

# Biodiversity tests for key economic sectors

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English Nature Research Reports

**Number 404**

**Biodiversity tests for key economic sectors**

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## Executive Summary

1. The proposed questions developed in this document are intended to assist English Nature in developing its engagement with business. These questions support the generic questions developed by English Nature and Earthwatch that are to be used in the Business in the Environment (BiE) Survey of Corporate Environmental Engagement.
2. The questions were developed following an investigation into existing 'tests' (criteria, indicators, objectives) in use at international, European, national, and local levels, those used by regulators or trade associations for each specific sector, and those reported on by best practice companies.
3. The DETR's sustainable development indicators, presented in 'Quality of Life Counts' provide a useful context to English Nature's proposed questions. These indicators were developed to measure progress of UK sustainable development activities as outlined in DETR's 'A Better Quality of Life' strategy for sustainable development for the UK (DETR May 1999). The proposed questions, where appropriate, have been linked to existing initiatives to ensure there is synergy between the sustainable development drivers acting on companies.
4. English Nature's priority sectors do not easily align with FTSE sector company listings. The proposed questions developed in this report are for specific FTSE sectors, with the exception of Coastal Defence. Each set of proposed sector specific questions contain generic questions that can be targeted at other FTSE sector listed companies that also impact on the appropriate English Nature sector.
5. For some of English Nature's sectors a large number of questions are proposed. Depending on the circumstances and English Nature's priorities, questions should be selected from the list, rather than all used.

### Comments Specific to Each of English Nature's Priority Sectors

6. The agriculture sector is characterised by its diverse products and complex supply chains. The proposed questions are designed for food retailers and processors, and are broadly worded to include all the suppliers in any one product's supply chain.
7. Coastal Defence was the one sector where no reporting on coastal processes impacted by company operations was found. An increase in corporate awareness of the need to maintain and work with coastal processes is therefore required.
8. The proposed questions developed for English Nature's Coastal Defence Sector have been designed for all land owning companies, which span several FTSE sectors.
9. The greatest engagement with biodiversity was in relation to English Nature's Fresh Water sector. However the level of engagement varied across companies. The development of Water UK's 'Towards Environmental Sustainability Indicators' (May

2000) is to be welcomed as an initiative to encourage and direct water companies in their biodiversity initiatives.

10. The analysis of the Sea Fisheries Sector revealed that there is some awareness of biodiversity issues in the business community. Relevant companies' corporate reporting includes support of the Marine Stewardship Council (MSC), yet there seems to be low general public awareness of the state of overfishing. Companies that support the MSC could further their support by initiating corporate customer information campaigns about the level of fish stocks, and the value of MSC certified fish.
11. English Nature's Land Development sector includes construction and extractive industries that significantly change land form. Both are engaging with the sustainable development agenda, which has raised awareness of biodiversity issues. This process has been assisted by DETR's publication of its Sustainable Construction Strategy (April 2000), and for extractive industries, the consultation process over the forthcoming aggregates tax has brought environmental issues to the forefront.
12. English Nature's Transport sector is a disparate sector covering not just modes of transport but also companies that own land for transport infrastructure. These include linear routes, as well as 'spot' developments for depots, service stations, airports etc. The proposed questions are directed at land owning companies and relate to their activities that impact on biodiversity.

## Findings

13. Companies are at different levels of engagement relating to biodiversity issues. Most are not undertaking biodiversity initiatives, and even many of the companies engaged in environmental activities have not addressed the biodiversity impacts of their operations. The only exception is in the water sector, where regulatory pressures have prompted action from water and sewerage companies.
14. Biodiversity, as a concept, needs to be demystified, because it is an unfamiliar word to many in the business sector. To assist companies in the uptake of biodiversity initiatives, biodiversity could be linked more visibly with wildlife and nature conservation, as these terms are more commonly understood.
15. The proposed sector-specific questions have been developed to engage companies in biodiversity issues. These questions will need to be supported with references to sources of information and guidance to assist companies in undertaking biodiversity enhancement activities, which include the development of BAPs. Biodiversity guidance for business can be sourced from:
  - ! UK Local Issues Group/ UK Biodiversity Group (UKBG)
  - ! Earthwatch, who has been given a grant by the DETR to become a resource centre for business and biodiversity. ([www.uk.earthwatch.org](http://www.uk.earthwatch.org) 01865 318838).

# 1. Introduction

## 1.1 Context

This project was undertaken by Stanger Science and Environment to assist English Nature in developing their engagement with business. English Nature has developed a set of generic questions to be completed by companies – the first two are included in the 2000 Business in the Environment (BiE) Survey of Corporate Environmental Engagement, as below:

1. Do you have a company policy on biodiversity issues and is this integrated within your wider environmental/ sustainability management system?
  - ! No
  - ! Yes but not integrated
  - ! Yes integrated within EMS/ SMS
  - ! Yes integrated within EMS/ SMS and report publicly
  
2. Do you have a company BAP or biodiversity strategy which will enable you to contribute to the biodiversity objectives and priorities of the countries within which you operate?
  - ! No
  - ! Yes, have a company BAP/ biodiversity strategy but not contributing to national objectives
  - ! Yes, contributing to national objectives
  
3. Do you have a company policy to achieve the highest state of conservation management on all protected and designated areas under the control of the company (e.g. in the UK this means achieving favourable condition on all land designated Site of Special Scientific Interest (SSSI)?)
  - ! No
  - ! Yes – for land we own or manage
  
4. Do you have a company policy on development and land use which is in accord with the provisions and guidelines of the Convention on Biological Diversity<sup>1</sup>?
  - ! No

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<sup>1</sup> Provisions and Guidelines for Biological Diversity:

- a. to conserve and where practicable enhance:
  - the overall populations and natural ranges of native species and the quality and range of wildlife habitats and ecosystems;
  - internationally important and threatened species, habitats and ecosystems;
  - species, habitats, and natural and managed ecosystems that are characteristic of local areas;
  - the biodiversity of natural and semi- natural habitats where this has been diminished over recent past decades
- b. to increase public awareness of and involvement in conserving biodiversity
- c. to contribute to the conservation of biodiversity on a European and global scale.

- |   |
|---|
| <ul style="list-style-type: none"> <li>! Yes for land we own or manage</li> <li>! Yes for our supply chain</li> </ul> <p>5. Do you have a partnership with a statutory agency or NGO for the protection and enhancement of biodiversity?</p> <ul style="list-style-type: none"> <li>! No</li> <li>! Yes partnership with a statutory agency</li> <li>! Yes the partnership with an NGO</li> </ul> |
|---|

The specific objectives of this project are to:

- ! identify existing tests for biodiversity at international, European, national, regional and local levels for six of English Nature’s priority sectors: Agriculture, Coastal Defence, Freshwater, Land Development, Sea Fisheries, and Transport;
- ! to review company best practice in each of these sectors; and
- ! to recommend biodiversity tests for each priority sector.

The purpose of developing these questions is to assist companies in addressing and managing their biodiversity impacts, and to help English Nature identify appropriate companies with whom to develop closer links.

The UK’s Biodiversity Action Plan (BAP) was developed in 1994 and includes strategies to conserve biological diversity and promote sustainable use of biological resources. For the UK’s BAP to be effective the objectives need to be translated into local biodiversity action plans. Action Plans have now been published for 45 priority habitats and over 400 species. Implementation of Biodiversity Action Plans (BAPs) is central to English Nature’s vision of a sustainable and biologically diverse natural environment. Over the last six years there has been little engagement in biodiversity by business, yet as owners and managers of land or influencers of water and sea activities their engagement is necessary for the UK’s BAP objectives to be met.

## 1.2 Terminology

English Nature is the statutory body that champions the conservation and enhancement of wildlife and natural features of England. English Nature works for wildlife in partnership with others by:

- ! *Advising* – Government and other agencies, local authorities, interest groups, business, communities, individuals on nature conservation in England.
- ! *Regulating* – activities affecting the special nature conservation sites in England.

- ! *Enabling* – helping others to manage land for nature conservation , through grants, projects and information
- ! *Enthusing* – advocating nature conservation for all and biodiversity as a key test of sustainable development.

Through the Joint Nature Conservation Committee English Nature works with sister organisations in Scotland, Wales and Northern Ireland to advise Government on UK and international nature conservation issues.

**Biodiversity** is defined by Earthwatch, the organisation sponsored by the DETR to assist business and biodiversity, as: ‘the entire variety of life on Earth, from mammals to micro-organisms such as bacteria and viruses. It includes:

- ! species;
- ! genetic variation within species;
- ! the ecosystems within which species occur;
- ! the whole of the natural world, from commonplace to highly endangered species’.

**Biodiversity ‘Tests’.** ‘Tests’ evaluated in the course of this project include criteria, standards, objectives, targets or indicators organisations use to improve and differentiate performance.

**Biodiversity Questions** have been developed in this project in order to encourage companies to address and improve their biodiversity performance, and to facilitate an assessment of corporate performance in this area.

### 1.3 Structure of this report

The remainder of this report is set out as follows. Section 2 outlines the methodology used to generate the proposed biodiversity questions. Section 3 relates English Nature’s priority sectors to the relevant FTSE economic sectors. Section 4 presents generic, non sector specific ‘tests’ developed by government departments, local government, international organisations and non-governmental organisations, as well as UK best practice companies. Section 5 is split into six parts with each presenting the proposed biodiversity questions for the English Nature priority sectors evaluated (Agriculture, Coastal Defence, Fresh Water, Land Development, Sea Fisheries, Transport). Section 6 groups the generic questions that have been teased out from the sectoral questions presented in Section 5. Conclusions are presented in Section 7.

Appendix A presents the background material used to develop the sectoral questions presented in the main body of the report and is split into six parts relating to English Nature’s priority sectors. (A1 Agriculture, A2 Coastal Defence, A3 Fresh Water, A4 Land Development, A5 Sea Fisheries, A6 Transport). Each of the six parts has two tables. The first table presents existing biodiversity ‘tests’ and indicators relevant to the English Nature priority sector. The second table links the proposed sectoral questions to relevant existing initiatives.

## **2. Methodology**

Research into existing 'tests' was undertaken by interviewing English Nature's priority sector leads, web searches, company environmental report literature reviews, evaluations of best practice, and telephone conversations with relevant trade associations or regulators.

For some sectors existing biodiversity 'tests' were few, with the result that relevant initiatives have been presented to give a fuller picture of companies' biodiversity activities. For those companies who do not own land, relevant 'tests' for water and bioaccumulating chemicals have been presented as it is anticipated these are key impacts of companies that are critical to biodiversity and are not priority environmental areas for action at the moment. Air quality concerns have been included in the proposed Transport sector questions because air emissions are a key issue for the sector.

### 3. The relationship between English Nature priority sectors and FTSE sector listings

The relationship between English Nature’s priority sectors and relevant FTSE economic sectors is shown below in Table 3.1. It is these economic sectors which have been reviewed in order to develop the sector specific biodiversity questions that are presented in the remainder of this report. Table 3.1 also illustrates further sectors that are related to the main economic sectors. These could be reviewed in the future in order to further refine the sectoral questions.

**Table 3.1 English Nature’s Priority Sectors linked to FTSE sectors**

English Nature’s priority sectors	FTSE economic sectors considered in this project	FTSE sectors to consider in the future
Agriculture	! Food and Drug Retailers ! Food Producers and Processors	! Beverages
Coastal defence	! Water ! Transport (includes Ports)	! Energy/Electricity – Nuclear ! Oil and Gas ! Chemicals ! Leisure, Entertainment and Hotels ! Construction and Building Materials
Freshwater	! Water	! Electricity (if relevant for multi-utility listing) ! <i>Industries with discharges or creating soil erosion:</i> ! Food Producers and Processors ! Chemicals, Etc.
Land Development (including construction, minerals and aggregates)	! Construction and Building Materials (includes House Building) ! Minerals and Aggregates	! Support Services (includes engineering consultants) ! Real Estate
Marine Fisheries	! Food and Drug Retailers ! Food Producers and Processors	
Transport	! Transport	! Support Services ! Automobiles ! Distributors ! Oil and Gas

In addition, the following sectors have biodiversity impacts across the six priority sectors; Telecommunications, and Pharmaceuticals, as well as other manufacturing, distributing and sourcing companies.

#### **4. Review of generic biodiversity tests and initiatives undertaken nationally, internationally, regionally and by best practice companies**

The tables below present generic biodiversity tests and initiatives undertaken at international, European, national and regional level as well as those undertaken by best practice companies. The companies listed in this section are known for their good environmental practice.

**Table 4.1 Review of Generic Biodiversity Tests**

Organisation	Reference	Tests/initiatives	Comments
<b>UK Government Biodiversity Tests and Initiatives (Initiatives are listed under issue heading)</b>			
DETR	<p><i>Quality of Life Counts – indicators for a strategy for sustainable development for the UK: a baseline assessment</i>                      December 1999  <a href="http://www.detr.gov.uk">www.detr.gov.uk</a></p>	<p>DETR's Quality of Life Counts publication presents the indicators that will be used to assess the sustainability of the UK, as set out in the DETR's <i>A better Quality of Life, a Strategy for Sustainable Development for the UK (May 1999)</i>. The indicators are subdivided into 15 headline indicators and are supported by 150 core indicators which are to measure progress. The indicators are presented with a baseline assessment of their current status.</p> <p>The Headline Indicator for biodiversity relates to the 'Populations of wild birds' (H13 – all species, woodland and farmland), while other headline indicators clearly affect biodiversity, such as 'rivers of good or fair quality' (H12) or 'new homes built on previously developed land' (H14).</p> <p>The following list summarises the indicators of relevance to biodiversity, according to the subject headings given in the document.</p> <ul style="list-style-type: none"> <li>! D. Sustainable Production and Consumption: Area under agreement under Environmentally Sensitive Area and Country Stewardship agri-environment schemes (D13); Area converted to organic production (D14)</li> <li>! M. Integrated Approach: Indicators include concentration of persistent organic pollutants (M1); Dangerous substances in the water (M2).</li> <li>! Q. Freshwater: Nutrients (P and N) in the water (Q1); Wildlife and amenity sites affected by abstraction (Q6);</li> </ul>	<p>The DETR Public Service Agreement with HM Treasury includes the following objectives to enhance opportunities in rural areas, improve enjoyment of the countryside and conserve and manage wildlife resources. This includes increasing open access to moorland etc; and achieving 95% of SSSIs in favourable condition by 2010.</p>

Organisation	Reference	Tests/initiatives	Comments
		<p>! R. Seas, Oceans and Coasts: Estuarine water quality, marine inputs of hazardous or radioactive substances, including metals, nutrients, and organic substances (R1 – this is linked to M4: Discharges from the nuclear industry); Biodiversity in coastal/marine areas (R3); Fish stocks around the UK fished within safe limits (R4).</p> <p>! S. Landscape and Wildlife: Net loss of soils to development (S1); Concentration of organic matter in agricultural top soil (S2); Trends in plant diversity (S3); Biodiversity action plans (S4 – costed BAPs are complete for all 391 priority species and 45 priority habitats); Landscape Features (S5 – hedges, dry stone walls, banks, ponds. This indicator is linked with a specific target to stop loss of species rich hedgerows by 2005); Extent and management of SSSIs (S6); Countryside quality (S7 – to be developed); Native species at risk (S9 – vertebrates – freshwater fish, marine reptiles, and amphibians, invertebrates, vascular plants and lower plants); Area of woodland in the UK (S10); Area of ancient semi-natural woodland in GB (S11); Sustainable management of woodland (S12 – to be developed); Land covered by restoration and after care conditions (S15)</p>	
DETR	<i>Environmental Reporting : Getting Started</i> <a href="http://www.environment.detr.gov.uk/envrp">www.environment.detr.gov.uk/envrp</a>	This publication does not mention biodiversity.	

Organisation	Reference	Tests/initiatives	Comments
DETR	MACC2 www.macc2.org.uk	'Making a Corporate Commitment' campaign to sustainable business practice and an improved environment is initiated by the government to enable Chief Executives of companies and public sector organisations to voluntarily commit to set environmental improvement targets. MACC2 commitments are being sought in the following areas, with the top three being the priority: CO <sub>2</sub> emissions Water consumption Waste production Raw materials use Gas emissions of Sulphur, NO <sub>x</sub> , Ammonia, and VOCs Travel plans Biodiversity Action Plan	
Advisory Committee on Business in the Environment DETR/DTI	<i>Internalising Sustainable Development – Exposure Draft 'A briefing paper for directors'</i> September 2000 020 7311 4812	A Biodiversity question is included under Purchasing: 'How will the UN Convention on Biodiversity affect our [company's] future access to raw materials?'	Biodiversity is not mentioned under Estate Management, which is a function with a potential biodiversity impact.
DTI	<i>DTI's Sustainable Development strategy – A strategy for simultaneously securing economic growth and environmental protection</i> October 2000 www.dti.gov.uk/sustainability/index.htm	This publication does not mention biodiversity. It concentrates on improving resource productivity and encouraging corporate social responsibility.	
DETR CLIP (Central-Local Government Information Partnership) Task Force	<i>Local Sustainability Counts: handbook for a menu of local indicators of sustainable development</i> July 2000	The indicators below can be chosen as part of a menu of 30 draft indicators that have been developed and trialled for local authority use. ! net change in the quality and/or quantity of locally important natural/semi-natural habitats (e.g. woodland and grassland); ! changes in the populations of selected characteristic species (the occurrence of a characteristic species is to be determined locally).	The government is recommending that local authorities and their partners consider using all or a selection of the indicators in the handbook for reporting on their community strategies

Organisation	Reference	Tests/initiatives	Comments
<p>Hampshire County Council and CAG Consultants with DG XI funding</p>	<p><i>Investigating Appropriate Indicators for Local Biodiversity</i>            June 2000  <a href="http://www.hants.gov.uk/tc/biodiversityindicators/">www.hants.gov.uk/tc/biodiversityindicators/</a></p>	<p>Hampshire County Council is developing indicators in four areas to monitor the influence of local, national, and European policy influences. The Birds and Habitat Directive is one area and its indicators for continued development are below.</p> <ul style="list-style-type: none"> <li>a. Number of proposed developments potentially affecting European sites.</li> <li>b. Percentage of cases in which proposed development is considered to have a likely significant effect on a European site.</li> <li>c. Percentage of cases in which an appropriate assessment is made.</li> <li>d. Percentage of cases where the appropriate assessment shows a likely negative impact.</li> <li>e. Percentage of cases in which development with a negative impact is permitted.</li> <li>f. Level of knowledge of the implications of the Directives amongst competent authorities.</li> <li>g. Progress towards completion of the 'review of consents'.</li> <li>h. Changes of key species inside and outside of SPAs and proposed cSACs.</li> <li>i. Changes in total wintering bird counts inside and outside SPAs.</li> <li>j. Changes in bird diversity indices inside and outside SPAs.</li> <li>k. Progress towards completion of conservation objectives for European sites.</li> <li>l. Percentage of interest features (within proposed cSACs and SPAs in favourable condition.)</li> <li>m. Proportion of land in European sites under management agreements receiving funding for positive management.</li> <li>n. Area of land adjacent to European sites which is subject to a management agreement for the purposes of habitat restoration.</li> </ul>	

Organisation	Reference	Tests/initiatives	Comments
Society of Local Authority Chief Executives and Senior Managers (SOLACE)	SOLACE <i>Best Value and Sustainability Checklist</i> <a href="http://www.solace.org.uk">www.solace.org.uk</a>	The following questions are included on a checklist produced to enable Local Authorities to systematically review services against <i>A Better Quality of Life</i> . Does your service ensure energy and resources are used widely and that the broader environment is protected and enhanced by: a. Enhancing the quality and provision of urban green spaces and countryside parks and access to them? b. Protecting and enhancing wildlife habitats?	
Dow Jones Corporate Sustainability Assessment Questionnaire	<a href="http://indexes.dowjones.com/djsg">http://indexes.dowjones.com/djsg</a> <a href="http://www.sam-group.com">www.sam-group.com</a>	No mention of biodiversity in their generic questionnaire.	This is an omission given the depth of other questions.

Organisation	Reference	Tests/initiatives	Comments
World Bank	<p><i>World Bank Operational Manual OP4.04</i>  <a href="http://www.worldbank.org/environment/op_policies">www.worldbank.org/environment/op_policies</a>  020 7930-8511</p>	<p>The World Bank uses environmental criteria to evaluate the environmental impacts of potential projects it may support. Relevant extracts from the World Bank's evaluation guidance is given below.</p> <ol style="list-style-type: none"> <li>1. The Bank supports the protection, maintenance, and rehabilitation of natural habitats and their functions.</li> <li>2. Identification of natural habitat issues and special needs for natural habitat conservation, including the degree of threat to critical natural habitats (those designated protected areas (World Conservation Union - IUCN classified); and sites identified by other authoritative sources including areas with known high suitability for biodiversity conservation, and sites that are critical for rare, vulnerable, migratory or endangered species. These sites are based on systematic evaluations of species richness, the degree of endemism, rarity and vulnerability of component species, representativeness and integrity of ecosystem processes.</li> <li>9. The Bank encourages borrowers to incorporate into their development and environmental strategies analyses of any major natural habitat issues, including identification of important natural habitat sites, the ecological functions they perform, the degree of threat to the sites, priorities for conservation, and associated recurrent funding and capacity building needs.</li> </ol>	<p>The World Bank has also set up Biodiversity Fund (\$150 m) with Conservation International and the Global Environment Facility that will focus on supporting biodiversity in 25 areas ~ 1.4% earth's land surface. (FT article 22.8.2000)</p>

Organisation	Reference	Tests/initiatives	Comments
Global Reporting Guidelines (GRI)  Coalition for Environmentally Responsible Economies (CERES)	<i>Sustainability Reporting Guidelines on Economic, Environmental and Social Performance</i> June 2000 <a href="http://www.globalreporting.org">www.globalreporting.org</a>	The GRI guidelines inform companies and other organisations on how to report their sustainability impacts. The guidelines include indicators organisations may wish to use to report their performance against. Suggested Land use/ Biodiversity performance indicators that are organisation specific include (p29); 6.32 Amount of land owned, leased, managed, or otherwise affected by the organisation. Type of ecosystem habitat affected and its status (e.g. degraded, pristine). Amount of impermeable surface as a percentage of land owned. 6.33 Habitat changes due to operations. Amount of habitat protected or restored 6.34 Objectives, programmes and targets for protecting and restoring native ecosystems and species 6.35 Impacts on protected areas (e.g. national parks, biological reserves, World Heritage Sites)	The June 2000 guidelines replace the previous draft guidelines.
Forum for the Future Directory of Sustainability in Practice	Forum for the Future <a href="http://www.forumforthefuture.org.uk/new2/directory/dindex.htm">www.forumforthefuture.org.uk/new2/directory/dindex.htm</a>	Forum for the Future has produced a Directory of Sustainability in Practice, in which sustainability projects are evaluated against 12 categories that represent aspects that constitute sustainable development. Under the 'Biological diversity and productivity' category the following question is asked of the project: Does the project 'Preserve, restore or enhance the physical conditions for biological productivity and diversity?'	
Sustainability: Integrated Guidelines for Management SIGMA	Forum for the Future <a href="http://www.forumforthefuture.org.uk">www.forumforthefuture.org.uk</a>	Biodiversity criteria for inclusion into SIGMA are still to be developed.	

Organisation	Reference	Tests/initiatives	Comments
New Economics Foundation (NEF)	New Economics Foundation <i>Index of Sustainable Economic Welfare 1950-1996</i> (ISEW) www.neweconomics.org 020 7407 7447	The Index of Sustainable Economic Welfare (ISEW) has been produced as an alternative measure to conventional economic indicators, such as GDP, in order to measure the sustainable welfare of a nation. The ISEW includes the following: Loss of Natural Habitats. This reflects the loss of nutrient cycling and storage, ground water storage and purification, storm protection, wildlife habitat functions, and is calculated from an estimated lost area of the following key natural habitats, native pine woodlands, wetlands, grazing marsh, unimproved neutral grasslands, lowland heathland, limestone pavements, and upland semi-natural woods (p20 & 21). Loss of Farmlands. This reflects the loss of agricultural land to urbanisation and the loss of agricultural land productivity through soil degradation. The latter calculation is based on impact of increased erosion from modern farming techniques (p21 & 22).	
B&Q	<i>How Green is my Patio? B&amp;Q's third environmental review</i> www.diy.co.uk	B&Q produces periodic reviews of its environmental performance. The following extracts are relevant to their biodiversity impacts. <u>PVC and Endocrine Mimics in plastics and other products</u> : B&Q is encouraging suppliers to research alternatives (p110). <u>B&amp;Q's Peat policy</u> (1991) is to stop extracting peat from bogs classified as SSSIs, and to encourage research and development into peat-free alternatives (p111). <u>B&amp;Q Store's Target</u> : Complete a desktop evaluation of the habitat threat of all our stores and, where necessary, produce and implement a store specific management plan to protect those habitats by the end of 1999. Baseline surveys when building new stores identify plant, invertebrate, bird and mammal species before and after construction. During construction an assessment is made of soil compaction, disturbance, noise and dust. (p129)	Winner of 2 categories in the Business in the Community Awards for Excellence 2000.

Organisation	Reference	Tests/initiatives	Comments
Co-operative Bank	<p><i>Partnership Report 1998</i>  <a href="http://www.co-operativebank.co.uk">www.co-operativebank.co.uk</a></p>	<p>The following extracts highlight the Bank's activities that are relevant to biodiversity.</p> <p><u>Persistent Bio-accumulative Chemicals Objective:</u>  Continue programme to reduce reliance on persistent bio-accumulative chemicals, and to draw these issues to the attention of the rest of society including the Co-operative movement. (p49)</p> <p><u>Development of Proposed Land Indicator:</u> Building floor space and land area occupied by premises (sq. m). This indicator aims to include embodied energy of Co-operative bank's operations, including construction. (p71 &amp; 72)</p> <p><u>Community Investment programme:</u> 'Customers who care' corporate giving programme is split into separate issue campaigns. In 1998 Biodiversity campaign donated £25,000 to the following organisations Whale and Dolphin Conservation Society, Wildlife trusts, Tusk Force, and Farmers World Network, and £25,000 was donated to appropriate organisations as part of their 'Food Labelling' Campaign. (p 89 &amp;90)</p> <p><u>RSPB alliance</u> includes an Affinity card, and participation in a Government backed 'Species Championing Scheme'. The Bank donates £10,000/year for three years to protect the Bittern. (p98 &amp; 99)</p>	<p>Winner of Association of Certified Chartered Accountants/ Institute of Social and Ethical Accountability Social Reporting 1999 awards</p>
BT	<p><i>How we Manage the Environment; BT's Environmental Performance Report 2000</i>  <a href="http://www.bt.com">www.bt.com</a></p>	<p>The following extracts from their environmental report are relevant to their biodiversity impacts.</p> <p><u>Persistent Chemicals Performance:</u> Disposal of 772 tonnes of PCBs (poly chlorinated biphenyls) and PCNs (poly chlorinated naphthalenes) from BT properties. (p45)</p> <p>One of BT's on-going target (adopted 1997) is to conduct a scoping exercise to see where PVC is used within the company and assess environmental concerns about its use. (p60)</p> <p><u>BT Sites and Buildings</u> have landscaped surroundings that encourage wildlife on to the site (p65)</p>	<p>BT came 2<sup>nd</sup> in the BiE survey of Corporate Environmental Performance</p>

## 5. Sector questions based on analysis of existing sectoral or company initiatives relevant to biodiversity

Biodiversity questions were developed from evaluating existing biodiversity initiatives being undertaken in English Nature's six priority sectors. Six tables in the Appendix present the existing 'tests' and initiatives relevant to the six English Nature priority sectors; Agriculture (Table A.1.1), Coastal Defence (Table A.2.1), Fresh Water (Table A.3.1), Land Development (Table A.4.1), Sea Fisheries (Table A.5.1) and Transport (Table A.6.1). Existing tests are drawn from relevant regulator or trade associations for each sector, or from non governmental organisation's initiatives, as well as from companies.

In each of the sections below, that review English Nature's (EN) priority sectors, the following information is presented:

- ! key initiatives or facts pertinent to the sector;
- ! existing sectoral 'tests' relevant to that priority sector,;
- ! DETR Sustainable Development indicators relevant to the priority sector;
- ! proposed questions developed for the EN priority sector.

The DETR's sustainable development indicators, presented in 'Quality of Life Counts' provide a useful context to English Nature's proposed questions. These indicators were developed to measure progress of UK's sustainable development activities as outlined in DETR's 'A Better Quality of Life' Strategy for Sustainable Development for the UK (DETR May 1999). Each of the DETR indicators listed in the following sections may be applicable to more than one EN priority sector.

The proposed biodiversity questions are linked to relevant sectoral tests' criteria including the DETR Sustainable Development indicators in Appendix A tables as follows: Agriculture (Table A.1.2), Coastal Defence (Table A.2.2), Fresh Water (Table A.3.2), Land Development (Table A.4.2 for Construction and Table A.4.3 for Quarrying and Mining), Sea Fisheries (Table A.5.2) and Transport (Table A.6.2).

For each priority sector the proposed questions have been designed to reflect both minimal compliance issues and best practice. The questions are listed in the following order within each section.

1. Compliance (which may be generic).
2. Best practice generic questions (listed in a boxed section and summarised in Section 6. Generic questions were developed for this sector, but can be applied to other sectors.)
3. Best practice specific questions relating to that sector.

Each question number is consistent with Section 6 and the Appendices. A code has been used for each sector where:

A	relates to	Agriculture	(Section 5.1 & A.1.2)
CD	relates to	Coastal Defence	(Section 5.2 & A.2.2)
FW	relates to	Fresh Water	(Section 5.3 & A.3.2)
CON	relates to	Construction	(Section 5.4 & A.4.2)
Q&M	relates to	Quarrying and Mining	(Section 5.4 & A.4.3)
SF	relates to	Sea Fisheries	(Section 5.5 & A.5.2)
T	relates to	Transport	(Section 5.6 & A.6.2)

Both the Construction and Quarrying and Mining questions are presented in Section 5.4 on Land Development.

## 5.1 Proposed questions for English Nature's Agriculture Sector

English Nature's agricultural sector aims to reduce the negative biodiversity impacts associated with agriculture. The main agricultural products covered by this sector are cereals and oilseeds; sugar and sweeteners; potatoes, potato products and savoury snacks; protein crops (peas, beans, and pulses for humans or animals); milk and dairy products; meat; wool; eggs; fruit and vegetables. These are either consumed as a primary product or are processed. The current driving forces in the agricultural sector include the increasing influence of the supermarket chains, the changes in the Common Agricultural Policy due to Agenda 2000 and new agricultural technologies and associated systems. The key FTSE sectors that are relevant to EN's Agricultural Sector are Food and Drug Retailers and Food Producers and Processors.

The existing 'tests' most relevant to EN's work are the UK's Quality of Life Counts indicators, MAFF's Sustainable Agriculture Pilot indicators, EN's Nature Conservation Objectives for Agriculture, and those developed by Hampshire County Council. These are linked with the proposed questions in Table A.1.2.

### **DETR Quality of Life Counts Indicators Relevant to Agriculture include:**

- ! Rivers of good or fair quality (H12)
- ! Populations of wild birds (H13 - all species, woodland and farmland)
- ! Area under agreement under Environmentally Sensitive Area and Country Stewardship agri-environment schemes (D13)
- ! Area converted to organic production (D14)
- ! Concentration of persistent organic pollutants (M1)
- ! Nutrients (P and N) in the water (Q1)
- ! Wildlife and amenity sites affected by abstraction (Q6)
- ! Biodiversity in coastal/marine areas (R3)
- ! Concentration of organic matter in agricultural top soil (S2)
- ! Trends in plant diversity (S3)
- ! Biodiversity action plans (S4 – for all 391 priority species and 45 priority habitats costed BAP are complete)
- ! Landscape features (S5 - hedges, dry stone walls, banks, ponds with specific target to stop loss of species rich hedgerows by 2005)
- ! Extent and management of SSSIs (S6)
- ! Countryside quality (S7 – to be developed)

- ! Native species at risk (S9 – vertebrates – freshwater fish, marine reptiles, and amphibians, invertebrates, vascular plants and lower plants)

## Proposed Questions

### Compliance

- A.20 Does your company source agricultural products under a Quality Assured scheme, e.g. British Farming Standard tractor logo or from certified organic schemes?

#### **Generic supply chain influence questions**

- A.2 Does your company have a policy of encouraging suppliers to manage their land to attract and support native species?
- A.5 Does your company have a policy of minimising/banning the use of persistent bioaccumulating chemicals in the products it makes or sources? (This question relates to generation and release of persistent organic chemicals, hazardous waste etc)?
- A.6 Does your company have a policy to influence its suppliers to adopt water efficient resource management (especially for irrigation and minimise water abstraction)?
- A.10 Does your company encourage each of its suppliers, where appropriate, to prepare and implement a BAP, and report to your company which priority species present are increasing or declining in numbers.

#### **Generic questions relating to company operations, including biodiversity uses associated with factory or store siting**

- A.21 Does your company have a policy to enhance the biodiversity of the sites it occupies?
- A.22 Does your company report publicly on the number and populations of priority species found on its sites?
- A.23 Does your company have a policy to minimise biodiversity impacts of any liquid effluent or run off?
- A.24 Does your company communicate the value of biodiversity to its customers and suppliers?

### ***Agriculture specific questions relating to supply chain influence on farmers***

- A.1 Does your company have a policy of encouraging farmers to use nutrient management plans to minimise excessive and harmful nutrient run off into local water courses?
- A.3 Does your company have a policy to source its products only from those farms adhering to agri-environment schemes?
- A.4 Does your company have a commitment to stock at least X% of its UK sourced food from organically certified sources?
- A.7 Does your company have a policy to encourage those farmers on wetland or salt marsh areas to restore or manage their land to support bio-diversity action plan targets for these habitats?
- A.8 Does your company encourage its suppliers to maintain and improve the structural integrity of their soils, through suitable management practices (crop rotation, appropriate disposal of animal wastes etc)?
- A.9 Does your company encourage suppliers to use locally indigenous plant or animal species?
- A.11 Does your company have a policy of encouraging farmers to participate in and share species information with local biodiversity groups?
- A.12 Does your company have a policy to influence its suppliers to undertake appropriate management to ensure field margins provide an optimal habitat for biodiversity?
- A.13 Does your company have a policy of encouraging its suppliers to increase the area of planted woodland under their management with appropriate species?
- A.14 Does your company have a policy to influence its suppliers to maintain and manage low soil nutrient status on semi-natural grassland habitats?
- A.15 Does your company have a policy that encourages responsible use of pesticides, both through type of pesticide used, as well as the purpose and location of its application (not to be used as a preventative, nor on margins)?
- A.15 Does your company and its suppliers employ advisors who are trained and qualified to advise on agri-environment schemes?
- A.17 Does your company encourage its suppliers to improve the air quality emissions associated with its operations? (reduce emissions of methane and CO<sub>2</sub> in accord with Kyoto protocol, and HCFCs, and CFCs)
- A.18 Does your company work with its suppliers and other organisations to research and promote the most environmentally benign crop practices?

A.19 Does your company support, financially or in kind, biodiversity initiatives at a farm level?

***Agriculture specific questions to be asked of retailers with superstore outlets***

A.25 Does your company have a policy to avoid stocking or using peat from SSSI sites?

A.26 Does your company have a policy to reduce the amount of peat it sells (both in compost/ growing media bags, and in container pots) and/or promote the stocking of peat alternatives?

A.27 Does your company have a policy to increase the proportion of wood and wood based products sourced from FSC material?

A.28 Does your company have a policy to avoid selling any species listed under CITES or on the World Conservation Union (IUCN) Red list?

A.29 Does your company have a policy to avoid stocking non-native species that would have an irreversible impact if released into the wild?

## 5.2 Proposed Questions for English Nature's Coastal Defence Sector

One of the purposes of English Nature's Coastal Defence sector is to enhance the biodiversity opportunities of the coastline, in part by lobbying for a change to the traditional "physical barrier" approach to coastal defence management.

The main landowners and influencers of coastal land include individual property owners (agricultural farmers, home owners), companies (power stations, refineries, gas works, leisure resorts, sea salt manufacturers, ports, sewage outlets) and public bodies (Environment Agency's coastal defences, or Local authority land). In addition, marine activities, such as dredging can change the shoreline, through the removal of material from the sea bed.

The existing 'tests' most relevant to EN's work are the UK's Quality of Life Counts indicators and MAFF's High Level Targets for Flood Defence. These are linked with the proposed questions in Table A.2.2.

### **UK Quality of Life Counts Indicators Relevant to Coastal Defence include:**

- ! Dangerous substances in the water (M2).
- ! Discharges from the nuclear industry (M4).
- ! Estuarine water quality, marine inputs of hazardous or radioactive substances, including metals, nutrients, and organic substances (R1).
- ! Biodiversity in coastal/marine areas (R3).

## Proposed Questions

These questions are designed for companies in general industry sectors that affect the coast. These could include companies operating in the water, transport, oil and gas, chemicals, electricity, leisure, entertainment and hotels sectors. Companies should initially establish whether they operate near or on the coast, and therefore first answer the question:

**Does your company own or operate on land within a X? mile margin of any coastline?**

If yes, please answer the following questions.

### **Compliance**

CD. 9 Has your company evaluated its flood defence needs with the Environment Agency?

#### ***Generic questions to encourage companies to move towards best practice activities***

CD 3 Does your company have a policy of avoiding development and changes in land use which have an irreversible effect on biodiversity?

### **Coastal Defence specific questions**

- CD.1 Does your company report publicly on its discharges to land, air and water and the environmental quality of the coastal habitat it owns or manages or impacts upon?
- CD.2 When considering coastal development or changing coastal land management does your company consult other coastal neighbours, as well as the local Environment Agency and English Nature offices, about potential impacts on coastal processes?
- CD.4 Does your company seek opportunities for environmental enhancement and promote managed realignment options, or other softer engineering solutions?
- CD.5 When considering development or coastal land management does your company adhere to Shoreline Management Plan guidance?
- CD.6 Does your company own land of European or UK Coastal significance or directly impact on such a site (e.g. SSSI, RAMSAR or Natura 2000 sites)? If yes, is your company liaising with the competent authority to ensure appropriate management with regard to biodiversity?
- CD.7 Does your company participate in any joint initiatives with its coastal neighbours to enhance coastal biodiversity over a period of time?
- CD.8 Does your company have a policy of not developing on the edge of the coast, and where it does develop in the coastal zone, of evaluating the biodiversity implications of its proposed structures?

### 5.3 Proposed questions for English Nature's Fresh Water Sector

English Nature's Freshwater Habitats Sector includes rivers and streams, lakes, ponds, canals, flooded pits and reservoirs, and lowland wet grassland, fens and peat bogs.

Key companies that impact upon freshwater habitats include all those who abstract water, or discharge into water courses or ground water, which obviously covers a wide range of FTSE sectors. A significant FTSE sector is the Water Sector that includes water and sewage companies in the UK. Some water and sewage companies have parent companies and are therefore listed under a different FTSE listing. Companies with agricultural activities have a dispersed but significant impact as a result of their nutrient and soil runoff. Garden centres and DIY companies that source peat and sell alien aquatic plants also impact on freshwater habitats.

#### Fresh water biodiversity indicators

Fresh water is a key feature of many designated sites. In the UK, more than 800 SSSIs are noted principally for their fresh water interest, and third of the SSSIs in England and Wales are wetlands. This fact and that water is a crucial resource for all life means that several groups are developing indicators to assess water quality and biodiversity in the future:

- ! English Nature has developed targets for freshwater habitats and species of European significance.
- ! The Centre for Ecology and Hydrology ([www.ceh.ac.uk](http://www.ceh.ac.uk)) is working on the physical and biological habitat sustainability indicators for a variety of freshwater fish, invertebrates and plants (CEH is supported by NERC).
- ! Secretariat to the Convention on Biodiversity (SCBD - [www.biodiv.org](http://www.biodiv.org)), based in Montreal, has ongoing activities to develop indicators related to freshwater and marine and coastal areas. They have been asked to develop:
  1. a set of principles for designing national-level monitoring programmes and indicators;
  2. a key set of standard questions and a list of available and potential indicators that may be used at a national level.

The existing 'tests' most relevant to EN's work are the UK's Quality of Life Counts indicators and those developed by Water UK. These are linked with the proposed questions in Table A.3.2.

#### UK Quality of Life Counts Indicators Relevant to Fresh Water include:

- ! Rivers of good or fair quality (H12).
- ! Dangerous substances in the water (M2).
- ! Nutrients (P and N) in the water (Q1).
- ! Wildlife and amenity sites affected by abstraction (Q6).

## Proposed Questions

These questions were initially developed for water companies. Due to the broad usage of water across many FTSE sectors (e.g. factories, power stations, etc) the questions are applicable not only to water companies, but to other FTSE sectors too.

### **Generic Compliance**

Does your company prepare and implement species or habitat management plans that enhance the biodiversity of at least one UK priority species?

### **Generic questions to engage companies to move towards best practice**

- FW.1 Does your company evaluate the biological quality of all streams into which it discharges?
- FW.2 Has your company made a commitment, and adopted a prioritised timetabled action plan, to improve the quality of the effluent discharged from your operations into water courses and out to sea to improve affected habitats? (Forthcoming EU Water Framework Directive will state all surface and ground water to have good ecological quality.)
- FW.3 Has your company evaluated the biodiversity impacts associated with your abstraction from both surface and ground water sources, and adopted a prioritised timetabled action plan to mitigate those impacts and/or evaluate alternative measures?
- FW.4 Does your company undertake habitat improvement plans for land which it owns or on which it operates to contribute to regional or national biodiversity targets, or a reduction in habitat fragmentation? (e.g. through the creation of wetlands)
- FW.5 Does your company report publicly on: SSSI condition survey results for each of the SSSIs under its control; and on its habitat management targets?
- FW.6 Does your company work with local or regional BAP steering groups or Regionally Important Geological Sites groups, soliciting their views on its proposed activities which will affect the nature conservation interest of designated sites or BAP priority habitats or species?
- FW.7 Is there a company policy to evaluate sites according to Natural Area Frameworks and then manage them to achieve optimal conditions?
- FW.8 Does your company encourage the public to visit designated sites under its control to enhance their awareness of biodiversity?
- FW.9 Does your company have a policy, integrated into planning processes (especially of capital projects) and operational management, to avoid development and land use with an irreversible effect on biodiversity?

FW.10 Does your company have a programme to evaluate the biodiversity impacts of its supply chain?

FW.11 Is your company developing biodiversity indicators that it will report against, specific to the habitats and species affected by its operations (in support of your company BAP/Management plans and linked to priority species)?

## 5.4 Proposed questions for English Nature's Land Development Sector

English Nature's Land Development Sector focuses on the impact of Domestic, Commercial and Industrial development, as well as the impact of Mineral and Quarrying companies on biodiversity.

- ! Development is a significant issue highlighted in roughly 40% of EN's Natural Area profiles, particularly in the south and east of England, where there is the greatest pressure to develop.
- ! Approximately 600 SSSIs have either been created or are managed by quarrying companies in the UK. However, mining and quarrying activities lead to habitat reduction on the site, as well as adjacent to the site, where diverse surface plant operates and wastes are dumped. Extractive companies also have a unique opportunity to restore and manage extraction sites to be of value to biodiversity and natural features. The extractive industry also includes marine dredging which has impacts on coastal biodiversity. The marine extraction of sand and gravel impacts directly on seabed habitats, and can affect habitats on soft coastlines.

Companies relevant to this sector include those involved in mining/ quarrying, construction and land development. These companies are predominantly listed under the Construction and Building Materials and the Minerals and Aggregates FTSE sectors. Other FTSE sectors of relevance include Real Estate and Support Services. The latter sector includes engineering consultancies which play a significant role in land development.

The existing 'tests' most relevant to EN's engagement with the construction sector are the UK's Quality of Life Counts indicators, indicators detailed in the DETR's Sustainable Construction Strategy, criteria for Movement for Innovation's sustainable construction indicator and the sustainable construction indicators developed by CIRIA. These are linked with the proposed questions in Table A.4.2.

The existing 'tests' most relevant to EN's engagement with extractive industries are the UK's Quality of Life Counts indicators and the activities covered by the Biodiversity and Minerals Guidance which was developed by English Nature, the Quarry Products Association and the Silica and Moulding Sands Association. These are linked with the proposed questions in Table A.4.3

### **UK Quality of Life Counts Indicators relevant to land development sector include:**

- ! New homes built on previously developed land (H14);
- ! dangerous substances in the water (M2)
- ! wildlife and amenity sites affected by abstraction (Q6);
- ! net loss of soils to development (S1);
- ! landscape features (S5 – hedges, dry stone walls, banks, ponds with specific target to stop loss of species rich hedgerows by 2005);

- ! countryside quality (S7 – to be developed);
- ! native species at risk (S9 – vertebrates – freshwater fish, marine reptiles, and amphibians, invertebrates, vascular plants and lower plants);
- ! amount of Secondary/recycled aggregates use compared with virgin aggregates (S14);
- ! land covered by restoration and after care conditions (S15).

## **Proposed questions to ask construction companies impacting EN's Land Development sector**

The proposed questions fall into 5 categories, minimal level of biodiversity engagement (compliance), development of new sites, management of sites to enhance biodiversity, corporate activities and then construction specific activities that are not generic.

### ***Generic Compliance***

CON.6 Are project managers within your company aware of the legal status of the UK's Sites of Special Scientific Interest (SSSI)?

### ***Generic questions relating to the development of new sites***

CON.1 When assessing strategic options does your company evaluate the direct and indirect impacts on the nature conservation interest of designated sites or BAP priority habitats or species (e.g. in Strategic Environmental Assessments or Environmental Impact Assessments)?

CON.7 Is there a commitment within the company to avoid development and land use with a significant adverse or irreversible effect on biodiversity?

### ***Generic questions relating to corporate activities***

CON.11 Does your company have a programme to evaluate the biodiversity impacts of its supply chain, including products and services procured?

CON.12 Does your company work with local or regional BAP steering groups or Regionally Important Geological Sites groups, soliciting their views on its proposed activities which will affect the nature conservation interest of designated sites or BAP priority habitats or species?

CON.13 Is there a commitment within the company to recreate and maintain habitats where damage occurs outside designated sites, in line with BAP targets?

### ***Generic questions relating to site management to enhance biodiversity***

CON.2 Does your company have water management plans to reduce water pollution and manage water use efficiently on all sites of 6 weeks duration or more and on or within 1 mile of a SSSI?

CON.3 Are biodiversity action plans with targets, and performance monitoring developed for all sites of 6 weeks duration or more and on or within 1 mile of a SSSI?

CON.4 Do site management plans include adjustments to working practices to accommodate priority habitats or species of nature conservation value? (for example to cover issues such as noise, dust and other secondary impacts, as well as timing of site clearance, or other significant operations e.g. piling)

CON.9 Does your company plan its conservation activities to link into habitat networks and support conservation management, such that a particular habitat is appropriately maintained?
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***Construction specific questions:***

CON.5 Has your company developed biodiversity indicators which it now reports against, specific to the priority habitats and species affected by its operations for all projects more than 6 weeks duration and on or within 1 mile of a SSSI?

CON.8 Does your company have a policy, supported by targets, to increase the percentage of recycled aggregates it uses year on year?

CON.10 Is there a company commitment for all projects longer than six weeks duration and on or within 1 mile of a SSSI to undertake Phase 1 Habitat Surveys, appropriately followed up by Phase 2 and 3 Habitat Surveys where key habitats or species are found? (The Surveys should be carried out by a trained ecologist.)

CON.14 Does your company have a policy to minimise harm to biodiversity through the disposal of construction spoil?

## Proposed Questions to ask Extractive Industries impacting EN's Land Development sector

### **Generic Compliance**

Q&M.5 Are the key decision makers with respect to site locations within your company aware of the legal status of the UK's Sites of Special Scientific Interest (SSSI)?

### **Generic questions**

Q&M 1 Does your company have water management plans on all major sites to reduce water pollution and manage water efficiently?

Q&M 3 Has your company developed biodiversity indicators that it reports against, specific to the habitats and species affected by its operations (in support of your company BAP/ Management plans and linked to priority species)?

Q&M 6 Is there a commitment within the company to avoid development and land use with an irreversible effect on biodiversity?

Q&M 9 Does your company report publicly on: SSSI condition survey results for each of the SSSIs under its control?

Q&M 12 Is there a company commitment to restore SSSIs to favourable condition status and manage all other sites in a way that contributes to BAP targets, Regionally Important Geological Sites (RIGS) network and are consistent with English Nature's regional Natural Area profiles?

Q&M 13 Does your company encourage the educational and recreational use of sites under its control where this does not adversely impact on habitats?

Q&M 14 When assessing development options does your company evaluate the direct and indirect impacts on the nature conservation interest of designated sites or BAP priority habitats or species (e.g. in Strategic Environmental Assessments or Environmental Impact Assessments)?

Q&M 15 Does your company work with local or regional BAP steering groups or Regionally Important Geological Sites groups, soliciting their views on its proposed activities which will affect the nature conservation interest of designated sites of BAP priority habitats or species?

Q&M 16 Does your company have a programme to evaluate the biodiversity impacts of its supply chain, including products and services procured?

### **Quarrying and Mining specific questions relating to development of new sites**

Q&M.7 Has your company ceased submitting new applications to quarry or mine any SSSI and Natura 2000 sites where it would damage the nature conservation interest of the site?

Q&M.8 Has your company a policy to avoid submitting applications to quarry or mine any locally designated sites where the work would damage the nature conservation interest?

Q&M.10 Is there a company commitment for all projects longer than six weeks duration and on or within 1 mile of a SSSI to undertake Phase 1 Habitat Surveys, appropriately followed up by Phase 2 and 3 Habitat Surveys where key habitats or species are found? (The Surveys should be carried out by a trained ecologist.)

**Quarrying and Mining specific questions relating to site management to enhance biodiversity**

Q&M.2 For each major site (greater than X hectares in area) have biodiversity action plans, which include targets and monitoring, been developed, and adhered to?

Q&M.4 Do site management plans include the adjustment of working practices to accommodate species of nature conservation value? (noise, dust and other secondary impacts, as well as timing of site clearance, or other significant operations e.g. blasting)

**Quarrying and Mining specific questions relating to corporate product policy**

Q&M.11 Does your company have a strategy to promote and develop its secondary aggregates business such that the volume of sales of recycled materials is greater than the volume of primary materials by X (date)?

## 5.5 Proposed questions for English Nature's Sea Fisheries Sector

Sea Fishery activities are relevant to biodiversity, both due to the species targeted, and the species killed and habitats damaged by fishing practices. English Nature estimate that 11 out of 12 habitat action plans and 14 of the 16 marine species action plans may be affected by fishing. The Food and Agriculture Organisation of the United Nations in *The State of the World Fisheries and Aquaculture 1996* states 'that 60% of the world's fish resources are in need of urgent management, and 35% are overfished'. In the UK, the target species of herring, mackerel and cod are in danger of collapse. The characteristics of UK fishing are changing; currently 60% of the UK's fish is imported and there is a trend of increased fishing in shallower waters closer to the coast.

### Marine Biodiversity Indicators

The extent of the marine environment and its undefined ownership has resulted in incomplete knowledge of its attributes. This fact and that the marine environment performs valuable functions (atmospheric gas exchange, nutrient processing etc.) for all life, means several groups are developing indicators to assess water quality and biodiversity in the future. One such group is the Secretariat to the Convention on Biodiversity (SCBD - [www.biodiv.org](http://www.biodiv.org)) based in Montreal that has ongoing activities to develop indicators related to freshwater and marine and coastal areas. They have been asked to develop

A set of principles for designing national-level monitoring programmes and indicators; and

A key set of standard questions and a list of available and potential indicators that may be used at a national level.

The existing 'tests' most relevant to EN's work with Sea Fisheries sector are the UK's Quality of Life Counts indicators, the UN's Food and Agriculture Organisation's criteria and the Marine Stewardship Council's criteria. These are linked with the proposed questions in Table A.5.2.

None of the proposed Sea Fisheries' questions are generic.

### UK Quality of Life Counts Indicators Relevant to Sea Fisheries Sector include

- ! Populations of wild birds' (H13 – all species, woodland and farmland).
- ! Concentration of persistent organic pollutants (M1).
- ! Dangerous substances in the water (M2).
- ! Discharges from the nuclear industry (M4).
- ! Estuarine water quality, marine inputs of hazardous or radioactive substances, including metals, nutrients, and organic substances (R1).
- ! Biodiversity in coastal/marine areas (R3).

- ! Fish stocks around the UK fished within safe limits (R4).
- ! State of the World's Fisheries (R5).
- ! Biodiversity action plans (S4 – for all 391 priority species and 45 priority habitats costed BAPs are complete).
- ! Native species at risk (S9 – vertebrates – freshwater fish, marine reptiles, and amphibians, invertebrates, vascular plants and lower plants)

## Proposed Sea Fisheries Questions

### Compliance

SF.1 Does your company have a procedure to avoid stocking fish products that have been sourced by a destructive fishing practice (poisons, explosives)?

### *Sea Fisheries specific questions to engage companies to move towards best practice*

SF.2 Does your company have a policy to influence its suppliers to avoid the discharge of persistent, bioaccumulating substances (oil, chemicals, and choice of anti-fouling paint) into the marine environment (water and air)?

SF.3 Does your company reward its suppliers for safe waste disposal (of obsolete boats and gear, contaminated catch) and for minimising its operational waste (litter and by-catches of non target species).

SF.4 Does your company have a target to stock at least X% MSC certified products products in the MSC product ranges available?

SF.5 Has your company made a corporate statement to the effect that it supports the precautionary principle and it does/ will not stock fish from depleted or at risk sources?

SF.6 Does your company encourage its suppliers to participate in the development and maintenance of local habitat management plans for key Nature Conservation sites such as: marine nature reserves (MNRs) Special Areas of Conservation (SACs), and sensitive marine areas, and with development of associated local codes of conduct to protect those sites?

SF.7 Does you company encourage its coast based or marine dependent suppliers that are located near European conservation sites (Natura 2000 and Ramsar) to liase with competent authorities to manage their operations for biodiversity protection and enhancement? (For example in the development of local Coastal Habitat Management Plans (ChaMPs)? See English Nature's *Coastal Habitat Management Plans: An interim guide to content and structure Appendix 1* for a list of sites likely to need a CHaMP).

SF.8 Does your company have a policy of encouraging its suppliers to source marine products from those fishing businesses using environmentally benign practices (timing of fishing, ballast water management, type of gear used, relevant to by- catches of biodiversity importance and to damage to the sea bed)?

SF.9 Does your company have a policy to avoid sourcing fish that has been caught by methods that affects the reproductive capacity of the relevant fish populations?

SF.10 Does your company encourage its suppliers to establish voluntary no-take zones (either for targets species, or conservation purposes, or because designated catch limits are reached) and effectively police these zones?

SF.11 Does your company support industry initiatives that monitor catch structure and location of catch, as well as assess the sustainability of catch trends?

- SF.12 Does your company have a policy to reduce fishing pressure (particularly on herring, mackerel, and cod), in conjunction with a marine environment information campaign and a customer consultation on food protein sources?
- SF.13 Does your company work with its suppliers to support fishing community initiated, non-fishing alternative business ventures?
- SF.14 Does your company have procedures to avoid stocking fish products that are sourced under controversial exemptions to international agreements? (either related to species - World Conservation Union (IUCN) Red List, or protected habitats).
- SF.15 Does your company support research that assists in informing and setting management plans for sustainable fishing with a view to enhancing biodiversity?
- SF.16 Does your company initiate or participate in cross sectoral (i.e. not private sector only) initiatives to protect and enhance wildlife sensitive areas?

## 5.6 Proposed questions for English Nature's Transport Sector

English Nature's Inland Transport sector covers all transport modes and transport routes including roads, railways, airports, canals, inland waterways, cycle routes and paths. Current drivers in this sector include the creation of the TransEuropean Transport Network (TEN), Transport 2010, the ten year UK transport strategy plan, the trend of increased air travel and the DETR's objective to achieve a modal shift away from roads, (albeit significant road proposals are still planned). It is likely new projects will be undertaken as Public Private Partnerships (PPP), for which the Highways Agency will act as the client for trunk roads. Engagement with business is therefore timely for this sector.

The main companies in this sector are listed under the FTSE Transport sector. Other FTSE sectors of relevance are Automobiles, Distributors, Oil and Gas and Support Services. The latter category includes maintenance companies as well as advisory consultants.

The existing 'tests' most relevant to EN's work in the transport sector are the UK's Quality of Life Counts indicators and TransEuropean Transport Network's guidance. These are linked with the proposed questions in Table A.5.2.

### **UK Quality of Life Counts Indicators relevant to EN's Transport Sector include:**

- ! Days when air pollution is moderate or higher (H10).
- ! Carbon Dioxide emissions by end user (N3).
- ! Access to local green space (K7).
- ! Dangerous substances in the water (M2).
- ! Net loss of soils to development (S1).
- ! Area of woodland in the UK (S10) .
- ! Land covered by restoration and after care conditions (S15).
- ! Biodiversity action plans (S4 – for all 391 priority species and 45 priority habitats costed BAP are complete) .
- ! Native species at risk (S9 – vertebrates – freshwater fish, marine reptiles, and amphibians, invertebrates, vascular plants and lower plants).
- ! Landscape features (S5 – hedges, dry stone walls, banks, ponds with specific target to stop loss of species rich hedgerows by 2005).
- ! Extent and management of SSSIs (S6).
- ! Countryside quality (S7 – to be developed).

**Proposed Transport Questions to all land owning companies: (Companies include BAA, Operating companies that own stations and linear development organisations such as British Waterways, Highways Agency, Railtrack)**

***Generic Compliance***

T.12 Are the key operational and planning decision makers within your company aware of the legal status of the UK's Sites of Special Scientific Interest (SSSIs)?

***Generic strategic questions***

T.1 Has your company evaluated your air quality emissions? If yes, have you evaluated the biodiversity impacts associated with your air quality emissions?

T.8 Does your company have a policy to avoid significant adverse or irreversible damage to biodiversity, and so avoid development or land use change that affects important wildlife sites?

T.10 Does your company have a programme to evaluate the biodiversity effects of its supply chain?

T.11 Does your company have strategic links to statutory and non governmental conservation organisations, who are consulted in formative stages (pre-planning application) of development plans?

***Generic questions relating to operational activities and impacts***

T.2 Does your company support educational or recreational projects which protect and enhance biodiversity; recreate or allow access to local green space; and enhance the public's awareness of the biodiversity associated with your operations?

T.3 Does your company have a specific policy for water storage, and drainage, which takes into account any likely significant impacts on wildlife or the potential to recreate habitats?

T.4 Does your company have a management system to prevent routine or accidental discharges to water, and where these may occur to prevent any degradation of water quality?

T.6 Does your company report publicly on UK BAP species and habitats affected by its operations?

T.13 Does your company plant native species to the local area in its landscaping operations? If yes, do the species contribute to BAP targets, eg for woodland?

### ***Transport specific strategic questions***

- T.7 Is there a company commitment to provide appropriate habitats on land in order to create wildlife corridors (ecological links between fragmented habitats), as part of a BAP for an area? (For example, where developments are linear are adjacent verges managed to provide such biodiversity linkages?)

### ***Transport specific questions relating to operational activities and impacts***

- T.5 Does your company have a policy to consult with appropriate organisations regarding weed control and then draw up appropriate management plans? E.g. relating to the timing of operations, spray chemicals used, special areas of protection (SSSIs and Water Protection Areas).
- T.9 Does your company have a policy to minimise harm to biodiversity through the disposal of construction spoil, and contaminated dredgings?

## 6. Generic questions developed from sectoral analysis of biodiversity engagement

From the proposed questions in Section 5, certain questions are considered to be generic, and could therefore be used if appropriate when engaging with companies from different FTSE sectors. These questions might also be used in addition to the BiE Survey of Corporate Engagement questions, that English Nature has already developed on Biodiversity.

The questions address companies' wider impacts and reflect English Nature's interest not only in land-based biodiversity, but also in fresh water, marine and coastal environments.

The following generic questions developed for each sector have been grouped together under the following headings of:

- ! Sites of Special Scientific Interest (SSSI);
- ! Biodiversity Action Plans (BAP);
- ! Partnership Working;
- ! Policy on Significant Adverse Effects on Biodiversity;
- ! Supply Chain;
- ! Water;
- ! Communication;
- ! Assessment.

The generic questions are listed below under these headings and are applicable to a wide range of FTSE sectors. These questions can be used in conjunction with the sector specific ones, and mixed and matched as appropriate to company operations.

The number after each question relates to its original sectoral question number (used in Section 5). A code has been used for each sector where:

A	relates to	Agriculture	(Section 5.1)
CD	relates to	Coastal Defence	(Section 5.2)
FW	relates to	Fresh Water	(Section 5.3)
CON	relates to	Construction	(Section 5.4)
Q&M	relates to	Quarrying and Mining	(Section 5.4)
SF	relates to	Sea Fisheries	(Section 5.5)
T	relates to	Transport	(Section 5.6)

Both the Construction and Quarrying and Mining questions are presented in Section 5.4 on Land Development.

## **6.1 Developing corporate policies for SSSI**

- ! Are project managers / key operational and planning decision makers within your company aware of the legal status of the UK's Sites of Special Scientific Interest (SSSI)? (CON.6, Q&M.5, T.12).
- ! Is there a company commitment to restore SSSIs to favourable condition status and manage all other sites in a way that contributes to BAP targets, Regionally Important Geological Sites (RIGS) network and are consistent with English Nature's regional Natural Area profiles? (Q&M.12)

## **6.2 Developing Biodiversity Action Plans (BAPs)**

- ! Does your company have a policy to enhance the biodiversity of the sites it occupies? (A.21).
- ! Does your company encourage each of its suppliers, where appropriate, to prepare and implement a BAP, and report to your company which priority species present are increasing or declining in numbers? (A.10).
- ! Does your company prepare and implement species or habitat management plans that enhance the biodiversity of at least one UK priority species? (FW.4).
- ! Does your company undertake habitat improvement plans for land which it owns or on which it operates to contribute to regional or national biodiversity targets? (FW.5).
- ! Is there a company commitment to provide appropriate habitats on land in order to create wildlife corridors (ecological links between fragmented habitats), as part of a BAP for an area? (T.7, FW.5, CON.9).
- ! Has your company developed biodiversity indicators that it reports against, specific to the habitats and species affected by its operations (in support of your company BAP/ Management plans and linked to priority species)? (Q&M.3, FW.12).
- ! Does your company plant native species to the local area in its landscaping operations? If yes, do the species contribute to BAP targets e.g. for woodland? (T.13).

## **6.3 Partnership working on biodiversity issues**

- ! Does your company work with local or regional BAP steering groups or Regionally Important Geological Sites groups, soliciting their views on its proposed activities which will affect the nature conservation interest of designated sites or BAP priority habitats or species? (FW.7, CON.12, Q&M.15).
- ! Does your company initiate or participate in cross sectoral (i.e. not private sector only) initiatives to protect and enhance wildlife sensitive areas? (SF.16).

- ! Does your company have strategic links to statutory and non governmental conservation organisations, who are consulted in formative stages (pre-planning application) of development plans? (T.11).

## **6.4 Corporate avoidance of significant adverse or irreversible effects on biodiversity**

- ! Is there a commitment within the company to avoid development and land use with a significant adverse or irreversible effect on biodiversity? (CD.3, CON.7, Q&M.6, T.8).
- ! Does your company have a policy, integrated into planning processes (especially of capital projects) and *operational management*, to avoid development and land use with an irreversible effect on biodiversity? (FW.10).
- ! Does your company have a policy of minimising/ banning the use of persistent bioaccumulating chemicals in the products it makes or sources? (This question relates to generation and release of persistent organic chemicals, hazardous waste etc) (A.5).

## **6.5 Corporate environmental supply chain programme**

(In the future, these questions could be reformulated to ascertain progress, e.g. whether there is a programme to evaluate sustainability impacts of the supply chain in place, the extent of the programme, and progress of evaluations.)

- ! Does your company have a programme to evaluate the biodiversity impacts of its supply chain, including products and services procured? (FW.11, CON.11, Q&M.16, T.10).
- ! Does your company have a policy of encouraging suppliers to manage their land to attract and support native species? (A.2).

## **6.6 Water management**

### **6.6.1 Abstraction**

- ! Has your company evaluated the biodiversity impacts associated with your abstraction from both surface and ground water sources, and adopted a prioritised timetabled action plan to mitigate those impacts and/or evaluate alternative measures? (FW.3).

### **6.6.2 Efficient water use**

- ! Does your company have a policy to influence its suppliers to adopt water efficient resource management (especially for irrigation) and minimise water abstraction? (A.6).
- ! Does your company have water management plans on all major sites to reduce water pollution and manage water efficiently? (Q&M.1).

- ! Does your company have a specific policy for water storage, and drainage, which takes into account any likely significant impacts on wildlife or the potential to recreate habitats? (T.3).

### **6.6.3 Effluent**

- ! Does your company evaluate the biological quality of all streams into which it discharges? (FW.1).
- ! Has your company made a commitment, and adopted a prioritised timetabled action plan, to improve the quality of the effluent discharged from your operations into water courses and out to sea to improve affected habitats? (Forthcoming EU Water Framework Directive will state all surface and ground water to have good ecological quality.) (FW.2).
- ! Does your company have a management system to prevent routine or accidental discharges to water, and where these may occur to prevent any degradation of water quality? (T.4).
- ! Does your company have a policy to minimise biodiversity impacts of any liquid effluent or run off? (A.23).

## **6.7 Communication**

- ! Does your company communicate the value of biodiversity to its customers and suppliers? (A.24).
- ! Does your company encourage the public to visit designated sites under its control to enhance their awareness of biodiversity? (FW.9).
- ! Does your company encourage the educational and recreational use of sites under its control where this does not adversely impact on habitats? (Q&M.13).
- ! Does your company support educational or recreational projects which protect and enhance biodiversity; recreate or allow access to local green space; and enhance the public's awareness of the biodiversity associated with your operations? (T.2).
- ! Does your company report publicly on: SSSI condition survey results for each of the SSSIs under its control/ UK BAP species and habitats affected by its operations? (FW.6, Q&M.9, T.6, A.22).

## **6.8 Assessment of potential impacts on biodiversity**

- ! When assessing strategic options does your company evaluate the direct and indirect impacts on the nature conservation interest of designated sites or BAP priority habitats or species (e.g. in Strategic Environmental Assessments or Environmental Impact Assessments)? (CON.1 and Q&M.14).

- ! Is there a company commitment to undertake Phase 1 habitat surveys on all sites, appropriately followed up by Phase 2 and 3 Habitat Surveys where key habitats or species are found? (The Surveys should be carried out by a trained ecologist.) (CON.13 and Q&M.10).
  
- ! Has your company evaluated your air quality emissions? If yes, have you evaluated the biodiversity impacts associated with your air quality emissions? (T.1).
  
- ! Is there a company policy to evaluate sites according to Natural Area Frameworks and then manage them to achieve optimal conditions? (FW.8).

## 7. Conclusions

1. Companies are at different levels of engagement in relation to biodiversity issues. Most are not undertaking biodiversity initiatives, and even most of the companies engaged in environmental activities have not addressed biodiversity impacts of their operations. The only exception is in the water sector, where regulatory pressures have prompted action from water and sewerage companies.
2. Biodiversity, as a concept, needs to be demystified. Biodiversity is an unfamiliar word to many in the business sector. To assist companies in the uptake of biodiversity initiatives, biodiversity could be linked more visibly with wildlife and nature conservation, as these terms are more commonly understood.
3. The proposed-sector specific questions have been developed to engage companies in biodiversity issues. These questions will need to be supported with references to sources of information and guidance to assist companies in undertaking biodiversity enhancement activities.
4. English Nature's priority sectors do not easily align with single FTSE sector company listings, except for English Nature's and FTSE transport sectors. Questions developed have therefore been targeted at specific FTSE sectors relevant to English Nature's priority sectors.
5. Coastal Defence was the one sector where no reporting on coastal processes impacted by a company's operations was found. An increase in the corporate awareness of the need to maintain and work with coastal processes is therefore required.
6. The analysis of the Sea Fisheries sector revealed that there is some awareness of biodiversity issues in the business community. Relevant companies' corporate reporting includes support of the MSC, yet there seems to be low general public awareness of the state of overfishing. Companies that support the MSC could further their support by initiating corporate customer information campaigns about the level of fish stocks, and the value of MSC certified fish.
7. The DETR's sustainable development indicators are comprehensive and provide a useful context to English Nature's proposed questions. Linking the proposed questions, where appropriate, to existing initiatives will ensure there is synergy between the sustainable development drivers acting on companies.
8. Biodiversity action plans (BAP) are effective ways of helping companies to manage, mitigate and enhance any impacts on biodiversity. However information on how to prepare a BAP needs to be disseminated more widely to companies. Guidance for preparing Biodiversity Action Plans can be sourced from:
  - ! UK Local Issues Group/ UK Biodiversity Group (UKBG) booklets on *Guidance for Local Biodiversity Action Plans*;
  - ! UK Biodiversity Group, which has produced a summary that includes the lead organisation's contact details for each of the UK Biodiversity Action Plan

species and habitats. (DETR Biodiversity Secretariat [www.jncc.gov.uk/ukbg](http://www.jncc.gov.uk/ukbg) 01179 876293);

- ! Earthwatch, which has been given a grant by the DETR to become a resource centre for business and biodiversity. ([www.uk.earthwatch.org](http://www.uk.earthwatch.org) 01865 318838).

## Appendix A. Tables supporting the development of English Nature's proposed sectoral questions

These appendices provide the background material to the development of the proposed questions for each of English Nature's (EN) priority sectors.

Appendix A.1 presents material relating to EN's Agriculture sector

Appendix A.2 presents material relating to EN's Coastal Defence

Appendix A.3 presents material relating to EN's Fresh Water

Appendix A.4 presents material relating to EN's Land Development

Appendix A.5 presents material relating to EN's Sea Fisheries

Appendix A.6 presents material relating to EN's Transport

Each appendix includes two tables. The first table reviews company and sectoral biodiversity 'tests' and initiatives relating to the sector. The second table links key existing sectoral 'tests' to proposed sector specific questions. For English Nature's Land Development sector there are two secondary tables – Table A.4.2 relating existing 'tests' to Construction questions and Table A.4.3 relating existing 'tests' to Quarrying and Mining questions.

### **Tables reviewing company and sectoral biodiversity 'tests' and initiatives. (Table A.x.1)**

Existing 'tests' are drawn from relevant regulator or trade associations for each sector, or from non governmental organisation's initiatives, as well as from companies. The companies listed in the tables were either mentioned by English Nature sector leads, or are known for their good environmental practice.

As there are comparatively few biodiversity 'tests' being used by companies or sectoral bodies, examples of biodiversity initiatives relevant to each sector are included to give a representation of corporate biodiversity activity.

### **Tables linking key existing sectoral 'tests' to proposed sector specific questions. (Table A.x.2 or Table A.x.3)**

These tables relate the proposed sector specific biodiversity questions to other relevant tests and indicators, including the relevant DETR Sustainable Development indicators. The DETR indicators provide a broad context for the proposed questions, but are applicable to more than one priority sector.

The title of each of the linking tables indicates the FTSE sector the proposed questions are designed to be directed at in the [ ] (square brackets).

For each priority sector the proposed questions have been designed to reflect both minimal compliance issues and best practice. Those questions that constitute minimum compliance are marked with (**Compliance**) at the end of the question.

The question numbering for each sector is consistent with numbering in Section 5 and 6.

## Appendix A.1 Agriculture

Table A.1.1 Review of company and sectoral biodiversity tests and initiatives relating to English Nature's Agriculture Sector

Organisation	Reference	Tests/ Initiatives	Comments
<b>Sector tests</b>			
English Nature	<i>Development of a set of indicators for sustainable agriculture in the UK : Memorandum by EN to MAFF consultation on indicators for sustainable agriculture</i> Sept 1998	The memorandum sets out English Nature's key nature conservation objectives for agriculture, which are to: <ul style="list-style-type: none"> <li>! Manage SSSIs to retain or improve their wildlife value.</li> <li>! Protect and restore other semi-natural habitats and uncropped habitats in general farm land (ponds, hedges/ linear features or field margins in upland and mixed farms).</li> <li>! Provide conditions on cropped farmland to maintain and restore biodiversity on arable land (over wintering survival and breeding).</li> <li>! Create wildlife habitats that link to others.</li> <li>! Minimise harmful effects of chemicals and farm waste.</li> <li>! Protect and restore freshwater quality.</li> <li>! Avoid structural damage and erosion of soils.</li> </ul>	
MAFF	<i>Towards Sustainable Agriculture: A Pilot Set of Indicators</i> February 2000	MAFF's sustainable agriculture pilot indicators include: <ul style="list-style-type: none"> <li>! Area of agricultural land under commitment to environmental conservation.</li> <li>! Area of cereal field margins under environmental management.</li> <li>! Characteristic features of farmland.</li> <li>! Area of semi-natural grassland.</li> <li>! Populations of key farmland birds.</li> </ul>	An objective of MAFF's Public Service Agreement with the HM Treasury is to sustain and enhance rural and marine environments and public enjoyment of the amenities they provide, and to promote forestry. This includes reversing the long term decline in farmland birds by 2020.
MAFF	<i>Countryside Matters Water, Air and Soil Codes</i> December 1998	Leaflet is designed to provide practical guidance to help farmers and growers avoid causing pollution and to protect soil as their most valuable resource. Headings covered by the leaflet are: Farm waste management planning, Slurry and manure spreading, Slurry storage, Solid manure storage, Dirty water, Livestock housing, Soil fertility and fertilisers, Nitrate, Soil compaction, Soil erosion, Soil mixing, Sheep dip, Pesticides, Disposing of animal carcasses, Soil contamination, Restoring disturbed soils, Smoke pollution, and Energy Efficiency.	Biodiversity is not specifically mentioned, though it does point out that silage effluent even in small amounts can kill fish and other water life, as can other effluent run off.

Organisation	Reference	Tests/ Initiatives	Comments
MAFF and National Farmers Union	<i>British Farm Standard press release</i> 13.6.2000 and 16.5.2000 www.maff.gov.uk  Assured Food Standards 020 7802 3208	The new unifying UK quality assurance scheme for agricultural products was launched in May 2000 and is called the British Farm Standard (BFS). It is denoted by the red and blue tractor logo. It will be managed by Assured Food Standards. It is supported by Tesco, Sainsbury, Asda, Safeway, Morrisons, Waitrose, Marks and Spencer, Somerfield, and Co-op. Logoed products will either be single ingredient foods, or simple mixtures (salad, bread). The Assurance schemes for the following products are recognised by new logo: cereals, fruit vegetables, salads, meat, beef, lamb, dairy, chicken, pigs. Environmental criteria is only mentioned in the assurance scheme summaries for the Assured British Beef and Lamb and Assured Chicken Production schemes.	It is unclear what Biodiversity criteria is covered by the BFS.
National Farmers Union	www.nfu.org.uk 020 7331 7200	The National Farmers Union has undertaken a number of initiatives to promote biodiversity which include: ! Millennium avenues ! Water audit initiatives ! Conservation advice ! President's Biodiversity award	
UK Biodiversity Group, Local Agenda 21 and UK Local Issues Advisory Group	<i>Local biodiversity Action Plan Case studies:</i> <i>Biodiversity on the farm</i> Sainsbury & FWAG 01203 696699	The Farming and Wildlife Advisory Group's BAPs involve general habitat management and propose habitat management guidance for approximately 4 target species (of which 2 are usually from the UK priority list).	

Organisation	Reference	Tests/ Initiatives	Comments
Hampshire County Council with DG XI funding with CAG	<i>Investigating Appropriate indicators for Biodiversity</i>	<p>Hampshire County Council is developing indicators in four areas to monitor the influence of local, national, and European policy influences. Agricultural indicators include:</p> <ul style="list-style-type: none"> <li>! total payments under the Arable Areas Payments scheme;</li> <li>! area of arable land outside the eligible area;</li> <li>! proportion of cereal crops which are spring sown;</li> <li>! area under agreements for each ESA tier;</li> <li>! area under Countryside Stewardship agreements;</li> <li>! proportion of ESA area under agreements (by tier);</li> <li>! proportion of non-ESA land in Hampshire under CSS agreements;</li> <li>! proportion of CSS agreements falling within target areas;</li> <li>! area/proportion of land under Organic Farming Scheme agreements;</li> <li>! financial input into ESA/CSS/OFS;</li> <li>! changes in biodiversity of land under ESA agreements (by tier);</li> <li>! changes in biodiversity of land under CSS/OFS agreements;</li> <li>! awareness among farmers of opportunities under agri-environment schemes and OFS;</li> <li>! area of new woodland planting grant-aided under the Farm Woodland Premium Scheme;</li> <li>! ratio of broad-leaved to conifer woodland in new planted areas;</li> <li>! incidents of nitrate eutrophication of water courses;</li> <li>! number of farmers with a copy of the MAFF Code of Good Practice for the protection of water;</li> <li>! number of 'wildlife incidents' attributed to pesticides.</li> </ul>	
Pesticides Forum	<i>Annual Report 1999</i> Pesticides Safety Directorate	Pesticides Forum is made up of representatives from ADAS, Environment Agency, English Nature, DTI, DETR, Pesticides Safety Directorate, Northern Ireland's Department for Agriculture and Rural Development, RSPB, NFU (Scotland) and the Crop Protection Association. The forum is developing a set of indicators, which potentially may include indicators to monitor risk to terrestrial systems, impacts on terrestrial wildlife, pesticide residues in terrestrial wildlife, as well as include population indicators for key vertebrate, invertebrate and plant species.	
Horticultural Trade Ass	0118 930 3132	None	To date, they have only been involved in ad hoc initiatives in the Scottish landscape sector.

Organisation	Reference	Tests/ Initiatives	Comments
Country Landowners Association	www.cla.org.uk 020 7235 0511	Articles in their magazine have promoted FWAG Farm Biodiversity Actions Plans and SSSIs. They have also supported EN Habitat Improvement pilot schemes and the Countryside Stewardship Scheme (which is now run by MAFF)	
Soil Association	<i>Biodiversity Benefits of Organic Farming.</i> www.soilassociation.org 0117 929 0661	Soil Association is a membership charity that researches and promotes organic farming as the solution to sustainable agricultural practices. Soil Association Certification Ltd owned by the Soil Association certifies organic food. Organic food farming avoids the use of artificial chemical fertilisers and pesticides on land, relying instead on developing a healthy fertile soil and growing a mixture of crops. Animals are reared without the routine use of the array of drugs, antibiotics and wormers which form the foundation of most conventional livestock farming. Results from study found that lowland organic farms support substantially more abundance and diversity than lowland conventional farms, including declining species. Organic farming has many beneficial practices to biodiversity, e.g. crop rotations with grass leys, mixed spring and autumn sowing, more permanent pasture, no use of herbicides or synthetic pesticides and use of green manuring. From these results 'organic farming should be the preferred farming system for targeted conservation objectives which require special management practices.'	
<b>Company biodiversity tests and initiatives, listed under issue headings.</b>			
Broad Oak Farming	01553 840233	Broad Oak Farming is a large commercial farming business. All farms invite FWAG to look at farm biodiversity after which three year plans are then put in place, which address issues such as farm margins (hedges and dykes), spraying (to avoid using chemicals that are damaging to key species) and cropping.	
Cargill, Aventis (Monsanto), Novartis	www.buffercouncil.org	In the US these companies have established the National Conservation Buffer Council, whose aim is to promote the use of conservation buffers to control runoff. Their goal is to create 2 million miles of buffers by 2002.	UK establishment of such a council is not recommended.
Cargill	www.cargill.com	Cargill sponsors 'Water Matters', an International Community Service initiative that focuses on water quality and school field trips.	

Organisation	Reference	Tests/ Initiatives	Comments
Novartis	'BioProspecting and Benefit Sharing' Report from UNED & Novartis workshop 22.4.99 www.info.novartis.com	The following activities that impact Biodiversity are documented in the report from a stakeholder workshop on Bio-Prospecting. Novartis was established from the merger of pharmaceutical and agro-chemical companies, and has prospected in order to find substances that can become commercially viable. It has adopted a bio-prospecting policy in line with the Convention on Biological Diversity. 'Biodiversity is an essential asset to human survival and it can generate, through the range of compounds ideas for new approaches and products. However if access to biodiversity becomes too bureaucratic, time consuming and expensive, then the importance of biodiversity may become limited to research and academic arenas instead of market orientated industrial applications.'	
ASDA	www.asda.co.uk 0113 243 5435	Asda's activities relevant to Biodiversity include: <b>Stores:</b> 27 of 36 new stores built since 1993 have been built on previously developed sites, some of which were on contaminated land. <b>Responsible farm management:</b> Asda supports two farm environmental management projects – the Fresh Produce Consortium (FPC) Code of Practice (which encourages a reduction in chemical pesticide by using integrated crop management systems) and the National Farmers Union Crop Protocols (which address all environmental aspects of crop production, including biodiversity impacts).	



Organisation	Reference	Tests/ Initiatives	Comments
		<ul style="list-style-type: none"> <li>! ensure that no species are on sale if they are defined as Critically Endangered within the Red Lists of Plants and Animals published by the IUCN (World Conservation Union);</li> <li>! ensure that plants and animals are not taken in an uncontrolled fashion from the wild;</li> <li>! ensure that where expert independent opinion and research indicates that the wild population is threatened by trade, alternative species are considered or action is taken to prevent wild populations being further degraded or threatened. (p26)</li> </ul>	
Sainburys	<p><i>Interim Environment Report 1999</i>  <a href="http://www.j-sainsbury.co.uk/environment">www.j-sainsbury.co.uk/environment</a></p>	<p>The following are quotes from Sainsbury's Interim Environment report. <b>Property &amp; Stores 1999 Target</b> "is to reduce our environmental impact on the natural environment through sourcing more sustainable materials, and preserve and enhance habitats in our landscaping where ever possible by establishing and sharing good practice by March 1999".</p> <p><b>2000 targets and beyond:</b>  <i>Own Brand Products and Suppliers:</i>  <i>Supermarkets:</i> By March 2002 determine and incorporate own brand supplier environmental requirements into management and audit mechanisms. Specific product initiatives include adoption of environmental management policies by livestock and dairy suppliers; adoption of farm biodiversity action plans by suppliers of Premium Range products; expansion of organic range; verification of compliance with Integrated Crop Management protocols; more FSC endorsed paper and timber products on offer; support for MSC and its labelling of fish products; continued compliance with our Sourcing form the Wild Policy.</p> <p><i>Homebase:</i> Offer a comprehensive range of peat-free growing media and pesticides that are less persistent in the environment.</p> <p><i>Property and Store Operations:</i> By March 2001 reduce environmental impact of the water released to foul sewer, water courses, or groundwater.</p>	<p>Sainsbury's Integrated Crop Management protocols are superseded by the Assured Produce scheme, and overseas by the Euro Retailer Produce working group (EUREP).</p>

Organisation	Reference	Tests/ Initiatives	Comments
Unilever	<p>Unilever Environment Report 1998  'Making Progress'  www.unilever.com</p>	<p>The following extracts relate to Unilever activities that have an impact on biodiversity.</p> <p><b>Supply Chain</b> work includes:  Sustainable fisheries – Marine Stewardship Council  Sustainable agriculture – Guidelines for Farmers  Clean Water Stewardship – Better Water Quality (p4 &amp; 13)</p> <p><b>Risk Assessment</b> of products includes assessments of biodegradation, bioaccumulation, and an evaluation of the impact on organisms in the water. (p9)</p> <p><b>Unilever Imprint</b> (a Life Cycle Analysis type of evaluation) has found that the key impacts of most of their products are raw material production, and the use and disposal of products. One of two areas highlighted is nitrification due to the release of P, N, and Organic Carbon compounds to surface water that leads to over fertilisation. (p12, p16 and p29)</p> <p><i>Producing Raw Materials.</i> Environmental impacts include:  Use of energy and water  Emissions of substances potentially harmful to the environment, when herbicides and pesticides are used  Increasing the acidity of soils from animal waste  Too many nutrients in fresh waters, caused by inefficient use of fertiliser  Key crops (spinach, peas, and tomatoes) are bought from farmers contracted to Unilever who follow Unilever Guidelines.</p> <p><b>Designated sites.</b> In 1990 Unilever published an ecological charter that precludes the clearing of any primary forest, or destroying habitats of specific scientific or cultural interest (p22)</p> <p><b>Emission Performance measures.</b> Unilever measures 6 indicators across the business these include: Chemical Oxygen Demand (COD) and Water (p26, p41-43)</p> <p><i>Home and Personal Care</i> Best practice guidelines have been produced to minimise effluent and waste from Home Care manufacturing processes, with some sites achieving zero effluent discharge.</p>	

Organisation	Reference	Tests/ Initiatives	Comments
		<p><b>Targets:</b></p> <p>! Apply Life Cycle Analysis best practice in the key product categories (yellow fats, ice cream, tomato based sauces) by the end of 1998 and identify improvement opportunities. (p18)</p> <p>! In 1998 develop an initiative to promote more sustainable agricultural practices.</p>	
Cadburys Schweppes	<p><i>Cadburys Schweppes plc Environment report</i>  <a href="http://www.cadburysschweppes.com">www.cadburysschweppes.com</a></p>	<p>Environment aspects detailed in Cadbury's report include: wastewater; solid waste, which has the potential to contaminate land; ground and surface water; and water integrity, which is a key raw material. (p5)</p>	<p>This company and its report is not demonstrating best practice, and was mentioned by a sector lead for having a polluting outfall into the River Lugg near an SSSI and a candidate Special Area of Conservation (cSAC) (which is not mentioned).</p>

**Table A.1.2 Linkages between proposed sector specific questions and existing tests and indicators – Agriculture [Food producers, Processors and Retailers]**

UK Quality of Life Counts Indicators	MAFF Sustainable Agriculture Pilot Indicators	English Nature's Key Biodiversity Objectives for Agriculture	Hampshire County Council Indicators	Proposed Agriculture Questions
Rivers of good or fair quality (H12)		Protect and restore freshwater quality	Number of farmers with a copy of the MAFF Code of Good Practice for the protection of water;	
Nutrients (P and N) in the water (Q1)			Incidences of nitrate eutrophication of water courses;	A.1 Does your company have a policy of encouraging farmers to use nutrient management plans to minimise excessive and harmful nutrient run off into local water courses?
Populations of wild birds (H13 – all species, woodland and farmland)	Populations of key farmland birds.		Proportion of cereal crops which are spring sown;	A.2 Does your company have a policy of encouraging suppliers to manage their land to attract and support native species?
Area under agreement under Environmentally Sensitive Area (ESA) and Country Stewardship (CSS) agri-environment schemes (D13)	Area of agricultural land under commitment to environmental conservation.		Area and proportion under agreements for each ESA tier;	A.3 Does your company have a policy to source its products only from those farms adhering to agri-environment schemes?
			Area and proportion under Countryside Stewardship agreements;	
			Proportion of CSS agreements falling within target areas;	

UK Quality of Life Counts Indicators	MAFF Sustainable Agriculture Pilot Indicators	English Nature's Key Biodiversity Objectives for Agriculture	Hampshire County Council Indicators	Proposed Agriculture Questions
Area converted to organic production (D14)			Area/proportion of land under Organic Farming Scheme (OFS) agreements;	A.4 Does your company have a commitment to stock at least X% of its UK sourced food from organically certified sources?
Concentration of persistent organic pollutants (M1)		Minimise harmful effects of chemicals and farm waste		A.5 Does your company have a policy of minimising/ banning the use of persistent bioaccumulating chemicals in the products it makes or sources?
wildlife and amenity sites affected by abstraction (Q6)				A.6 Does your company have a policy to influence its suppliers to adopt water efficient resource management (especially for irrigation) and minimise water abstraction?
Biodiversity in coastal/marine areas (R3)				A.7 Does your company have a policy to encourage those farmers on wetland or salt marsh areas to restore or manage X% of their land to support the species native to those habitats?
Concentration of organic matter in agricultural top soil (S2)		Avoid structural damage and erosion of soils		A.8 Does your company encourage its suppliers to maintain and improve the structural integrity of their soils, through suitable management practices (crop rotation, appropriate disposal of animal wastes etc)?

UK Quality of Life Counts Indicators	MAFF Sustainable Agriculture Pilot Indicators	English Nature's Key Biodiversity Objectives for Agriculture	Hampshire County Council Indicators	Proposed Agriculture Questions
Trends in plant diversity (S3)				A.9 Does your company encourage suppliers to use locally indigenous plant or animal species?
Biodiversity action plans (S4 – for all 391 priority species and 45 priority habitats costed BAP are complete)				A.9 Does your company encourage each of its suppliers, where appropriate, to prepare and implement a BAP, and report to your company which priority species present are increasing or declining in numbers?
Extent and management of SSSIs (S6)		Manage SSSIs to retain or improve their wildlife value		
Native species at risk (S9 – vertebrates – freshwater fish, marine reptiles, and amphibians, invertebrates, vascular plants and lower plants)		Provide conditions on cropped farmland to maintain and restore biodiversity on arable land (over wintering survival and breeding)	Changes in biodiversity of land under ESA agreements (by tier);	A.11 Does your company have a policy of encouraging farmers to participate in and share species information with local biodiversity groups?
			Changes in biodiversity of land under CSS/OFS agreements;	
Countryside quality (S7 – to be developed)				
Landscape features (S5 – hedges, dry stone walls, banks, ponds with specific target to stop loss of species rich hedgerows by 2005)	Characteristic features of farmland.	Protect and restore other semi natural habitats and uncropped habitats in general farm land (ponds, hedges/ linear features or field margins in upland and mixed farms)		A.12 Does your company have a policy to influence its suppliers to undertake appropriate management to ensure field margins provide an optimal habitat for biodiversity?

UK Quality of Life Counts Indicators	MAFF Sustainable Agriculture Pilot Indicators	English Nature's Key Biodiversity Objectives for Agriculture	Hampshire County Council Indicators	Proposed Agriculture Questions
	Area of cereal field margins under environmental management.			
Area of woodland in the UK (S10)			Area of new woodland planting grant-aided under the Farm Woodland Premium Scheme;	
			Ratio of broad-leaved to conifer woodland in new planted areas;	A.13 Does your company have a policy of encouraging its suppliers to increase the area of planted woodland under their management with appropriate species?
	Area of semi-natural grassland.			A.14 Does your company have a policy to influence its suppliers to maintain and manage low soil nutrient status on semi-natural grassland habitats?
		Create wildlife habitats that link to others		
			Number of 'wildlife incidents' attributed to pesticides.	A.15 Does your company have a policy that encourages responsible use of pesticides, both through type of pesticide used, as well as the purpose and location of its application (not to be used as a preventative, nor on margins)?

UK Quality of Life Counts Indicators	MAFF Sustainable Agriculture Pilot Indicators	English Nature's Key Biodiversity Objectives for Agriculture	Hampshire County Council Indicators	Proposed Agriculture Questions
			Total payments under the Arable Areas Payments scheme;	
			Area of arable land outside the eligible area;	
			Financial input into ESA/ CSS/ OFS;	
			Awareness among farmers of opportunities under agri-environment schemes and OFS;	

#### **Additional supply chain questions not related to existing tests and indicators**

- A.16 Does your company and its suppliers employ advisors who are trained and qualified to advise on agri-environment schemes?
- A.17 Does your company encourage its suppliers to improve the air quality emissions associated with its operations? (reduce emissions of methane and CO<sub>2</sub> in accord with Kyoto protocol, and HCFCs, and CFCs)
- A.18 Does your company work with its suppliers and other organisations to research and promote the most environmentally benign crop practices?
- A.19 Does your company support, financially or in kind, biodiversity initiatives at a farm level?
- A.20 Does your company source agricultural products under a Quality Assured scheme, e.g. British Farming Standard tractor logo?  
**(Compliance)**

#### **Questions relating to company operations, including biodiversity uses associated with factory or store siting**

- A.21 Does your company have a policy to enhance the biodiversity of the sites it occupies?
- A.22 Does your company report publicly on the number and populations of priority species found on its sites?

A.23 Does your company have a policy to minimise biodiversity impacts of any liquid effluent or run off?

A.24 Does your company communicate the value of biodiversity to its customers and suppliers?

**Other questions to be asked of retailers with superstore outlets**

A.25 Does your company have a policy to avoid stocking or using peat from SSSI sites?

A.26 Does your company have a policy to reduce the amount of peat it sells (both in compost/ growing media bags, and in container pots)?

A.27 Does your company have a policy to increase the proportion of wood and wood based products sourced from FSC material?

A.28 Does your company have a policy to avoid selling any species listed under CITES or on the World Conservation Union (IUCN) Red list?

A.29 Does your company have a policy to avoid stocking non-native species that would have an irreversible impact if released into the wild?

## Appendix A.2 Coastal Defence

Table A.2.1 Review of company and sectoral biodiversity tests and initiatives relating to English Nature's Coastal Defence Sector

Organisation	Reference	Tests/ Initiatives	Comments
<b>Sector tests</b>			
MAFF	<i>High Level Targets for Flood and Coastal Defence and Elaboration of the Environment Agency's Flood Defence Supervisory Duty.</i> November 1999	MAFF's guidance states: ! 'In addition to statutory obligations, when carrying out flood and coastal defence works aim: - To avoid damage to environmental interest - To ensure no net loss to habitats covered by Biodiversity Action Plans - To seek opportunities for environmental enhancement ! Report to the Environment Agency on all losses and gains of habitats covered by Biodiversity Action Plans as a result of their flood and coastal defence operations. ! In partnership with English Nature, complete Water Level Management Plans: - for European Sites; - for other SSSIs ! Environment Agency and English Nature are to identify sites where Coastal Habitat Management Plans are needed and produce a programme for their completion.'	MAFF tests are good because they go beyond designated sites
British Ports Association (BPA)	020 7242 1200	British Ports Authority is involved in a number of initiatives that include biodiversity. The most relevant are below. ! The BPA has a policy of encouraging each port to select relevant performance indicators, collect data and publish the results. English Nature has been consulted in the development of biodiversity indicators. BPA is planning a series of training seminars in 2001 to help members in achieving this. ! The BPA are partners in a European 'eco information' scheme and its planned successor, 'ecoports' scheme which shares information on environmental solutions and has developed a system of environmental self diagnosis. ! The BPA has also produced good practice guides addressing biodiversity issues.	

Organisation	Reference	Tests/ Initiatives	Comments
English Tourism Council	Draft 'wise growth' of tourism indicators May 2000	The English Tourism Council's draft indicators include: ! Tourism's contribution to the protection of built and natural assets. ! Biodiversity indicator for Natural Areas.	
<b>Company Biodiversity Tests and Initiatives – listed under Issue headings.</b>			
BG	BG Group Plc Environment Report 1999 www.bg-group.com	The following extracts relate to BG's biodiversity impacts. <b>Contaminated land</b> BG removes contaminants from soil and groundwater, and returns land to beneficial use (p11). BG Technology has developed a Bio-slurry using indigenous bacteria which cleans up soil contaminated with coal tars to the EA standard within 10 days. (p32) <b>Water Quality</b> BG has an objective to protect ecosystems and habitats (p11) <b>Conservation</b> BG Storage assisted Spurn Heritage Coast Project's conservation activities, which included beach clean ups and guided walks. (p29)	Objectives and targets are not explicit

**Table A.2.2 Linkages between proposed sector specific questions and existing tests and indicators –Coastal Defence [coastal land owning companies including power stations, refineries, leisure resorts, and port operators]**

The questions in the right hand column should be posed after it has been ascertained whether the company owns or operates on land within a X mile margin of any coastline

DETR Quality of Life Counts Indicators	MAFF High Level Targets for Flood and Coastal Defence	Proposed Coastal Defence Questions
Dangerous substances in the water (M2)		CD.1 Does your company report publicly on its discharges to land, air and water, and the environmental quality of the coastal habitat it owns or manages or impacts upon?
Discharges from the nuclear industry (M4)		
Estuarine water quality, marine inputs of hazardous or radioactive substances, including metals, nutrients, and organic substances (R1)		
Biodiversity in coastal/marine areas (R3)	Report to the Environment Agency on all losses and gains of habitats covered by Biodiversity Action Plans as a result of their flood and coastal defence operations.	
	- To avoid damage to environmental interest	CD.2 When considering coastal development or changing coastal land management does your company consult other coastal neighbours, as well as the local Environment Agency and English Nature offices, about potential impacts on coastal processes?
	- To ensure no net loss to habitats covered by Biodiversity Action Plans-	CD.3 Does your company have a policy of avoiding development and changes in land use which have an irreversible effect on biodiversity?
	- Seek opportunities for environmental enhancement	CD.4 Does your company seek opportunities for environmental enhancement and promote managed realignment options, or other softer engineering solutions?

DETR Quality of Life Counts Indicators	MAFF High Level Targets for Flood and Coastal Defence	Proposed Coastal Defence Questions
	In partnership with English Nature, complete Water Level Management Plans: - In European Sites; - in other SSSIs	CD.5 When considering development or coastal land management does your company adhere to Shoreline Management Plan guidance?
	Identify sites where a Coastal Habitat Management Plan is needed and produce a programme for their completion	CD.6 Does your company own land of European or UK Coastal significance or directly impact on such a site (e.g. SSSI, RAMSAR or Natura 2000 sites)? If yes, is your company assisting in the production of Coastal habitat management plans (CHaMP) for the site?

**Additional questions not related to existing tests and indicators**

CD.7 Does your company participate in any joint initiatives with its coastal neighbours to enhance coastal biodiversity over a period of time?

CD.8 Does your company have a policy of not developing on the edge of the coast, and where it does develop in the coastal zone, of evaluating the biodiversity implications of its proposed structures?

CD.9 Has your company evaluated its flood defence needs with the Environment Agency? (**Compliance**)

## Appendix A.3 Fresh Water Sector

Table A.3.1 Review of company and sectoral biodiversity tests and initiatives relating to English Nature's Fresh Water Sector

Organisation	Reference	Tests/ Initiatives	Comments
<b>Sector tests</b>			
Office of Water Services (OFWAT)	<a href="http://www.ofwat.gov.uk/rolereg">www.ofwat.gov.uk/rolereg</a> 0121 625 1300	<p>The role of OFWAT in relation to the environment is set out as follows:</p> <p><b>General Environmental Duty</b> – The Director is also required under Section 3 of the Water Industry Act 1991 to exercise his powers subject to the requirement (among other things) "to further the conservation, enhancement of flora, fauna and geological or physiographical (landscape) features of special interest". He should also have regard to the preservation of public amenities, such as freedom of access to the countryside and seaside. However the Director is only required to do these things so far as they are consistent with his primary duties.</p> <p><b>Other Water Regulators</b> The Director does not set environmental standards but works closely with:</p> <p>The Environment Agency which regulates abstraction and enforces water quality standards in inland, estuarial and coastal waters.</p>	
Environment Agency	<i>Spotlight on Business Performance 1999</i> <a href="http://www.environment-agency.gov.uk">www.environment-agency.gov.uk</a>	<p>The Environment Agency produces league tables of good performers (who have reduced the amount of pollution they produce) and tables of poor performers who have been fined and prosecuted for pollution offences. The Environment Agency reports on which companies have reduced their impact on the environment in the sectors the Agency regulates – waste, water, chemicals, fuel and power, minerals and metal production and processing.</p> <p>In the water sector: Dwr Cymru, Severn Trent and Anglian had a reduced number of pollution incidents. From all the fines given, across all sectors Thames Water and Anglian Water were fined respectively 3<sup>rd</sup> and 4<sup>th</sup> highest amounts in fines and they respectively were prosecuted the most and second most times.</p>	

Organisation	Reference	Tests/ Initiatives	Comments
Environment Agency	<p><i>Achieving the Quality</i> 2000 www.environment-agency.gov.uk</p>	<p><i>Achieving the Quality</i> publication sets out the benefits to the environment of water company investment over the next five years. A programme of 6,000 water company improvement projects has been agreed as part of the last periodic review covering 2000-20005 and is called the National Environment Programme. The programme will ensure 100 wildlife sites will be protected from effects of discharges or abstractions made by water companies; and will assist in meeting requirements of EC Habitats Directive and further UK BAP. The Environment Agency influenced the periodic review to (with outcomes in brackets):</p> <ul style="list-style-type: none"> <li>! prevent the discharge of raw sewage (85% storm sewage spills are to be put right, and untreated sewage sludge is not to be used in agriculture);</li> <li>! improve water quality around coasts and in rivers and lakes. (Coastal discharges will get the same treatment as for discharges to rivers);</li> <li>! rectify unacceptable impacts of abstraction on rivers and wetlands permitted by licences granted in the past;</li> <li>! meet the needs of the EC Directives and national legislation;</li> <li>! ensure development is sustainable.</li> </ul> <p>The <b>Conservation</b> section of the publication states that water companies have a duty to further the conservation of plants and animals, particularly SSSIs. It is recognised that water companies improvements will particularly contribute to biodiversity in wetlands, river habitats, eutrophic Sensitive Areas and River Quality Objectives. English Nature seeks from water companies:</p> <ul style="list-style-type: none"> <li>! the proper management of water levels and abstraction;</li> <li>! the prevention of pollution &amp; eutrophication;</li> </ul> <p>100 wetland SSSIs in England and Wales are at risk from discharges or abstraction made by the water companies, of these half are designated as internationally important (SAC, SPA or RAMSAR). English Nature (EN) and Environment Agency (EA) have classified the action needed for SSSIs, and these are in water companies' programmes.</p>	

Organisation	Reference	Tests/ Initiatives	Comments
		<p>Category 1 sets out actions that have been agreed will solve the problem;</p> <p>Category 2 and 3 require further effort by EN, EA and water companies to decide what action should be taken. Actions could relate to reducing abstraction, or improving discharges, and 'the timetable for delivery is to be dictated by conservation objectives, even if this means additional costs have be allowed for in next price review in 2004'.</p>	
		<p>For sites all action is be taken by 2005. The EA is reviewing whether any of the activities they licence have a detrimental effect on the integrity of SPAs or SACs.</p> <p>For sites not of national or international significance improvement actions have also been assigned categories, and the timetable for action is again to be determined by conservation need.</p>	
Water UK	<p><i>Towards Environmental Sustainability: Indicators for the UK Water Industry</i>, Water UK, May 2000 <a href="http://www.water.org.uk">www.water.org.uk</a></p>	<p>Water UK, the water companies' trade association, has developed sustainability indicators. The 1998/9 Sustainability Indicators include (p25-28):</p> <ul style="list-style-type: none"> <li>! Priority species identified on water operators' properties with biodiversity action plans (BAPs). (C1) Sector average 55%.</li> <li>! Priority habitats identified on water operators' holdings with biodiversity action plans (BAPs). (C2) Sector average 43%.</li> <li>! River Water Quality – Percentage of rivers in England and Wales in classes A-D (C3) Sector average 90%.</li> </ul> <p>Indicators under development include (p37):</p> <ul style="list-style-type: none"> <li>! Wetland Bird Index (E1).</li> <li>! Otter population (E2).</li> <li>! Rivers with low flows (E3).</li> </ul>	

Organisation	Reference	Tests/ Initiatives	Comments
RSPB	<p><i>Good Practice Guide for the UK Water Industry - Meeting the Biodiversity Challenge</i>  Nov 1998  RSPB  01767 692395</p>	<p>The RSPB's Good Practice Guide presents guidance, case studies and the two challenges the water industry faces if it is to contribute substantially to the UK BAP. The challenges are:</p> <ul style="list-style-type: none"> <li>! To manage their water and landholdings to ensure the conservation of wildlife.</li> <li>! To undertake investment, operations and planning in a way that enhances biodiversity and the wider environment – both through direct actions (e.g. water abstraction) and through indirect actions (e.g. purchasing policy) (p3).</li> </ul> <p>Activities that contribute to biodiversity in practice include:</p> <ul style="list-style-type: none"> <li>! Support of local biodiversity initiatives.</li> <li>! Corporate BAPs, linked to national and local biodiversity priorities that include actions relating to landholdings (habitat creation, management) as well as to company operations (removal of P)</li> </ul> <p>Case studies are included from Wessex Water, Bristol Water, Anglian Water, East of Scotland Water and Northumbrian Water.</p>	
<b>Company Biodiversity Tests and Initiatives – listed under Topic headings</b>			
United Utilities (Includes North West Water, Norweb Distribution, Norweb Energi, Norweb Telecom, Vertex and United Utilities International)	<p><i>Social and Environment Report 2000</i>  www.unitedutilities.com</p>	<p>The following extracts from United Utilities (UU)'s environment report relate to their biodiversity impacts.</p> <p><b>Biodiversity and Land Management</b> (p14-17). This section provides national, regional and company contexts to Biodiversity and Land Management and covers the UK Biodiversity Action Plan, the Open Countryside Bill introducing Right to Roam, and that United Utilities owns 142k acres including 17 nature reserves, 68 farms and 2,000 agricultural, recreational and other tenancies.</p> <ul style="list-style-type: none"> <li>! <i>Protection for Endangered Species</i>  10 Endangered Species are covered in UU's biodiversity strategy. Activities are undertaken to improve those species population numbers. Examples cited include Breeding Bitterns on freshwater reed beds that are supported by Lancashire Wildlife Trust, EN, EA, and RSPB; Hen Harriers in the Forest of Bowland are supported by the RSPB; schelly fish in Haweswater catchment, and a red squirrel initiative provides a rope crossing over the A591;</li> </ul>	

Organisation	Reference	Tests/ Initiatives	Comments
		<p>! <i>Operational Environmental activities</i> undertaken by North West Water include:</p> <ul style="list-style-type: none"> <li>- Reedbed creation. Reedbeds extract pollutants, are not energy intensive and provide wildlife habitats. Fazakerley reedbed will be managed by Lancashire Wildlife Trust.</li> <li>- Use of horses to create clearings, because they cause less damage than tractors.</li> </ul> <p>! <i>Biodiversity audits</i> Biodiversity audits of species are being undertaken at two sites, with two more planned. Audits will gather existing information on all known species and wildlife on the estates and will provide the basis for BAPs.</p> <p><b>Rivers and Coasts</b> (p22 - 25) This section reports yearly river water quality, and the increase in fish species in the Mersey (up to 66 in 1999 from 35 in 1980's). The main issues relate to dissolved (biochemical) oxygen concentrations, Ammonia levels, and suspended solids, as well as metals or persistent organic compounds (solvents, pesticides).</p>	
		<p><i>Targets:</i></p> <ul style="list-style-type: none"> <li>! To achieve 70% reduction in organic load discharge between 1995 and 2001.</li> <li>! To remove all remaining 919 unsatisfactory intermittent discharges by 2005</li> </ul>	

Organisation	Reference	Tests/ Initiatives	Comments
<p>Scottish Power (owns Southern Water and Manweb, as well as 8 windfarms)</p>	<p>Scottish Power 24 Hour Environment Report 1999-00 <a href="http://www.scottishpower.com">www.scottishpower.com</a></p>	<p>The following extracts from Scottish Power's Environment report relate to their Biodiversity impacts.</p> <p><b>Biodiversity as a Strategic Issue.</b></p> <p><i>'Our strategy is to minimise damage to biodiversity when we develop new projects or as part of our maintenance operation and to positively enhance our landholdings for species, habitats and heritage through measures such as our Rural Care Programme' (Inside Front Cover).</i></p> <p><i>'We recognise the value to society of biological diversity and natural and cultural heritage and will strive, within the scope of our operations, to secure their preservation' (p3)</i></p> <p>Biodiversity is one of 6 key issues to their business, (p8) and Scottish Power aims to minimise damage to habitats during development work and draw up biodiversity strategy and action plans. These are most advanced in the Southern Water business. The action plans lead to wildlife enhancements at site level. Specific examples include:</p> <ul style="list-style-type: none"> <li>! Lagoons used for ash disposal are managed as nature reserves.</li> <li>! Power System's Rural Care Programme aims to minimise disruption to plants, animals and other wildlife and enhance biodiversity. (P10).</li> </ul> <p><b>Biodiversity Strategy</b></p> <ul style="list-style-type: none"> <li>! Ensure actions do not cause significant adverse effects.</li> <li>! Protect strategic biodiversity where it occurs on larger land holdings, through development of appropriate conservation management plans for significant new developments and where ever possible, avoid designated sites of nature conservation value. Where not possible assess significance, minimise effects and provided appropriate conservation enhancement.</li> <li>! Implement specific measures that support the relevant Species and Habitat Action Plans where adverse impacts on species and or habitats listed in UK Biodiversity Action plan are unavoidable.</li> </ul>	<p>1999 ACCA runners up. No KPI relating to biodiversity p13.</p> <p>Scottish Power's performance against Water UK's indicators that relate to BAPS for priority species and habitats is unclear.</p>

Organisation	Reference	Tests/ Initiatives	Comments
		<p>! Where operation sites become redundant and are not sold, consider creation of habitats suitable to promote local biodiversity as an appropriate end use option. (P40)</p> <p><b>Biodiversity Targets include:</b></p> <p>! Monitoring of existing habitat management plans (1999), followed by establishing a format for Conservation Management Plans to cover operational sites and additional capital scheme commitments (2000).</p> <p>! Implement a contaminated land risk ranging system (1999), targeting 30 high risk sites for investigation (2000).</p> <p>! Undertake environment initiatives which support the UK Biodiversity Plan (1999), followed by establishing a Corporate Biodiversity Strategy with existing County BAP Steering groups. (2000).</p> <p>! Monitor agreed environment mitigations for construction activities (1999).</p> <p>! Sponsor the creation of a Biodiversity Officer post (Power 2000) (p41)</p> <p><b>Performance Appendix on Water</b> presents Southern Water's Performance against Water UK Environment sustainability indicators</p> <p><b>Performance Appendix on Biodiversity</b> presents data on:</p> <p>! Oil losses from underground cables (litres).</p> <p>! Transformer and switchgear oil lost (litres), number of transformers banded to date, and investment to date.</p> <p>! PCB status of equipment as % ground mounted equipment sampled for PCB levels and number of samples above 50ppm. (p77)</p> <p><b>Scottish Power subsidiary activities</b></p> <p><b>Southern Water's Corporate Biodiversity Action Plan</b> will be complete by Autumn 2001 and will include management plans, and implementation/ asset management of management plans. (p42 and Water Vole p43)</p> <p><b>Electricity Generation and Power Systems</b></p> <p>! Cites habitat management project to improve an area for Golden Eagles and a siting of a Royal Tern at their Musselburgh Ash</p>	

Organisation	Reference	Tests/ Initiatives	Comments
Anglian Water	<p><i>Providing Solutions: Environmental Activity Report 1999</i> www.anglianwater.co.uk</p>	<p>The following extracts from Anglian Water's Environment report relate to their Biodiversity impacts:</p> <p><b>1998/9 Targets and achievement</b> (p8 &amp; 9):</p> <ul style="list-style-type: none"> <li>! Review Water UK's sustainable environmental performance indicators by Dec 1998. Status: Achieved.</li> <li>! Develop an Anglian Water BAP based on the UK BAP by April 1999. Status: Achieved.</li> </ul> <p><b>2000 strategic targets:</b></p> <ul style="list-style-type: none"> <li>! Implement Priority One Work Programme of the Biodiversity Action Plan by 2002.</li> <li>! Publish a customer version of Anglian Water Biodiversity Action Plan by September 1999.</li> <li>! Establish a breeding population of ospreys at Rutland Water by year 2000. On-going.</li> <li>! Agree by April 1999 conservation management plans for SSSIs under Anglian Water ownership where plans do not exist. Status: Management plans in draft. Target repeated for 2000.</li> <li>! Trial Anglian Water's biodiversity index at four Anglian Water reservoir sites by April 1999. Status: Achieved.</li> <li>! Trial and assess the use of Anglian Water's biodiversity index at a further four sites of conservation value by April 2000.</li> <li>! Implement landscaping plans to lessen visual impact at 12 priority Anglian Water sites within the Lincolnshire Wolds and Dedham Vale (Suffolk) AONBs by April 1999. Status: Achieved.</li> </ul> <p><b>Environmental integration.</b> Key objectives for the integration of environmental commitments into business plans include:</p> <ul style="list-style-type: none"> <li>! A biodiversity action plan that gives a structured and measurable approach to conservation activities (p10).</li> </ul>	1998 ACCA Reporting Award winner

Organisation	Reference	Tests/ Initiatives	Comments
		<p>! Establishing the business case for sustainable development. Anglian Water has set 10 indicators what will be used to measure progress towards sustainable development, and which contribute to the Government's Quality of Life Indicators. These include Biodiversity; impacts associated with abstraction; river water quality (85% ammonia reduction); eutrophication (Phosphate removal); and cultural/natural heritage (the latter is still to be developed) (p10).</p> <p><b>Anglian Water's Biodiversity Action Plan's</b> strategy is developed in line with national biodiversity priorities and:</p> <p>! Sets targets for the next 10 years for priority species and habitats.  ! Will provide wildlife value from investment.  ! Will focus activities with partners such as the Wildlife trusts  ! Supports the Government's 'are you doing your bit campaign' (p18).</p> <p>Their BAP includes actions to reduce habitat fragmentation, survey habitats, sponsor the pool frog, (a UK BAP species), prioritise key national species and develop a biodiversity index. (p19)</p> <p><b>Achievements:</b></p> <p>! Anglian Water Rutland Reservoir won the British Trust for Ornithology British Sugar Challenge 1998 for the best business site for birds. (p19)  ! At Wivenhoe Quay the pipeline route was altered to avoid an affected SSSI. (p23)  ! Partnerships were established to achieve the objectives of the Anglian Water BAP (p27)</p>	

Organisation	Reference	Tests/ Initiatives	Comments
Wessex Water	<p data-bbox="423 245 752 304"><i>Striking the Balance 1999 Sustainable Development Report</i></p> <p data-bbox="423 344 685 368">www.wessexwater.co.uk</p>	<p data-bbox="882 245 1626 368">The following extracts are taken from Wessex Water sustainable development report's section on Biodiversity. (p21-24) Wessex Water's BAP was completed in 1998 and in 1998/99 £175,300 was spent on 17 biodiversity projects. Specific initiatives include:</p> <ul data-bbox="882 373 1626 592" style="list-style-type: none"> <li data-bbox="882 373 1626 464">! Management of third of a 115 acre sewage treatment works, designated as a country wildlife site, as a nature reserve, following the discovery of a large population of water voles.</li> <li data-bbox="882 469 1626 528">! Implementation of a joint plan with the tenant farmer to maintain chalk grassland habitat at a treatment works adjoining a SSSI.</li> <li data-bbox="882 533 1626 592">! Support for the publication of a guide '<i>River Habitats for Wildlife</i>' for landowners.</li> </ul> <p data-bbox="882 596 1626 692">1999-2000 targets are to complete nest box erection, review habitats on all sites, develop Wessex Water BAP indicators, and support the South West Biodiversity Partnership. (p24 and 41)</p>	

**Table A.3.2 Linkages between proposed sector specific questions and existing tests and indicators –Fresh Water [Water Companies]**

Relevant UK Quality of Life Counts indicators include:	Current and Proposed Water UK indicators include:	Proposed Questions
Rivers of good or fair quality (H12)	River Water Quality – Percentage of rivers in England and Wales in classes A-D (C3)	FW.1 Does your company evaluate the biological quality of all streams into which it discharges?
Dangerous substances in the water (M2).		FW.2 Has your company made a commitment, and adopted a prioritised timetabled action plan, to improve the quality of the effluent discharged from your operations into water courses and out to sea to improve affected habitats? (Forthcoming EU Water Framework Directive will state all surface and ground water to have good ecological quality.)
Nutrients (P and N) in the water (Q1)		
Wildlife and amenity sites affected by abstraction (Q6)	Rivers with low flows (E3)	FW.3 Has your company evaluated the biodiversity impacts associated with your abstraction from both surface and ground water sources, and adopted a prioritised timetabled action plan to mitigate those impacts and/or evaluate alternative measures?
	Priority species identified on water operators' properties with biodiversity action plans (BAPs). (C1)	FW.4 Does your company prepare and implement species or habitat management plans that enhance the biodiversity of at least one UK priority species? ( <b>Compliance</b> )
	Priority habitats identified on water operators' holdings with biodiversity action plans (BAPs). (C2)	FW.5 Does your company undertake habitat improvement plans for land which it owns or on which it operates to contribute to regional or national biodiversity targets, or a reduction in habitat fragmentation? (e.g. through the creation of wetlands)

Relevant UK Quality of Life Counts indicators include:	Current and Proposed Water UK indicators include:	Proposed Questions
	Wetland Bird Index (E1)	FW.6 Does your company report publicly on: SSSI condition survey results for each of the SSSIs under its control; on its habitat management targets?
	Otter population (E2)	<p>FW.7 Does your company work with local or regional BAP steering groups or Regionally Important Geological Sites groups, soliciting their views on its proposed activities which will affect the nature conservation interest of designated sites or BAP priority habitats or species?</p> <p>FW.8 Is there a company policy to evaluate sites according to Natural Area Frameworks and then manage them to achieve optimal conditions?</p> <p>FW.9 Does your company encourage the public to visit designated sites under its control to enhance their awareness of biodiversity?</p>

**Additional questions not related to existing tests and indicators**

FW.10 Does your company have a policy, integrated into planning processes (especially of capital projects) and operational management, to avoid development and land use with an irreversible effect on biodiversity?

FW.11 Does your company have a programme to evaluate the biodiversity impacts of its supply chain?

FW.12 Is your company developing biodiversity indicators that it will report against, specific to the habitats and species affected by its operations (in support of your company BAP/Management plans and linked to priority species)?

## Appendix A.4 Land Development

**Table A.4.1 Review of company and sectoral biodiversity tests and initiatives relating to English Nature’s Land Development Sector (Construction, Aggregates and Mining)**

Organisation	Reference	Tests/ Initiatives	Comments
<b>Sector tests</b>			
DETR	<i>Building a Better Quality of Life: Sustainable Construction Strategy</i> April 2000 <a href="http://www.detr.gov.uk">www.detr.gov.uk</a>	The DETR strategy sets out a definition of sustainable construction, and actions that the construction industry can take to be more sustainable. <b>Sustainable construction</b> is defined to include: ! Achieving higher growth whilst reducing pollution and use of resources. ! Improving towns and cities and protecting the quality of the countryside. <b>The construction industry can be more sustainable by.</b> ! Enhancing and better protecting the natural environment. (p8). ! Following the Revised Planning Policy Guidance Note 3 on housing which makes clear the need to take into account physical conditions, such as flood plains or natural drainage or other areas of environmental risk when siting new developments. (p18). ! Adopting the 10 themes for sustainable construction action which include a theme to preserve and enhance biodiversity by looking for opportunities throughout the construction process to provide and protect habitats. (p20).	

Organisation	Reference	Tests/ Initiatives	Comments
Movement for Innovation (M4i)	<p><i>Sustainable Construction Indicator</i>  <a href="http://www.m4i.org.uk/publications/toolkits/sustain">www.m4i.org.uk/publications/toolkits/sustain</a></p>	<p>The sustainable construction indicator is an aggregate score that considers generic environmental, social and economic issues. Biodiversity is included under the heading Ecology which is defined as the protection of habitat and species. Two specific questions are posed with the following reply options.</p> <p>! Protection of habitat and species – how does the project impact on wildlife habitats?</p> <ul style="list-style-type: none"> <li>- Habitat destroyed and no new habitat created</li> <li>- Area of habitat created less than area destroyed</li> <li>- No net impact on habitat</li> <li>- Area of habitat created significantly greater than destroyed</li> <li>- Sensitive plants, trees or other vulnerable species are protected</li> <li>- Don't know</li> </ul> <p>! Are specific actions being taken to protect/ enhance the biodiversity – habitat and species? (e.g. as part of project plan for local environmental protection or local Biodiversity Action Plan 'BAP')</p> <ul style="list-style-type: none"> <li>- No</li> <li>- Yes</li> <li>- Yes – through a plan that is available to public scrutiny</li> </ul>	

Organisation	Reference	Tests/ Initiatives	Comments
DETR – CIRIA	<p><i>Sustainable construction targets and indicators</i>  CIRIA RP609  020 7222 8891  Sept 2000 draft</p>	<p>This project is developing indicators at three different levels for industry, company (strategic) and project (operational) level use.</p> <p><b>Strategic Environmental Indicators:</b></p> <ul style="list-style-type: none"> <li>! Percentage of projects for which an environmental appraisal has been undertaken and proposed environmental mitigation measures implemented. Appraisal to include consideration of fauna and flora, landscape, soil, water, air and noise pollution.</li> </ul> <p><b>Operational Environmental Indicators:</b> relate to the protection and enhancement of biodiversity.</p> <p><i>Design issues:</i></p> <ul style="list-style-type: none"> <li>! Design-in environmental improvements (e.g. through landscaping)  Indicator: Cost of environmental improvement designed as a proportion of total project costs</li> <li>! Identification of opportunities to enhance biodiversity by habitat creation  Indicator: Percentage of project sites for which an assessment of existing biodiversity has been undertaken prior to design and implementation of appropriate mitigation measures  Indicator: Area of habitat designed and created</li> </ul> <p><i>Construction issues</i></p> <ul style="list-style-type: none"> <li>! Protecting sensitive ecosystems through good construction practices and supervision  Indicator: Percentage of project sites for which appropriate mitigation measures have been implemented to protect sensitive ecosystems  Indicator: Number of non-conformance certificates issues by £ turnover.</li> </ul> <p><b>Industry Indicators</b> relate to the protection and enhancement of biodiversity.</p> <ul style="list-style-type: none"> <li>! Number of specially designated features destroyed, partially destroyed or unfavourably declining due to development activities</li> <li>! Area of greenfield land used for construction purposes per £1m construction output (Km<sup>2</sup>)</li> </ul>	

Organisation	Reference	Tests/ Initiatives	Comments
English Nature, the Quarry Products Association and Silica and Moulding Sands Association	<i>Biodiversity and Minerals – Extracting the benefits for wildlife (1999)</i>	<p>This briefing document was produced to advise extractive industries of action they can take during the development stages to support biodiversity.</p> <p><b>a) Planning Stage</b></p> <ul style="list-style-type: none"> <li>! Work in partnership with English Nature and others.</li> <li>! Identify potential mineral sites that, through restoration, can contribute to BAP targets without causing significant damage to existing biodiversity.</li> <li>! Make this potential contribution an important criterion for site selection - strategic environmental assessment can assist in the selection process.</li> <li>! Plan habitat creation based on the 'habitat network' concept.</li> <li>! Treat environmental assessment as a process that parallels and links to scheme design.</li> </ul> <p><b>b) During Operation</b></p> <ul style="list-style-type: none"> <li>! Monitor sites to identify new species and habitats that appear during operation;</li> <li>! Wherever possible, implement working practices to accommodate these species/habitats;</li> <li>! Implement working practices that reduce noise, dust and other impacts that can indirectly affect wildlife</li> </ul> <p><b>c) Managing restored sites</b></p> <ul style="list-style-type: none"> <li>! Put in place management measures for restored sites that meet the long term needs of biodiversity conservation;</li> <li>! Implement the management needed to conserve valuable habitats or to restore degraded areas on non-operational land.</li> </ul>	<p>This document makes a positive step to discuss nature conservation on undesignated sites.</p> <p>It does not address damage to existing sites and the need to avoid impact on sites where such an impact will have an irreversible outcome on biodiversity.</p>

Organisation	Reference	Tests/ Initiatives	Comments
		<p><b>d) Other activities</b></p> <ul style="list-style-type: none"> <li>! Consider preparing corporate statements of commitment to biodiversity and company BAPs;</li> <li>! Encourage staff to attend training courses geared to biodiversity and minerals;</li> <li>! Contribute to research on biodiversity;</li> <li>! Share your experience in habitat creation, restoration and management.</li> <li>! Encourage educational and recreational use of restored and non-operational sites (where this does not cause damage).</li> </ul>	

Organisation	Reference	Tests/ Initiatives	Comments
Confederation of British Industry (CBI) Minerals Committee	'Evidence to UK House of Common's sub-Committee's Inquiry into UK Biodiversity' 2000 www.cbi.org.uk	<p>The CBI's evidence to the Environment Sub-Committee contains the following extracts that relates business' and in particular to the mining industry's impact on biodiversity.</p> <p>! <i>'Business and industry, both as owners and occupiers of large areas of land and as generators of the country's wealth, is well placed to make a significant contribution to national biodiversity strategy. The key relationship between industry and biodiversity centres on:</i></p> <ul style="list-style-type: none"> <li>- <i>The occupancy, use and development of land and marine sites</i></li> <li>- <i>The use of natural resources in industrial processes</i></li> <li>- <i>Industrial activities that lead to emissions to air, land and water</i></li> <li>- <i>The use of living organisms and genetic resources in biotechnological applications'.</i></li> </ul> <p>The CBI supports the following principles in pursuit of sustainable minerals development:</p> <p>a) Resource Development</p> <p>! The proximity principle, although the reasonable application of this recognises that in many parts of the country local supply is not possible.</p> <p>! The optimum use of the available resource, through efficiency of production, use, waste minimisation, recycling, recovery and use of secondary materials</p> <p>! The minimisation of the effects of transport, by the use of rail and sea transportation and effective lorry routing and management.</p> <p>b) Land Use</p> <p>! The implementation of high quality land restoration to support future beneficial after-use.</p> <p>The careful design and operation of sites to minimise any adverse environmental impacts during extraction operations.</p> <p>! The protection of the long-term value associated with landscape, biodiversity and other aspects of the environment, particularly within areas designated for their importance.</p>	

Organisation	Reference	Tests/ Initiatives	Comments
British Property Federation	020 7828 0111		No specific advice is given to members, since developers respond to planning guidance. No public environmental reports found either.
<b>Company Biodiversity Tests and Initiatives – listed under Issue headings.</b>			
Hanson	<p><i>Hanson Environmental Report 1999: Committed to Continuous improvement</i> www. Hansonplc.com</p>	<p>The following extracts are taken from Hanson's environment report.</p> <p><b>Designated Sites and Initiatives</b></p> <p>52 areas on land controlled by Hanson have been designated as SSSIs (p26) and Hanson also operates in US National Parks &amp; Wetlands.</p> <p>The UK sites include:</p> <ul style="list-style-type: none"> <li>! SSSIs, SACs, SPA, RAMSAR</li> <li>! Kings Dyke Nature reserve in Cambridge, which is a former clay quarry which now restored offers a variety of habitats (p27)</li> <li>! Middleton Hall Quarry, Staffordshire is adjacent to the River Tame. The quarry has diverted the stream and worked with local wildlife organisations to restore natural features which has contributed Staffordshire's Biodiversity Action Plan. (p28 &amp; 29)</li> <li>! UK Sabellaria reefs, Great Yarmouth, listed under UK BAP.</li> </ul> <p>These reefs are avoided by Hanson's marine dredging.</p> <p>Hanson states: "<i>We support the UK Biodiversity Action Plan, carry out assessments of existing flora and fauna before proposing development, and work closely with conservation organisations to ensure that, where possible, biodiversity is enhanced and maintained.</i>"</p> <ul style="list-style-type: none"> <li>! Hanson is evaluating its performance through measures of hectares of trees planted/ removed, as well as metres of hedges planted/ removed. p31</li> </ul>	<p>English Nature signed in January 2000 a Memorandum of Understanding with Hanson Quarry Products to contribute to conservation objectives in England.</p>

Organisation	Reference	Tests/ Initiatives	Comments
RMC	<p>RMC UK Environment report 1999:  <i>Building a sustainable future</i>  www.rmc-group.com  01932 583588</p>	<p>RMC's report includes sections on biodiversity, water and resource management and sustainability. In the latter RMC identifies the UK sustainable development headline indicators of relevance to their business to include the emissions of greenhouse gases, road traffic, populations of wildbirds and waste disposal.</p> <p><b>Biodiversity</b> policies, targets and general statements include:</p> <ul style="list-style-type: none"> <li>! 'we are enthusiastically committed to the government's policies on biodiversity, which are relevant to RMC because many of the species and habitats identified in the plan are directly or indirectly associated with our sites.'</li> <li>! Policy: 'RMC will conserve existing habitats where possible, and create new habitats that support plants and wildlife both during active operations and after operations have ceased.'</li> <li>! Targets for 2002: To ensure, where possible, all RMC's existing and future site developments conserve and where appropriate create viable natural habitats for plants and wildlife.</li> <li>! Progress in 1999: Ecological considerations were fully taken into account when planning all site developments during the year. RMC achieved its aim of operating a resource neutral strategy, (only developing new reserves at the same rate as RMC restores previously worked land, 223 ha in 1999).</li> </ul> <p><b>Site Management</b></p> <ul style="list-style-type: none"> <li>! Sites are rehabilitated in compliance with landscape guidelines and local plan policies so that they can be used for agriculture, forestry, nature conservation or leisure activities. Large areas of RMC's land is farmed and farm managers are employed in addition to 15 estate managers.</li> <li>! Native species are planted in accordance with 'RMC Practical Guide to Restoration' in order to enhance the habitat for insects and birds.</li> <li>! RMC controls and manages 450 hectares of woodland and planted 70,000 trees in 1999.</li> <li>! 31 SSSIs are under RMC management. RMC actively manages habitats such as calcareous grasslands and reed beds that are specifically singled out for mention in the <i>UK Biodiversity Action Plan</i>. In 1999 17 hectares were restored to wildlife purposes.</li> </ul>	

Organisation	Reference	Tests/ Initiatives	Comments
		<p>! RMC supported the action group responsible for the preservation of naturally occurring limestone pavements in the UK. In furtherance of the aims of the action group a global 'non-usage' policy for materials taken from limestone pavements has been issued.</p> <p><b>Water Management</b></p> <p>! <i>Target for 2002:</i> To ensure all above ground fuel tanks are banded.</p> <p>! <i>1999 performance</i> estimated that 90% of water used in production is recycled, and 80% fuel tanks banded.</p> <p>! RMC water discharges are high in suspended solids and are alkaline after ready mix concrete production, unless mitigation measures are undertaken.</p> <p>! RMC owns RMC Angling, which is the largest commercial angling organisation in the UK, operating on 70 restored gravel and sand pits and 20 stretches of river for 25,000 anglers. The fisheries are managed to provide a diverse range of habitats, that attract nationally important species. Six of RMC Angling's directly managed sites have been designated SSSIs.</p> <p><b>Company targets and awards</b></p> <p>! Great Mills (an RMC subsidiary) won an award for its policy on pricing, for example, pricing peat free products at the same price as equivalent peat products.</p> <p>! RMC uses construction and demolition waste, as well as other secondary or recycled materials in their products. Total weight of recycled material in products was 822,000 tonnes, and RMC's target is to increase the percentage of recycled materials by 5% every year.</p> <p>! RMC through its membership of World Business Council for Sustainable Development has joined five other cement producers in sponsoring the '<i>Towards a Sustainable Cement Industry</i>' project.</p> <p>! RMC also has a target for all companies to be involved with at least one educational or community/conservation project. 1999 Status: A third of subsidiary companies supported at least one project.</p>	

Organisation	Reference	Tests/ Initiatives	Comments
Biffa (Part of Severn Trent)	<i>Biffa Environment Report 1998</i> www.biffa.com	<p>The following biodiversity information is taken from Biffa's Environment report.</p> <p><b>Biffa Environment Action Plan 1998/9</b> includes:</p> <ul style="list-style-type: none"> <li>! Development of a restoration programme for all Biffa landfill sites which links all restoration works to a five year after-care programme. Expected environmental benefit is enhanced biodiversity. (p7)</li> <li>! Conservation activities. Most landfill sites are returned to agriculture, some include specially created wildlife habitats, including a site overseen by RSPB. (p17)</li> </ul> <p>At Howden Clough, West Yorkshire, Biffa has agreed to undertake 20 years aftercare of the former landfill site which will be transformed into a community woodland.</p> <p><b>Biffaward for Enhancing Ecology</b> is a £4million fund managed by the Royal Society for Nature Conservation. It part funds along with 10 water companies a project to protect otters in England and Wales' rivers. (p28)</p> <p><b>Sustainability Indicators – Biodiversity</b> – Biffa has adopted the following indicator: Landfill Restoration restored to Public Open Space, Woodland or Agriculture. (p31)</p>	1999 winner of ACCA's first time reporter award
Carillion	<i>We are Making Choices: Carillon's Environment, Community and Social report 1999-2000</i> www.carillionplc.com	<p>The following extracts on biodiversity impacts are taken from Carillion's sustainable development report.</p> <p><b>Sensitive sites policy:</b> A position statement covering Sensitive and Designated Sites of Nature Conservation, Landscape or Heritage Importance supports Carillon's environment policy (p9 and p18). Action to support the policy included revision to Carillon's risk Manual to include reference to risks associated with sensitive and designated sites. In addition, procedures were identified for adoption at tender stage that allow for a formal review of the impact of proposed activities on sensitive and designated sites.</p> <p>Carillion is also a member of the WWF 95+ Sustainable Timber Group.</p>	

Organisation	Reference	Tests/ Initiatives	Comments
Morrison's	Morrison Environment Report 1999 www.morcon.co.uk  01438 743744 01924 828888	Morrison's Environment report presents their Business Environmental Strategy entitled 'Responsive Construction.' As part of their strategy, Morrison's have joined up with the Woodland Trust to run a promotional programme with practical activities, such as creation of way-marked trails and planting of new woodland, on Morrison's sites. There is no target relating to biodiversity, but there are targets related to Environmental Management and Control of Water Run Off.	
Laings	020 8959 3636 www.laing.co.uk	John Laing plc's Sustainable Development Policy does not mention biodiversity specifically, but includes the following commitment to implement site specific environmental management plans, which minimise the effects of historical contamination, contaminated land, water, dust, noise, visual intrusion and disturbance. Laing has also assisted in developing a nature trail on a development that has reclaimed industrial land for housing. It is also a member of the WWF 95+ sustainable timber group.	

**Table A.4.2 Linkages between proposed sector specific questions and existing tests and indicators –Land Development [Construction and Building Materials]**

DETR Quality of Life Counts Indicators	Sustainable Construction Strategy	Movement for Innovation Sustainable Construction Indicator Criteria	CIRIA Sustainable Construction Indicators	Proposed Land Development Questions for Construction
New homes built on previously developed land (H14).	Take into account physical conditions such as flood plains or natural drainage or other areas of environmental risk. (PPG3)		Area of greenfield land used for construction purposes per £1m construction output (Km <sup>2</sup> ) (Industry indicator)	CON.1 When assessing development options does your company evaluate biodiversity impacts (e.g. in Strategic Environmental Assessments)?
Net loss of soils to development (S1)				
Dangerous substances in the water (M2).	Reducing pollution and use of resources			CON.2 Does your company have water management plans to reduce water pollution and manage water use efficiently on all sites of 6 weeks duration or more and on or within 1 mile of a SSSI?
Wildlife and amenity sites affected by abstraction (Q6)				
Biodiversity Action Plans (S4)		Are specific actions being taken to protect/ enhance the biodiversity – habitat and species? (e.g. as part of project plan for local environmental protection or local Biodiversity Action Plan 'BAP') ! No ! Yes ! Yes – through a plan that is available to public scrutiny	Percentage of project sites for which an assessment of existing biodiversity has been undertaken prior to design and appropriate mitigation measures implemented (Operational)	CON.3 Are biodiversity action plans with targets, and performance monitoring developed for all sites of 6 weeks duration or more and on or within 1 mile of a SSSI?

DETR Quality of Life Counts Indicators	Sustainable Construction Strategy	Movement for Innovation Sustainable Construction Indicator Criteria	CIRIA Sustainable Construction Indicators	Proposed Land Development Questions for Construction
			Percentage of project sites for which appropriate mitigation measures have been implemented to protect sensitive ecosystems (Operational)	CON.4 Do site management plans include adjustments to working practices to accommodate species of nature conservation value? (for example to cover issues such as noise, dust and other secondary impacts, as well as timing of site clearance, or other significant operations e.g. piling)
Landscape features (S5 – hedges, dry stone walls, banks, ponds with specific target to stop loss of species rich hedgerows by 2005)	Enhancing and better protecting the natural environment.		Number of specially designated features destroyed, partially destroyed or unfavourably declining due to development activities (Industry)	CON.5 Has your company developed biodiversity indicators which it now reports against, specific to the habitats and species affected by its operations for all projects more than 6 weeks duration and on or within 1 mile of a SSSI?
Extent and Management of SSSIs (S6)				CON.6 Are project managers within your company aware of the legal status of the UK's Sites of Special Scientific Interest (SSSI)? ( <b>Compliance</b> )
				CON.7 Is there a commitment within the company to avoid development and land use with an irreversible effect on biodiversity?
Countryside quality (S7 – to be developed)	Improving towns and cities and protecting the quality of the countryside			

DETR Quality of Life Counts Indicators	Sustainable Construction Strategy	Movement for Innovation Sustainable Construction Indicator Criteria	CIRIA Sustainable Construction Indicators	Proposed Land Development Questions for Construction
Native species at risk (S9 – vertebrates – freshwater fish, marine reptiles, and amphibians, invertebrates, vascular plants and lower plants)		Protection of habitat and species – how does the project impact on the area of habitat for wildlife? Habitat destroyed and no new habitat created Area of habitat created less than area destroyed No net impact on habitat Area of habitat created significantly greater than destroyed Sensitive plants, trees or other vulnerable species are protected Don't know		CON.13 Is there a commitment within the company to recreate and maintain habitats where damage occurs outside designated sites, in line with BAP targets?
Amount of Secondary/recycled aggregates use compared with virgin aggregates (S14)				CON.8 Does your company have a policy, supported by targets, to increase the percentage of recycled aggregates it uses year on year?
Land covered by restoration and after care conditions (S15)			Indicator: Area of habitat designed and created (Operational)	CON.9 Is there a company commitment to provide appropriate habitats on land in order to create wildlife corridors (ecological links between fragmented habitats), as part of a BAP for an area?
			Cost of environmental improvement (e.g. landscaping) designed as a proportion of total project costs (operational)	

DETR Quality of Life Counts Indicators	Sustainable Construction Strategy	Movement for Innovation Sustainable Construction Indicator Criteria	CIRIA Sustainable Construction Indicators	Proposed Land Development Questions for Construction
	Preserve and Enhance Biodiversity: look for opportunities throughout the construction process to provide and protect habitats.			
			Percentage of projects for which an environmental appraisal has been undertaken and proposed environmental mitigation measures implemented. Include consideration of Fauna and flora, landscape, soil, water, air and noise pollution. (Strategic)	CON.10 Is there a company commitment for all projects longer than six weeks duration and on or within 1 mile of a SSSI to undertake Phase 1 Habitat Surveys, appropriately followed up by Phase 2 and 3 Habitat Surveys where key habitats or species are found? (The Surveys should be carried out by a trained ecologist.)
			Number of non-conformance certificates issues by £ turnover. (Operational)	

#### Additional questions not related to existing tests and indicators

- CON.11 Does your company have a programme to evaluate the biodiversity impacts of its supply chain, including products and services procured?
- CON.12 Does your company work with local or regional BAP steering groups or Regionally Important Geological Sites groups, soliciting their views on its proposed activities which will affect the nature conservation interest of designated sites or BAP priority habitats or species?
- CON.14 Does your company have a policy to minimise harm to biodiversity through the disposal of construction spoil?

**Table A.4.3 Linkages between proposed sector specific questions and existing tests and indicators –Land Development [Minerals and Aggregates]**

DETR Quality of Life Counts indicators	Biodiversity and Minerals Guidance	Proposed Land Development Questions for Quarrying and Mining
Dangerous substances in the water (M2).		Q&M.1 Does your company have water management plans on all major sites to reduce water pollution and manage water efficiently?
Wildlife and amenity sites affected by abstraction (Q6)		
Net loss of soils to development (S1)	Identify potential mineral sites that, through restoration, can contribute to BAP targets without causing significant damage to existing biodiversity	
Biodiversity Action Plans (S4)	Monitor sites to identify new species and habitats that appear during operation and Wherever possible, implement working practices to accommodate these species/habitats;	Q&M.2 For each major site (greater than X hectares in area) has biodiversity action plans, which include targets and monitoring, been developed, and adhered to?
	Consider preparing corporate statements of commitment to biodiversity and company BAPs;	Q&M.3 Has your company developed biodiversity indicators that it reports against, specific to the habitats and species affected by its operations (in support of your company BAP/ Management plans and linked to priority species)?
	Implement working practices that reduce noise, dust and other impacts that can indirectly affect wildlife	Q&M.4 Do site management plans include the adjustment of working practices to accommodate species of nature conservation value? (noise, dust and other secondary impacts, as well as timing of site clearance, or other significant operations e.g. blasting)
Landscape features (S5 – hedges, dry stone walls, banks, ponds with specific target to stop loss of species rich hedgerows by 2005)		

DETR Quality of Life Counts indicators	Biodiversity and Minerals Guidance	Proposed Land Development Questions for Quarrying and Mining
Extent and Management of SSSIs (S6)		Q&M.5 Are the key decision makers with respect to site locations within your company aware of the legal status of the UK's Sites of Special Scientific Interest (SSSI)? <b>(Compliance)</b>
		Q&M.6 Is there a commitment within the company to avoid development and land use with an irreversible effect on biodiversity?
		Q&M.7 Has your company ceased submitting new applications to quarry or mine any SSSI and Natura 2000 sites?
		Q&M.8 Has your company a policy to avoid where possible submitting application to quarry or mine any locally designated sites?
		Q&M.9 Does your company report publicly on: SSSI condition survey results for each of the SSSIs under its control; on its habitat management targets?
Countryside quality (S7 – to be developed)		
Native species at risk (S9 – vertebrates – freshwater fish, marine reptiles, and amphibians, invertebrates, vascular plants and lower plants)		Q&M.10 Is there a company commitment for all projects longer than six weeks duration and on or within 1 mile of a SSSI to undertake Phase 1 Habitat Surveys, appropriately followed up by Phase 2 and 3 Habitat Surveys where key habitats or species are found? (The Surveys should be carried out by a trained ecologist.)
Amount of Secondary/recycled aggregates use compared with virgin aggregates (S14)		Q&M.11 Does your company have a strategy to promote and develop its secondary aggregates business such that the volume of sales of recycled materials is greater than the volume of primary materials by X (date)?

DETR Quality of Life Counts indicators	Biodiversity and Minerals Guidance	Proposed Land Development Questions for Quarrying and Mining
Land covered by restoration and after care conditions (S15)	Put in place management measures for restored sites that meet the long term needs of biodiversity conservation;	Q&M.12 Is there a company commitment to restore SSSIs to favourable condition status and manage all other sites in a way that contributes to BAP targets, Regionally Important Geological Sites (RIGS) network and are consistent with English Nature's regional Natural Area profiles?
	Plan habitat creation based on the 'habitat network' concept.	
	Implement the management needed to conserve valuable habitats or to restore degraded areas on non-operational land.	
	Encourage educational and recreational use of restored and non-operational sites (where this does not cause damage).	Q&M.13 Does your company encourage the educational and recreational use of sites under its control where this does not adversely impact on habitats?
	Share your experience in habitat creation, restoration and management.	
	Strategic environmental assessment can assist in the site selection process.	Q&M.14 When assessing development options does your company evaluate biodiversity impacts (e.g. in Strategic Environmental Assessments)?
	Treat environmental assessment as a process that parallels and links to scheme design.	
	Work in partnership with English Nature and others.	Q&M.15 Does your company work with local or regional BAP steering groups or Regionally Important Geological Sites groups, soliciting their views on its proposed activities which will affect the nature conservation interest of designated sites or BAP priority habitats or species?
	Encourage staff to attend training courses geared to biodiversity and minerals;	

DETR Quality of Life Counts indicators	Biodiversity and Minerals Guidance	Proposed Land Development Questions for Quarrying and Mining
	Contribute to research on biodiversity;	
		Q&M.16 Does your company have a programme to evaluate the biodiversity impacts of its supply chain, including products and services procured?

## Appendix A.5 Marine Fisheries

Table A.5.1 Review of company and sectoral biodiversity tests and initiatives relating to English Nature's Sea Fisheries Sector

Organisation	Reference	Tests/ Initiatives	Comments
<b>Sector tests</b>			
MAFF	<a href="http://www.maff.gov.uk">www.maff.gov.uk</a>	Advice on available fish stocks, in the form of Total Allowable Catches, is provided each year to Fisheries Ministers. This provides an indication of available resource and could be considered an indicator of the 'health' of stocks. The relative size (length) of fish could be considered as an indicator of the state of stocks - the decrease in relative size of fish in the North Sea matches the decline in fish stocks but it has yet to be identified as an 'official' indicator.	The MAFF Public Service Agreement has an objective to conserve fish stocks for future generations and secure a sustainable future for the sea fishing industry.
Food and Agriculture Organisation of the United Nations (FAO)	<i>Technical Guidelines for Responsible Fisheries No 8. Indicators for sustainable development of marine capture fisheries</i> February 2000 <a href="http://www.fao.org/fi/agreem/codecond/gdlines/guide8/guide8.asp">www.fao.org/fi/agreem/codecond/gdlines/guide8/guide8.asp</a>	The FAO guidelines present criteria that can be used to develop a Sustainable Development Reference System as well as criteria for indicators. <b>1. Ecological Criteria</b> ! <i>Catch structure</i> (exploitation rate, the size of fish, species composition and numbers, and the trophic level of each species in the catch) (shift of fishing pressure to less-preferred species or size classes e.g. of lower value preys). ! <i>Area and quality of important or critical habitats</i> Vegetated habitats (such as seagrasses, algal beds, mangroves and marshes), estuaries, coral reefs, offshore canyons and seamounts, and trawlable soft-bottom habitats are fundamental elements of marine ecosystems. Changes in the area of habitat, can be measured using habitat inventory tools, which would capture direct effects of fishing gear on non-target species and on habitats. ! <i>Fishing pressure – fished vs unfished areas.</i> Not all areas within any given fishing grounds are fished with equal intensity. Information is required on fishing locations, the type of gear used and the frequency of fishing activities.  <b>2. Economic criteria</b> – Profitability; Value of fishing entitlements or individual transferable quotas (ITQs);	

Organisation	Reference	Tests/ Initiatives	Comments
		<p>3. <b>Social Criteria</b> – Employment, Protein Consumption, Tradition and culture</p> <p>4. <b>Governance/institutional criteria</b> – Capacity to manage, Compliance regime, Transparency and participation</p>	
Maritime and Coast Guard Agency	<p><i>Business plan 2000/01</i>  <a href="http://www.mcagency.org.uk">www.mcagency.org.uk</a>  023 8032 9100</p>	<p>The Maritime and Coast Guard Agency's (MCA) business plan presents its role and activities relating to the environment. The MCA is responsible for minimising the risk of pollution of the marine environment from ships, and where pollution occurs, minimising the impact on UK interests. Their targets are designed to fulfil their environmental duty and include:</p> <ul style="list-style-type: none"> <li>! Preparation of a proposal for the Minister by Autumn 2000 on the most cost effective options for Emergency Towing Vessel Provision, following the Marine Environment High Risk Areas consultation.</li> <li>! Evaluate and report to Ministers on the effectiveness of the National Contingency Plan for Counter Pollution by March 2001</li> <li>! To evaluate the provision of UK port waste reception facilities and to report to Ministers on this by December 2000. (Forthcoming EU Directive 2002)</li> </ul> <p><b>The environment issues</b> mentioned in the business plan include:</p> <ul style="list-style-type: none"> <li>! oil slicks and chemical spills,</li> <li>! greenhouse gas emissions from merchant ships (2001 regulations),</li> <li>! transfer of non indigious species through ballast waster (international convention proposed for 2003), and</li> <li>! effect of anti-fouling paint on marine life (2001 IMO conference). (p7, 29, 48)</li> </ul> <p><b>Research programme 2000-1</b>, supported by the MCA, includes the following:  Ecological and Operational Parameters for the Use of Bioremediation;  Pilot project to establish nationally agreed guidelines and methodologies to enable the identification of Ship sourced marine litter (p70, 72)</p>	

Organisation	Reference	Tests/ Initiatives	Comments
Sea Fisheries Committees	<p>Individual committees are autonomous</p> <p>These notes are made from various phone conversations.</p>	<p>In 1994 Sea Fisheries Committees were made the competent relevant authority relating to fisheries. Their duties include balancing fisheries management with nature conservation (including consideration of by-catches). Their inshore fisheries remit goes out to 6 miles. The organisations they liaise with include:</p> <ul style="list-style-type: none"> <li>! The EA, who are responsible for coastal protection, coastal defence, discharge, fresh and migratory fisheries. (Their remit is up to 12 miles from the coast)</li> <li>! MAFF, who are responsible for EU policy implementation, and licensing for quotas and vessels. (Their remit is up to 200 miles from the coast)</li> </ul> <p>Some Sea Fisheries Committees are active in coastal zone management e.g. the Dorset Coastal Forum, others have developed code of practices relating to lobster trapping, orientation of nets and inter-tidal shell fishing (NW Sea Fisheries Committee). One Sea Fisheries Committee has promoted a permit system for vessels (in addition to MAFF licenses) that assists communication about local information, and can record catch returns for fisheries management data purposes.</p> <p>Other comments were that the existing system is set up in such a way that it is not in the fishing communities' short term interest to provide accurate records relating to catch numbers. For example, reported catch numbers are linked to fishing business' taxable income; quotas are exceeded because people are paid per weight of fish sold; and boats pay landing fees per catch brought in.</p>	<p>Overall, Sea Fisheries and Local Authorities (LA) who have responsibility for local biodiversity feel under-resourced, whilst having their work load increased, particularly with the increased focus on marine biodiversity.</p>

Organisation	Reference	Tests/ Initiatives	Comments
Marine Stewardship Council (MSC)	<p><i>Principles and Criteria for Sustainable Fishing 'Airlie House Draft'</i>            Oct 1998            www.msc.org            020 7350 4000</p>	<p>The MSC principles and criteria set the standard for independent certification to cover fisheries activities up to the point fish are landed. The certification is applicable to marine fisheries and invertebrates (shellfish, crusteans, and cephalopods). The principles with their related criteria include:</p> <p><b>P1 Maintenance and re-establishment of healthy populations of targets species</b></p> <ul style="list-style-type: none"> <li>! The fishery shall be conducted at catch levels that continually maintain the high productivity of the target population(s) and associated ecological community relative to its potential productivity.</li> <li>! Where the exploited populations are depleted, the fishery will be executed such that recovery and rebuilding is allowed to occur to a specified level consistent with the precautionary approach and the ability of the populations to produce long-term potential yields within a specified time frame.</li> <li>! Fishing is conducted in a manner that does not alter the age or genetic structure or sex composition to a degree that impairs reproductive capacity.</li> </ul> <p><b>P2 Maintenance of the integrity of ecosystems</b></p> <ul style="list-style-type: none"> <li>! The fishery is conducted in a way that maintains natural functional relationships among species and should not lead to trophic cascades or ecosystem state changes.</li> <li>! The fishery is conducted in a manner that does not threaten biological diversity at the genetic, species or population levels and avoids or minimises mortality of, or injuries to endangered, threatened or protected species.</li> <li>! Where exploited populations are depleted, the fishery will be executed such that recovery and rebuilding is allowed to occur to a specified level within specified time frames, consistent with the precautionary approach and considering the ability of the population to produce long-term potential yields.</li> </ul>	<p>Like most certification schemes there are inherent problems in applying one set of criteria to different sectors of the industry with different fishing techniques. Currently only Thames Herring and Alaskan Salmon have this global branding and it is likely to take up to five years for MSC labelled products to be available in most supermarkets.</p>

Organisation	Reference	Tests/ Initiatives	Comments
		<p><b>P3 Development and maintenance of effective fisheries <u>management systems</u></b>, taking into account all relevant biological technological economic social, environmental and commercial aspects.</p> <p>! The fishery shall not be conducted under a controversial unilateral exemption to an international agreement.</p> <p>The management system shall:</p> <p>! Demonstrate clear long-term objectives consistent with MSC Principles and Criteria and contain a consultative process that is transparent and involves all interested and affected parties so as to consider all relevant information, including local knowledge. The impact of fishery management decisions on all those who depend on the fishery for their livelihoods, including, but not confined to subsistence, artisanal, and fishing-dependent communities shall be addressed as part of this process;</p> <p>! be appropriate to the cultural context, scale and intensity of the fishery – reflecting specific objectives, incorporating operational criteria, containing procedures for implementation and a process for monitoring and evaluating performance and acting on findings;</p> <p>! observe the legal and customary rights and long term interests of people dependent on fishing for food and livelihood, in a manner consistent with ecological sustainability;</p> <p>! incorporate an appropriate mechanism for the resolution of disputes arising within the system; (outstanding disputes of substantial magnitude disqualify a fishery from certification)</p> <p>! provide economic and social incentives that contribute to sustainable fishing and shall not operate with subsidies that contribute to unsustainable fishing;</p> <p>! act in a timely and adaptive fashion on the basis of the best available information using a precautionary approach particularly when dealing with scientific uncertainty;</p> <p>! incorporate a research plan – appropriate to the scale and intensity of the fishery – that addresses the information needs of management and provides for the dissemination of research results to all interested parties in a timely fashion;</p> <p>! require that assessments of the biological status of the resource and</p>	

Organisation	Reference	Tests/ Initiatives	Comments
		<p>impacts of the fishery have been and are periodically conducted;</p> <p>! specify measures and strategies that demonstrably control the degree of exploitation of the resource, including, but not limited to:</p> <p>A setting catch levels that will maintain the target population and ecological community's high productivity relative to its potential productivity, and account for the non-target species (or size, age, sex) captured and landed in association with, or as a consequence of, fishing for target species;</p> <p>A identifying appropriate fishing methods that minimise adverse impacts on habitat, especially in critical or sensitive zones such as spawning and nursery areas;</p> <p>A providing for the recovery and rebuilding of depleted fish populations to specified levels within specified time frames;</p> <p>A mechanisms in place to limit or close fisheries when designated catch limits are reached;</p> <p>A establishing no-take zones where appropriate;</p> <p>! contains appropriate procedures for effective compliance, monitoring, control, surveillance and enforcement which ensure that established limits to exploitation are not exceeded and specifies corrective actions to be taken in the event that they are.</p> <p><b>Operational Criteria:</b> Fishing operation shall:</p> <p>! make use of fishing gear and practices designed to avoid the capture of non-target species (and non-target size, age, and/or sex of the target species); minimise mortality of this catch where it cannot be avoided, and reduce discards of what cannot be released alive;</p> <p>! implement appropriate fishing methods designed to minimise adverse impacts on habitat, especially in critical or sensitive zones such as spawning and nursery areas;</p> <p>! not use destructive fishing practices such as fishing with poisons or explosives;</p> <p>! minimise operational waste such as lost fishing gear, oil spills, on-</p>	

Organisation	Reference	Tests/ Initiatives	Comments
		<p>board spoilage of catch, etc.;</p> <ul style="list-style-type: none"> <li>! be conducted in compliance with the fishery management system and all legal and administrative requirements; and</li> <li>! assist and co-operate with management authorities in the collection of catch, discard, and other information of importance to effective management of the resources and the fishery.</li> </ul> <p><b>P4 Compliance with relevant local and national local laws and standards and international understandings and agreements.</b></p>	
David Symes and John Pope, commission for EN	<i>Ecosystem based approach to the Common Fisheries Policy</i>	<p>This ecosystem based assessment of the Common Fisheries Policy recommends biodiversity actions, financial measures and policy schemes.</p> <p><b>Practical action:</b></p> <ul style="list-style-type: none"> <li>! Ecosystem impact assessment provided alongside fisheries management advice for target species.</li> <li>! BAP (including general status management objectives and recommended actions for selected types of habitat and species at risk from human activities to be developed)</li> </ul> <p><b>Financial measures:</b></p> <ul style="list-style-type: none"> <li>! Resource payments for maintaining environmentally sensitive areas in favourable conditions– where the marine environment is sensitive to use by certain types of gear or fishing at certain times of year.</li> <li>! Market based schemes e.g. MSC.</li> </ul> <p><b>Policy schemes</b></p> <ul style="list-style-type: none"> <li>! Phase out fishing methods with unacceptable effects to non target species and marine habitats.</li> <li>! Introduce more selective fishing gear.</li> <li>! Systematic use of ground enclosures (long term no-take zones) to protect essential fish habitats and vulnerable populations of non-target species.</li> </ul>	

Organisation	Reference	Tests/ Initiatives	Comments
Institute for European Policy	'Towards a Fisheries Council Integration Strategy' Clare Coffery and David Baldock, Institute for European Policy March 2000	<p>This document reviews EU Fisheries policy and identifies activities to be included in forthcoming review of EU fisheries policy. The EU July 1999 <i>Fisheries Management and Nature Conservation in the Marine Environment</i> states the objectives the commission is committed to pursuing:</p> <ul style="list-style-type: none"> <li>! Reducing fishing pressure</li> <li>! Nature conservation measures</li> <li>! Integrated coastal zone management</li> <li>! Training, Information and consultation</li> <li>! Contribution from scientific research</li> <li>! International fisheries policy</li> </ul> <p>Two types of indicators are being developed by the commission in support of the Cardiff process: traditional state of the environment indicators and (environmental) integration indicators - to be able to answer the following questions:</p> <ul style="list-style-type: none"> <li>! Is there an improvement in the state of the environment?</li> <li>! Do key sector policies take the environment into account?</li> <li>! Can sustainable development be achieved?</li> </ul> <p>The list of possible topics for indicators under environment and impact headings include:</p> <ul style="list-style-type: none"> <li>! Environment: status/ trends of commercial stocks, status/ trends of non commercial species, status trends of marine habitats, ecosystem integrity, water quality in aquaculture zones</li> <li>! Impact: fish landed, by catches, discards, habitats affected by fishing techniques e.g. beam trawling, wild species affected by aqua culture (p17)</li> </ul>	

Organisation	Reference	Tests/ Initiatives	Comments
<b>Company Biodiversity Tests and Initiatives – listed under issue headings.</b>			
ASDA	www.asda.co.uk 0113 243 5435	Support of the Marine Stewardship Council.	
Sainburys	<i>J Sainsbury plc 1998 Environment Report</i> www.j-sainsbury.co.uk/environment	The following biodiversity activities are described in Sainsbury's environment report. <b>Sound Fishing</b> Sainsburys supports the development of the Marine Stewardship Council (MSC). Their 'Sourcing from the Wild' policy highlighted one product from a Shark species that is defined as a vulnerable species according to the World Conservation Union (IUCN) Red List. As a result that product line was alternatively sourced. (p10) <b>2000 targets and beyond:</b> for Supermarket <i>Own Brand Products and Suppliers</i> include support for MSC and its labelling of fish products and continued compliance with their 'Sourcing from the Wild Policy'.	
Unilever	<i>Unilever Environment Report 1998</i> 'Making Progress' www.unilever.com	The following extracts relate to Unilever's marine Biodiversity impacts. <b>Corporate Supply Chain</b> work includes: ! Sustainable fisheries – Marine Stewardship Council ! Clean Water Stewardship – Better Water Quality (p4 & 13) <b>Risk Assessment</b> of products includes assessments of biodegradation, bioaccumulation, and an evaluation of the impact on organisms in the water. (p9) <b>Targets: Fishing:</b> As a big buyer of frozen fish, Unilever has acted to protect their supply and is committed to sourcing all fish from certified sources by 2005. (p21) <b>Performance:</b> Chemical Oxygen Demand (COD) and Water Consumption are two of the 6 key indicators Unilever measures. (p26, p41-43).	

Organisation	Reference	Tests/ Initiatives	Comments
Scottish Power	<p data-bbox="423 245 869 339"> <i>Scottish Power 24 hour Environment report 1999-00</i>  <a href="http://www.scottishpower.com">www.scottishpower.com</a> </p>	<p data-bbox="882 245 1635 533"> The following extract is taken from Scottish Power's Environment Report.  <b>Southern Water</b> will relocate its proposed long sea outfall after it invested £375,000 in marine environment survey at Sandown Bay on the Isle of Wight. The South of the Isle of Wight is designated as South Wight Maritime candidate Special Area of Conservation for its reefs and vegetated sea cliffs. Southern Water's proposed long sea outfall as a result of the survey findings will be relocated 140 m to minimise impacts on sensitive reefs. (P32) </p>	

**Table A.5.2 Linkages between Proposed sector specific questions and existing tests and indicators – Sea Fisheries [Food Producers, Processing and Retail companies]**

DETR Quality of Life Counts Indicators	UN's Food and Agriculture Organisation's Criteria	Selected Marine Stewardship Council Criteria	Proposed Sea Fisheries Questions
Populations of wild birds' (H13 – all			
Dangerous substances in the water (M2)		Not use destructive fishing practices such as fishing with poisons or explosives	SF.1 Does your company have a procedure to avoid stocking fish products that have been sourced by a destructive fishing practice (poisons, explosives)? ( <b>Compliance</b> )
Discharges from the nuclear industry (M4)			
Concentration of persistent organic pollutants (M1)			SF.2 Does your company have a policy to influence its suppliers to avoid the discharge of persistent, bioaccumulating substances (oil, chemicals, and choice of anti-fouling paint) into the marine environment (water and air)?
Estuarine water quality, marine inputs of hazardous or radioactive substances, including metals, nutrients, and organic substances (R1)		Minimise operational waste such as lost fishing gear, oil spills, on-board spoilage of catch etc.	SF.3 Does your company reward its suppliers for safe waste disposal (of obsolete boats and gear, contaminated catch) and for minimising its operational waste (litter and by-catches of non target species).
Biodiversity in coastal/marine areas (R3)	Biodiversity (species)	The fishery is conducted in a manner that does not threaten biological diversity at the genetic, species or population levels and avoids or minimises mortality of, or injuries to endangered, threatened or protected species.	SF.4 Does your company have a target to stock at least X% MSC certified products in the MSC product ranges available?

DETR Quality of Life Counts Indicators	UN's Food and Agriculture Organisation's Criteria	Selected Marine Stewardship Council Criteria	Proposed Sea Fisheries Questions
	Indirect effects of fishing: trophic structure		
Fish stocks around the UK fished within safe limits (R4).	Relative abundance of targets species		SF.5 Has your company made a corporate statement to the effect that it supports the precautionary principle and it does/ will not stock fish from depleted or at risk sources?
	Exploitation Rate		
State of the World's Fisheries (R5)		The fishery is conducted in a way that maintains natural functional relationships among species and should not lead to trophic cascades or ecosystem state changes.	
Biodiversity action plans (S4 – for all 391 priority species and 45 priority habitats costed BAP are complete)			SF.6 Does your company encourage its suppliers to participate in the development and maintenance of local habitat management plans for key Nature Conservation sites such as: marine nature reserves (MNRs) Special Areas of Conservation (SACs), and sensitive marine areas, and with development of associated local codes of conduct to protect those sites?

DETR Quality of Life Counts Indicators	UN's Food and Agriculture Organisation's Criteria	Selected Marine Stewardship Council Criteria	Proposed Sea Fisheries Questions
			SF.7 Does your company encourage its coast based or marine dependent suppliers that are located near European conservation sites (Natura 2000 and Ramsar) to liaise with competent authorities to manage their operations for biodiversity protection and enhancement? (For example in the development of local Coastal Habitat Management Plans (ChaMPs)? See English Nature's <i>Coastal Habitat Management Plans: An interim guide to content and structure Appendix 1</i> for a list of sites likely to need a CHaMP)
Native species at risk (S9 – vertebrates – freshwater fish, marine reptiles, and amphibians, invertebrates, vascular plants and lower plants)	Direct effects of fishing gear on non-target species	Make use of fishing gear and practices designed to avoid the capture of non-target species (and non-target size, age, and/or sex of the target species); minimise mortality of this catch where it cannot be avoided, and reduce discards of what cannot be released alive;	SF.8 Does your company have a policy of encouraging its suppliers to source marine products from those fishing businesses using environmentally benign practices (timing of fishing, ballast water management, type of gear used, relevant to by- catches of biodiversity importance and to damage to the sea bed)?
	Direct effects of gear on habitats	Identify appropriate fishing methods	
		Fishing is conducted in a manner that does not alter the age or genetic structure or sex composition to a degree that impairs reproductive capacity.	SF.9 Does your company have a policy to avoid sourcing fish that has been caught by methods that affects the reproductive capacity of the relevant fish populations?

DETR Quality of Life Counts Indicators	UN's Food and Agriculture Organisation's Criteria	Selected Marine Stewardship Council Criteria	Proposed Sea Fisheries Questions
		Where the exploited populations are depleted, the fishery will be executed such that recovery and rebuilding is allowed to occur to a specified level consistent with the precautionary approach and the ability of the populations to produce long-term potential yields within a specified time frame.	SF.10 Does your company encourage its suppliers to establish voluntary no-take zones (either for targets species, or conservation purposes, or because designated catch limits are reached) and effectively police these zones?
	Area and quality of important or critical habitats Vegetated habitats (such as seagrasses, algal beds, mangroves and marshes), estuaries, coral reefs, offshore canyons and seamounts, and trawlable soft-bottom habitats are fundamental elements of marine ecosystems. Critical habitats such as seagrass or mangrove systems or reefs. Change in the area of habitat, can be measured using habitat inventory tools.	Mechanisms in place to limit or close fisheries when designated catch limits are reached  Establish no take zones	
	Catch structure (the size of fish, species composition and numbers, and the trophic level of each species in the catch) (shift of fishing pressure to less-preferred species or size classes e.g. of lower value preys).	Set catch levels that maintain the high productivity of the target population(s)	SF.11 Does your company support industry initiatives that monitor catch structure and location of catch, as well as assess the sustainability of catch trends?

DETR Quality of Life Counts Indicators	UN's Food and Agriculture Organisation's Criteria	Selected Marine Stewardship Council Criteria	Proposed Sea Fisheries Questions
	Fishing pressure – fished vs unfished areas Not all areas within any given fishing grounds are fished with equal intensity. Information is required on fishing locations, the type of gear used and the frequency of fishing activities.		
	Protein Consumption		SF.12 Does your company have a
	Employment	Provide economic and social incentives that contribute to sustainable fishing and shall not operate with unsustainable fishing subsidies.	SF.13. Does your company work with its suppliers to support fishing community initiated, non-fishing alternative business ventures?
	Value of fishing entitlements or individual transferable quotas (ITQs);		
	Compliance regime	The fishery shall not be conducted under a controversial unilateral exemption to an international agreement.	SF.14 Does your company have procedures to avoid stocking fish products that are sourced under controversial exemptions to international agreements? (either related to species - World Conservation Union (IUCN) Red List, or protected habitats)
		Conducted in compliance with fishery management system and all legal and administrative requirements.	
		Incorporate a research plan appropriate to the scale and intensity of the fishery that addresses the information needs and provides for dissemination. Assessments of the biological status of the resource and impacts of the fishery have been and are periodically conducted.	SF.15 Does your company support research that assists in informing and setting management plans for sustainable fishing with a view to enhancing biodiversity?

DETR Quality of Life Counts Indicators	UN's Food and Agriculture Organisation's Criteria	Selected Marine Stewardship Council Criteria	Proposed Sea Fisheries Questions
			SF.16 Does your company initiate or participate in cross sectoral (i.e. not private sector only) initiatives to protect and enhance wildlife sensitive areas?

## Appendix A.6 Transport

Table A.6.1 Review of company and sectoral biodiversity tests and initiatives relating to English Nature's Transport Sector

Organisation	Reference	Tests/ Initiatives	Comments
<b>Sector tests</b>			
European Union	<i>Manual on Strategic Environmental Assessment in the Framework of the Trans-European Transport Network (TEN)</i>	The manual supports the assessment process for development of TENs. Table 6 in the manual presents indicators for comparing alternatives. Under 'Impact on Biodiversity', the following are included: ! Land take and fragmentation of ecologically sensitive sites ! Distance from ecologically sensitive sites ! Risk of affecting key species populations	
DETR	<i>Transport 2010 The 10 Year Plan Summary</i> 2000 <a href="http://www.detr.gov.uk/trans2010/index.htm">www.detr.gov.uk/trans2010/index.htm</a>	Transport 2010 is long term strategy for delivering quicker, safer, more punctual and environmentally friendly transport system. Transport 2010 builds on the Integrated Transport White Paper. The 10 year plan aims to deliver specific improvements to rail passengers and freight; motorists and road haulage; the London rail, underground and river crossings; transport users in towns and cities, and for those in rural areas .	Biodiversity is not specifically mentioned however reducing climate changing gas emissions and using cleaner fuels and cleaner vehicles should lead to the stated aim of improving the environment.
DETR	<i>A New Deal for Trunk Roads in England: Guidance on the New Approach to Appraisal</i> July 1998	The DETR appraisal guidance provides detailed advice for assessing the impact of road scheme proposals on biodiversity and earth heritage.  For biodiversity proposals are to be assessed on two factors; nature conservation evaluation of the habitats, species, features affected and the ecological impact of the proposal on them. Guidance on appraisal is given.	

Organisation	Reference	Tests/ Initiatives	Comments
Highway Agency	<p>Highways Agency Business Plan 2000/2001 - putting customers first</p> <p><i>Environmental Strategy</i></p> <p><i>Design Manual for Roads and Bridges</i> www.highways.gov.uk 020 7921 4070</p>	<p>The Highways Agency's strategic aim is '<i>to contribute to sustainable development by maintaining, operating and improving the trunk road network in support of the Government's integrated transport and land use planning policies</i>'. This is supported with an objective to minimise the impact of the trunk road network on both the natural and built environment. The ministerial target is therefore to operate an environmentally friendly network. This target is defined as the 85% achievement of the annual targets across the four environment programme sub-indicators, which are biodiversity, landscape, noise, and air quality.</p> <p>The Highways Agency's Environmental Strategy develops the idea of performance indicators and the Government's ten year plan for transport investment contains an assessment of the Plan's impact on the key environmental indicators, presented in <i>A better quality of life</i>, the Government's sustainable development white paper.</p> <p>Design Manual for Roads and Bridges' Ecology and Nature Conservation section is comprehensive, including list of protected species, list of non-designated areas of potential nature conservation interest and an annex explaining the Ratcliffe Criteria (Fragility, Rarity, Size, Diversity, Potential value, Position within the ecological/geographical unit, Typicalness, Recorded history, Naturalness, &amp; Intrinsic appeal)</p> <p>The Highways Agency (HA) is developing its own BAP, and as part of its ministerial target the HA needs to manage 10% of the network to meet biodiversity objectives.</p>	<p>The Highways Agency guidance is comprehensive with regard to conservation, though lengthy.</p>

Organisation	Reference	Tests/ Initiatives	Comments
Office of the Rail Regulator	<i>Railway Operations and the Environment: Environmental Guidance</i> March 1996 020 7282 2000	<p>The Rail Regulator grants licenses to operating companies. The licenses are subject to environmental conditions. The extracts below are from the Regulator's Environmental guidance that relates to its role and to how companies address their environmental impacts.</p> <p>! <i>“Rail Regulator is to have regard to the effect of railway activities on the environment (as defined in Part 1 of Environmental Protection Act - air, water and land) in carrying out his functions under the Railways Act 1993.”</i> (p3)</p> <p>The regulator's Environmental guidance encourages companies to draw up an environmental policy, set objectives (that may relate to legal requirements, training/ briefings, liaison with other organisations), develop quantified plans to meet those objectives, management arrangements and monitoring.</p>	There is no specific comment on biodiversity, land take or other specific environmental issues.
Association of Train Operating Companies	020 7904 3000	The Association of Train Operating Companies has not undertaken initiatives relating to biodiversity.	
Hampshire County Council with DG XI funding with CAG	<i>Investigating Appropriate indicators for Biodiversity</i>	<p>Hampshire County Council is developing indicators in four areas to monitor the influence of local, national, and European policy influences. One of the four areas includes Transport, and the indicator for further development is presented below.</p> <p>a. Loss of local priority habitats due to secondary development pressure within a fixed radius of a Trans European Transport Network.</p>	

Organisation	Reference	Tests/ Initiatives	Comments
<b>Company Biodiversity Tests and Initiatives – listed under issue headings</b>			
Railtrack	Railtrack 1999/2000 Corporate Sustainability Report www.railtrack.co.uk	<p>Extracts from Railtrack’s Environment Report on its biodiversity impacts are presented below under appropriate subject headings.</p> <p><b>Vegetation Control</b></p> <p>Railtrack currently uses weedspray trains and handspray teams to suppress vegetation growth. In 2000 Railtrack will use Multi Purpose Vehicles with special weed spray modules, which will spray more of the network, earlier in the growing season. A unique agreement with Environment Agency has been drawn up to ensure Water Source Protection Areas, private water sources and SSSIs are not sprayed. (p27)</p>	
		<p><b>Conservation</b></p> <p>Track infrastructure crosses a number of legally protected sites. Railtrack has worked with English Nature (EN) to clarify ownership and boundaries of all Railtrack sites with SSSIs, which totals 330 SSSIs in UK. This site information is on Railtrack’s asset database that is distributed to contractors. To ensure correct management Railtrack has committed to agree site management statements with English Nature, Scottish Natural Heritage, and Countryside Council for Wales for 20% total sites.</p> <p><b>Conservation Collaboration</b></p> <p>Railtrack has had regular meetings with EN over the past 2 years to agree joint objectives, clarify ownership of protected sites and to commit to formal agreements on the management of protected sites. An operating agreement will be developed to progress management plans for all Railtrack SSSIs to improve their condition, and will link these plans to development of biodiversity action planning. It is hoped similar level of dialogue can be had with Countryside Council for Wales (CCW) and Scottish Natural Heritage (SNH). Local level liaison occurs with local SNH, EN or CCW teams over site -specific issues. (p29)</p>	154 of Railtrack’s SSSIs are in England.

Organisation	Reference	Tests/ Initiatives	Comments
		<p><b>Objectives:</b>  Railtrack's environmental aims include the intention to apply a consistent set of principles for the stewardship of protected heritage features and habitats under its care. (p43). 1999/2000 targets include:</p> <ul style="list-style-type: none"> <li>! To continue/ develop liaison meetings with EN, SNH, CCW and SEPA respectively. (p47)</li> <li>! To develop a risk assessment methodology for controlling pollution associated with surface water discharge. (p48)</li> </ul>	
Railtrack and English Nature	<i>Draft Memorandum of Understanding</i>	<p>The draft memorandum includes the following commitments to:</p> <ul style="list-style-type: none"> <li>! Develop improved communication to include prepublication consultations, and consultation in advance of planning applications that may have adverse impacts on SSSIs</li> <li>! Achieve the highest state of conservation management referred to as 'favourable condition' on all SSSIs under control of the company with agreed Site Management Statements and necessary actions underway by 2005.</li> <li>! Integrate UK Biodiversity Action Plan targets and Natural Area Objectives within all the company's policies, programmes, operations, and in the activities of their contractors.</li> </ul> <p>The memorandum includes a commitment to submit no new applications on land designated as a site of special scientific interest and to inform English Nature of proposed disposal of any land in or adjoining a SSSI (and where appropriate, offer the land for purchase by a nature conservation body).</p>	

Organisation	Reference	Tests/ Initiatives	Comments
Railtrack East Anglia	<p><i>Railtrack East Anglia Zone Biodiversity Action Plan 'Nature's Permanent Way'</i>  <a href="http://www.railtrack.co.uk/corporate/environment/index">www.railtrack.co.uk/corporate/environment/index</a></p>	<p>Railtrack's East Anglia Zone's Biodiversity Action Plan (BAP) was developed with the Local Wildlife Trusts. It mentions priority habitats in East Anglia, and priority species, as well as presenting a map of East Anglia's Natural Areas, as coded by English Nature. The BAP:</p> <ul style="list-style-type: none"> <li>! Provides template for use in other zones</li> <li>! Includes an evaluation of the ecological resource of the East Anglian Zone</li> <li>! Provides management guidelines for the enhancement and protection of priority habitats and species</li> <li>! Provides information on the distribution of habitats and species for use by trackside managers</li> <li>! Incorporates information from other local biodiversity action plans</li> </ul> <p>The BAP includes commits Railtrack to:</p> <ul style="list-style-type: none"> <li>! Enhance the trackside environment to increase local biodiversity and provide ecological links with more distant habitats</li> <li>! Integrate environment management with the safe efficient operation of railways, treating all legal obligations as the minimum standard</li> <li>! Work with other organisations at a local regional and national level to seek advice and ensure that any work undertaken on the trackside is co-ordinated with that in adjacent areas that are important for wildlife</li> </ul> <p>Railtrack East Anglian's aim is to produce management statements for all SSSI in conjunction with English Nature.</p>	<p>Production of Railtrack East Anglia's BAP, provides a good example of how companies can take a phased approach to improving biodiversity associated with their operations.</p>

Organisation	Reference	Tests/ Initiatives	Comments
Shell	<p><i>Shell Report 1999: People, Planet and Profits, An Act of Commitment</i>  <a href="http://www.shellreport.com">www.shellreport.com</a>  <a href="http://www.shell.com">www.shell.com</a></p>	<p>The biodiversity activities in Shell's report include the following statements:  <b>1999 Targets:</b>  ! All chemicals process water to be treated before discharge  ! Exploration and Production are to only discharge water effluent compatible with the receiving environment. In open sea oil in water discharges is to be less than 40mg/l, the current North Sea Standard.  ! No discharge of oil-based muds to sea  ! All major Shell operated installations are to be assessed for soil and ground water contamination. Migration detection control mechanisms are to be in place by end of 1999.  <b>Performance:</b>  Forestry planted area increased from 11,000 ha to 136,000 ha in 1999.</p>	<p>No specific mention of protected habitats or biodiversity.   However Shell has taken action subsequent to their report. See below.</p>

Organisation	Reference	Tests/ Initiatives	Comments
Shell	Email and conversation with Shell's Group Environmental Adviser September 2000	<p>In Dec 1999 Shell convened a dialogue with some conservation organisations (Conservation International, Kew, Natural History Museum, Smithsonian, WRI, WWF) to understand their expectation of what a large multinational should be doing on biodiversity. Three principal messages came out:</p> <ol style="list-style-type: none"> <li>1. Say what the company stands for - develop and publish a global policy (Shell policy is completed);</li> <li>2. Operate responsibly by minimising the companies operational impact, and</li> <li>3. Offset that impact by making a positive contribution to conservation efforts. (Initially a US \$2.8 million grant has been given from the Shell Foundation to the Smithsonian Institution to carry biodiversity baseline and monitoring studies in three operational areas to understand the ecosystems and the impact of Shell's operations.)</li> </ol> <p>Shell's actions to operate responsibly come in two strands:</p> <p>i) Setting up an 'Early Warning System' with key stakeholders for new projects in sensitive environments. This will be incorporated into Stakeholder Engagement Plans for all new projects.</p> <p>ii) Revising their Environmental Impact Assessment guidance to include biodiversity.</p>	
BP Amoco	<p><i>Case Studies in Business and Biodiversity:</i>  <i>BP Amoco Wytch Farm</i>            Earthwatch March 2000  <a href="http://www.uk.earthwatch.org">www.uk.earthwatch.org</a>            01865 318800</p>	<p>The case study presents BP's activities at Wytch Farm which includes an Area of Outstanding Natural Beauty (AONB). BP Amoco is developing an oil field within the AONB. The license to operate on the site is dependent on establishing a 26 hectare conservation area. Other key features of the project include consultation, monitoring all aspects of wildlife on the site (survey information is shared with local groups), and contractor inductions that address the site's environmental sensitivities including biodiversity.</p>	

Organisation	Reference	Tests/ Initiatives	Comments
London Luton Airport	<p><i>Case Studies in Business and Biodiversity: London Luton Airport</i>  Earthwatch March 2000  www.uk.earthwatch.org  01865 318800</p>	<p>The case study presents London Luton Airports Biodiversity activities. Key features of Luton Airport's biodiversity work include:</p> <ul style="list-style-type: none"> <li>! surveying and monitoring (which has found significant numbers of indicator species, such as brown hares, skylarks and bee orchids, that feed into national targets);</li> <li>! integrating biodiversity into Environmental Management System ISO 14001;</li> <li>! complementary projects to sponsor barn owl nesting boxes to mitigate recorded casualties of barn owls on the airfield; and</li> <li>! liaison with Bedford and Luton Wildlife Working Group in relation to the local BAP.</li> </ul>	
BAA	<p><i>Annual Report 1999/2000</i> combines annual report and sustainable development report.  www.baa.co.uk</p>	<p>BAA combined report presents BAA's sustainable development impacts, which includes air quality, water environment, climate change, product stewardship, procurement, retail, sustainable design and construction and property management. The following are extracts from it.</p> <ul style="list-style-type: none"> <li>! BAA's main impacts on the water environment are: contamination by de-icing products, herbicide use on aircraft pavement, effluent from aircraft and vehicle maintenance, sewage from terminals and offices, and consumption of water during operations and construction.</li> <li>! For biodiversity, BAA undertakes ecological management and landscaping and has restorative land use policies.</li> <li>! BAA states that the main environmental issues for the aviation business associated with climate change are derived from the consumption of aircraft fuel, energy used in airport buildings and fuel used in vehicles and surface transport.</li> </ul>	

**Table A.6.2 Linkages between Proposed sector specific questions and existing tests and indicators –Transport [Transport – covering companies involved in linear transport as well as those that own or manage transport sites e.g. stations and depots]**

DETR Quality of Life Counts Indicators	Trans European Transport Network's Guidance	Proposed Transport Questions
Days when air pollution is moderate or higher (H10)		T.1 Has your company evaluated the biodiversity impacts associated with its air quality emissions?
Carbon Dioxide emissions by end user (N3)		
Access to local green space (K7)		T.2 Does your company support educational or recreational projects which protect and enhance biodiversity; recreate or allow access to local green space; and enhance the public's awareness of the biodiversity associated with your operations?
Dangerous substances in the water (M2).		T.3 Does your company have a specific policy, which relates to the biodiversity opportunities for water storage, and drainage options?
		T.4 Does your company have a management system to prevent routine or accidental discharges to water, and where these may occur to prevent any degradation of water quality?
net loss of soils to development (S1)	Land take (km2)	
Area of woodland in the UK (S10)		
Land covered by restoration and after care conditions (S15)		T.5 Does your company have a policy to consult with appropriate organisations regarding weed control and then draw up appropriate management plans? E.g. relating to the timing of operations, spray chemicals used, special areas of protection (SSSIs and Water Protection Areas)
Biodiversity action plans (S4 – for all 391 priority species and 45 priority habitats costed BAP are complete)		T.6 Does your company report publicly on UK BAP species and habitats affected by its operations?
Native species at risk (S9 – vertebrates – freshwater fish, marine reptiles, and amphibians, invertebrates, vascular plants and lower plants)	Risk of affecting key species	

DETR Quality of Life Counts Indicators	Trans European Transport Network's Guidance	Proposed Transport Questions
Landscape features (S5 – hedges, dry stone walls, banks, ponds with specific target to stop loss of species rich hedgerows by 2005)		T.7 Is there a company commitment to provide appropriate habitats on land in order to create wildlife corridors (ecological links between fragmented habitats), as part of a BAP for an area? (For example, where developments are linear are adjacent verges managed to provide such biodiversity linkages?)
Extent and management of SSSIs (S6)		T.8 Does your company have a policy to avoid irreversible damage to biodiversity, and so avoid development or land use change that affects important wildlife sites?
Countryside quality (S7 – to be developed)		
	Fragmentation of ecologically sensitive sites	
	distance from ecologically sensitive sites	

### Additional Questions

- T.9 Does your company have a policy to minimise harm to biodiversity through the disposal of construction spoil, and contaminated dredgings?
- T.10 Does your company have a programme to evaluate the biodiversity effects of its supply chain?
- T.11 Does your company have strategic links to Biodiversity organisations, who are consulted in formative stages (pre-planning application) of development plans?
- T.12 Are the key operational and planning decision makers within your company aware of the legal status of the UK's Sites of Special Scientific Interest (SSSI)? (**Compliance**)
- T.13 Does your company plant native species to the local area in its landscaping operations? If yes, do the species contribute to BAP targets e.g. for woodland?