, if any, will be the significant environmental effects?" The criteria in Table B 1 refine this question in respect of each environmental objective.

107. Policies, or parts of them, which merely reiterate policies in higher tier plans in the policy hierarchy and which have already been subject to assessment, may be omitted from the assessment matrix at the lower tier, unless different significant effects would be likely. In these cases an explanation for the omission should be included in the environmental report. However, policies that enlarge on, or further or interpret policies in higher tier frameworks should be assessed even if broadly in accordance with SPP and NPPG.
108. While all the potential effects have to be considered (see paragraph 105) the report should reflect the Directive's requirement for the assessment to report on "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" (Annex I (f)). In accordance with Annex I the assessment should include any likely significant "secondary, cumulative, synergistic, short, medium and long-term, permanent and temporary, positive and negative effects" on the environment (as listed in the footnote to Annex I. An example of a policy assessment and matrix are given in Appendix E below.

Case study 13

Results of policy appraisal

The **Clackmannan District Local Plan** Strategic Environmental Appraisal of Policies, 1995, recorded the following assessment of the impact of the 73 policies in the plan against 16 environmental assessment criteria. As a result of this analysis, 30 recommendations were made resulting in amendments to 29 policies and the addition of two further policies. In addition, seven priorities for future work for the Council were identified.

Table 3 Assessment of policies in Clackmannan Local Plan

Topic	No. of policies	Positive	Positive + negative	Questionable	Negative	No impact	% negative
General policies	17	101	10	18	14	129	5.2%
Residential	16	93	11	13	20	119	7.8%
Business	12	50	8	4	43	87	22.4%
Infrastructure	9	23	7	0	83	31	21.5%
Community/recreation	3	18	0	1	1	28	2.1%
Env enhancement	16	103	2	5	16	130	6.2%
Totals	73	388	38	41	177	524	7.0%

Case study 14

Results of policy appraisal

The **Falkirk Council Structure Plan** Environmental Appraisal, 2001, assessed all policies in the plan and found that:

- about 25% of policies would have a positive environmental impact,
- about 58% were generally neutral,
- about 14% were uncertain in their effects and
- 3% would be likely to have clearly negative environmental effects.

109. It is to be expected that almost all policies in the plan will be consistent with environmental objectives and criteria. Rows of symbols indicating compliance with environmental objectives will not be surprising, given the traditional regard planning authorities have for the environment in drawing up their plans. Most development plans will be strongly consistent with the principles of environmental sustainability. It is counter-productive to apply the criteria unrealistically severely. It should be assumed that all policies would be applied consistently with the obvious intent and thrust of the policy (see Examples below). The assessment should not seek to exploit every possible loophole in policy wording, but only draw attention to obvious ambiguity or inadequacy where policies are inconsistent with paragraph 27 of SPP1.

Examples of applying the plan policies in an integrated way

Example A: If the policy for a particular type of proposal does not specifically refer to design of the proposed development, it should be assumed that the design will comply with the design related policies elsewhere in the plan, because the Council will require the proposal to comply with those policies when it comes to decide the planning application or to undertake the work.

Example B: A policy may potentially adversely affect a locally designated wildlife site, but if the effects could be avoided or reduced to insignificant levels, as a result of the application of nature conservation policies which require effects on such sites to be avoided, or where unavoidable to be minimised by mitigation, then it should be assumed that that policy was relied upon in making the assessment – i.e. cross compliance (see glossary).

110. Policy conflicts should not be created unnecessarily because it obscures those policies that really need to have attention drawn to them. An example of a matrix assessing plan policies is given in Appendix E below.

Assessing the plan's proposals

111. This step involves the assessment of the effects on the environment of the plan's site or location specific proposals. The level of detail in the assessment will depend on the nature of the plan, the nature, scale and locations of the development proposals and the information available. However, all proposals should be assessed for significant effects and included in the environmental report.
112. Criteria are drawn up, similar to those in the policy assessment but usually requiring some modification, and applied to the proposals, usually in a matrix. However, a checklist could be used instead, similar to that shown in Figure 3 below. Matrices or checklists help to keep the process structured, systematic and manageable. They also help in presentation. Again symbols are usually the best way of presenting the judgements on the effects. The effects to be considered should be all of those listed in the footnote to Annex I(f), including the effects on issues such as those listed in Annex I(f). Appendix F provides an example of an assessment matrix for plan proposals.
113. This stage may be the only opportunity to assess the likely effects on the environment of housing, employment, retail and other development proposals, which will not be subject to any other form of assessment until an application for planning permission is received. Thus, an analysis of the proposals assessment matrix may show a number of symbols indicating uncertainty or potential adverse effects in respect of either particular types of development (eg housing) or in respect of particular environmental criteria. These will also indicate cumulative pressures arising from the plan implementation.

Figure 3

Example of a checklist to test a site or location specific development plan proposal

Proposal: Housing 1	Potential significant effects:				Comments
	+ positive	- negative	? uncertain		
Criteria	Direct/ Indirect (Secondary)	Permanent/ Temporary	Short Medium Long term	Cumulative/ Synergistic	
Designated nature conservation site	I-	P-	LT-		Indirect effect on hydrology of a SSSI
Protected species	?+/-	?+/-	?+/-	?+/-	Possible presence of Water vole and Barn owl, no surveys undertaken
Area Great Landscape Value	D-	T-	MT-	C-	Cumulative effect until screen planting matures
Listed Buildings and setting					No significant effects
Watercourses	I+	P+	LT+	C+	Potential pollution effects of construction and subsequent discharge from waste water treatment works controlled by conditions and discharge consents, surface water SUDS
Aspect	I-	P-	LT-	C/S-	C/S effects of northerly aspect and high levels of exposure of site will increase energy consumption create
Shelter	I-	P-	LT-	C/S-	
Contamination	D+	P+	LT+		Prior removal of contamination required by policy, beneficial effects
Accessibility	I+	P+	LT+	C+	Site within 0.5km of rail station and bus stop with hourly service
Agricultural land/soil	D+	P+	LT+		No loss of prime agricultural land and soil contamination removed
Previously developed land	D+	P+	LT+	C+	Redevelopment of brownfield industrial site

It is emphasised that the above are examples of entries in a site assessment checklist and are not intended to include all potentially relevant environmental issues. Each assessment would need to determine its own checklist in light of local circumstances.

114. Cumulative and synergistic effects must be assessed (see glossary for definitions and examples). In many cases the most effective form of cumulative and synergistic assessment may be a simple analysis of how many proposals potentially may affect particular environmental resources of importance, for example, ancient or semi-natural woodlands, monuments, peatlands, wetlands or villages displaying a distinctive architectural character. This type of approach highlights any environmental resources, which may be under stress from a series of small but cumulatively significant or synergistic changes than from one major impact.
115. An example of a Cumulative Assessment Schedule is provided in Appendix G below. In the hypothetical example given it will be seen that there is a potentially significant cumulative effect on wildlife habitats caused by a series of housing and road proposals only one of which would have a major effect on nature conservation. However, this one major effect is compounded by the combined effects of a series of smaller impacts which on their own, individually, would not be significant.
116. This is an assessment to see whether there are any fundamental problems in the allocation of land for development. It is not equivalent to a series of detailed project environmental impact assessments. It is necessary in this part of the assessment to make certain assumptions. It should be assumed that the proposal would be implemented in accordance with all of the policies of the plan. Unless it is clear that the proposal is likely to create a conflict with one or more policies, it should be assumed that the development plan would be implemented as a whole (see the boxed example at paragraph 109 above). Policy divergence should not be created for the sake of it because it obscures those proposals that really need to have attention drawn to them.
117. The assessment of proposals will highlight whether the objectives of the policies are actually being applied in practice, through the proposals of the plan and the local authority's own programmes. Are the proposals consistent with the policies in the plan and with the environmental objectives? This is called "policy convergence". Inconsistency between the aims, policies and proposals is called "policy divergence". In some cases the assessment of a proposal may be dependent on the way in which particular policies would be applied to any planning application that was made to implement the proposal. This indicates a reliance on "cross-compliance" (see the glossary for an explanation of these terms). Again, it should not be necessary to look in meticulous detail at every conceivable effect on the environment. Rather, the process is looking out for "warning lights", important indications that the plan is moving away from sustainable development, and could harm the environment.
118. This is an assessment to see whether there are any fundamental problems in the allocation of land for development. It is not equivalent to a series of detailed project environmental impact assessments. It is necessary in this part of the assessment to make certain assumptions. It should be assumed that the proposal would be implemented in accordance with all of the policies of the plan. Unless it is clear that the proposal is likely to create a conflict with one or more policies, it should be assumed that the development plan would be implemented as a whole.

119. The assessment should consider cumulative effects of the plan because these are specifically required to be assessed in the Directive and also because these kinds of effects are difficult to assess in project EIA, on a case-by-case basis.
120. Inevitably, plan proposals are likely to record a series of uncertainties and occasionally adverse effects, especially where their effects on the environment have not yet been fully investigated. The matrices are likely to have more symbols indicating uncertainty or potential policy divergence than the policy matrix. This is one of the important roles of assessment, to act as an early warning of potential problems or cumulative effects in plans or programmes that may not otherwise be assessed together. It does not necessarily mean that the schemes will actually be damaging to the environment when they are finally implemented, because there may be opportunities for the issues to be addressed and harm avoided or reduced.

Case Study 15

Results of assessment of proposals

The Strategic Environmental Appraisal of the Consultation Draft **Midlothian Local Plan**, 1999, recorded the following results from an assessment of the 75 non-site specific policies against seven environmental sustainability aims:

25 policies would be likely to have no significant environmental effects;

41 would be likely to have beneficial effects;

7 policies would be likely to have some adverse effects; and

2 policies could have potentially negative but uncertain environmental effects.

The method was adapted to provide a particularly rigorous assessment of the **proposals**.

Six environmental sustainability aims were broken down into a checklist of 44 site specific environmental criteria which were applied to the 39 site specific proposals in the plan. Of these, 15 were identified as having potential adverse environmental effects. However, these were mainly in relation, firstly, to the potential for intrusion in the landscape, which could be controlled by Policy RP7 which was included in the plan to mitigate the potential for a poor landscape fit, and secondly, loss of green open space which was inevitable given the relatively low level of brownfield land available to accommodate the housing requirement of the Lothian Structure Plan.

Identifying uncertainties and mitigating adverse environmental effects

121. Before proceeding further with the assessment it is useful at this point to draw together the potential negative significant environmental effects and the key uncertainties. Article 5.1 and Annex I(g) requires that the environmental report must include *“the measures envisaged to prevent, reduce and as fully as possible offset any significant adverse effects on the environment of implementing the plan.”* Annex I(h) requires the environmental report to include *“any difficulties (such as technical deficiencies or lack of know-how) encountered in compiling the environmental information”*.

Case Study 16

Limitations in the assessment process

The **Clackmannanshire and Stirling Structure Plan** Sustainability Appraisal, 2000, included a section relating to “Limitations of the Sustainability Appraisal” which highlighted constraints on the process and factors such as: the lack of weighting which could be accorded to the various effects identified; the exclusion of non-planning issues which could contribute to some effects; the difficulty of identifying local issues in an assessment of a strategic plan; and the limitations of assessing policy interaction.

122. It is important in this context to appreciate that the requirement of the Directive is not to mitigate every conceivable adverse effect but to **report** on the measures to mitigate and compensate any **significant** adverse effects. As explored in stage 3 above, “significant”, in this context means significant in light of the nature and scale of the plan.
123. The planning authority should consider how any significant adverse environmental effects could be mitigated or compensated for. Here, we use the terms “mitigation” and “compensation” in the way that they are defined in the glossary, which itself draws on the approach to planning decisions and biodiversity set out in *“Planning for Biodiversity Good Practice Guide”* published by the Royal Town Planning Institute in 1999. This set out the five-point approach to decision making summarised in Table 4 below. Following this approach would directly reflect the requirements of Annex I(g) as illustrated in Table 4.
124. The environmental report should include a description of the mitigation and compensation measures introduced to avoid, reduce or offset any significant adverse environmental effects and should provide an indication of the anticipated effectiveness of the measures in achieving the mitigation and compensation. One of the more important mitigation measures to consider in the report will be the way in which the plan itself has been modified as a result of the environmental assessment process.

Table 4

RTPI 5 point approach to decisions	Annex I(g) requirements
Information: Is there adequate information to inform the decision?	
Avoidance: Have all adverse effects on been avoided wherever possible?	Prevent
Mitigation: Where adverse effects are unavoidable have they been or can they be minimised by the use of mitigation measures?	Reduce
Compensation: Where, despite mitigation, there will be residual adverse effects that mitigation cannot reduce further, have they been or can they be compensated by measures that try at least to offset the harm?	As fully as possible offset
New Benefits: Are there opportunities to provide new benefits?	

Stage 10. Preparing and publishing the environmental report with the consultation draft plan

125. The planning authority should prepare the environmental report, which must be made available with the consultation draft plan. The environmental report must comply with the requirements of Article 5 and Annex I of the Directive. The environmental report is the main vehicle by which consultation is to be achieved. Its contents are prescribed by Annex I of the Directive and the revised report must be placed on deposit again with the submitted or finalised plan. In all cases, the public must be invited to comment on the report as well as the plan. However, although important, the environmental report should not be seen as the only or principal output of the assessment process. The report and the plan should refer to each other and it should be clear how the assessment process has influenced the plan especially its policies and proposals. Annex I(h) requires the environmental report to include *“any difficulties (such as technical deficiencies or lack of know-how) encountered in compiling the environmental information”*. A suggested outline of the contents of an environmental report for a development plan is given below.

Suggested outline contents of an environmental report

1. Contents page
2. Non-technical summary of the report
3. Introduction including purpose of the report and compliance with explicit reference to the Directive
4. Explanation of the main objectives of the plan, its statutory purpose, its links with national policy and [other] structure/local plans and an outline of its contents
5. The state of the environment of the plan area generally

6. How the environment might evolve in the absence of implementation of the plan
7. A description of existing environmental problems that the plan should address
8. Report on scoping – how the significant environmental effects of the plan have been identified
9. The areas likely to be most affected by the plan's policies or proposals and their particular environmental characteristics
10. The method of assessment and any limitations, which restrict the effectiveness of the assessment, including technical deficiencies or lack of information or know-how
11. The environmental objectives and criteria and a brief reasoning as to why they were adopted and how they have been applied in the assessment eg in the matrices
12. A description of the main alternative policy frameworks and spatial strategies considered with a description of their likely significant environmental effects and a reasoned account as to why the selected option(s) were chosen
13. A report on the policy coverage and range of policies in the plan
14. The likely significant effects of the plan's policies and proposals, including any secondary, cumulative, synergistic, short, medium and long-term, permanent and temporary, positive and negative effects
15. A list and description of mitigation measures to avoid or reduce the significant effects and their likely effectiveness, including changes made to the plan as a result of the assessment process
16. A list and description of compensation measures and a description of the extent to which they may be expected to off-set significant residual effects
17. A description of the measures envisaged for monitoring the implementation of the plan and how it will influence the review of the plan
18. Consultations carried out and how to comment on the environmental report
19. Source documents, cross-references, bibliography etc.

Developing proposals for monitoring

126. When preparing the environmental report planning authorities should set out their preliminary proposals for the monitoring of the plan in respect of its significant environmental effects. Whilst this process cannot be completed until the final contents of the plan are known, near to the time of adoption/approval, planning authorities, nevertheless, have to provide at least preliminary and reasonably comprehensive proposals for monitoring in order to comply with the Directive.
127. Article 5.1 and Annex I(i) require that the environmental report should include “a description of the measures envisaged concerning monitoring in accordance with Article 10”. This implies it is recognised that the monitoring proposals cannot be fully developed when the environmental report is written but the measures **envisaged** at that stage should be included. The monitoring of the implementation of the plan, as required by Article 10.1, should be designed to “*identify at an early stage unforeseen adverse effects, and to be able to undertake appropriate remedial action*”. Article 10.2 provides for a planning authority to use existing monitoring arrangements (which may not necessarily be monitoring undertaken by the planning authority itself) if appropriate, to avoid duplication. Stage 14 below provides further guidance on monitoring,
128. It will be necessary for planning authorities to consider what effects, or possible effects, may need to be monitored, how they may be monitored, whether existing arrangements would be sufficient and appropriate to achieve the required monitoring and thus whether any new monitoring arrangements need to be put in place.

Stage 11. Modifying the draft plan and revising the environmental report

129. The planning authority will take account of public representations on the consultation draft plan but this stage will now need to include consideration of the comments on the environmental report. There will be important interactions between the comments and these should influence consideration of changes to both the plan and the report. Representations about the findings of the environmental report and/or about the plan may suggest deletion of policies or proposals or new policies or proposals, or significant modifications, to those in the consultation draft. The changes should be assessed.
130. Any revised or new policies will need to be assessed against the environmental policy criteria and new or revised proposals assessed against the criteria used to test the proposals. It will be necessary to consider whether deletion of policies or proposals would have significant environmental effects. The planning authority should also consider whether any new or different significant environmental effects can be mitigated and if so include appropriate mitigation measures in the next version of the plan.
131. The environmental report will need to be revised accordingly. If changes are extensive a new report is likely to be the most appropriate way forward. However, if modifications to the plan and changes to significant environmental effects are limited it may be sufficient to produce a supplementary environmental report, so long as the original report is still available for the public.

Stage 12. Depositing the environmental report with the submitted structure plan/ finalised local plan

132. The planning authority will finalise the plan in preparation for deposit and submission to the Scottish Ministers in the case of a structure plan or for deposit in the case of a local plan. The revised environmental report must also be submitted to the Ministers and placed on deposit. The environmental report must comply with the requirements of Article 5 and Annex I.
133. It is anticipated that the existing statutory requirements for consultation and publicity for finalised plans in the 1997 Act and the Structure and Local Plan Regulations will be adequate to meet the requirements of Article 6.1 and 6.2 of the Directive. Planning authorities should particularly ensure that the environmental report is included in all deposits and reference to it made in all publicity. They should also ensure that the designated consultation authorities receive a copy of the environmental report with the submitted/deposited plan.

Stage 13. Procedures in respect of the adoption/approval of the plan

134. Under Article 8 of the Directive there is a duty to take account of the environmental report, consultation responses, opinions expressed by the public and the results of any transboundary consultations during the preparation and before the plan's adoption/ approval. For structure plans the duty appears to be a continuing one up until approval of a plan by Scottish Ministers. Similarly, a planning authority (as advised by a Reporter where a Public Local Inquiry has been held to hear objections to a local plan) shall take account of the environmental report, consultation responses, opinions expressed by the public and the results of any transboundary consultations during the preparation, and before adoption, of a local plan.
135. It follows that the consideration of the results of the assessment process may require the plan to be modified before approval/adoption and the planning authority or Scottish Ministers, as the case may be, will need to consider whether any such changes arising from this requirement should be placed on deposit/publicised as proposed modifications to the plan
136. Thus the planning authority, and Scottish Ministers as appropriate, will need to continuously bear in mind the environmental report, consultation responses, opinions expressed by the public and the results of any transboundary consultations at every stage following the deposit of the plan. In particular, with regard to a local plan, for example, these results of assessment should be taken into account when considering pre-inquiry modifications to the plan, during the Public Local Inquiry to hear objections to the plan, when considering the Reporter's report and recommendations and post inquiry modifications (and any further representations received).

137. Where any modification to the plan is proposed (after the deposit of the finalised plan and environmental report) that would be likely to have significantly different environmental effects it will be necessary for the planning authority or Scottish Ministers as appropriate to review and if necessary, supplement, revise and re-consult/re-publicise the environmental report at the same time as the modifications are publicised. In deciding whether to revise the environmental report, planning authorities should have regard to any representations made by the designated consultation authorities as to the continuing validity of the environmental report in light of the proposed modifications.

Prepare Article 9.1(b) statement

138. The Directive requires a statement to be prepared in accordance with Article 9.1(b) which shall summarise:

- a) how environmental considerations have been integrated into the plan or programme;
- b) how the environmental report, consultation responses and public opinions have been taken into account in accordance with Article 8; and
- c) the reasons for choosing the plan as adopted/approved in light of the other reasonable alternatives dealt with.

As this statement must be made available to the designated consultation authorities and the public when the plan is approved/adopted, it will be necessary to start its preparation in sufficient time. The Directive does not specify whether this statement should, or may, be included in the adopted plan.

Case Study 17

Reporting the effect of assessment

The **Highland Structure Plan** Sustainability Appraisal 1999, summarised the outcomes of the assessment and the resulting modifications to the plan so that it was clear how the assessment had influenced the plan. For example, amongst many and varied changes, a policy referring to the precautionary principle was added to the Strategy, policies were strengthened to further ensure high levels of environmental protection without diminishing the economic potential of fish farming in Highland, and a large single user employment site allocation was reduced in scale to reflect nature conservation concerns relating to an internationally designated site nearby.

Finalise proposals for monitoring

139. It should now be possible for the planning authority to finalise its proposals for monitoring in accordance with Articles 5 and 10. The reason why it would not be possible to finalise before this stage, and include in the environmental report only preliminary measures envisaged for monitoring is because the full and final content of the plan's policies and proposals would not be known until this stage. The requirement of Article 9.1(c), to make available the measures decided about monitoring at the time of adoption of the plan, must recognise that the measures included in the environmental report may not be the final monitoring measures. Further guidance on monitoring is given in Stage 14 below, Appendix I (paragraph 23) and Appendix H.

Adopt/approve plan and make information available

140. On adoption/approval the planning authority must also comply with Article 9 and ensure that the designated consultation authorities and the public are informed. Pre-existing publicity arrangements are expected substantially to provide adequate compliance for this notice of adoption/approval. A statement in accordance with Article 9.1(b) and a statement as to the measures decided concerning monitoring shall be made available to the public and the consultation bodies.

141. Upon adoption/approval of the plan the monitoring should be commenced. However, often in practice, the process of monitoring, review and potential adjustment and revision of the development plan will already have been started.

Stage 14. Monitoring and review

142. Articles 9 and 10 require planning authorities to monitor the significant environmental effects of implementing development plans to identify the effects, whether anticipated or unforeseen and to take remedial action if necessary.

143. The 1997 Act already places a duty on every planning authority to keep under review the matters which may affect the planning of development (Section 4), to justify structure plan policies and proposals with survey results (S7(2)) and to keep local plans under review (S.13). Advice on monitoring and review is given in PAN 37 *Structure Planning* and PAN 49 *Local Planning*.

144. Where the monitoring information indicates that significant environmental effects arising from a local plan need to be remedied, that should be regarded as a consideration under S.13(2)(a) and could lead the planning authority to consider reviewing and, if necessary, altering or replacing the plan under S.13(1) (see also SPP 1 paragraph 38). Similarly for a structure plan, monitoring could lead an authority to consider preparing an alteration or replacement plan under S.9.

145. Monitoring is an essential part of the development planning process and particularly important for assessment. Indeed, it is a requirement of the Directive. Furthermore, assessment can make a major contribution to wider monitoring programmes, for example by allowing limited resources to be focused on key areas of uncertainty or potential policy divergence which the assessment has highlighted.

The purposes of monitoring

- a] **To assess the performance of the plan's policies:**
Have the policies been adhered to? Are the environmental objectives of the policies being fulfilled? and is the coverage of the plan's policies still relevant and adequate?
- b] **To assess the performance of the plan's proposals:**
Are the effects on the environment of the plan's proposals as predicted in the assessment?
- c] **To keep track of change:**
Both of the environment itself and of human responses to changes in the environmental resource. This helps to see if the plan is working and whether the plan needs to be revised to help tackle a new issue.
- d] **To provide better information:**
About the environment and the implementation of the plan to reduce the degree of uncertainty and to increase the accuracy and objectivity of professional judgements in future plan assessments.

146. Planning authorities already monitor some aspects of the development plan, eg population change, housing completions and employment, but these will not be the best indicators of change for the environment. To be effective, monitoring of development plans should be based explicitly on specific indicators and targets that help to inform the understanding of environmental change in the area and how that may be influenced by the development plan.

147. Ideally, the effectiveness of the plan's policies and proposals needs to be monitored in combination with other environmental, social and economic monitoring, in an integrated way. It is the cumulative effects of change in the area that should be the principal object of monitoring. This may need to include environmental change that is outwith the direct control of the planning system and the direct influence of the development plan, for example, in respect of agriculture and forestry.

148. Monitoring has not received a high priority until quite recently, so there is relatively little work to draw upon in considering the monitoring stages of assessment. However, it is very likely that only limited resources will be available for monitoring so priorities need to be identified.

149. Whilst almost all aspects of the plan could be monitored in some way, this is unlikely to be either feasible (from a resource point of view) or necessary (there would be little advantage in monitoring issues that would not be likely to lead to significant changes in the plan review). Environmental monitoring could be focused on three key aspects:

- a] Reducing uncertainty;
- b] Sustaining irreplaceable environmental assets that if lost can never be recreated; and
- c] Improving environmental assets such as landscape, townscape, water or air, which are degraded and require restoration or enhancement.

150. The Development Plan could cross reference relevant policies with possible indicators and targets, where applicable. Monitoring of these indicators, therefore, would show where specific targets are being met or missed and provide a guide as to how well the plan is performing its part in achieving the environmental objectives.
151. Monitoring should be a useful and cost effective process. It should be comprehensive without being unmanageable; rigorous without being complicated and meaningful without being complex, esoteric or inaccessible. Preference should be given to indicators that may monitor more than one aspect of environment. Different aspects of the environment may be grouped to reduce the monitoring effort, without reducing its inclusiveness or effectiveness. Lessons should be learned from other monitoring projects, elsewhere, but monitoring projects need to be developed that reflect local priorities, issues, pressures and environment.
152. It is also important to accept that a full scale monitoring programme is not likely to be feasible at the start. A modest beginning, with a small number of effective indicators, is better than no monitoring at all. Any programme can be extended, modified and refined with experience and as more information becomes available. The frequency of monitoring can be increased as more experience or resources become available.
153. Targets may be set so that monitoring can check to see whether they have been met or missed, and why. Targets should be demanding and worthwhile, clearly beneficial and meaningful, but they should also be feasible and realistic. Nothing is gained by setting targets that can never be achieved, because they are out of reach. However, not every indicator needs to have a specific target. Sometimes there are important indicators of trends and directions that do not necessarily have specific stages or measurements, but nevertheless clearly point to whether the plan is helping to sustain or diminish the environmental resource.
154. Finally, indicators and any related targets should always reflect the values, aspirations and attitudes of all sections of the community. As many people as possible, representing as many views as possible, should have an opportunity to contribute to the selection of indicators and the setting of targets. This is very much in line with the inclusive approach of the Directive.
155. Crucially, development plan monitoring needs to concentrate on the effects of development plans and the planning process. It may be tempting to select indicators that are easily tracked, because they are collated and published by others, such as headline indicators. However, these may reveal nothing about the performance of the plan. It is likely to be much more useful to the plan review process if indicators and targets are more like those in Figure 4 below.

Figure 4**Examples of potentially useful indicators and targets for development plans**

Topic	Indicator	Target
Reuse of land	Proportion of development, by number of bedrooms/dwellings, granted planning permission in previous 12 months which would occupy previously developed land	75% brownfield, not more than 25% greenfield
Nature conservation	Area of specified habitats likely to be lost as a result of grants of planning permission	Ancient long established semi natural woodland: Nil Ponds and other wetlands: Nil Field boundaries: No net loss
Waste and recycling	Whole building demolition by approximate total floorspace	Downward trend from 2003 baseline

Quality control

156. Article 12 requires Member States to ensure that environmental reports are of sufficient quality to meet the requirements of the Directive and must tell the EC what measures they have taken concerning the quality of reports through Regulations and Circular. It is anticipated that the Scottish Ministers will ensure quality of reports by issuing and updating this guidance, revising the guidance in light of experience, and periodically commissioning research to independently assess the compliance and quality of published environmental reports. Quality control is also enhanced by the involvement of the consultation authorities and the public (including non-governmental organisations), by the use of teams of assessors with knowledge and experience of different disciplines within local authorities, and the examination of reports when structure plans are submitted to the Scottish Ministers or local plans submitted to Reporters in connection with local plan public inquiries.

Conclusion

157. Environmental assessment can help development plans make a more effective contribution to achieving the environmental aims of sustainable development. This advice sets out one approach and provides some examples of alternatives. Other, more sophisticated and resource intensive techniques exist and it is for planning authorities to decide the form of environmental assessment that is best suited to the circumstances of their area. Environmental assessment should be seen as an integral part of development plan preparation; conducted in this way it can assist structure and local plans in meeting the needs of the current population without compromising the ability of future generations to meet their own needs.

Glossary

Aim – in this context, an intention, **objective**, or a way in which something is to be done or achieved.

Compensation measures – measures designed and intended to off-set, or at least to try to off-set, adverse **residual effects** of a development or other change.

Cross compliance – occurs where policies interact to support related and interdependent environmental objectives, for example, where one policy, say policy X is not only consistent with another policy – Y – but policy X actually relies on policy Y to achieve its objectives.

Cumulative effects – these effects can be caused by a number of developments which, individually and in themselves, may have insignificant effects, but together combine to create a significant effect; for example, too many houses built in the countryside can change and diminish the character of an open landscape; cumulative effects can also be caused by the combination of several types of effects on the same feature or receptor, such as three developments near a housing area – one causing dust, the second causing smell and the third causing noise.

Designated consultation authorities – these are the bodies that need to be consulted at specific stages, namely: screening, scoping, consultation draft plan, formal submission/ deposit of a plan and in respect of any transboundary effects. They will also need to be informed and provided with specified information upon adoption/approval of the plan. For the purposes of this advice, they are assumed to be the Scottish Environment Protection Agency, Scottish Natural Heritage and the Scottish Ministers (Historic Scotland).

Environmental report – the report required to be published with a finalised plan or programme in accordance with Article 5 and including all relevant matters listed in Annex I of the Directive.

Long-term effects are those that tend to be persistent, they may be over several or many years, or they may be of indeterminate duration, whether or not they are regarded as permanent.

Medium-term effects are those that may last a few years, such as the effects of mineral working of a quarry with an operational life of three years after preparation works and before restoration. Visual effects of a new development may be substantial in the short-term but may diminish in the medium to long-term as screen planting and other landscaping matures.

Mitigation measures – measures designed and intended to reduce adverse environmental effects that cannot be avoided.

Objectives – in this context, an intention, a goal, something which is to be done or achieved.

Permanent effects are those that are unlikely ever to cease or significantly change, throughout the life of a built development or change of use that has no time limit. Many of the effects of most forms of built development, once completed, will be regarded as permanent but visual and landscape effects may be reduced over time by landscaping.

Policy convergence – occurs when the policies and proposals of plans and programmes are consistent with each other and with the environmental objectives, as tested by the environmental criteria.

Policy divergence – occurs when the policies and proposals of plans and programmes are inconsistent with each other and/or with the environmental objectives, as tested by the environmental criteria. Thus, the policies are pulling in different directions creating uncertainty, internal inconsistency and tensions in the plan.

Public – the public are specifically defined in Articles 2(d) and 6(4) of the Directive so as to include the public affected, likely to be affected or to have an interest in a plan or programme, together with relevant non-governmental organisations such as those promoting environmental protection and other organisations concerned. Article 6(4) provides for the Scottish Ministers to define the public for the purposes of consultation. The public must be consulted at specific stages, namely: consultation draft plan, formal submission/deposit of a plan and in respect of any transboundary effects. They will also need to be informed and provided with specified information upon adoption/approval of the plan. The public may play a role in the assessment process either individually or collectively.

Residual effects – are effects that are left over after all measures have been taken to avoid or reduce the effects (**mitigation measures**) and which themselves may require **compensatory measures** to offset their effects.

Scoping – the stage in the assessment process which seeks to define what the environmental report should cover and how environmental effects should be assessed and presented.

Screening – the stage in the assessment process which determines whether a particular plan or programme, or alteration, should be subject to the assessment process, in accordance with the Directive.

Secondary effects – these may be indirect effects such as increased disturbance to breeding birds in woodland adjacent to a high density residential development, resulting from increased noise and activity and access to the woodland, even though the development did not directly affect the woodland site.

Short-term effects – are typical of those that may occur during construction stage of a development, for example, the increased traffic going to and from the site during, say, a six months construction period.

Significant environmental effects – effects on the environment which are significant in the context of the development plan, see section 3 for a fuller discussion of “significant” effects.

Strategic environmental assessment – (SEA) is the common name (acronym) attributed to the process of environmental assessment of plans and programmes, described in this Advice.

Sustainability appraisal – the assessment of a plan or programme which is extended to include social and economic effects of the plan. Where an objectives/criteria based method is used in the assessment it requires socio-economic objectives and criteria to be defined and used as well as environmental ones.

Synergistic effects – are similar to cumulative effects but the result of them is that the effect of the whole change is greater than the sum of the individual effects. For example, the steady attrition of a particular area of habitat may combine to cause a reduction in the population of a particular species, even though on its own any one of the losses would not reduce the population – a cumulative effect, but after a certain point is reached, further losses would result in the loss of that and several other dependent species from the site altogether, because a critical threshold had been reached where the habitat became too small a unit to support all the typical species. Another form of synergistic effect would be the combination of different pollutants, for example from traffic, combining in ways that eliminated plants tolerant of each pollutant on its own but not all of them together.

Temporary effects – are those with a limited or finite duration, whether short, medium or long-term and irrespective of whether the likely date of the cessation of the effects can be estimated.

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APPENDICES

Appendix A

Preliminary checklist of environmental information for inclusion in the environmental report of a local plan

This appendix relates particularly to stage 2 of the process (see paragraphs 44 – 58). With respect to the current state of the environment and likely evolution in the absence of the implementation of the plan, information concerning the following matters should be considered for inclusion.

Some aspects of the environment are particularly relevant to more than one factor, eg air quality is relevant to air and climatic factors and to population and human health, it can affect biodiversity and material assets, however, each aspect of environmental information is listed only once, to avoid considerable repetition.

Biodiversity, flora and fauna, geology/geomorphology

- Areas designated or proposed for their international (Special Protection Areas, Special Areas of Conservation and Ramsar sites), national (Sites of Special Scientific Interest) or local nature conservation importance and a description of the relevant interests, including earth heritage interests;
- Species characteristic of the area or likely to be encountered in development that are especially protected by law;
- Species and habitats identified as priorities in national or local biodiversity action plans.
- Relevant aspects of geology

Population and human health

- Areas of particular amenity value, cultural associations, tranquillity or sensitivity to development including those of importance for tourism or outdoor recreation;
- Regional and Country Parks;
- Urban and rural areas of degraded environment needing restoration or enhancement;
- Areas affected by former mineral working and requiring environmental improvement;
- Contaminated land;
- Derelict land;
- Unstable land;
- Land vulnerable to erosion from the sea;
- Operational and closed waste disposal and management sites and any particular environmental problems associated with them
- Proximity to other potential sources of pollution.

Soil

- Areas affected by former mineral working and requiring restoration.
- Prime quality agricultural land
- Nitrate Vulnerable Zones.

Water

- River catchments;
- Watercourses and water quality;
- Aquifers and other important ground water resources;
- Lochs, ponds and other wetlands including peat lands;
- Coasts categorised as developed, undeveloped and isolated coasts
- Areas of fluvial or coastal flood risk

Air and climatic factors

- Areas where renewable energy potential should be safeguarded from sterilisation.
- Locations where air quality thresholds of pollution have been exceeded
- Air Quality Management Areas

Material assets and cultural heritage (including architectural and archaeological heritage)

- Distinctive urban forms and settlement patterns;
- Conservation Areas
- Listed Buildings
- Other areas locally important for their townscape
- Other areas or concentrations of architecturally or historically interesting buildings.
- Important historic gardens and designed landscapes
- Sites of national, regional or local archaeological importance
- Areas with a concentration of archaeological and other cultural heritage interests
- Areas where the archaeological interest is uncertain but potentially significant.
- Railway land and tracks with potential for re-use as linear routes

Landscape

- Landscape character including any particularly rare or distinctive features or associations, based on the Landscape Character Assessment for the area;
- National Parks and a description of the special qualities of the area which were the reasons for designation;
- Other areas designated for their international (World Heritage Sites), national (National Scenic Areas) or local landscape importance (eg Areas of Great Landscape Value) and a description of the special qualities or features or natural beauty and amenity of the area which were the reasons for designation;
- Areas valued for their wild land character;
- Urban parks and open spaces of recreational, amenity or wildlife value;
- Green belts;
- Green corridors or wedges of green land important because they penetrate or separate urban areas;
- Important open areas which contribute to the distinctive setting or identity of settlements.

Interrelationships between these factors

- Areas sensitive to the cumulative effects of different development types eg single houses in the countryside, mineral workings or windfarms;
- Areas sensitive to an accumulation of different environmental effects, eg noise and visual intrusion;
- The coastal zone including areas of particular sensitivity or under particular pressures for change.

Appendix B

Developing environmental objectives and criteria

This appendix relates particularly to stage 4 of the process (see paragraphs 71 – 81). The objectives and criteria are considered to include all the factors required by the Directive. If planning authorities use these criteria it is expected that they would comply with the requirements of the Directive. If alternative, or fewer criteria are used it is for the planning authority to satisfy itself that the assessment would be compliant.

* In applying the criterion the question asked in each case is as follows:

“Assuming the policy is implemented as intended, that the development plan is applied as a whole, and if a planning application was made and determined in accordance with this policy, does/is ...”

Table B.1
Suggested environmental objectives and criteria

Ref	Environmental Objective	Environmental Criterion * see note above table	Most relevant factors in Annex I(f)
1	Respect land form, natural processes and systems	Does the aim/policy/proposal respect the influence of landform, geology, geomorphology and natural systems such as coastal erosion and unstable land or is it likely to significantly exacerbate risks?	Biodiversity, human health, fauna, flora, water, air, climatic factors and landscape
2	Protect and use soils in a sustainable way	Is the aim/policy/proposal likely to significantly help to protect soils or encourage the sustainable use of soils, or to have adverse effects on soils?	Soils
3	Protect and enhance the water environment including coastal and river systems	Is the aim/policy/proposal likely to significantly help to protect or enhance the water environment, for example by encouraging SUDS, reducing the risk of water being polluted, development being flooded or the need for flood defence works, or is it likely to have significant adverse effects on the water environment?	Water, biodiversity, population, human health, fauna, flora, climatic factors, material assets, cultural heritage and landscape
4	Protect, enhance and where necessary restore (specified) species and habitats	Is the aim/policy/proposal likely to significantly help to protect species especially protected by law or species identified in national or local BAPs, or to protect, enhance or restore designated nature conservation sites and/or habitats which are identified in national or local BAPs, or is it likely to have significant adverse effects on them?	Biodiversity, fauna, flora, water and landscape
5	Protect, enhance and where necessary restore landscape character, local distinctiveness and scenic value	Is the aim/policy/proposal likely to significantly help to protect, enhance or restore, or is it likely to significantly damage or diminish landscape character, local distinctiveness or scenic value or the enjoyment and understanding of the landscape?	Landscape, population, biodiversity, water, material assets, cultural heritage

Table B.1 (continued)

Ref	Environmental Objective	Environmental Criterion * see note above table	Most relevant factors in Annex I(f)
6	Protect, enhance and create green spaces important for recreation and biodiversity	Is the aim/policy/proposal likely to significantly help to protect, enhance or create, or is it likely to significantly destroy green spaces important for recreation and biodiversity or diminish their enjoyment?	Population, human health, biodiversity, fauna, flora, water, air, climatic factors and landscape
7	Regenerate degraded environments	Is the aim/policy/proposal likely to make a significant contribution to the regeneration/restoration of derelict, contaminated or otherwise degraded environments or is it likely to increase the area or degradation of such land?	Population, human health, biodiversity, water, air, climatic factors, material assets and landscape
8	Respect urban form, settlement pattern and identity	Does the aim/policy/proposal respect aspects of urban form, settlement pattern and identity in ways that contribute to sustainable development, or depart/detract from them in significant ways?	Human health, material assets, cultural heritage (including architectural and archaeological heritage) and landscape
9	Protect, enhance and where necessary restore building character, and townscape	Is the aim/policy/proposal likely to significantly help to protect, enhance or restore, or is it likely to significantly damage or diminish building character or townscape or its enjoyment and understanding?	Population, material assets, cultural heritage (including architectural heritage) and landscape
10	Protect, enhance and where necessary restore the historic environment	Is the aim/policy/proposal likely to significantly help to protect, enhance or restore, or is it likely to significantly damage or diminish the historic environment and its enjoyment and understanding?	Population, material assets, cultural heritage (including archaeological heritage) and landscape
11	Improve design quality in new development	Is the aim/policy/proposal likely to significantly improve or reduce the quality of design in new development?	Biodiversity, population, human health, material assets, cultural heritage and landscape
12	Reduce energy consumption	Is the aim/policy/proposal likely to significantly help to reduce energy consumption or increase it?	Air, climatic factors, water, biodiversity, population, human health
13	Facilitate renewable energy	Is the aim/policy/proposal likely to significantly help to facilitate renewable energy in appropriate locations or deter its development?	Air, climatic factors, water, biodiversity, population, human health and landscape
14	Reduce the need for travel and journey length	Is the aim/policy/proposal likely to significantly help to reduce the need to travel or reduce journey length or is it likely to significantly increase travel?	Air, climatic factors, water, biodiversity, population, human health
15	Encourage walking, cycling and use of public transport	Is the aim/policy/proposal likely to significantly help to encourage walking, cycling or the use of public transport or is it likely to deter them?	Population, human health, water, air, climatic factors, biodiversity and landscape

Table B.1 (continued)

Ref	Environmental Objective	Environmental Criterion * see note above table	Most relevant factors in Annex I(f)
16	Reduce waste	Is the aim/policy/proposal likely to significantly help to reduce waste including by re-using existing buildings or is it likely to increase waste arisings?	Human health, water, air, soils and material assets
17	Protect the environment from pollution	Is the aim/policy/proposal likely to significantly help to protect the environment from pollution, inc by avoiding potentially polluting developments in sensitive locations, or is it likely to increase the risk of pollution?	Population, human health, water, air, climatic factors, soils, biodiversity fauna, flora and material assets
18	Environmental capacity and the precautionary principle	Is the aim/policy/proposal likely to significantly help to identify, and to contain development within, the limits of acceptable change, or is it likely to exceed environmental capacity? Would the precautionary principle be invoked and applied?	Population, human health, water, air, climatic factors, soils, biodiversity, fauna, flora, landscape, cultural heritage, material assets

Appendix C

Checking the policy range in local plans

Example of a checklist derived from current SPP/NPPG expectations

- C.1 This appendix is particularly relevant to stage 8 of the process (see paragraphS 99 – 102). It illustrates how a checklist can be compiled to enable a systematic analysis of the range of environmental policies in a development plan. This example is drawn from the expectations set out in SPPs and NPPGs current at the time of compiling the checklist. The method involves scanning through the plan to make sure it contains a policy that meets each of the expectations listed. If there is a policy the policy reference number eg ENV10 is entered in the “Ref” column. Gaps in the reference column indicate gaps in policy coverage. Sometimes there may be only partial coverage of an expectation and the shortfall can be explained in the “comments” column.
- C.2 The checklist needs to be updated for each assessment, as the expectations of SPP and NPPG will change. The checklist could be added to by including expectations of PANs and examples of innovative policy topics in other development plans.

Appendix C Checking the policy range in local plans – based on SPP/NPPG			
NPPG	Expectations: are there policies in the plan which:	Ref	Comments
SPP 1 Planning system (2002)	Promote regeneration, full and appropriate use of land, buildings and infrastructure		
	Promote use of previously developed land and minimise greenfield development		
	Conserve important historic and cultural assets		
	Protect and enhance areas for recreation and natural heritage		
	Support better access by foot bicycle and public transport		
	Encourage energy efficiency through layout and design of development		
	Encourage prudent use of natural resources		
	Require good design		
	Encourage improvement of the physical environment		
SPP2 Economic development (2002)	Identify supporting action eg for environmental improvement that can assist the delivery of economic development		

Appendix C (continued)

NPPG	Expectations: are there policies in the plan which:	Ref	Comments
<p>NPPG 3 Housing (1996)</p>	Re-use vacant or cleared land in urban areas.		
	Specify the standards and criteria against which the development of gap, garden or other infill sites will be judged.		
	Specify those areas where regeneration and environmental improvement is to be given priority.		
	Define any areas of the countryside where isolated sporadic or small groups of houses in the countryside will be allowed; set out the criteria against which proposals for individual houses within these areas will be judged.		
	Provide for the conversion and re-use of buildings including redundant farm buildings.		
	Clearly define areas including green belts where new housing will not normally be allowed.		
	Protect valuable urban open space, particularly playing fields.		
	Guide the design of new housing proposals, including where appropriate the preparation of planning briefs, particularly in relation to new settlements.		
<p>NPPG 4 Mineral Working (1994)</p>	Define sites or areas of search, where mineral working would be favoured.		
	Define sites or areas where environmental considerations are likely to militate against mineral working.		
	Ameliorate significant environmental effects for proposed mineral developments.		
	Promote reclamation of sites to beneficial after-use.		
	Provide for regular monitoring and the preparation of environmental audits.		
	Facilitate recycling and re-use of material in waste tips and construction wastes where environmentally acceptable.		
	Include criteria for testing planning applications in respect of pollution, nature conservation, landscape, cultural heritage and built up areas.		
<p>NPPG 5 Archaeology (1994)</p>	Require the protection, preservation and, where appropriate, enhancement of all nationally important sites of archaeological interest and their settings; and also for other unscheduled remains and their settings identified as particularly worthy of preservation.		
	Require the protection and where appropriate the enhancement of landscapes of historic importance including historic gardens and designed landscapes, and their settings.		
	Require the excavation and recording of sites where the primary aim of preservation has not been achieved.		

Appendix C (continued)			
NPPG	Expectations: are there policies in the plan which:	Ref	Comments
NPPG 6 Renewable Energy (2000)	Support Scottish Minister's commitment to renewable energy and provide positively for its development		
	Define broad areas of search suitable for wind and other renewable energy developments or, where appropriate, specific sites.		
	Safeguard, where appropriate, areas with potential for renewable energy.		
	Indicate whether there are areas or sites where, for overriding environmental reasons, proposals for renewable energy development would only be considered in exceptional circumstances.		
	Guide developers on the broad criteria they would be required to consider in any development proposal, including those falling outwith preferred areas.		
NPPG 7 Flooding (1995)	Indicate where a degree of flood risk exists.		
	Define areas where development is unlikely to be acceptable and areas where flood threat can be managed		
NPPG 8 Town Centres and Retailing (1998)	Promote the environmental improvement of town and other centres and retail and commercial leisure developments,		
	Provide criteria for testing new developments outwith the framework of preferred sites and indicate how such developments will be assessed including environmental and design criteria.		
NPPG 9 Roadside Facilities (1996)	Require developments to fit in the landscape, avoid harm to other natural features and the built environment and minimise effects of noise, visual intrusion and vehicle emissions.		
	Require landscaping of parking areas.		
NPPG 10 Waste Management (1996)	Encourage development which assists in the reduction, re-use and recovery of waste for example through the re-use of buildings wherever practicable		
	Provide facilities as close as is reasonable to the source of waste production, taking into account the safeguarding of the natural and built environment.		
	Require provision of recycling facilities at new superstores and provide for other civic amenity sites		
	Provide guidance on appropriate locations for differing waste management facilities including special and clinical wastes and wastewater treatment plants.		
	Provide standards for landfill site restoration, aftercare and after-use and the proper landscaping of all waste sites.		
	Identify closed landfills, whether they require further treatment and specify appropriate after-uses.		
	Protect groundwater		

Appendix C (continued)

NPPG	Expectations: are there policies in the plan which:	Ref	Comments
<p>NPPG 11 Sport Physical Recreation and Open Space (1996)</p>	Protect and enhance parks and open spaces and other land of recreational, amenity or wildlife value.		
	Identify public access routes, referring to other publications if appropriate, state the statutory position and indicate where the network requires to be augmented.		
	Safeguard and improve public access to open space and to the countryside, especially Green Belts and promote new or replacement routes.		
	Promote planting of new woodlands for recreation, landscape and nature conservation benefits.		
	Safeguard nature conservation and cultural heritage designations and the character of the landscape from effects of sporting or recreational developments including the effects of increased traffic in rural areas.		
<p>NPPG 12 Skiing (1997) [where relevant]</p>	Set out criteria against which new ski and associated developments will be considered including environmental criteria		
	Indicate sites to be developed or improved, having regard to visual and other likely environmental impacts.		
	Provide for the monitoring and management of slopes in order to minimise damage to thin soil cover and fragile habitats.		
<p>NPPG 13 Coastal planning (1997)</p>	Define in the proposals map the extent of the coastal zone and in particular the developed, undeveloped and isolated coast.		
	Protect the environment on the coast.		
	Identify priority sites for enhancement and regeneration and opportunities for restoring degraded coastal environments.		
	Set out the criteria that will be applied with respect to the location and design of new development having regard to the risk from erosion and flooding, cultural and natural heritage interests.		
	Incorporate policies developed in Local Agenda 21 or Local Biodiversity Action Plans to meet local biodiversity objectives.		
<p>NPPG 14 Natural heritage (1999)</p>	Protection and, where appropriate, enhancement of internationally, nationally and locally designated areas and sites (including potential SPAs and SACs).		
	Indicate the criteria against which a development affecting a natural heritage designation will be assessed.		
	Encourage the management and safeguard of features of the landscape of major importance for nature conservation or amenity, including field boundaries, woodlands, trees, lochs, ponds, watercourses and other wetlands		
	Include policies for the conservation and/or enhancement of landscape character, including, where appropriate, wild land character.		

Appendix C (continued)			
NPPG	Expectations: are there policies in the plan which:	Ref	Comments
NPPG 14 Natural heritage (1999) (continued)	Make appropriate provision for Local Nature Reserves and the protection and enhancement of open space of natural heritage value.		
	Identify opportunities to extend native woodland cover and to maintain and enhance wetlands.		
	Provide for the conservation of biodiversity and the protection and enhancement of the natural heritage outwith designated areas.		
	Invoke and apply the precautionary principle.		
	Identify appropriate opportunities to improve public access for the purposes of enjoying and learning about the natural heritage.		
NPPG 15 Rural development (1999)	Identify opportunities for re-use/conversion of agricultural buildings and set out the criteria against which applications for residential and business re-use will be assessed.		
	Identify locations where tourism development could lead to environmental improvement and improve public enjoyment of the countryside.		
NPPG 16 Opencast coal (1999)	Define the broad areas where opencast coal and related minerals development may be acceptable and set out the criteria to be addressed when assessing individual proposals.		
NPPG 17 Transport (1999)	Encourage people to make more journeys by walking, cycling, and public transport.		
	Appraise the effects of road and other infrastructure proposals for their local setting, taking into account implications for the natural and built environments, the extent to which they can enhance them, or if not, demonstrate that all non-damaging alternative options have been considered and how any adverse effects might be mitigated.		
	Retention and safeguarding of linear routes such as canals and former railway lines, and other existing networks for public access on foot and by cycle, including protection and enhancement of green networks and footpaths within and around towns and cities to provide informal recreational opportunities.		
	Set standards for road construction including definition of areas where particular sensitivity is required to ensure that road standards reflect the existing character and amenity of the area.		
	Provide for traffic and parking management and safe and secure provision for walking and cycling including standards for the design and location of cycle parking.		
	Require transport assessments and green transport plans to be submitted in support of planning applications for specified development types.		

Appendix C (continued)

NPPG	Expectations: are there policies in the plan which:	Ref	Comments
NPPG 18 Historic environment (1999)	Define the historic environment and where appropriate, its landscape or townscape setting, in proposals maps.		
	Include policies for the protection, conservation and enhancement of the historic environment and its setting including listed buildings, conservation areas, scheduled monuments and historic gardens and designed landscapes.		
	Include reference to existing and proposed Article 4 Directions that relate to conservation areas.		
	Outline criteria that will be applied to development proposals within conservation areas, within the curtilage of listed buildings and development affecting the setting of scheduled monuments, listed buildings, conservation areas, historic gardens and designed landscapes.		
	Specify criteria that will be applied to proposals for alteration, extension, demolition or re-use of listed buildings and for unlisted buildings within conservation areas.		
	Identify priorities for enhancement programmes, including opportunities for regeneration or revitalisation. Indicate sites and areas for which development briefs, design guides, character appraisals and other relevant guidance have been prepared.		
NPPG 19 Telecomms (2001)	Specify development control criteria for radio telecommunications development including siting and design matters		

Appendix D

Example of an assessment of a plan's strategy/vision The consultation draft Midlothian local plan 1998

Introduction

- D.1 The general scale and location of new development in Midlothian was set out by policies in the approved Lothian Structure Plan. The Local Plan generally had to conform to the requirements of the Structure Plan and had to identify locations for the provision of:
- 4,000 dwellings in part of the South East wedge (excluded from this local plan but see Appendix F below);
 - 2,000 dwellings at Gorebridge/Mayfield/Newtongrange;
 - 1,000 dwellings at Bonnyrigg/Lasswade;
 - 1,000 dwellings at Dalkeith;
 - 500 dwellings at Penicuik/Auchendinny;
 - Up to 40 hectares of industry/business land in the North Midlothian towns;
 - Up to 30 hectares of industry/business land in part of the South East wedge (excluded from this local plan);
- D.2 As these requirements are outwith the direct control of the Local Plan process, any environmental assessment of these provisions would amount to an assessment of the Lothian Structure Plan, rather than the Midlothian Local Plan. Consequently, the environmental assessment of the Local Plan strategy is best focused on the overall policy objectives which are intended to guide the locational strategy which will identify the more precise locations of these major developments in the Local Plan and which set the overall context for the more detailed development and conservation policies in the plan. These overall policy objectives were found at paragraph 1.2.10 of the Local Plan under the title of *"Strategy Objectives"*. Eleven such objectives were listed as follows:

The Strategy Objectives

- D.3 The strategy objectives were:
1. Protecting and enhancing Midlothian's countryside and rural environment.
 2. Protecting and enhancing the built environment of Midlothian's towns and villages.
 3. Protecting and enhancing the high quality landscape of the Green Belt.
 4. Attracting economic investment for the benefit of all Midlothian's communities.
 5. Reducing traffic congestion in and around Midlothian by measures such as improved public transport and traffic management.
 6. Identifying locations for new development which minimise environmental impact and which can be well served by public transport.
 7. Identifying new economic and commercial opportunities locally to help reduce the levels of out-commuting from Midlothian.
 8. Applying the principles of quality design and energy efficiency to all new developments.

9. Seeking agreements and partnerships with developers and agencies to ensure the delivery of infrastructure and environmental enhancement.
10. Ensuring efficient use is made of existing and new infrastructure.
11. Identifying measures to regenerate rundown urban areas and revitalise rural communities.

Strategic Environmental Assessment Criteria

D.4 For the purposes of the assessment, a set of criteria was developed by the consultants and agreed with the Council. These criteria represent all the key aspects of environmental sustainability objectives, whilst keeping a manageable number of understandable and generally accepted criteria, derived from Government policy objectives. It should be emphasised that in this part of an environmental assessment, only the effects of the overall strategy objectives are being assessed, and only environmental effects that are significant at a strategic level are included. The detailed effects of the policies and the proposals of the local plan are appraised in later stages of the process. The more detailed assessment in these later stages will also highlight whether the objectives of the strategy are actually applied in practice, in the policies and proposals of the plan. This step is to test the likely effects of the strategy objectives themselves, their potential for policy conflict and their reliance on cross compliance with other policy objectives, to provide a framework for the more detailed assessment of policies and proposals. The seven criteria were as follows:

- 1. Energy Efficiency**
Will the strategy objective be likely significantly to encourage greater energy efficiency?
- 2. Pollution**
Will the strategy objective be likely significantly to minimise pollution?
- 3. Non-Renewable Resources**
Will the strategy objective be likely significantly to reduce consumption of non-renewable resources?
- 4. Renewable Resources**
Will the strategy objective be likely significantly to encourage the development and use of renewable resources within the limits of their replenishment?
- 5. Biodiversity**
Will the strategy objective be likely significantly to conserve/enhance biodiversity?
- 6. Environmental Quality and Distinctiveness**
Will the strategy objective be likely significantly to restore, conserve or enhance local environmental quality and distinctiveness?
- 7. Environmental Equity**
Will the strategy objective be likely significantly to contribute towards greater environmental equity?

D.5 The 7 environmental sustainability criteria were applied to the Local Plan's 11 strategy objectives in the matrix presented below, the paragraphs following it summarise the matrix assessment.

Assessment of the draft Midlothian local plan strategy								
Strategy Objective	Criteria							Comments
	1	2	3	4	5	6	7	
1. Protecting and enhancing Midlothian's countryside and rural environment		✓			✓	✓	✓	Significant environmental benefits
2. Protecting and enhancing the built environment of Midlothian's towns and villages		✓			✓	✓	✓	Significant environmental benefits
3. Protecting and enhancing the high quality landscape of the Green Belt	X	X	X		?	?	✓	Significant environmental benefits in green belt but its protection can increase travel distances and pressure on urban spaces and countryside/natural resources beyond the green belt
4. Attracting economic investment for the benefit of all Midlothian's communities.	✓	✓	✓		?	?	?	Significant socio-economic benefits but potential for policy conflict and divergence, highly dependant on cross compliance
5. Reducing traffic congestion by improved public transport and traffic management	✓	✓	✓			✓		Significant environmental benefits
6. Locating new dev. minimising environmental impact and well served by public transport.	✓	✓	✓		✓	✓	✓	Significant environmental benefits
7. Identifying opportunities to help reduce levels of out-commuting from Midlothian	✓	✓	✓		?	?	?	Likely significant environmental benefits but relies on cross compliance to protect local environmental quality etc
8. Applying principles of quality design and energy efficiency to all new developments.	✓	✓	✓	?		✓		Significant environmental benefits but will use of renewable energy sources be encouraged?
9. Agreements and partnerships to ensure infrastructure and environmental enhancement		✓			?	?	✓	Significant environmental benefits if infrastructure provided with cross compliance with other policy objectives
10. Ensuring efficient use is made of existing and new infrastructure	✓	✓	✓		?	?		Significant environmental benefits if new infrastructure provided with cross compliance with other policy objectives
11. Identifying measures to regenerate rundown urban areas and revitalise rural communities	✓	✓	✓			✓	✓	Significant environmental benefits

Key to matrix symbols

✓ Likelihood of significant beneficial effect(s)

Blank Criterion not relevant, or likelihood of no significant or only neutral effect(s)

X Likelihood of significant adverse effect(s) and/or likelihood of policy divergence with environmental objectives in the Local Plan, or likelihood of conflict with other environmental sustainability aims.

? Uncertain or unpredictable effect(s) and/or some potential for policy divergence with environmental objectives in the Local Plan, or potential for conflict with other environmental sustainability aims. High reliance on cross compliance in the application of the objective.

Summary of the Assessment Conclusions

- D.6** In summary, it will be seen that, assuming cross-compliance between all policy objectives, the strategy is likely to have significant environmental benefits and is certainly driving Midlothian towards sustainable development rather than away from it. The only strategic objective likely to generate some adverse environmental effects is that of protecting the green belt. This may appear to be a strange conclusion, bearing in mind the environmental benefits of protecting the countryside around towns and of preventing urban sprawl and the coalescence of settlements. Nevertheless, green belts can have some significant environmental disadvantages by increasing the need to travel, and travel distances, from growth areas beyond the green belt into the main urban centres of a region for employment, education, shopping, leisure, entertainment and other journeys. Green belts can also increase pressure for development on countryside and natural heritage resources beyond the green belt and on urban open spaces. Clearly, the recognised benefits of green belts and the Plan's policies encouraging the use of public transport and the reduction of out-commuting are all relevant and help to offset these potential disadvantages of the green belt.
- D.7** Uncertain effects and/or potential for policy divergence with environmental objectives in the Local Plan, or potential for conflict with other environmental sustainability aims arises primarily from the high dependence on cross compliance of objectives 4 and 7. Some green-field development, and therefore some potential for policy conflicts with strategy objective 1, is inevitable. Similarly, pressure to develop brown-field sites in urban areas is high so there is potential for policy conflict with environmental sustainability aims if objectives 4 and 7 are not applied in a way that is consistent with objective 2, which includes protection of both the natural and built environmental qualities of urban areas. Cross compliance is not specifically referred to in these two development objectives in the way that it is in objective 6.
- D.8** The best use of infrastructure can have significant environmental benefits, but strategy objectives 9 and 10 have the potential to require developments to provide new infrastructure in the form of road improvements or new roads and to use them to maximum effect, which may generate more private car trips or longer journeys, albeit with reductions in congestion or reduction of environmental impacts of through traffic in existing settlements.
- D.9** Consequently, the detailed assessment of the Plan's proposals should concentrate on ensuring cross compliance with the Plan's environmental policies in respect of all the Plan's allocations for development and major infrastructure proposals. If full policy convergence can be established, and overall environmental benefits can be shown to offset environmental disadvantages, then these uncertainties will be removed.
- D.10** Finally, it will be seen from the matrix that none of the strategic objectives are likely directly to encourage the development and use of renewable resources, within the limits of their replenishment. This may be regarded as a gap in the overall scope of the Local Plan's strategy.

Appendix E

Example of an assessment of a plan's policies

Consultative draft Aberdeenshire local plan 2000

- E.1 This appendix is particularly relevant to stage 9 (see paragraphs 103 to 110).
- E.2 A full sustainability assessment was undertaken, on behalf of the Aberdeenshire Council, of the Consultative Draft Aberdeenshire Local Plan in 2000. Ten sustainability aims and criteria were used to test the policies. Five of the aims/criteria related to socio-economic issues and these are not reproduced in the matrix below, although they were in the original assessment matrix. Furthermore, in this example, in order to save space, not all of the policies tested are shown in the matrix. A selection from each of the five chapters of the Draft Plan are presented for illustration. Whilst the matrix symbols are the same as in the original assessment, the comments in the matrix have been extended to help explain the conclusions.

Environmental aims and criteria

Aim 6 Environmental Protection (PRO in the matrix heading)

Environmental protection including minimisation of pollution and waste.

Criterion 6

Will the policy be likely significantly to reduce waste and/or the risk of pollution of air, water, sea, land or soil?

Aim 7 Environmental Capacity (CAP in the matrix heading)

Respecting settlement pattern, landform and natural systems and processes, containing the effects of change within environmental capacity and adopting the precautionary principle.

Criterion 7

Will the policy be likely to encourage development that fits well with Aberdeenshire's settlement pattern and does not increase the risk of flooding or land instability affecting development?

Aim 8 Environmental Quality and Distinctiveness (EQD in the matrix heading)

Conserving and enhancing, and where necessary restoring, the quality, quantity, character, distribution, distinctiveness and diversity of environmental, historical and cultural assets and stock.

Criterion 8

Will the policy be likely significantly to conserve, enhance or restore the quality, quantity, character, distribution, distinctiveness or diversity of environmental, historical or cultural assets/resources?

Aim 9 Renewable Resources (REN in the matrix heading)

Managing the use and consumption of renewable resources within the limits of replenishment.

Criterion 9

Will the policy be likely significantly to encourage appropriate forms of renewable energy, or to encourage the use or consumption of renewable resources in a more sustainable way?

Aim 10 Non Renewable Resources (NOR in the matrix heading)

Minimising the consumption of non-renewable resources, using renewable substitutes where possible and in all other ways using and consuming non-renewable resources wisely and efficiently.

Criterion 10

Will the policy be likely significantly to reduce the level of demand or rate of growth in consumption of construction or energy minerals, including reducing the need to travel and/or journey lengths?

Key to symbols in the policy assessment matrix

- ✓ Likelihood of significant beneficial effect(s)
- Criterion not relevant, or likelihood of no significant or only neutral effect(s)
- X** Likelihood of significant adverse effect(s) and/or likelihood of policy divergence with sustainability objectives in the Plan, or likelihood of conflict with other sustainability aims.
- ?** Uncertain or unpredictable effect(s) and/or some potential for policy divergence with sustainability objectives in the Plan, or potential for conflict with other sustainability aims. High reliance on cross compliance in the application of the objective, or high reliance on assessment of specific proposals promoted by the policy, the assessment of which would come later in the process and is flagged up here as an issue.

Appendix E Example of a policy assessment matrix						
Policy	PRO	CAP	EQD	REN	NOR	Comments
Env 2 National Nature Conservation Sites Development that would have a negative impact on a SSSI or a NNR will be refused unless the developer proves: A) there is no suitable alternative site for the development; B) its public benefits at a national level clearly outweigh the nature conservation value of the site; C) satisfactory steps are taken to mitigate negative development impacts.	✓	○	✓	○	○	Not confined to developments within the designated areas but includes dev that may affect them; allows for appropriate dev that would not adversely affect the site. Criteria are clearly set out but alternatives may include other ways of doing a dev, not just other sites. Could refer to compensation measures for negative impacts as well as mitigation.
Env 4 Biodiversity Development that would have a negative impact on plants or animals protected under British or European Law, identified as a priority in UK or Local Biodiversity Action Plans or other valuable habitats, will be refused unless the developer proves: A) there is no suitable alternative site for the development; B) its public benefits at a local level clearly outweigh the value of the habitat; C) satisfactory steps are taken to mitigate negative development impacts. Where there is evidence to suggest that a habitat or species of importance exists on the site the developer, at their expense, may be required to undertake a survey of the site's natural environment.	✓	○	✓	○	○	Commendable policy referring to LBAP and protected species etc but not fully compliant with Reg 37 Habitats Regulations 1994 and NPPG 14 paras 18, 20 and 47-49. Other valuable habitats are not defined or cross-referenced. Same comments on criteria as ENV 2 above.
Env 6 Coastal Development Development on the Developed Coast will be approved, in principle, if: A) It requires a coastal location; OR B) It provides economic benefits to settlements; AND C) Satisfactory account has been taken by the developer of locating the proposal on brownfield land or in disused buildings. D) It will not lead to the coalescence of coastal developments. E) It respects the character and amenity of the surrounding area. F) Where applicable, it conforms to policy Gen/4 (White Land).	✓	✓	✓	○	✓	Highly compatible with sustainability aims

Appendix E (continued)

Policy	PRO	CAP	EQD	REN	NOR	Comments
<p>Env 7 Protected and Other Open Areas</p> <p>Development in a Protected or Other Open Area will be refused unless:</p> <p>A] It would not negatively impact on the site's or settlement's special character or amenity.</p> <p>B] If within a Protected Area, it is for an essential community facility, which cannot be located elsewhere and whose public benefits clearly outweigh the value of the site to the settlement's special character or amenity.</p>	○	✓	✓	○	○	Compatible with sustainability aims
<p>Env 10 Forestry and Woodland Consultations</p> <p>The Council will object to a woodland grant scheme application if it would:</p> <p>A] Impact negatively on international, national or other recognised nature conservation sites; OR</p> <p>B] Cause the obstruction or removal of an existing or proposed access route; OR</p> <p>C] Have a significant negative landscape or ecological impact.</p> <p>When notified of any felling licence applications or Forest Design Plans which would impact as (a) – (c) above, the Council will encourage the satisfactory mitigation of any negative impacts.</p>	✓	○	✓	?	○	Policy could be more positive in provision eg for encouraging native woodlands, planting native/locally indigenous species. No reference to the sustainable management and harvesting of the woodland resource.
<p>HOU 2 Future Housing Land 2006-2016</p> <p>New housing on future housing land will be approved, in principle, if it is required to maintain a 5 year effective supply of housing land.</p> <p>Non-housing development on future housing land will be refused unless it is ancillary to the housing development.</p>	○	?	?	○	?	Compliance depends entirely on the sustainability of the allocations that flow from the policy. There is no policy encouraging mixed development.
<p>HOU 3 and HOU 4 New housing in Green Belt (H3)/Inner Countryside (H4) will be approved, in principle, if:</p> <p>A] It is for a full time worker in a primary industry who is essential to the efficient operation of an enterprise which itself is appropriate to the Green Belt/Inner countryside.</p> <p>B] The worker is housed within the immediate vicinity of their place of employment.</p> <p>C] It conforms to Appendix 1.</p>	○	✓	✓	?	X ?	Green belt and inner countryside can have negative effects on travel distances and increased commuting etc as well as positive benefits. Transport strategy needs to assess impact of Green belt. Settlement capacity is not adequately addressed.

Appendix E (continued)						
Policy	PRO	CAP	EQD	REN	NOR	Comments
EMP 5 Home Based Employment will be approved, in principle, if: A) It does not cause significant loss of amenity to neighbouring properties. B) It can be accommodated within the house and ancillary buildings without the need for extensions.	○	○	✓	✓	✓	Highly compatible with sustainability aims
EMP 8 Out of Town Centre Retail Development will be approved, in principle, if: A) The sequential test outlined in policy Emp\7 (The Sequential Test) is satisfied. B) For proposals over 1000m ² the developer funds an independent Retail Impact Assessment. C) Satisfactory account has been taken by the developer of locating the proposal on brownfield land, in disused buildings or on allocated employment land. D) The site is accessible by public transport. E) The proposal accords with policies Gen\2 (The Layout, Siting and Design of New Buildings) and Gen\6 (Aberdeenshire Towns Partnership).	○	✓	✓	○	✓	Highly compatible with sustainability aims
INF 2 Parking, Servicing and Accessibility Development will be approved, in principle, if: A) It can be accessed by walkers, cyclists and, where possible, users of public transport. B) Parking and servicing arrangements are satisfactorily provided.	✓	?	?	✓	✓	Not all new development will be able to comply. Does policy mean (a) and (b) or (a) or (b)? Still tends to encourage parking which has adverse environmental effects.
INF 4 Drainage and Water Standards Development will be approved, in principle, if: A) It will not overload existing mains infrastructure unless it is practical for the developer to provide for new infrastructure. OR B) If in a settlement, a septic tank is not used. OR C) Where public infrastructure is not available and it requires private infrastructure, this can be provided without negative impacts to public health or the environment.	✓	✓	○	✓	○	Highly compatible with sustainability aims. No explicit reference to sustainable drainage systems.

Appendix E (continued)

Policy	PRO	CAP	EQD	REN	NOR	Comments
<p>GEN 1 Sustainable Development Principles Development will be approved, in principle, if:</p> <p>A] It has a positive impact on the local environment, community and economy.</p> <p>B] It conforms, where applicable, to the following principles of sustainable development:</p> <ul style="list-style-type: none"> ■ Makes full use of design and technology to maximise the efficient use of resources ■ Reduces the production of waste and manages it as a resource in accordance with the waste hierarchy i.e. Reduce, Reuse, Recovery, Disposal. ■ Takes account of the need to minimise the use of vehicles. ■ Does not damage valuable natural and built resources. ■ Provides safe and convenient accessibility to, and helps support, existing community services and facilities. ■ Does not compromise public health and safety. ■ Does not impact negatively on the character and amenity of the surrounding area. ■ Does not give rise to hazards, pollutants or nuisances in the surrounding area. ■ Does not prejudice future development opportunities nor encourage inappropriate future development patterns. <p>Provides new, or helps support, existing local employment.</p>	✓ ?	✓ ?	✓ ?	○	✓ ?	<p>Could be elevated to the strategy of the plan.</p> <p>GEN1 is a very good keynote policy but may be subjective and too general as a main policy for implementation in dev control. Would development be refused if it only had neutral rather than positive impacts? Some duplication as many aspects covered by other policies.</p> <p>Missed opportunity to encourage mixed development. Could be restructured to be more specific and targeted. Lack of reference to energy efficiency.</p>
<p>GEN 8 Contaminated Land Development for the reuse of contaminated land will be approved, in principle, if satisfactory site investigations, risk assessments and remedial actions are taken to address any actual or potential significant risks to public health and safety and the environment arising from the proposals.</p>	✓	✓	✓	✓	✓	<p>Positive approach highly compatible with sustainability aims.</p>

Appendix F

Example of an assessment of a plan's proposals

South East Wedge Joint Development Study 1999

- F.1 This appendix is particularly relevant to stage 9 (see paragraphs 111 – 124).
- F.2 A full sustainability assessment was undertaken, on behalf of the Edinburgh City and Midlothian Councils, of the Draft Proposals for the Development of the “South East Wedge”, in 1999. The South East Wedge Joint Development Study was an important part of the planning process in the preparation of Local Plans in the City of Edinburgh and Midlothian. The Study translated the strategic planning proposals for the area contained in the Lothian Structure Plan into a more detailed and coordinated framework of land allocations and development principles which would be included in Local Plans prepared separately by each of the two planning authorities. The Study ensured that the strategic vision of the Structure Plan for the extension of Edinburgh and the redevelopment of the Craigmillar Estate was co-ordinated at Local Plan level.
- F.3 Consequently, although not a development plan itself, the Joint Development Study (JDS) had detailed land allocations and site specific proposals within an overall locational strategy based on a series of guiding principles (similar to policies). These were all supported by more detailed development principles and proposals under a range of topic headings eg, housing, schools and infrastructure. It therefore makes a good case study for the assessment of proposals in development plans because it shows how environmental objectives and criteria can be adapted to fit the key issues relevant to particular plan proposals and how they can be applied at both strategic and detailed levels. It also shows how a plan that is not a formal development plan but an essential part of a suite of plans intended to influence or implement the development plan should be subject to environmental assessment.
- F.4 Eleven sustainability aims were drawn up and from these 22 sustainability objectives and criteria (two per aim) were established to test the JDS proposals. Five of the aims and 10 of the objectives/criteria related primarily to socio-economic issues and these are not reproduced in the matrix below, although they were in the original assessment matrix and are reproduced in the example below. Furthermore, in this example, in order to save space, not all elements of the proposals tested are shown in the matrix.
- F.5 The following Table F.1 shows how the environmental criteria were drawn from the aims and objectives.

Table F.1**Environmental sustainability aims, objectives and criteria for the assessment of the South East Wedge Joint Development Study**

Sustainability Aims	Sustainability Objectives	Sustainability Criteria
1. Environmental protection	1.A To protect water courses and their catchment areas	Is the proposal likely significantly to help or to hinder the protection of a) water courses and their catchment areas or b) ground water resources
	1.B To protect ground water resources	
2. Environmental capacity precautionary principle.	2.A To contain development within the capacity of the landscape resource.	Is the proposal likely significantly to help or to hinder a) containing development within the capacity of the landscape or b) the protection of ridge lines?
	2.B To protect undeveloped ridge lines	
3. Environmental historical cultural assets/stock.	3.A To protect potential archaeological resources including industrial archaeology.	Is the proposal likely significantly to help or to hinder the protection of a) potential archaeological resources including industrial archaeology or b) historic buildings and their settings?
	3.B To protect historic buildings and their settings	
4. Renewable non renewable resources	4.A To protect prime agricultural land.	Is the proposal likely significantly to help or to hinder a) the protection of prime agricultural land or b) energy efficient development layouts utilising aspect, reducing elevation and exposure?
	4.B To create energy efficient development layouts utilising aspect, reducing elevation and exposure	
5. Environmental equity.	5.A To enhance the local path network and accessibility to countryside of green belt.	Is the proposal likely significantly to help or to hinder a) enhancement of the local path network and accessibility to countryside of green belt b) enhancement of understanding of the City, its surroundings, local views, geology, and history?
	5.B To enhance understanding of the City, its surroundings, views, geology, and history	
11. Quality of life	11.A To provide high quality design in the built environment.	Is the proposal likely significantly to help or to hinder a) high quality design in the built environment or b) opportunity for local people to contribute art accessible and relevant to their community?
	11.B To improve opportunity for local people to contribute art accessible and relevant to their community.	

Environmental assessment of key proposals of the locational strategy for the South East Wedge						
Environmental Sustainability Criteria	Ec Dev Monkton-hall Colliery	Ec Dev Newcraighall	Ec Dev Scotway	Ec Dev Whitehill Mains	Public Transport Corridor	Path network
1. Environmental protection	○	?	○	○	○	○
2. Environmental capacity	✓	X	○	X	○	○
3. Environmental etc stock	○	?	○	?	?	○
4. [Non] Renewable resources	✓	○	○	X	○	○
5. Environmental equity	○	○	○	○	○	✓
11. Quality of Life	○	○	○	○	○	✓
Comments	Benefits of redeveloping brownfield/derelict land and possible remediation of contamination	Landscape Character Assessment indicated this area required substantial mitigation, located in a "most visually sensitive area" Adjacent to a water course	Compatible with sustainability criteria	Prime Agricultural Land 3.1 Landscape Character Assessment indicated this area required substantial mitigation, located in a "most visually sensitive area"	Highly compatible with sustainability criteria	Highly compatible with sustainability criteria

- ✓ Likelihood of significant beneficial effect(s)
- Criterion not relevant, or likelihood of no significant or only neutral effect(s)
- X Likelihood of significant adverse effect(s), and/or likelihood of policy divergence or potential conflict with sustainability aims and objectives, or with other policies or principles in the plan which are consistent with sustainable development principles and aims.
- ? Uncertain or unpredictable effect(s) and/or some potential for policy divergence or potential conflict with sustainability aims and objectives. High reliance on cross compliance in the application of the principle or proposal.

Appendix G

Example of a cumulative impact assessment schedule

- G.1 This is particularly relevant to stage 9 (paragraphs 103 – 124).
- G.2 As far as can be ascertained, no detailed cumulative impact assessments have been completed, for development plans in Scotland, at the time of drafting this advice. Consequently, the following example is necessarily a hypothetical one.
- G.3 The method involves the construction of a matrix, or schedule, of proposals that could contribute to cumulative effects and assessing their effects on key environmental resources. The resources will need to be selected in light of local circumstances and planning authorities should particularly consider including such resources as landscape, water quality, wildlife habitats and the setting of important historical assets because these tend to be vulnerable to harm from the combined effects of several developments as much as by one major proposal.
- G.4 If the effects are summarised in the way shown in the example on the next page it will draw attention to cumulative effects because of the repeated reference to particular impacts. In the case of the example, the housing and road proposals are the main causes of the potential cumulative effects. The wildlife habitats are the environmental resource principally affected. Whilst only one proposal has a major adverse effect on wildlife habitats, several others add to the loss of woodland, heathland and wetland habitats, cumulating to further potentially significant losses. However, it will be noted that one of the waste water treatment works would also contribute to these cumulative effects. The other resource significantly affected is the landscape character. Here, there are two proposals with major adverse effects in their own right but these effects could be compounded by other proposals where effects are uncertain or minor.
- G.5 The symbols explained below are merely for presentational purposes, representing the key findings, they are not, in themselves, an indication of cumulative effects but of the effects on each resource of each proposal. For the assessment of cumulative effects it is essential to read the matrix as a whole, looking for repetitive patterns of symbols across the whole matrix, especially **X** and ? symbols.
- No or very limited effects of the proposal on the resource
 - ? Uncertain effects of the proposal on the resource
 - X Likelihood of minor adverse effects of the proposal on the resource
 - X** Likelihood of major adverse effects of the proposal on the resource
 - ✓ Likelihood of beneficial effects of the proposal on the resource

Appendix G				
Example of a cumulative assessment schedule				
Proposals likely to contribute to cumulative effects	Examples of environmental resources that may be affected by proposals			
	Sch Monmths Listed Buildings and Settings	Conservation Areas	Specified semi-natural habitats	Landscape character
Road improvement 1	■ None affected	✓ Beneficial – bypasses Oldtown conservation area	X Minor landtake from south side of Oldtown wood	? Uncertain depends on detailed design and mitigation
Road improvement 2	■ Passes within 500m of The Cairn monument but setting not affected	■ None affected	X + ? Severs access to woodland on the Braes from village and may affect hydrology of eastern woodland edge	? Uncertain, cuttings will be required to reduce intrusion
Road improvement 3	■ None affected	✓ Beneficial – bypasses Newtown conservation area	X Landtake inevitable from Low Loch and severs north end of Big Wood	X Road likely to be intrusive in tranquil setting of Low Loch, tree planting would be out of character in this open part of route
Traffic management scheme	✓ Adjacent to 4 Listed Buildings but generally beneficial	■ None affected	■ None affected	■ No significant effects
Waste water treatment works scheme 1	■ Sewer passes close to 2 Sch Monuments and 16 Listed Buildings but no adverse effects	■ None affected	X Pumping station and sewer at A will require some landtake from heath and would fragment Upper Heath	? Uncertain depends on detailed design and mitigation
Waste water treatment works scheme 2	✓ Beneficial, relocates pumping station away from Sch Monument	■ None affected	■ None affected	■ No significant effects
Housing proposal A	■ None affected	■ None affected	X Site is part of a locally designated wildlife site, small habitat loss from wetlands	■ ? Cross compliance with policy ENV 10 (landscaping of new housing areas) should avoid significant effects

Appendix G (continued)

Proposals likely to contribute to cumulative effects	Examples of environmental resources that may be affected by proposals			
	Sch Monmts Listed Buildings and Settings	Conservation Areas	Specified semi-natural habitats	Landscape character
Housing proposal B	■ None affected	■ None affected	■ None affected	X Site is conspicuous and would detract from linear settlement pattern
Housing proposal C	■ ? Close to 2 Listed Bldgs, cross compliance with policy CON 9 (design of new housing areas) required	■ Close to Oldtown Conservation Area but unlikely to significantly affect setting	X Some minor habitat loss from wetlands	X Some potential adverse effects as edge of village exposed and lacks cohesion
Housing proposal D	■ None affected	■ None affected	X Small habitat loss from woodland and wet heathlands	✓ Beneficial, would screen unsightly storage development
Overall Commentary	Generally no significant cumulative effects	Generally no significant cumulative effects	Adverse cumulative effects on habitats	Potential for adverse cumulative effects

Appendix H

Further guidance on monitoring

Criteria for the Selection of Development Plan Environmental Indicators

- H.1 This appendix is particularly relevant to stage 14 of the assessment process.
- H.2 Identifying indicators for monitoring the effectiveness of development plans has proved to be perhaps the most difficult of all the method steps in recent assessments. Various attempts to define indicators have considered a wide range of possible indicators for monitoring the environment but there appears to be no consensus or standard practice emerging.
- H.3 The difficulties have revolved around the need to identify indicators that meet appropriate criteria and selecting indicators relevant to the monitoring purpose and for which information is or could be made available. It should be left for local decision by the planning authority as to which indicators should be selected and what targets may be appropriate. However, it may be helpful to give some idea as to how to select the indicators. The following is an example of a list of criteria for selecting indicators [with acknowledgement to Stirling and Clackmannanshire Councils and Scottish Natural Heritage for agreeing to the reproduction of these criteria].
- The indicator, or the information it is calculated from, should be readily available at reasonable cost
 - The indicator must be about something measurable.
 - An indicator should be meaningful: it should measure or represent something believed to be important or significant in its own right.
 - The indicator should be resonant ie. cogent, appealing and compelling to the public and understandable.
 - There should only be a short time-lag between the state of affairs referred to and the indicator becoming available.
 - The indicator should be based on information, which can be used to compare different geographical areas both inside and outside the plan area.
 - The availability of the indicator information should be reliable over the whole plan period, the information should be manageable with analysis capable of drawing conclusions about the significance of changes, and although judgements are inevitable, they should be as objective as possible.
 - The indicator should be relevant and appropriate to the scale and purpose of the plan.
 - Indicators should concentrate monitoring on objectives, policies or proposals the effects of which are uncertain.
 - Indicators should monitor cross-compliance between objectives, policies and proposals, which may potentially conflict – policy divergence within the plan.

H.4 Indicators may be:

- a) measures of the state of the environment, or
- b) measures of pressures on the environment, or
- c) measures of the environment's responses to pressures for change.

H.5 Indicators need not be absolute measures of these conditions but should reflect directions of desirable or undesirable change, in our progress towards development that is more sustainable. Targets, limits or thresholds should be set in relation to each indicator that would act as "warning lights" indicating whether decisions or changes are moving towards or away from sustainable development. Indicators should directly reflect the environmental tests used in the environmental assessment.

H.6 Monitoring should be a useful and cost effective process. It should be comprehensive without being unmanageable; rigorous without being complicated and meaningful without being complex, esoteric or inaccessible. Preference should be given to indicators that may monitor more than one aspect of environment. Different aspects of the environment may be grouped to reduce the monitoring effort, without reducing its inclusiveness or effectiveness. Lessons should be learned from other monitoring projects, elsewhere, but monitoring projects need to be developed that reflect local priorities, issues, pressures and environment.

H.7 It is also important to accept that a full scale monitoring programme is not likely to be feasible at the start. A modest beginning, with a small number of effective indicators, is better than no monitoring at all. Any programme can be extended, modified and refined with experience and as more information becomes available. The frequency of monitoring can be increased as more experience or resources become available.

H.8 Targets may be set so that monitoring can check to see whether they have been met or missed, and why. Targets should be demanding and worthwhile, clearly beneficial and meaningful, but they should also be feasible and realistic. Nothing is gained by setting targets that can never be achieved, because they are out of reach. However, not every indicator needs to have a specific target. Sometimes there are important indicators of trends and directions that do not necessarily have specific stages or measurements, but nevertheless clearly point to whether we are sustaining or diminishing the environmental resource.

H.9 Finally, indicators and any related targets should always reflect the values, aspirations and attitudes of all sections of the community. As many people as possible, representing as many views as possible, should have an opportunity to contribute to the selection of indicators and the setting of targets. This is very much in line with the inclusive approach of the Directive.

Appendix I

Sustainability appraisal

Introduction

1. Some planning authorities may wish to extend the environmental assessment of the development plan so that it also covers socio-economic issues. Only environmental assessment is required by the Directive.
2. It will be seen from Table 2 in the main report that many of the assessments of Scottish development plans have been full sustainability appraisals so there is a growing amount of experience in these types of assessment.
3. The overall process of assessment is no different to that described in this advice. The principal differences are in the wider selection of sustainability objectives and criteria, and the increased volume of information required to cover social and economic factors and issues. On average, in Scottish development plan sustainability appraisals between 1995 and 2002, about half the objectives and criteria related to socio-economic issues and half to environmental issues.
4. The case study below provides an example of a range of objectives used in a sustainability appraisal.

Case study

Example of Sustainability Appraisal Objectives

The **Highland Structure Plan** Sustainability Appraisal 1999, identified 15 objectives.

They were to maximise:

- community empowerment and decision making;
- the diversification of the regional and local economies;
- the quality and number of employment opportunities;
- accessibility to and quality of housing;
- the safety, enjoyment and diversity of towns and villages;
- standards of health for all;
- the effectiveness and efficiency of infrastructure provision;
- accessibility to community facilities and services;
- accessibility to education and training;
- the maintenance and enhancement of the cultural heritage including landscape and the Gaelic language;
- the quality of the built environment;
- biodiversity;
- the optimal use of renewable and non-renewable resources;
- the efficiency of energy use; and
- the quality of air, water and land.

5. The remainder of this Appendix provides a brief commentary on matters that may require to be considered in undertaking a sustainability appraisal rather than an environmental assessment. After a brief resume of the advantages and disadvantages, comments are related to the 14 key stages of the process described in the IPA.

Potential advantages and disadvantages of sustainability appraisal compared with environmental assessment.

6. The two main advantages of a sustainability appraisal are firstly, that it allows a balanced view of the total effects of the development plan; for example, negative environmental effects may be more clearly understood and justified by substantial social or economic benefits not apparent in the environmental assessment and report. Secondly, it allows for a more integrated approach to assessment because the complex interactions, for example, those between the economics of land use, the social advantages of public transport and the amenity of the environment. There are close connections between environmental equity and social justice. These kinds of relationships can be more fully explored, assessed and presented in a sustainability appraisal.
7. In assessing their quality of life, few people would distinguish whether the advantages of an attractive, healthy, clean and safe environment in which to live and work, travel and spend their leisure time were “environmental” or “social” considerations. There are clear relationships between the quality of environment in terms of its amenity and the ability of a local economy to attract inward investment. The development plan seeks to address these kinds of issues in an integrated way and the wider remit of a sustainability appraisal will generally be more consistent with that more integrated approach.
8. However, the inclusion of socio-economic factors will complicate and extend the assessment process. It is likely to take more time and involve more staff, and therefore more resources. It will need to engage a wider range of stakeholders, further adding to the time and resources needed. An environmental assessment would comply with the Directive; exceeding minimum requirements may not be seen as a priority in some authorities. Much will depend on the timing, stage of plan preparation, local issues and priorities and resources that can be made available as to whether a planning authority chooses to extend the assessment. Delaying the plan production process should be avoided. It is for planning authorities to decide the extent of the assessment of their development plans.

Effects on the Key stages

Stage 1 Screening

9. This stage is unlikely to be affected because all new and replacement plans and the large majority of alterations will be subject to assessment in any event.

Stage 2 Information collation and forecasting

10. It will be evident that a significant additional input to a sustainability appraisal will be the collation and forecasting of socio-economic information in addition to, and on a comparable basis with that of, environmental information. One aspect of the appraisal should not be significantly more or less comprehensive than the others. Forecasting socio-economic information can be as difficult as forecasting environmental information.

Stage 3 Scoping the sustainability report

11. Again, it will be necessary to ensure an even-handed approach, with as much effort devoted to the identification of significant socio-economic issues as environmental ones. Consultations will be needed with a range of organisations in addition to the consultation authorities for the environmental assessment.

Stage 4 Adopting sustainability objectives and criteria.

12. As indicated above, this is one of the main stages where the differences between the two kinds of assessment will be very apparent. The appraisal must adopt socio-economic objectives and criteria usually related to national objectives, for example those set out in SPP1 – economic competitiveness, social justice, integrated transport etc. In most appraisals to date the socio-economic criteria have concentrated on employment, economic growth and diversification, housing (especially affordable housing), provision of key services including health, education, recreation and shopping facilities and accessibility to services and public transport.
13. The number of objectives, and thus the criteria to be applied can escalate at this point and a clear focus on key issues and potentially significant adverse socio-economic and environmental effects, that the plan should be tested for, is required. Without a substantial team of assessors it is unlikely that the assessment will be able to simply add as many socio-economic criteria as would be selected for environmental criteria in an environmental assessment.

14. Although a few assessments have used in excess of twenty criteria, a doubling of the number of criteria recommended in the IPAt to over 30 is unlikely to be practical. Consequently it is likely that some objectives and criteria may need to be omitted or amalgamated. Care needs to be taken to avoid narrowing the environmental criteria to such an extent that environmental effects required to be considered by the Directive are omitted from the assessment. Equally, the caution advocated in the IPA against reducing the number of criteria by amalgamating them to such an extent that it makes them too complex to apply, should be heeded.

Stage 5 Assessing the plan's vision and aims

15. This will follow the same method as environmental assessment but the matrix would be constructed to include the socio-economic criteria.

Stage 6 Consideration of transboundary effects

16. It is unlikely that transboundary socio-economic effects will be an issue.

Stage 7 Assessing alternatives

17. This stage could be made more effective in a sustainability appraisal because it allows for a more thorough and balanced assessment of all the advantages and disadvantages of alternative policy approaches and spatial strategies. In the environmental assessment it is likely that socio-economic issues will need to be addressed, in any event, in order to explain the selection of options. This stage is likely to be more transparent and clearer if socio-economic factors are dealt with in the same degree of detailed assessment as the environmental factors.

Stage 8 Checking the policy range

18. It will be apparent that this stage will require considerably more input because the total range of policies will need to be considered, not just those relating to the environment. This will generally increase the length of the checklist (such as that reproduced in Appendix D) by between 50% and 100%, depending on the sources used to derive the extended checklist to cover socio-economic issues eg SPPs, NPPGs, PANs and other development plans.

Stage 9 Assessing the plan's policies and proposals

19. Whilst each policy and proposal will be subject to assessment in the environmental assessment, it follows that the consideration of each will need to be extended and the matrices or checklists will need to be more comprehensive, not only in the wider range of criteria but in the commentary that will explain the analysis. Socio-economic effects of policies and proposals are no more or less difficult to assess than environmental ones, and the assessment is likely to need considerable additional thought and a wider range of expertise to advise or contribute to the assessment. The socio-economic effects of some proposals, especially employment-related allocations eg business, industry, commerce, retail and warehousing/distribution, can be extremely difficult to assess in the absence of specific proposals. The matrices are likely to exhibit a high level of uncertainty and reliance on cross-compliance.

20. The example below includes the socio-economic analysis of the same proposals assessed in Appendix F above, for the South East Wedge JDS but this time including the whole sustainability appraisal showing the derivation of the 22 criteria and their application to the selected proposals, so that the full picture of the analysis is presented.

Stage 10 Preparing and publishing the sustainability report

21. Again, it will be self evident that if the report is to contain all that it would have done for an environmental assessment it will be substantially longer if it is to present the socio-economic assessment in a comparable way. Whilst it is unlikely to be twice the length, the substantial additional time in its preparation and consultation will need to be considered.

Stages 11 to 13, relating to modification, deposit and adoption

22. These are unlikely to vary from the steps in the environmental assessment but it needs to be born in mind that a wider range of comments on the sustainability report are likely as a result of its wider remit. On the other hand, it is likely that the report will be seen as a more integrated assessment, possibly explaining some of the choices made in selecting options, and some of the adverse effects of the plan, in a way that is more transparent to the consultees and the public. Again, a wider range of stakeholders may be interested in a sustainability report rather than an environmental report.

Stage 14 Monitoring and review

23. Self evidently the monitoring of the plan and the monitoring proposals in the sustainability report, and the report on monitoring in accordance with Article 9, at the stage of adoption, will need to extend to a full suite of socio-economic indicators and targets as well as environmental ones. The principles underlying selection of indicators and targets will be much the same as those identified in Appendix H. However, monitoring of socio-economic issues is more likely to embrace the existing monitoring programmes of development plans, eg in terms of population, housing supply and completions, employment etc.

Example of sustainability assessment

South East Wedge Joint Development Study

Assessment of Proposals

The following Table shows how the criteria were drawn from the aims and objectives for all the sustainability criteria, including socio economic criteria as well as the environmental criteria previously presented in Appendix F. Table 2 records the assessment of key principals.

Table I		
Full sustainability aims, objectives and criteria for the assessment of the South East Wedge Joint Development Study		
Sustainability Aims	Sustainability Objectives	Sustainability Criteria
1. Environmental protection	1.A To protect water courses and their catchment areas	Is the principle or proposal likely significantly to help or to hinder the protection of a) water courses and their catchment areas or b) ground water resources?
	1.B To protect ground water resources	
2. Environmental capacity precautionary principle	2.A To contain development within the capacity of the landscape resource	Is the principle or proposal likely significantly to help or to hinder a) containing development within the capacity of the landscape or b) the protection of ridge lines?
	2.B To protect undeveloped ridge lines	
3. Environmental historical cultural assets/stock	3.A To protect potential archaeological resources including industrial archaeology	Is the principle or proposal likely significantly to help or to hinder the protection of a) potential archaeological resources including industrial archaeology or b) historic buildings and their settings?
	3.B To protect historic buildings and their settings	
4. Renewable non renewable resources	4.A To protect prime agricultural land.	Is the principle or proposal likely significantly to help or to hinder a) the protection of prime agricultural land or b) energy efficient development layouts utilising aspect, reducing elevation and exposure?
	4.B To create energy efficient development layouts utilising aspect, reducing elevation and exposure	
5. Environmental equity	5.A To enhance the local path network and accessibility to countryside of green belt	Is the principle or proposal likely significantly to help or to hinder a) enhancement of the local path network and accessibility to countryside of green belt b) enhancement of understanding of the City, its surroundings, local views, geology, and history?
	5.B To enhance understanding of the City, its surroundings, views, geology, and history	

Table I (continued)		
Sustainability Aims	Sustainability Objectives	Sustainability Criteria
6. Economic growth	6.A To reduce the amount of derelict land.	Is the principle or proposal likely significantly to help or to hinder
	6.B To utilise the commercial advantage of the Capital City image	a) the reduction of the amount of derelict land or b) utilisation of the commercial advantage of the Capital City image?
7. Employment	7.A To provide an adequate range of type and scale of employment land.	Is the principle or proposal likely significantly to help or to hinder
	7.B To provide easy access to employment sites from housing areas, by a choice of transport modes.	a) the provision of an adequate range of type and scale of employment land or b) the provision of easy access to employment sites from housing areas, by a choice of transport modes?
8. Healthy and safe environment	8.A To reduce the extent and degree of contamination in land	Is the principle or proposal likely significantly to help or to hinder
	8.B To make travel safer for pedestrians and cyclists.	a) the reduction of the extent and degree of contamination in land or b) making travel safer for pedestrians and cyclists?
9. Accessibility	9.A To provide neighbourhood shopping in reasonable walking distance of all housing.	Is the principle or proposal likely significantly to help or to hinder
	9.B To minimise journey times to City Centre by public transport.	a) the provision of neighbourhood shopping in reasonable walking distance of all housing or b) minimisation of journey times to the City centre by public transport?
10. Socio economic equity	10.A To provide a public transport stop within reasonable walking distance of all housing.	Is the principle or proposal likely significantly to help or to hinder
	10.B To ensure residents of redeveloped areas of Craigmillar are integrated into local communities.	a) provision of public transport stops within reasonable walking distance of all housing or b) the integration of residents of redeveloped areas of Craigmillar into local communities?
11. Quality of life	11.A To provide high quality design in the built environment.	Is the principle or proposal likely significantly to help or to hinder
	11.B To improve opportunity for local people to contribute art accessible and relevant to their community.	a) high quality design in the built environment or b) opportunity for local people to contribute art accessible & relevant to their community?

Table 2

Full sustainability assessment of selected key proposals of the locational strategy for the South East Wedge

Environmental Sustainability Criteria	Ec Dev Monkton-hall Colliery	Ec Dev Newcraighall	Ec Dev Scotway	Ec Dev Whitehill Mains	Public Transport Corridor	Path network
1. Environmental protection	○	?	○	○	○	○
2. Environmental capacity	✓	X	○	X	○	○
3. Environmental etc stock	○	?	○	?	?	○
4. [Non] Renewable resources	✓	○	○	X	○	○
5. Environmental equity	○	○	○	○	○	✓
6. Economic growth	?	○	○	?	○	○
7. Employment	✓	✓	✓	✓	✓	✓
8. Health safe environment	✓	○	○	○	✓	✓
9. Accessibility	○	○	○	○	✓	✓
10. Socio-economic equity	○	○	○	○	✓	✓
11. Quality of Life	○	○	○	○	○	✓
Comments	Benefits of redeveloping brownfield/derelict land and possible remediation of contamination	Landscape Character Assessment indicated this area required substantial mitigation, located in a "most visually sensitive area" Adjacent to a water course	Compatible with sustainability criteria	Prime Agricultural Land 3.1 Landscape Character Assessment indicated this area required substantial mitigation, located in a "most visually sensitive area"	Highly compatible with sustainability criteria	Highly compatible with sustainability criteria

Appendix J

Directive 2001/42/EC of the European Parliament and of the Council of 27 June 2001 on the assessment of the effects of certain plans and programmes on the environment

The European Parliament and the Council of the European Union,

Having regard to the Treaty establishing the European Community, and in particular Article 175(1) thereof,

Having regard to the proposal from the Commission^[1],

Having regard to the opinion of the Economic and Social Committee^[2],

Having regard to the opinion of the Committee of the Regions^[3],

Acting in accordance with the procedure laid down in Article 251 of the Treaty^[4], in the light of the joint text approved by the Conciliation Committee on 21 March 2001,

Whereas:

- (1) Article 174 of the Treaty provides that Community policy on the environment is to contribute to, *inter alia*, the preservation, protection and improvement of the quality of the environment, the protection of human health and the prudent and rational utilisation of natural resources and that it is to be based on the precautionary principle. Article 6 of the Treaty provides that environmental protection requirements are to be integrated into the definition of Community policies and activities, in particular with a view to promoting sustainable development.
- (2) The Fifth Environment Action Programme: Towards sustainability — A European Community programme of policy and action in relation to the environment and sustainable development^[5], supplemented by Council Decision No 2179/98/EC^[6] on its review, affirms the importance of assessing the likely environmental effects of plans and programmes.
- (3) The Convention on Biological Diversity requires Parties to integrate as far as possible and as appropriate the conservation and sustainable use of biological diversity into relevant sectoral or cross-sectoral plans and programmes.
- (4) Environmental assessment is an important tool for integrating environmental considerations into the preparation and adoption of certain plans and programmes which are likely to have significant effects on the environment in the Member States, because it ensures that such effects of implementing plans and programmes are taken into account during their preparation and before their adoption.

- (5) The adoption of environmental assessment procedures at the planning and programming level should benefit undertakings by providing a more consistent framework in which to operate by the inclusion of the relevant environmental information into decision making. The inclusion of a wider set of factors in decision making should contribute to more sustainable and effective solutions.
- (6) The different environmental assessment systems operating within Member States should contain a set of common procedural requirements necessary to contribute to a high level of protection of the environment.
- (7) The United Nations/Economic Commission for Europe Convention on Environmental Impact Assessment in a Transboundary Context of 25 February 1991, which applies to both Member States and other States, encourages the parties to the Convention to apply its principles to plans and programmes as well; at the second meeting of the Parties to the Convention in Sofia on 26 and 27 February 2001, it was decided to prepare a legally binding protocol on strategic environmental assessment which would supplement the existing provisions on environmental impact assessment in a transboundary context, with a view to its possible adoption on the occasion of the 5th Ministerial Conference 'Environment for Europe' at an extraordinary meeting of the Parties to the Convention, scheduled for May 2003 in Kiev, Ukraine. The systems operating within the Community for environmental assessment of plans and programmes should ensure that there are adequate transboundary consultations where the implementation of a plan or programme being prepared in one Member State is likely to have significant effects on the environment of another Member State. The information on plans and programmes having significant effects on the environment of other States should be forwarded on a reciprocal and equivalent basis within an appropriate legal framework between Member States and these other States.
- (8) Action is therefore required at Community level to lay down a minimum environmental assessment framework, which would set out the broad principles of the environmental assessment system and leave the details to the Member States, having regard to the principle of subsidiarity. Action by the Community should not go beyond what is necessary to achieve the objectives set out in the Treaty.
- (9) This Directive is of a procedural nature, and its requirements should either be integrated into existing procedures in Member States or incorporated in specifically established procedures. With a view to avoiding duplication of the assessment, Member States should take account, where appropriate, of the fact that assessments will be carried out at different levels of a hierarchy of plans and programmes.

- (10) All plans and programmes which are prepared for a number of sectors and which set a framework for future development consent of projects listed in Annexes I and II to Council Directive 85/337/EEC of 27 June 1985 on the assessment of the effects of certain public and private projects on the environment^[1], and all plans and programmes which have been determined to require assessment pursuant to Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild flora and fauna^[2], are likely to have significant effects on the environment, and should as a rule be made subject to systematic environmental assessment. When they determine the use of small areas at local level or are minor modifications to the above plans or programmes, they should be assessed only where Member States determine that they are likely to have significant effects on the environment.
- (11) Other plans and programmes which set the framework for future development consent of projects may not have significant effects on the environment in all cases and should be assessed only where Member States determine that they are likely to have such effects.
- (12) When Member States make such determinations, they should take into account the relevant criteria set out in this Directive.
- (13) Some plans or programmes are not subject to this Directive because of their particular characteristics.
- (14) Where an assessment is required by this Directive, an environmental report should be prepared containing relevant information as set out in this Directive, identifying, describing and evaluating the likely significant environmental effects of implementing the plan or programme, and reasonable alternatives taking into account the objectives and the geographical scope of the plan or programme; Member States should communicate to the Commission any measures they take concerning the quality of environmental reports.
- (15) In order to contribute to more transparent decision making and with the aim of ensuring that the information supplied for the assessment is comprehensive and reliable, it is necessary to provide that authorities with relevant environmental responsibilities and the public are to be consulted during the assessment of plans and programmes, and that appropriate time frames are set, allowing sufficient time for consultations, including the expression of opinion.
- (16) Where the implementation of a plan or programme prepared in one Member State is likely to have a significant effect on the environment of other Member States, provision should be made for the Member States concerned to enter into consultations and for the relevant authorities and the public to be informed and enabled to express their opinion.
- (17) The environmental report and the opinions expressed by the relevant authorities and the public, as well as the results of any transboundary consultation, should be taken into account during the preparation of the plan or programme and before its adoption or submission to the legislative procedure.

- (18) Member States should ensure that, when a plan or programme is adopted, the relevant authorities and the public are informed and relevant information is made available to them.
- (19) Where the obligation to carry out assessments of the effects on the environment arises simultaneously from this Directive and other Community legislation, such as Council Directive 79/409/EEC of 2 April 1979 on the conservation of wild birds^[3], Directive 92/43/EEC, or Directive 2000/60/EC of the European Parliament and the Council of 23 October 2000 establishing a framework for Community action in the field of water policy^[4], in order to avoid duplication of the assessment, Member States may provide for coordinated or joint procedures fulfilling the requirements of the relevant Community legislation.
- (20) A first report on the application and effectiveness of this Directive should be carried out by the Commission five years after its entry into force, and at seven-year intervals thereafter. With a view to further integrating environmental protection requirements, and taking into account the experience acquired, the first report should, if appropriate, be accompanied by proposals for amendment of this Directive, in particular as regards the possibility of extending its scope to other areas/sectors and other types of plans and programmes,

Have adopted this directive:

Article 1

Objectives

The objective of this Directive is to provide for a high level of protection of the environment and to contribute to the integration of environmental considerations into the preparation and adoption of plans and programmes with a view to promoting sustainable development, by ensuring that, in accordance with this Directive, an environmental assessment is carried out of certain plans and programmes which are likely to have significant effects on the environment.

Article 2

Definitions

For the purposes of this Directive:

- (a) 'plans and programmes' shall mean plans and programmes, including those co-financed by the European Community, as well as any modifications to them:
- which are 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;
- (b) 'environmental assessment' shall mean the preparation of an environmental report, the carrying out of consultations, the taking into account of the environmental report and the results of the consultations in decision-making and the provision of information on the decision in accordance with Articles 4 to 9;

- (c) 'environmental report' shall mean the part of the plan or programme documentation containing the information required in Article 5 and Annex I;
- (d) 'The public' shall mean one or more natural or legal persons and, in accordance with national legislation or practice, their associations, organisations or groups.

Article 3

Scope

1. An environmental assessment, in accordance with Articles 4 to 9, shall be carried out for plans and programmes referred to in paragraphs 2 to 4 which are likely to have significant environmental effects.
2. Subject to paragraph 3, an environmental assessment shall be carried out for all plans and programmes,
 - (a) which are 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, or
 - (b) 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.
3. Plans and programmes referred to in paragraph 2 which determine the use of small areas at local level and minor modifications to plans and programmes referred to in paragraph 2 shall require an environmental assessment only where the Member States determine that they are likely to have significant environmental effects.
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.
5. Member States shall determine whether plans or programmes referred to in paragraphs 3 and 4 are likely to have significant environmental effects either through case-by-case examination or by specifying types of plans and programmes or by combining both approaches. For this purpose Member States shall in all cases take into account relevant criteria set out in Annex II, in order to ensure that plans and programmes with likely significant effects on the environment are covered by this Directive.
6. In the case-by-case examination and in specifying types of plans and programmes in accordance with paragraph 5, the authorities referred to in Article 6(3) shall be consulted.
7. Member States shall ensure that their conclusions pursuant to paragraph 5, including the reasons for not requiring an environmental assessment pursuant to Articles 4 to 9, are made available to the public.

8. The following plans and programmes are not subject to this Directive:
 - plans and programmes the sole purpose of which is to serve national defence or civil emergency,
 - financial or budget plans and programmes.
9. This Directive does not apply to plans and programmes co-financed under the current respective programming periods^[1] for Council Regulations (EC) No 1260/1999^[2] and (EC) No 1257/1999^[3].

Article 4

General obligations

1. The environmental assessment referred to in Article 3 shall be carried out during the preparation of a plan or programme and before its adoption or submission to the legislative procedure.
2. The requirements of this Directive shall either be integrated into existing procedures in Member States for the adoption of plans and programmes or incorporated in procedures established to comply with this Directive.
3. Where plans and programmes form part of a hierarchy, Member States shall, with a view to avoiding duplication of the assessment, take into account the fact that the assessment will be carried out, in accordance with this Directive, at different levels of the hierarchy. For the purpose of, *inter alia*, avoiding duplication of assessment, Member States shall apply Article 5(2) and (3).

Article 5

Environmental report

1. Where an environmental assessment is required under Article 3(1), an environmental report shall be prepared in which the likely significant effects on the environment of implementing the plan or programme, and reasonable alternatives taking into account the objectives and the geographical scope of the plan or programme, are identified, described and evaluated. The information to be given for this purpose is referred to in Annex I.
2. The environmental report prepared pursuant to paragraph 1 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.
3. Relevant information available on environmental effects of the plans and programmes and obtained at other levels of decision-making or through other Community legislation may be used for providing the information referred to in Annex I.
4. The authorities referred to in Article 6(3) shall be consulted when deciding on the scope and level of detail of the information which must be included in the environmental report.

*Article 6***Consultations**

1. The draft plan or programme and the environmental report prepared in accordance with Article 5 shall be made available to the authorities referred to in paragraph 3 of this Article and the public.
2. The authorities referred to in paragraph 3 and the public referred to in paragraph 4 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 or programme or its submission to the legislative procedure.
3. Member States shall designate the authorities to be consulted which, by reason of their specific environmental responsibilities, are likely to be concerned by the environmental effects of implementing plans and programmes.
4. Member States shall identify the public for the purposes of paragraph 2, including the public affected or likely to be affected by, or having an interest in, the decision-making subject to this Directive, including relevant non-governmental organisations, such as those promoting environmental protection and other organisations concerned.
5. The detailed arrangements for the information and consultation of the authorities and the public shall be determined by the Member States.

*Article 7***Transboundary consultations**

1. Where a Member State considers that the implementation of a plan or programme being prepared in relation to its territory is likely to have significant effects on the environment in another Member State, or where a Member State likely to be significantly affected so requests, the Member State in whose territory the plan or programme is being prepared shall, before its adoption or submission to the legislative procedure, forward a copy of the draft plan or programme and the relevant environmental report to the other Member State.
2. Where a Member State is sent a copy of a draft plan or programme and an environmental report under paragraph 1, it shall indicate to the other Member State whether it wishes to enter into consultations before the adoption of the plan or programme or its submission to the legislative procedure and, if it so indicates, the Member States concerned shall enter into consultations concerning the likely transboundary environmental effects of implementing the plan or programme and the measures envisaged to reduce or eliminate such effects.

Where such consultations take place, the Member States concerned shall agree on detailed arrangements to ensure that the authorities referred to in Article 6(3) and the public referred to in Article 6(4) in the Member State likely to be significantly affected are informed and given an opportunity to forward their opinion within a reasonable time-frame.

3. Where Member States are required under this Article to enter into consultations, they shall agree, at the beginning of such consultations, on a reasonable timeframe for the duration of the consultations.

Article 8

Decision making

The environmental report prepared pursuant to Article 5, the opinions expressed pursuant to Article 6 and the results of any transboundary consultations entered into pursuant to Article 7 shall be taken into account during the preparation of the plan or programme and before its adoption or submission to the legislative procedure.

Article 9

Information on the decision

1. Member States shall ensure that, when a plan or programme is adopted, the authorities referred to in Article 6(3), the public and any Member State consulted under Article 7 are informed and the following items are made available to those so informed:
 - (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 environmental report prepared pursuant to Article 5, the opinions expressed pursuant to Article 6 and the results of consultations entered into pursuant to Article 7 have been taken into account in accordance with Article 8 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 in accordance with Article 10.
2. The detailed arrangements concerning the information referred to in paragraph 1 shall be determined by the Member States.

Article 10

Monitoring

1. Member States shall monitor the significant environmental effects of the implementation of plans and programmes in order, inter alia, to identify at an early stage unforeseen adverse effects, and to be able to undertake appropriate remedial action.
2. In order to comply with paragraph 1, existing monitoring arrangements may be used if appropriate, with a view to avoiding duplication of monitoring.

*Article 11***Relationship with other Community legislation**

1. An environmental assessment carried out under this Directive shall be without prejudice to any requirements under Directive 85/337/EEC and to any other Community law requirements.
2. For plans and programmes for which the obligation to carry out assessments of the effects on the environment arises simultaneously from this Directive and other Community legislation, Member States may provide for coordinated or joint procedures fulfilling the requirements of the relevant Community legislation in order, inter alia, to avoid duplication of assessment.
3. For plans and programmes co-financed by the European Community, the environmental assessment in accordance with this Directive shall be carried out in conformity with the specific provisions in relevant Community legislation.

*Article 12***Information, reporting and review**

1. Member States and the Commission shall exchange information on the experience gained in applying this Directive.
2. Member States shall ensure that environmental reports are of a sufficient quality to meet the requirements of this Directive and shall communicate to the Commission any measures they take concerning the quality of these reports.
3. Before 21 July 2006 the Commission shall send a first report on the application and effectiveness of this Directive to the European Parliament and to the Council.

With a view further to integrating environmental protection requirements, in accordance with Article 6 of the Treaty, and taking into account the experience acquired in the application of this Directive in the Member States, such a report will be accompanied by proposals for amendment of this Directive, if appropriate. In particular, the Commission will consider the possibility of extending the scope of this Directive to other areas/sectors and other types of plans and programmes.

A new evaluation report shall follow at seven-year intervals.

4. The Commission shall report on the relationship between this Directive and Regulations (EC) No 1260/1999 and (EC) No 1257/1999 well ahead of the expiry of the programming periods provided for in those Regulations, with a view to ensuring a coherent approach with regard to this Directive and subsequent Community Regulations.

Article 13

Implementation of the Directive

1. Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with this Directive before 21 July 2004. They shall forthwith inform the Commission thereof.
2. When Member States adopt the measures, they shall contain a reference to this Directive or shall be accompanied by such reference on the occasion of their official publication. The methods of making such reference shall be laid down by Member States.
3. The obligation referred to in Article 4(1) shall apply to the plans and programmes of which the first formal preparatory act is subsequent to the date referred to in paragraph 1. Plans and programmes of which the first formal preparatory act is before that date and which are adopted or submitted to the legislative procedure more than 24 months thereafter, shall be made subject to the obligation referred to in Article 4(1) unless Member States decide on a case by case basis that this is not feasible and inform the public of their decision.
4. Before 21 July 2004, Member States shall communicate to the Commission, in addition to the measures referred to in paragraph 1, separate information on the types of plans and programmes which, in accordance with Article 3, would be subject to an environmental assessment pursuant to this Directive. The Commission shall make this information available to the Member States. The information will be updated on a regular basis.

Article 14

Entry into force

This Directive shall enter into force on the day of its publication in the Official Journal of the European Communities.

Article 15

Addressees

This Directive is addressed to the Member States

Done at Luxembourg, 27 June 2001

For the European Parliament

The President

N. Fontaine

For the Council

The President

B. Rosengren

Annex I

Information referred to in Article 5(1)

The information to be provided under Article 5(1), subject to Article 5(2) and (3), is the following:

- (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 Member State 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^[1] 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;
^[1] These effects should include secondary, cumulative, synergistic, short, medium and long-term permanent and temporary, positive and negative effects.
- (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 in accordance with Article 10;
- (j) a non-technical summary of the information provided under the above headings.

Annex II

Criteria for determining the likely significance of effects referred to in Article 3(5)

1. The characteristics of plans and programmes, having regard, in particular, to
 - the degree to which the plan or programme sets a framework for projects and other activities, either with regard to the location, nature, size and operating conditions or by allocating resources,
 - the degree to which the plan or programme influences other plans and programmes including those in a hierarchy,
 - the relevance of the plan or programme for the integration of environmental considerations in particular with a view to promoting sustainable development,
 - environmental problems relevant to the plan or programme,
 - the relevance of the plan or programme for the implementation of Community legislation on the environment (e.g. plans and programmes linked to waste-management or water protection).
2. Characteristics of the effects and of the area likely to be affected, having regard, in particular, to
 - the probability, duration, frequency and reversibility of the effects,
 - the cumulative nature of the effects,
 - the transboundary nature of the effects,
 - the risks to human health or the environment (e.g. due to accidents),
 - the magnitude and spatial extent of the effects (geographical area and size of the population likely to be affected),
 - the value and vulnerability of the area likely to be affected due to:
 - special natural characteristics or cultural heritage,
 - exceeded environmental quality standards or limit values,
 - intensive land-use,
 - the effects on areas or landscapes which have a recognised national, Community or international protection status.

Footnotes for Page 1 of the Pre-amble

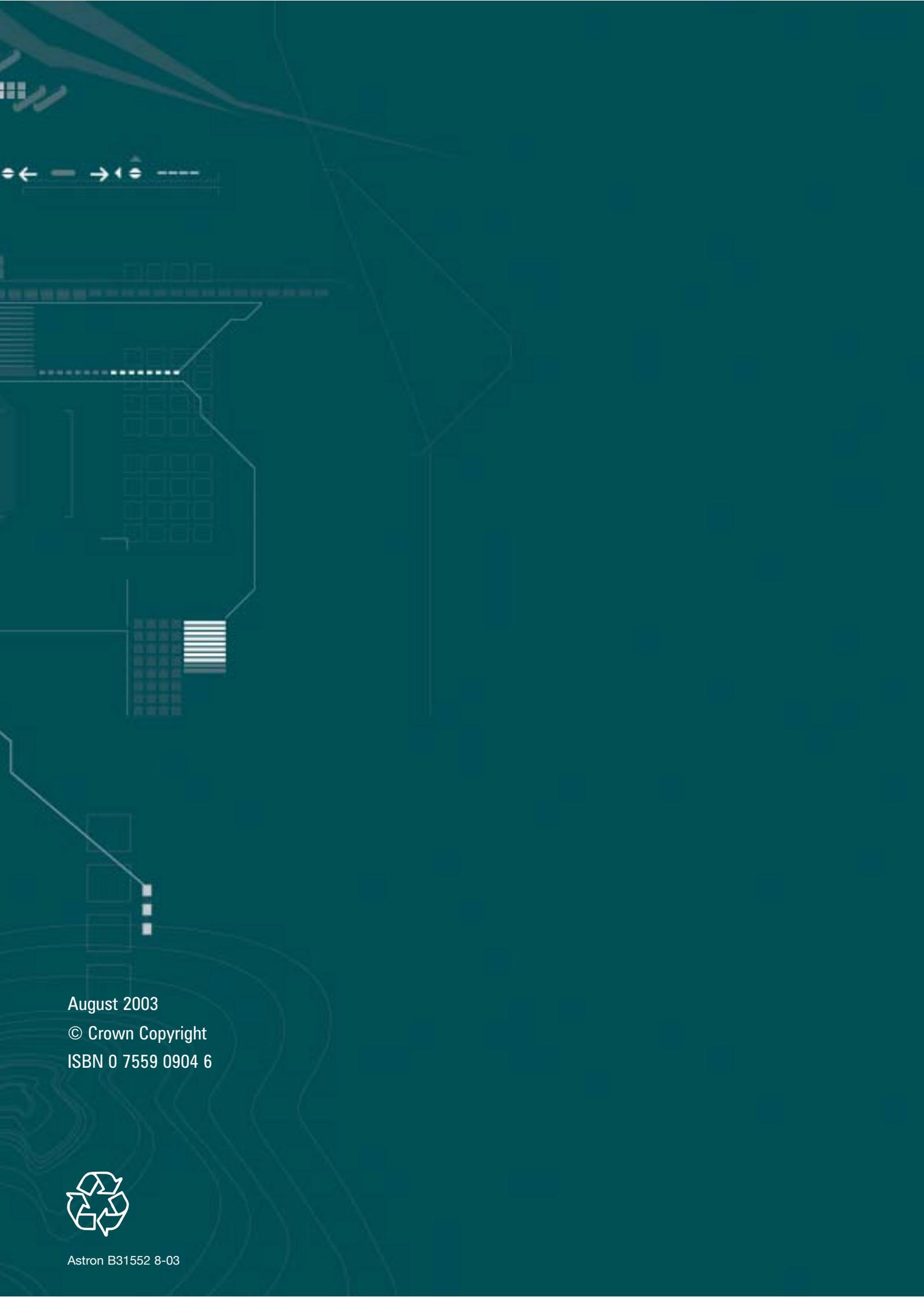
- [1] OJ C 129, 25.4.1997, p. 14 and OJ C 83, 25.3.1999, p. 13.
- [2] OJ C 287, 22.9.1997, p. 101.
- [3] OJ C 64, 27.2.1998, p. 63 and OJ C 374, 23.12.1999, p. 9.
- [4] Opinion of the European Parliament of 20 October 1998 (OJ C 341, 9.11.1998, p. 18), confirmed on 16 September 1999 (OJ C 54, 25.2.2000, p. 76), Council Common Position of 30 March 2000 (OJ C 137, 16.5.2000, p. 11) and Decision of the European Parliament of 6 September 2000 (OJ C 135, 7.5.2001, p. 155). Decision of the European Parliament of 31 May 2001 and Decision of the Council of 5 June 2001.
- [5] OJ C 138, 17.5.1993, p. 5.
- [6] OJ L 275, 10.10.1998, p. 1.

Footnotes for the Remainder of the Pre-Ambles

- [1] OJ L 175, 5.7.1985, p. 40. Directive as amended by Directive 97/11/EC (OJ L 73, 14.3.1997, p. 5).
- [2] OJ L 206, 22.7.1992, p. 7. Directive as last amended by Directive 97/62/EC (OJ L 305, 8.11.1997, p. 42).
- [3] OJ L 103, 25.4.1979, p. 1. Directive as last amended by Directive 97/49/EC (OJ L 223, 13.8.1997, p. 9).
- [4] OJ L 327, 22.12.2000, p. 1.

Footnotes for Article 3

- [1] The 2000-2006 programming period for Council Regulation (EC) No 1260/1999 and the 2000-2006 and 2000-2007 programming periods for Council Regulation (EC) No 1257/1999.
- [2] Council Regulation (EC) No 1260/1999 of 21 June 1999 laying down general provisions on the Structural Funds (OJ L 161, 26.6.1999, p. 1).
- [3] Council Regulation (EC) No 1257/1999 of 17 May 1999 on support for rural development from the European Agricultural Guidance and Guarantee Fund (EAGGF) and amending and repealing certain regulations (OJ L 160, 26.6.1999, p. 80).



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