

National Planning Framework

Environmental Assessment Report

INTRODUCTION

1. The requirements of EU Directive 2001/42/EC, better known as the Strategic Environmental Assessment (SEA) Directive, have to be transposed into Scottish law by July 2004. The Directive states that, "*environmental assessment is an important tool for integrating environmental considerations into the preparation and adoption of plans and programmes which are likely to have significant effects on the environment...because it ensures that such effects of implementing plans and programmes are taken into account during their preparation and before adoption.*" The Scottish Executive agrees.

2. Scotland's first national planning framework (NPF) is a non-statutory planning policy document which has been prepared by the Scottish Executive. The NPF looks at Scotland from a spatial perspective and sets out an achievable long-term vision. It provides a view of Scotland as a place and identifies likely change to 2025 to ensure different areas can develop to their full potential. The NPF identifies key strategic infrastructure needs so that we can plan for the right investment in the right places.

3. The Directive's requirements do not apply to the NPF. The Executive has, however, decided to carry out an assessment on a voluntary basis. This is in keeping with the commitment given in the Partnership Agreement to undertake SEA for all public sector plans, programmes and strategies. However, it is important to note that this assessment is considered to be a pilot exercise which will aid future SEA work. It is acknowledged that this assessment does not meet the full requirements of the Directive. In particular, the full consultation requirements have not been met and the scope for considering alternative options was limited due to many of the NPF proposals being existing Executive commitments.

SCOPING

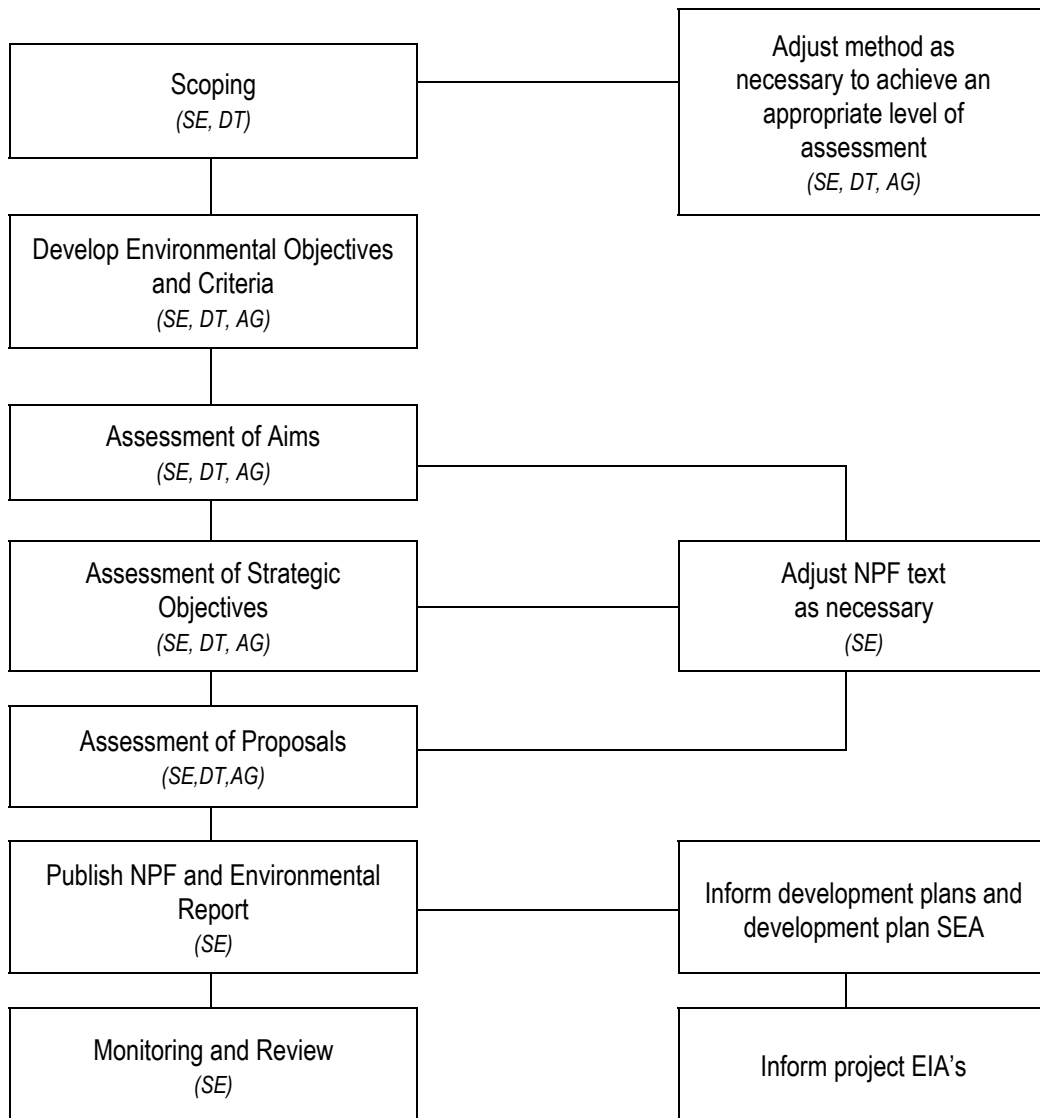
4. This is the first time that the Executive has undertaken an assessment of this nature. Finding an appropriate method of assessment was a challenging task, particularly as there are few comparative examples of national spatial plan assessments.

5. In order to devise a method of assessment suitable for this level of planning, the Executive commissioned David Tyldesley and Associates, leading environmental consultants, to provide advice. An Advisory Group was also formed comprising representatives from the Scottish Environment Protection Agency (SEPA), Scottish Natural Heritage (SNH), Scottish Environment Link and the Scottish Executive. All participants had prior knowledge and experience of SEA.

6. As a first stage, David Tyldesley suggested a preliminary method, which was tested. After consideration, the Advisory Group concluded that the approach was not appropriate for a national spatial framework as it relied too heavily on making assumptions about the likely environmental effects of proposals arising from it. The method was therefore adapted and re-tested a number of times until a suitable approach was agreed.

PROCESS

7. The following diagram outlines the assessment process finally adopted. The key players at each stage (the Scottish Executive (*SE*), David Tyldesley & Associates (*DT*) and the Advisory Group (*AG*)) are shown in *italics*.



8. The assessment stage involved the formulation of environmental criteria against which to assess the NPF. The following criteria were derived from the environmental issues identified in *Annex I* of the *Directive*, *Appendix B* of the report by David Tyldesley and Associates on the “*Environmental Assessment of Development Plans*” and the Executive's “*Indicators of Sustainable Development for Scotland*”:

Environmental Issue	Environmental Criterion for Assessment
Landscape	<i>Respects and protects the character, diversity and special qualities of Scotland's landscape.</i>
Bio-diversity	<i>Protects or enhances biodiversity, flora or fauna.</i>
Climate	<i>Reduces energy consumption or CO₂ emissions.</i>
Air	<i>Reduces pollution or emissions and protects air quality.</i>
Water	<i>Minimises water pollution or enhances water quality.</i>
Soils	<i>Protects or enhances the quality of soils.</i>
People	<i>Safeguards or enhances the living environments of people or communities.</i>
Human Health	<i>Promotes human health.</i>
Cultural Heritage	<i>Safeguards or enhances the built environment.</i>
Material Assets	<i>Promotes the development of a sustainable settlement pattern and physical infrastructure, or encourages the efficient use of land and resources.</i>

9. The aims, strategic objectives and proposals contained in the ‘*Scotland – 2025*’ and ‘*Spatial Perspectives*’ sections of the NPF were then assessed against the criteria.

10. The assessment assumes that all projects arising from proposals in the framework are implemented in accordance with legislation, national planning policy, and advice on good planning practice. The results of the assessment are shown in the Annex to this document. A commentary on the most significant issues is set out below.

ASSESSMENT

Aims

11. The NPF recognises that maintaining and enhancing the quality of Scotland's environmental resources will be critical to Scotland's success. The aims of the NPF (see Annex) reflect this and place emphasis on promoting sustainable development, protecting and enhancing the environment, and ensuring environmental justice. On the recommendation of the Advisory Group, the pursuit of sustainable development has been identified as a key driver of change.

12. All of the aims are likely to have some positive effects on the environment. Increased economic growth and competitiveness can deliver a higher quality of life, improved infrastructure and better environments. A commitment to environmental justice can ensure improved living environments and better health for disadvantaged communities. However, care will need to be taken to ensure that development promoted in furtherance of economic growth and competitiveness complements and reinforces environmental aims and objectives. Proposals will need to be carefully assessed at the development plan and project stages.

Strategic Objectives

13. The strategic objectives of the framework seek to achieve an appropriate balance between social, economic and environmental considerations and place emphasis on environmental stewardship.

14. Supporting the development of cities and city regions could have both positive and negative effects on the environment. The framework seeks to ensure that the effects are predominantly positive by placing emphasis on creating better urban environments, improving infrastructure, developing sustainable transport systems, reusing previously developed land and encouraging sustainable patterns of development. Placing emphasis on the cities can also help to reduce pressure for development in more environmentally sensitive areas.

15. Developing facilities to meet waste recycling targets will contribute to a more sustainable physical infrastructure, encourage the more efficient use of resources, promote greater energy efficiency and help to reduce air, water and soil pollution. The reduction in the requirement for landfill is likely to have positive effects on landscape. Care will have to be taken in the siting of new waste facilities in order to minimise adverse impacts on landscape, biodiversity and communities.

16. Linking area regeneration to economic opportunity is likely to result in better living and working environments, a more sustainable urban infrastructure and a healthier population. Attracting international events, improving sports facilities and greening vacant and derelict land will also have positive effects on the physical environment, quality of life and human health.

Transport

17. Developing external links and improving connectivity can help to promote a more sustainable settlement pattern and physical infrastructure. There may, however, be negative effects on climate, landscape, biodiversity and air quality. Overall, the effects of the proposals designed to promote sustainable transport and land use are likely to be overwhelmingly positive.

18. Strengthening external links is likely to result in an increase in air travel. While the emphasis on providing more direct flights from Scotland offers some scope for reducing the length of air journeys, this is likely to be outweighed by the availability of a wider range of services from Scottish airports encouraging more people to fly. Increasing air travel could contribute to global warming and climate change, but the emphasis which the NPF places on promoting more sustainable patterns of surface transport, countering long-distance commuting and using pricing to manage travel demand, could help to reduce energy consumption and CO₂ emissions.

19. Developing deep water facilities at Scapa Flow and Hunterston would contribute positively to Scotland's physical infrastructure but could have negative effects on landscape, biodiversity and water quality. These matters will need to be addressed thoroughly during the preparation of development plans and in the assessment of specific proposals.

20. Increasing the capacity of Waverley Station and supporting the development of an Edinburgh tram network will improve physical infrastructure and promote more sustainable patterns of transport. However, care will be required in project planning to ensure that the quality of the built environment is protected.

21. At the route planning and project development stages, specific measures will be required to eliminate or mitigate the negative environmental effects of transport infrastructure improvements.

Other Infrastructure

22. The promotion of electricity generated from renewable sources is an important element of both the UK and Scottish Climate Change Programmes. Whilst the overall effect will be positive, there is potential for negative effects on landscape and possibly biodiversity. A significant proportion of Scotland's renewable energy resources lie within sensitive areas and some projects such as wind farms and grid improvements may have to be located in these areas. Strategic and local decision-making on renewable energy development will need to be informed by careful assessment of impacts on the environment. Developing a mix of renewable energy technologies in the medium/longer term, rather than relying on wind, is likely to place less pressure on sensitive landscapes.

23. Supporting community-based renewable energy projects can help to maintain population in remote and economically fragile rural areas, thus underpinning sustainable land management. Promoting synergies between renewable energy development and fish stock management can contribute to the maintenance of biodiversity.

24. Investing in the renewal and improvement of water and drainage infrastructure will help to improve water quality, promote more sustainable drainage solutions and reduce the risk of water and soil pollution. Works to reduce flood risk in Glasgow could contribute to a more sustainable urban infrastructure and safeguard the city's built heritage, but could have negative effects on landscape and biodiversity. Measures to minimise or mitigate adverse environmental effects will need to be addressed at the planning and project development stages.

Regional Perspectives

25. The proposals for the Central Belt place strong emphasis on environmental improvement and area regeneration. Their effects are likely to be predominantly positive. The Clyde Waterfront and Clyde Gateway projects are major strategic opportunities to reuse previously developed land and to improve the quality of the environment of West Central Scotland. The new infrastructure required to improve the connectivity of gateway facilities could have negative effects of the sort highlighted in the Transport section, so there will need to be a strong commitment to high environmental standards and good design. Promoting a high quality environment should be an essential part of realising the potential of West Edinburgh as a key business location and may provide opportunities for improving biodiversity. Supporting tourism and leisure development to the West of Glasgow offers important opportunities to improve environmental quality in Inverclyde and West Dunbartonshire, but care will have to be taken to safeguard the area's natural and built heritage. The text has been amended to highlight the potential contribution of community woodlands to environmental improvement and the greening of derelict land.

26. Successful promotion of knowledge economy clusters in the East Coast corridor will require a strong commitment to environmental quality. Projects designed to reduce journey times between centres will require to be carefully assessed and measures taken to eliminate or mitigate any adverse environmental effects.

27. The development of the gateway role of Ayrshire and the South West will require to be supported by complementary environmental measures. Improving quality in the former mining areas of Ayrshire can bring a wide range of environmental benefits.

28. The proposals for rural Scotland stress that the future of the economy is dependent on the maintenance of a high quality environment. Ensuring that planning and land management regimes reinforce each other will help to promote environmental stewardship and safeguard landscape and

biodiversity. Co-ordinated action to stimulate development in the Western Isles will help to maintain the population in an economically fragile rural area and sustain environmentally important land management practices. However, it will be important to ensure that new development does not adversely affect the unique environmental heritage of the islands. One of the objectives of improving transport infrastructure to support timber extraction should be to ensure that a higher proportion of timber is transported by rail.

THE EFFECT OF ASSESSMENT

29. The assessment of proposals is a matter of judgement and different individuals may conclude different results. The Executive considers, however, that a consistent approach has been taken and values the expert contribution of the Advisory Group.

30. As a result of this assessment, the NPF has been amended to give greater recognition to Scotland's landscape and bio-diversity assets, reinforce national policy on the protection of sensitive areas, and stress the importance of maximising opportunities to improve landscape quality.

31. The assessment matrices show that nearly all proposals are likely to have significant positive effects on at least one aspect of the environment. This reflects the Executive's commitment to the environment and sustainable development.

32. Planning authorities should ensure that further, more detailed assessments are carried out once the specific nature and location of the proposals are identified. Where there are likely to be negative, potentially negative or unknown impacts on the environment, planning authorities and others concerned with the implementation of the NPF proposals, should ensure that appropriate mitigation measures are secured.

33. Care must also be taken to consider the cumulative impacts of proposals on the environment which cannot be appropriately addressed through project led mitigation or compensation. The Advisory Group recommended that the Executive should make a commitment to identifying environmental enhancement opportunities at the strategic scale specifically to offset any negative effects on landscape or biodiversity. The Executive will consider the implications of this in reviewing the NPF. The text of the framework has been amended to emphasise that areas of change should be seen as strategic opportunities to improve environmental quality.

HOW THE ENVIRONMENT MIGHT EVOLVE IN THE ABSENCE OF THE NPF

34. In the absence of the national planning framework development would still occur but would be less well attuned to environmental and other strategic objectives and priorities. It is likely that new development would be strongly focused on the most economically buoyant parts of the country and a diminishing number of locations unconstrained by lack of physical infrastructure, aggravating problems of congestion and intensifying pressures on areas of environmental quality and greenfield land. Progress on restoring vacant and derelict land and improving environmental quality in areas requiring regeneration would probably be more limited.

35. New development would be less well related to public transport infrastructure and opportunities to improve public transport, thus limiting the scope for reducing car dependency and promoting sustainable transport patterns.

36. The absence of strategic guidance on the location of waste management facilities could lead to uncertainty and delay, making it more difficult to realise recycling targets and prolonging the requirement for large landfill sites. Opportunities to avoid duplication of facilities and achieve economies of scale might be missed.

37. In rural Scotland, renewable energy development would require to focus more intensely on areas with existing grid capacity, with potentially adverse environmental consequences.

38. Weaker economic performance could result in less investment in environmental improvement and the renewal of urban fabric.

39. Overall, the NPF provides a national spatial vision to ensure that development of strategic importance is located in the most appropriate location. This strategic and sustainable approach will benefit the environment.

MONITORING AND REVIEW

40. It is intended to review the NPF on a four-year cycle. Monitoring based on the environmental indicators contained in the Executive's *"Indicators of Sustainable Development for Scotland"* and validation of the assessment contained in this report will play essential parts in that process.

CONCLUSION

41. This is the first assessment of this nature to be undertaken by the Executive and finding a level of assessment suitable for the NPF has been challenging. Whilst it has not been possible to meet all of the technical requirements of the Directive in this pilot exercise, we are satisfied that it provides a suitable level of assessment and accords with the intent of the Directive. The Advisory Group considers that it represents an appropriate approach to SEA in these particular circumstances and that it has added value to the national planning framework.

42. A commitment to protecting and enhancing the environment has been built into the aims and strategic objectives of the NPF and the effects of its proposals on the environment are predominantly positive. As a result of this assessment, the text of the framework has been amended to place greater emphasis on our landscape and biodiversity assets and the strategic opportunities for environmental improvement offered by areas of change.

43. Measures to eliminate or mitigate the potential negative effects of proposals will have to be addressed in more detail through the assessment of development plans and specific development proposals. Much can be achieved through a commitment to environmental quality and careful attention to siting and design.

44. Overall, the assessment has made a valuable contribution to the preparation of the NPF. Whilst there has been overall benefit in carrying out the assessment, the Executive acknowledges that there is much to learn in the future as international experience of assessment at the strategic level develops. Suggestions are welcome on how to improve the assessment method and process for future versions of the NPF.

BIBLIOGRAPHY

European Parliament and Council of the European Union (2001) *Directive 2001/42/EC “on the assessment of the effects of certain plans and programmes on the environment”*.

Scottish Executive Environment Group (2003) *Indicators of Sustainable Development for Scotland*, Paper 2003/3.

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**Scottish Executive
Development Department, Planning Division
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Annex National Planning Framework Environmental Assessment

Tables

Aims

Strategic Objectives

A Better Transport System

 Developing External Links

 Improving Connectivity

 Sustainable Transport and Land Use

Other Infrastructure

Spatial Perspectives

KEY

+	Likely to have a significant positive environmental effect
-	Likely to have a significant negative environmental effect
	Not considered likely to have a significant environmental effect
+ / -	Likely to have both positive and negative significant environmental effects
?	Uncertain or unpredictable significant environmental effects

Strategic Objectives

Strategic Objective	Potentially Significant Environmental Effects									
	Landscape	Biodiversity	Climate	Air	Water	Soils	People	Health	Cultural Heritage	Material Assets
Support the development of cities as main drivers of the economy	+ / -		+	?			+	?	?	+
Spread activity by promoting quality and connectivity	+ / -	+ / -					+	+		+
Strengthen external links			-	-			+		?	+
Promote economic diversification and environmental stewardship	+ / -	+		+	+	+	+			?
Realise the potential of renewable energy resources	-	-	+	+	?			+		+
Develop facilities to meet waste recycling targets	+/-		+	+	+	+		+		+
Extend broadband coverage in every area of Scotland							+			+

Proposal	Potentially Significant Environmental Effects									
	Landscape	Biodiversity	Climate	Air	Water	Soils	People	Health	Cultural Heritage	Material Assets
Link area regeneration to economic opportunity	?						+	+		+
Identify opportunities to foster economic clusters	+ / -	-								+
Reuse previously developed land in preference to greenfield sites	+	+				+	+		+	+
Promote the greening of vacant and derelict land	+	+	+	+	+	+	+	+		+
Attract international cultural and sporting events									+	+
Improve national and regional sports facilities	+ / -						+	+		+

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A Better Transport System : Developing External Links

Proposal	Potentially Significant Environmental Effects									
	Landscape	Biodiversity	Climate	Air	Water	Soils	People	Health	Cultural Heritage	Material Assets
Develop more direct air links			-	-				?		+
Provide rail links to Edinburgh and Glasgow Airports			+	+						+
Safeguard land for airport expansion	-	-			?				?	
Reduce travel times to major English cities	?	?								+
Improve sea links to England and mainland Europe			+	+	-					
Strengthen rail and road routes between Ireland and the Continent	-	-	+ / -	-						+
Develop deep water facilities at Scapa Flow and Hunterston	?	?			-				?	+

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A Better Transport System : Improving Connectivity

Proposal	Potentially Significant Environmental Effects									
	Landscape	Biodiversity	Climate	Air	Water	Soils	People	Health	Cultural Heritage	Material Assets
Develop through rail services across the Central Belt			+	+						+
Promote efficient city region public transport systems			+	+						+
Increase capacity at Waverley Station									-	+
Bring Inverness, Aberdeen & Newcastle closer to the Central Belt	?	?	?							+
Reduce journey times between Aberdeen and Inverness	?	?								+
Complete Central Belt Motorway network	+ / -	?	-	-		+ / -			?	+
Complete Aberdeen Western Peripheral Route	?	?	-	+ / -					?	+
Reopen the Airdrie to Bathgate rail line		?	+	+						+
Reopen the Stirling - Alloa - Kincardine rail line		?	+	+						+
Reopen the Borders rail line		?	+	+						+
Improve the rural road network	?	?	-	-					?	+

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A Better Transport System: Sustainable Transport and Land Use

Proposal	Potentially Significant Environmental Effects									
	Landscape	Biodiversity	Climate	Air	Water	Soils	People	Health	Cultural Heritage	Material Assets
Transfer freight from road to rail and water			+	+	-	+				+
Use pricing to manage travel demand			+	+						
Develop passenger and freight interchange facilities			+	+			+		?	+
Support development of a tram network in Edinburgh			+	+			+		-	+
Develop at locations with good public transport infrastructure			+	+			+		?	+
Use urban renewal to counter long-distance commuting			+	+		+		+		
Promote development where it will support better public transport			+	+					?	+
Integrate interchange facilities with existing centres			+	+			+		+	+
Locate freight generating uses close to freight interchanges			+	+						+

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Other Infrastructure

Proposal	Potentially Significant Environmental Effects									
	Landscape	Biodiversity	Climate	Air	Water	Soils	People	Health	Cultural Heritage	Material Assets
Strengthen the grid to support renewable energy development	-		+	+				+	?	+
Develop a mix of renewable energy technologies	+ / -	?	+	+	+			+	?	+
Site new power stations to take advantage of existing grid capacity	+									+
Support community based renewable energy projects	+ / -	?	+	+			+ / -	+		+
Promote synergies between renewables & fish stock management		+								
Expansion of aquaculture to the East Coast		-			-					
Invest in water and drainage infrastructure to support development					+	+		+		+
Engineering works to reduce flood risk in Glasgow	?	-			+		+	+	+	+

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Spatial Perspectives

Proposal	Potentially Significant Environmental Effects									
	Landscape	Biodiversity	Climate	Air	Water	Soils	People	Health	Cultural Heritage	Material Assets
Central Belt										
Promote the complementarity of Edinburgh and Glasgow							+			+
Invest in environmental improvement	+	+	+	+	+	+	+	+	+	+
Improve the connectivity of gateway facilities	-	-								+
Realise West Edinburgh's potential as a business location	-		?	?			+ / -		?	+
Promote regeneration of the Clyde Corridor	+	+			+	+	+	+	+	+
Support tourism and leisure development to the West of Glasgow	+ / -	?					+	+	+ / -	
East Coast										
Develop knowledge economy links in the East Coast corridor										+
Develop Aberdeen's role as an energy and cultural centre									+	+
Build on the success of Dundee's knowledge economy clusters										+
Broaden economic base of Inverness and the Inner Moray Firth	+ / -									+
Promote the complementarity of Dundee and Perth										+
Ayrshire and the South West										
Build on the success of Prestwick Airport	?		?	?			?			
Cluster export orientated industries along transport corridors	+ / -		+							+
Develop cultural, business and activity based tourism							+		+	?
Improve environmental quality in former mining areas	+	+			+	+	+	+	+	+
Develop role of Dumfries as a regional centre							+		+	
Improve transport infrastructure to support timber extraction in SW	?	?								+
Rural Scotland										
Promote diversification based on a high quality environment	+	+		+	+	+	+	+	+	+
Planning and land management regimes must reinforce each other	+	+			+	+			+	
Support the development role of higher education										
Develop expertise in marine power technology										
Promote new and shorter ferry crossings to the islands					+ / -					+
Co-ordinated action to stimulate development in the Western Isles							+		+	+
Improve the environmental quality of the M74 corridor	+	+					+	+		