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Consultation on the proposed EU Soil Framework Directive and initial Regulatory Impact Assessment

July 2007

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European Commission Soils Policy webpage (including details of the proposed Soil Framework Directive and their Impact Assessment):

<http://ec.europa.eu/environment/soil/>

Defra Soils Policy webpage: www.defra.gov.uk/environment/land/soil/

Foreword

Protection of our soil resource is an important part of the delivery of a sustainable future for the UK, the European Union and the wider international community. Our soils deliver a range of vital functions for human activities including food and fibre production, support for ecosystems and habitats, storage of carbon, stabilisation of contaminants, and filtration of water.

As part of the 6th Environment Action Plan agreed in 2002 by the European Council and the European Parliament, the European Commission was asked to produce a Thematic Strategy for the protection of soil as one of a series of measures aimed at addressing issues posed by climate change and other natural and man-made risks to the environment as a whole.

After much further preparatory work and a Europe-wide consultation with a range of expert and stakeholder interests, the Commission finally adopted such a Strategy in September 2006, accompanied by proposal for a new EU Soil Framework Directive.

In summary, the Strategy concludes that soil is being degraded by a host of human activities, such as urban development, inappropriate agricultural and forestry practices, industrial activities, and tourism. The proposed Soil Framework Directive accordingly seeks to ensure the protection and sustainable use of soil based on preventing further soil degradation and preserving its functions, and restoring degraded soils.

The main elements of the proposed Directive focus on requiring Member States to:

- assess the impacts of policies likely to exacerbate or reduce soil degradation processes during the development of these policies;
- take precautionary measures to protect soil functions;
- take appropriate measures to limit sealing - the permanent covering of the soil surface with an impermeable material;
- identify risk areas with regard to soil erosion, loss of soil organic matter, compaction, salinisation and landslides and draw up a programme of measures to address these risks;
- take appropriate action to prevent soil contamination; establish a national inventory of contaminated sites; and remediate all contaminated sites using mechanisms to fund remediation;
- raise awareness of the importance of soils.

Many of these issues are already the subject of existing UK (and in some cases EU) legislation and it is this context that we present this consultation paper. We are keen to learn from policy managers, operational bodies (including local authorities) land managers and users about how they see the proposals in the Directive meeting the needs of soil protection in the UK. It is also important to find out your views on the costs and benefits of the measures if the Directive were adopted and implemented. We would also like your suggestions as to how the measures could be improved, for example, to ensure they focus on real risks and that they require policy measures proportionate to those risks. This information will be valuable input to our negotiations on the proposed Directive.

We look forward to receiving your views.

A handwritten signature in black ink, appearing to read 'Jonathan Shaw'.

Jonathan Shaw, Minister for Marine, Landscape & Rural Affairs and Minister for the South East

A stylized handwritten signature in black ink, appearing to read 'Michael Russell'.

Michael Russell MSP, Minister for Environment

A handwritten signature in black ink, appearing to read 'Jane Davidson'.

Jane Davidson, Minister for Environment, Sustainability & Housing

Executive summary

The Thematic Strategy for Soil Protection, adopted by the European Commission in September 2006, contains a proposal for a Soil Framework Directive.

This consultation, issued jointly by Defra, the Scottish Executive and the Welsh Assembly Government, is designed to assist us in developing a robust negotiating position to enable us to engage effectively in negotiations on the proposal. It is important that our negotiating line is well-informed and based on sound evidence. Hence we are seeking your views on the scope of the proposed Directive, as well as on the costs and benefits associated with it.

The consultation contains seven distinct parts:

Part 1, Introduction, outlines the background to the Commission's proposal, as well as the rationale for the proposed Directive, alongside the UK's initial Impact Assessment.

Part 2, Initial questions, sets out key general questions which will inform our analysis of the need for and benefits of the proposed Directive. It would be helpful if we could have answers to all of these initial questions.

Parts 3-7 each focus on a single Chapter of the draft Directive:

Part 3, Articles 1-5, general provisions

Part 4, Articles 6-8, risk prevention, mitigation and restoration

Part 5, Articles 9-14, soil contamination

Part 6, Articles 15-17, awareness raising, reporting and exchange of information

Part 7, Articles 18-26, final provisions

In each of these Parts of the consultation document the key Articles within the relevant Chapter of the draft Directive are outlined and the issues we have identified in relation to these, to date, are summarised. Where relevant our preliminary analysis of costs and benefits associated with each proposed Article is given. Any current EC or domestic legislation which is already in place to address related issues is described to assist consultees consider how this additional legislation fits in with existing legislation. This is followed by a series of questions relating to the Article under consideration. Not all questions will be of interest to all recipients. We are not expecting everyone to attempt to answer them all.

Responses to the consultation will assist in the formulation of our negotiating position. We will rely on this position to shape the proposed Directive through discussions at European level and through negotiations and lobbying of other Member States, the Parliament and the Commission. However, as we are already involved in such negotiations, we are taking into account responses to Stakeholder Workshops held in London, Edinburgh and Cardiff and consideration by officials as to how the proposed Directive fits in with UK policy on better regulation and other general principles. **It would be helpful for us to receive as many responses as possible before the closing date for this consultation, 19 October 2007. This will assist us to process replies and help develop our negotiating position as things develop in the autumn.**

Part 1 – Introduction

The proposed Directive and timeline

1.1 The European Commission adopted the Thematic Strategy for Soil Protection, including proposals for a Framework Directive for Soils, in September 2006¹. The proposed Directive lays down a framework for the protection and sustainable use of soil based on the principles of integration of soil issues into other policies, preservation of soil functions within the context of sustainable use, prevention of threats to soil and mitigation of their effects, as well as restoration of degraded soils to a level of functionality consistent at least with the current and approved future use of the land.

1.2 The key elements of the Directive as proposed by the Commission are:

- i. A requirement for central and local Government to consider the impacts that new policies will have on soils whilst they are being developed (Article 3);
- ii. A duty on all land-users to prevent or minimise harm to soils (Article 4);
- iii. A requirement to limit or mitigate the effects of soil sealing (the covering of the soil surface with an impermeable material such as concrete) (Article 5);
- iv. A requirement to reduce the risks relating to soil erosion, organic matter decline, compaction, salinisation, and landslides, by identifying risk areas, and deciding on a programme of measures to address these risks (Articles 6-8);
- v. A requirement to prevent soil contamination, compile an inventory of contaminated sites and remediate those sites listed on the inventory (Articles 9-14); and
- vi. A requirement to raise awareness of soils issues, report to the Commission, and exchange information (Articles 15-17).

1.3 The proposed Directive is now being considered by the Council of Ministers and the European Parliament under the co-decision procedure. A first read-through of the proposal has been undertaken at Council Working Groups and the Portuguese Presidency is aiming to produce a Presidency compromise text over the summer. The European Parliament's Environment Committee has held an initial exchange of views on the dossier and is preparing a report for plenary discussion in the autumn.

Sectors affected

1.4 As drafted the Directive will impact upon a wide range of people and organisations in the UK, including farmers, property developers, the construction industry, individual land owners, and any industry which affects the state of soils. Local Authorities and other enforcement bodies may also have to accept new regulatory

¹ <http://ec.europa.eu/environment/soil/>

responsibilities and approaches in order to implement the proposed Directive, with the risk that this will lead to significant new burdens on them.

Purpose of consultation

1.5 This consultation, issued jointly by Defra, the Scottish Executive and the Welsh Assembly Government, is designed to assist us in developing a robust negotiating position to enable us to engage effectively in negotiations. It is important that our negotiating line is well-informed and based on sound evidence. Hence, we are seeking your views on the scope of the proposed Directive and its approach, as well as on the benefits that the proposed Directive may deliver and the likely costs of implementing it.

1.6 Any references in this paper to “Great Britain” should be taken as referring to England, Scotland and Wales. References to “the Government” should be taken to read the UK Government, the Scottish Executive and the Welsh Assembly Government.

1.7 Although this consultation is not being carried out in Northern Ireland anyone wishing to make any particular comments in relation to Northern Ireland issues should do so to Norman Simmons: norman.simmons@doeni.gov.uk.

1.8 The UK has prepared an initial Regulatory Impact Assessment which sets out our preliminary assessment of the costs and benefits related to the Commission’s proposal. We would welcome your views on this to assist our development of a more detailed Impact Assessment.

1.9 The Government also invite you to comment on the implications of the various provisions contained within the proposed Directive, as well as on possible amendments to the proposed Directive which we may need to seek to ensure our interests are looked after.

1.10 Your comments will assist us in developing our position and continue our work to look at costs and benefits of the proposed Directive through Impact Assessment. Ultimately, any agreed Directive will of course reflect positions taken by the 27 Member States, the European Parliament and the Commission. We will of course seek actively to influence negotiations and discussion of the proposed Directive at European level, including lobbying other Member States, the Parliament and the Commission.

1.11 Stakeholder engagement to date has included three separate workshops (held in London on 17 May, Edinburgh on 8 June and Cardiff on 2 July) to obtain preliminary stakeholder views on the proposed Directive; feedback from these events have fed into our developing negotiating line and this consultation². We will continue to keep stakeholders engaged as we proceed with negotiations.

² A report from the London workshop is available: www.defra.gov.uk/environment/land/soil/europe/

Background to the proposed Directive

1.12 Member States, agree that action to protect soils is necessary, and have made Community level commitments to this effect. The 6th Environmental Action Programme established a Community objective to protect soils against erosion and pollution. The Sustainable Development Strategy, published in 2001, noted that soil loss and declining fertility are eroding the viability of agricultural land. We recognise the importance of protecting our soil resources as soil is a fundamental and ultimately finite natural resource which has many functions.

1.13 In 2002, the Commission's Communication 'Towards a Thematic Strategy for Soil Protection' [COM (2002) 179]³ was accepted by Member States. Following publication of this Communication, several expert Working Groups were established to discuss how best to address soil issues. The outcomes from these discussions were fed into the Commission's 'Thematic Strategy for Soil Protection' [COM (2006) 231]⁴, which was adopted by the Commission on 22 September 2006. This included proposals for a Directive "establishing a framework for the protection of soil and amending Directive 2004/35/EC" [COM (2006) 232]⁵.

1.14 If the proposed Soil Framework Directive is adopted, it will be the first soil specific legislation to apply across the whole of Europe. However, there is already a wide range of European legal instruments which, though not specifically designed to address soil issues, provides some protection against the risks of soil degradation and contamination. Relevant Directives/Regulations include:

- the Water Framework Directive which, amongst other things, addresses erosion and agriculture related risks to water; as well as existing soil contamination which detracts from or prejudices "good status" of a water body. These risks will need to be tackled by Member States in order to meet the Directive obligations;
- the Waste Framework Directive, the Air Quality Directives and others which address the prevention of pollution;
- the Strategic Environmental Assessment Directive which requires the integration of environmental considerations into policy making;
- the Environmental Impact Assessment Directive which requires an assessment of the environmental impacts (including on soils) of certain projects to be conducted, and the introduction of a consents regime to give the go ahead to projects as appropriate;
- the Integrated Pollution Prevention Control Directive which provides a licensing system for current activities which have the potential to cause pollution, and include clean-up mechanisms for new contamination;

³ COM(2002)179 - http://eur-lex.europa.eu/LexUriServ/site/en/com/2002/com2002_0179en01.pdf

⁴ COM(2006)231 final - http://ec.europa.eu/environment/soil/pdf/com_2006_0231_en.pdf

⁵ COM (2006)232 final - http://ec.europa.eu/environment/soil/pdf/com_2006_0232_en.pdf

- the Environmental Liability Directive which includes measures to secure remediation of new environmental damage, and provides a further incentive for the prevention of contamination by operators of potentially polluting activities;
- the Habitats Directive which requires Member States to take measures to maintain or restore natural habitats and wild species at a favourable conservation status; and
- CAP Single Payment Regulations and the Rural Development Regulation – the former require farmers to comply with a baseline set of environmental/agricultural standards in order to receive payments and the latter provides for payments for improvement to agricultural land.

These are explained in more detail in the relevant parts of this document.

1.15 The range of existing legislation raises the issue as to whether this proposed Directive is necessary and if it is what it should cover and the provisions required to achieve the relevant outcomes.

The Commission's Rationale for the proposed Directive

1.16 The Commission's Communication and Impact Assessment⁶ set out its justification of its proposals. This justification is summarised below. Note that we are not satisfied as to the adequacy of this impact assessment.

1.17 In terms of the state of soils, the Commission's key conclusions are that:

- 115 million hectares, 12% of Europe's total land area, are subject to soil erosion and 42 million hectares are affected by wind erosion.
- 45% of European soils have low organic matter content, principally in Southern Europe but also in areas of France, the UK and Germany.
- 3.5million hectares are potentially contaminated in the EU-25.

1.18 In terms of the overall costs of soil degradation, the Commission estimates this to be up to €38 billion (£26 billion) per annum for the EU-25. This is costed as follows:

- Erosion - €0.7-14 billion (£0.5-9.4 billion) p.a. However this does not take into account the impact of recently introduced EU-wide measures.
- Declining organic matter - €3.4-5.6 billion (£2.3-3.8 billion) p.a.
- Compaction – no monetary figure available; yield reductions of between 13%-35% per hectare.

⁶ SEC (2006)620 - http://ec.europa.eu/environment/soil/pdf/sec_2006_620_en.pdf

- Salinisation – this is stated to affect 3.8 million hectares in EU-25 but the issue appears to relate to only a few Member States. The Commission estimates the costs to be €158-321 million (£106-216 million) p.a.
- Landslides – up to €1.2 billion (£0.7 billion) per event.
- Contamination costs – €2.4-17.3 billion (£1.6-11.6 billion) p.a. EU-wide.
- Sealing – no costs are given. Reference is made to the increase in soil surface covered up by impermeable surfaces including a 6% increase in sealed areas between 1990 and 2000 in the EU-15. It refers to risks relating to increased flood risks; disruption of gas, water, electricity fluxes; reduced groundwater recharge; increased water pollution; loss in soil and terrestrial biodiversity.

1.19 The Impact Assessment makes no quantitative assessment of the benefits of the proposed actions in the draft Soil Framework Directive or of many of the costs which those actions themselves would entail. Some costs are included such as:

- Preparing an inventory of contaminated land, which is estimated to be €51 million (£34 million) p.a. for 5 years across the EU (calculated by assuming costs on average of €3100 (£2085) per site) for an initial survey and €241 million (£162 million) p.a. for 25 years for full site surveys. However, the UK anticipates that the actual costs to the EU of populating such an inventory according to the methodology prescribed by the Commission will be significantly higher than this;
- Mapping of risk areas - €2million (£1.4 million) p.a. for 50 years across the EU-25.

1.20 The Commission's Impact Assessment does not include a detailed comparative cost/benefit analysis of the policy options (e.g. the Water Framework Directive, CAP cross-compliance, etc) for achieving reductions in the various forms of soil degradation. In addition, it does not take into account the benefits from recently introduced EU-wide measures or domestic regimes for addressing these issues. The UK has raised its concerns about the inadequacy of this Impact Assessment and the underestimates of particular costs at several EU-level meetings.

1.21 The Commission concludes that the proposed Soil Framework Directive represents the best approach considering a perceived need to balance flexibility of implementation at Member State level with a common and systematic process of identifying issues and risks. It is explicitly stated that costs will be incurred before benefits can be realised, and these are likely to be distributed unevenly between Member States.

1.22 However, there are significant concerns regarding the Commission's justification for specific Community legislation on soils, especially given the broad portfolio of existing EC legislation such as the Integrated Pollution Prevention Control, Water Framework, Strategic Environmental Assessment, and Environmental Liability Directives, plus the Common Agricultural Policy, and at the national level, planning

legislation and policy frameworks, which already largely address the threats to soils outlined in the proposals.

UK initial Regulatory Impact Assessment

1.23 Soil is a fundamental and ultimately finite natural resource which has many functions. It is therefore vital that our soil resources are protected. By carrying out an initial Regulatory Impact Assessment (RIA) we have sought to assess whether the Directive in its current form will assist in achieving this objective and what the costs and benefits of the proposed Directive will be.

1.24 The UK's initial Regulatory Impact Assessment⁷ sets out the approximate costs and benefits of implementing the Directive as it is currently drafted, and also the costs and benefits associated with other options, including a 'do nothing' option, possible amendments to the current proposals, and the alternative of a non-binding approach based on voluntary uptake by Member States of the recommendations of the Thematic Strategy.

1.25 The UK believes itself to be progressing well in addressing soil issues. We already have an extensive range of measures in place, many of which implement existing EC legislation, which address the threats to the UK's soils, including the threats outlined in the proposed Soil Framework Directive.

1.26 Our preliminary conclusion, having carried out this initial RIA, is that additional EC legislation is most probably not required to enable the UK to take appropriate measures to address risks to its soils. In addition, from a UK point of view, the current proposals risk being overly prescriptive, disproportionate and expensive to implement. Significant changes in the proposed Directive would be needed to deliver positive net benefits at the national level.

1.27 We have particularly strong concerns about the provisions on soil contamination which are prescriptive, especially as to drawing up an inventory, and have serious costs consequences. The UK is also concerned about the impact of the provisions on soil sealing which could affect development at all levels, and, especially through overloading the system, compromise the ability of the planning system to help deliver sustainable development that the country requires.

1.28 A Directive may, however, be of assistance to some other Member States in protecting their soils, especially those facing issues of desertification and salinisation. The Commission's justification for such legislation is based on ensuring a level playing field and addressing transboundary effects. However, the UK's initial view is that the impact on our competitiveness from current levels of protection to be limited and transboundary effects to also be limited. There are however some transboundary issues such as carbon storage in our soils, as well as filtration of our water through soils. We would appreciate your views on the possible benefits of a Directive in terms of dealing with transboundary issues as well as in relation to ensuring a more level playing field (see initial questions at Part 2).

⁷ www.defra.gov.uk/corporate/consult/soil-directive/

1.29 We will provide a further quantitative analysis of the costs and benefits of the proposed Directive in the next iteration of the Regulatory Impact Assessment, drawing on evidence provided in this consultation.

Outline of the consultation document

1.30 Part 2 of the consultation document sets out some **initial questions** about the need for a Directive and the principles underlying the present proposals.

1.31 Parts 3-7 contain a series of more **detailed questions** relating to the individual Chapter of the proposals as tabled. All questions are also outlined in Annex A.

1.32 **Not all questions will be of interest to all recipients.** We are **not** expecting everyone to attempt to answer them all. Similarly if there are issues of concern which are not covered either in the general questions or the more specific sections, please feel free to provide additional comments in your response – though it would help if you separate these from answers to the questions as asked.

1.33 To assist in your consideration we have included the text of Key Articles in full in each Chapter with an explanation of the issues which we believe arise.

1.34 Where relevant, our preliminary analysis of the costs and benefits associated with each proposed Article is summarised, and any current European or domestic legislation which is already in place to address related issues is described.

Part 2 – Initial Questions

2.1 In addition to the specific questions included throughout the consultation document, we would like your views on the overarching questions set out below.

2.2 You will probably find it helpful to read the explanation of the content of the proposed Directive and our explanation of existing EC and domestic legislation which is in the following sections before you do so. Where possible please provide explanation and examples to support comments made.

2.3 Questions:

- **A. What are your views on the current level of soil protection measures in the UK considering the risks and threats faced by soils, including those identified by the Commission?**
- **B. If you consider these measures to be inadequate, do you believe that any gaps are best dealt with on a common basis across the EU, for example to avoid distortion in competition, or better dealt with at a domestic level?**
- **C. What, if any, gaps exist in terms of addressing soil protection at an EU level in particular the risks identified by the Commission?**
- **D. Does the solution to these gaps lie in amending existing EU Directives, or in introducing a new overarching framework for soil protection?**
- **E. Are there any existing EU provisions that give some protection to soils which, in your view, do not work or which could do with simplification?**
- **F. In terms of the risks and threats identified by the Commission, how urgent are these problems? Is there sufficient evidence to tackle them now?**
- **G. Who should bear the costs involved in any new obligations? Should we follow a polluter pays approach, a market-based system where, for example, a property developer pays the cost of remediation, or should these costs fall to taxpayers?**

2.4 This consultation closes on **19 October 2007** but we would welcome early comments if possible in view of the Portuguese Presidency's intention to discuss this proposal at the October Environment Council (30 October 2007).

Part 3 – Chapter I: Articles 1-5 – General Provisions

Article 1 – Subject-matter and scope

Article 1 – Subject-matter and scope

1. This Directive establishes a framework for the protection of soil and the preservation of the capacity of soil to perform any of the following environmental, economic, social and cultural functions:

- a) biomass production, including in agriculture and forestry;
- b) storing, filtering and transforming nutrients, substances and water;
- c) biodiversity pool, such as habitats, species and genes;
- d) physical and cultural environment for humans and human activities;
- e) source of raw materials;
- f) acting as carbon pool;
- g) archive of geological and archaeological heritage.

To that end, it lays down measures for the prevention of soil degradation processes, both occurring naturally and caused by a wide range of human activities, which undermine the capacity of a soil to perform those functions. Such measures include the mitigation of the effects of those processes, and the restoration and remediation of degraded soils to a level of functionality consistent at least with the current and approved future use.

2. This Directive shall apply to soil forming the top layer of the earth's crust situated between the bedrock and the surface, excluding groundwater as defined in Article 2(2) of Directive 2000/60/EC of the European Parliament and of the Council.

Content

3.1 This is an important Article as it determines the scope of the proposed Directive and how other provisions are interpreted, even though it does not impose any express obligations itself.

Issues raised

3.2 This proposed Article places emphasis on protecting soil, preserving its capacity to perform soil functions, and preventing certain degradation processes. This raises an issue as to whether the needs of the current generation to make use of soil in the present are given adequate recognition.

3.3 No distinction is made between soil degradation processes that are caused naturally and those caused by human activities. The implication that “natural processes” need to be addressed raises issues as to the extent to which this must and can be done. Our initial view is that Member States will, under the proposed Directive, have some discretion as to the extent to which such processes need to be controlled when drawing up their programmes of measures, but we remain concerned about the way in which the wording could be interpreted possibly requiring us to address such processes when we consider this detrimental or unnecessary.

3.4 The definition of soil leaves it unclear whether riverbanks, riverbed sediment, lake sediment and coastal areas are covered.

Questions

- **Q.1 What are your views on the scope of the proposed Directive, in particular the definition of soil and the soil functions which are listed?**
- **Q.2 Do you think the proposed Directive seeks the right level of protection for our soils?**
- **Q.3 Do you think it is important for Member States to address natural degradation as well as that caused by human activity?**

Article 2 - Definitions

Article 2 – Definitions

For the purposes of this Directive, the following definitions shall apply:

- 1) 'sealing' means the permanent covering of the soil surface with an impermeable material;
- 2) 'dangerous substances' means substances or preparations within the meaning of Council Directive 67/548/EC and Directive 1999/45/EC of the European Parliament and of the Council.

Content

3.5 This proposed Article lays down definitions of:

- sealing, relevant to the proposed Article 5; and
- dangerous substances (referring to a previous definition under Directives 67/548/EC and 1999/45/EC on the approximation of laws, regulations and administrative provisions relating to the classification, packaging and labeling of dangerous substances), relevant to the proposed Articles 9-14 on soil contamination.

Issues raised

3.6 The definition of sealing relates to the permanent covering of the soil surface, it is unclear what "permanent" means and there could be a time limiting issue to this. Additionally, this definition does not appear to cover sub-surface sealing.

Questions

- **Q.4 Do you have any comments on these definitions? Do you think it is important to clarify any other terms in the proposed Directive?**

Article 3 – Integration

Article 3 – Integration

In the development of sectoral policies likely to exacerbate or reduce soil degradation processes, Member States shall identify, describe and assess the impacts of such policies on these processes, in particular in the areas of regional and urban spatial planning, transport, energy, agriculture, rural development, forestry, raw material extraction, trade and industry, product policy, tourism, climate change, environment, nature and landscape.

Member States shall make public those findings.

Existing EC/domestic legislation

3.7 The Strategic Environmental Assessment (SEA) Directive⁸, requires an assessment of the environmental impacts (including on soil) to be conducted, when drawing up certain plans and programmes which are likely to have significant effects on the environment⁹. Requirements under the proposed Article 3 broadly replicate this but also mention some sectors not specifically mentioned in the SEA Directive, including raw material extraction and climate change. As this proposal sets out a non-exhaustive list of sectors, the effects of all policies which may have an impact on soil will need to be considered and a decision made as to whether an assessment is needed.

3.8 The SEA Directive has been implemented in the UK in various ways including through the sustainability appraisal of planning strategies and local plans. Sustainability appraisal ensures that choices made during the plan making processes at regional and local level are based on clear evidence of their economic impacts, as well as those on society and the environment, which includes consideration of the implications for soils.

Issues raised

3.9 There is an overlap with the SEA Directive, which will mean two overlapping regimes that may have to be implemented slightly differently. This could give rise to complicated, potentially inconsistent regulatory approaches to assessing impacts of policies – where some policies will only be scrutinised for their effect on soils (unlike the

⁸ Directive 2001/42/EC

<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32001L0042:EN:HTML>

⁹ An environmental assessment shall be carried out for all plans and programmes, which are likely to have significant environmental effects and which a) are prepared for agriculture, forestry, fisheries, energy, industry, transport, waste management, water management, telecommunications, tourism, town and country planning or land use and which set the framework for future development consent of projects listed in Annexes I and II of the Environmental Impact Assessment, or b) in view of the likely effect on sites, have been determined to require an assessment pursuant to Article 6 or 7 of the Habitats Directive.

holistic environmental assessment under the SEA Directive), and different consultation requirements may apply in different cases. For example, in respect of soils, it would be necessary to carry out an assessment in relation to a broader range of sectoral policies but there will be no duty to consult in relation to these policies. We are uncertain as to why it is considered necessary to add this duty in relation to the impact on soil but not other environmental media such as air and water.

3.10 Such broad sectoral coverage as proposed in the Soil Framework Directive may also mean that consideration of the impact on soils is carried out as a matter of course without sufficiently in-depth analysis. This may dilute the effect of the SEA Directive.

Questions

- **Q.5 Do you consider there is a significant benefit in expanding the duty, as provided by the proposed Directive, to carry out an environmental assessment in so far as soil is concerned, so that it covers all other sectoral policies which may have a significant impact on soil? If so, which particular sectors of policy do you think impact on soil and need to be covered? And what are your views on leaving out the duty to consult in relation to these additional sectors?**
- **Q.6 What are your views on how this provision could be improved, for example, should it instead only refer to the SEA Directive in the recitals and include this additional duty in respect of soils only in respect of policies not already covered by the SEA Directive?**

Article 4 – Precautionary measures

Article 4 – Precautionary measures

Member States shall ensure that any land user whose actions affect the soil in a way that can reasonably be expected to hamper significantly the soil functions referred to in Article 1(1) is obliged to take precautions to prevent or minimise such adverse effects.

Content

3.11 This proposed Article sets out a very broad duty on Member States to ensure all “land-users” take precautions to prevent or minimise the adverse effects of any actions which can reasonably be expected to hamper significantly the soil functions in the proposed Article 1.

3.12 This proposal requires Member States to take measures, possibly in addition to those under the proposed Articles 8 and 9, in respect of agricultural and rural soils, as well as in relation to other sectors.

3.13 There is a lack of clarity in respect of several issues including:

(a) whether all soil pollution is covered by the proposed Article 9 rather than the proposed Article 4. If soil pollution is covered by Article 4 as well as Article 9, then pollution by way of air deposition might be covered by the proposed Directive.

(b) which activities, and what scale of activity, should be regarded as significantly hampering soil functions.

Existing EC/domestic legislation

3.14 The Environmental Impact Assessment (EIA) Directive¹⁰, as implemented in the UK, requires, in relation to projects above a certain scale, an assessment of the environmental impacts of the proposed project (which should include consideration of the impacts upon soil) before the consent is given. So this provision overlaps with the EIA, in relation to projects above a certain size, but also brings in similar requirements in relation to activities which do not amount to projects and possibly also to projects below established EIA thresholds if they “significantly hamper soil functions”.

3.15 There is a wide range of legislation at an EC and domestic which covers such activities from regulation of waste to land, use of pesticides and veterinary medicines. Domestic legislation has also been introduced to implement CAP cross-compliance¹¹. This lays down a broad set of measures for farmers and land managers who claim the Single Payment or Single Farm Payment in Scotland.

Issues raised

3.16 As drafted this provision requires an assessment, such as under the EIA Directive, for activities and other projects without setting clear *de minimis* levels. It is likely therefore to require extensive work to decide which activities must be regulated and also in terms of enforcement.

3.17 There is a lack of certainty as to when an activity should be regarded as “hampering significantly the soil functions” and exactly which land-users the proposed Directive intends Member States to regulate.

3.18 There is also a lack of certainty as to whether the proposed Directive might be interpreted as requiring action to be taken to prevent rather than simply minimise adverse effects, as well as the extent to which such effects must be mitigated. This may mean that certain activities will have to be restricted even where their impact is low but could be considered ‘significant’.

3.19 In respect of the agricultural community, revision and tightening up of CAP cross compliance type measures to cover those outside the CAP might also be needed.

¹⁰ Directive 97/11/EC

<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:31997L0011:EN:HTML>

¹¹ Council Regulation (EC) No 1782/2003

http://europa.eu.int/eur-lex/pri/en/oj/dat/2003/l_270/l_27020031021en00010069.pdf

3.20 There are some additional questions such as whether this proposed Article covers soil pollution. If so, this may require restrictions in relation to deposition from air pollution.

3.21 The relationship with issues already addressed by other legislation is also unclear.

3.22 This provision could however provide a means of ensuring comprehensive protection of our soils. It may be that clarity and specific exceptions are what is needed.

Initial Regulatory Impact Assessment – costs and benefits

3.23 We have not yet identified the costs and benefits of this provision but it is considered that the administrative burden on Government in terms of having to legislate to cover many sectors, as well as to inspect and enforce could amount to several million pounds per annum. The costs depend on exactly what additional measures will be required under this provision. This is still under consideration.

Questions

- **Q.7 There are a number of ways in which this proposed Article could be adapted. Please let us have your views on how this provision could be amended. Some possibilities you may wish to consider are:**
 - **inclusion of an appropriate *de minimis* threshold, in terms of area of land affected.**
 - **leaving it to individual Member States to decide which land-users are covered and which activities should be regarded as likely to result in significant harm. This may mean differing levels of care in different Member States but with more flexibility to deal with relevant local issues that may change with time.**
 - **leaving this outcome to be achieved by the EIA and other Directives, and simply requiring Member States to encourage action by land-users more generally to minimise their impact on soil functions.**
 - **exceptions or limits to the duty to prevent or minimise, for example, because some uses serve important social or economic needs, and minimising adverse effects may be technically infeasible or involve excessive cost?**
- **Q.8 What activities, which are not already regulated in the UK, if any, do you consider may have a significant adverse impact on soils?**
- **Q.9 Do you have any comments on the issues we have raised, and on our initial analysis of costs and benefits?**

Article 5 – Sealing

Article 5 – Sealing

For the purposes of preserving the soil functions referred to in Article 1(1), Member States shall take appropriate measures to limit sealing or, where sealing is to be carried out, to mitigate its effects in particular by the use of construction techniques and products which will allow as many of those functions as possible to be maintained.

Content

3.24 This proposed Article requires Member States to take measures to limit sealing (defined in the proposed Article 2 as permanent covering of the soil surface with an impermeable material) or where sealing is carried out to mitigate its effects using construction techniques and products to preserve the soil functions as referred to in the proposed Article 1. The provision relates to the construction of buildings, roads, pavements and any other impermeable materials that cover the surface of soils. Hence, it is directly applicable to domestic planning systems and has repercussions for new development as well as soil protection.

3.25 The purpose of this proposal is to preserve the soil functions listed in the proposed Article 1, including in practice ensuring aquifer recharge, enabling water run-off to be filtered, reducing contamination risks to ground and surface water, reducing flood risk, and protecting good quality agricultural land and biodiversity. The proposed Recital 13 explains the reasons for the provision on sealing. In doing so, the Recital points to the impact of “urban sprawl” on soil functions and the need to promote brownfield development so as to reduce the use of greenfield sites.

3.26 Member States would be required to regulate sealing. This would involve limiting it, possibly by preventing some proposed developments or reducing their coverage. The proposed Articles 1 and 4 are important to the interpretation of this proposed Article. These suggest Member States should prevent or minimise adverse effects on soils. Where sealing does occur Member States should ensure the effects of sealing are mitigated; for example, through the use of permeable pavements and Sustainable Urban Drainage Systems.

Existing EC/domestic legislation

3.27 The Strategic Environmental Assessment Directive requires a formal environmental assessment of certain programmes and plans which are likely to have significant effects on the environment. This includes assessing the effect on soil, water and the interrelationships between these factors. In England, sustainability appraisal of regional spatial strategies (RSSs) and local development documents (LDDs) is required by the Planning and Compulsory Purchase Act 2004 and incorporates the requirements of the SEA Directive. This is where the content of RSSs and LDDs is tested and the implications for soils considered. Sustainability appraisal focuses on the full range of social, environmental and economic effects and integrates environmental concerns with the other pillars of sustainable development. Local planning authorities must determine planning applications in accordance with the statutory development plan which comprises development plan documents (a type of LDD) and the relevant RSS, unless

material considerations indicate otherwise. Relevant and recent national policy, particularly where this points to a different decision than suggested by the development plan, can be a material consideration.

3.28 Projects which are likely to have significant effects on the environment are subject to Environmental Impact Assessment (EIA). This involves an assessment of how the proposed project will affect certain aspects of the environment including soils. Development consent for a project subject to EIA cannot be granted without the decision-maker first taking into account the environmental information before them.

3.29 In terms of the specific soil functions which this provision seeks to protect, the Water Framework Directive requires Member States to protect the quality of ground and surface water, and the quantity of groundwater. In the UK, one of the means of implementing this might be to introduce measures to promote sustainable drainage systems to manage run-off from roads and buildings. This is a valuable role in preventing the flow of pollutants, which may include soil material, to surface waters.

3.30 The proposed Floods Directive requires Member States to develop flood risk management plans for areas considered to be at significant risk of flooding. This includes establishing measures and objectives for managing flood risk, focusing on reducing the potential adverse consequences of flooding and/or reducing the likelihood of flooding. Amongst other issues, flood risk management plans will need to take into account the environmental objectives of Article 4 of the Water Framework Directive (environmental objectives) and soil and water management. Negotiations on the Floods Directive have concluded and formal adoption is expected in the autumn, from which time Member States will have two years in which to transpose its provisions.

3.31 To implement the Habitats Directive and to meet domestic biodiversity targets, planning authorities already have specific responsibilities on biodiversity, and should therefore already consider implications of sealing for this soil function.

Issues raised

3.32 To a large extent this provision replicates existing environmental legislation including that on water and biodiversity but it goes further by specifically requiring sealing to be limited or mitigated. The provision does not make clear how far Member States must go to limit sealing or the scale of development to be affected. This lack of clarity and the potential impacts on desirable and sustainable new development causes us concern.

3.33 As drafted, this Article does not recognise that soil sealing can arise from socially and economically beneficial development. Equally, it does not recognise the contribution sealing makes to achieving environmental outcomes through developments such as waste water treatment works or wind farms or flood prevention schemes. This proposal could have a significant impact on new development on any site, brownfield or greenfield, where there is soil, even where the development is not automatically ruled out. This would arise through adding to its costs (and viability) by requiring specific designs and materials, and by requiring additional studies which may delay consent procedures.

3.34 There is no *de minimis* in terms of physical area in the provision so it could affect very small developments such as the paving over of front gardens which currently fall within the scope of permitted development rights which permit certain small scale developments without the requirement to submit a planning application.

3.35 In terms of the preference for brownfield development, the UK already has a policy of encouraging development on brownfield site. For example, national planning policy in England is for local planning authorities to make effective use of land by re-using previously developed land, with a national target that at least 60% of new housing should be built on such land.

3.36 Overall, we are concerned that this proposed Article would have a significant effect on all development and have major implications for control mechanisms currently in place. Taking England as an example:

- provisions may have to be applied to small developments, such as extensions to domestic property and paving in front gardens, currently within the scope of permitted development rights (PDRs). These permit small scale projects without the requirement to submit a planning application. Reducing the scope of permitted development would significantly increase the number of planning applications dealt with by Local Planning Authorities (LPAs), the time taken to do so, and the burden on those required to submit these.
- the provision would lead to the loss of some development land, with consequential effects on house building, hospitals, etc, unless they are to be built on brownfield site, because soil sealing provisions are likely to mean that certain land can no longer be developed, and to increased construction costs if more expensive materials and construction techniques are needed to mitigate the effects of soil sealing.

Initial Regulatory Impact Assessment - costs and benefits

3.37 We have not been able to quantify these as yet but key points to note are as follows:

- Less flexibility for Member States on use and development of land in accordance with the principle of sustainable development. This could mean that otherwise suitable development land could no longer be used. This would have adverse consequences for the sustainability of communities, including on the affordability of housing.
- As drafted, the Directive would increase the number of proposals which require the submission of planning applications. In aggregate, this would be costly in terms of the time and resources required to make them, and the extra demands on the administration of the planning system.
- Reducing sealing of soils can have some environmental benefits, through the protection of particular soil functions. For example, if members of the public wishing to pave drives and gardens required planning applications, the occurrence of such activities might be reduced, thus decreasing run-off rates

and reducing flooding, although as discussed above such a measure would significantly increase the burden on LPAs.

- It could also strengthen protection for biodiversity, soils for food and fibre production and green space. However, the issue can be complex as developments requiring sealing can, as already mentioned, bring both environmental and social benefits, for example, through the construction of a sewage treatment works or a hospital.
- Construction costs may increase as the materials and construction techniques required to mitigate the effects of soil sealing may be more costly than standard techniques.

Questions

- **Q.10 Do you consider there to be significant benefits in having new EC legislation that deals with soil sealing? If so, what are the benefits and do they in your view exceed the potential costs?**
- **Q.11 Do you think there would be value in amending the draft Directive, for example, to:**
 - a) **make it clear that Member States in considering the need to limit soil sealing should do this as part of their overall consideration of a proposed development's environmental, social and economic impacts;**
 - b) **provide for exceptions to the requirement to limit sealing, for example, where the proposed development/sealing serves an overriding public interest;**
 - c) **insert *de minimis* provisions in line with the thresholds in the Environmental Impact Assessment Directive?**
- **Q.12 What are your views on amending this provision so that it only requires mitigation of new soil sealing through use of permeable construction materials?**
- **Q.13 Do you agree with our concerns and our assessment of the costs and benefits as set out in our initial RIA?**

Part 4 - Chapter II: Articles 6-8 – Risk Prevention, Mitigation And Restoration

Article 6 – Identification of risk areas of erosion, organic matter decline, compaction, salinisation and landslides

1. Within five years from [transposition date], Member States shall identify the areas in their national territory, at the appropriate level, where there is decisive evidence, or legitimate grounds for suspicion, that one or more of the following soil degradation processes has occurred or is likely to occur in the near future, hereinafter “the risk areas”:

- a) erosion by water or wind;
- b) organic matter decline brought about by a steady downward trend in the organic fraction of the soil, excluding undecayed plant and animal residues, their partial decomposition products, and the soil biomass;
- c) compaction through an increase in bulk density and a decrease in soil porosity;
- d) salinisation through the accumulation in soil of soluble salts;
- e) landslides brought about by the down-slope, moderately rapid to rapid movement of masses of soil and rock material.

For the purposes of that identification, Member States shall, in respect of each of those soil degradation processes, use at least the elements listed in Annex I and shall take into account the effects of those processes in exacerbating greenhouse gas emissions and desertification.

2. The risk areas identified pursuant to paragraph 1 shall be made public and reviewed at least every ten years.

Article 7 – Methodology

Member States may base the identification of risk areas on empirical evidence or on modelling. If modelling is used, the models must be validated by comparing the results on the basis of empirical data which have not been used for the development of the model itself.

Article 8 – Programmes of measures to combat erosion, organic matter decline, compaction, salinisation and landslides

1. For the purposes of preserving the soil functions referred to in Article 1(1), Member States shall in respect of the risk areas identified in accordance with Article 6, draw up, at the appropriate level, a programme of measures including at least risk reduction targets, the appropriate measures for reaching those targets, a timetable for the implementation of those measures and an estimate of the allocation of private or public means for the funding of those measures.

2. When drawing up and revising the programmes of measures pursuant to paragraph 1, Member States shall give due consideration to the social and economic impacts of the measures envisaged.

Member States shall ensure that measures are cost-effective, technically feasible and shall carry out impact assessments, including cost-benefit analyses, prior to the introduction of the programmes of measures.

Member States shall indicate in their programmes of measures how the measures are to be implemented and how they will contribute to achievement of the environmental targets established.

3. Where an area is at risk from different concurrent soil degradation processes, Member States may adopt a single programme in which appropriate risk reduction targets are to be set for all the risks identified together with the appropriate measures for reaching those targets.

4. The programme of measures shall be drawn up within seven years from [transposition date] and shall be in application no later than eight years after that date.

The programme of measures shall be made public and shall be reviewed at least every five years.

Content

4.1 The proposed Article 6 requires Member States to identify all areas in their national territory where there is decisive evidence or legitimate grounds for suspicion that one or more of the following soil degradation processes have occurred or are likely to occur in the near future: erosion; organic matter decline; compaction; salinisation; and landslides. To identify these 'risk areas' Member States must conduct risk assessments using the factors in Annex I of the proposed Directive. Where risk areas are identified, these must be made public and reviewed every ten years.

4.2 The proposed Article 7 sets out the methodology for identifying these risk areas and allows for modelling or the use of empirical evidence.

4.3 The proposed Article 8 requires Member States to adopt programmes of measures in respect of these risk areas including risk reduction targets, appropriate measures for achieving these targets and a timetable for doing so. There is some lack of clarity as to whether these programmes need only aim to reduce the risk of erosion or whether they should also aim to secure some restoration of the land. In drawing up their programmes of measures, Member States are required to take into account the social and economic impacts of the programme of measures. They are also required to ensure that measures introduced are cost-effective.

Existing EC/domestic legislation

4.4 **The Water Framework Directive (WFD)** - this requires programmes of measures to achieve water quality targets in relation to bodies of water. Where soil erosion or the condition of the soil is a cause of water quality problems, it will need to be tackled. Programmes of Measures are being developed across the UK to identify priorities for different types of preventative or remedial action, targeted at national,

catchments, and specific water body scales. It does not cover soil erosion where this does not impact upon water quality.

4.5 Catchment Sensitive Farming (CSF) - CSF initiatives, plus Monitored Priority Catchments (MPCs) in Scotland, have been established to help the UK meet Water Framework Directive objectives, and aim to encourage soil management change at the catchment level. This includes promoting both the soil management planning process and the uptake of agri-environment scheme options.

4.6 CAP cross-compliance - This requires Member States to introduce measures (Good Agricultural Environmental Conditions – GAEC) to deal with erosion, soil organic matter and soil structure (including compaction). The approach taken was to set a baseline for all farmers rather than a risk-area approach as under the proposed Directive. The objective underlying the soil organic matter standard was not the protection of soil carbon for climate change related reasons. In practice this may mean that implementation of the proposed Soil Framework Directive would require a higher standard of protection for soil carbon than cross-compliance. (It may, however, be that this can be done through agri-environment schemes).

4.7 The GAEC soils requirements have been implemented in England, Wales and Scotland, largely by requiring farmers to carry out an assessment of risk on their farms and adopt appropriate measures accordingly.

4.8 CAP Agri-environment - The UK has developed a range of options under agri-environment schemes to encourage farmers to address any threats to soil that demand more specific management than complying with the GAEC standards. Payments are available to encourage farmers to employ management practices which reduce soil erosion and run-off, and improve and protect water and soil quality.

4.9 Habitats Directive - The main aim of the EC Habitats Directive is to promote the maintenance of biodiversity by requiring Member States to take measures to maintain or restore natural habitats and wild species at a favourable conservation status, introducing robust protection for those habitats and species of European importance. In applying these measures Member States are required to take account of economic, social and cultural requirements and regional and local characteristics. As soils underpin all terrestrial ecosystems and as “peat habitats” which are valuable carbon stores form an intrinsic part of the designated features, the Habitats Directive provides a means to protect soil and its habitat support functions where designated areas are concerned.

Article 6 and 7 – Identification of risk areas

Issues raised

4.10 We are concerned that it may be difficult and potentially expensive to map risk areas for soils to the degree of precision that is required for policy purposes. Mapping risk areas for soil compaction in particular is likely to be expensive and to deliver few benefits as compaction related issues depend mainly on management practices rather

than soil type. Farmers may prefer to be outside risk areas and may appeal against any findings. This will add to administrative costs.

4.11 In addition, there may be limited benefits to this exercise if the proposed Article 4 will require a different analysis of risk and possibly measures that cover the whole farming community in any event.

4.12 As well as loss of the soil resource, soil erosion presents a further issue when it leads to sediment in watercourses or on infrastructure including roads. The Water Framework Directive addresses erosion which leads to sediment in watercourses and further mapping of erosion risk beyond what is required by the WFD may not yield significant benefits.

4.13 The importance of protecting carbon stores in our soils is recognised; Article 6 as drafted defines carbon as only including the stable component of carbon in our soils. However, less stable components, such as partly decayed plant material, are relevant to soil structure and fertility, suggesting that the definition should be broader. This component of soil is, however, affected by land use and management practices and soil maps would have to be very detailed to identify risk areas.

4.14 Salinisation is not a risk in Great Britain and we would be concerned about having to map it for this reason. We would also like to be able to continue to use 'managed retreat' to deal with rising sea water levels. Landslides pose risks in many areas of Great Britain and can be important in relation to risks to infrastructure and development. However, a risk assessment of the whole of Great Britain may not be proportionate.

4.15 The proposed Directive is not clear about the level of risk that would make an area a "risk-area". It may be more proportionate for areas at significant or unacceptable risk to be identified.

4.16 The methodology set out in Annex 1 of the proposal, which sets out how Member States must go about mapping risk areas, is unnecessarily prescriptive. This sets out the factors to be taken account of in identifying risk areas.

Initial Regulatory Impact Assessment - costs and benefits

4.17 Our initial RIA suggests that an additional £150k (for England and Wales only) would be required to identify risk areas if definitions currently used in the UK are applied and compaction, landslides and salinisation excluded. A further c.£500k would be required if re-sampling of Soil Organic Matter (SOM) is required (unclear at present if current UK data on SOM is compatible with requirement under Article 6.1(b) as drafted). Further expenditure would be required to complete the exercise for Scotland and Northern Ireland. Note also that Article 18 of the draft Directive allows the Commission to alter the criteria which Member States are required to use in identifying risk areas – this may result in additional costs. Costs may also be affected by the scale at which Member States are required to identify risk areas.

4.18 The requirement to identify areas at risk of organic matter loss (and implement a programme of measures to respond to this) may deliver slight environmental benefits

through improved information allowing for more targeted action to deal with identified soil threats.

4.19 Level playing field – UK land managers may be better able to compete with some other Member States who would have to increase levels of soil protection above current levels to comply with the proposed Framework Directive. Considering the wide discretion that will be allowed in relation to programmes of measures, it is considered that the benefits will not be substantial.

Questions

- **Q.14 Do you consider that this risk-area/programme of measures approach is appropriate? How do you consider that this provision could be improved, for example, what are your views on requiring Member States to put in place programmes of measures to address degradation processes with an adequate focus on higher risk areas and higher risk activities (but without requiring formal identification of risk areas) or requiring more clearly harmonised standards?**
- **Q.15 Is there a significant benefit, in your view, in having a common EU-wide framework in place?**
- **Q.16 Do you consider that the correct degradation processes have been listed for the purpose of identifying risk areas? What are your views on seeking to have compaction removed from this list so that it is dealt with only under the proposed Article 4?**
- **Q.17 Do you consider that the definitions of soil erosion, soil carbon and the other degradation processes are correct considering the range of soil functions which the proposed Directive seeks to protect?**
- **Q.18 What are your views on the inclusion of salinisation as a threat – do you consider that it should be defined to exclude managed retreat?**
- **Q.19 If the proposed Directive were to require detailed risk-mapping, is it important for it to require Member States to use all the Annex I factors or could the methodology be left to individual Member States?**
- **Q.20 Do you agree with our concerns and our estimate of the costs and benefits of this provision?**

Article 8 – Programmes of measures

Issues raised

4.20 There is a lack of clarity as to whether all risks need to be addressed and the extent to which risks need to be reduced and whether restoration of soils is required.

4.21 Cross-compliance measures and agri-environment schemes cover the vast majority of UK agricultural land. It is important to avoid adding to existing measures without good cause. In addition, it is important to give farmers some time to understand and learn to comply with existing measures and avoid unnecessary change. Hence, it is important that Member States are given the flexibility to continue to use such schemes, perhaps with some minor modifications if necessary.

4.22 It would be consistent with UK policy to use incentive-based schemes, like environmental stewardship, as well as voluntary codes and other measures as part of the programme of measures. It is anticipated that these can form part of our programme of measures.

Initial Regulatory Impact Assessment - costs and benefits

4.23 Additional administrative burden on the Government in drawing up the 'programme of measures', undertaking research to set targets, monitoring progress against targets and reviewing programmes of measures.

4.24 Potential additional administrative burdens and compliance costs for land managers (in particular small businesses and those in risk areas), in adjusting to changes made to existing soil protection measures.

4.25 Environmental and economic benefits are as explained in relation to the proposed Article 6.

Questions

- **Q.21 How important do you think it is for us to be permitted to continue to use existing CAP measures (cross-compliance and agri-environment) to deliver the required Programme of Measures? Do you think such existing measures in their current form are adequate for addressing soils issues in high risk areas?**
- **Q.22 Would you like the Government to be able to use a range of measures, from guidance and codes of practice to regulations, to implement this proposed Article?**
- **Q.23 Do you agree with our concerns and our estimate of costs and benefits?**

Part 5 – Chapter III: Articles 9-14 – Soil Contamination

Article 9 – Prevention of soil contamination

Article 9 – Prevention of soil contamination

For the purposes of preserving the soil functions referred to in Article 1(1), Member States shall take appropriate and proportionate measures to limit the intentional or unintentional introduction of dangerous substances on or in the soil, excluding those due to air deposition and those due to a natural phenomenon of exceptional, inevitable and irresistible character, in order to avoid accumulation that would hamper soil functions or give rise to significant risks to human health or the environment.

Content

5.1 This provision is about preventing new contamination rather than dealing with already contaminated land. Provisions for identifying and dealing with land where contamination is present are drafted at Articles 10-14.

Existing EC/domestic legislation

5.2 This provision largely overlaps with other community legislation which aims to prevent pollution and where contamination occurs requires its remediation. This includes:

- **The Integrated Pollution Prevention and Control Directive:** the Pollution Prevention and Control Regulations which implement this set up a licensing system for current activities which may cause pollution, and include clean-up mechanisms for new contamination, and a requirement to leave sites in a “satisfactory state” at the end of authorised activity. The Regulations cover all environmental media including soil and cover over 4500 industrial installations in the UK.
- **Environmental Liability Directive:** the Environmental Liability Directive (ELD) includes measures to secure remediation of new environmental damage, and provides a further lever for the prevention of contamination by operators of potentially polluting activities. The ELD covers the prevention of contamination issues addressed by the proposed Soil Framework Directive, but not historic contamination.
- **Waste Framework Directive and Landfill Directives:** licensing arrangements, and licensing exemptions, introduced to implement these Directives aim to prevent waste management activity causing land contamination (amongst other risks). The controls also include measures to remedy the effects of illegal dumping and fly-tipping on land.

Issues raised

5.3 It is not clear that this provision is necessary considering existing legislation. In addition, having this additional provision without the thresholds, exemptions and other detail of the Directives referred to above, causes legal uncertainty as to exactly what Member States are required to do. Clarity is required in the text as to how Article 9, as drafted, relates to these existing Directives.

5.4 The use of the term “appropriate and proportionate measures” creates uncertainty – it is not clear exactly what Member States must do and whether judgement as to the measures which are appropriate is for Member States or for the Commission.

5.5 Clarity is also required as to the relationship between the proposed Article 9 and Article 4. In particular, is Article 9 intended to cover all forms of contamination and is this in effect excluded from Article 4?

Questions

- **Q.24 Are there any benefits in having this provision?**
- **Q.25 How do you think this proposed Article could be amended to improve it? Examples include:**
 - **So the proposed Directive states that full implementation of existing pollution prevention and waste legislation might be sufficient for implementation.**
 - **So the proposed Directive states specifically what risks or activities must be addressed.**

Articles 10 and 11 – Inventory of contaminated sites

Article 10 - Inventory of contaminated sites

1. Member States shall, in accordance with the procedure laid down in Article 11, identify the sites in their national territory where there is a confirmed presence, caused by man, of dangerous substances of such a level that Member States consider they pose a significant risk to human health or the environment, hereinafter “contaminated sites”.

That risk shall be evaluated taking into account current and approved future use of the land.

2. Member States shall establish a national inventory of contaminated sites, hereinafter “the inventory”. The inventory shall be made public and reviewed at least every five years.

Article 11 - Identification procedure

1. Each Member State shall designate a competent authority to be responsible for the identification of contaminated sites.

2. Within five years from [transposition date], the competent authorities shall have identified the location of at least the sites where the potentially soil-polluting activities referred to in Annex II are taking place or have taken place in the past.

For those purposes, the activities referred to in point 2 of Annex II shall be considered independently of the thresholds specified in Annex I to Council Directive 96/61/EC14, except for the activities carried out by micro-enterprises, as defined in point 3 of Article 2 in the Annex to Commission Recommendation 2003/361/EC, and those relative to the rearing of livestock.

The identification shall be reviewed at regular intervals.

3. In accordance with the following time-table, the competent authorities shall measure the concentration levels of dangerous substances in the sites identified in accordance with paragraph 2, and where the levels are such that there may be sufficient reasons to believe that they pose a significant risk to human health or the environment, an onsite risk assessment shall be carried out in relation to those sites:

- a) within five years from [transposition date], for at least 10% of the sites;
- b) within 15 years from [transposition date], for at least 60% of the sites;
- c) within 25 years from [transposition date], for the remaining sites.

Content

5.6 These proposed Articles deal with the establishment of a national inventory of contaminated sites. Article 10, as drafted, requires a public inventory of contaminated sites, as defined, to be compiled and reviewed every 5 years. Article 11 goes on to describe the process by which Member States should go about identifying these contaminated sites.

5.7 Contaminated sites are defined as those “where there is a confirmed presence, caused by man, of dangerous substances [as defined in the proposed Article 2] of such a level that Member States consider they pose a significant risk to human health or the environment”.

5.8 In considering whether the risk posed to human health or the environment is significant, account should be taken of what the site is being used for currently, and also of any approved future use of the site. The above description of “contaminated sites” gives Member States some discretion in deciding what level of dangerous substance should be regarded as causing a significant risk.

5.9 The proposed Article 11 lays down the process by which Member States must identify contaminated sites. This involves a three stage procedure:

- i. Identify at least all sites where “potentially soil-polluting activities” listed in Annex II¹² are taking place, or have taken place in the past. This must be completed within 5 years of the proposed Directive being transposed into domestic legislation. The list of sites identified at this stage should be reviewed regularly.
- ii. For the sites identified under (i), competent authorities must “measure the concentration levels of dangerous substances”.
- iii. Where the concentration levels determined are such that there may be sufficient reasons to believe that a site poses a significant risk to human health or the environment, an “on-site risk assessment” must be carried out. Where this on-site risk assessment confirms that the site is a “contaminated site” it must be recorded on the inventory.

5.10 This procedure must be carried out in 5-25 years from the date of transposition, with 10% having to be identified within 5 years, 60% within 15 years and the remainder within 25 years.

Existing EC/domestic legislation

5.11 There is no EU-wide legislation that specifically addresses historically contaminated land. Some of the Directives identified at paragraph 5.2 do however effectively require remedial action where, for example, activities such as waste management or operating specified industrial activities give rise to new land contamination. In addition, the Water Framework Directive and Groundwater (Daughter) Directive, which are currently being implemented, may effectively require remediation of contaminated land where it is found to affect water quality. The requirements under these Directives are explained in paragraphs 5.16-5.17.

5.12 In terms of domestic legislation, the Commission states that, as of September 2006, only 9 Member States had a specific domestic regime in place.

5.13 We already have a comprehensive regime for identifying contaminated land, covering all contaminants (i.e. not limited to dangerous substances) and all activities or sources (except where remedies are available in other domestic legislation). Development is the main driver for bringing such land back into beneficial use and the aim of planning policy is to facilitate sustainable development that takes appropriate account of contaminated land issues. This means that property developers generally meet the costs of remediation. Local Planning Authorities should require an applicant for planning permission where contamination is known or suspected to provide sufficient information to determine the existence or otherwise of contamination, its nature and the risks it may pose, and whether these can be satisfactorily reduced to an acceptable level. Further investigation and remediation can be required as a condition of planning permission to secure the removal of unacceptable risk and make the site

¹² Amongst a number of other potentially soil-polluting activities, Annex II of the Soil Framework Directive also covers all the industrial activities listed in Annex I of the Integrated Pollution Prevention Control (IPPC) Directive. The thresholds included in the IPPC Directive are disapplied, except in the case of activities relating to the rearing of livestock, and activities carried out by enterprises which employ fewer than 10 people, and have an annual turnover of less than €2 million (£1.4 million).

suitable for its new use. The planning register will record details of the permission, conditions and discharge of conditions.

5.14 The planning system is complemented by a pro-active approach under the Environmental Protection Act 1990. Under Part IIA of this Act, Local Authorities have an ongoing duty to inspect their areas for “contaminated land” as defined – in broad terms this covers land in such a condition, by reason of the presence of substances, that it presents unacceptable risk to human health or the environment. Appropriate remedial action must be secured. Contaminated land and actions taken in respect of it are recorded in a public register. In England and Wales, sites are only placed on a register when a remediation notice, statement or declaration is issued. In Scotland details appear at an earlier stage, when contaminated land is identified. In England and Wales, local Authorities are the lead regulators, but certain specified descriptions of contaminated land, once identified, are dealt with by the Environment Agency, which is better placed to enforce in those cases.

5.15 Part IIA strongly encourages voluntary action (by agreement rather than through formal enforcement action), allows liability to be passed on when land changes hands, ensures land condition and liabilities are reflected in land values, and encourages buyers, sellers, lenders and conveyancers, etc, to exercise considerable care in land transactions wherever there is a possibility of contamination. Much investigation and remediation takes place either voluntarily or under the planning system, without formal action being taken under Part IIA.

5.16 Scotland, Wales and England all have similar measures in place, and Northern Ireland is due to implement provisions similar to the above shortly.

5.17 In addition to the existing measures already in place to address contamination, a number of other measures will be implemented in the near future. For example, the Water Framework Directive (WFD) establishes a process for setting environmental targets for bodies of water which Member States are required to meet through the implementation of programmes of measures. Historic land contamination is among the continuing sources of water contamination. The Water Framework Directive will thus act as a driver for increased remediation of contaminated sites (largely via existing mechanisms such as the **Water Resources Act** in England and Wales, the **Controlled Activities Regulations** in Scotland, or Part IIA of the Environmental Protection Act), thus enabling the UK to meet the objectives established under the WFD. Consultation papers are being issued in 2007 concerning the issue of new diffuse pollution which can arise when land is used in ways which enable harmful substances to enter groundwater or other water bodies.

5.18 The new **Groundwater Directive** (a daughter Directive to the Water Framework Directive) includes specific obligations to prevent and/or limit the entry of listed pollutants into groundwater. Historic land contamination can give rise to the ongoing entry of such pollutants. As with the Water Framework Directive, this is expected to act as a driver for Member States to increase the levels of protection afforded to water courses by utilising existing measures.

Issues raised

5.19 The proposed Directive's approach to identification of land requiring action differs from our approach in a number of key areas: (1) it is confined to 'dangerous substances', as defined in the proposed Article 2, and requires measuring "levels" of these substances to assess risk; (2) it lays down a list of potentially polluting activities; (3) it requires the locating and sampling of all sites upon which such activities have ever taken, or are taking, place, regardless of circumstances; and (4) identification of all 'contaminated sites' must be carried out to a prescribed timetable.

5.20 Based on our preliminary analysis (see Annex I of the Initial RIA), we anticipate that the costs of establishing a national inventory of contaminated sites according to the proposed Directive's requirements would far outweigh any benefits that such an inventory might deliver.

5.21 The approach under these proposals is only partially risk-based. For example, risks to human health and the environment are not only associated with concentrations levels of substances in soil. Landfill gas is one example where severe risk might not be reflected in surface soil concentrations. The provisions also appear to require Member States to sample the concentration levels of **all** dangerous substances at sites on which a potentially soil polluting activity has taken place, even though only a small number of substances are normally associated with any particular potentially polluting activity¹³.

5.22 Furthermore, sampling of potentially polluted sites is required without any regard to whether this is justified by the available facts on each site. A more risk-based approach would allow for consideration of, for example, existing information about the site and its history; of previous investigations or remedial measures; and the likelihood that if there are dangerous substances present on the site they could actually cause harm to human health or the environment (in particular to consider whether there is a potential pathway by which the substance might reach a vulnerable receptor, and also whether there is such a receptor present or likely to be present under the current or approved future use).

5.23 There is a risk of unnecessary property blight as a result of the sampling obligation applying to whole classes of land. There may also be a risk of blight where land is identified as a contaminated site (in compliance with the timetable) but resources to undertake remediation are not immediately available. Since the extent of contamination and the unit costs of dealing with it are considerable, this scenario is likely to arise under the proposed Directive's timetable for identification.

Initial Regulatory Impact Assessment - costs and benefits

5.24 The cost of mandatory sampling of every 'Annex II' site, to establish concentration levels of dangerous substances which may be on site is high. The Commission estimate that 100,000¹⁴ sites would require such preliminary sampling in

¹³ Note that in Article 12 (2) the requirement to sample the concentration levels of dangerous substances only applies to "those substances that are linked to the potentially polluting activity on the site". The Commission says, informally, that this is how Article 11 should be read.

¹⁴ Environment Agency 2002 – 'Dealing with Contaminated Land in England' Report

the UK. This figure is based on an Environment Agency report, relating to England and Wales only. The actual figure could be significantly higher. Based on a sampling and analysis cost averaging £10-20k for a 2 hectare (average size) site, the estimated total cost of this sampling is **£1-2 billion**¹⁵. This is largely an additional cost to those incurred under our domestic system, under which sampling is not an automatic requirement across whole classes of land, and which does not contain a national timetable for the identification of sites. The reliable identification of all Annex II sites would be costly, because the status of many historic locations may not be clear from available records (for example, numbers of employees or turnover, or quantities of dangerous substances held at the location).

5.25 Where the level of contamination determined by the preliminary sampling of Annex II sites suggests a possible significant risk to human health or the environment, a full site investigation and site-specific risk assessment will be required. In Great Britain, this costs on average £50-75k per site (average 2 hectare). If 5-20% of identified Annex II sites require this further investigation, total costs in excess of **£250 million - £1.5 billion** could arise. Some of this cost will be incurred in any event under our domestic approaches to land contamination, but the proposed Directive's timetable means that this will need to be incurred at an earlier date.

5.26 The strict timetable for the inventory may also present capacity problems as sampling and risk assessment is a highly skilled, complicated job.

5.27 The requirement to review the inventory of contaminated sites also likely to incur very significant costs (though these are not analysed in the Commission's Impact Assessment).

5.28 The benefits which are difficult to quantify would include earlier identification and remediation of contaminated sites with potential benefits for human health and the environment.

Questions

- **Q.26 Do you agree with the costs and benefits identified in our preliminary analysis? How do you think the proposed Directive could be amended to reduce the costs involved whilst achieving the same benefits?**
- **Q.27 Should the proposed Directive enable Member States to retain their existing national approaches to the identification of contaminated land, provided these deliver some basic common requirements, or should they be required to follow a common detailed procedure? If so, what are the basic common requirements that can in your view reasonably be included in the proposed Directive?**

¹⁵ Note that in connection with the Environment Protection Act (Part IIA), local authorities undertake inspection of individual sites, but this is carefully targeted to sites which warrant it according to evidence and a carefully drawn-up inspection strategy and prioritised programme. This will result in a minor reduction to the total costs of site investigations as described under Option 2.

- **Q.28 What are your views on the Commission’s definition of contaminated sites? Is it appropriate?**
- **Q.29 What are your views on the list of potentially polluting activities set out in Annex II?**
- **Q.30 Do you consider that it is necessary to test for dangerous substances at all sites on which potentially polluting activities have taken place or do you think testing should be targeted based on a risk assessment?**
- **Q.31 Do you think the timescales given in the draft Directive for compiling and reviewing the inventory are reasonable?**
- **Q.32 How do you think this requirement will affect land values?**

Article 12 - Soil status report

Article 12 – Soil status report

1. Where a site is to be sold on which a potentially polluting activity listed in Annex II is taking place, or for which the official records, such as national registers, show that it has taken place, Member States shall ensure that the owner of that site or the prospective buyer makes a soil status report available to the competent authority referred to in Article 11 and to the other party in the transaction.
2. The soil status report shall be issued by an authorised body or person appointed by the Member State. It shall include at least the following details:
 - a) the background history of the site, as available from official records;
 - b) a chemical analysis determining the concentration levels of the dangerous substances in the soil, limited to those substances that are linked to the
 - c) potentially polluting activity on the site;
 - d) the concentration levels at which there are sufficient reasons to believe that the dangerous substances concerned pose a significant risk to human health or to the environment.
3. Member States shall establish the methodology necessary for determining the concentration levels referred to in paragraph 2(b).
4. The information contained in the soil status report shall be used by the competent authorities for the purposes of identifying contaminated sites in accordance with Article 10(1).

Content

5.29 This obligation applies to all sites on which there has been a potentially polluting activity as listed in Annex II. It appears to apply to every proposed sale of such land in perpetuity. Whether the duty should be placed on the buyer or the seller is left to Member States to decide.

Issues raised

5.30 This proposed Article may interfere, without any benefit, with national procedures for transfers of land. In Great Britain there is provision for disclosure of information relating to contamination and buyers are free to further investigate the risk involved for them as they choose.

5.31 It risks stigmatising and blighting any land which has ever been subjected to a potentially contaminating use, even after it has been remediated. Anyone selling property or land on which an Annex II activity has taken place may find the value of that investment disproportionately reduced because of the cost and time involved in preparing this report. Such effects would be additional to any arising from the obligation in the proposed Article 10 to identify and sample all Annex II sites.

5.32 We believe that we already have a successful policy for building on previously used land, thereby preserving undeveloped land and soil functions. As drafted, any housing built on an Annex II site, even when it has been cleaned up so as to be suitable for its approved use, or found not to warrant action, would fall within the scope of the proposed Article 12.

5.33 The Commission's Impact Assessment (which accompanied publication of the proposed Soil Framework Directive) contains no information on the likely number of transactions in the EU which will require Soil Status Reports (SSRs). We believe that millions of transactions take place annually, and are likely to result in significant costs.

5.34 We are concerned that there may not be sufficient capacity in Great Britain to conduct all the soil status reports that will be required.

Initial Regulatory Impact Assessment - costs and benefits

5.35 Millions of transactions likely across EU-25 imposing significant administrative and economic costs on all property transactions. We have not yet identified exactly what this cost will be.

5.36 There is potential for land and property blight. Whilst it is not yet fully clear how property markets will react, the requirement to produce SSRs may push down the value of this land. We are concerned that this may happen even when the land presents no risk and when the current land owner was not responsible for the contamination.

5.37 UK businesses, including major industry and property sectors likely to incur administrative and financial costs to meet SSR requirements. Homeowners would also face additional costs.

5.38 The Commission's Impact Assessment does not take account of the potentially significant additional costs associated with establishing monitoring and enforcement regimes to ensure SSR provisions are met.

Questions

- **Q.33 How do you think this provision could best be amended to minimise any possible negative impacts that this proposed Article may have in Great Britain?**
- **Q.34 What are your views on the costs and benefits of this provision? What effect do you think this will have on land prices?**
- **Q.35 What do you think are the public health/environmental benefits of the requirement to produce Soil Status Reports? Do you consider that they will benefit business activity?**

Articles 13 and 14 – Remediation

Article 13 – Remediation

1. Member States shall ensure that the contaminated sites listed in their inventories are remediated.
2. Remediation shall consist of actions on the soil aimed at the removal, control, containment or reduction of contaminants so that the contaminated site, taking account of its current use and approved future use, no longer poses any significant risk to human health or the environment.
3. Member States shall set up appropriate mechanisms to fund the remediation of the contaminated sites for which, subject to the polluter pays principle, the person responsible for the pollution cannot be identified or cannot be held liable under Community or national legislation or may not be made to bear the costs of remediation.

Article 14 – National Remediation Strategy

1. Member States shall, on the basis of the inventory and within seven years from [transposition date], draw up a National Remediation Strategy, including at least remediation targets, a prioritisation, starting with those sites which pose a significant risk to human health, a timetable for implementation, and the funds allocated by the authorities responsible for budgetary decisions in the Member States in accordance with their national procedures.

Where containment or natural recovery are applied, the evolution of the risk to human health or the environment shall be monitored.

2. The National Remediation Strategy shall be in application and be made public no later than eight years after [transposition date]. It shall be reviewed at least every five years.

Content

5.39 Article 13, as drafted, requires Member States to remediate all contaminated sites appearing in their inventory. Remediation is deemed to have taken place when a contaminated site no longer poses any significant risk to human health or the environment, based on the sites current use and any approved future use. Remediation should be conducted via the "removal, control, containment or reduction of contaminants".

5.40 The proposed Directive suggests that in most cases the polluter should pay for the remediation of contaminated sites (although it does not expressly require this). Member States must set up "appropriate mechanisms" to fund remediation in cases where the polluter either cannot be found, or cannot be held liable for the costs of remediation.

5.41 Under the proposed Article 14, Member States must draw up a 'National Remediation Strategy' within seven years of transposition, which should be in place and made public within eight years of transposition. This Strategy should be based on the inventory of contaminated sites, and must include remediation targets, an implementation timetable, and details of how funding is to be allocated. The Strategy should also prioritise the order in which sites are remediated, with those posing a significant risk to human health to be dealt with first. The Strategy must be reviewed every five years.

5.42 Where containment or natural recovery are used as the methods of remediation, the level of risk posed must be monitored.

Issues raised

5.43 Land affected by contamination is very often dealt with under the land use planning regime, with the costs of any remedial works largely falling to the developer/land owner. The approach of the proposed Directive may impose significant costs on Member States (and thus the tax-payer), if it undermines the successful and largely voluntary approaches currently in place. It is possible that developers will be discouraged from incurring costs themselves if they know that Member States have to ensure remediation of the land, especially if a public timetable is in place. It is also unclear how the Directive might affect transfer of potential liability for remediation when land transactions take place.

5.44 The timetable for identification of contaminated sites could also mean public pressure to remediate in advance of development plans which might address the problem. A detailed "national remediation strategy" including timetables and details of public funds available, could thus have unpredictable effects on remediation activity by polluters, owners or developers.

5.45 Though the Directive specifies a range of methods to remediate land, it does not appear to provide for cases where the standard of remediation might not be fully attainable technically, or could entail disproportionate cost or environmental dis-benefits where it may be best to simply restrict access. In addition, this provision does not take into account that the Environmental Liability Directive and Integrated Pollution Prevention Control Directive and other measures require action to be taken in response to future contamination in many situations.

Initial Regulatory Impact Assessment - costs and benefits

5.46 Given the timetable required under Article 14 of the proposed Directive, the proposals may lead to remediation of some sites at a cost to the public sector where these would otherwise have been voluntarily remediated, as the timetable may deter developers from spending large amounts of money on remediation where this is due to be done by the Government. Also, Article 13(3), as drafted, suggests that either the polluter pays or otherwise payment should be made through mechanisms set up by Member States.

5.47 The proposed requirements for the remediation of contaminated sites do not clearly provide for balancing of costs and benefits, nor consideration of practicability, or possible adverse environmental impacts, to be taken into account. This may mean that unnecessary costs would be incurred, for example where the best practical means of remediation might be to restrict or remove the vulnerable receptor, thus reducing potential exposure.

5.48 There is an additional administrative burden on the Government in drawing up the 'National Remediation Strategy'. There is also potential for drawing up such a Strategy to become cumbersome and expensive as future contamination is also covered. This will mean constantly updating this strategy.

Questions

- **Q.36 Do you agree that contaminated sites as defined should be remediated? Do you think these provisions could be amended to make them more proportionate? If so, how?**
- **Q.37 Should this provision be aligned with existing European Directives (as outlined in paragraph 5.2), so that where they apply, those Directives' arrangements concerning remedies will operate as now?**
- **Q.38 Do you agree with the costs and benefits identified in our preliminary analysis? How do you consider these costs could be reduced whilst achieving the same or similar benefits?**
- **Q.39 What are your views on requiring Member States to put in place appropriate mechanisms to fund remediation of orphan sites?**

- **Q.40 What are your views on requiring Member States to have a public 'National Remediation Strategy' in place? Do you think this will affect existing national approaches such as remediation by developers?**

Part 6 – Chapter 4: Articles 15-17 – Awareness Raising, Reporting And Exchange Of Information

Article 15 – Awareness raising and public participation

Article 15 – Awareness raising and public participation

1. Member States shall take appropriate measures to raise awareness about the importance of soil for human and ecosystem survival, and promote the transfer of knowledge and experience for a sustainable use of soil.
2. Article 2(1), (2), (3) and (5) of Directive 2003/35/EC shall apply to the preparation, modification and review of the programmes of measures on risk areas referred to in Article 8 and the National Remediation Strategies referred to in Article 14.

Content

6.1 Member States must take ‘appropriate measures’ to raise public awareness of the importance of soil, and promote the transfer of knowledge and experience for the sustainable use of soil. Article 2 of the Public Participation Directive (PPD) should be applied to the preparation, modification and review of the programme of measures described in the proposed Article 8, and the National Remediation Strategy described in the proposed Article 14. This would mean that certain steps would have to be taken to ensure that the public is given early and effective opportunities to participate in the preparation and modification or review of these programmes and strategies.

Existing EC/domestic legislation

6.2 In terms of the application of the Public Participation Directive, there is currently no existing legal obligation to consult on policies like programmes of measures or national remediation strategies generally. It refers to specific Directives. But we are likely to do this in any event.

Issues raised

6.3 The duty to raise awareness is not considered to cause any significant difficulties. Some progress has already been made in this area under the Soil Action Plan for England. For example, a programme of soils education has been developed, including resources for use in schools and awareness raising has taken place under agricultural schemes such as cross compliance and catchment sensitive farming.

6.4 In Scotland a series of public events continues to champion the importance of soil for our food, landscape, wildlife, water and climate and highlight how soils play a crucial role in our society. The Farm Soil Plan has raised awareness on soil amongst Scottish farmers.

Initial Regulatory Impact Assessment - costs and benefits

6.5 Costs of awareness raising have not been analysed in the Commission's Impact Assessment. However, experience of running awareness raising campaigns suggests set up costs of **£2 million**, with ongoing costs of **£0.5 million p.a.**

Questions

- **Q.41 Do you agree with our concerns and the costs and benefits identified?**
- **Q.42 What are your views on this provision and how could it could be improved?**

Article 16 - Reporting

Article 16 – Reporting

1. Member States shall make the following information available to the Commission within eight years from [transposition date], and every five years thereafter:

- a) a summary of the initiatives taken pursuant to Article 5;
- b) the risk areas established pursuant to Article 6(1);
- c) the methodology used for risk identification pursuant to Article 7;
- d) the programmes of measures adopted pursuant to Article 8 as well as an assessment of the efficiency of the measures to reduce the risk and occurrence of soil degradation processes;
- e) the outcome of the identification pursuant to Article 11(2) and (3) and the inventory of contaminated sites established pursuant to Article 10(2);
- f) the National Remediation Strategy adopted pursuant to Article 14;
- g) a summary of the initiatives taken pursuant to Article 15 as regards awareness raising.

2. The information referred to in paragraph 1(b) shall be accompanied by metadata and shall be made available as documented digital georeferenced data in a format that can be read by a geographic information system (GIS).

Issues raised

6.6 Communicating what soil we have and what threats they are subject to will not be a problem in relation to risk identification and the related programme of measures, as we already have GIS systems in place that can do much of this. Data on contamination is widely available and information on sealing is available.

6.7 The requirement to make information for reporting purposes on the identified risk areas available in a format that can be read by GIS seems unnecessary. There has been no analysis of the costs and benefits of this or any explanation as to how the Commission or others will use the data.

6.8 It is unlikely that the methodology for identifying risk areas will change, so we would suggest that the requirement should only be to report if it does change.

Questions

- **Q.43 What are your views on this provision and how could it be improved?**

Article 17 – Exchange of Information

Article 17 – Exchange of information

Within one year from [entry into force], the Commission shall set up a platform for the exchange of information between Member States and stakeholders on the risk area identification pursuant to Article 6 and on risk assessment methodologies for contaminated sites currently in use or under development.

Issues raised

6.9 It is unclear how this “platform for the exchange of information between Member States and stakeholders” will work. We will seek more information on how this will work and what benefits it will deliver for Member States.

6.10 The provision is narrow and should also allow for exchange of other information, such as best practice on means of mitigating soil sealing, acceptable levels of risk, etc.

6.11 It is unclear if the Commission want information specific to methodologies ‘currently in use or under development’ or information on methodologies specific to contaminated sites ‘currently in use or under development’.

Questions

- **Q.44 Do you consider that this platform for the exchange of information would be useful for the Government and stakeholders?**
- **Q.45 Is this too narrow a range of information? If so, what else should be included?**

Part 7 – Chapter 5: Articles 18-26 – Final Provisions

Article 18 – Implementation and adaptation to technical progress

Article 18 – Implementation and adaptation to technical progress

1. The Commission may, in accordance with the regulatory procedure with scrutiny referred to in Article 19(3), adapt Annex I to technical and scientific progress.
2. Where, on the basis of the exchange of information referred to in Article 17, a need to harmonise the risk assessment methodologies for soil contamination is identified, the Commission shall adopt common criteria for soil contamination risk assessment in accordance with the regulatory procedure with scrutiny referred to in Article 19(3).
3. Within four years after [date of entry into force], the Commission shall adopt, in accordance with the regulatory procedure referred to in Article 19(2), the necessary provisions on data and metadata quality, utilisation of historical data, methods, access, and data-exchange formats for the implementation of the provisions of Article 16.

Content

7.1 This proposed Article provides for use of the regulatory procedure for: the adaptation of Annex 1 to technical and scientific progress; to adopt common criteria for soil contamination risk assessment if the exchange of information suggests that this is required; and for the necessary provisions (e.g. on data and metadata quality, methods, access and data-exchange formats) to enable implementation of the proposed Article 16 on reporting. The regulatory procedure involves the Commission and Member State representatives considering measures to be adopted. The Commission will adopt these measures if in accordance with the opinion of the committee. If the measure is not in accordance with the opinion of the committee, the Commission will submit to the Council for its approval proposals relating to the measure in question, as well as informing the European Parliament.

Issues raised

7.2 We have some concerns over the delegation of this power to Committee as a result of the introduction of the regulatory procedure (explained above).

Article 22 – Penalties

Article 22 – Penalties

The Member States shall lay down the rules on penalties applicable to infringements of the national provisions adopted pursuant to this Directive and shall take all measures necessary to ensure that they are implemented. The penalties provided for must be effective, proportionate and dissuasive. The Member States shall notify those

provisions to the Commission by the date specified in Article 24 at the latest and shall notify it without delay of any subsequent amendment affecting them.

Issues raised

7.3 It is not entirely clear whether this would prevent the use of measures such as voluntary codes of practice for which there are not penalties for non-compliance. Council Legal Services have advised that this will not prevent the use of such measures, provided they achieve the objectives of the relevant Article. We are considering this issue further.

Article 23 – Amendment to Directive 2004/35/EC

Article 23 – Amendment to Directive 2004/35/EC

In Article 6 of Directive 2004/35/EC, paragraph 3 is replaced by the following:

“3. The competent authority shall require the remedial measures to be taken by the operator. Subject to Article 13(1) of Directive xx/xx/xx, if the operator fails to comply with the obligations laid down in paragraph 1 or 2(b), (c) or (d) of this Article, or cannot be identified or is not required to bear the costs under this Directive, those measures may be taken by the competent authority itself.”

Content

7.4 Article 6 (3) of the Environmental Liability Directive is replaced.

Issues raised

7.5 The Commission considers it necessary to amend this to allow Member States to fund the remediation of orphan sites. It is not clear to us why this is necessary and we would be concerned about any changes to the ELD as it is being implemented this year, and any changes would cause delay and extra administrative costs at this late stage.

Article 24 – Transposition

Article 24 – Transposition

1. Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with this Directive by [24 months after the date of entry into force] at the latest. They shall forthwith communicate to the Commission the text of those provisions and a correlation table between those provisions and this Directive.

When Member States adopt those provisions, they shall contain a reference to this Directive or be accompanied by such a reference on the occasion of their official publication. Member States shall determine how such reference is to be made.

2. Member States shall communicate to the Commission the text of the main provisions of national law which they adopt in the field covered by this Directive.

Content

7.6 Member States shall transpose the proposed Directive into national law within 2 years of the Directive coming into force.

Issues raised

7.7 We have significant concerns regarding these timeframes. Experience on Directives such as the Environmental Liability Directive and the Water Framework Directive suggest that transposition of a Directive is a time consuming process. Successful implementation should be the outcome we are seeking and this would be problematic in 24 months. We would suggest that an implementation period of 3-4 years would be more manageable.

Questions in relation to Articles 18-24

- **Q.46 What are your views on these provisions?**

Annex A – Summary Of Consultation Questions

The full list of questions, including where they can be found in the document, is summarised below. Where possible please provide explanation and examples to support your response to questions.

Initial questions (page 13):

- A. What are your views on the current level of soil protection measures in the UK considering the risks and threats faced by soils, including those identified by the Commission?
- B. If you consider these measures to be inadequate, do you believe that any gaps are best dealt with on a common basis across the EU, for example to avoid distortion in competition, or better dealt with at a domestic level?
- C. What, if any, gaps exist in terms of addressing soil protection at an EU level in particular the risks identified by the Commission?
- D. Does the solution to these gaps lie in amending existing EU Directives, or in introducing a new overarching framework for soil protection?
- E. Are there any existing EU provisions that give some protection to soils which, in your view, do not work or which could do with simplification?
- F. In terms of the risks and threats identified by the Commission, how urgent are these problems? Is there sufficient evidence to tackle them now?
- G. Who should bear the costs involved in any new obligations? Should we follow a polluter pays approach, a market-based system where, for example, a property developer pays the cost of remediation, or should these costs fall to taxpayers?

Detailed questions:

Question number	Question	Page number
Q.1	Article 1: What are your views on the scope of the proposed Directive, in particular the definition of soil and the soil functions which are listed?	15
Q.2	Article 1: Do you think the proposed Directive seeks the right level of protection for our soils?	15
Q.3	Article 1: Do you think it is important for Member States to address natural degradation as well as that caused by human activity?	15
Q.4	Article 2: Do you have any comments on these	16

	definitions? Do you think it is important to clarify any other terms in the proposed Directive?	
Q.5	Article 3: Do you consider there is a significant benefit in expanding the duty, as provided by the proposed Directive, to carry out an environmental assessment in so far as soil is concerned, so that it covers all other sectoral policies which may have a significant impact on soil? If so, which particular sectors of policy do you think impact on soil and need to be covered? And what are your views on leaving out the duty to consult in relation to these additional sectors?	17
Q.6	Article 3: What are your views on how this provision could be improved, for example, should it instead only refer to the SEA Directive in the recitals and include this additional duty in respect of soils only in respect of policies not already covered by the SEA Directive?	17
Q.7	Article 4: There are a number of ways in which this proposed Article could be adapted. Please let us have your views on how this provision could be amended. Some possibilities you may wish to consider are: <ul style="list-style-type: none"> ○ inclusion of an appropriate <i>de minimis</i> threshold, in terms of area of land affected. ○ leaving it to individual Member States to decide which land-users are covered and which activities should be regarded as likely to result in significant harm. This may mean differing levels of care in different Member States but with more flexibility to deal with relevant local issues that may change with time. ○ leaving this outcome to be achieved by the EIA and other Directives, and simply requiring Member States to encourage action by land-users more generally to minimise their impact on soil functions. ○ exceptions or limits to the duty to prevent or minimise, for example, because some uses serve important social or economic needs, and minimising adverse effects may be technically infeasible or involve excessive cost? 	19
Q.8	Article 4: What activities, which are not already regulated in the UK, if any, do you consider may have a significant adverse impact on soils?	19

Q.9	Article 4: Do you have any comments on the issues we have raised, and on our initial analysis of costs and benefits?	19
Q.10	Article 5: Do you consider there to be significant benefits in having new EC legislation that deals with soil sealing? If so, what are the benefits and do they in your view exceed the potential costs?	23
Q.11	Article 5: Do you think there would be value in amending the draft Directive, for example, to: a) make it clear that Member States in considering the need to limit soil sealing should do this as part of their overall consideration of a proposed development's environmental, social and economic impacts; b) provide for exceptions to the requirement to limit sealing, for example, where the proposed development/sealing serves an overriding public interest; c) insert <i>de minimis</i> provisions in line with the thresholds in the Environmental Impact Assessment Directive?	23
Q.12	Article 5: What are your views on amending this provision so that it only requires mitigation of new soil sealing through use of permeable construction materials?	23
Q.13	Article 5: Do you agree with our concerns and our assessment of the costs and benefits as set out in our initial RIA?	23
Q.14	Articles 6-7: Do you consider that this risk-area/programme of measures approach is appropriate? How do you consider that this provision could be improved, for example, what are your views on requiring Member States to put in place programmes of measures to address degradation processes with an adequate focus on higher risk areas and higher risk activities (but without requiring formal identification of risk areas) or requiring more clearly harmonised standards?	28
Q.15	Articles 6-7: Is there a significant benefit, in your view, in having a common EU-wide framework in place?	28
Q.16	Articles 6-7: Do you consider that the correct	28

	degradation processes have been listed for the purpose of identifying risk areas? What are your views on seeking to have compaction removed from this list so that it is dealt with only under the proposed Article 4?	
Q.17	Articles 6-7: Do you consider that the definitions of soil erosion, soil carbon and the other degradation processes are correct considering the range of soil functions which the proposed Directive seeks to protect?	28
Q.18	Articles 6-7: What are your views on the inclusion of salinisation as a threat – do you consider that it should be defined to exclude managed retreat?	28
Q.19	Articles 6-7: If the proposed Directive were to require detailed risk-mapping, is it important for it to require Member States to use all the Annex I factors or could the methodology be left to individual Member States?	28
Q.20	Articles 6-7: Do you agree with our concerns and our estimate of the costs and benefits of this provision?	28
Q.21	Article 8: How important do you think it is for us to be permitted to continue to use existing CAP measures (cross-compliance and agri-environment) to deliver the required Programme of Measures? Do you think such existing measures in their current form are adequate for addressing soils issues in high risk areas?	29
Q.22	Article 8: Would you like the Government to be able to use a range of measures, from guidance and codes of practice to regulations, to implement this proposed Article?	29
Q.23	Article 8: Do you agree with our concerns and our estimate of costs and benefits?	29
Q.24	Article 9: Are there any benefits in having this provision?	31
Q.25	<p>Article 9: How do you think this proposed Article could be amended to improve it? Examples include:</p> <ul style="list-style-type: none"> ○ So the proposed Directive states that full implementation of existing pollution prevention and waste legislation might be sufficient for implementation. ○ So the proposed Directive states specifically what risks or activities must be addressed. 	31

Q.26	Articles 10-11: Do you agree with the costs and benefits identified in our preliminary analysis? How do you think the proposed Directive could be amended to reduce the costs involved whilst achieving the same benefits?	36
Q.27	Articles 10-11: Should the proposed Directive enable Member States to retain their existing national approaches to the identification of contaminated land, provided these deliver some basic common requirements, or should they be required to follow a common detailed procedure? If so, what are the basic common requirements that can in your view reasonably be included in the proposed Directive?	36
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Q.29	Articles 10-11: What are your views on the list of potentially polluting activities set out in Annex II?	37
Q.30	Articles 10-11: Do you consider that it is necessary to test for dangerous substances at all sites on which potentially polluting activities have taken place or do you think testing should be targeted based on a risk assessment?	37
Q.31	Articles 10-11: Do you think the timescales given in the draft Directive for compiling and reviewing the inventory are reasonable?	37
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Q.33	Article 12: How do you think this provision could best be amended to minimise any possible negative impacts that this proposed Article may have in Great Britain?	39
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Q.36	Articles 13-14: Do you agree that contaminated sites as defined should be remediated? Do you think these	41

	provisions could be amended to make them more proportionate? If so, how?	
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