

## Taking Account of Costs and Benefits

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**TAKING ACCOUNT OF COST AND BENEFITS****1. PURPOSE**

- 1.1 The purpose of this Note is to interpret for all Agency staff the "costs and benefits" duty in Section 39 of the Environment Act 1995 (EA 95) and to give some broad practical guidance on how staff may carry out the duty. The Agency is required by the Department of the Environment to set out internal guidance on costs and benefits to staff (see the explanatory document accompanying the Secretary of States Statutory Guidance on Sustainable Development to the Agency, paragraph 5.7). (A full list of references to this and other documents is contained in Appendix 1.)
- 1.2 There are existing sources of guidance on the more detailed analysis of costs and benefits available to Agency staff (see Appendix 1) and existing procedures and methods in use. These remain good practice and should continue to be used until revised formally. These procedures in general help the Agency comply with the duty in the Act.
- 1.3 In the coming months the Chief Economist will be working with policy and operations practitioners and others to develop more detailed guidance and training on how to apply the duty to deal with particular issues.

**2. BACKGROUND**

- 2.1 Any organisation will wish to take into account the likely costs and benefits of the actions it proposes in order to ensure that it delivers the best possible outcome in the most efficient way. A public body will want to look not just at the costs and benefits to itself of any action it takes, but to the impact on others and the environment. This is spelled out in the Treasury's "Green Book" and the guidance published by the Cabinet Office's Deregulation Unit.
- 2.2 However, the Agency has a *duty* to look at wider costs and benefits under EA 95. There are two references to taking account of likely costs and benefits in the Act (see Appendix 2 for the text).
- 2.3 In Section 4, the Agency's principal aim is defined as being to discharge its functions in such a manner as to attain the objective of achieving sustainable development, as guided from time to time by Ministers, under the provisions of the Act and *taking into account* any likely costs.
- 2.4 In Section 39 the Agency is required to *take into account* the likely costs and benefits that are likely to follow from its decisions or actions whenever it:
  - *considers* whether or not to exercise a statutory power, or
  - *decides how* (the manner in which) it exercises its powers.

- 2.5 Section 39 makes it clear that the Agency does not have to do so if it *unreasonable for it to do so*, because of the *nature* or *purpose* of the power that is being considered, or the *circumstances* of the particular case.
- 2.6 It is also made explicitly clear in Section 39 that this *duty* does not affect the Agency's obligations to discharge any of its other duties. For example, the Agency has duties to have regard to conservation matters in undertaking its functional responsibilities, *to further* conservation when dealing with proposals relating to its non-pollution control functions, and *to promote* conservation with respect to the aquatic environment. These duties, and the principal aim of contributing to sustainable development, are described in internal guidance notes similar to this one. The carrying out of the Agency's functional activities requires a complex interplay of both duties and powers in order to deliver each functional objective.
- 2.7 Section 56 of the Act defines costs as meaning a cost to any person or a cost to the environment. This definition covers all negative and or undesirable effects and is not restricted to costs which can be expressed in money terms (eg the loss of an indigenous species may be a cost to the environment). Benefits are not defined in the Act.
- 2.8 The Agency can interpret this duty better by looking at the debate on the Act in Parliament, the guidance the agency has received from ministers on its sustainable development duty (the Statutory Guidance), the commentary accompanying the statutory guidance, and the Agency's own Management Statement.
- 2.9 From the Parliamentary debate on the Environment Bill it seems that the duty in section 4 arises from the view that, because sustainable development itself requires a complex reconciliation of economic development and environmental protection, the Agency's particular role - of protecting or enhancing the environment - has to be balanced by a need for it also to take account of the costs. If that were not the case, then the Agency would not be able to play an independent or practicable role in the achievement of sustainable development, because the economic consequences of its decisions would continually need to be assessed by Government.
- 2.10 In the debate on Section 39 the Secretary of State described the intention of the section as enabling the Agency to put the environment on a par with other costs - "speaking the language of the banker."
- 2.11 The Statutory Guidance and the accompanying commentary reinforce this view. On costs and benefits it says:

*"These provisions recognise that sustainable development involves reconciling the need for economic development with that for protecting and enhancing the environment, without compromising the ability of future generations to meet their own needs. Ministers consider that as the Agency is a body with powers to make decisions with significant impacts on individuals, organizations and the environment, it should take account of all types of costs and benefits when making such decisions. This will not only ensure that financial and other considerations are taken into account, but also that environmental considerations are given the central*

*role that is necessary for sustainable development. But the duty does not apply in cases where it would be unreasonable, nor can it be used to override other statutory requirements."*

- 2.12 The guidance spell out in more detail those occasions where the duty does and does not apply. It will apply to both strategic planning and to individual projects or activities. However it might not be reasonable for the duty to apply in full in an emergency, (although the Agency will attempt to plan for emergencies in such a way as to take into account the costs and benefits of the way in which it reacted to emergencies). Equally it does not affect the Agency's obligations to discharge specific duties, comply with requirements, or pursue objectives. Legal requirements (such as the implementation of water quality objectives) remain unaffected by the duty.
- 2.13 However the guidance does point out that the duty will apply whenever there is more than one way of achieving the legal requirements, and if the Agency retains discretion as to how they should be achieved.
- 2.14 The Statutory guidance also sets, as an objective for the Agency, the need for it to work with all relevant sectors of society, including regulated organizations, to develop approaches which deliver environmental requirements and goals *without imposing excessive costs (in relation to benefits gained)* on regulated organizations or society as a whole. This objective, together with the notion that the costs that follow from the Agency's decision or actions are proportionate to benefits gained, is incorporated into the Agency's Management Statement.

### 3. BASIC PRINCIPLES IN APPLYING THIS DUTY

- 3.1 In the light of this discussion, the Agency needs to take account of costs and benefits in its activities to demonstrate that its actions are justifiable in the light of the costs imposed and benefits delivered, without having to refer its decisions to government to gain acceptance for the economic effects. This will also enable the Agency to demonstrate to regulated bodies and the public that it is acting efficiently and that the costs are not disproportionate to the benefits gained.
- 3.2 There is no duty for the Agency to demonstrate quantitatively that likely benefits exceed likely costs before it acts, as long as it can be shown that the Agency took account of the likely costs and benefits in reaching its decision. The Agency can demonstrate it has met this requirement by providing an audit trail of actions taken and justification for those actions.
- 3.3 The duty does not prescribe the Agency to apply any particular technique, such as cost-benefit analysis. Thus, for example, there is no requirement for the Agency to value the environmental benefits it delivers, although it is now open to the Agency to do so in any occasion where the use of that technique helps efficient regulation.

- 3.4 Equally, the cost of applying this duty should be proportionate to the potential benefit to be gained. For example, in the case of a small-scale application for a licence or consent, a detailed survey of all related costs and benefits could be more expensive, in terms of diverted Agency resources, than any additional costs avoided or benefits gained.
- 3.5 The duty refers to *likely* costs and benefits. In any appraisal the costs and benefits will be subject to uncertainty. For simple cases, there may be relative little uncertainty and it may be possible to form a judgement. More complex cases, for example involving a sensitive ecosystem or a new chemical, may need a detailed risk assessment. Pending more detailed guidance on dealing with risk and uncertainty and a final decision on the treatment of risk assessments in the Agency, contact Sustainable Development Function if you consider such an assessment may be needed. In some cases the Precautionary Principle may have to be invoked where there is significant uncertainty about potentially large harmful impacts.
- 3.6 Given the statutory duty, and the discussion above on the legislation and related guidance, and given the onus on all public bodies to be efficient in their activities, there are a number of simple objectives that the Agency should achieve to enable it to have regard to likely costs and benefits:
- ensure that the Agency's activities are appropriately assessed with regard to their costs and benefits, both environmental and other,
  - ensure that its response to emergencies, and its taking of legal action, are always effective and efficient but not generally subject to analysis on a case-by-case basis,
  - develop processes and techniques for identifying and assessing risks, costs, and benefits which gain general acceptance for their use,
  - be relevant, proportionate, understandable, pragmatic, and transparent in its approach, and
  - take account of basic principles such as:
    - considering the environment as a whole, having regard to conservation and related matters,
    - taking a long-term view, and
    - taking account of risks and uncertainty.
- 3.7 The Agency document, *List of powers and duties falling to the Environment Agency*, initially prepared by the NRA legal team in February 1996, and currently being completed, outlines the duties and powers of the Agency, and gives a preliminary assessment of the need for applying section 39. This will be available through the Agency's information centres.

#### 4. PUTTING THE DUTY INTO PRACTICE

- 4.1 In putting the duty into practice, it is important to see it in the context of the Agency's activities and its overall strategy. The Agency has already characterised its role in terms of analysing the various pressures on the environment - some of which are subject to the Agency's powers, some of which are not - and the relationship between those pressures and the state of the environment across England and Wales. A major part of The Agency's response to that pressure-state relationship can be expressed in terms of managing risks. Some of the risks are natural, and may have to be reduced. Others may be the result of economic and social processes - ranging from heavy manufacturing industry to walkers on a river bank. In order to ensure that The Agency's response to the risks of the processes combines the protection of the environment with peoples welfare, the Agency must take account of the benefits from those processes.
- 4.2 The management of risks is often reflected in the setting of standards to be met or targets to be achieved. Where the standards or targets are set by law, or by Ministerial direction, the benefits have already been decided and the task for the Agency is then one of achieving the target at least cost. In many cases however the precise objectives may not have been set in this way and there may be a number of choices available to address the risk, in which case the Agency's task is to choose the optimum between them. Different approaches may therefore be required, depending on the circumstances.
- 4.3 Where the target/objective is not for discussion (eg statutory objectives or Ministerial direction), use cost-effectiveness analysis to determine the least-cost means of achieving the target or achieving the objective (taking into account the risk of failing to deliver);
- 4.4 Where the benefits of action, or inaction, and the costs of achieving (or not achieving) the benefit, need to be decided:
- where there is a reasonably acceptable way of putting monetary value on the non-financial costs and benefits of the alternatives, use **cost-benefit analysis** to help the decision making process;
  - where there are additional features which mean that monetary valuation is inappropriate or unacceptable, (for example a wide range of diverse costs and benefits or a wide range of people involved) use **multi-attribute analysis**.
- 4.5 Although a formal cost-benefit analysis is not necessarily required under the duty, an assessment using a cost-benefit analysis framework would normally be a useful starting point and is a well recognised approach. The guidance in the Agency's Project Management Manual, section 4.2.2, is a useful guide to appraising any activity; project or not. Broadly speaking, the steps it describes are:
- define the objectives and, where possible identify the products (this should include a description of the environmental, human health and other social implications);
  - identify the options, including the "do-nothing" option;

- ensure the short-listed options comply with environmental policy;
- identify the costs and benefits of each option, including the costs falling directly to the Agency, to proponents or to others who must take specific action or are affected; non financial costs and benefits should be listed, and quantified or valued where possible;
- assess the options, using an appropriate appraisal technique, and assessing the risks associated with each of the options;
- assess the balance between the options, selecting the preferred option; and
- present the results.

4.6 Using a summary proforma, such as the standard Agency Form As, which are already required for certain procedures, is one way of setting this out clearly.

## 5. DECIDING HOW DETAILED AN ASSESSMENT IS REQUIRED

5.1 The level or complexity of the assessment that is undertaken should be commensurate with the significance and implications of the decision. In principle, one could use either the estimated level of benefits or disbenefits as the criterion to determine how detailed the assessment should be: the more significant the benefits or the disbenefits, or the costlier the possible actions that may follow, the more substantial will be the assessment required. In practice, the benefit gained or the harm avoided may not be readily expressed in money terms. Therefore one simple criterion to determine the level of analysis needed is the size of the project or policy, as measured by the level of expenditure by the Agency and by those affected by the regulation.

5.2 Figures 1 and 2 suggest appropriate levels and types of assessment depending on the scale and type of issue that needs to be assessed. The level of effort put into the assessment and the robustness required of the results should be linked to the different expenditure bands. Figure 1 is designed for policies and programmes; Figure 2 for projects.

5.3 At project level the bands mentioned are those referred to in the scheme of delegation, although where a project involves relatively little Agency expenditure but a lot of expenditure by external parties, it may be appropriate to use a more detailed assessment. At policy and programme level it may be particularly necessary to consider expenditure by other parties as the criterion. These levels will be continually reviewed for their appropriateness.

## 6. WHICH COSTS AND BENEFITS SHOULD BE INCLUDED?

6.1 Benefits are not defined by the Act. In some cases the benefits are effectively set by statute, in terms of the need to meet statutory environmental standards, or to meet nationally-set targets or goals. In other cases the benefits may be similarly clear - for

example, that of upholding the law. Benefits also include fulfilment of the Agency's duties and their basic purpose: for example, a duty is placed on the Agency (Section 5, EA '95) to exercise all of its pollution control powers for the purposes of preventing, or minimising, or remedying or mitigating the effects of, pollution of the environment.

- 6.2 Costs, as noted above, are costs to the environment, or costs to individuals, or to companies and society. The Agency therefore may need to consider the following:
- the costs and benefits of its actions for society as a whole;
  - effects on the welfare of people and business;
  - changes in the use of resources (capital, labour and natural resources); and
  - impacts on the environment, including the environmental costs of any Agency action.
- 6.3 Included in this should be consideration of impacts on individual companies and industry sectors, distributional issues and other costs and benefits which may be unquantifiable or which cannot readily be given monetary valuations. The public perception of the issue and of the Agency's response should also be considered.
- 6.4 The Agency can also only take into account those likely costs upon which information is available, or in cases where the Agency considers that such costs can be assessed in a sensible manner. This does not preclude or excuse the Agency from researching poorly understood areas where that is appropriate.

## **7. TYPICAL SITUATIONS REQUIRING AN ASSESSMENT**

- 7.1 Figures 1 and 2 provide a flow chart indicating the type of assessment which will be necessary for those actions for which assessment of costs and benefits is required. This information is also summarised in Tables A and B. These are general recommendations which should be assumed to apply until more specific guidance has been developed for individual functions. The rest of this section looks at some typical types of assessment situation.

## **8. ASSESSMENT REQUIREMENTS FOR ACTIONS RELATED TO STATUTORY TARGETS**

- 8.1 Where a policy or project is being driven by the need to enforce statutory or other legal or policy requirements, then cost-effectiveness analysis is the most appropriate form of assessment. These analyses generally require an assessment in money terms of the costs associated with different options, where the options should include not only that favoured by the Agency but other approaches which may be favoured by industry, conservation groups or other interests. Because the environmental and/or human health targets have been pre-defined, there is no requirement to assess the benefits associated with alternative options.

- 8.2 Different options are likely to lead to varying levels of cost-effectiveness. Some may meet the targets with a higher level of certainty and at a considerable cost, while the reliability attached to other options in meeting the targets is lower, as are the costs. Furthermore, the appraisal may become more complicated when more than one target must be met. In such cases, it may be more appropriate to try and quantify the difference in benefits provided by alternative options, or to undertake a full assessment of both the relative costs and benefits.
- 8.3 Similarly, the greater the expenditure associated with a decision, the more important it may be to quantify the differences in benefits provided by different options, where any such differences exist.

## 9. ASSESSMENT REQUIREMENTS RELATED TO DISCRETIONARY TARGETS

- 9.1 Where both the targets to be met and the means of meeting these are discretionary, a fuller assessment of costs and benefits will be required and a full audit trail should be maintained. In these cases, it will be important to consider the trade-offs associated with meeting different target levels, where these include the financial costs to industry and government and the environmental and human health implications (including risks, costs and benefits).
- 9.2 The assessment of trade-offs can be undertaken using a range of different approaches. These vary from a qualitative discussion of costs and benefits, to a semi-quantified assessment, to a more formal quantified assessment. Where appraisal methodologies already exist or are in development, these should be utilised as appropriate (for example, MAFF provides guidance on assessment requirements for flood defence grant-aid applications and desk-top methodologies have been developed for the assessment of low flow alleviation and water quality problems).
- 9.3 In many cases a quantitative assessment of costs will be necessary, derived by following Treasury and other in-house guidelines. Where a quantitative assessment of benefits is required, this can be achieved through the use of multi-criteria techniques (including simple scoring and weighting systems) or cost-benefit analysis techniques (including the valuation of environmental and human health effects). Multi-criteria techniques and cost-benefit analysis can be combined within a single assessment where the valuation of environmental and human health impacts is not feasible or unacceptable. An example of the latter includes projects which mainly comprise impacts on nature conservation and biodiversity, given the problems associated with the derivation of justifiable and robust estimates in these cases. Where a combined approach is taken, care is required to ensure that there is no double counting of costs and benefits.

- 9.4 Full cost-benefit analyses, entailing the commissioning of specific environmental valuation studies, should only be commissioned in special cases. Reasons for commissioning such studies may include high levels of expenditure being associated with the decision, the potential for applying the results to other similar decisions, or the need to fill an important gap in understanding. These should not be attempted without first discussing the options with the Chief Economist.
- 9.5 For the more common cases, standard values for environmental resources can be developed, although their use in specific cases will always be subject to scrutiny.

## **10. ASSESSMENTS IN RELATION TO RESPONSES TO EMERGENCY SITUATIONS**

- 10.1 Decisions to take action, and the appropriate form of that action in emergency situations, are discretionary in nature. It has been determined, however, that it would be unreasonable for the Agency to be required to apply the Section 39 (EA '95) duty to such decisions in the majority of cases. The requirement would unduly hinder the ability of the Agency to meet its statutory duties in protecting the environment. However the Agency's planning for emergencies should apply the duty.
- 10.2 It could be argued, however, that there are important exceptions with regard to emergencies, where the emergency is declared by an outside party. A prime example concerns the Agency's response to applications for drought orders. In such cases, where the Agency must consider the 'trade-offs' between the need to meet basic domestic and industrial demands for water versus damages to the environment, it may be essential for the Agency to support its decision with an assessment of costs and benefits. In such cases, the form of the assessment will be determined by the time and information available.

## **11. ASSESSMENTS IN RELATION TO ENFORCEMENT ACTION**

- 11.1 Enforcement of environmental regulations, consents and licenses, are duties falling on the Agency. As a result, it may be considered unreasonable for enforcement decisions to be supported by an assessment of costs and benefits. Because enforcement actions relate to statutory requirements or other environmental quality objectives which have been determined previously, it can be argued that the benefits associated with the enforcement action have already been assessed and determined. (It is important to note, however, that any decisions as to whether or not to take criminal proceedings should be based solely on the criteria contained in the Code for Crown Prosecutors which themselves indicate the bases upon which decisions should be taken in so far as likely costs and benefits are concerned.)
- 11.2 However, even in such cases, benefits need to be attained in the most cost-effective manner. The type of assessment carried out where the benefits have to be achieved is known as cost-effectiveness analysis. In the cases of emergency and enforcement the Agency will wish to develop guidelines to ensure cost-effectiveness and to evaluate the cost-benefit of its actions.

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**12. SUPPORT AND DEVELOPMENT**

- 12.1 As the Agency develops its economics and general appraisal capacities, and builds up accompanying case histories and databases, there will be greater support for Agency staff undertaking assessments. The provision of this support will depend on the local situation. Some units may wish to set up their own local support. Others may be governed by service-level agreements with the Agency business units concerned. But in order to ensure consistency, the professional support available will in turn be supported by the Chief Economist.
- 12.2 The Agency will also review and develop guidance for each function in the Agency. To this end the Environmental Strategy Directorate will need to work with practitioners to analyse case studies and develop appropriate procedures.

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**APPENDIX 1 - BIBLIOGRAPHY***Duties and powers of the Agency*

*Duties and powers of the Environment Agency / National Rivers Authority. Bristol : (NRA, 1995.)*

*Environment Agency and sustainable development statutory guidance**Guidance on the analysis of costs and benefits*

*Economic appraisal in central government: a technical guide for government departments / HM Treasury. London : (HMSO, 1991. 0-11-56--34-5)*

*National Rivers Authority economic appraisal manual version 1.0 / National Rivers Authority. Bristol : (NRA, 1993.) (NRA Internal Policy Manual)*

*Flood and coastal defence: project appraisal guidance note / Ministry of Agriculture, Fisheries and Food. London : (MAFF, 1993. PB 1214)*

*Policy appraisal and the environment: a guide for government departments / Department of the Environment. London : (HMSO, 1991. 0-11-752487-5)*

*Guide to compliance cost assessment : releasing enterprise: counting the cost to business / Department of Trade and Industry. (London : DTI, 1990.)*

*Checking the cost of regulation: a guide to compliance cost assessment / Cabinet Office Deregulation Unit. London : (HMSO, 1996. 0-7115-0308-7)*

*A guide to risk assessment and risk management for environmental protection / Department of the Environment. London : (HMSO, 1995. 0-11-753091-3)*

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**Procedures**

In general all the Agency's existing advisory and procedural manuals remain in force and are useful starting points for assessing costs and benefits. However your particular attention is drawn to the following:

*Financial memorandum and scheme of delegation / Environment Agency.* Internal Procedural Manual Volume 07.

*The appraisal and management of projects in the Environment Agency. Project management manual / Environment Agency.* Internal Procedural Manual Volume 014

*Surface water quality benefit assessment manual* - Available from December

*Economic appraisal of non-grant aided work / National Rivers Authority.* Research and Development. Bristol : NRA, 1993. NRA R&D Output Ref. Note 187

*Economic appraisal of non-grant aided work / National Rivers Authority.* Research and Development. Bristol : NRA, 1993. NRA R&D Output Ref. Project Record 435/2/NW

*The code for Crown Prosecutors / Crown Prosecution Service.* London : CPS, 1994. (Available in Legal Department)

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**APPENDIX 2 - ENVIRONMENT ACT, SECTIONS 4 & 39**

From the ENVIRONMENT ACT 1995:

4.—(1) It shall be the principal aim of the Agency (subject to and in accordance with the provisions of this Act or any other enactment and taking into account any likely costs) in discharging its functions so to protect or enhance the environment, taken as a whole, as to make the contribution towards attaining the objective of achieving sustainable development mentioned in subsection (3) below.

Principal aim and objectives of the Agency.

[ . . . ]

(3) The guidance given under subsection (2) above [on Ministerial guidance] must include guidance with respect to the contribution which, having regard to the Agency's responsibilities and resources, the Ministers consider it appropriate for the Agency to make, by the discharge of its functions, towards attaining the objective of achieving sustainable development.

[ . . . ]

39.—(1) Each new Agency—

- (a) in considering whether or not to exercise any power conferred upon it by or under any enactment, or
- (b) in deciding the manner in which to exercise any such power, shall, unless and to the extent that it is unreasonable for it to do so in view of the nature or purpose of the power or in the circumstances of the particular case, take into account the likely costs and benefits of the exercise or non-exercise of the power or its exercise in the manner in question.

- (2) The duty imposed upon a new Agency by subsection (1) above does not affect its obligation, nevertheless, to discharge any duties, comply with any requirements, or pursue any objectives, imposed upon or given to it otherwise than under this section.

General duty of the new Agencies to have regard to costs and benefits in exercising powers.

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**APPENDIX 3 - DEFINITIONS**

**Assessment** An assessment is an activity designed to document the known facts about costs and benefits of an individual project, programme or policy, and to comment on the balance between them. It contains different options of achieving a stated aim including the 'do-nothing option', and results in the identification of the preferred option. An assessment should take into account and build upon the following:

- the technical feasibility of alternative options, including 'do-nothing' or 'do the minimum' options;
- the results of any environmental impact assessments; and
- any assessments of risks, where these may include financial, engineering, environmental or human health risks.

An assessment may be qualitative, semi-quantitative or fully quantitative in form. A quantitative assessment may involve the monetary valuation of environmental, human health and other social costs and benefits where cost-benefit analysis is being used, or may take other forms where other appraisal methodologies such as multi-criteria analysis are adopted.

**Costs**

Section 56 of the Environment Act defines costs as including "costs to any person and costs to the environment". The costs of a project are the opportunity costs - the full value of any resource in its best alternative use. This may be estimate by the financial expenses incurred by an operator or proponent in meeting the requirements placed upon them by the authorising body, or any expenses incurred by the Agency in undertaking its actions; similarly, the cost of a programme or policy is the expected financial expense of implementing the programme or policy by those it will affect. Costs also include any environmental, human health or other social impacts which are detrimental in nature.

Costs include any capital and recurrent expenditure, administrative costs, monitoring and enforcement costs, and research and development costs.

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- Benefits** The benefit of a project, programme or policy is the positive expected aspect of an outcome, including the improvement in environmental protection or environmental quality which will flow from it, but also including other improvements - for example, in cost savings, social benefits such as health, convenience, or general welfare.
- Duty** A duty is a restrictive requirement placed upon the Agency and upon which it must act.
- Power** A power is a facility provided by legislation for the Agency to act within its discretion in specified circumstances.

**FIGURE 1 - FLOWCHART FOR POLICIES AND PROGRAMMES**

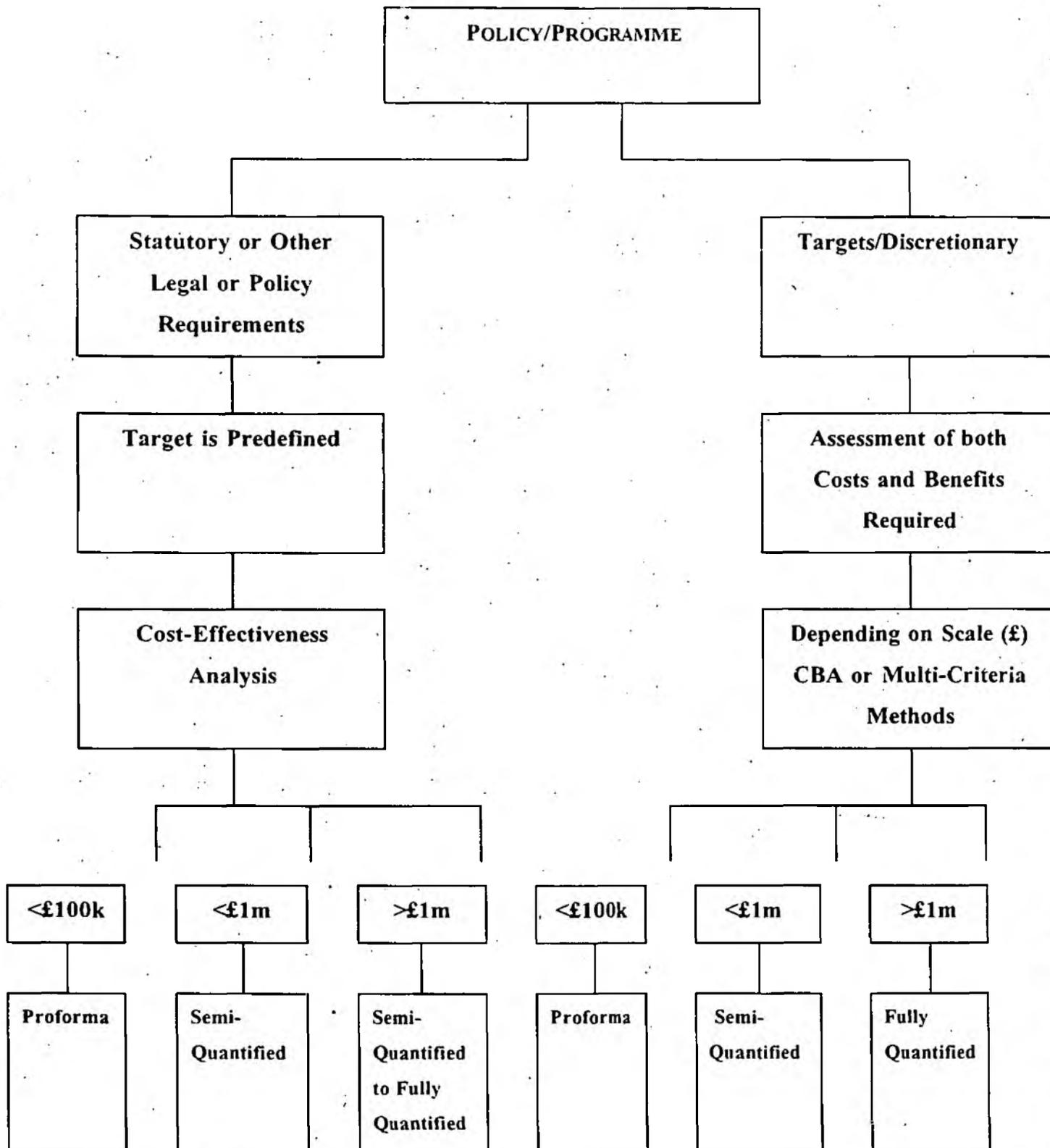
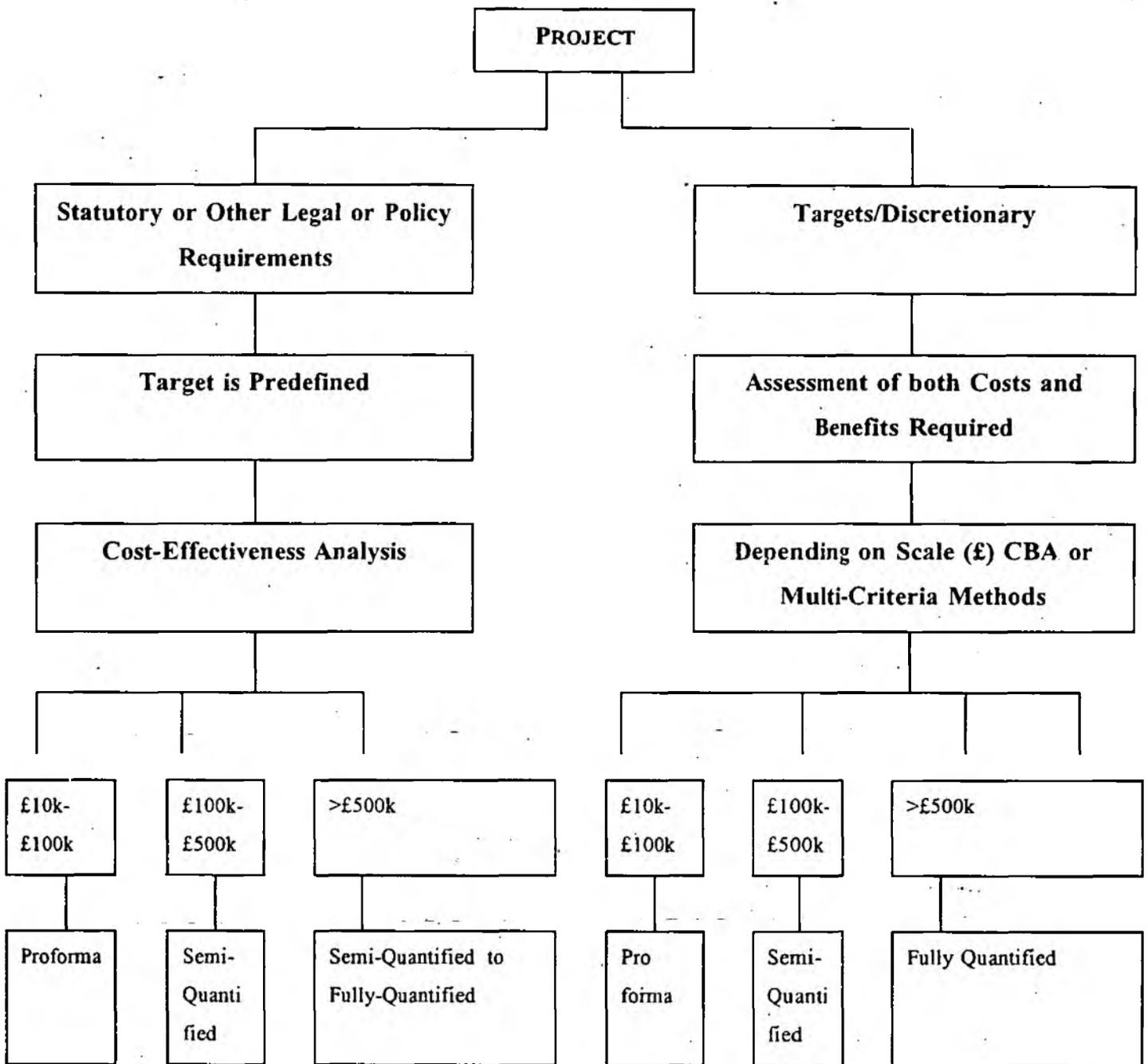


FIGURE 2 - FLOWCHART FOR PROJECTS



## TABLES

<b>Table A: Levels of Discretion and Potential Assessment Approaches</b>				
Nature of Decision	Proforma	Cost-Effectiveness Analysis	Multi-Criteria Analysis	Cost-Benefit Analysis
Statutory or Other Legal or Policy Targets Pre-defined	■	■		
Discretion in Targets to be Achieved	■		■	■

<b>Table B: Assessment Requirements by Expenditure</b>			
	Proforma/Qualitative Assessment	Semi-Quantified	Fully Quantified
<b>Policy</b>			
<£100k	Proforma only required providing any quantitative information available		
<£1m		Quantification of costs necessary; benefits assessed in qualitative terms. Applies to both Statutory and discretionary targets	
>£1m		Quantification of costs only required for Statutory targets, with qualitative assessment of benefits where these differ between options	Fully quantified assessment should be prepared for discretionary proposals, using either MCA or CBA for assessment of environmental and human health effects
<b>Project</b>			
<£10k-£100k	Proforma only required giving qualitative discussion		
£100k-£500k		Costs should be quantified with a qualitative assessment of benefits. Assessment of benefits required only for discretionary targets, unless significant differences in "effectiveness" of measures in meeting Statutory targets.	

<p>&gt;£500k</p>		<p>Costs should be quantified and only a qualitative assessment of benefits may be required, depending on existence of methodologies and ease of quantification.</p>	<p>Fully quantified assessment should be prepared for discretionary proposals, using either MCA or CBA. CBA should be used where methodology exists; MCA may be more appropriate where there a large component of the costs or benefits are conservation related.</p>
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**Sustainable Development Section Publication Series.****Guidance Notes**

SD 1	Introductory Guidance on the Agency's Contribution to Sustainable Development.	November 1996
SD 2	The Agency's Conservation Duties.	November 1996
SD.3	Taking Account of Costs and Benefits.	November 1996
SD 4	The Local Communities in Rural Areas	Forthcoming

For further information in relation to any of the above, please contact the Sustainable Development Section at :

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