Workshop on Best Practice in Analysing and Developing Environmental Policies

15 November 2005

Background Paper

This background paper has been produced by Andrew Farmer, Patrick ten Brink, Marianne Kettunen and David Wilkinson of IEEP, drawing upon a range of analyses for this paper of Member States approaches by IEEP (UK, Ireland, Sweden, Finland, Estonia, Slovakia), BIO (France), Ecologic (Austria and Germany), FEEM (Italy), IEP (Czech Republic), and RIVM (the Netherlands). Contributing experts were Cécile des Abbayes of BIO, Benjamin Görlach of Ecologic, Michela Catenacci of FEEM, Eva Adamova of IEP, Bart Wesselink of RIVM and from IEEP the above and also Claire Monkhouse, Peter Hjerp, Vanessa Aufenanger, Katarina Korytarova and Clare Miller.

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Background

A number of initiatives by the Member States and the Commission seek efficient implementation of environmental legislation. The Commission in particular is promoting improved analysis of policies through its commitment to Better Regulation, and the use of tools such as stakeholder consultation, market based instruments, impact assessment and simplification. Within EU environmental policies there is often flexibility as to the choice of policy instrument or level of ambition that can be applied as they are implemented by the Member States. For example:

- Often EU law set targets and then allows Member States to choose the route for transposition and implementation that is appropriate to them.
- There can be a range of areas where there may be flexibility for Member States – such as the targeting or the level of burden and scope of a Directive, the level of national ambition, the choice of which instruments to use to meet the objectives, the implementation paths, institutional responsibility, and the level of internal subsidiarity.
- The level of flexibility varies for different Directives and across countries, and can be split into 'real flexibility' and 'constrained flexibility' - where there is some flexibility though with some restrictions.

One of the ways in which Member States can exploit flexibility is through ex-ante analysis of different implementation options. The more efficient policy assessment is at the Member State level, then the more efficient the implementation of European policy is likely to be. If the Member States are efficient in how they implement environmental policy then any negative impacts on businesses can be minimised and, ultimately, new environmental ambitions will be more welcomed. Assessment techniques can be fully-fledged integrated assessments covering all key options for flexibility, or they can more focused assessments. Different roles are also given to the use of consultation, and to the use of benefits and costs assessment.

There is considerable variability both within and between Member States in the use, role and rigour of ex-ante policy assessment. This occurs both across policy fields (water, air, soil, etc) and between different levels of government (cities, regions, country level).

Objective of the workshop

The purpose of this policy exchange workshop is to examine the flexibility Member States have in transposing EU environmental policy and, where they have flexibility, to identify good practice in policy assessment that allows them to implement it more cost efficiently. As such, it should allow good practice to be shared. The workshop will bring together environmental policy makers, better regulation experts, and analysts (consultants or academics) experienced in environmental policy assessment. The focus is more on ex-ante policy assessment than on implementation in practice. The discussions should lead not only to a better understanding of the value of impact assessment techniques for assessing national options for implementing EU Directives, but also recommendations for what can usefully be done, by whom, to make better

use of impact assessments. It is hoped that this will help national administrations in their processes of transposing and implementing EU Directives.

Background Report

This background report examines the scope of flexibility in EU environmental law and how Member States have responded to it. In particular it examines three case studies - the national emission ceilings Directive, habitats Directive and packaging waste Directives – in order to draw insights as to whether and how Member States have used ex-ante assessments in implementing EU environmental law and how this might lead to more effective choices for implementing measures.

The results show that there is no element of the analytical approaches that is truly common to all Member States. Where analyses have been undertaken, Member States have usually clearly identified the problems being addressed, both in terms of the environmental outcomes expected and the obligations that are required of a Directive. Importantly, the scope of flexibility is often identified explicitly or implicitly. This is an important first step prior to options identification as it allows stakeholders, etc, to understand the limits within which a government is working.

Even without a formal impact assessment procedure many Member States do undertake many of the analytical processes that this would imply, such as problem and options identification, cost-benefit analysis and stakeholder involvement. Thus there is already much good practice in the Member States, but the process of policy assessment could be more systematic, more transparent and better linked to the policy cycle.

It is also important to note that assessments can be used genuinely to examine different options and inform an open choice of policy making (eg implementation path) or can sometimes be used simply to provide a justification of a policy choice that has already been made.

Stakeholder consultation is an important part of the practice of determining implementation options in many Member States. It is evident that in some cases this is not simply the presentation of draft conclusions to elicit a stakeholder response, but that stakeholders can be deeply involved in the process of options development.

A critical element of an impact assessment is the assessment of the costs and benefits of the options being considered. The most obvious way to tackle this is a full cost-benefit assessment (CBA). However, there have been relatively few full CBAs undertaken in the survey for this report.

We can, therefore, conclude that there has been some recent progress in the use of ex-ante assessments by the Member States in exploring implementation choices. However, in many cases the use of such assessments is still limited, so a question remains as to whether the right choices are made in every case. The aim of the workshop is, therefore, to go beyond the information contained in this paper and explore where, and by whom, initiatives can be made to encourage the use of techniques in the assessment process.

The workshop

The workshop is being held at the British Embassy in Brussels on the 15 November 2005. There will be around 60 experts, invited from across all 25 Member States, the European Commission, and external experts. From Member States this includes a mixture of 'enablers' – those that can make impact assessment happen – and technical experts – those involved in the actual assessments.

Structure of the day

Session I: Overview: Analysing and Developing Environmental Policies
9:00 Welcome and introduction by the chair
9:15 Flexibility & Impact assessment: An Overview

Session II: Assessment Processes
National Case, Discussant Response and Discussion.

Session III: Assessment Tools – Use of Analysis of Benefits and Costs

National Case, Discussant Response and Discussion.
13:00 Lunch

Session III: Assessment Tools - Use of Consultation
National Case, Discussant Response and Discussion.

15:00 **Breakout on Assessment Techniques (3 Groups)**
(1) stakeholder consultation; (2)analysis of costs and benefit; (3) what are the barriers and solutions to choosing a good implementation path

Session IV: Plenary: Reporting Back From Breakout Groups
16:45 **Discussion: Needs and Way forward**
What are the needs, what are the barriers, what are the solutions, who can make solutions happen?

17:15 **Chairman's Conclusions**
17:30 End of the day

The workshop will address many of the issues considered in this background paper. In particular participants will have the opportunity for detailed discussion during three parallel 'breakout' sessions centred on three different themes. Following the analysis in this background paper, the following boxes identify some pertinent questions that could be addressed in each of the breakout discussions.

Breakout discussion: stakeholder consultation

- Have stakeholder consultations helped Member States identify and choose the best options to implement EU legislation?

- When and how are stakeholders best involved in the assessment process?
- Is there a trade-off between 'deep' involvement and transparency?
- How can stakeholder consultation best support the use of benefits and costs assessments?
- Could stakeholder consultation be better done and, if so, what are the barriers, and how should they be overcome?

Breakout discussion: use of benefits and costs assessments

- Has assessments of costs and benefits allowed Member States to choose the best options to implement EU legislation?
- How ambitious (in level of depth or quality) should assessments be of benefits and costs?
- If detailed analysis of benefits and costs are undertaken what practical implications might this have for the number of options to be assessed?
- Where available, has ex-post assessment of benefits and costs demonstrated the accuracy of ex-ante assessments?
- Could benefits and costs be better assessed and, if so, what are the barriers, and how should they be overcome?

Breakout discussion: what are the barriers and solutions to choosing a good implementation path?

- What barriers exist (EU, national, local or other) to choosing better policy options?
- Does ex-ante assessment help Member States find the best way to implement EU environmental legislation?
- What elements of ex-ante assessment are best practice?
- Why are full ex-ante assessments sometimes not undertaken?
- How can better ex-ante assessment be promoted?

In addition to the breakout sessions, the agenda has been structured so that there is plenty of scope for discussion and participants are invited not only to reflect upon the above questions, but also to bring their own questions on the issues addressed in this report for discussion on the day.

Workshop on Best Practice in Analysing and Developing Environmental Policies

Background Paper

1 Introduction

A number of initiatives by the Member States and the Commission seek better implementation of environmental legislation. The Commission is pushing for improved analysis of policies through its commitment to Better Regulation, and the use of tools such as stakeholder consultation, market based instruments, impact assessment and simplification.

The use of such tools is not limited to the Commission. Many EU legal instruments give the Member States flexibility over implementation and so allow them to make their own choices over efficient and effective policies at the national level.

Of course, flexibility only pays off if it is exploited. This is why this report and the workshop will examine to what extent Member States have looked at the opportunities open to them and found the implementation tailored to their own circumstances to meet any targets agreed at EU level.

Member States are more likely to choose the optimal policies if they undertake detailed ex-ante analysis of different implementation options. The more efficient policy assessment is at the Member State level then the more efficient (eg lower cost) should be the implementation of European policy, and any negative impacts on competitiveness should be minimised.

It is believed that there is considerable variability both within and between Member States in the rigour of ex-ante policy assessment. This occurs both across policy fields (water, air, soil etc) and between different levels of government (cities, regions, country level). This is despite a number of efforts at the Member State and European level to promote better policy assessment (both in general such as the work of the Directors for Better Regulation and in the environmental field such as strategic environmental assessment, voluntary actions to promote urban planning, water framework Directive requirements for river basin planning, etc).

The purpose of this background paper is to:

- describe the nature of flexibility in EU law, and assess whether it leaves significant choices open to Member States in practice;
- identify whether ex-ante policy assessment can allow Member States to use that flexibility to implement environmental policies more efficiently;
- identify good practice in how Member States undertake ex-ante policy assessment; and
- provide questions for debate at the workshop on 15 November 2005.

This paper begins by providing a short analysis of EU environmental law, illustrating the nature of flexibility. The analytical component of the report is introduced by a description of how the report was produced, followed by sections considering lessons learnt from individual Member States' approaches and for each Directive under

consideration. Finally, the paper concludes with some questions that might usefully be considered by participants during the workshop.

To provide concrete examples, this paper includes case studies of the habitats, national emission ceilings and packaging waste Directives and on assessment procedures within Austria, Czech Republic, Estonia, Finland, France, Germany, Ireland, Italy, the Netherlands, Slovakia, Sweden and the United Kingdom. These provide a range of examples to stimulate discussion, rather than attempting to be comprehensive in coverage.

Please note that the views expressed in this background paper are entirely those of the authors and do not, in any respect, represent those of the European Commission.

2 Flexibility in EU environmental law

EU environmental law contains a range of flexibility that the Member States can use. This flexibility is provided in line with the principle of subsidiarity that the scope of EU action should be limited to what it can do best, and that Member States should decide details if they are best placed to do so. The range of flexibility includes:

- Regulations that leave little scope for flexibility.
- Directives, which set specific requirements, eg an emission limit value, that allows little or no flexibility in implementation.
- Directives that establish procedures with relatively detailed requirements, which allow some flexibility, but certain obligatory elements (eg IPPC).
- Directives that set out environmental goals to be established, but are not prescriptive as to the means of achieving them, thus providing much flexibility of instruments, etc (eg planning within the water framework Directive).

Where flexibility exists, Member States have the opportunity to identify options for implementation that fit better with the administrative culture of their country. The options chosen can also reflect the costs and benefits to business, etc in their country – costs and benefits that may differ across Member States according to the state of the environment, the specific local problems, the specific local stakeholders, etc. It, therefore, allows for practical progress on achieving the objectives of 'better regulation'.

This paper seeks to answer the following questions:

1. What **scope for flexibility** do Member States have with regard to the level of ambition and way of implementing EU environmental legislation in different policy areas (water, soil, air, waste, etc.)? In other words, are these issues decided by the EU or the Member States?
2. What is the **analytical framework** used by the Member States in policy areas where they have flexibility, eg regulatory or sustainable impact assessment, integrated policy appraisal or other tools?
3. Is the choice of policy instruments and targets **consulted** with relevant stakeholders?
4. Does it seem that there is considerable **variability in the rigour of policy analysis** for different environmental media and in different Member States?
5. Does policy assessment **pay off** in the form of lower cost implementation?

2.1 EU environmental law and resulting flexibility

In order to consider the issues of flexibility in Community law and Member States' responses to them, it is important to stress the variety of Community 'legislation' that exists (set out in Article 249 of the Treaty). They are:

- Regulations
- Directives
- Decisions
- Recommendations
- Opinions

The last two have no binding force and are not regarded as legislative instruments. Having no binding character, they allow maximum flexibility to the Member States.

A **Regulation** is directly applicable law in the Member States. Examples include REACH and also day-to-day management of the Common Agricultural Policy. Its provisions (usually precise) are directly applicable and can significantly limit any flexibility of response.

A **Directive** is binding as to the results to be achieved, but leaves open to the Member States the choice of form and methods. It is therefore the most appropriate instrument where some flexibility is required to accommodate existing national procedures or circumstances and, for this reason, is the instrument most commonly used for environmental matters. A balance usually exists between the EU placing binding objectives on a Member States and how far the Member State is given real choice in how to meet those objectives.

A **Decision** is binding in its entirety upon those to whom it is addressed. It has been used in the environmental field in connection with international conventions and with certain procedural matters.

The flexibility that Member States actually have when implementing EU law varies considerably and the ability to use this flexibility will depend upon the situation (legal, political, etc) in each Member State. We consider three types of flexibility:

- *Real flexibility*: where EU law either allows complete freedom to Member States for measures to be adopted (eg the programme of measures under the water framework Directive, or using general binding rules with standard conditions or individual site-based permits with individually-tailored conditions under the IPPC Directive).
- *Apparent or constrained flexibility*: where the flexibility seemingly available within one EU law is constrained by another or due to existing instruments/institutions/procedures and compatibility issues.
- *'Not real' flexibility*: this is where the flexibility apparently available in EU law cannot be taken advantage of in a Member State due to in-country constraints, eg an option is not allowed by the legal system.

In addition, there are also cases where certain practices or approaches are non-binding but recommended. For example, there is the recommendation to implement full cost recovery in the water framework Directive and in the bio fuels Directive there is a recommendation to have a target of around 2% and 5.75% bio fuels use for 2005 and 2010 respectively. Taking forward non-binding recommendations could impact upon the choices of measures used to achieve related binding obligations (eg in relation to reporting).

It is important to note, that the more flexibility that a Directive provides then the more choice a Member State will have over implementation. Flexibility can exist over both the level of ambition (addressed in 2.2) and over the choice of implementation path to meet a given level of ambition (addressed in 2.3).

2.2 Flexibility over ambition

Directives can provide flexibility in relation to the **level of coverage**. Examples include:

- IPPC Directive – the definition of 'installation' can affect the coverage of the permit and hence the coverage of application as some countries adopt a wider definition of installation or have broader coverage of permit. There is also some choice over which (sizes of) installations fall under the Directive**.**
- Habitats Directive – the Member States must propose a list of nature sites, and have some ability to freely select the sites on the list (although the Commission may seek to include further sites). As the choice of sites is based on scientific criteria this choice is partially controlled. Member States are required to undertake surveillance (Article 11) but no definition of the scope of this is given and this is up to Member states to decide. Member States must establish 'necessary conservation measures' for sites, involving 'if need be' appropriate management plans or other provisions (ranging from administrative provisions to contractual arrangements - Article 6). This also represents ambition in terms of coverage**.** The choice of necessary conservation measures provides significant opportunity for choosing efficient implementation paths tailored to Member State and/or site based contexts, depending upon the analysis undertaken to support this.

Directives can provide flexibility in relation to **ambition level**. An example is:

- In implementing the biofuels Directive Member States can chose their own target for biofuels, though a guidance value of 2% in 2005 and 5.75% in 2010 is given.

Directives can provide flexibility in relation to the **choice of how fast** to reach a given target. Examples include:

- Habitats Directive - there was a three year time period after the adoption of the Directive for the Member States to sending their 'initial' site lists, but none were early, many were late. There is no deadline for achieving favourable conservation status where this is to be done through management and when/where necessary by restoration. The deadline for Member States to start implementing management of the sites is when the sites agreed are notified as Special Areas of Conservation (SCAs), which will within a period of 6 years after the adoption of the SCI list by the Commission. This represents flexibility in the level of ambition in terms of how quickly to achieve objectives, which will, in turn, affect the choice of management measures/tools, ie implementation path.
- IPPC - Member States have until 2007 to issue permits to existing installations and they have chosen different timetables to achieve this.

Directives can provide flexibility through the use of **exit clauses and 'safety valves'**. Examples of this include:

- Water framework Directive – Member States have significant flexibility through the use of derogations where requirements are excessively costly. This provides flexibility in terms of timetable linked to cost-efficiency, translated into choices of implementation path.
- Habitats Directive - Member States whose sites hosting priority natural habitat types or priority species represent more than five per cent of their national territory may request a more 'flexible' approach to the selection of sites of Community importance. This represents flexibility in how far to go, which will result in different choices for the implementation measures to be adopted. This also represents a recognition of the different conditions prevailing in the various Member States and a recognition of North-South difference and excess burden.

Finally, most Directives allow flexibility in relation to whether Member States can seek to achieve objectives beyond those required in the Directive. This is sometimes termed 'gold plating'. However, this is often used in a pejorative sense, but can legitimately address areas of national concern. The term is not used further in this paper, therefore.

2.3 Flexibility over the implementation path

Even after flexibility over the ambition level has been dealt with, there is often still flexibility over the choice of how to meet the target or ambition level chosen. Directives allow flexibility in this implementation path in different ways.

Directives can provide flexibility through the choice as to **which policy instruments** to use. Examples include:

- National emission ceilings Directive – Member states are free to choose which portfolio of instruments to reach the NEC targets. Note that the scope for emissions trading is constrained by the requirement for emission limit values to be specified in site specific IPPC permits (an example of *constrained flexibility*), although this has been a choice taken forward in the Netherlands, but was rejected as a viable option by Ireland (see section 4.1).
- Under the water framework Directive Member States have the freedom to target measures (and allocate the burden) necessary to achieve good ecological status. As a result Member States are free to choose any appropriate measures (implementation paths) and decide the distribution of costs.
- Air framework Directive: this sets local air limit values, and the Member States are free to decide how to achieve these. The choices made can vary within a Member State. For example, in the UK London has chosen to use congestion charging as a measure to help improve air quality, but Edinburgh has rejected this option.
- Solvent emissions Directive: emission limit values or national plan allowed. The latter could be achieved through any choice of instruments (although again there could be constrained flexibility due to IPPC obligations).
- Under the emissions trading Directive – Member states can choose which sectors to 'burden' through the national programmes (also an issue of coverage). This also allows Member States flexibility in a choice of measures and who pays.

- Landfill Directive – Member States are free to choose a range of measures such as landfill taxes and other instruments.

Directives can also provide flexibility through a choice of which **technical standards** to apply. An example includes:

- IPPC Directive – in assessing best available techniques for installations and establishing emission limit values in permits, Member States are free to consider a range of technical options to achieve the desired objective.

Directives can provide flexibility through a choice as regards **institutional responsibility** (ie giving responsibility to an existing institution or create a new one, add new powers, etc). Examples include:

- Emissions trading Directive – Member States could regulate this through a new competent authority or use an existing one.
- Packaging waste Directive – Member States have adopted different institutional structures to support its implementation.

Directives can provide flexibility through the level of internal **subsidiarity** available (ie how much responsibility is devolved to the cities and regions). Examples include:

- Water framework Directive – Member States are free to identify the range of institutional responsibilities relating to river basins (and combinations thereof) and sub-basins. For example, a single competent authority is responsible in England, while in France each Water Agency is a designated competent authority.
- IPPC – Member States are free to identify different levels and combinations of administration(s) to be responsible for permitting and inspection obligations. This has resulted in many different approaches ranging from single national bodies (eg Ireland) to mainly local implementation (Denmark) or a mix of the two (eg the Czech Republic).

In addition, the choice of pathway can be influenced by the following:

- The possibility of ***piggybacking*** – implementation can 'piggyback' on measures currently (or planned) at national level. IPPC, for example, has piggybacked on national systems in Ireland, Sweden and the UK. It will be seen in the case studies that piggybacking by the habitats Directive and packaging waste has a major influence on implementation choices.
- Whether implementation results in ***Revision or revolution*** – eg in some cases the opportunity is taken to repeal and revise a broad swathe of legislation (eg as happened in a number of new Member States during the accession process).

In theory environmental problems could be more frequently regulated by Regulations. These have the advantages of relative clarity, certainty and harmony across Member States, with subsequent advantages for traders within the single market. However, Directives are usually the chosen instrument at EU level because they offer the flexibility to Member States as described above. This flexibility is chosen because it is recognised that Member States often have different environmental, administrative and

economic situations and that these differing conditions make the choice of one implementation path for the whole of Europe often inappropriate. One instrument, or ambition level, might work effectively in one country but could be excessively costly (in relation to its benefits) in another. The flexibility exists to allow Member States to choose the implementation measure which best achieve the Directive's objectives in their Member State. However, choosing an efficient, cost-effective path requires analysis in the Member States.

2.4 Flexibility pays off

The use of flexibility means that Member States can choose from more or less costly, or more or less effective, routes to implement EU legislation. The issue then becomes – how does a Member State choose the best route to implementation when there is flexibility?

The key is to consider more than one option for implementation – to look seriously at the range of measures available under the flexibility and to work out which is the best for the conditions.

There is also a widespread recognition that ex-ante policy option assessment (including the existence of an impact assessment framework incorporating the identification of multiple options, the use of cost benefit analysis and widespread consultation of stakeholders) allows Member States to identify the most attractive implementation paths. These implementation paths may in this way be tailored to the specific circumstances of the country including its administrative culture, businesses, environmental problems etc.

Most recently, the European Environment Agency has undertaken two studies[1]. on the relative costs in different Member States for implementing the urban waste water treatment and packaging waste Directives which demonstrate, as far as is possible, that different Member States have different ambition levels, and seemingly different costs of achieving their targets.

The following section of this paper identifies some issues on selected Member States generally. This then follows with sections on three example Directives – national emission ceilings, habitats and packaging waste.

[1] EEA 2005. Effectiveness of packaging waste management system in selected countries: an EEA pilot study. And EEA 2005. Effectiveness of Urban Wastewater Treatment in Selected Countries: an EEA pilot study.

3 Analytical frameworks adopted in the Member States

The comments made here draw upon short analyses undertaken of selected Member States by the project team, as well as other recently published studies of ex-ante assessments.

3.1 Analysis to support the choice of path for implementation

In order to take advantage of the flexibility that is available in EU Directives, Member States ought to undertake analysis in order to:

- Determine the extent of flexibility available (for example, taking account of requirements of other Directives and national conditions).
- Weigh-up the pros and cons of options that might be used for implementation within the scope of the flexibility available.
- Provide a basis for useful communication with stakeholders.

Member States undertake these analyses to varying degrees and in different ways. As will be seen, some Member States have adopted a formal, structured assessment framework used in most cases for assessment of implementation options (eg Regulatory Impact Assessment in the UK), while others might undertake a more disaggregated approach to the assessment. Whatever the framework, what is critical is whether the best policy decisions are made.

Whatever the approach (and whatever name is given to it), the immediate question is what are the issues and processes that should be included? A starting point is the Commission's 2002 Communication on Impact Assessment (COM(2002)276) [2] and the Commission's Guidelines[3] recommend that the following questions be asked when undertaking impact assessments at Community level, although they are equally applicable at national level:

- What issue/problem is the proposal expected to tackle?
- What is the main objective the proposal is expected to reach?
- What are the main policy options available to reach the objective?
- What are the economic, social and environmental impacts – positive and negative – expected from these different options?
- How to monitor and evaluate the results and impacts of the policy?
- How has stakeholder consultation been approached?
- What is the justification for the final policy choice?

[2] The Commission's Impact Assessment methodology took on board both state of the art in both Sustainability Impact Assessment and Regulatory Impact Assessment. In particular, it was in line with the recommendations of the Mandelkern Group on Better Regulation - Final Report (2001) and OECD recommendations on what constitutes a good ex-ante policy assessment.

[3] See http://europa.eu.int/comm/secretariat_general/impact/index_en.htm for the 2005 version of the Guidelines

Impact Assessment addresses a wide range of issues and incorporates a number of processes. This paper examines the key aspects determining whether the Member States take advantage of the flexibility that EU law provides them to implement environmental policies cost-effectively[4]:

- Use and scope of assessments
- Options identification
- Stakeholder involvement

3.2 Use and scope of assessments

The scope and frequency of use of assessments varies significantly between the Member States. Table 3.1 provides a summary of the use of systematic ex-ante assessment process in the Member States recently published by the Commission. From this it can be seen that:

- Of the 25 Member States, only 12 have obligatory ex-ante assessments (or plan to do so). Some of these are highly developed and institutionalised (eg UK), while others have only recently been introduced, as in Ireland and the Czech Republic. In some Member States (eg the Netherlands and Finland) a variety of impact assessment systems, focused on different objectives, continue to exist side by side. These assessments can be used to decide on how to implement EU law, but the extent can depend upon the degree of impact expected by a Directive (and hence the need to consider options, etc). Further points to be made are:
  - Assessments are used in some Member States where it is not obligatory.
  - The scope of assessments varies. Some systems are limited to assessing business and administrative costs, or impacts on government expenditure and revenues. However, in many such Member States the approaches are evolving – for example through broadening the focus towards a wider consideration of environmental and social impacts (eg Ireland).
  - Some Member States have introduced a systematic assessment of the impact of proposed EU measures to assist in formulating their positions in Council (examples are the UK and the Netherlands), which can form a foundation for later analyses (post-adoption) supporting options analysis for implementation.
  - The procedures of assessment vary, such as the extent of stakeholder consultation.
  - Approaches to the central co-ordination and enforcement of assessment requirements, and to quality control also vary widely.
  - Where Member States have introduced a legal basis for assessments for some years there can still be practical problems in making these a reality in all important cases (eg Estonia).

[4] For a detailed assessment of assessment processes in the Member States see 'A Comparative Analysis of Regulatory Impact Assessment in Ten EU Countries'. A Report Prepared for the EU Directors of Better Regulation Group. Dublin, May 2004.

An important lesson from this is that care should be taken when referring to ex-ante assessments (or other related terms) in that it can mean different things in different Member States.

3.3 Options identification

In taking advantage of the flexibility available in EU law, assessments should explicitly identify the full range of options available for implementation. However, under most frameworks in the EU, assessment does not begin until after a preferred option has been identified. Only in the Netherlands, UK and Italy does the RIA begin before a choice is made[5].

Identifying options is only one part of the process. Table 3.2 demonstrates that once identified only some Member States refine this by considering multiple options, attempting to express them in quantitative terms and being explicit as to why they were selected.

One reason for the limited consideration of possible options is that government departments may tend to define issues according to their own specific 'world view' and their traditional policy instrument of choice (eg regulation, service provision, or taxation). Moreover, some instruments (eg the use of taxes or other economic instruments) may be the responsibility of other government ministries. This suggests that inter-ministerial consultations on impact assessments should take place at as early a stage as possible, to widen the discussion of available options[6].

The use of some form of assessment of costs and benefits is common, although not always systematic. The case examples demonstrate how little full cost-benefit analysis (CBA) has been undertaken, for example. Further a 2004 study for DG Enterprise concluded that while support for CBA was relatively widespread, this bore little relation to its actual use (see box 3.1).

It is also important to note that options analysis (in seeking to examine future developments) requires considerable information to be robust. While some of the relevant information will be held by governmental bodies, much is held by stakeholders and, therefore, active engagement with them is critical (see section 3.5).

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[5] In the UK, guidance from the Better Regulation Executive requires departments explicitly to identify the scope for flexibility in implementing EU Directives, and to consider at least three options, including 'do nothing', and a non-regulatory instrument. However, evaluations of RIAs by the UK's National Audit Office in both 2003-2004 and 2004-2005 have been obliged to reiterate the requirement to consider a range of options - including different enforcement regimes and the consequences of different levels of compliance. This suggests that a balanced consideration of options in the UK is not yet accepted as standard practice across all departments.

[6] The Regulatory Policy Institute study on RIA for the proposed groundwater Directive noted that Member States (eg Ireland) have often taken considerable trouble in identifying the incremental additional obligations that the proposal would have. This, therefore, illustrates the importance of this critical step in the analysis. However, as this study considers RIA by Member States directed to a Commission proposal, it is less relevant to the question of options analysis for implementation.

Box 3.1 Costs and benefits assessments: comments from DG Enterprise study[7]
The study concluded: 'When we probed … on indicators of quality arising out of a cost-benefit approach to better regulation, we found no evidence of countries pursuing cost-benefit assessment as the major pathway to quality. The pattern of impact in impact assessment is limited. True, there is unanimous support for IA. However, IA means quite different things in different countries. In some Member States IA does not go much further than compliance cost assessment of checklists; in others it does not stretch beyond a handful of pilot IAs; finally in a few cases there appears to be a consistent effort to assess a wide range of costs and benefits in an integrated process'.

3.4 Cost benefit analysis

Ideally Member States should identify the pros and cons of each option before deciding which is the best choice for them. This would require cost benefit analysis to be undertaken. Where the ambition level is fixed, then so are the pros and the analysis should focus on the cons, i.e. take the form of cost-effectiveness analysis.

A report from the Regulatory Policy Institute[8] examined the ex-ante assessments of eight Member States of how to implement the proposed groundwater Directive. It found that some analyses are of more use in finding the best implementation path. The factors that are likely to determine whether this is the case are:

- Whether the costs (and where relevant the benefits) are quantified and assessed;
- Whether the assessment is a 'one-off' designed to inform a relatively high-level policy decision or whether it is repeated as an iterative, interactive part of a process for continuing policy development;
- Whether a favourite option is split into its constituent parts and then explored further to check that all elements make sense and are optimal.

It is also important to note that assessments can be used genuinely to examine different options and inform a open choice of policy making (eg implementation path) or can sometimes be used simply to provide a justification of a policy choice that has already been made.

3.5 Stakeholder consultation

Stakeholder consultation is an important part of an assessment process:

- Primarily it helps policy makers choose between options by allowing stakeholders to provide information for use in the analyses.

[7] University of Bradford 2004. Indicators of Regulatory Quality. Report to DG Enterprise.

[8] Regulatory Policy Institute 2005. Benchmarking project: RIAs of the national effects of the proposed Groundwater Directive

- It also keeps those who are affected by regulation informed of its development.
- And the participatory process can generate greater ownership of the outcomes.

Governmental bodies do not have all of the information that is needed to undertake effective impact assessments. Therefore it is essential that stakeholders are involved to inform the analysis, not simply to seek a buy-in to the conclusions. Much relevant information will be available from stakeholders. However, this needs to be actively gathered as they will not necessarily know that the information that they hold is critical to the assessment process.

Public consultation is in practice pursued in most countries with RIA systems (see Table 3.1). A wide range of techniques is employed, including internet consultations of the general public; public meetings; surveys; test panels (eg in Denmark, UK, Germany and the Netherlands)[9].

Generally, an effective consultation process needs to start early; have a clearly defined structure; consider as many relevant stakeholders as possible; utilise a wide range of techniques tailored to the needs of the target groups; provide for adequate duration; make the results widely available; and use the information and analysis gathered.

3.6 Case examples

UK – Assessment as an ongoing process within policy development

In the UK RIA is expected to be a continuous process, developing as an EU proposal is firmed up. This is because the RIA is an integral part of the process of policy development, not an 'add-on'. It is a three-stage process:

Initial RIA: This is prepared as soon as details emerge of the Commission's first internal draft. Cabinet Office guidelines state that implementation and enforcement issues should be considered right from this early stage, including the practicality of proposed timescales and sanctions. It should include an initial estimate of costs and benefits of each option, and their distribution between groups, based on initial informal consultations.

Partial RIA: This builds on the initial RIA and should contain more advanced analysis than the Initial RIA, including the benefits, costs and risks (including competition impacts) associated with each option. A Partial RIA is issued when the Commission formally publishes its proposal, and has two main uses:
1) To be released as a consultation document – so that stakeholders can see what the policy options are and how they are likely to be affected by each

[9] Minimum standards are set in Sweden, UK, Germany and Austria. The minimum duration of consultation is variable – from 1-2 weeks in Poland, to three months in Sweden and the UK. In a number of Member States, there are specific requirements to consult particular groups or sectors eg SMEs (five countries); churches (Austria); charities and the voluntary sector (UK); women's groups and immigrants' representatives (Sweden). Estonia uses public opinion polls in assist its draft law-making process.

options – so that they can provide useful and relevant information in response; 2) To act as the framework for more detailed analysis of options, identifying areas where more information is needed and structuring future thinking.

Full or Final RIA: The Partial RIA is updated in the light of consultation, progress with EU negotiations, and further data collection and analysis. The Final RIA is prepared when the EU legislation is agreed by the Council and Parliament. It should set out a more detailed implementation and delivery plan, as well as plans for monitoring and evaluation. The Final RIA is signed off by the appropriate Minister.

Germany: assessment as 'work in progress'

In Germany, RIA was established in 2000 as a procedure to assess the probable and potential effects and side-effects of new laws. It is mainly targeted at legal initiatives with an expected significant impact, and shall take into account important developments in the field of society, environment, European integration and globalisation.

According to the joint rules of procedure (Gemeinsame Geschäftsordnung, GGO) of the German ministries, which entered into force on 1 September 2001, a RIA is to be conducted for each legislative proposal, the results of which are to be presented along with the proposal itself. Besides examining the intended and potential unintended effects of the new regulation, it serves to describe alternative regulation options and to evaluate the suitability of the suggested option for achieving a given target. Also the Ministry of the Interior and the Federal State of Baden-Württemberg have jointly developed a handbook on RIA, which was published in 2000. The publication of a new, hands-on guidance document for the practical application of regulatory impact assessments is expected at the end of 2005.

Regulatory impact assessment as a tool is still in its early phase. So far, it is not firmly established in German administrations, either at the federal level or in the ministries of federal states. An initial collection of exemplary applications did not include any environmental examples.

Ireland – adoption of a new regulatory impact assessment procedure

A new RIA system was launched in Ireland in July 2005 in a *Report on the Introduction of Regulatory Impact Analysis* from the Department of the Taoiseach. The procedure has been greatly influenced by the European Commission's Impact Assessment system, and practice in the OECD. Detailed RIA guidance is expected soon. The Better Regulation Unit in the Department of the Taoiseach will review and report on the operation of the RIA system after two years. A two-phase approach is proposed – an initial, brief screening RIA, and for more significant proposals, a full RIA. Full RIAs will be conducted where any one of the following applies:

- There will be significant negative impacts on national competitiveness;
- There will be significant negative impacts on the socially-excluded or vulnerable groups;
- There will be significant negative impacts on the environment;
- The proposals involve a significant policy change in an economic market;
- The proposals will impinge disproportionately on the rights of citizens;
- The proposals will impose a disproportionate compliance burden;
- The costs to the Exchequer or third parties are significant – initial costs of €10 million, or cumulative costs of €50 million over 10 years;
- The proposals are politically significant or sensitive.

UK: Cost benefit analysis

Guidance from the Better Regulation Executive stresses that costs and benefits should be quantified wherever possible, preferably in monetary terms. The analysis of costs and benefits should be proportionate to the likely impact. Expressing impacts in monetary terms – even where they do not have explicit market values – allows different impacts to be compared more easily, helping decision makers choose between options. Economists place monetary values on many 'non-market goods'. In the absence of monetisation, other forms of quantification should be used where possible – eg number of lives saved; changes in emission levels etc. Uncertainties should be addressed by presenting a range of figures, rather than a single figure. *The Evaluation of Regulatory Impact Assessments Compendium Report 2004-2005* by the National Audit Office (March 2005) found that eight of ten RIAs sampled included some quantified estimates of costs, and four included quantified estimates of benefits. Departments used a range of approaches to derive cost/benefit estimates, including in-house modelling; in-house modelling qualified by consultation of stakeholders; and data provided by stakeholders. Decisions are not made on strict comparisons of total monetised costs and total monetised benefits, but the figures help decision-making.

Italy: guidance on stakeholder consultation

According to the law 50/99, RIA is an ex-ante procedure, mandatory for all regulatory proposals developed by ministries. The scope of RIA was later extended in law 229/03 to include Independent Agencies with regulatory power. The procedure is, in principle, an ex-ante procedure that requires the

assessment of different alternatives, including the business as usual option. Stakeholder consultation is a key aspect in the 2001 guidelines, since it is defined as critical in identifying potential impacts and specific information on costs and benefits. According to the same guidelines, the consultation process, to be undertaken in the initial phase of RIA, should not be viewed as a negotiation or lobbying exercise, nor to acquire judgements on the different options under investigation. The guidelines identify the following consultation techniques:

- Focus group
- Panel
- Structured interview
- Statistical survey

3.7 Lesson learnt

The following points can be highlighted:

- Problem and option identification is common when assessments are undertaken.
- Only some Member States have adopted a formal impact assessment procedure.
- The use of impact assessments has been growing significantly and new processes are being put in place and guidelines developed.
- Impact Assessment means different things in different countries, and in some does not cover all economic, social and environmental impacts.
- Even where an impact assessment procedure exists, it is not always used to decide on how best to implement.
- Assessment of costs and benefits is less widespread, particularly the use of full and detailed analysis.
- Stakeholder consultation is widely used, not only in commented upon draft or final assessments, but also in the early stages of an assessment.

Table 3.1: an overview of the use and status of regulatory impact assessment in the Member States and issues relating to stakeholder involvement and impact on SMEs. Legend: Y (measures exist), (Y) (measures planned or partially available), N (no measures exist), NA (no information available). Table from COM(2005)97.

Member State	Better Reg Prog	Specific RIA policy	Obligatory RIA	Alternative Instruments Considered	Guidelines on RIA	Co-ordinating body for RIA	Consul-tation part of RIA	Formal consultation procedures	Direct stakeholder consultation	Tests on impact on small enterprises	Exemptions for SMEs	Total Y+(Y)
Belgium	(Y)	NA	(Y)	NA	(Y)	(Y)	N	(Y)	(Y)	(Y)	N	7
Czech Republic	Y	NA	N	Y	NA	NA	NA	NA	NA	(Y)	N	3
Denmark	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	10
Germany	Y	NA	NA	NA	Y	Y	Y	Y	NA	NA	NA	5
Estonia	N	N	Y	Y	Y	NA	NA	N	N	NA	Y	4
Greece	(Y)	(Y)	N	N	N	N	Y	N	N	N	NA	3
Spain	Y	(Y)	Y	Y	(Y)	(Y)	N	N	N	N	NA	6
France	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0
Ireland	Y	N	N	(Y)	(Y)	N	(Y)	(Y)	N	N	N	5
Italy	(Y)	Y	N	(Y)	Y	(Y)	(Y)	N	Y	(Y)	N	8
Cyprus	N	N	N	N	N	N	N	N	N	N	NA	0
Latvia	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	N	9
Lithuania	NA	Y	Y	Y	Y	NA	NA	NA	N	NA	NA	4
Lux	Y	NA	Y	Y	NA	Y	Y	Y	N	N	Y	7
Hungary	Y	(Y)	Y	N	N	Y	(Y)	(Y)	N	N	N	6
Malta	Y	NA	NA	N	NA	(Y)	N	N	Y	N	Y	4
Netherlands	Y	Y	NA	Y	Y	Y	N	N	Y	(Y)	Y	8

Austria	Y	Y	Y	Y	Y	N	Y	Y	Y	NA	N	8
Poland	Y	Y	Y	Y	Y	Y	Y	Y	(Y)	N	Y	10
Portugal	N	N	N	N	N	N	N	N	N	N	N	0
Slovenia	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1
Slovakia	NA	NA	NA	NA	NA	NA	NA	NA	(Y)	NA	N	1
Finland	Y	Y	Y	Y	Y	(Y)	Y	Y	Y	NA	NA	9
Sweden	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	9
United Kingdom	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	10
Total Y+(Y)	19	13	12	15	15	14	12	12	11	7	5	

Table 3.2: The extent of problem definition and identification of policy objectives and how these are used within regulatory impact assessment in ten Member States. Legend: Y (yes), N (no), NA (no information available), NS (not specifiable, ie depends upon particular cases). Table is derived from EU Directors of Better Regulation Group (2004)[10].

Issue	Austria	Denmark	Finland	Germany	Hungary	Italy	Netherlands	Poland	Sweden	UK
Problem definition	Y	Y	Y	Y	N	Y	Y	Y	Y	Y
Identification of policy objectives	Y	Y	Y	Y	N	Y	Y	Y	Y	Y
Are policy objectives defined to avoid ambiguities and contradictions?	NS	Y	Y	NS	N	Y	Y	Y	Y	Y
Are they stated as expected results in quantitative, physical terms?	N	N		N	N	Y	Y	N	Y	Y
Is a hierarchy between objectives made explicit?	N	N	Y	N	N	N		N	Y	N
Is possible conflict with other pre-existing public policy objectives taken into account?	N	Y	Y	N	Y	N	Y	N	Y	Y
Identification of multiple relevant regulatory options	Y	Y	Y	Y	N	Y	Y	Y	Y	Y
Do you think that assessment is made *before* the actual choice of regulatory option?	N	N	NS	Y	N	Y	Y	NS	NS	Y
Are multiple regulatory options actually considered?	N	Y	N	Y	N	Y	Y	N	Y	Y
Are there explicit criteria to select them?	N	N		Y		Y	N		N	Y
Are there established procedural steps to select them?	N	NA	N		N	N	N	N	N	N

10 EU Directors of Better Regulation, 2004. A comparative assessment of regulatory impact assessment in ten EU countries. See: http://www.betterregulation.ie/index.asp?docID=66

4 Directive specific insights

4.1 National emissions ceilings Directive (NECD) 2001/81/EC

Why has this Directive been studied?

The NECD has presented a variable challenge to the Member States. It takes forward an approach developed under the UNECE, which apportions the degree of action to be taken by a Member State according to the impacts that its emissions will have. This means that targets vary between Member States.

The targets are established at the EU level as specific limits for a country for emissions of four groups of pollutants for a specified timetable. These are emitted variably by different sectors (industry, energy, transport, agriculture and households), but the Directive does not set sector specific targets, nor how Member States are to deliver these limits. Thus the Directive provides a good case of flexibility and variability for Member States and, therefore, of how Member States may have approached the analysis to examine policy options for implementation.

4.1.1 Aims of the Directive

The aim of the Directive is to reduce the adverse effects of acidification (water and soil), ground-level ozone (air) and eutrophication (water and soil) by setting national emission ceilings for sulphur dioxide (SO_2), nitrogen oxides (NO_X), volatile organic compounds (VOC) and ammonia (NH_3) but leaves the Member States with the flexibility to determine how to comply with them. The national emission ceilings are intended to meet "broadly" the interim environmental objectives for reduction of acidification and ground-level ozone to be achieved by 2010. Therefore the interim environmental objectives will serve as an indicator of the effectiveness of the national emission ceilings in order to meet the benchmark date 2020 for achieving the long-term goal of keeping within critical loads and protecting people against the health risks caused by air pollution.

Member States were also required to draw up national programmes by 1 October 2002 (and inform the Commission by 31 December 2002) and to revise them as necessary by 1 October 2006 (and inform the Commission by 31 December 2006). The national programmes must include information on adopted and envisaged policies and measures and the effect of these on emissions in 2010.

4.1.2 Areas of flexibility or not

The Directive allows for significant flexibility (see Table 4.1) in its implementation. NECD sets overall limits for pollutant emissions with a timetable. Thus there is freedom:

- To apportion measures to different sources of each pollutant (eg according to cost, political acceptability, etc).
- To use any effective instruments to achieve these objectives.

However, it is important to note that some pollutant sources are also subject to other EU Directives and, therefore, where these Directives establish obligations these might constrain the freedom of Member States' policy choices for NECD implementation. IPPC is a case in point as noted in the table.

Table 4.1 Flexibility and Constraints for NECD

Areas of potential flexibility (ambition/path)	Level of flexibility	Comment
Coverage	There are specific limits on four individual pollutants set at national level. The Directive does not set out any requirements relating to the targeting of burden within a Member State.	The targeting of the burden depends upon the pollutant being addressed (eg sulphur emissions being mostly from industry, ammonia from agriculture and NOx from multiple sources). The targeting within industry is likely to be overtaken by application of BAT within IPPC. However, concern over the allocation of burdens to industry for NOx in the Netherlands was one reason for its adoption of emissions trading as an implementation path.
Timescale	The limits must be met within a specified timetable, although Member States are free to meet the obligations earlier than required.	Some Member States are predicting meeting NECD targets prior to the deadline (though not through adopting new measures to achieve this). Implementation of BAT under IPPC might lead to an earlier reduction in some industrial emissions, although the extent is uncertain at this point.
Exit clauses, safety valves	None	
Ambition and going beyond Directive requirements	Member States are free to exceed targets, but not to undershoot them. The Netherlands had previously set some more ambitious national targets. More ambitious targets are policy objectives rather than legal obligations.	It should be noted that NECD operates without prejudice to other Directives. Most notably implementation of BAT under IPPC could, theoretically, result in lower sulphur emissions than allowed under NECD.
Implementation development path (technical options) and use of policy instruments	Member States are free to take any implementation path.	Note, as above, obligations from other Directives apply. Eg in the Netherlands a NOx trading scheme has to cover emissions that remain after application of IPPC, rather than being free to cover all emissions. Measures adopted in the Member States include setting emission limit values, emissions trading, fuel taxes, traffic management, etc.
Institutional responsibility and internal subsidiarity	There is full flexibility in institutional responsibility. This is particularly so given that the Directive applies to pollutants from a variety of sources that would be regulated, etc, by different means.	For industrial emissions, Member States will implement the Directive through the institutional arrangements established for the IPPC Directive. Many traffic management measures will require implementation through local government.
Possibility of piggybacking	Where the pollutants are already being addressed under other legislation, there is the possibility to piggyback.	Other relevant EU law, such as IPPC, provides an obvious piggyback to NECD. However, some national regulation (eg on agriculture in Denmark and the Netherlands) also allows some piggybacking.
Revision or revolution	Unlikely given the history of regulation.	

4.1.3 Techniques to support Member States in assessing and choosing implementation path/options

Ex-ante assessments

The timing of analysis to consider implementation options can vary between Member States. This is because there are two major milestones for the NECD: firstly, transposition; secondly, the development of a national programme. Many of the choices about how to implement can be left to the second of these milestones as transposition itself does not necessarily involve choices over implementation options – this can wait until national programme development. If ex-ante assessment is formalised as part of a transposition process then it could require options analysis earlier than necessary. While early consideration of options is often desirable, there is also a need to address new information and circumstances until the measures need to be implemented.

We can identify two 'classes' of Member States, ie those for which NECD establishes new obligations beyond those already being addressed in the Member State and those where NECD establishes no new obligations. Where new obligations are imposed, then more detailed options analysis is desirable.

Member States with new obligations

France has undertaken detailed ex-ante assessment of the implementation of NECD. This was undertaken in two parts, one examining the sources of emissions and the other of policy (instrument) options with cost and efficiency analyses.

In **Italy** an assessment was undertaken during national programme development, identifying where additional measures are needed (NOx and NH3), but without quantification of costs and benefits.

For **Austria** only the NOx limits of the NECD present a new obligation and it is to this pollutant that analyses have been undertaken. This has not been in the form of a single assessment, but a series of studies which have, *inter alia*, examined the feasibility and costs of measures.

In **Ireland** the government provided an assessment (a 'discussion paper' in 2003) prior to transposition noting the need for additional measures in meeting the NOx target. However, the 2005 national programme already demonstrated that the situation for NOx had altered with the introduction of new power generation with low NOx emissions not addressed in 2003. This illustrates how rapidly circumstances can change and the need, on occasion, for revision of analysis.

In the **Czech Republic** transposition of NECD was supported by a series of projects examining air management issues. These supported the general *acquis* implementation plan and were important in the process of joining the EU. Further assessment was undertaken in developing the national programme. Interestingly, the national programme has been developed not only to meet NECD requirements, but

also other air issues (eg meeting limit values) and thus acts as an integration mechanism.

NECD sets targets for **Germany** that will require additional action. However, it has decided to achieve these through existing types of instruments (making them more ambitious) and no formal assessment was undertaken, although some analysis of options was considered in the national programme (developed in 2002, two years prior to transposition), but this largely focused on those of a regulatory nature.

The NECD also presents a significant challenge to the **Netherlands**. Interestingly a series of assessments have been undertaken for various measures and issues, including those on impacts of deposition, meeting national ceilings and specific proposals for the transport sector. The NECD targets are only slightly more ambitious than the Gothenburg Protocol. However, the Netherlands had previously (1998) adopted a non-binding national environmental plan with significantly tougher targets. Thus assessments for NECD largely build on existing national commitments (this includes the NOx trading scheme which stems from the 1998 policy objective).

Member States with no new obligations

As noted above, NECD has variable implications for the Member States and this can affect the degree of assessment undertaken. This seems to be the case for Finland, Sweden and the UK. **Finland**, in its national programme, predicted that NECD targets would be met by existing measures and that no ex-ante assessment was required. Similarly, **Sweden** predicted little problem in meeting targets. However, the **UK** undertook a RIA prior to transposition, although this noted that it did not anticipate that any further action was needed to meet the objectives of NECD (with one proviso concerning options for implementing the large combustion plant Directive).

The recommendation for formalised RIA for transposition of EU law is, therefore, interesting in this case. Is the obligatory use of RIA useful (eg in terms of resources) if a Directive imposes no new obligations? Also if the options for implementation are identified later in the implementation process, how does this relate to an RIA procedure? Presumably, the analysis is of most use if it is developed as choices open up and need to be made. In a case like this, the Netherlands' process of iterative options identification and specific analyses seems best suited to delivering efficient implementation.

Options analysis

Only a few Member States require additional measures for the achieving NECD objectives. The degree to which these have been analysed varies:

In the **Netherlands** there has been significant analysis of options to reduce emissions, including specific proposals and debate on individual sectors, eg transport. However, this process began with a national commitment to emission reductions rather than NECD per se, i.e. it is not a response to an EU Directive, although the need for options analysis, etc, is ultimately the same for implementation whatever the source of the objectives. In the case of the Netherlands, the progressive identification and

refinement of options together with individual analyses of these has enabled a more efficient implementation path to be taken.

Similarly in **France** the analyses have examined a range of options (technical and non-technical) and each is analysed in terms of potential outcomes and costs. Of the Member States studied, this is probably the most complete options analysis.

In **Ireland** the analysis in the discussion paper provided some discussion of policy options (eg ruling out emissions trading as unsuitable in Ireland) and the introduction of differential excise duty. However, generally it makes few suggestions for specific options. The national programme takes this further forward, including looking for outcomes through changes in the Common Agricultural Policy.

Sweden is also an interesting case in that its national programme clearly uses the flexibility available in the Directive to propose emission targets for SO_2 and NOx that are stricter than the Directive and a wide range of instruments (many economic) to achieve these.

4.1.4 Specific focus: use or not of cost and benefits assessment

It is important to note that NECD was developed following earlier policy development by the UNECE and using a common mechanism for assessing costs and benefits, ie the RAINS model. Some Member States (eg **Ireland** and **Italy**) have, as a result, chosen to use the results of this model for their own cost/benefit assessment. This analysis is not aimed at detailed policy options at the national level, and so is not very in-depth for use in ex-ante assessments.

In the **Netherlands** a formal CBA was not undertaken. However, the range of different assessments undertaken has produced a detailed assessment of measures on costs to different sectors and on the benefits to ecosystem protection and human health (not monetised), which, when considered in combination, cover the elements of a CBA.

France undertook a detailed CBA, with costs and benefits analysed for each option under consideration. Costs were monetised for sectors affected and the government and qualitatively for benefits. The study also indicated secondary costs and benefits (eg knock-on effects on carbon dioxide emissions). In contrast, **Germany** did not provide information on the costs of additional measures needed to implement NECD.

Of the Member States with no new obligations, the **UK** did not undertake a formal CBA, but presented a qualitative description of benefits of compliance with NECD and estimates of costs. The latter were estimated at £0 to £29 million per year depending on how the large combustion plant Directive is implemented. Thus much of the presentation of cost benefit issues in the RIA is there for completeness sake. Similarly, **Finland** also presents an assessment of costs and benefits in its national programme based on previous work and not as a formal CBA, although additional costs are not thought to occur. Importantly these assessments did stress cost-effectiveness in choosing measures and timing procedures. The national programme is also transparent in describing the cost calculations used, the justifications for these

and how they might conflict with calculations undertaken by the European Commission. **Sweden** did not present a cost-benefit assessment.

In conclusion, a full CBA is only justified where a Directive requires additional measures and this is not the case for a number of Member States. The existence of the RAINS model also allowed a short-cut for some, although this is not sufficiently detailed for assessment of some possible measures. It is also interesting to note the development in the Netherlands, which used an iterative process of assessment of costs and benefits as policy issues are discussed and amended as policy options evolve.

4.1.5 Specific focus: use or not of stakeholder consultation

In most Member States a simple stakeholder consultation approach was used, whereby a consultation paper was submitted for comments. In the **UK** the responses to the consultation were formally published.

The 'iterative' assessment process in the **Netherlands** involved more detailed stakeholder participation. This involved workshops and specific research programmes and stakeholders were invited to investigate and propose reduction measures. Interestingly, stakeholder groups from specific sectors have opposed the sectoral targets proposed by the government which, as they are to be supported by self-regulation, are potentially at risk of not being met. In **Austria** there was also stakeholder involvement in the 'chain' of assessments undertaken, such as in working groups (with officials, technical experts and stakeholders) that developed programmes of measures for different emission groups. Interestingly, this process resulted in significant disagreements on the action to be taken and this has not yet been resolved.

In **Finland** the choices of measures described in the national programme were the result of the deliberations of a working group. This was undertaken according to themes (eg energy, transport, agriculture, etc) and a variety of options were discussed within these themes prior to the publication of the programme. Subsequently the draft programme was made available for consultation.

The stakeholder involvement in NECD, therefore, provides few examples for wider consideration, except perhaps that of Finland and the Netherlands as examples of a more interrogative approach.

4.1.6 Practice implementation choices - choice of implementation path and why

Member States have considerable flexibility in implementing NECD and have adopted different approaches. However, from the above discussion it is clear that in a number of cases analysis of options leading to implementation choices has been limited. Examples include:

- Where NECD requires (or probably requires) no new action over international agreements, eg **Finland** or the **UK**.
- Where NECD has been pre-empted by stricter national requirements, eg the **Netherlands**.

- Where the Member State follows simply existing types of measures, eg **Germany,** although in this case there did not seem to be any pressure for an alternative approach.

Member States have adopted a range of measures to implement the Directive, ranging from tighter emission limits, emissions trading, fuel taxes, etc. The choice will reflect the pollutant of most concern and its particular sources (eg agriculture, transport, etc).

In two cases options analysis has led to specific measures being chosen in the implementation process. In **France** the analysis proposed a sulphur 'bubble' for refineries. The national programme lists this measure, but without the actual bubble limit. Also some non-technical measures are to be further studied before implementation, eg NOx trading, taxation and training. In **Ireland** the initial analysis in the 'discussion paper' discussed options and that on adopting a differential excise duty on fuel has been introduced. The national programme states that further measures (unspecified) will be required.

How far the analysis of options led to the choices with lower costs is difficult to determine as we do not know what would have been done in the absence of such analysis. Certainly though, ex-ante analysis has led to a better understanding of different policy options' costs and hence to the choice of the best policy options. The **Netherlands** would argue that its new instruments (eg emission trading for NOx) are more cost-efficient, as might the bubble approach in **France**. However, only comparative assessments in the future will clarify the extent of any cost savings.

4.1.7 Interesting practice and best practice

Finland: Stakeholder Involvement
The involvement of stakeholders in identifying options for implementation is interesting in Finland and worthy of discussion. The initial establishment of a working group of key individuals enabled options to achieve NECD targets be debated at a very early stage. The resulting proposal of measures presented in the national programme might, therefore, be closer to a consensus approach than an alternative whereby officials simply present options for comment. Drafts of the programme were subsequently circulated for wider comment and responses were received and taken into account.

4.1.8 Conclusions - lessons learnt

On the Directive and its flexibility

- The Directive is highly flexible in that it only sets overall limits to emissions for all sources from a Member State. It does not set targets relating to the contribution from any sector nor how emission reductions are to be achieved.
- Member States seem to take full advantage of the flexibility offered and a wide range of measures have been (or are proposed to be) adopted to tackle

individual pollutants, ranging from taxation, charges, command and control limits in permits, voluntary agreements and promotion of good practice.

- While the NECD has high flexibility, the activities that might to be controlled to achieve its objectives can also be subject to other Directives and these latter obligations might restrict the range of options for measures available to a Member State. The obligations of IPPC, for example, led to a modification of the Dutch NOx trading scheme.

On the use of assessment techniques

- The degree of assessment undertaken by the Member States varied. One important reason for this was the extent to which NECD imposed new obligations on a country. Where there were none (or minor), assessments were sometimes thought unnecessary (note the UK was an exception).
- The assessment process under NECD is complicated by the requirement of the Directive to produce a national programme. In this study we focused on assessment of options at the stage of transposition. However, under NECD this options assessment can be undertaken at the stage of national programme development, which could move it away from a formal RIA setting.
- The issues addressed by NECD have been of concern to Member States for some years and, therefore, some have undertaken various analyses of the issues (costs, benefits, measures, etc) prior to the NECD and these have fed into decision-making outside of a formal RIA (eg the Netherlands).
- The use of CBA (or similar) has been highly variable between the Member States. This has, in part, reflected the extent of new obligations on the Member State, but also whether there was a choice to rely on EU-wide approaches (RAINS) or Member State assessments.
- Consultation has also varied both in extent and approach. NECD did present some consultation challenges given the range of sectors potentially involved. Some (eg energy) would already have been involved in such debates from previous Directives and international discussions, while others (eg agriculture) would have been less familiar.

4.2. Habitats Directive - Natura 2000

Why has this Directive been studied?

The habitats Directive aims to protect and promote European and global biodiversity benefits via national implementation of conservation measures. The Directive is of interest because it is the corner stone of EU biodiversity and nature conservation policy. Again, the Directive sets targets but then leaves Member States to choose how to meet them.

4.2.1 Aims of the Directive

The habitats Directive came into force in 1992. The aim of the Directive is to promote the maintenance of biodiversity within the European territory of the Member States through the conservation of natural habitats and of wild fauna and flora. The Directive seeks to establish 'favourable conservation status' for habitat types and species of Community interest.

The implementation of the Directive can be divided into two phases, i.e. the designation and then the management of sites. In the first phase each Member State must establish a list of proposed sites of Community importance (SCI), i.e. valuable nature sites with unique habitats and wildlife across Europe, which have to be submitted to the Commission for approval. Following their adoption by the Commission the lists of the SCIs will be designated by Member States to special areas of conservation (SAC) and together with areas of special protection for birds under the birds Directive (ASPB) they will form the EU wide conservation network Natura 2000.

After their designation as SACs, i.e. in the second phase of the implementation, the Member States must establish necessary conservation measures, e.g. appropriate management plans, to maintain or to restore favourable conservation status of the site (Article 6(1)). Additionally, according to the Directive's provisions the Member States are already obliged to prevent any deterioration of sites and disturbance of species from the time of their proposal as SCIs through out the designation process (Articles 6(2), (3) and (4)).

4.2.2. Areas of flexibility or not

The flexibility given by the habitats Directive is rather limited regarding the transposition and designation of the sites (Table 4.2). Flexibility comes more apparent with the second phase of the implementation, i.e. when the management measures for Natura sites are selected on a local level. In other words, there is little flexibility regarding the level of Directive's ambition but considerable flexibility in how to meet the given target.

In terms of flexibility to choose different implementation paths for reaching the Directive's target, two levels, **national** and **local**, can be distinguished.

1. On a **national** level, the Member States had certain flexibility at the transposition phase to select the path for enabling the establishment, and later

on the appropriate management, of the network on the local level. In some Member States this was done via legislation and in others by contracts with landowners (see 4.2.6 below).

2. On a **local**/site level, further considerable flexibility is available to select the most suitable path to implement the Directive's provisions and deliver the Directive's target (favourable conservation status) in practice. The decisions regarding the local paths for implementation (e.g. sets of management measures) are not, however, decided on a national level when transposing the Directive and they are therefore largely beyond the scope of this study.

Implementation of Natura 2000, therefore, provides another example of a Directive where initial implementation choices are made at the transposition stage and then further choices made at a later stage. The NEC Directive also showed this pattern, except that the second stage for determining choices is usually at the national level (national plan production) and, therefore, potentially subject to the ex-ante assessments being addressed in this paper. When the secondary choices are made on a local level, such assessments might be more problematic. However, Directives can attempt to formulate a requirement for localised assessments, as is done within the assessments required for river basin planning under the water framework Directive.

Table 4.2. Flexibility and Constraints for Natura 2000.

Areas of potential flexibility (ambition/path)	Level of flexibility	Comments
Coverage	Generally little, with some exceptions	Member States can select the proposed SCI sites. However, the selection must be based on scientific evidence and socio-economic considerations as a part of the national designation criteria are excluded. Additionally, if the SCI list is unsatisfactory, the Commission may seek to include further sites. There is some flexibility in selecting the pSCIs as sufficiency of a habitat type or a species can be attained with a smaller number of sites than all the sites available. For example, Greece has not proposed all the sites identified through its nationwide inventory project, as sufficiency has been attained before. There is also some flexibility allowing a Member State to ask the Commission to withdrawn proposed sites from the pSCI list or an adopted list, when the habitat types or species hosted by a Member State represent more than 5% of the national territory (Article 4). No Member State has yet used this flexibility. The concept of conservation, i.e. achieving the favourable conservation status (FCS) of habitats and species, is binding. However, the definition of FCS is still being discussed.
Timescale	Flexible, especially in practise	Transition periods are given regarding the nomination of pSCIs (3 years) and designation of SACs (max 6 years). This also provides some flexibility in relation to the site management requirements (proactive management obligatory only after the process of designation is completed). In practise the nomination of pSCIs has been considerably shower than anticipated (unintentional flexibility). Additionally, there is also no deadline for achieving favourable conservation status by restoration (this entails an inbuilt flexibility, as favourable conservation status is not defined strictly in the Directive and it is thus a term for interpretation). Some Member States/regions (e.g. Wales) have already designated all SACs. Several Member States have also already started applying management measures to some of the pSCIs. In some Member States and particularly in the UK and France advanced management plans and guidelines have been developed as part of LIFE-Nature projects.
Exit clauses, safety valves	Some	Member States have some possibilities for derogation regarding the management of sites and species protection. These derogations can, however, take place only under rather limited circumstances and compensatory measures are required (Articles 6(4) and 16). The compensatory measures are to compensate the 'role/function' of a site within the context of European wide network, i.e. there is also some flexibility in compensation, e.g. location and surface area of a compensating site. There is also the procedure as prescribed in Article 6(3) which is to be followed in the case of development projects which will impact negatively the sites. For this there is a possibility that the project goes ahead when it can be demonstrated that there exists an overriding public interest. Compensation measures apply in this case (Article 6(4).
Ambition and going beyond the requirements in the Directive	Little in relation to the general ambition Flexible in relation to management of sites	General ambition of the Directive: There is a little flexibility in relation to establishing the conservation network (designation of sites) and securing favourable conservation status. For example, in France, Spain and the Netherlands site specific management plans are required by law. This is not the case, for example, in Germany and UK. Management: Member States have freedom to go beyond the requirements in the Directive in relation to: classification of sites, ambition/level of legal protection given to a site, amount of resources provided per site, and complexity of selected management measures.
Implementation development path (technical options)	Little in relation to the designation of sites; Flexible in relation to the	Designation: as in coverage. Management: Member States have the freedom to choose the management measures for the sites and in this phase of the

	management of sites	implementation there is also flexibility to take socio-economic aspects into consideration. However, the management of sites, including the bordering areas, is also restricted by the general obligations to avoid any activities that could cause deterioration of, and disturbance to the site. Additionally, the national legislation can restrict the Member State possibilities when selecting the path for implementation (e.g. conflicts with property rights and spatial planning). The management of Natura 2000 network is only starting, however it can be seen that a variety of national management approaches will be taken by Member States.
Policy instruments used	Flexible in principle, however somewhat inflexible in practise	Member States have the freedom to choose which policy instruments to use when transposing and implementing the Directive. However, in several cases Member States choosing a more complex path for transposition (eg UK, Sweden) have been brought before the ECJ due to unsatisfactory transposition. In retrospect, this indicates that the framework of the Directive did not allow much flexibility in transposition. Member States have been choosing different ways for transposing the Directive ranging from issuing one Act (eg Finland) to including the Directive's provisions into several pieces of national legislation (eg Sweden) or into both national and regional legislation (e.g. Germany, UK and Austria). Some Member State (eg France, Austria) favoured more contractual solutions.
Institutional responsibility	Flexible	Member States can freely choose how to divide the responsibility within institutions. The national ministries responsible for environmental matters were in most cases the responsible ministries for the transposition. Interestingly in Greece this institutional flexibility led to bureaucratic conflict between environment and agricultural ministries. In some Member States special institutional arrangements, e.g. establishing special institutional bodies, have been made to assist the implementation. The borderline has also been crossed sometimes between national and local/regional responsibilities.
Internal subsidiarity	Flexible	Member States can freely choose the level of internal subsidiarity. In some countries (e.g. Germany, Austria, Spain and UK) the transposition of the Directive was decentralised to the regional level.
Possibility of piggybacking	Flexible	Member States can piggy-back the implementation of the Directive on something in the national pipeline. Some Member States used existing legislative initiatives when transposing and implementing the Directive. For example, in Finland the new nature conservation Act was used and in Sweden the transposition of the Directive was partly incorporated with the development of the Environmental Code.
Revision or revolution	Flexible	Implementation of the Directive can be limited to minimum or it can provide an opportunity to repeal and revise legislation relating to biodiversity protection, national parks, etc. For example, in Finland implementation of the Directive provided the final push for the new Nature conservation Act.
Possibility to carry out *ex ante* assessments	Flexible, however not always feasible in practise	The Directive gives Member States flexibility to carry out comprehensive *ex ante* assessments both prior to the transposition and also during the implementation. In the implementation stage an impact assessments are obligatory (Article 6 (3)), for determining the implications of any development plans/projects for the site (e.g. alternative solutions and mitigation measures). In retrospect, an assessment prior to the transposition could have help in identifying the implications (e.g. conflicts) of the Directive, however the benefits would have been limited by the lack of clarity regarding the Directive's provisions (especially regarding the old Member States).

4.2.3. Use of techniques to support Member States in assessing and choosing implementation path/options

The country studies gave no evidence that the Member States would have used structured *ex ante* assessments at the transposition stage of the Directive in order to decide the implementation path/options taken (e.g. a structured assessment of different policy instruments). The possible reasons for the lack of assessments include the following:

- Impact assessments were not part of the common practise at the time the Directive was adopted;
- There were not enough national resources (e.g. **Ireland**, **France**);
- There was not enough time for Member States to carry out a comprehensive assessment, especially for some new Member States during the accession process, e.g. **Estonia, Slovakia**);
- An assessment was not regarded as necessary because the Directive's framework was considered quite inflexible (e.g. **Finland**, **Czech Republic**).
- An assessment was not considered feasible because there were not enough reliable quantified data, quantifiable indicators and impacts (e.g. **Czech Republic**). *Ex ante* assessments are more feasible in so called technical environmental protection, not in the case of nature conservation.

In achieving the transposition, the most commonly used methods for deciding the implementation path/options in Member States have been **internal consultations** within the governmental institutions and **consultations of external experts**. Additionally, in some cases a limited stakeholder consultation has been conducted, e.g. in **Germany** and in **Finland** where the transposition coincided with the renewal of national nature conservation legislation. Learning from **previous experiences** from other Member States has played an important role in the transposition and also implementation of Directive, especially for the new Member States. In addition, in some Member States some estimation of costs related to the implementation of the Directive were conducted (see 4.2.4 below). The case studies did not, however, give the impression that these estimations/assessments would have been used with a particular view of systematically comparing different implementation paths/options to find the most cost-effective solution.

It is to be noted, however, that more comprehensive **impact assessments** on the effects of Natura 2000 network have been conducted in some Member States **after the transposition** of the Directive (e.g. **Finland**, **Austria**, **UK**). These assessments consider the costs and benefits of Natura 2000 including both socio-economic considerations and conservation benefits. However, they often provide more detailed analysis on the costs than benefits (see 4.2.4. below). In **France** LIFE-projects have been used as 'prototypes' for assessing the most efficient and cost-effective management of Natura sites (see 4.2.5. below). In the **UK** a Regulatory Impact Assessment (RIA) on options in relation to extending coverage of the Directive to the offshore marine environment has been conducted. Additionally, in several Member States a variety of studies analysing the effects of Natura 2000 have been carried out by academics and NGOs. Of these cases, only the RIA carried out in the UK systematically assessed the different policy options for implementation, however the

actual role of the assessment in decision-making is still unclear as the related legislation has not yet been adopted.

4.2.4. Specific focus: use of cost and benefits assessment

For the habitats Directive, there is no clear indication that Member States conducted comprehensive cost and benefit assessments at the transposition stage in order to consider and compare different implementation paths/policy options. This could be partly explained by the following:

- at the time the habitats Directive was transposed the availability and use of cost-benefit analysis (CBA) was rather limited. Since then a widening range of CBAs has started to take place, which reflects both the development of methodologies (e.g. benefits can be better incorporated) and the increased general tendency of carrying out CBAs in Member States;
- carrying out a comprehensive CBA at the transposition stage was not feasible because at that stage only certain costs rising from the implementation of the Directive could be estimated (e.g. administrative costs). For example, it was not possible to estimate a total cost as the number of sites and area covered was not available, as well as the costs over time on a local/site level;
- in general, conducting CBAs on Natura 2000 is complicated since quantitative valuation of nature conservation benefits is rather difficult.

However, a variety of cost and benefit assessments/calculations were conducted in Member States regarding Natura 2000 (both at the transposition stage and during implementation). Instead of comparing the costs and benefits of different implementation paths/policy options these calculations/assessments have focused mainly on estimating certain 'sets' of costs and/or benefits arising from the establishment of Natura 2000. Examples of types of cost assessed by Member States include the following: costs for national finances/co-financing costs (**Finland, Austria, Czech Republic**); costs of management, identification, monitoring and mitigation (**UK** for marine environments); compensations for landowners (**Finland**); costs arising from the conservation of endangered species (**Finland**); estimates of costs to informed **Estonia's** bid for a transition period; and costs for different sectors (e.g. forestry, agriculture, manufacturing and retail industry, and mining) (**Finland**, **Austria**). In the case of the new Member States, the costs of transposition and implementation of the EU environmental laws, including the habitats Directive, were often assessed as an integral part of the accession process (e.g. personnel requirements, state budget, impacts on agriculture/forestry). The environmental benefits of Natura 2000 considered by some Member States (e.g. **UK, Finland, Czech Republic, Austria**) include, for example, conservation benefits of different network options (regarding the area covered by the network), job creation and local/regional value added.

4.2.5. Specific focus: use or not of stakeholder consultation

The extent, role and importance of stakeholder/public consultation carried out in Member States differed widely. For example, in **Sweden** extensive public consultation processes were conducted (see 4.2.6 below), whereas in **France** hardly any public consultation took place and **Estonia** was criticised by the IUCN over its

limited stakeholder involvement. Most often public consultations were held in relation to drafting the national pSCI lists or when management plans or management objectives are set for these sites. In some cases, e.g. in **Finland** and **Germany**, a limited stakeholder consultation was also held when transposing the Directive. In some Member States the role and extent of public consultation also changed during the implementation process. For example, in **Finland** an extra consultation was held due to strong objections from stakeholders during pSCI designation (mainly owners). In contrast in **Sweden** the stakeholders' derogation rights were limited during the designation. In some cases the public consultation led to some changes in pSCI lists, for example in the **UK** some sites were added as a result of representations by NGOs.

4.2.6. Practice implementation choices - choice of implementation path and why

At a national level most Member States have followed a similar legal implementation path (largely following established practice) – it is at the level of implementation at site level that divergence occurs. An interesting exception is France, details of which are provided in the following box.

France: national level: contractual vs. legislative approach
France decided to use a contractual, not a legislative approach to implement the Directive. This meant that contracts with landowners instead of regulations and other administrative provisions were used to establish and manage the Natura network. The contractual approach was adopted because the French Natura 2000 network was likely to cover 10 per cent of the French territory, and the government did not want 10 per cent of the territory submitted to regulation. The contractual approach promotes setting out the "management objectives" for the site and the measures to attain them. Also the use of renewable contracts enabled some flexibility to be kept in the evolution of the management of every site, compared to regulation, which is more rigid. The use of contracts instead of legislation also ensured a better involvement of actors. Similar approach was adopted also in other Member States, for example in Austria.

4.2.6. Interesting practice and best practice

Sweden: Role of public opinion and consultation
There was no public debate in Sweden hindering the establishment of the Natura 2000 network (for example, comparing to Finland, Ireland and France). This could be explained by the landowners' involvement in the designation process. Firstly, in the beginning the Government required landowners' approvals for each designated site, i.e. a site could be included in the Natura 2000 network only if the landowners agreed to it ('landowner's veto right'). Secondly, even when this veto right was removed the local authorities were still advised primarily to nominate sites to which there were no objections from the landowners (in cases where alternative sites of the same landowner were proposed). The outcome was that only a few areas in Sweden were proposed as Natura 2000 sites against the landowners' will. In the majority of these cases the areas were of high and well-known importance, thus general public opinion was in favour of the designation. Additionally, Sweden has also been notably proactive (in comparison to several other Member States) in informing landowners about the implications of Natura 2000 and correcting possible misunderstandings. This might have also significantly contributed to generally 'non-hostile' attitudes regarding Natura 2000. This has also resulted in a very significant number of Natura 2000 sites in Sweden of a very small size, certifying that only what has been absolutely necessary has been designated. This way, Sweden has not followed the path of other Member States that have designated sites of greater size in order to cover coherently many habitats. This has to do also with a much more "maximalistic" approach to designation (i.e. less sites of a bigger surface compared to more sites of small surface).

France: site level implementation: developing management plans
Considering management of sites, the French government decided to assess the different options by testing them 'on the ground' on 37 pilot sites via LIFE funding. This enabled it to a) evaluate the financial needs for the implementation of management measures and policies, and b) identify the various elements to take into account when drawing the final methodological guide for the management of sites (formulation of Documents for the Management Objectives). All local stakeholders were also involved in the LIFE projects. The French approach has generally been considered as a good policy practise and it has enabled France to start developing site management plans already from the early stages of implementation. Also France has been active in collating this experience to various key habitat management practices, such as agricultural land, forests, wetlands, etc.

4.2.7. Conclusions - lessons learnt

On the Directive and its flexibility

The habitats Directive can be characterised as providing little flexibility regarding ambition but gives Member states considerable flexibility in reaching the given goals (especially regarding the management of sites).

A certain ambiguity in the Directive's provisions has caused difficulties in implementation, for example in relation to the criteria for site designation, definition

of ‘favourable conservation status’ and criteria for compensation measures. Due to this ambiguity the implementation of the Directive has also been characterised by ‘supposed’ (intentional or unintentional) flexibility by Member States. Hence, the transposition and implementation of the Directive has to a certain extent turned out to be a learning process through the ECJ, which in turn has both hindered the overall process of implementation and resulted in more flexibility in practice than intended. For example, the site designation process has taken ten years longer than estimated, although this has resulted in a larger area being designated than was originally anticipated. Consequently, the habitats Directive shows that it is important to distinguish real flexibility from ambiguity and provide enough detailed information/guidance on the Directive’s provisions to ‘support’ the flexibility.

On the use of assessment techniques

In the light of difficulties in Member States, one could conclude that an *ex ante* assessment might have been beneficial in order to satisfactorily transpose the Directive’s provisions. Additionally, an *ex ante* assessment at the transposition stage might have been of assistance in determining the long-term implications of the Directive and planning the implementation in the long run. For example, an *ex ante* assessment could have pushed the Member States to consider how other pieces of national legislation can be used to effectively support the establishment of Natura 2000. An *ex ante* might have also helped to recognise the Directive’s provision that turned out to be unclear and ended up hindering the implementation.

However, one can also argue that an *ex ante* assessment at the transposition phase, especially in the case of old Member States, could have been only of limited assistance since initially the several implications of the Directive were not clear (ie problems with ambiguity, see above). This underlines the need for sufficient information on the Directive’s provisions (eg adequate guidance) enabling the use of *ex ante* assessments.

On a local/site level impact assessments are obligatory under Article 6 (3) in order to find out the implications of development plans/projects for the site in view of site’s conservation objects. Even though the implementation paths used on a local/site level fall outside the scope of this study in could be concluded that the use of comprehensive *ex ante* assessments could help determine the potential environmental and socio-economic costs and benefits of planned development plans/projects, both in relation to negative impacts and mitigation (Article 6(3)), and compensation (Article (4)).

Consultation, or the lack of it, has played an important role in national implementation processes. Several Member States consider that the lack of public consultation during the implementation was one of the key elements causing difficulties in the implementation. This shows that public consultations are crucial in gaining stakeholders acceptance and diminishing the politicisation of a Directive. In some cases the public consultations have also led to some changes in the implementation (e.g. in the UK, see 4.2.6).

4.3 Packaging waste Directive (94/62/EC and 2004/12/EC)

Why has this Directive been studied?

The packaging waste Directive has presented a major challenge to a number of Member States. It has set targets for the reduction and recovery/ recycling of packaging waste that has challenged industry and governments to identify efficient routes for implementation. It has also proven to be one of the more challenging parts of the environmental *acquis* for the new Member States, resulting in a number of transition periods being agreed.

The Directive sets overall targets for packaging waste, yet leaves significant flexibility to how these are achieved. Member States have experience of the challenge of the 1994 Directive and now have to take forward the further targets of the 2004 revision. Implementation potentially has significant consequences for costs to industry and waste authorities. Therefore, the choices made in achieving compliance are critical in delivering cost-effective solutions. Thus this Directive forms a good case for examination in this background paper.

4.3.1 Aims of the Directives

The Directives have two main objectives: to reduce the impact of packaging on the environment (both the impacts of waste going to final disposal and also impacts relating to the production of virgin materials) and to harmonize national measures in order to prevent distortions to competition. The environmental objective is to be achieved by limiting the amount of packaging waste going to final disposal through reuse and recovery. The Directives seek to achieve its objectives (a) by requiring Member States to establish return, collection and recovery systems (b) by setting a number of targets for recovery and recycling, and (c) by guaranteeing free circulation within the EU of packaging which meets certain essential requirements.

The 1994 Directive required that between 50 and 65 per cent of packaging waste be recovered. Of the material recovered, between 25 and 45 per cent will need to be recycled. A minimum recycling target of 15 per cent by weight for each packaging material is also set.

Under the 2004 Directive the targets for 31 December 2008 are: 60 per cent as a minimum by weight of packaging waste will need to be recovered or incinerated at waste incineration plant with energy recovery; between 55 per cent as a minimum and 80 per cent as a maximum by weight of packaging waste.

Apart from the collection of information on Member State approaches by the project team, this chapter has also drawn upon the report by the European Environment Agency on the effectiveness of the 1994 Directive published in October 2005 which covered Austria, Denmark, Ireland, Italy and the UK.

4.3.2 Areas of flexibility or not

The Directive allows for significant flexibility in implementation. This is because it is largely target driven (targets for re-use, recycling, etc), with very few other obligations other than to establish systems for recovery and information management.

Table 4.3 identifies specific elements of flexibility in the Directive. More generally, it is important to note that the flexibility includes:

- What (to some extent) type of packaging is covered.
- What territory (part or whole) Member States apply the Directive to.
- What instruments are used (taxes, charges, tradable permits, etc)
- Who pays for recovery, etc.

The critical issue is to achieve the targets. It can be seen, therefore, that there is significant potential for Member States to adopt policy options targeted at their own specific circumstances, such as business structures, waste infrastructure, tradition of use of specific instruments, etc.

Member States have, indeed, taken advantage of the flexibility available in the Directive to implement it through different systems (some pre-existing and some new)[11]:

- Those where industry is fully responsible for covering all costs (municipalities can be involved in separate collection on behalf of industry) – **Austria**, **Germany** and **Sweden**.
- Those where industry and municipalities share responsibility, so that industry covers costs of sorting and recycling and municipalities are responsible for separate collection and their cost are (fully or partially) reimbursed – **Belgium, Denmark, Finland, France, Ireland, Italy, Luxembourg, Portugal** and **Spain**.
- Those where industry and municipalities share responsibility, so that industry covers the cost of recycling and municipalities are in charge of separate collection and receive revenues through selling the collected materials – the **Netherlands** and the **UK**.

[11] ARGUS 2001. European packaging waste management systems. Report to DG Environment.

Table 4.3 Flexibility and Constraints for Packaging Waste

Areas of potential flexibility (ambition/path)	Level of flexibility	Comment
Coverage	What type of packaging is covered by national targets and some for setting minimum recycling targets. Member States are free to choose the areas that are covered provided national targets are met. There is flexibility over who pays for collection and whether the concept of full cost recovery is applied or not	Member States are free to target specific sectors to meet targets, eg industrial or household waste. Member States are also free to prevent certain routes being adopted, eg incineration. For example, the UK is exploring whether to extend obligations to franchises for implementation of the 2004 Directive in order to spread costs to industry.
Timescale	The Directives have set specific timetable obligations in relation to recycling, etc, targets. Member States are, however, free to achieve these targets earlier than required.	It is now clear, given the time since adoption of the 1994 Directive, that some Member States have met targets earlier. Indeed, some have already met the requirements for the 2004 Directive.
Exit clauses, safety valves	There are no exit clauses or safety valves. However, transition periods or longer periods for implementation have been given to some new Member States as well as older Member States – Greece, Ireland and Portugal.	
Ambition and going beyond the requirements in the Directive	Directive allows for Member States to go further than Directive requires.	Member States have clearly exceeded targets during implementation of the 1994 Directive. An interesting case is the UK which has identified a target for the 2004 Directive slightly beyond what is required to act as a 'cushion' for any failure by industry in order to ensure that the country remains in compliance.
Implementation development path (technical options) and policy instruments	There is flexibility who operates the recovery/ recycling system, including monopoly or competition. Complete flexibility regarding instruments, eg taxes, charges, voluntary agreements, tradable permits, etc.	There are limitations to monopoly by Community competition rules – such rules were formulated, eg in Commission decisions relating to Austria and Germany. Directive specifically states that if EC fails to adopt economic instruments, Member States are free to (A15) do so. Most Member States have adopted measures of producer responsibility. However, the Netherlands has used an interesting approach via agreements.
Institutional responsibility and internal subsidiarity	Authorities need to be identified, but otherwise there is full flexibility. The Directive also allows for internal subsidiarity.	The use of internal subsidiarity has been limited, given the need to work with industry generally to deliver national targets. However, much relevant analysis in Italy has been at sub-national level. The role of municipalities in some Member States, eg Belgium and Spain, is important and decentralisation has been an important factor in Scandinavian countries (Denmark, Finland and Sweden).

Possibility of piggybacking	There is wide flexibility to piggyback on other measures adopted in the Member States.	In implementing the 1994 Directive some Member States piggybacked on prior national regulations on packaging waste, eg in Austria and Germany. In Belgium the structures established by municipalities have built on pre-existing systems. For the 2004 most Member States are building on the measures adopted for the 1994 Directive, although some changes have been assessed and are being introduced, eg in the UK.
Revision or revolution	There is the possibility for revision or revolution depending upon national circumstances.	Where Member States have had little or no regulation in this area (in new Member States) there has been a considerable challenge for implementation and, arguably, a revolution in approach.

4.3.3 Approach in this chapter

The packaging waste Directives provide a different context to ex-ante assessment compared to the other cases considered in this paper. The 1994 Directive was implemented in the Member States largely before systematic ex-ante assessments were common. However, certain analysis was undertaken and the context of implementation is still relevant to our discussion. Note also that the new Member States have implemented the Directive more recently.

The 1994 Directive has, however, been subject to particular scrutiny in relation to its implementation, with ex-post analyses addressing issues such as details of waste management and business costs. These analyses informed the development of the 2004 Directive (although further analysis has since continued). They have also informed aspects of implementation in the Member States.

Thus this case study reflects a case of iteration between ex-ante and ex-post evaluation. Of the cases chosen, it is also the only one where we can ask whether the flexibility available in the revised (2004) Directive is constrained by the implementation choices made during implementation of the first (1994) Directive.

As a result this chapter will initially consider implementation issues concerning the 1994 Directive, provide some comment on ex-post evaluations and conclude with the implementation of the 2004 Directive.

4.3.4 Implementing the 1994 Directive

Introduction – obligations and assessments

It is important to note that the 1994 Directive did not impose new obligations on some Member States. These included:

- **Germany** had adopted its Packaging Ordinance in 1991 that was stricter and more prescriptive than the Directive. Note, however, that the adoption of the Ordinance did occur after significant analysis of options for measures, etc, through the Working Group for Packaging and the Environment (AGVU), whose results contributed to development of the Directive. Germany excluded incineration as an option.
- **Austria** anticipated the Directive by the 1992 Packaging Ordinance, which follows the German approach, but allows incineration. This was subject to an ex-ante assessment by the University of Vienna. Thus Directive 94/62 required only minor changes in Austrian law and there was no need for a further assessment, not least because the flexibility in the Directive allowed Austrian practice to continue.
- In the **Netherlands** the 1994 Directive also allowed for the continuation of existing Dutch policies on packaging waste, as did the situation in **Denmark**.

For other Member States, the Directive did impose new obligations. These included:

- In **Italy** new measures needed to be adopted, but no ex-ante assessment was undertaken.
- **Ireland**, unlike the other Member States in this study, has a transition period under Directive 94/62. In implementing the Directive it did not undertake a formal assessment, although there was a consultation with stakeholders, including businesses and enforcement authorities prior to adoption of the 1997 Regulations and some earlier consultancy analysis.
- **Finland** did not undertake an assessment, but discussed implementation through consultative working groups of stakeholders. Interestingly it opted to use packaging taxes, but these are being abolished as it stimulates purchase of beverages outside the country.
- In the **UK** transposition of 94/62 was supported by a series of specific analysis on individual issues (eg costs) and processes (eg stakeholder consultations).

Overall, most Member States did not undertake full ex-ante assessments. Some undertook specific analyses, such as life cycle assessment in **Denmark** and **Germany**, although these were largely undertaken to justify decisions already made. Many have used benchmarking of practice in other Member States, as seen, for example, by the use of green dot approaches in a number of countries. Thus **Spain** researched the best systems across Europe and built on the green dot approach.

The new Member States have implemented the Directive more recently and some analysis was undertaken to support this:

- In the **Czech Republic** a series of analyses were undertaken to support transposition and, being prior to accession, also supported negotiations for membership. The most integrated document was the 2003 Implementation Programme for the Directive, including information on a range of economic and other aspects of waste management.
- Experience in **Estonia** demonstrates the importance that effective analysis has in getting implementation of EU Directives right. Estonia initially transposed the 1994 Directive in 1998. However, this was subsequently shown to be incomplete and, therefore, insufficient for the accession process. As a result implementation was supported by a Phare project which not only analysed the legal gaps and current waste issues in Estonia, it also examined the options for different instruments in further implementation. This ex-ante assessment not only led to decisions on implementation measures, but also considered choices on negotiation with the Commission on potential transition periods (which Estonia eventually did not request).
- In contrast, in **Slovakia** the Ministry of Environment did not have the resources to undertake any assessment and an assessment was not used as the basis for decision-making which was supported instead by a stakeholder working group. As a result, the NGO SPZ promoted a Czech analysis of options and organised workshops with industry and government authorities, focusing on waste prevention. This resulted in the transposing legislation adopting some of these elements.

For this earlier Directive we can conclude:

- Use of ex-ante assessment for implementation was limited, but some important elements were considered and options chosen as a result (eg in **Estonia**).
- However, ex-ante assessment was not used in some Member States at all.
- For some Member States implementation largely meant the continuation of existing national practice and the Directive did not act as a spur to change direction.

These contexts are important when considering the results of ex-post evaluations of the Directive and the process of ex-ante assessment of the 2004 Directive.

Options and choices for implementation

In undertaking the analyses and stakeholder consultations for the 1994 Directive there has been variation in the way that options are presented. However, in no Member State considered in this study were all options consistent with the flexibility in the Directive identified and subject to further analysis. The most 'open' approach is potentially that of **Finland** where implementation was addressed in ad-hoc consultative working groups. This led to consideration of all open options, albeit not in the format of a formal assessment and, therefore, not linked to other assessment elements.

Where the Directive had little impact on existing national policy (eg **Austria** and the **Netherlands**) options were not generally considered during transposition.

In other cases wider options assessments were more formally addressed. In the **Czech Republic** a range of different instrument options were considered (although without detailed assessment of cost and benefits of each). Ex-ante assessment of options was not undertaken in **Italy**, although subsequent research on waste management in the country has provided more detailed assessment of policy options both for packaging waste and waste management more generally.

The analysis in **Estonia** addressed two options. The first option was a shared approach that included all packaging chain stakeholders with individual obligations and the retailer; the second was to have the retailers be responsible for attaining the recovery and recycling targets. It is not stated explicitly why these options were chosen. However, as with other support projects, these would have generated through discussion of issues with officials, etc, and, therefore, presumably a wider collection of earlier ideas/options.

The **UK** also addressed different options for implementation. However, these were limited in terms of the flexibility of the Directive and it is instructive to consider this in more detail. Here options are set out in a compliance cost assessment (CCA) and consultation document. The latter presents a discussion based on producer responsibility rather than other options possible under the Directive. This was due to a focus on implementation at minimum cost and reliance on the market to deliver compliance. The 1993 CCA examined costs to industry using different scenarios (eg market or regulation, etc) which concluded that the regulatory option would be the most expensive. After adoption of the Directive a 1996 CCA focused only on a 'shared approach' to implementation (options within this approach having been consulted on in 1995). The UK, therefore, provides an example of a step-wise approach to options analysis, with analysis being undertaken in more depth in

later stages, as options are reduced. However, a full examination of available options was not addressed.

Costs and benefits analysis

Full use of CBA was not undertaken by any of the Member States addressed in this study to consider a wide range of choices for implementation of the Directive. However, other more limited analyses were undertaken.

In **Finland**, for example, the assessment examined economic, institutional, environmental and stakeholder impacts. The assessment concluded that financial implications would not be severe, however the details of some of the analysis were limited, eg on the environment. In effect, therefore, this approach is one of cost effectiveness analysis. In this case the analysis was not particularly extensive, partly because the implications for Finland of implementing the Directive were not that onerous. The **Czech Republic** did a cost assessment (for the public and private sectors) in monetised and non-monetised forms. However, benefits were not determined nor, therefore, compared to costs. In **Italy** ex-ante CBA for general transposition was not carried out, but the National Observatory on Waste (ONR) has undertaken research on costs and benefits of waste management to support national and regional waste planning, including packaging issues. It is not clear, however, that these analyses have resulted in practical choices for the management of packaging waste specifically as opposed to wider waste management decisions. In the **UK** a CBA was not undertaken, but a compliance cost assessment (CCA) was produced by consultants which focused on the costs of meeting recovery and recycling targets and with the provision of information. It considered three implementation options. The CCA was subsequently updated as the proposal changed and then during the transposition phase. In **Estonia** the support project did not undertake a CBA, but simply a cost assessment of the waste management options. Thus the cost statements are presented for investment purposes, etc, rather than to guide any choice of options.

Although implementation of the Directive followed existing policy choices in the **Netherlands**, it is worth noting that specific full CBAs have been undertaken to support these. These have been undertaken on whether to maintain the high degree of separate household organic waste collection and on the balance between re-use and incineration.

In conclusion it can be seen that the assessments of cost and benefits arising from implementation have generally been limited in the Member States. Also it is clear that more effort has been given to cost assessments, both for the private and public sector, including analysis of different options.

Stakeholder participation

Consultation with relevant stakeholders was often widespread. Indeed, in **Finland** the use of discussions leading to consensus was the major technique used to identify policy options for transposition of, rather than any other form of assessment.

The process in **Estonia** had wide stakeholder participation. Unlike many Member States, the process was not led by a Ministry, as it was undertaken by a consultancy project. The Ministry of the Environment was indirectly involved in the assessment process being one of the stakeholders consulted by the consultants. The consultants worked closely with stakeholders from all governmental levels as well as concerned non-governmental organisations and interest groups.

In the **UK** there was significant stakeholder consultation. This took place at various stages, including prior to the adoption of 94/62, where the government specifically sought information from businesses on the costs of compliance and comments on economic instruments and recycling. Industry was also asked to help draw up a plan for packaging management. Following adoption further consultation was held with 5,000 businesses and other stakeholders on draft implementing Regulations. It also consulted widely on producer responsibility obligations.

Implementation choices

Few Member States introduced real innovative measures to implement the Directive. The **UK**'s tradable certificates are one example and countries did introduce systems new for them, such as **Poland**'s product charges. Most Member States focused on producer responsibility systems (eg green dot) and many built on existing systems (eg **Denmark** built on the municipality collect and pay system with local taxes to cover costs). However, even where similar instruments have been introduced, their exact use can be different. For example, three of the EU15 introduced taxes (an instrument used in five new Member States). **Belgium** is the only Member State to tax packaging of solvents, glues and inks. **Ireland** taxes plastic shopping bags, but **Denmark** taxes both plastic and paper shopping bags to avoid discrimination between materials.

It is, in fact, difficult to find an audit trail of analyses at an early stage leading through to the implementation of a preferred option. This is largely due to the incompleteness of the analyses and the limited options appraisal. A good exception is **Estonia** where implementation largely followed the preferred choices developed in the analytical support project. These have been generally accepted by stakeholders, although practical implementation still poses challenges. Although unusual, **Slovakia** also represents a form of exception in that the debate on options (though without national analysis) led to stronger measures than required in the Directive (an obligation for a prevention programme).

The difficulties in analysing the assessment process are exemplified by the **UK**. The 'model' approach which we consider is that assessments should begin with the government identifying objectives and setting out options, supported with initial analysis. This then goes for stakeholder consultation leading to better-informed choices for policy implementation. However, the case of packaging in the UK does not follow this route. This is because of early involvement of businesses and others in the analysis, so that issues of cost and options identification become conflated and the resulting consultation focused on

the option (the shared approach) which is that eventually adopted. In effect the example of **Finland** is similar in its use of a stakeholder working group to achieve consensus, thus clearly identifying the implementation choice.

In the **Netherlands** a covenant approach has been taken to managing packaging waste. This establishes covenants with different business sectors supported by collection systems (partly) paid by local waste taxes. From 2006 the local taxes will be abolished and business will pay. However, these developments are nationally developed and not triggered by the Directive(s), although are consistent with them.

Overall, the measures adopted by the Member States have been primarily administrative (eg producer responsibility, mandatory collection, banning landfilling, etc). However, many have also supplemented these measures with economic instruments, especially a landfill tax and educational measures.

4.3.5 Ex-post evaluation of the 1994 Directive

It is important first to stress that the 1994 Directive has had a significant impact on improving packaging waste management. By 2002 the recycling rate across the EU had increased to 54 per cent and all 75 applicable targets were achieved. However, the question remains as to how efficiently this was achieved through the implementation choices made in the Member States. In this regard it is also argued (eg by the Commission) that the Directive could be implemented at no greater costs per tonne of waste than other disposal options. Thus there ought to be no increase in net costs (though potentially some re-distribution of costs). It is also worth noting that a 2005 report[12] on the impact of the 1994 Directive concluded that, in seven Member States, it had little impact on recycling rates (ie these would have developed without EU law through ongoing Member State initiatives).

Member States have undertaken studies of implementation issues relating to the implementation of the 1994 Directive. For example in **Italy** subsequent research provided more detailed assessment of policy options both for packaging waste and waste management more generally than was undertaken during initial implementation.

There have also been a number of multi-country studies. A study in 2000[13] of implementation in four Member States identified the following as factors influencing the cost-efficiency of packaging recycling:

- The flexibility to choose between industrial, commercial and household sources reduces costs per tonne, by being able to focus on the cheapest options.
- Measures in areas of denser populations have lower costs.
- As greater quantities are collected and recycled there is no obvious trend in the influence on cost.

[12] Perchards, FFact and SAGIS 2005. Study on the progress of the implementation and impact of Directive 94/62/EC on the functioning of the internal market. Draft final Report to DG Environment.

[13] Taylor Nelson Sofres Consulting 2000. Cost-efficiency of packaging recovery systems. The case of France, Germany, the Netherlands and the United Kingdom. Report for DG Enterprise.

- In general (though not in every particular instance) recycling is cheaper than alternative forms of waste treatment.
- The German system is costly, but also achieves high absolute environmental benefits.
- The Dutch system based on agreements does not differentiate between industrial and household sources so can focus on the most cost-efficient, resulting in low costs per environmental benefit.

This study is interesting, in the context of this paper, for the following:

- It highlights the different options taken by Member States and, therefore, the inherent flexibility in the Directive.
- It provides some information on issues relevant to ex-ante analysis of the 2004 Directive.
- It demonstrates the differences in cost implications of the options chosen by the Member States. Note that the two 'extremes' (Germany and the Netherlands) are based on pre-existing national systems.

In 2005 the EEA examined the effectiveness of national policy measures implemented in the context of the 1994 Directive[14]. It concluded that measures have focused on the targets for recycling and recovery and not addressed the need for reducing waste production. The appropriate choice of measures should not only reflect whether they achieve their objectives but also whether they are cost effective. The EEA report addressed this. Thus in concluded that the cost level of the Austrian ARA system is the highest of the five countries examined. The system was criticised for being inefficient, and for the fees being too high. It was also claimed that the system was not open enough to competition. However, ARA is a full-cost system, covering more of the costs of collection, sorting and recovery than the other countries investigated. The study also points out that the fees themselves are an incentive towards reducing waste generation. However, it also concluded that detailed comparative assessment of cost-effectiveness is difficult due to the availability and compatibility of data, although it is evident that some choices are more cost-effective than others. The assessment of cost-effectiveness would, however, be important in Member States for which the 2004 Directive imposes significant challenges and further measures need to be developed.

Apart from the efficiency of the choices made, a 2005 study[15] has also raised the question of the possibility of the use of taxes causing a barrier to trade or distortions to competition. It concludes that there is evidence that these can undermine the Internal Market by protecting local producers. Industry is seeking to have these examined, but the Commission has stressed that its powers are limited. As long as these instruments are consistent with EU law, then (at Member State level) they may remain appropriate. If not, then a re-examination of implementation choices might be required.

[14] EEA 2005. Effectiveness of packaging waste management system in selected countries: an EEA pilot study.

[15] Perchards, FFact and SAGIS 2005. Study on the progress of the implementation and impact of Directive 94/62/EC on the functioning of the internal market

It is also worth noting at this point the issue of Essential Requirements, which packaging has to comply with. Only three Member States (**Czech Republic**, **France** and the **UK**) have an enforcement mechanism in place, the latter two recommending adherence to CEN standards. These were published in February 2005 and this might stimulate Member States to enforce them. A 2005 study[16] concluded that if this were the case it could result in a wider range of legal provisions and might generate conflicts between different sets of national rules. Thus the exact measures chosen for implementation might need re-examination (note that it is as yet unclear if this will be a practical problem).

4.3.6 The 2004 Directive

Introduction

Analysis to undertake transposition and then implementation of the 2004 Directive is still in its early stages. This process will take account both of experience in implementing the earlier Directive and in the subsequent adoption of formalised RIA procedures in some Member States. However, it is too early to state how extensive or effective such processes will be. It should be noted that some Member States (eg Austria) have already achieved the 2008 targets of the 2004 Directive, so options analysis would be academic. While there could be a tendency for Member States simply to develop options chosen in implementing the 1994 Directive (and there are obvious benefits in this), it should be noted that the EEA report concludes that 'there are indications that packaging waste management systems are reaching their upper limits in several countries'. Thus Member States may need to analyse further options for measures, for example addressing the lack of progress made on reducing waste production.

Use of assessment

A 2005 draft report[17], *inter alia*, identified the following issues as relevant to ex-ante assessment of packaging waste policy options:

- Where legislation is applied to an area for the first time there can be significant problems with data availability and quality to undertake an assessment.
- As a scheme is implemented over time, the availability of data for ex-post or ex-ante assessments of revised legislation increases.
- The impacts of other policy instruments (eg landfill Directive) need to be factored out.
- For the packaging waste Directive with progressive targets and flexibility it should be possible to establish a feedback process between ex-ante and ex-post evaluations of each stage.

These points are particularly relevant in considering the 2004 Directive. Whereas lack of data could have inhibited assessment of the 1994 Directive, this should no longer be the case. It also stresses the facility available through feedback with ex-post evaluations.

[16] Perchards, FFact and SAGIS 2005.

[17] GHK 2005. Cost of compliance case study: packaging and packaging waste Directive 94/62/EC. Draft report.

However, ex-ante assessment is only likely to be stimulated if Member States consider that they are under significant new obligations (eg the targets are challenging) and/or they have concerns about the efficiency of the existing systems.

Few Member States have, however, undertaken any form of systematic ex-ante assessment to support transposition and implementation of the 2004 Directive. For example:

- **Germany** has undertaken no further assessments for the 2004 Directive.
- In **Finland** a very similar process was adopted as for the 1994 Directive, with the establishment of the Pakka II working group in late 2004 to examine issues in a consultative framework (but not a formal RIA-type assessment).
- In **France** no assessment was undertaken as for non-household waste the system is market-driven (no need for cost assessment) and for household waste the existing system will continue. However, the authorities used the PIRA study on implementation of the 1994 Directive to update the agreement of the green dot organisations – demonstrating the role of ex-post evaluations in this instance.
- In **Italy** no assessment was undertaken, but earlier analyses of regional and local waste management issues helped inform decision-making.
- The most systematic assessment was undertaken by the **UK** with its 'partial' RIA in August 2005. The UK had already established interim targets for the period to 2008. However, due to changes in the underlying data used to calculate the existing targets, it considered that a 'thorough review' of those targets was required.

Options identification

Few Member States seem to be exploring, at least formally, options analysis for the 2004 Directive. An exception is the **UK**. Its RIA has set out formal options for analysis in three different areas:

- For target scenarios:
    1. (Business as usual) existing targets, no increase in obligated tonnage.
    2. Existing targets, increase in obligated tonnage.
    3. Targets set in straight line, increase in obligated tonnage (Government preferred option).
    4. Front loaded targets, increase in obligated tonnage.
    5. Back loaded targets, increase in obligated tonnage.
    6. Direct target option, increase in obligated tonnage.
- Scheme approval regime:
    1. Business as usual
    2. Schemes need to apply for approval annually.
- Scrutiny of operational plans:
    1. Business as usual
    2. Schemes and large producers required to send in their operational plans.

Interestingly, UK guidance for RIA recommends the presentation of three options, including business as usual. The presentation of six options reflects the fact that analysis of all options is not much more onerous than analysing a sub-set in this case as well as providing transparency for stakeholders.

Costs and benefits assessment

The only full CBA that we have seen for the 2004 Directive implementation has been produced by the **UK** in its RIA. This sets out monetised costs and benefits for each option under consideration. Thus for the six options for recovery and recycling it considers economic costs to businesses and economic benefits (avoided disamenity of landfills and avoided financial costs of landfills) and environmental benefits (limited in monetary terms to avoided cost due to climate effects from carbon dioxide release). The RIA was not able to identify any social benefits to monetise. Details are given of the approach and the net costs and benefits are summarised. The results have helped target the government's preferred option.

Stakeholder consultation

There is little evidence of any significant changes in stakeholder consultation procedures for the 2004 Directive. It should be expected that industry would be potentially more active (given that there ought to be little need to raise awareness after the earlier experiences of EU law). Interestingly, the EEA 2005 report on the 1994 Directive concluded that (in the countries studied) there was little NGO involvement and public awareness was a problem in some cases. This would present problems where widespread participation was thought to be needed. However, as noted above, there was important NGO involvement in **Slovakia**.

Where significant legal changes are expected, stakeholder participation has taken place. The **Finnish** practice of a consultative working group to draft legislation (with Ministry officials, industry and environmental interests) is one example of this. This was then submitted for wider consultation. However, this set out the final conclusions, rather than any set of choices for implementation for stakeholders to comment upon.

In the **UK** government guidelines on consultation on RIAs recommend a minimum consultation period of 12 weeks. However, the August 2005 RIA allowed a consultation of only six weeks. The government argued that this was necessary in order to adopt secondary legislation in time to enforce targets for 1 January 2006, which it states are in the stakeholders' interests. It is unclear whether this short period had any impact, although earlier production of an RIA would have made this unnecessary.

Choice of implementation path

Most Member States are taking forward the 2004 Directive through the mechanisms already used in implementing the 1994 Directive. At most there seem to be only minor amendments. In October 2005 the **UK**, for example, announced that, following its consultation on its RIA, it has decided to expand the range of businesses addressed by transposing legislation, including leased packaging. The UK considers that including more businesses will spread costs 'more equitably' and keep individual recycling rates (and hence costs) lower. A measure reducing data requirements for small businesses will also be introduced to reduce costs. However, a proposal to include packaging from franchise businesses will be subject to further analysis and consultation, indicating that not all policy choices have yet been decided.

The choice of options has been affected by experience in implementing the 1994 Directive. For example, the **UK** recognised that while it mostly met the obligations of the 1994 Directive, it did fail to recover sufficient packaging waste in 2001. As a result it has chosen to set business targets with a 'slight cushion' so that if some producers fail to meet their targets, the UK would still be in compliance.

The impact of changed circumstances has also been seen in **Finland**. An initial 45 per cent recovery target for plastic packaging had to be withdrawn as a number of incinerators have not applied for new permits due to the need to meet the requirements of the waste incineration Directive, thus significant energy recovery is no longer an option.

4.3.7 Interesting practice and best practice

UK Business Consultation
A case of interesting practice of industry consultation occurred in the UK concerning producer responsibility obligations. Initial discussions for how these might be implemented were held with industry and this led to a consultation paper in 1995 setting out six industry-proposed options. Senior industry representatives worked to reach a consensus. The approach of asking industry to come forward with suggestions for implementation contrasts with a top-down approach of presenting options for discussion. While this tended to meet industry interests, the approach has been criticised as being too heavily influenced by industry. The process also involved more than 1,000 active participants in the process and that the result was somewhat complicated.

Estonia: Stakeholder Consultation
The stakeholders involved were the Estonian Parliament (the legislative), Ministry of Environment, County Governments, local governments, waste management organisations, waste generators, European Commission, general public and NGOs (consumer and environmental organisations). Overall, the cooperation with interest groups was quite good. The discussions were open and information about implementation was easily available. This is resulted in almost no protest after the implementation. A steering committee was formed in 1999, involving the following: representatives of competent authorities (5 ministries), Local

municipalities, Industry associations, Packaging association, Waste management companies, NGOs. The Estonian National Packaging Council, a policy think tank, was established to provide strategic direction on packaging and packaging waste issues for Estonia. It also assisted and will assist the Minister of Environment with the policy development and effective implementation.

4.3.8 Conclusions - lessons learnt

On the Directive and its flexibility

- Member States have considerable flexibility in implementing the Directive, with a wide range of options open and chosen.
- Some Member States have built upon pre-existing national systems, although sometimes modifying them in the light of the flexibility available.

On the use of assessment techniques

- None of the studied Member States undertook a full, formal impact assessments of the 1994 Directive prior to transposition/implementation, although there were some assessments of costs of implementation to private and public interests
- Few are undertaking a full, formal impact assessments to decide on how to implement the 2004 Directive, though there are exceptions. The only full CBA identified was undertaken by the UK for the 2004 Directive implementation.
- Some Member States were so little affected by the Directive that assessments were not viewed as necessary.
- Stakeholder involvement varied, in some cases with extensive early involvement in developing implementation options (though this has been criticised).
- Benchmarking has played an important role in some cases, as evidenced by the comparisons made on the green dot practice.

5 Synthesis of Practice in Analysing and Developing Environmental Policies

Responding to flexibility in EU law

EU environmental Directives can provide significant flexibility for Member States to choose their own implementation paths, not least in the types of measures or instruments that can be used. Overall, it is evident that such flexibility is taken account of by Member States, although there are a number of potential constraints, such as when the obligations of a Directive fit within an existing national policy context.

Where there is flexibility, Member States need to examine which measures might be most effective (cost efficient) in meeting the obligations that are required of them. To do this, it is good practice to undertake some form of impact assessment incorporating a clear identification of options, a rigorous assessment of costs and benefits and stakeholder interaction to support both the analysis and its conclusions. There are benefits to a formal assessment procedure, although it is also important to stress the value of some flexibility, such as in complex cases where a process of iterative analyses might be required.

The depth of analysis undertaken should reflect the significance of the obligations on a Member State. For any one Directive this will vary between Member States (eg for both NEC and packaging waste Directives the obligations were a major challenge for some Member States and business as usual for others). Whatever the depth of analysis, it is important that it is rigorous and transparent.

The 'ideal' model is that Member States identify the flexibility available for implementation of a Directive, analyse options and choose those which are most cost-effective. In the short survey for this paper it has been difficult to find good examples where this has been fully followed. Options might be rejected before any analysis is undertaken and impact assessment itself might be limited in scope. Indeed the findings of the Better Regulation Group (Table 2.2) suggested that, in some cases, the choice of option was made before an assessment was undertaken. We are, of course, not able to identify cases where a restriction in the analysis of options led to sub-optimal choices. However, it does seem likely from the case studies that Member States might have missed options that could have been more cost-efficient than the ones chosen. It is important that future implementation of EU environmental law is supported by rigorous analysis in order to deliver better regulation.

Member States clearly respond to the flexibility available in Directives in choosing different implementation paths. Each of the case studies has shown this to be the case. In some cases the choices reflect the continuation (or modification) of previous national practice. However, there are also clear examples of Member States assessing options and making choices for new implementation paths, such as with the NEC Directive in the Netherlands, Natura 2000 in France or packaging waste in the UK.

Approaches to ex-ante assessment

From the survey undertaken for this short report and previous research, it is evident that there is no element of the analytical approaches that is truly common to all Member States. Clearly we need to take account of the fact that the use of assessments and their content has

changed over recent years and, therefore, comparative assessment of individual cases need not reflect current practice.

Various authors have recommended the use of some sort of formalised impact assessment (and the elements that this should contain). The use of such formalised approaches is not found in all Member States, although they are being adopted, as can be seen in the current situation in Ireland. From the work undertaken here it is, however, evident that even without a formal impact assessment procedure many Member States do undertake many of the analytical processes that this would imply, such as problem and options identification, cost-benefit analysis and stakeholder involvement. However, these can be discrete and progressive stages as was the experience on the NEC Directive in the Netherlands. In other words, there is already much good practice in the Member States, but the process of policy assessment could be more systematic, more transparent and better linked to the policy cycle.

Ultimately the important issue is not what the process is called, but whether sufficient analysis is effectively undertaken to identify and assess options for implementation. Having said this, there are still benefits to a formal process, not least that it ensure that all relevant stages are addressed and that the outcomes provide a relatively transparent audit trail.

The report from the Regulatory Policy Institute[18] on RIA for the proposed groundwater Directive suggested that there are potentially different types of RIA process:

- An 'unbundled' (ie the elements of the assessment are not undertaken as a single analytical task), high-frequency combination that sees RIA as an iterative, interactive part of a process of continuing policy development. An example is the iterative analytical process undertaken by the Netherlands to support implementation of the NEC Directive.
- A 'bundled' approach that sees RIA as a contribution to a 'one-off', relatively high-level policy decision to be made at a particular time. An example is the assessment undertaken by France to implement the NEC Directive.
- An 'unbundled', low frequency, high detail combination which sees RIA as an information reporting exercise.

As demonstrated earlier, each of the first two of these options could be appropriate in addressing implementation choices. A 'bundled' single assessment has the advantage of bringing all of the information into a single analytical process which, not least, aids with stakeholder consultation. The 'unbundled' process might, however, be appropriate where some aspects of the understanding of the obligations or implementation options cannot be determined at the initial analytical stage.

The Regulatory Policy Institute report contrasts the specific examples of a 'quick-scan' approach in the Netherlands with a detailed analysis in Denmark. However, the critical issue is not simply what an assessment contains, but what is its purpose. The report notes that assessments can be used genuinely to examine different options and inform policy

[18] Regulatory Policy Institute 2005. Benchmarking project: RIAs of the national effects of the proposed Groundwater Directive

making (eg implementation path) or can sometimes be used simply to provide a justification of a policy choice that has already been made.

Ex-ante assessments should examine the range of options available for implementation and, for each, their relative benefits and costs. The case studies have identified examples of good practice in this regard. However, overall in many cases, in many Member States, there have not been systematic assessments of benefits and costs for different options. Wider use of such assessments should not only assist in effective implementation, but also achieving this at lower cost.

In undertaking an assessment for transposition and implementation Member States usually respond to the degree of perceived burden that a Directive will impose. If the existing national legislation is already as strict as that of the Directive then most Member States undertake little or no analysis (eg the 1994 packaging waste in Germany). An exception to this is the RIA undertaken in the UK for the NEC Directive which indicated that no new measures were required at that stage. Here the formal impact analysis was carried out and enabled the presentation of the benefits to be derived from ongoing measures.

The nature of RIA (for example) for national law and for implementing EU law in a Member State demonstrates some differences in approach. A Member State can undertake a single RIA during the formulation of national law to ensure the adoption of cost-effective measures (as does the European Commission in formulating proposals through impact assessments). However, the response of Member States to EU law is often different. A Member State can undertake a RIA based on a Commission proposal not least to inform its position in Council. The obligations of the adopted Directive will inevitably be different to the proposal, so a further RIA might be required to determine implementation issues. Finally, a Member State might undertake a RIA as a 'draft' to inform consultation and a further RIA to act as a final procedure to inform the choice of instruments, etc. These different purposes colour the extent and nature of the analysis, as well as its timing. In practice it is rare to find all of these elements for one Directive (and the scope of this paper has been on processes post-adoption of EU law). However, from the cases examined, the clearest example is that of the assessment process of the UK for the NEC Directive with pre-adoption, post-adoption draft and final RIAs.

It is important to note the different context of the old and new Member States in the use of impact assessments. Some new Member States (eg the Czech Republic) are actively examining the adoption of formal RIA procedures. However, in examining past experience the new Member States have not generally undertaken such analyses within the governmental machinery. This inevitably reflects their need to transpose and implement a vast array of EU law in a short time-span. However, there are examples of support projects that did undertake many of the elements of an impact analysis (eg for packaging waste in Estonia).

Stakeholder participation

Stakeholder consultation is an important part of the practice of determining implementation options in many Member States. It is evident that in some cases this is not simply the presentation of draft conclusions to elicit a stakeholder response, but that stakeholders can be deeply involved in the process of options development. This is evident in the approach in Finland on different Directives and in the early stages of options identification in the UK for the 1994 packaging waste Directive. Stakeholder involvement provides many benefits, ranging from the provision of additional information to support analysis to buy-in of the conclusions that are reached. The use of different types of stakeholder participations in Estonia to support implementation of packaging waste requirements certainly resulted in widespread acceptance of the implementation choices. However, too 'close' an involvement of stakeholders at an early stage can result in concerns over bias (as has been claimed for packaging waste in the UK).

We can, therefore, conclude that where there is a formalised ex-ante assessment processes, with identification of options for implementation, assessment of benefits and costs with effective stakeholder consultation, Member States are more likely to adopt implementation choices which are of lower cost (to business and/or administrations).

Factors influencing assessment approaches

The nature of the assessment to be undertaken also varies according to the type of measures required in a Directive and the timetable of these. In some cases transposition needs to result in the adoption of all (or most) measures that will be required for implementation. For other Directives this is not the case. For example, the NEC Directive requires the development of a national programme which itself could identify implementing measures. This could, therefore, require different types of analysis at different stages, or at least updating (as seen in the case of Ireland). This raises questions over how comprehensive an assessment can be before transposition, or indeed how detailed it should be.

More problematic are those Directives which may require significant measures to be taken at a 'local' level. Examples include air quality management areas under the air framework Directive and programmes of measures in river basin management plans under the water framework Directive. For the latter not only are local solutions potentially required, but authorities also have to determine objectives (good ecological status) that those measures should address. Thus undertaking impact assessments during transposition, etc, is problematic due to a lack of understanding of what the actual implications are.

Most Directives require transposition within two or three years of adoption. This, therefore, represents the time available for Member States to undertake the analysis. In theory this should provide sufficient time for an analysis, particularly if a Member State has undertaken analyses during the adoption process. However, in practice an analysis can be hampered by the quality of information available. Where a Directive amends a previous Directive (as was seen in the case of the packaging waste Directive) then monitoring and reporting data collected during the implementation of the earlier Directive will help inform assessments and even more so if a more thorough ex-post evaluation has been undertaken.

Where analyses have been undertaken, Member States have usually clearly identified the problems being addressed, both in terms of the environmental outcomes expected and the

obligations that are required of a Directive. Importantly, the scope of flexibility is often identified explicitly or implicitly. This is an important first step prior to options identification as it allows stakeholders, etc, to understand the limits within which a government is working.

Where analyses have been undertaken Member States also identify the options that they seek to assess. In some cases the number of options is limited (indicating that others have either been rejected or were not considered) and in other cases options might be quickly dismissed as inappropriate. Where significant analysis is undertaken, Member States will tend to narrow down the choice of options in order to focus the resources for analysis. Therefore, where options have been analysed (in the case studies) usually these have been few in number. Thus, for example, guidance in the UK on RIA recommends analysis of three options (including 'do nothing'). Interestingly, the UK RIA on the 2004 packaging waste Directive did examine six options, although this was facilitated by the fact that each used common data sets.

Analysis costs and benefits

A critical element of an impact assessment is the assessment of the costs and benefits of the options being considered. The most obvious way to tackle this is a full cost-benefit assessment. However, there have been relatively few full CBAs undertaken in the survey for this report. Arguably where the benefits are relatively fixed (eg emission limits under the NEC Directive), then the most appropriate analysis is the cost-effectiveness of different options. However, there are also relatively few examples of these analyses. Some Member States have relied on the results of EU-wide CBAs which informed the development of a Directive, but these ought usually to be re-investigated at the scale of the Member State and updated for changed circumstances.

It is unclear why there is not wider assessment of costs and benefits. This could reflect the lack of real assessment of options. The tools for CBA (and similar methods) are available (although there is continuing debate on the details of their application) and the only justification for not using them would be where the measures proposed are relatively minor in effect or where there are inadequate data to support an analysis. It is not possible in this brief survey to consider whether the failure to undertake a detailed assessment of benefits and costs has resulted in any sub-optimum choice of implementation path. This would require a major ex-post study. However, we can conclude that where there is a formalised ex-ante assessment process, Member States are more likely to adopt implementation choices which are of local costs to businesses and/or administrations.

Conclusion

We can, therefore, conclude that there has been some recent progress in the use of ex-ante assessments by the Member States in exploring implementation choices. However, in many cases the use of such assessments is still limited, so a question remains as to whether the right choices are made in every case. The aim of the workshop is, therefore, to go beyond the information contained in this paper and explore where, and by whom, initiatives can be made to encourage the use of techniques in the assessment process. The discussions at the workshop will important in this regard and, therefore, the following section provides some questions, which participants might usefully consider.

6 Questions for the workshop

The workshop on 15 November 2005 will address many of the issues considered in this background paper. In particular participants will have the opportunity for detailed discussion during three parallel 'breakout' sessions centred on three different themes. Following the analysis in this background paper, the following boxes identify some pertinent questions that could be addressed in each of the breakout discussions.

Breakout discussion: stakeholder consultation

- Have stakeholder consultations helped Member States identify and choose the best options to implement EU legislation?
- When and how are stakeholders best involved in the assessment process?
- Is there a trade-off between 'deep' involvement and transparency?
- How can stakeholder consultation best support the use of benefits and costs assessments?
- Could stakeholder consultation be better done and, if so, what are the barriers, and how should they be overcome?

Breakout discussion: use of benefits and costs assessments

- Has assessments of costs and benefits allowed Member States to choose the best options to implement EU legislation?
- How ambitious (in level of depth or quality) should assessments be of benefits and costs?
- If detailed analysis of benefits and costs are undertaken what practical implications might this have for the number of options to be assessed?
- Where available, has ex-post assessment of benefits and costs demonstrated the accuracy of ex-ante assessments?
- Could benefits and costs be better assessed and, if so, what are the barriers, and how should they be overcome?

Breakout discussion: what are the barriers and solutions to choosing a good implementation path?

- What barriers exist (EU, national, local or other) to choosing better policy options?
- Does ex-ante assessment help Member States find the best way to implement EU environmental legislation?
- What elements of ex-ante assessment are best practice?
- Why are full ex-ante assessments sometimes not undertaken?
- How can better ex-ante assessment be promoted?

In addition to the breakout sessions, the agenda has been structured so that there is plenty of scope for discussion and participants are invited not only to reflect upon the above questions, but also to bring their own questions on the issues addressed in this report for discussion on the day.

ANNEX

Workshop agenda

Workshop on Best Practice in Analysing and Developing Environmental Policies
15 November 2005 - British Embassy Brussels

Agenda

8:30 Registration and coffee

Session I: Overview: Analysing and Developing Environmental Policies

9:00 Welcome and introduction by the chair - Robin Miège (DGENV)
9:15 Flexibility & Impact assessment: An Overview - Andrew Farmer (IEEP)

Session II: Assessment Processes - 10:15

National Cases, Discussant Response and Discussion.
Case 1: UK - Mark Courtney (Cabinet Office, UK)
Discussant response – Per Mickwitz (Ymparisto - Finnish Environment Institute)
Discussant response: Jan Dusik (Ministry of Environment, CR)
Discussion
Coffee – 11:15

Session III: Assessment Tools – Use of Analysis of Benefits and Costs - 11:35

National Cases, Discussant Response and Discussion.
Overview of Use of costs and benefits analysis – Patrick ten Brink (IEEP)
Case 2: NEC in France – a short introduction: Cécile des Abbayes (Bio, France)
Discussion response: Otto Linher (European Commission)
Discussion

13:00 Lunch

Session III: Assessment Tools - Use of Consultation - 14:00

National Cases, Discussant Response and Discussion.
Case 3: Sweden and Natura - Jan Terstad (Ministry for Sustainable Development, Sw)
Discussant response – Estonia and packaging – Peeter Eek (Ministry of Env., Estonia)
Discussion

15:00 Breakout on Assessment Techniques (3 groups)

- stakeholder consultation;
- analysis of costs and benefit;
- what are the barriers and solutions to choosing a good implementation path?

Facilitators: Consultation: David Wilkinson
Costs and Benefits: Patrick ten Brink
Implementation choices, barriers & solutions: Andrew Farmer

Coffee – 16:00

Session IV: Plenary: Reporting back from breakout groups -16:20

16:40 Discussion: Needs and Way forward

What are the needs, what are the barriers, what are the solutions, who can make solutions happen?

17:15 Chairman's conclusions

17:30 End of the day