Assessing the Impacts of Spatial Interventions
Regeneration, Renewal and Regional Development
‘The 3Rs guidance’
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Following the reorganisation of the government in May 2002, the responsibilities of the former Department of the Environment, Transport and the Regions (DETR) and latterly Department for Transport, Local Government and the Regions (DTLR) in this area were transferred to the Office of the Deputy Prime Minister.

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Email: odpm@twoten.press.net

or online via www.odpm.gov.uk

ISBN 1 85112 703 8

Printed in Great Britain on material containing 75% post-consumer waste and 25% ECF pulp.

May 2004

Reference no. 04LRGG02060
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Foreword

This document has been developed to provide guidance on the assessment of interventions with a spatial focus (typically regeneration, renewal or regional development initiatives). It replaces the 1995 HM Treasury document commonly known as EGRUP.

The document has been revised with the help of the HM Treasury, the Cabinet Office, Department of Trade and Industry, the Department for Transport, the Department for Work and Pensions (DWP), The Department for Education and Skills (DFES), The National Assembly for Wales, The Scottish Executive, DFP-Northern Ireland, the Department for Culture, Media and Sport, (DCMS) and the Department for the Environment, Food and Rural Affairs (DEFRA). The document has also benefited from substantial input from the ODPM’s Neighbourhood Renewal and Urban Policy Units, the Regional Development Agencies, English Partnerships and OFFPAT, their joint support unit for appraisal best practice. In addition an Advisory Group was established made up of key academics and consultants who undertake much of the assessment activity in this area.

The aim of the Guidance is to set out the broad framework within which the assessment of spatially targeted interventions should take place. The drafting recognises the need for flexibility and hence focuses on the broad principles that should be followed rather than defining rigid procedures.

The ODPM, as lead author of the Guidance, recognises the need for co-ordination between government departments and their agencies and the autonomy with which many bodies need to operate in delivering regeneration and related outcomes. This guidance is not meant to restrict other departments and agencies but to clearly state the principles that need to be followed to conform with best practice and hence allow these bodies to get on and deliver.
Executive Summary

What are the 3Rs?

Regeneration, renewal and regional development (the 3Rs) are interventions that have a specific spatial focus. As a result they often have distributional impacts. This document provides guidance specific to the assessment (appraisal and evaluation) of these impacts.

Not all areas of government intervention are targeted in this way. However, the impacts of all interventions differ according to the local conditions of the areas they affect. This guidance therefore has a wider relevance.

Who should read this Guidance?

Anyone involved in the design, appraisal, delivery or evaluation of 3R interventions may benefit from reading or ‘dipping into’ the guidance. The same applies to those engaged in the appraisal and evaluation of non-3R interventions who may be interested in 3R impacts.

However, the target audience is primarily those in central government and its agencies (and their external advisors) who are engaged in appraisal and evaluation of 3R policies and programmes, as well as those who must develop assessment tools for the project level.

What is the purpose of the guidance?

The guidance aims to provide advice on assessment techniques that can be applied to policies, programmes and projects in the 3R area and for non-3R interventions that may nevertheless have such impacts. The guidance is not primarily about the design of interventions – but about the assessment of interventions in a way that rigorously identifies value for money and supports the development of interventions that provide value for money.

This guidance, it is hoped, will ensure better appraisal and evaluation of projects thereby saving time and resources and increasing the benefits secured by each intervention and each pound of Exchequer funds spent in pursuit of such policy aims.

The role of this guidance is to supplement the Green Book in the general area of spatially focussed interventions. It should be considered binding best practice in the same sense as the Green Book.
Assessments of spatial interventions will accord with best practice if they are conducted according to the principles of this guidance.

Although best practice, the guidance should be applied proportionately and with due regard to materiality.

The guidance should not be followed mechanistically, and there may be circumstances when it is right to depart from the guidance.

Any such departures should be as a result of a conscious decision justified by specific circumstances set out in the assessment.

How is the guidance structured?

The main body of this guidance is supported by more detailed material in a series of Annexes and Appendices. These should be used as necessary in helping to interpret the principles set out in the main document. All of the main principles that need to be followed are summarised here. Where these are well understood there should be no need to refer to the detailed annexes.

The annexes are a mixture of detailed process guidance (based on the stages of the appraisal and evaluation cycle) and more general guidance and supporting material:

Annex 1 covers the audience, scope and underlying principles of the guidance;

Annex 2 provides an overview of the 3R interventions;

Annex 3 provides material relevant to the management of the assessment cycle;

Annexes 4-8 cover the main stages of the assessment cycle from defining the problem (Annex 4), defining alternatives/comparators (Annex 5), identifying and measuring costs/inputs (Annex 6), identifying and measuring outputs and outcomes (Annex 7) and presenting results (Annex 8);

Annex 9 details sources of related guidance;

Annex 10 contains a glossary;

Annex 11 lists the case studies which have been used to illustrate particular points in the guidance (by means of boxed examples).

Key points to take into account

Guidance on appraisal and evaluation in this area is not new. Specific guidance has been available for over 15 years in various guises, most recently in the HM Treasury publication commonly known as EGRUP. This Guidance is a replacement for EGRUP.

Unlike previous guidance it is intended that this guidance is regularly updated.
• It is as relevant to ex-post evaluation as to ex-ante appraisal and indeed the document emphasises the symmetry between these two forms of assessment in the hope that this will encourage greater integration and cross fertilisation of results and techniques.

• The guidance has a focus on economic issues but adopts an integrated approach in which 'economics' is both a particular area of focus (e.g. for economic Regeneration or regional economic development) and also a way of integrating social and environmental issues within an overall assessment framework.

• It places an emphasis on the use of indicators in the measurement of impacts. Many impacts within the 3R area are often discussed with little rigour and this needs to be improved. This applies to both quantitative as well as qualitative information.

• The guidance emphasises the need to be clear about what the no-intervention case is (i.e. the reference case in appraisal or counterfactual in evaluation).

• It also emphasises the need to look at net as opposed to gross changes both in terms of the costs of an intervention (given possible receipts and changes in tax and tax funded expenditure) and the outcomes (in terms of their additionality).

• Given that many 3R interventions are ‘close to the market’, the guidance calls for a clear distinction between financial and economic analysis.

• It promotes the principle of adopting a 'programme logic' approach – identifying the various stages (inputs/activities and outputs) which lead from the decision to commit resources to an objective to the ultimate outcomes.

• The guidance focuses on value for money and the various components: economy of input use, efficiency of using inputs to produce outputs and the effectiveness of turning these into outcomes.

• It places an emphasis on the valuation of impacts where possible but recognises that this will not be feasible in many areas at present. For that reason it promotes the principle of the use of performance matrices for reporting assessment results which promote comparability while facilitating the consideration of qualitative, quantitative and monetary information.

How do I get the most from this guidance?

If you are engaged in policy appraisal and evaluation you will want to use this document as a guide in undertaking specific appraisal and evaluation exercises. This guidance can be used as an input into other assessment tools such as the Integrated Policy Appraisal (IPA) or Regulatory Impact Assessment (RIA) procedures. The document should enable you to open and maintain a dialogue with experts who may need to be employed to undertake assessments. In particular the glossary provides a definition of terms that will be useful in this regard.

Agreement by parties (e.g. steering group, research manager, contractor, sub-contractor) that such work is undertaken in conformity with this guidance should give confidence that the assessment is defensible, is methodologically rigorous and accords with identified best practice.
Attention is also drawn to Appendix 4.1 which provides some detail on the rationale for 3R interventions which may provide a useful framework for policy specialists.

If you are engaged in programme appraisal and evaluation you may use it in a similar manner to those involved at the policy level, but within the framework of any policy assessment already undertaken or planned.

In addition it will be useful in interpreting guidance on the design and implementation of specific programmes and in writing more detailed project level assessment guidance. This guidance is however considered to be too technical and generic to form the basis of routine project appraisal and evaluation by non-specialists.

You may find the discussion of case studies and the detail in some of the boxes in the different annexes a useful introduction to the issues which have a practical perspective.

Non-specialists engaged in project appraisal and evaluation are expressly not the intended audience for this guidance but may nevertheless benefit from dipping into parts of it. If you are responsible for undertaking large project appraisals or in areas where there is no other source of specific programme guidance you will want to use the guidance provided here.

Experts will find the detail in this guidance most useful. The Annexes in particular have been developed to provide a comprehensive picture of the issues. Particular attention is drawn to the appendices related to Annex 7 on indicators, valuation and additionality. A number of improvements to the technique have been made which will enhance the rigour with which assessments can take place.

If you are writing guidance in non 3R areas you will find the Main Guidance most useful in providing an overview. Appendix 1.1 provides an illustration of how other Government Departments (Transport) have used this guidance to help update their own guidance. Annex 2 provides a detailed overview of 3R interventions.

Limitations of the guidance

This guidance is not the ‘final word’ on the appraisal and evaluation of 3R interventions – a field in which best practice is constantly evolving. In particular the pilot applications of the guidance (see case studies) identified a number issues where the guidance provides a useful starting point but at present provides limited guidance in terms of the practical solutions. This is particularly true in the case of:

- The incorporation of optimism bias into the appraisal and the role of risk adjustment in relation to risk analysis, sensitivity testing and contingencies;

- The application of distributional analysis and in particular the use of small area data/neighbourhood statistics to design weights for the analysis of distributional impacts;

- Valuation results and benchmark information for comparison over different spatial areas and in the context of relatively new impacts such as amenity, community and environment.

These are areas in which it will take time to develop best practice but the current document provides the best starting point for now.
CHAPTER 1
Introduction: Scope, Audience and Underlying Principles

Introduction

1. This guidance is supplementary to the Green Book. It focuses on the impact of interventions which are spatially targeted but its relevance goes further. It is written to be as useful to as wide an audience as possible. However, it is not intended for non-specialists at the project level. It is applicable to policy assessment but will typically be a component of a wider assessment such as Integrated Policy Appraisal or Regulatory Impact Analysis.

2. The guidance aims to help achieve a rigorous assessment of value for money and thereby support the development of policies that promote value for money. The guidance provides a framework, which is relevant to appraisal and evaluation and is grounded in the ROAMEF policy cycle. While adopting an integrated assessment approach the focus of the guidance is on economic aspects.

3R interventions

3. 3R is a term used to describe interventions in the general areas of Regeneration, Renewal and Regional economic development. These areas of government activity have a strong spatial focus (and consequently distributional impacts) which sets them apart from many other areas of government activity. Specific guidance on these areas has been available since 1987.

4. Not all areas of government intervention are spatially targeted. However, the impacts of all policies differ according to the local conditions of the areas they affect – in this sense the total impact of any intervention will depend on the spatial distribution of its impacts.
Audience

5. Anyone involved in the design, appraisal, delivery or evaluation of 3R interventions may benefit from reading or ‘dipping into’ the guidance. The same applies to those engaged in the appraisal and evaluation of non-3R interventions who may be interested in 3R impacts. However, the target audience is primarily those in central government and its agencies (and their external advisors) who are engaged in appraisal and evaluation of 3R policies and programmes, as well as those who must develop assessment tools for the project level.

6. High level policy officers, advisors and consultants will find this guidance useful in relation to large projects, novel and contentious projects, policies and programmes (including the development of guidance for programme managers), regulatory changes, research and pilot interventions.

7. Programme managers, advisors and consultants will find it useful in terms of the development of more detailed guidance for project managers, assessing value for money of the programmes and projects undertaken, and reporting on programme performance.

8. Other parts of the audience include those engaged in the audit, analysis and support of the activities of any of the above and more general research into the value for money of government interventions.

9. The target audience specifically excludes project managers or those involved in ‘front-line’ appraisal except for major projects or where other more appropriate guidance is not available. Although they may find this guidance useful as a reference source, non-specialists undertaking routine project appraisal should only feel obliged to carry out their activities in relation to the specific programme guidance (where this is available). It is the responsibility of those who manage the specific programmes to ensure that higher-level guidance is adequately reflected in the front-line guidance.

Relationship to other guidance

10. This is supplementary guidance and follows a pyramid principle. It takes its lead from the Treasury’s Green Book. It sits above more detailed, programme-specific guidance such as the Single Programme Appraisal Guidance (SPAG) used by the Regional Development Agencies. It sits along side other supplementary guidance developed for another areas (e.g. environment, culture etc.). It aims to be useful in the assessment of all forms of intervention. However, for policies (including regulatory and fiscal changes) this guidance will form a useful component within wider appraisal and evaluation exercises (e.g. Integrated Policy Appraisal).
11. The guidance is considered to be binding best practice in the same sense as the Green Book and reflecting the role of this document in supplementing the Green Book in the general area of spatially targeted interventions.

12. In the case of non-3R interventions which may nevertheless have 3R impacts, there may be or need to be specific guidance for specific policy areas. Such guidance should conform to the principles of this guidance.

Assessment – appraisal and evaluation

13. The guidance is grounded in the ROAMEF (Rationale, Objectives, Appraisal, Monitoring, Evaluation and Feedback) framework and emphasises the symmetry between appraisal and evaluation but recognises the differences (see Figure 1). This is a direct response to the general lack of interaction between the appraisal and evaluation of 3R interventions. It is hoped that this approach will provide a stimulus to better co-ordination.

Figure 1 Stages of the assessment cycle within ROAMEF

See Stage 1 and Annex 4
See Stage 2 and Annex 5
See Stage 3 and Annex 6
See Stage 4 and Annex 7
See Stage 5 and Annex 8
Economic and other appraisal

14. The guidance recognises that economics is both a component of sustainable development and that economic analysis provides a framework for bringing the other dimensions (social, environmental) together for the purposes of decision making.

15. The guidance takes an integrated impact assessment approach and emphasises that the best tools need to be chosen for the job. As with the Treasury's Green Book, an aim is to ensure that no intervention is adopted without first having the answer to questions such as: are there better ways to achieve this objective? and are there better ways to use these resources? In addition to this kind of economic assessment, this guidance should help answer a wider set of questions including whether interventions are working, for whom and why, given particular circumstances.

Management of the assessment cycle

16. The guidance is focused on analysis. However, some information related to the management of the assessment cycle is given – particularly where this influences the approach to appraisal and evaluation. These areas include the need to:

- link clearly appraisal and evaluation stages;
- take into account the implications of arms-length delivery;
- recognise the different levels of intervention and the need for proportionality; and
- make effective use of the evidence base.

Structure of the remaining sections

17. The Main Guidance is supported by more detailed guidance in a series of Annexes and Appendices. These should be used as necessary in helping to interpret the principles set out in the main document. All of the main principles that need to be followed are summarised here. Where these are well understood there should be no need to refer to the detailed annexes.

18. The annexes are a mixture of detailed process guidance (based on the stages of the appraisal and evaluation cycle) and more general guidance and supporting material.
• Annex 1 covers the audience, scope and underlying principles of the guidance. Annex 2 provides an overview of the 3R interventions. Annex 3 provides material relevant to the management of the assessment cycle;

• Annexes 4-8 cover the main stages of the assessment cycle from defining the problem (Annex 4), defining alternatives/comparators (Annex 5), identifying and measuring costs/inputs (Annex 6), identifying and measuring outputs and outcomes (Annex 7) and presenting results (Annex 8);

• Annex 9 details sources of related guidance, Annex 10 contains a glossary and Annex 11 provides background to the case study material.

19. The case studies (listed in Annex 11) are used throughout the rest of the guidance in terms of specific (boxed) examples. The structure is reflected in the following route map which recurs throughout the Annexes to aid in navigation.
CHAPTER 2
Aims, Actions, Areas and Actors – an Overview of 3R Interventions

Introduction

1. Terms like ‘Regeneration’, ‘renewal’ and ‘regional development’ typically do not have simple definitions. The distinguishing characteristic of these interventions is that they have a strong spatial focus and often, as a result, distributional impacts. They tend to aim at, or contribute to, the overall goals for sustainable development of target areas and groups, and have the specific objective of improving outcomes in social, economic and environmental terms.

2. The ultimate aim of 3R interventions is to achieve thriving, inclusive and sustainable communities in all regions by raising levels of social inclusion, promoting neighbourhood renewal and fostering regional prosperity.

3. Given these aims an integrated assessment approach is needed.

Actions

Interventions affecting spatial areas can be categorised as:

- Universal welfare programmes – not targeted but may have spatial impacts;
- Selectively targeted national programmes – may have spatial impacts because of the groups targeted;
- Explicitly area based initiatives.

3R interventions are typically carried out using area-based initiatives. However, selectively targeted national programmes (e.g. the New Deal programmes), and universal welfare programmes are also relevant. Such interventions may affect the prospects for spatial sustainable development – not least because of the importance the government attaches to bending mainstream programmes to achieve 3R aims.

Box A2.1 provides definitions and examples of spatial sustainable development

Box A2.3 provides examples of Area Based Initiatives

Box A2.4 provides more detail on bending the mainstream and floor targets
Given these various types of intervention an holistic approach is needed recognising the interplay of other activities, what they will deliver and the gap between this and the ultimate objectives.

Areas

Given these aims and actions, various different spatial areas are of interest:

- Regeneration – inner city areas, areas facing imbalance and decline, rural areas;
- Renewal – deprived neighbourhoods and housing estates;
- Regional Development – regions and sub-regions.

Given these areas it is important to be clear about the spatial extent of interventions and impacts.

Actions

4. The range of actors is similarly diverse, including private business, voluntary organisations, public-private partnerships, local partnerships, government agencies and local authorities.

5. An approach which recognises the multiple perspectives of the different actors is therefore necessary.
CHAPTER 3
Stage 1 – Defining the Problem

Introduction

6. The assessment of the rationale and the definition of objectives for 3R interventions should follow the general principles laid down in the Green Book. The multi-faceted nature of 3R problems and their spatial dimension raise a series of specific issues in terms of justifying interventions and setting the objectives.

7. As with any other area of government intervention it is important for assessments to be clear about the rationale. As a result of cumulative market, distributional and institutional failures, 3R interventions will typically be concerned with both economic and equity objectives. The relationships between the failures, the objectives and the overall aims of the intervention need to be clearly stated. This should be founded on a thorough review of the evidence base.

Rationale

8. Although they may achieve both economic and equity objectives a clear distinction needs to be maintained between these different arguments and the spatial level of analysis. A rationale based on an improvement in economic efficiency should define the root causes of the market and institutional failures and be clear over what spatial area the efficiency objectives hold. A rationale based on social objectives should clearly identify the closeness of fit between the aims of the intervention and the social objective as expressed in national, regional and local policy documentation.

Objectives and context

9. Given the wide range of market and other failures and the ultimate aim of promoting spatial sustainable development, 3R interventions tend to take place within or as part of holistic interventions. This means that there will often be a wide variety
of related (often mutually dependant) activities. It is important, therefore, to set out the intervention's rationale within the context of all other planned activities. At the heart of this mapping of the intervention should be the logic of the intervention itself (inputs, activities, outputs and outcomes) and the gap identified between the 'without intervention' situation and the desired outcomes.

10. As with all interventions, the objectives should be SMART (i.e. specific, measurable, achievable, relevant and time-bound). This will often be difficult in the case of 3R interventions but it is important to make objectives as SMART as possible.

11. Particular attention needs to be paid to examining and explaining the alignment of objectives at different spatial levels and intervention levels (project, programme and policy).

**Delineating boundaries**

12. Establishing boundaries is a key aspect of the assessment of 3R interventions given their spatial focus. The definition of the boundaries should bear a clear relation to the size of the market, social or institutional failure the intervention seeks to address. It should start from the recognition of the stated objectives of the intervention and not simply reflect existing administrative boundaries or convenient territorial units.

13. The appropriate boundaries will vary by the type of intervention and hence assessments should demonstrate that the choice of a specific boundary has been informed by a consideration of the type of intervention. For example, an environment- or community-led regeneration project may impact a smaller area than an employment-led project due to the wide spatial nature of the economic linkages.

14. The nature of the impacts also means that however the target area is defined, it will be necessary to look wider (e.g. to establish impacts at the regional and national level) but also to consider possible impacts on other priority areas (e.g. the target areas for other policies). In identifying impacts on target areas, the assessment should leave no doubt as to whether there are impacts on other areas that may add to or subtract from the total impact.
Establishing the baseline

15. Establishing a baseline is an essential first step in both appraisal and evaluation and serves a variety of purposes. A clearly defined baseline will:

- provide context;
- support for the rationale;
- define relevant performance indicators;
- help measure impact;
- interpret the reference case or counterfactual.

See A4.36 to A4.40

Box A4.8 discusses the various functions of the baseline

Box A4.9 discusses gathering baseline information
CHAPTER 4
Stage 2 – Identifying alternatives and comparators

Introduction

1. The generation of alternatives/comparators lies at the heart of assessment activity. General best practice principles on option development in an ex-ante appraisal context can be found in the Green Book. The Green Book and sources of guidance on evaluation like the MEANS Collection also address the issue of a definition of a counterfactual and other alternative actions in an ex-post evaluation context. However, some of the characteristics of 3R interventions raise specific issues in relation to these crucial stages of the assessment cycle.

Identifying alternatives/comparators

2. The basic principle in defining a set of alternative options/actions is to identify the range of feasible scenarios that illustrate the true trade-offs implied by an intervention. This is as true of evaluation as it is of appraisal although the focus, methods and approaches are different.

Linking options/actions to the rationale and the evidence base

3. In appraisal the assessment of the rationale should be the starting point for identifying the long list of intervention options, recognising whether particular options are necessary or sufficient to solve the area’s problems. In evaluation the focus is on identifying what did happen in the context of what would have happened in the absence of the intervention. Where possible, however, consideration should be given to whether there were alternative actions, which if pursued could have delivered more than the implemented action. Clear links should be established between the definition of these alternatives/comparators and the evidence base.
The ‘no intervention’ case

4. A special case of the alternative option/action is the ‘no intervention’ case. In appraisal this is termed the reference case. In evaluation the term used is often the counterfactual. Both serve the same purpose by helping to isolate the incremental impacts of the alternative options/actions.

5. In 3R interventions a baseline (i.e. a snapshot in time) is not a sufficient basis for the ‘no intervention’ case. It is generally unrealistic to assume ‘nothing happens’. The variables that affect local sustainable development are constantly changing and these processes need to be given full consideration by establishing a scenario with a time dimension. Having said that there are clearly diminishing returns in the amount of detail contained in a reference case and a principle of proportionality needs to be applied.

6. The range of relevant factors will vary by case but typically account should be taken of the following:

- Changes in social, economic and environmental variables under a policy-off scenario (projected trends from the end year of baseline indicators);

- Impacts of investment or actions that the partners in the proposed 3R intervention are required to carry out in any case under existing legal/statutory constraints;

- Impacts of existing investments or actions by other public sector/private sector organisations;

- Planned/in the pipeline investments or actions by public sector/private sector organisations (in order of likelihood of implementation);

- Reactions of other parties to the actions being considered (i.e. actions taken by other organisations as a result of the particular option being pursued). Care should be taken to avoid this leading to an unclear reference case.

7. In evaluation, the counterfactual serves the same purpose as a reference case. An appraisal looks forward to what is likely to happen in the reference case given predictions from existing data. An evaluation looks backwards to estimate what might have happened by attempting to gather otherwise missing data and making various adjustments to try to offset the impact of what was done as well as trying to strip out all other contextual changes.
8. Assessments should choose the most appropriate method(s) for defining the counterfactual. Depending on the case this may involve before-and-after comparisons, modelling, randomised control trials, matched area or group comparisons and or other techniques.

**Identifying options/actions**

9. Options/actions should be defined so they give a clear picture of the trade-off implied by an intervention. General trade-offs to be considered should include: whether more could be obtained using a different approach; whether the same results could be achieved for less cost; how much more could be achieved with more resources; and whether the expected pay-off is adequate given the risk of particular options.

10. Particular attention should be paid in the context of 3R interventions to trade-offs involving:

   - Targeting in terms of directing the intervention at specific areas or groups;
   - Intensity/quality of intervention;
   - Timing.

**Avoiding problems with preferred options**

11. Due to the way that 3R interventions are delivered, preferred options are often identified before the option appraisal. Often these emerge from participatory and deliberative processes involving local stakeholders and partnerships. In such cases it can appear a waste of time to consider alternatives and there can be pressure to define alternatives which make the preferred option look good.

12. Appropriate procedures should be developed to avoid this happening. In such cases transparency in the appraisal documentation regarding the development of the preferred option is essential. Such transparency can be gained by unbundling the preferred option into component parts and then reconstructing having discussed alternatives. It will also be aided by a clear description of how the option generation process was conducted.
Procurement, interdependence and irreversibility

13. Usually it will be better to decide on the type and scale of intervention and then on how it should be procured/delivered. However, in many cases it will be necessary to consider procurement/delivery simultaneously because procurement impacts on viability, the outcomes delivered and the cost (for example where a partnership approach enables more outputs to be produced at a lower cost).

14. Interdependence and irreversibility may be features of 3R interventions and should be considered. Often the outcomes associated with an option will depend critically on some condition being met that is outside the control of the project in question (e.g. the provision of transport infrastructure). In such cases options should be contingent on the outcome of this issue. 3R interventions may often involve irreversible effects and which will require analysis using decision trees, scenario analysis or real option theory.

Recognising constraints

15. A wide range of constraints may affect the options that are feasible. Consideration should be given to the full range of constraints:
   - Physical;
   - Legal/statutory;
   - Competitive/market-based;
   - Political.

16. When eliminating options because of constraints or on other grounds, the reasons for this decision should always be explicitly discussed in the appraisal report. Staying within constraints should not be presented as an objective of an intervention.
CHAPTER 5
Stage 3 – Identifying and measuring costs and other inputs

Introduction

1. In general terms the approach set out in the Green Book should be followed in identifying and measuring the costs of interventions. A number of issues of specific relevance to cost assessment in the area of 3R interventions need to be taken into account. These include:

   - The need to separate the economic from the financial case where relevant;
   - The need to value voluntary costs and in-kind contributions;
   - The need to focus on net costs as far as possible;
   - Discounting and apportionment of costs;
   - Accounting for sunk (irrecoverable) costs.

Separating financial and economic analysis

2. A clear approach to identifying and measuring costs and other inputs is important in the context of 3R interventions because of the different types of organisations involved (and hence concepts and criteria for defining cost), the importance of partnerships, the blurring of the public and private sectors and the role of the voluntary sector.

3. The wide range of interested parties in 3R interventions, and their differing interest and criteria in judging costs and benefits means that in most cases 3R assessments will need to be undertaken using both financial and economic analysis. A clear distinction between these two types of analysis and their results always needs to be maintained.
4. A financial analysis will help provide answers to questions concerning specific groups and organisations. It will answer questions such as *does the project have a sound business case? will returns satisfy shareholders? are cash flows sufficient?* It will usually require detail on investments, operating costs and revenues and financing sources, from which most financial analysis can take place.

5. An economic analysis builds on the financial analysis to answer questions from a social perspective, such as ‘*does the project represent an effective use of resources for society as a whole?’*. It will typically involve the recognition of:

- the difference between financial and economic costs (e.g. depreciation, interest);
- differences between market prices and opportunity costs (e.g. assets already in ownership);
- the fact that transfer payments (e.g. Resource Accounting and Budgeting charges) are offsetting at the societal level;
- externalities (e.g. environmental and social costs and benefits).

**Voluntary inputs and in-kind contributions**

6. Account needs to be taken of gifts, contributions in kind as well as costs incurred in the voluntary sector, as these inputs are not ‘free’ in an economic sense. This is important in defining the total economic costs of an intervention and also in quantifying inputs which may need to be match funded.

7. A variety of approaches are available but approaches based on replacement cost of inputs tend to be most widely used. The approach adopted will depend on the circumstances but the rationale and implications should be clearly stated.

8. In certain circumstances (e.g. where specific objectives exist for increasing the level of participative activity) voluntary contributions may need to be considered also as a benefit.
Gross or net costs

9. In general the focus should be on net costs to the exchequer. However, net costs can be difficult to define in the case of 3R interventions as they are often aimed at altering levels of economic activity. This can, in itself, affect the need for funding because an intervention may:

- bring investment to an area offsetting public costs through receipts from asset sales;
- alter levels of economic activity and labour market participation and affect tax receipts;
- alter benefit claimant levels and levels of tax funded expenditure.

10. Asset sales (from the public to private sector), consequent on an intervention should be netted off the exchequer cost. Gross costs should also be reported particularly where there is some uncertainty at the appraisal stage in the level of such receipts that will be forthcoming.

11. Typically it will not be necessary to adjust an economic appraisal for differences in the tax situation between options as a result of the project expenditures/revenues. However, as a result of supply side improvements, 3R interventions may alter the level of tax and tax funded expenditure in the economy as a whole as a result of the outputs and these effects, where material, should be appraised and evaluated as far as possible.

Discounting

12. In an economic analysis (one that considers economic costs and benefits with the aims of answering questions like is this the best use of society's scarce resources), all costs and benefits should reflect true economic costs and benefits and should be discounted at the Social Time Preference Rate (currently set at 3.5%).

13. 3R interventions often require other types of analysis such as:

- affordability given current funding levels and commitments;
- level of return given any financial targets such as Required Rates of Return;
- checks on viability/sustainability of private sector partners;
• calculation of the appropriate price of an asset to be sold into a private market;

• calculation of the level of gap funding necessary to bring forward a specified private sector activity.

14. In these other types of analysis (financial) the definition of costs may be different (e.g. they may include costs occurring to particular bodies that are not real economic costs – such as transfer payments) and other discount rates may be evident (e.g. private sector rates reflecting their opportunity cost of capital or rates reflecting the a public sector body’s Required Rate of Return).

15. While such information may be relevant in answering specific questions, where the answer to the question ‘is this worthwhile for society?’ needs to be asked – costs and benefits should be adjusted to reflect true economic costs and these then need to be discounted at the Social Time Preference Rate.

16. Even where other questions are being addressed it will often be better to deal with these issues separately from time preference and then discount as appropriate using the Social Time Preference Rate.

Apportionment

17. It is important that costs are apportioned to outputs and outcomes as far as possible. This will aid in benchmarking the project in terms of value for money. Generally this can be done on an activity basis (activity based costing).

18. Where this is not possible cost allocation should follow the principle that the correct allocation is where there is no cross-subsidy between outputs. Often this can be achieved by a simple pro-rata allocation but in other cases it will be necessary to apply techniques such as stand alone and incremental cost analysis.

How should sunk costs be treated?

19. Generic project appraisal guidance is that sunk costs (those already incurred which cannot be recovered) should be ignored in appraisals. This is because, strictly speaking, appraisals are only concerned with making forward-looking decisions in the current time period, and the only relevant quantities are those about which decisions can still be made. However, it is often useful to expand the scope of a ‘strict’ appraisal to include a partial ex-post evaluation of the value for money of previous decisions. In such cases, it is useful to present an (extra) assessment which includes sunk costs, to provide a view on the value for money of both
previous and current decisions. To avoid confusion however, such ‘assessments’ should not be called ‘appraisals’. Furthermore, the current decision should only be based on the assessment which excludes sunk costs.

20. Whether or not any assessment of sunk costs is carried out, appraisers should still list the main sunk items and explain why they are or are not an issue in a particular situation. This will help in appraisal transparency but also provide necessary information for evaluation.
CHAPTER 6
Stage 4 – Identifying and measuring outputs and linking to outcomes

Introduction

1. Assessments involving the identification and measurement of outcomes must take the lead from the general principles identified in the Green Book. They should also take account of a range of other issues, which although they are not entirely specific to the 3R do tend to raise particular problems – often because they are encountered jointly with other problems.

2. Specific issues associated with assessing 3R interventions include those associated with:

   • The nature of the outcomes – Whether objectives are clear or not and whether they are long term or short, single or multiple, quantitative or qualitative;

   • The nature of the intervention – The extent to which an intervention is a ‘mixed bag’ of activities, dependant on the degree of implementation or applies to different units of analysis (individual, group or society);

   • Context dependency – The degree to which scale effects and external influences are important and the degree to which the involvement of beneficiaries alters outcomes.

3. Assessments should identify the outputs/outcomes of interventions within the general value for money framework, specifying the resources, inputs, outputs and outcomes of the intervention in order that over all costs and benefits can be examined as well as other aspects of the value for money case: economy, efficiency and effectiveness (see Figure 4.1).
Specifying outcomes to measure the achievement of objectives

4. Assessments should contain a clear description of the objectives of the intervention and the outcome measures chosen to assess achievement. They should clearly distinguish between process (e.g. greater stakeholder involvement) and delivery outcomes, particularly where the achievement of one is at the expense of another or entails significant additional costs.

5. Assessments should adopt the principle that it will often be better to measure important impacts imperfectly (for example through scales or scores) rather than ignore them or focus too much on more easily quantified impacts. In addition it should be recognised that typically, there will be some way in which soft (difficult to quantify) outcomes (or a related proxy or instrument variable/scale), can be measured (for example using scales to measure changes in job-seekers self-confidence or other prerequisites for effective labour market participation).

Dealing with multiple outcomes

6. Ideally outputs and outcomes should be valued in money terms where possible. In the presence of multiple outcomes, valuation is especially desirable as an aid to comparison.

7. A range of principles needs to be taken into account in valuing typical 3R outcomes. Guidance is provided in Annex 7.2 on principles and evidence relevant to the valuation of impacts related to:

- Time savings, health and the environment;
- Additional employment and economic activity;
- Changes in land values;
Changes in productivity and competitiveness;

Distributional changes;

Social capital;

Crime prevention/reduction;

Education/training;

Heritage and culture impacts.

8. Where valuation is not possible assessments should identify how best to quantify the impact and to identify priorities among the outcomes. Where preferences can be expressed in terms of weights, guidance on the use of multi-criteria analysis (MCA) decision approaches should be followed.

9. In general, there is no easy solution to the problem of double counting but it can typically be minimised by a clear elucidation of the impact pathway, sticking to established frameworks for categorising benefits and seeking the advice of economists where necessary. While the elimination of double counting of the outcomes of 3R interventions may be difficult (e.g. valuing increases in jobs and land values), such double counting should always be identified, reported and the implications considered.

10. The attribution of multiple outputs to actors should be such that there is no (implicit) cross subsidy between the different funders/activities – this is the same logic as for the attribution of costs to outcomes. This will ensure that in the presence of multiple outputs (e.g. jobs and affordable housing units) these are apportioned (e.g. between Regional Development Agencies and English Partnerships) in a consistent manner.

Recognising and accounting for multiple perspectives

11. Indicators are useful for measuring impacts and judging performance. A range of indicators (covering all areas of the intervention – resources, inputs, activities, outputs and outcomes – and their context) should be chosen to reflect the different perspectives and questions that may need to be examined.

12. In identifying and using indicators account should be taken of the principles that:

A ‘pick and mix’ approach is required, as there is no universally applicable set of indicators that will be appropriate for a particular intervention;
Follow available best practice guidance on the choice of indicators and the development of indicator systems;

Avoid re-inventing the wheel where possible, there is a range of indicators already in use in common indicator frameworks and the likelihood that an indicator has already been defined for the impacts considered for most interventions.

Assessments must clearly identify the perspectives and the implications in terms of the tests that are to be performed. An assessment that delivers a yes/no answer to the question ‘is this intervention beneficial in cost terms’ will rarely be sufficient. Particular assessments may be concerned with economy, efficiency and effectiveness and/or overall value for money. In addition a range of other issues may need to be investigated such as whether the intervention is transferable to other contexts (and how much it would cost to undertake in a different setting).

**Long time frames**

Many 3R interventions operate over very long time frames. Assessments should avoid the tendency to focus on short-term impacts at the expense of long-term impacts. The use of a balanced scorecard (i.e. ensuring that the options are chosen that maintain the processes for the delivery of long-term outcomes as well as delivering immediate outputs) can be helpful in this regard.

The difficulty of valuing some impacts together with the long time frames raises the issue of reflecting time preference for non-monetised impacts. This is a technically difficult area best dealt with through sensitivity analysis and, where it is material, will generally require specific advice.

**Distributional issues**

In 3R interventions ‘who benefits’ is always a very important question and distributional analysis should always be a component of appraisal and evaluation (although this will often only need to be qualitative).

Distributional impact matrices and Lorenz curve analysis provide two useful approaches to distributional analysis.

Quantitative distributional adjustments may also be useful. However, because of the uncertainties it is important that any adjustment does not reduce transparency – they should be undertaken to provide additional information to the unadjusted results.
19. In those circumstances where a formal quantitative distributional adjustment is deemed necessary the approach advocated in the Green Book should be adopted through the use of distributional weights. Where the reduction in social inequalities is also an issue further sensitivity analysis may be appropriate for example in determining the switching value that would alter a decision in a particular case. In general the approach identified in the Green Book should be followed by identifying in as broad a way as possible the potential impacts on different groups.

**Multiplicity of interventions, degrees of implementation and unit of analysis**

20. In appraisal and evaluation of individual interventions it is important to be clear about what is assumed about related interventions in order to interpret the effectiveness of any one intervention. Assumptions should reflect the degree of certainty about the impact of other interventions (e.g. a distinction should be made between the impact of planned interventions as opposed to those in-the-pipe-line). The sensitivity of results to changes in the assumptions about related interventions should be examined and presented.

21. The impact of differences in the implementation of the interventions (e.g. degree of targeting or involvement of the local community) should also be made clear in the appraisal and evaluation and the implications discussed.

22. Furthermore, it is important to be clear about the relationship between impacts at different units of analysis (individual/community, local, regional and national). Where necessary separate indicators will need to be developed to track change at these different levels of analysis.

**Additionality**

23. In assessing 3R interventions it is necessary to identify the extent to which the impacts are additional – i.e. different from the reference case/counterfactual after allowing for the range of possible impacts (leakage, displacement, substitution, crowding out and multipliers) and the spatial level at which additionality has been established.
24. The assessment of additionality should not be a mechanistic process. Best practice guidance includes:

- Deadweight should not be seen as an adjustment factor but should be seen, where possible, as the outcomes achieved under the policy off situation (i.e. whatever reference case/counterfactual the intervention option is being compared with);

- Where relevant leakage from target groups should be considered in addition to leakage from target areas;

- Substitution and displacement should be looked at separately rather than jointly, as the effects and mechanisms are distinct;

- Crowding out should be considered routinely at all levels where a project is part of a larger intervention;

- Multipliers should not be applied mechanistically without any consideration of the affected markets and whether they contain sufficient excess capacity to see activity increase;

- Consideration of additionality should be iterative and lead to a refinement of options and the relevant target area;

- In exploring supply side improvements consideration should be given to the extent to which particular interventions alter the scale of the additionality factors (e.g. reduce displacement or increase multipliers).

25. Detailed guidance (assembled by English Partnerships) is available on assessing the individual components of additionality and there is a significant evidence base related to some of the components. These methods will typically help to identify the additional impacts of interventions in local areas and often at a regional scale but may not be sufficient to identify the total impact – where detailed macro-economic modelling may often be required (e.g. using models of the regional/national economy).

26. Often in small project assessment it will not be possible to undertake any detailed assessment of additionality. In such cases project appraisal and evaluation should be informed by more detailed assessments done at the programme and policy level. Although non-additionality should be designed-out of interventions as far as possible (e.g. through targeting), this is not sufficient to negate the need for an analysis of additionality as many of the non-additionality effects will be beyond the control of those responsible for designing the intervention.
27. 3R interventions are applied in varying localities and involve different people and different organisations. Understanding the context into which interventions are introduced is therefore often crucial. Issues of context dependency are closely related to those of the nature of the intervention. However, regardless of the nature of the intervention, the outcomes produced in any one area will depend upon the context (local factors, unrelated to the intervention itself) into which they are introduced. Where context dependency is important the appraisal and evaluation should make a specific point of identifying and explaining the mechanisms at work.
CHAPTER 7
Stage 5 – Presentation of results

Introduction

1. As with any assessment care should be taken in terms of the presentation and interpretation of information for the assistance of decision makers and stakeholders in making the most appropriate use of it.

2. Generic guidance on presenting results available in the Green Book should be followed. Issues of particular relevance in the 3R area include:
   - dealing with risk and uncertainty;
   - benchmarking;
   - the use of reporting formats and tests.

Risk and uncertainty

3. The results of assessments may need to be risk adjusted in order to reflect the cost of variability. This might arise because the risks are concentrated disproportionately in the population (e.g. the most disadvantaged groups), risks are large or risks are correlated systematically with income. As a result the initial position faced by the beneficiaries (income, access to services, welfare etc.) has an important bearing on how risk trade-offs are considered. In such cases a variability adjustment may significantly improve the information available to decision makers, by making the implications of the costs of variability clear in terms of the relative certainty of the outcomes for different areas/groups.

4. As many 3R interventions work close to the market (i.e. the market under different circumstances could supply them) or rely on the market for delivery, changes in market conditions (e.g. business cycles) need to be clearly addressed in the risk analysis of 3R interventions. Limits in the evidence base which are typical of most 3R assessments also place an increased focus on scenario and...
sensitivity analysis and a clear statement of any assumptions and their implications.

5. Optimism bias is the demonstrated tendency for appraisers to be overly optimistic and explicit adjustments should be made for this. Such adjustments are intended to compliment not replace existing good practice in terms of calculating project specific risk adjustments. As noted in the Green Book adjustment for optimism bias should be empirically based, using data from past projects or similar projects elsewhere. Cross-departmental evidence for generic project categories is available and should be used in the absence of more specific evidence. Where more robust evidence is available this should be used.

6. In the 3R field there is presently limited evidence on appropriate factors for considering optimism bias. Specific bodies are likely to hold the best data on optimism bias related to cost and timing and some limited evidence is available in relation to optimism bias for benefits.

Benchmarking

7. The use of benchmarks for outputs and outcomes can be helpful in providing context in relation to the outputs of 3R interventions. However, care should be taken to establish the relevance of the benchmark in terms of the comparability of the characteristics of what is being compared, the context in which the values were derived (transferability) and the time of derivation.

8. When applied benchmarks should be provided in a format that recognises:
   
   - Differences in the characteristic of the benchmarked output (e.g. if cost per job, what type of job?);
   
   - Differences in the context (e.g. the area where the job is created);
   
   - Differences in the time at which the benchmark was derived.
Reporting formats and tests

9. The Office of Government Commerce provide a business case template which is a standard document for project assessments. This will be adequate in many circumstances and should form the starting point in developing more specific reporting formats.

10. Given the variety of outputs and outcomes and the likely mixture of qualitative, quantitative and monetary information, performance matrices using a variety of reporting formats are likely to be the most useful method of displaying the results of 3R assessments. Where formal Multi Criteria Analysis methods are used existing guidance should be followed.

11. In an economic appraisal the overall criteria should be the net present value of costs and benefits (or net present cost in cost-effectiveness analysis). This is the criterion that should inform the main decision on the project together with whatever analysis is possible on the un-quantified/unvalued impacts.

12. Where relevant, but not detracting from the above, reporting should also clearly identify any other ‘tests’ which have been performed and their relevance to other questions posed of the analysis.

See para A8.23 to A8.30

See Box A8.5 for a discussion of MCA

See Box A8.6 for an example of a performance matrix for policy appraisal and Box A8.7 for a discussion of the pitfalls in using performance matrices.

See Box A8.8 for a listing of tests and their possible uses.
ANNEX 1
Target audience, scope and underlying principles

Summary

A full summary of this annex is available at the end of the section. In brief the annex provides a general introduction to the guidance. It discusses the target audience – who this guidance is aimed at? scope – what is this guidance intended to do? And principles – what is the general approach underlying the guidance?
Introduction

A1.1 This guidance supplements high level government guidance on appraisal and evaluation, in particular the HM Treasury ‘Green Book’, *Appraisal and Evaluation in Central Government*. It does this by providing more detailed guidance in relation to interventions associated with regeneration, renewal and regional economic development (3R) (see below).

**Box A1.1 The 3Rs**
The 3Rs represent the main policy areas in which the analysis of interventions with a spatial focus is needed. **Regeneration** can be defined as the holistic process of reversing economic, social and physical decay in areas where it has reached a stage when market forces alone will not suffice. **Renewal** covers many of the same issues but has an additional focus on communities, the most disadvantaged areas and the quality of services they receive. Renewal objectives may be wide ranging but will seek to deliver improved work and business opportunities, improved residential attractiveness and improved public services. **Regional economic development** is the remit of the regional development agencies and involves regeneration and renewal but also other areas of activity (skills, innovation etc.) which are less area focussed but contribute to the way the region is to develop.

A1.2 Such interventions typically have a strong spatial focus and this guidance emphasises the issues related to undertaking assessments within this context. Not all areas of government intervention are spatially targeted. However, the impacts of all policies differ according to the local conditions of the areas they affect – in this sense the total impact of any intervention will depend on the spatial distribution of its impacts.

A1.3 The guidance aims to provide advice on the framework and associated techniques that can be applied to the assessment of interventions (policies, programmes and projects) and to support development of effective interventions through the rigorous assessment of value for money.

Target audience – who is this guidance aimed at?

A1.4 This guidance is considered to have a wide audience, across central Government, agencies, Non-Departmental Public Bodies (NDPBs) and beyond. While written to be accessible to a wide audience it is not intended for the non-specialist. A distinction can be drawn between a number of different possible users of the guidance (see Table A1.2). The table also illustrates how the guidance forms a common link between the different parties to an appraisal.

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1 The Green Book asks Departments and Agencies to ensure that their own manuals or guidelines are consistent with the Green Book principles, and to provide supplementary guidance on their specific areas. This guidance is supplementary to the Green Book in the context of spatially targeted interventions.
The target audience is considered to be everyone with the exception of project managers, who, although they may find this guidance useful, should only feel obliged to carry out their activities in relation to the specific programme guidance (where this is available). It is the responsibility of those who manage the specific programmes to ensure that higher level guidance is adequately reflected in the front-line guidance.

Finally, it is anticipated that the guidance will be of use in those contexts where more detailed guidance is not available and indeed would not be needed because the issues arise so infrequently.
Scope – what is this guidance intended to do?

A1.7 The guidance aims to provide advice on assessment techniques that can be applied to policies, programmes and projects in the 3R area and for non-3R interventions that may nevertheless have such impacts. The guidance is not about the design of interventions – but about the assessment of interventions in a way that rigorously identifies value for money and supports the development of interventions that provide value for money.

A1.8 This guidance, it is hoped, will ensure better appraisal and evaluation of projects involving potential spatial and hence distributional impacts, thereby saving time and resources and increasing the benefits secured by each pound of Exchequer funds spent in pursuit of such policy aims.

A1.9 This guidance is considered to be binding best practice in the same sense as the Green Book and reflecting the role of this document in supplementing the Green Book in the general area of spatially targeted interventions.

Principles – what is the general approach underlying this document?

A1.10 A number of principles underlie this guidance. It is intended to offer a framework and not to be a manual. It provides guidance on how to approach some complicated issues. It does not intend to be a manual that would guide users to solve problems, mechanistically, through a series of predetermined steps.

A1.11 It is grounded in the project/policy assessment cycle (ROAMEF) and so is relevant to both appraisal and evaluation. Box A1.3 outlines the approach in more detail, identifying the five common stages that are covered in depth in this guidance. The figure in the box illustrates the complementary nature of appraisal and evaluation, which although different in many respects, need to work together in a dynamic manner to improve the overall assessment of interventions aimed at 3R policy aims and ultimately improved policy making.

A1.12 The guidance covers both appraisal and evaluation. Appraisals are undertaken before a decision is made, to predict the likely outcomes of options, and inform the decision on how best to address a problem. Evaluations are undertaken after a decision, to identify, learn from and improve implementation processes (process/formative evaluation); and, in the longer-term, to isolate outputs and outcomes, with the intention of learning whether objectives were met and the lessons for future decision-making (ex post/summative/impact evaluation).

2 Following the principles of this guidance is defensible given its status as a summary of best practice. Although best practice the guidance should be applied proportionately and with due regard to materiality. The guidance should not be followed mechanistically and there may be circumstances when it is right to depart from the guidance. Where there is a departure from the guidance it should be a conscious decision to do so and these departures should be justifiable in specific circumstances.

3 ROAMEF stands for Rationale, Objectives, Appraisal, Monitoring, Evaluation and Feedback.

4 The term assessment is generally used to cover both of these approaches, ex-ante or ex-post and indeed formative assessment, undertaken in the life of the intervention.
A1.13 As Box A1.3 indicates, many of the concerns of appraisal and evaluation are the same. For instance, issues such as identifying aims and objectives, developing measures, estimating forecasts or outturn costs and benefits, employing discount rates, and proposing reference case/counterfactuals are likely to be as important to evaluators as to appraisers. Furthermore, the interrelationship between appraisal and evaluation is important to their effectiveness and the policy cycle as a whole (Figure 1.1 illustrates some of these possible links). By working closely together, analysts can ensure appraisals and evaluations draw on one another to maximise the value derived from each.

A1.14 This guidance focuses on those common issues likely to be of relevance to both evaluation and appraisal – particularly in terms of the economic aspects. It alerts assessors to practical differences in these common issues between appraisal and evaluation – for instance in the treatment of sunk costs. Evaluations, however, differ from appraisals more generally in some important aspects. They are undertaken for different purposes, to different time-scales and often employ a different range of techniques to collect and assess a wide range of primary and secondary quantitative and qualitative data on both anticipated and unanticipated impacts. Evaluators may therefore wish to draw on other guidance more directly related to their concerns.

A1.15 The guidance emphasises the importance of taking a multi-method approach (using the best tools for the job, rather than using one particular approach). To some degree different methods are applicable in the case of appraisal and evaluation.

A1.16 The guidance is designed to be relevant to all levels of intervention (policy, programme and project) and complimentary to other guidance. However, it is likely to be of most use at the programme and project level. Policy assessment for 3R interventions will be informed by this guidance but should follow other guidance aimed at policy development for example Better Policy Making – Guidance on Integrated Policy Appraisal. Similarly in terms of regulatory changes (changes in standards, fiscal instruments, administrative arrangements etc.) this guidance will be useful but a key requirement will be the guidance on Regulatory Impact Assessment.

A1.17 In the case of non 3R interventions which may have 3R impacts there may be or need to be specific guidance for particular policy areas. Such guidance should follow the principles set out in this guidance (Appendix 1.1 gives an example of the development of complementary guidance in the area of transport appraisal).

A1.18 The approach to producing this guidance has adopted a collaborative and integrated approach. The framework sets out an integrated impact assessment approach, involving social, economic, environmental and other forms of impact assessment, as necessary given the nature of the impacts.
A1.19 The guidance emphasises the importance of taking a quantitative and scientific approach to the analysis of costs and outcomes and of recognising the fundamental budget constraint at the heart of government intervention. However, it also recognises that 3R interventions typically present analytical difficulties (as they operate on complex open systems) and there is concern not only about the efficient use of resources (cost benefit analysis, cost effectiveness analysis) but in identifying what works (and what does not work), where and why.
A1.20 The guidance does, however, cover economic aspects in greater detail. Other guidance (provided by other departments) is available on social and environmental impact assessment and indeed appraisal and evaluation more generally. Where relevant, this guidance provides links (see Annex 9). Where other guidance is not available or adequate, this document attempts to propose a way forward, for these missing areas.

Summary

A1.21 This annex has set out the background to the guidance in terms of its audience, its intended scope and the general principles underlying its development.

- The guidance is supplementary to the Green Book. It focuses on the impact of interventions which are spatially targeted but its relevance goes further.

- It is written to be as useful to as wide an audience as possible. However, it is not intended for non-specialists, nor should it be used in the first instance in policy appraisal or the assessment of regulatory changes.

- The guidance aims to help achieve a rigorous assessment of value for money and thereby support the development of policies that promote value for money.

- The guidance provides a framework, which is relevant to appraisal and evaluation and is grounded in the ROAMEF policy cycle.

- While adopting an integrated assessment approach the focus of the guidance is on economic aspects.
APPENDIX 1.1

Example of the development of Guidance on the 3R impacts of non-3R interventions

Introduction

A1-1.1 The principles of this guidance can be applied to situations where 3R impacts are not the primary purpose of the intervention. This includes interventions where 3R effects might be an ancillary policy consideration compared with other objectives or where there are many objectives only one of which may be 3R related.

A1-1.2 In many cases this will require specific guidance to be developed in these areas to assist in the assessment of particular linkages between the interventions and 3R impacts. One such area is transport appraisal, where in order to take account of regeneration related impacts a specific approach has been developed. In other cases it will not be necessary to develop specific guidance and the guidance provided in this report will be sufficient when adapted on an ad-hoc basis.

A1-1.3 The following provides a brief review of the transport guidance (specifically the guidance on undertaking an economic impact report which feeds into the wider guidance on undertaking transport appraisals (GOMMS (see Annex 9 for related guidance)). The way in which this guidance has been developed to take into account regeneration impacts is instructive in terms of how departments have developed specific guidance (suited to their policy needs) on regeneration impacts on the basis of the original EGRUP and 3R principles.

A1-1.4 Infrastructure development, and transport in particular have important linkages with regeneration, renewal and regional economic development. This is recognised in the appraisal guidance developed by DfT to assist in undertaking transport expenditure appraisals. The original guidance was based on yes/no answers to a series of relatively simple questions to determine whether a transport scheme is likely to lead to regeneration effects:

- is the project in a designated regeneration area (RA);
- have development dependent sites been identified; and
- is there a link between the development site and the transport project?

A1-1.5 A Yes on all counts was taken as evidence of a positive link between the transport scheme and a regeneration effect. While this method is relatively easy to apply it offers little useful information about the scale of regeneration impacts.
A1-1.6 The SACTRA report *Transport and the Economy* (1999) called for the Department to produce an economic impact report for all schemes to go alongside the traffic and environmental appraisals currently undertaken. SACTRA argued that the report should cover in addition to the total economic impact and the conventional measure of transport benefits the pattern of gains and losses, in economic activity and jobs.

A1-1.7 DfT prepared guidance on undertaking an EIR which involved the following key steps: defining the regeneration area, auditing the existing economic conditions, identifying constraints and market failures, estimating changes in travel times and costs as a result of the transport scheme, quantifying the transport impacts based on accessibility indicators and calculating the impact on employment.

A1-1.8 The EIR sets out a process that should be followed and does not advocate any particular modelling technique although it does not rule out the use of such models if appropriate.

**Accessibility**

A1-1.9 In the case of transport, the case for a scheme having an impact on economic activity rests on how it affects patterns of accessibility. Hence a central task in preparing an EIR will be to demonstrate how patterns of accessibility will change, and then to understand how those changes will affect economic activity, leading to changes in employment or unemployment. In each case the comparison is between the situations with and without the proposed scheme.

A1-1.10 The approach requires the calculation of the travel times between zones with and without the scheme and changes in proportion of people willing to travel from one zone to another zone across all zones which enables an estimate of a) changes in workers access to jobs and b) changes in employers access to workers. The methods available for converting travel times into accessibility to jobs and workers can be based on a range of methods from simple time cut-offs to estimated deterrence curves.

A1-1.11 The EIR is designed for the majority of schemes. However, a wider range of impacts might be relevant for decisions on very large schemes and in these special cases the EIR may be less appropriate. For example SACTRA discussed the importance of market imperfections, agglomeration effects and economies of scale. The EIR guidance does not rule out seeking to measure the impacts of these especially for very large schemes. However, the EIR is not designed to provide guidance on matters such as regional economic development or national implications of transport schemes.

A1-1.12 The analysis undertaken in preparation of the EIR is one component of a much wider appraisal methodology, the full results of which are summarised in an overall appraisal summary table. The AST covers other impacts which are also of interest from a 3R perspective including other economic effects (to the extent these are captured in time savings) and impacts on environment (including landscape/townscape) and supporting analyses on distribution and equity. This is a good illustration of a more general principle in the appraisal of the 3R impacts of non-3R interventions and additional guidance should pay close attention to 3R related issues that are already dealt with within existing appraisal systems.
ANNEX 2

3R interventions: aims, actions, areas and actors

Summary

A full summary of this annex is provided at the end of the section but in brief the annex provides an overview of 3R interventions in terms of the aims, actions, actors and areas. This represents detailed picture of the scope of the guidance and is intended to help users locate their interests within the overall framework that unites approaches to the assessment of interventions aimed at regeneration, renewal and regional development.
Introduction

A2.1 Terms like ‘regeneration’, ‘renewal’ and ‘regional development’ typically do not have simple definitions. The distinguishing characteristic of these interventions is that they have a strong spatial focus and often, as a result, distributional impacts. They tend to affect the process of sustainable development for target areas and groups, and have the specific objective of improving outcomes in social, economic and environmental terms.

A2.2 This section takes a closer look at the basic features of 3R interventions in terms of their overall aims, the types of actions through which they are implemented, the problem areas that they address and the main actors involved in delivery.

Aims

A2.3 The ultimate aim of 3R interventions is to achieve thriving, inclusive and sustainable communities in all regions by raising levels of social inclusion, neighbourhood renewal and fostering regional prosperity. There are three interrelated and partially overlapping domains (or pillars) of spatial sustainable development that together contribute towards a better quality of life:

- Economic – achieving self-sustaining local economic development consistent with regional and national economic prosperity, leading to sustainable improvements in the economic performance of all regions;

- Environmental – creating a built and natural environment in which people want to live and work by providing amenities, tackling degradation, safeguarding natural and built heritage assets; and

- Social – meeting people’s social needs by promoting social inclusion, neighbourhood renewal, building social capital, promoting stronger communities, better health, access to services/infrastructure and recreation.

A2.4 Different types of intervention (renewal, regeneration or regional development) will typically address a number of specific issues across these broad domains. For instance, neighbourhood renewal might focus on improving work and business opportunity for the local residents under the economic pillar, on improving residential attractiveness under the environmental pillar and on improving public services under the social pillar.

Box A2.1 Defining sustainable development for spatial areas

A Better Quality of Life – A Strategy for Sustainable Development for the UK (DETR, 1999) explains how, at its heart, sustainable development is the simple idea of ensuring a better quality of life for everyone, now and for generations to come. The Government approach to sustainable development also stresses how ‘thriving regions, cities, towns, villages and neighbourhoods are fundamental to quality of life. Strong economies, employment opportunities, good access to services, and attractive and safe surroundings are vital for their sustainable development and for building sustainable communities.’

In more specific terms, the concept of sustainability as applied to a city has been described as ‘the ability of the urban area and its region to continue to function at levels of quality of life desired by the community, without restricting the options available to the present and future generations and causing adverse impacts inside and outside the urban boundary’ (The Sustainable City, 2000). This definition can be easily applied to other spatial areas and can therefore be turned into a definition of spatial sustainable development.
Sustainable Communities – Building for the Future (2003) identifies some of the key features of sustainable communities:

- A flourishing local economy to promote jobs and wealth;
- A safe and healthy local environment with well designed public and green space;
- A well integrated mix of homes of different types and tenures;
- Good local public services including education and training opportunities, health care and community facilities;
- The right links with the wider regional, national and international community.

### Actions

**A2.5** The Neighbourhood Renewal Unit (NRU) Report, Collaboration and Co-ordination in Area-Based Initiatives, May 2002 identifies the following, useful typology of interventions affecting spatial areas:

- Universal welfare programmes, such as income support, unemployment benefit, and tax credits which can, by the way they are distributed and delivered have an effect on the well-being of an area depending on how many people eligible for the benefits are located there. However, the impact on the area is incidental to the programme;

- Selectively targeted national programmes aimed at key client groups and having an impact upon the areas where those client groups are concentrated (e.g. the Employment Service’s New Deal for the unemployed, or the Employment Zone and New Start initiatives). While such programmes are not explicitly designed to contribute to changes in the nature of the area, they do have a significant effect upon it and can contribute much to turning around disadvantaged neighbourhoods;

- Initiatives which are much more explicitly designed on an area basis and are intended to change the nature of an area and to engage with the local community which lives there (e.g. RDA Single Programme, New Deal for Communities or the Scottish Social Inclusion Partnerships).

**A2.6** 3R interventions are typically carried out under the latter of these policy delivery mechanisms, which are often defined as area-based initiatives (ABIs). The guidance provided here is therefore primarily relevant to these types of intervention (see Box A2.3). However, the broad principles of this guidance will also be appropriate in the assessment of the impacts of selectively targeted national programmes on those areas where their client groups are concentrated. This later type of intervention has become much more prevalent in recent years and has led to the development of numerous PSA floor targets (see Box A2.4) and an emphasis on the bending of mainstream programmes.
**Box A2.3 Area Based Initiatives**
The Regional Co-ordination Unit (RCU) maintains a database of Area Based Initiatives, which is useful in considering the types of policies this guidance is applicable to. The RCU definition of ABIs is quite wide and ranges from interventions focused on very small areas (e.g. particular streets) to whole regions. Interventions covering the range of broad areas of government activity are also included.

**Health** – e.g. Health Action Zones which aim to target a special effort on a number of areas where the health of local people can be improved by better integrated arrangements for treatment and care.

**Education** – e.g. the Neighbourhood Support Fund, which aims to re-engage the most disaffected and disengaged 13-19 year olds living in some of the most deprived areas back into education, training and employment.

**Work and Pensions** – e.g. Action teams for Jobs – where the aim is to help those disadvantaged in the labour force to get and keep jobs by working with individuals to overcome the barriers they face when looking for sustainable work.

**Regional** – e.g. European Regional Development Fund Areas which aims to tackle economic regeneration by promoting the development of those regions lagging behind the rest of the European Union, redeveloping regions seriously affected by industrial decline; and supporting the adjustment of rural and urban areas facing new economic challenges.

**Trade and Industry** – City Growth Strategies – to encourage towns and cities to develop and implement inner city strategies that put enterprise and business at the heart of regeneration, focusing on the competitive economic advantages of inner city areas rather than the social disadvantages.

Further details available from http://www.rcu.gov.uk/

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**Box A2.4 PSA Floor/Ceiling Targets**
The Neighbourhood Renewal Unit (NRU) emphasises that neighbourhood renewal will only work if all parts of Government that affect deprived neighbourhoods work together. To get results, key national strategies and targeted policies must work effectively in those areas.

One way of tackling deprivation at a national level across government departments is through the ‘floor targets’ that were established in the course of the Spending Review 2000. These are Public Service Agreements (PSAs) relevant to deprivation that for the first time set targets for all the relevant departments on the areas where they are doing worst – not on the national average.

Floor/Ceiling targets have been established in the domains of Jobs, Crime, Education, Health, Housing and the Environment. The target for crime gives an illustration of the nature of a floor target.

‘Reduce domestic burglary by 25 per cent, with no local authority district having a rate more than three times the national average (by 2005)’

This target is the responsibility of the Home Office, with the local lead taken by Crime and Disorder Reduction Partnerships.

The implementation strategies of individual Government Departments, setting out how these targets will be met are on the NRU web site at

http://www.neighbourhood.gov.uk/targets.asp
Areas

A2.7 By definition, 3R interventions address spatial areas that have policy priority at different levels, from local to regional. As examples of the problem areas that are addressed by each type of intervention, one can think of the following typology:

- **Regeneration:**
  - Urban regeneration: addressing the problems of inner city areas and other similar areas facing problems of imbalance and decline (e.g. as defined in planning documents – regeneration zones, seaside towns, market towns, former coalfield areas, etc.), but also aiming at improving the confidence of private investors in areas in transition. Much of the policy in these areas stems from the Urban White Paper (which brought together policies from across a range of departments);
  - Rural regeneration: addressing problems of decline and structural change in rural areas (for smaller settlements, this can often involve focussing on a few dispersed households).

- **Neighbourhood renewal:** addressing the regeneration problems and the poor public service provision of the most deprived neighbourhoods and housing estates.

- **Regional development,** addressing the economic prosperity of the different regions of the United Kingdom through planning and strategy development and the implementation of specific programmes, focussing in particular on those regions that are affected by weak competitiveness. Sub-regions are typically identified as priorities for intervention on the basis of both their relatively poor socio-economic conditions and the opportunities that they present.

A2.8 This guidance is also relevant to devolved administrations in Wales, Northern Ireland and Scotland but particular issues arise in these areas because of possible differences in policy priority and impacts that transcend these boundaries. Assessment will typically have difficulty in dealing with these issues and should take the lead from agreed policy (e.g. concordats between administrations as appropriate).

Actors

A2.9 There are many different institutions/organisations involved in the delivery of 3R projects, often acting in partnership in order to increase effectiveness and co-ordination. Two useful attributes of different organisations are the scale at which they act (national, regional, local etc.) and the degree to which they are public, private or voluntary. Organisations involved in 3R interventions come from all sectors:

- Private business engaged in trade at local, regional and national levels;

- Voluntary organisations, social enterprises, community groups and other organisations (e.g., universities);

- Public private partnerships and local strategic partnerships;

- Government Agencies, RDAs, local authorities.
As discussed in detail later in this guidance, differences in the nature of these actors, the areas and actions they are involved in, condition the appraisal and evaluation approach required to manage the performance of interventions and help achieve policy aims.

Summary

The aim of this Annex has been to lay out in more detail the main features of 3R interventions.

- **Aims:** the ultimate aim is to achieve thriving, inclusive, sustainable communities in all regions by raising levels of social inclusion, promoting neighbourhood renewal and fostering regional prosperity.

- **Actions:** interventions are typically carried out using area-based initiatives. However selectively targeted national programmes (e.g. the New Deal programmes), and universal welfare programmes are also relevant. Such interventions may affect the prospects for spatial sustainable development – not least because of the importance of bending mainstream programmes to achieve 3R aims.

- **Areas:** given these aims and actions, a wide range of different areas are involved. These include: inner city areas and areas facing problems of imbalance and decline (e.g. seaside towns, coalfield areas), deprived neighbourhoods and housing estates, as well as regions and sub-regions.

- **Actors:** are similarly diverse, including private business, voluntary organisations, public-private partnerships, local and sub-regional partnerships, government agencies and local authorities.
ANNEX 3
Managing the assessment cycle

Summary

A full summary is provided at the end of this annex, however in brief, the annex provides guidance in relation to issues associated with managing the assessment cycle. Issues covered are: Linking appraisal and evaluation, Arms length delivery, Intervention levels, Proportionality, and Making the most of data and the evidence/theory base.
Introduction

A3.1 Management of the assessment cycle is a largely generic issue for appraisal and evaluation and there is guidance available in the Green Book (Chapter 2). However, there are several issues that need to be considered in 3R specific terms given the nature of the interventions, the outcomes sought and the characteristics of the target areas and groups.

A3.2 This section provides some commentary on the following issues from a 3R perspective:

- Linking appraisal and evaluation;
- Arms length delivery;
- Intervention levels;
- Proportionality;
- Making the most of data and the evidence/theory base.

Linking the appraisal and evaluation stages

A3.3 Developing operational links between appraisal and evaluation stages is essential to the effective management of the assessment of government interventions. This is true of all interventions in principle, but this necessity takes on added importance in the 3R area because of conditions quite specific to the area of 3R interventions: notably considerable uncertainty, context dependency and an evolving but still limited evidence base.

A3.4 Linking appraisal and evaluation much more closely can therefore make significant improvements in 3R assessment. Thus in general terms it will be important for:

- Appraisers to think clearly about the design of a monitoring and evaluation plan at the appraisal stage (for example in order to ensure local data is available at the evaluation stage);
- Evaluators to consider carefully the result of any appraisals that have been undertaken – particularly in terms of the light they may shed on the counterfactual (i.e. what events were expected to have an influence on the outcomes at the appraisal stage);
- Appraisers should clearly set out any non-decision variables such as sunk costs etc. which although they may not be relevant for the decision at hand, should be born in mind for the evaluation stage;
- Appraisers should develop options for intervention that are consistent with the evidence base. 3R assessments frequently need to be assessed on the basis of limited information. Evidence from evaluations will be particularly useful.
Arms length delivery

A3.5 The outcomes of 3R interventions are delivered through a great deal of delegation and via a range of organisations working in partnership. This can raise issues about governance and give rise to particular assessment problems.

A3.6 There are a number of best practice rules for the management of the appraisal and evaluation process that recognise these problems. In particular:

- Assessors should be clear about the lines of responsibility and the decision process;
- Where outputs satisfy a variety of objectives (held by different partners), this economy should not lead to a reduction in transparency;
- There should be maintenance of the distinction between project promoter and assessor, even where these roles are within the same organisation. Realistically this can only be achieved through transparency and by maintaining an audit trail;
- Evaluation will usually need to be independent for credibility.

A3.7 A related issue is the preponderance of partnership approaches to 3R interventions. This can give rise to ‘across the table’ development of interventions. Options for intervention may arise from a process of negotiation and this can mean that it is unclear that alternatives have been fully considered (indeed the active consideration of alternatives may be detrimental to the partnership process). This should not lead to a lack of transparency in the process of appraisal and evaluation and in particular attention should be paid to alternative forms of option analysis (See Part 2).

A3.8 Appraisal, monitoring and reporting are all done for different purposes. Although there are benefits in exploiting synergies this should not compromise the overall analysis. There can be pressure in an appraisal exercise to undertake analysis in such a way that it provides information relevant to managing the delivery of the project and reporting on it. This should not be at the expense of the appraisal. For example in management through contract, only tangible outputs are relevant as these are the only things that can be counted and verified. This does not however mean that appraisal should ignore non-tangible impacts.

A3.9 The results of appraisals and evaluations may be useful, together with output and outcome monitoring for reporting against targets. However, considerable care should be taken in cases where the appraisal and evaluation studies were not designed for this purpose, as there may be problems in translating information between uses. This is likely to be particularly the case for appraisals in which there may be substantial internal inconsistency, which means that their results cannot simply be added together.

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5 Organisations will often make distinctions between direct (contracted) outputs and indirect (hoped for) outputs and it will be the direct outputs that they generally report. Appraisals, however, should report all impacts regardless of this distinction.
Intervention levels

A3.10 This guidance aims to provide assistance in relation to all levels of intervention (project, programme and policy). It is important to recognise therefore the differences between the application of the guidance at these levels. Projects, and to a lesser extent programmes, take place within a relatively well defined set of aims and objectives where there is knowledge about the inputs, outputs and outcomes expected. Assessments undertaken at the level of policies, however, often take place with much less information and require a more strategic approach. This applies equally to evaluation as to appraisal, since evaluation at a more strategic level may be based on more limited information. Evaluations of individual programmes will need to be undertaken in addition to and in a complimentary manner to local evaluations of particular projects. Often this will be best achieved through the deployment of standardised local evaluation tools which help analyse and evaluate delivery at the local level as well as providing information for a national/programme evaluation.

Proportionality

A3.11 Many 3R projects will be very small and there is a need to build in proportionality (with respect to time and resources) into the appraisal and evaluation process. A good starting point is to be clear at each level of intervention what can be taken for granted at different levels. Thus if an appraisal of a project reveals it is unlikely to have significant impacts in Area X, it may be sufficient to confirm this by some rapid tool rather than to investigate it as thoroughly as was done at the programme level. A ROAMEF statement for the programme should typically assert what needs to be appraised at what level given the assessments already undertaken at higher levels. However, often scale is not a good guide to where things matter as small scale effects alter the result in finely balanced cases.

A3.12 In the case of very small projects it should be borne in mind that some form of appraisal will generally be better than nothing at all, not least to maintain transparency. Allowance should be made for the skill levels of those undertaking front-line assessments. A rudimentary assessment by a front line officer will often be better than a more rigorous assessment by a consultant with little knowledge of the detail associated with the local situation. However, regularity and consistency are also important principles to be considered as well as the need for transparency and a clear audit trail.

Making the most of data and the evidence/theory base

A3.13 There is a growing resource of information on 3R interventions in terms of evidence and theory and data to support assessments. Some of the most useful resources are summarised in Box A3.1
Box A3.1 Resources for 3R Assessments

Policy/evidence general
Policy Hub – http://policyhub.cmps.gov.uk/default.jsp
NRU – http://www.neighbourhood.gov.uk/
Urban Policy Unit http://www.urban.odpm.gov.uk/index.htm
European regional policy website (Inforegio) – http://europa.eu.int/comm/regionalpolicy/indexen.htm
Local and Regional Government Research Unit (LRGRU) http://www.local.dtlr.gov.uk/research/index.htm
Centre for the Analysis of Social Exclusion (CASE) http://sticerd.lse.ac.uk/case/
Economic and Social Research Council (ESRC) http://www.esrc.ac.uk/
Joseph Rowntree Foundation (JRF) http://www.jrf.org.uk/

Data
(Scotland http://www.scotland.gov.uk/stats/neighbours/tables/neighbour.asp)
(In Scotland http://www.scotland.gov.uk/stats/neighbours/tables/index.asp)

A3.14 The importance of making the most of the evidence base also points to the importance of disseminating evidence from the assessments, the need to be aware of research going on elsewhere and of sharing data to reduce burdens on stakeholders.

Summary

A3.15 The guidance is focused on analysis. However, some information related to the management of the assessment cycle is given – particularly where this influences the approach to appraisal and evaluation. These areas include the need to: link clearly appraisal and evaluation stages; take into account the implications of arms-length delivery; recognise the different levels of intervention and the need for proportionality and make effective use of the evidence base.
ANNEX 4

Defining the problem – rationale, objectives and baselining

Summary

A full summary is provided at the end of this section but in brief this annex presents guidance in relation to the first stage of the appraisal and evaluation cycle – defining the problem. The section first sets out the general principles and then discusses issues associated with: the rationale for 3R interventions, defining and clarifying objectives, and assessing the baseline and market conditions.
Introduction

A4.1 In general terms the assessment of the rationale and the definition of objectives for public intervention should follow the principles laid down in the Green Book. However, the multi-faceted nature of 3R problems and their spatial dimension raise a series of specific issues in terms of justifying interventions and setting the objectives. This section addresses these issues in turn, and ends with a discussion of the related topic of baselining, which also raises specific issues in a 3R context.

General Principles

A4.2 The Green Book states clearly that ‘... Before any possible action by government is contemplated, it is important to identify a clear need which it is in the national interest for government to address. Accordingly, a statement of the rationale for intervention should be developed’ (see introduction to Chapter 3 of the Green Book).

A4.3 The Green Book (Annex 1) then moves on to set out in broad terms the rationale for government intervention. It makes a clear distinction between the two most common rationales:

- The achievement of economic objectives by addressing inefficiencies in the operation of markets and institutions; and
- The achievement of an equity objective such as local or regional regeneration.

A4.4 A strong link exists between these two rationales and the three pillars of sustainable development, discussed in Chapter 2. The resolution of market and institutional failures, or the achievement of a social objective may contribute in many and varied ways to increased quality of life in economic, social or environmental terms.

A4.5 The Green Book points out that markets/institutions may not achieve an efficient outcome for a number of reasons related to market failure: public goods, externalities, imperfect information and market power. Before addressing an equity objective there should be an assessment of the inequality and the reason it exists.

A4.6 The general form of this rationale applies equally to 3R type interventions as it does to other types of intervention. In a 3R context, however, a number of specific issues arise which are dealt with here:

- Interaction of different types of and institutional failures behind 3R problems;
- Relationship between market and other failures and supply side effects;
- Holistic approach to the definition of regeneration intervention.

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6 Institutional failure is a term which has a variety of meanings in different contexts – often referring to problems with the structure of society (e.g. lack of clarity in terms of property rights or absence of trust between parties). The use of the terms in the current context is not related to these aspects but to problems associated with non market institutions (government etc.) Identifying this as a distinct rationale for intervention is important given that many interventions aim partly or wholly at addressing institutional issues such as problems with service delivery, co-ordination, partnerships etc.
A4.7 The objectives of intervention should be clearly linked to the underlying failures that the intervention itself is seeking to address. The Green Book emphasises that the objectives of any proposal for government action in the form of a new policy, programme or project need to be stated clearly.

Box A4.1 Regeneration and employment
The Green book specifically addresses regeneration and employment impacts of regeneration in Annex 1. It notes the feature of regeneration as having both efficiency and equity aims and the different spatial scales at which regeneration policies operate. It identifies the need for a clear elucidation within the appraisal of the rationale, the objectives, outcomes and partnership involvement.

The Green Book notes that often regeneration policies have employment objectives, either as a specific aim or as a component of a more wide ranging objective. Typically this gives rise to programmes with multiple objectives and stresses the importance of looking at all impacts (together with employment as relevant) and taking account of the different geographic scales (local and national).

A4.8 As pointed out by European guidance on evaluation (MEANS), in an evaluation context it is often necessary to clarify objectives when these were not clearly expressed at the time when a policy was introduced. This clarification is necessary to structure the collection of information and analyse impacts more effectively.

A4.9 Specific issues relating to the definition of objectives which need additional emphasis in the context of 3R interventions are:

- The relationship between project specific objectives (which may be defined in local terms) and higher level government objectives aimed at improving quality of life;
- Boundaries of analysis (how to define issues and areas in a way that facilitates a clear appraisal or evaluation of impacts).

A4.10 Finally, the definition of a baseline and the analysis of market conditions play a key role in setting the scene for appraisal and evaluation. This is particularly true in a 3R context given the complex and multi-faceted nature of the problems that are being tackled by public intervention.

Rationale for 3R interventions

A4.11 This section briefly summarises some of the specific problems encountered in defining the rationale for 3R interventions. These are mostly related to the multi-faceted nature of 3R problems, the focus on social and economic objectives, and the need to justify specific projects/programmes or policies within a holistic approach. As such the identification of the rationale should start with a review of the evidence base.
INTERACTION OF DIFFERENT TYPES OF FAILURES BEHIND 3R PROBLEMS

A4.12 The economic, environmental and social problems targeted by 3R interventions are usually the result of the combined action of market and distributional (social) failures, which the local area/community in itself lacks the power to rectify. Also, the market and distributional failures in disadvantaged areas are often compounded by institutional failures (see Appendix 4.1 for a more detailed discussion of market and related failures, summarised in Box A4.2).

A4.13 As a result of the cumulative nature of 3R problems, it is often difficult to establish clearly what specific market or institutional failures the interventions aim to address, but it is important to do so. Indeed, in order to identify appropriate policy responses it is necessary to understand the root causes of the 3R problems afflicting a given area rather than just the symptoms. Similarly, the distributional problems afflicting the target areas should be clearly identified and their wider implications discussed.

A4.14 Ex-post evaluation should examine how effective the chosen intervention is in remediying the failures it is addressing, having regard also to any wider effects. In a formative evaluation context, the intention is to get an early idea of how specific processes on the ground (structural, organisational, cultural, activity changes) designed to deliver outputs that address identified failures are working. By highlighting what is most effective at addressing different failures in different contexts, as well as why, how and when, these evaluations provide a base on which ex post evaluations can build. There should be testable hypotheses so that evidence gathering is systematic and complete, and these hypotheses should be part of an analytical framework.

Box A4.2 Summary of Appendix 4.1 – Best practice concepts and criteria for defining interventions
This appendix provides additional material on the concepts and criteria relevant to definitions of interventions. It outlines the role of market failures in defining the intervention rationale – identifying the main issue as the occurrence of cumulative multiple micro-spatial market failures. It describes various types of market failure arguments and provides examples in a 3R context. It identifies the links between these failures and supply side improvements. Finally it provides some best practice criteria for the definition of interventions so that the rationale, objectives and context are clear.

The annex makes it clear that market failures are imperfections in markets that prevent them from providing efficient outcomes. Interventions that improve the efficiency through which desired outcomes are delivered can be said to have removed or mitigated a market failure. Key issues that need to be borne in mind are that:

- the fact that a market does not produce a socially desired outcome is not necessarily a case of market failure. Nevertheless there may still be a rationale to intervene to address a social objective;

- It is typically multiple market failures which are the cause of an area’s identified problems;

- The consequences of a particular market failure may be exacerbated when it occurs in combination with another failure;

- The removal of a market failure does not necessarily imply a supply side improvement. The case for a supply side improvement needs to be made separately.
A4.15 As they address a mix of market, distributional and institutional failures and their ultimate aim is spatial sustainable development, 3R interventions typically have both efficiency and distributional aims.

A4.16 3R interventions may involve local efficiency gains to the extent that they address local market failures that constrain the performance of the target area and the overall welfare of its population. These efficiency gains may be reduced as the spatial level of analysis is increased but (provided there are no offsetting effects) may result in an overall efficiency improvement.

A4.17 3R interventions have a distributional aim to the extent that they promote the well-being of those living in the most deprived areas and reduce the disadvantage that people might face because of where they live. A rationale specified in terms of meeting a social objective will need to be based on a clear indication of that social objective in policy terms. A social objective may be defined in local terms but will need to be aligned with national policy objectives. Particular interventions may have both efficiency and distributional aims (not least by attempting to achieve distributional aims by resolving local market failures).

A4.18 Where there is a mixture of social and economic objectives in the rationale for an intervention additional care needs to be taken in clearly laying out the justification.

**Box A4.3 Relationship between economic and distributional objectives**

One of the Objectives of the ODPM is to:

- Work with the full range of Government Departments and policies to raise the levels of social inclusion, neighbourhood renewal and regional prosperity.

The Public Service Agreements, which accompany this objective, illustrate a combination of economic efficiency and distributional aims at local, regional and national levels:

- **PSA1** – Promote better policy integration nationally, regionally and locally; in particular to work with departments to help them meet their PSA floor targets for neighbourhood renewal and social inclusion;

- **PSA2** – Make sustainable improvements in the economic performance of all English regions and over the long term reduce the persistent gap in growth rates between the regions, defining measures to improve performance and reporting progress against these measures by 2006.

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7 Regeneration projects often have their rationale defined in terms of efficiency and equity. In the main such interventions aim at achieving an improvement in equity through the improvement of efficiency in a particular area. It is important to recognise those situations in which there are particular equity/efficiency trade-offs as such impacts need to be clearly identified and communicated to decision makers. Distributional analysis can help in this regard (see Annex 7.)
A4.19 The assessment of 3R interventions is often concerned not with assessing the impacts of individual changes but further interventions within the context of a series of related interventions, which together, are being used to solve an area’s problems in a holistic manner. Thus, rather than simply focusing on the outputs of an individual intervention, more attention has to be placed on comparing a future situation – one where all other (planned and in-the-pipeline) interventions have taken place (there may be scenarios for these), and whether this meets national and local objectives. It is then possible to assess the extent of the remaining gap that needs to be closed in order to achieve sustainability, and then identify whether the intervention provides a feasible means (necessary or sufficient given other constraints) of closing that gap. These issues are further discussed in the next chapter while addressing the issue of the definition of a suitable reference case/counterfactual. Box A4.4 illustrates this mapping and gapping approach.

Box A4.4 ‘Mapping’ and ‘Gapping’

Mapping and gapping are short hand terms for two important activities in the definition of an intervention:

- Mapping the intervention involves specifying the logic of the intervention itself in terms of the resources, inputs, activities, outputs and outcomes;
- Gapping or gap analysis involves looking at the objectives in the context of the baselines for the area, what will happen in the absence of the intervention (with assumptions about other interventions) and then assessing the extent to which the intervention is capable of closing the gap between what is expected and the identified objectives.

A particular intervention may achieve gap closure (is sufficient) or it may make a contribution and be necessary for the overall closure of the gap to which other activities also contribute.

Objectives for 3R interventions

A4.20 This section briefly summarises some of the problems encountered in defining and measuring objectives for 3R interventions (i.e. making them SMART8). Objectives for an intervention should be SMART. However, there are a number of issues associated with 3R interventions that need special attention: the need to link specific objectives to the overarching higher level objectives and to make objectives measurable. The specific issues that emerge in relation to objective setting in a 3R context are due to the multiple dimensions of 3R problems and to the different spatial levels affected.

8 Specific, measurable, achievable, relevant and time-bound
RELATION BETWEEN SPECIFIC OBJECTIVES AND THE OVERARCHING SUSTAINABLE DEVELOPMENT OBJECTIVES

A4.21 The objectives of 3R interventions will vary according to the context. However, in appraisal and evaluation of 3R policies a link should be established (working bottom up) between the detailed objectives of a specific project/programme or policy and the three overarching dimensions (economic, environmental and social) of sustainable development. Objectives at different spatial levels (e.g., local, sub-regional, regional and national) should also be rationalised and reconciled with the economic, environmental and social objectives. The ultimate aim should be to demonstrate how the specific objectives can contribute to the ultimate objective of spatial sustainable development.

Box A4.5 Example of nesting of different objectives
The Neighbourhood Wardens/Street Wardens programme provides an example of the importance of achieving an appropriate reconciliation and rationalisation of national and local objectives. The national objectives of the programme were clearly identified when the programme was set up, these were:

• Caring for the physical appearance of streets;
• Deterring anti-social behaviour;
• Reducing crime and the fear of crime;
• Fostering social inclusion.

The programmes, however are subject to local take up and may be adopted for a variety of other reasons or an emphasis other than that identified at the national level may be applied. Without a proper reconciliation and rationalisation of objectives it can be very difficult to identify whether a scheme has been successful or not. In most cases it will be possible to see how a local objective relates to a national objective. In a minority of cases however it may be that the local objective sits outside or is in direct conflict with a national objective. One purpose of the nesting exercise is to make these cases clear.

MEASUREMENT OF OBJECTIVES

A4.22 The objectives of 3R interventions are often not expressed in quantitative terms. To be SMART, however, objectives should be measurable as far as possible. Appendix 7.2 provides guidance on measurement issues in relation to indicators – this guidance is also relevant to considering indicators for measuring objectives.
BOUNDARIES OF ANALYSIS (PEOPLE AND PLACES)

A4.23 As discussed in Annex 2, no one target area is appropriate for all interventions. This section details the type of questions that need to be asked in considering specific area definitions. The key points are that:

- Different interventions will require different areas to be defined (i.e. an economic regeneration project would need a different area than one aimed at social or environmental objectives);

- As well as the specific impact areas consideration needs to be given to the wider (national) impacts, this may include the use of buffer zones;

- Consideration also needs to be given to ‘other priority areas’.

A4.24 In 3R interventions, the clear definition of objectives should also help identify the most appropriate boundaries for appraisal/evaluation. 3R interventions are spatially targeted and pursue objectives related to spatial sustainability. Therefore, the primary dimension along which boundaries need to be drawn is the spatial dimension, i.e. where the net impacts of intervention accrue. However, the concept of spatial sustainability also reflects distributional concerns. There is therefore a need for drawing boundaries also alongside the distributional dimension, i.e. who benefits or suffers from the intervention on the basis of its gross impacts (inside and outside the primary target area). In both respects, the definition of boundaries should bear a clear relation to the size of the market (see Box 4.5) or socio-institutional context whose failure the intervention seeks to address. It should start from the recognition of the stated objectives of intervention and not simply reflect existing administrative boundaries or other convenient territorial units.

A4.25 The availability of data and comparator information also needs to play a role, and often limitations in the data will lead to a boundary different from the one which would have been chosen otherwise. Similarly, the choice of boundaries affects the extent to which comparison may be made with other areas (e.g. benchmarking and unit costs). Where boundaries reflect such considerations this should be clearly stated.

A4.26 From a spatial point of view, 3R problems can emerge at several different levels, on an array going from local to regional. In some cases, 3R problems can have long-term impacts at a national level. Therefore, depending on their size and complexity, the intervention can produce impacts at several geographical levels, e.g.:

- Site: the immediate vicinity of the projects (for projects that involve a physical component);

- Locality: can vary from the ward, to a ten-fifteen mile radius of the site concerned, depending on the density of the settlement pattern;

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10 i.e. areas where there may be a concern about the positive and negative consequences of a project in addition to the target area. These may be other areas in the same programme or a different programme.

11 In appraisal this will often be defined as the area over which the intervening body has (or will acquire) direct control.
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- **Sub-region**: coherent socio-economic region. Might correspond to the relevant TTWA\(^{12}\) or to specific sub-regions identified by the regional economic strategy. It typically varies according to the density of the settlement pattern;

- **Region**: the area covered by the regional economic strategy, normally relating to the area covered by RDAs, but also Wales, Scotland and Northern Ireland;

- **National level**.

A4.27 There is no direct mapping of these spatial areas and the intervention areas discussed in Annex 2. An urban regeneration area may be defined as a specific site, but its area of impact may be sub-regional or regional. Neighbourhoods will often be larger than specific sites but smaller than localities (which may contain a series of neighbourhoods).

**Box A4.6 Defining markets – the OFT approach**

Often the area of interest is related to the labour market, in which case TTWAs provide a useful definition of the market. Similar considerations apply to other markets and guidance is available from the OFT on market definition. This defines markets according to:

- The product market, by looking at the closest demand-side substitutes and supply-side substitutes (high levels of substitutability leading to the definition of larger markets);

- The geographic market, by looking at whether consumers can obtain similar goods or services from other local suppliers on reasonable terms or are instead captive.

To provide a proxy for market power, the relevant market needs to be defined with reference to competitive constraints that exist between products and areas. In recognition of this, although there are some minor differences in emphasis and detail the underlying approach to defining relevant markets is now common across most competition jurisdictions. This test = SSNIP (small but significant non-transitory increase in price) test. The SSNIP test is also known as the ‘5% test’, after the quantitative threshold described in the test and the ‘hypothetical monopolist test’.

For further discussion of these issues, see ‘The role of market definition in monopoly and dominance enquiries – National Economic Research Associates (July 2001).

A4.28 Different impacts might be felt at different levels for some interventions. The impact of land development on the physical characteristics of an area might be confined to the site, but the employment impacts could be sub-regional or regional. Housing, physical or economic led interventions may have impacts at very different scales and require different boundaries to be drawn. Beacon projects are an extreme example\(^{13}\).

A4.29 For many 3R interventions however, the main target area will be a geographical level between the local and the regional. Nonetheless, an excessively narrow local focus needs some justification to the extent that it is effectively ignoring (i.e. placing no weight on) the (positive or negative) impacts outside the target area. If an intervention has a purely distributional aim then this may be justified\(^{14}\). However, even for interventions with purely distributional aims it is still important to assess impacts on ‘other priority areas’.

\(^{12}\) Travel to Work Area

\(^{13}\) A regeneration scheme targeted in a few localities might have very localised impacts that act as beacons prompting completely unrelated areas to replicate some or all elements of the scheme – with consequent impacts well beyond those measured just in the original localities.

\(^{14}\) In principle it is akin to adopting a ‘closed impact analysis’ (see Mohring, 1993). Effectively the assumption is that on the basis of distributional concerns we are willing to discount negative consequences in the wider area. A more refined (distributional) analysis could be used to give a more accurate representation of the rate at which society as a whole is willing to trade-off negative impacts in the wider area for positive impacts in the target area.
A.4.30 For interventions with an economic aim assessments should be clear on the area over which
the positive economic consequences are expected. A clear distinction should be made
between interventions which have positive economic efficiency gains on the target area
and those that have:

- No impact outside the area;
- Offsetting losses outside the area (e.g. displacement, crowding out);
- Additional gains outside the area (e.g. leakage, multipliers).

More detail on these effects is provided in English Partnerships' Additionality Guide
(referenced at Appendix 7.3, and formally a part of this guidance).

A.4.31 The extent to which these impacts outside the target area need to be appraised and
evaluated will depend on the specific circumstances, but in all cases they should be
acknowledged and the reasons why they have been included/excluded clearly given. In
many cases there will be both positive and negative impacts outside the target area which
will need to be considered together to get an overall idea of impact. The concept of a buffer
zone can be useful in this regard.

Box A4.7 How do you know you have drawn the boundary correctly?

**Distributional** – target area will generally be the area over which the distributional aims are
defined. BUT – assessments must check for impacts on ‘other priority areas’.

**Economic efficiency** – target area is the area over which the economic impact is expected. BUT
– assessments should recognise the possibility of positive and negative consequences outside the
area and ultimately the national economic efficiency impact.

A.4.32 Often it will be unclear before an analysis what the geographical scope of the impacts will
be. In such cases it may be appropriate to draw the boundary one level above (or greater)
than the area/group where the majority of impacts are expected. This rule of thumb can
help ensure that the target area/group chosen is large enough to capture all relevant
impacts.

A.4.33 The definition of the target area should also be an iterative process and should be refined as
analysis reveals the possible magnitude of leakage and displacement effects.

A.4.34 Another reason for taking a look at the impacts from a wider perspective than the
immediate target area is the desire to learn lessons and gain a better understanding of how
the intervention works, particularly in the context of summative (but also formative)
evaluation.

A.4.35 Further guidance and an example of boundary issues is available via the reference at
Appendix 7.3 in relation to the Additionality Framework.
Assessing the baseline and market conditions

A4.36 One of the early, crucial steps in carrying out appraisal and evaluation is to define a clear baseline. The baseline, reference case and counterfactual are three important concepts that can cause some confusion because of how the terms are used in different disciplines:

- The baseline is generally taken to mean the state of the economic, social or environmental context, at a given time/period (generally at the beginning of an intervention);
- The reference case is the development (over time) of the economic, social or environmental context in the absence of the intervention being approved. The term represents the same concept as the counterfactual (the term typically used to describe the 'intervention-off' situation in an evaluation).\(^{15}\)

A4.37 The baseline, therefore, fulfils the same role in both appraisal and evaluation – providing a snapshot against which the reference and counterfactual cases progress. The definition of the baseline is one of the first crucial steps in undertaking any assessment. This is particularly true in a 3R context, where the task of describing the initial conditions is made rather complex by the multi-faceted nature of the problems that are being tackled by public intervention and by the multiplicity of domains that are addressed.

A4.38 Establishing the baseline plays a number of crucial roles (see Box A4.8):

**Box A4.8 Functions of the baseline**

- **Context definition** – It provides qualitative and quantitative information in order to characterise the target area from an economic, environmental and social perspective.
- **Support to rationale** – It helps the rigorous definition of the specific problems to be addressed by the intervention, providing evidence in support of its rationale and objectives (in terms of the market, distributional and institutional failures and in terms of the gaps in existing policies/programmes).
- **Definition of performance indicators** – It provides the basis for defining a set of indicators and benchmarks that will be used to monitor the project/programme/policy progress.\(^{16}\) Baseline indicators should be reflected in a structure of outputs and outcome targets. In particular, the definition of each outcome indicator should relate closely to a corresponding baseline indicator.
- **Essential for measurement of impact** – Data comparable with planned outcome data must be gathered at this stage for the outcome data to be interpreted rigorously.
- **First step to build a reference case/counterfactual** – It represents the first necessary step to build a reference case or counterfactual in order to assess the gross additional effects of the intervention (see following section).

\(^{15}\) Often the term basecase is also used in this manner. Following from the convention in the Green Book, however, this is not the use of the term here. The term basecase is used to describe the best estimate within an option, around which the range of costs/outcomes of that option will be distributed.

\(^{16}\) It is useful here to distinguish between baseline indicators and context indicators. Baseline indicators are those that are likely to change as a result of the intervention. Context indicators are those that may change and thereby alter the impact of the intervention. This distinction reflects the typology identified by MEANS (European Commission, 1999) in relation to the scope of information provided. However, it is worth noting that at least in the long term most indicators are likely to be ultimately affected (whether directly or indirectly) by holistic 3R interventions.
The assessment of the context in which 3R interventions take place also calls for gathering information on the demand and supply conditions in the markets that are affected by the intervention. Indeed, many of the outputs (and therefore outcomes) of 3R interventions are delivered through the market and hence market conditions will have an impact on delivery.

Formative evaluations can play a role in developing an evaluation framework and establishing baseline conditions so that a subsequent evaluation can examine the economic, social and environmental impacts.

Box A4.9 Gathering baseline information

In 3R terms, ‘Context’ extends beyond incorporating local quantitative indicators such as employment, ethnic mix, housing types and crime levels into the analyses. It involves acquiring an appreciation of the social norms, values and interrelationships that can act as opportunities or barriers for development, including attitudes and perceptions.

Appraisers and evaluators, therefore, need to gather a range of quantitative and qualitative data to establish baseline conditions and the ongoing nature of local conditions. This is a key step for the definition of holistic interventions, as Figure 3.1 highlights.

For example, the evaluation of Health Action Zones assesses the local context of each Zone in terms of the:

- characteristics and capacity of their local communities;
- physical features of their neighbourhoods;
- existing infrastructures and agency relationships;
- politics of local organisations and historical links or tensions;
- existence of other strategic partnership initiatives; and
- enthusiasm and skills of individual players in the local health and social care economy.

In a similar vein, the Sure Start evaluation has sought to screen out the influence of other external factors, but also included a local context analysis of 310 localities.

A variety of techniques might be used to gather this information. These might typically involve both the use of secondary data (e.g., employment statistics, IMD rankings, etc.) and the gathering of new information through demand studies, market research, local social surveys, interviews with stakeholders, focus groups, content analysis of key local documents and media reports etc.

Research designs typically include case study areas, which enable evaluators to gather data at local level to help understand their findings and test hypotheses. Also, the fact that 3R activities can have impacts at different spatial levels (e.g., sub-regional and regional as opposed to merely local) might suggest gathering some basic baseline information at a wider spatial level than the immediate target area.

Process or ‘formative’ evaluations can assist, by establishing the baseline and gathering a rich variety of data throughout the initiative. A process evaluation assesses and reports on processes. A formative evaluation focuses on improving or fine-tuning an initiative in its early stages (and may therefore include a review of processes).

The approach to the identification of an appropriate ‘baseline date’ can be different in appraisal and in evaluation. Appraisers will typically look for the most up to date information they can find on the target area in order give a picture of the ‘current situation’ at the time when the appraisal is carried out. Evaluators will often define the baseline date as the implementation date for the policy, project, programme, etc. Furthermore, evaluation research designs that employ longitudinal trend analysis will need more than one pre-measure. Long implementation periods may mean that there is a large gap between the date for the baseline for appraisal and that appropriate for evaluation.
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Nonetheless, evaluators should try to make use of the baseline as defined by appraisers and to clearly identify any changes (due for instance to postponed implementation).

Finally, the preparatory work for the NDC evaluation framework developed the concept of moving baseline, or continuous baselining. The concept of moving baseline is not about changing the data or ‘moving the goal posts’ to demonstrate that the objectives of a given programme/policy have been achieved. Instead, it means that the baseline that was established at the beginning of the appraisal/evaluation cycle might need to be revisited when new information (exogenous to the project) becomes available. This can happen, for example, when baseline data is not up to date at the beginning of a programme because of delays in the availability of administrative data.

Summary

A4.41 This annex has dealt with the issue of problem definition in a 3R context. Guidance is provided on describing the rationale, objectives and the current situation. Key points are summarised below.

A4.42 In terms of rationale, 3R interventions will typically be concerned with removing or mitigating market, social and distributional failures in order to achieve both economic and social objectives. The relationship between these failures, the objectives and the overall aims in terms of sustainable development need to be clearly stated in order that the intervention can be effectively appraised and evaluated. This should be achieved by a thorough review of the evidence base.

A4.43 Although 3R interventions may achieve both economic and social objectives a clear distinction needs to be maintained between these different arguments and the spatial level of analysis. A rationale based on an improvement in economic efficiency should define the root causes of the market failures and be clear over what spatial area the efficiency objectives hold. A rationale based on a social objective should clearly identify the closeness of fit between the rationale for the intervention and the social objective as expressed in national, regional and local policies.

A4.44 It is important to set out the rationale within the context of all other activities that are also going ahead in the target area/group. At the heart of this mapping of the intervention should be the logic of the intervention itself (inputs, activities, outputs and outcomes) and the gap identified between the ‘without intervention’ situation and the desired outcomes.

A4.45 As with all interventions, the objectives should be SMART (i.e. specific, measurable, achievable, relevant and time-bound). This will often be difficult in the case of 3R interventions but it is important to make objectives as SMART as possible. Particular attention needs to be paid to examining and explaining the alignment of objectives at different spatial levels and intervention levels (project, programme and policy).

A4.46 Establishing boundaries is a key aspect of the assessment of 3R interventions given their spatial focus. The definition of the boundaries should bear a clear relation to the size of the market, social or institutional failure the intervention seeks to address. It should start from the recognition of the stated objectives of the intervention and not simply reflect existing administrative boundaries, or convenient territorial units. The appropriate boundaries will vary by the type of intervention and hence assessments should demonstrate that the choice of a specific boundary has been informed by a consideration of the type of intervention.
A4.47 The nature of the impacts also mean that however the target area is defined, it will be necessary to look wider (e.g. to establish impacts at the regional and national level) but also to consider possible impacts on 'other priority areas'. In identifying impacts on a particular area the assessment should leave no doubt as to whether these are potentially added to (or detracted from) by impacts in wider areas.

A4.48 Establishing a baseline is an essential first step in both appraisal and evaluation and serves a variety of purposes. A clearly defined baseline will provide context, support for the rationale, define relevant performance indicators, help measure impact and interpret the reference case/counterfactual.
APPENDIX 4.1

Concepts and criteria for defining interventions

Introduction

A4-1.1 This annex is an expansion of the best practice principles for the definition of regeneration, renewal and regional development (3R) interventions addressed in Annex 4.

A4-1.2 As highlighted in Annex 4, public sector intervention should typically target market and distributional failures that may be compounded by institutional failures. The 'language of market failure' is a rather complex one and can often lack contextual reference for many involved in the 3R field. The first section of this Appendix addresses this issue by providing a review of the main types of failures that are the basis of 3R interventions.

A4-1.3 The second section of this Appendix moves from some of the key concepts presented in Annex 4 and develops a set of criteria that should be respected in order to provide convincing evidence that a 3R intervention is well defined. This best practice approach is developed by providing an example of how these criteria could be developed in a set of operational tests that should underpin the definition of 3R interventions.

Market failures and the intervention rationale

A4-1.4 The rationale for intervention may be made on either social (distributional) or economic efficiency grounds. 3R interventions tend ultimately to be based on social objectives but tend to involve arguments about efficiency at regional, sub-regional and local levels.

A4-1.5 Market failures are imperfections in markets that prevent them from producing efficient outcomes. Interventions that increase the efficiency with which markets deliver desired outcomes can be said to have removed or mitigated a market failure. In a 3R context it is important to make a distinction between:

- Market failures which have a specific spatial dimension (i.e. they arise because of conditions in a specific area), and

- Market failures whose presence is not dependent upon location but whose impacts (also the impact of removal) is exacerbated by specific local conditions.
A4-1.6 The former (which might also be referred to as ‘micro-spatial market failures’) will generally constitute the rationale for 3R interventions. The latter will typically be market failures that are addressed by mainstream programmes. Removal of a micro-spatial market failure may improve economic efficiency in a specific area but not necessarily lead to improvements in national economic efficiency.

A4-1.7 The absence of a market is a very obvious case of market failure. However, the fact that an existing market does not produce a socially desired outcome is not itself a case of market failure. The market may be working efficiently but will not produce what is desired either because of the initial allocations or because the market produced outcome (however efficient) is not the objective.

A4-1.8 It is important to note that the real issue in terms of 3R interventions is not the presence of individual market failures but multiple market failures to which there is often no simple remedy. The outcome of multiple market failures may be very complex and thereby involve complex solutions.

Box 4-1.1 Illustration of interaction of multiple market failures
The fact that a region cannot rely on the market to bring forward the right types of business accommodation in the right quantities at the right time is a problem that is the result of the interaction of a wide number of market failures.

Path dependency is an issue, since there are limits to the way the existing accommodation stock can be adapted given the heritage of sites, structures and locations that have been built up in the past and which are geared to a different industrial landscape.

- Information and risk are issues as it may not be possible to rely on the private sector to bear the risk inherent in bringing forward particular types of units for which demand may not be well understood.

- Externalities may also be important in both positive and negative terms. The market may not bring forth the required outcome because of its inability to capture the external benefits of the development. Many sites may suffer from contamination and require remediation before they can be effectively utilised.

Clearly a wide range of market failures may have a role in this particular problem and a wide view of market failure is needed\(^\text{17}\), to understand the problem and to design an effective solution.

A4-1.9 It should also be noted that the consequences of particular cases of failure might be exacerbated where they occur in combination with other market failures than when they occur singly in different areas.

A4-1.10 Having recognised that the main issue is multiple, cumulative micro-spatial market failure, it remains to discuss and lay out some of the arguments which are commonly encountered. This should help those engaged in appraisal and evaluation to structure the arguments correctly and hence produce clearer and more specific objectives. The following represents a survey of the main 'market failure arguments' that are encountered, together with examples and issues that arise in employing them in appraisal and evaluation.

\(^{17}\) A narrow view might risk focusing on one element, such as the fact that the market is not interested in developing particular sites at all, and miss the wider issues associated with the type and timing of development.
• **Public goods arguments** – pure public goods are a theoretical construct and will not be encountered in 3R interventions. What is of interest are goods which have public good characteristics. These goods will typically not be provided by the market alone. However, the majority of public goods are provided either by institutions (government and its agencies) working with the market or replacing it. Hence the under provision of public goods will normally need to be looked at in the context of institutional failure. Often public good arguments in the context of 3R problems are framed in terms of institutions (for whatever reason) being incapable of providing the required level of public goods in specific areas.

| Investments in urban infrastructure (road, rail etc.) training, education, policing as well as general improvements in urban environment are all examples of public goods in which there is a clear system of public (and often some private) provision. These problems are the main rationale for the mainstream programmes (health, education etc.). In 3R cases the question is whether mainstream programmes are capable of providing the right level of provision and/or whether additional provision can overcome some other related market failure. |

• **Free rider arguments** – A specific case of the public good problem is the so-called free rider problem. This arises from the non-excludability of consumers when the public good is provided. In regeneration terms this can often be seen as leading to an inertia or lack of action. Where there could be multiple providers of an output with these characteristics each possible provider will prefer to wait in the prospect of being allowed to be a free (or easy) rider. Typical reactions to this are the development of partnership working and the use of contracting and negotiation.

| An example of a free rider problem arises in business areas where individual businesses may benefit from small improvements in the area’s amenity (e.g. tackling a build up of litter, graffiti). However, each individual business also knows that other business will also benefit and is reluctant to tackle it because benefits will accrue to other businesses (i.e. other business cannot be excluded). |

• **Positive externality arguments** – External effects may be positive or negative. They arise where there are positive or negative impacts of an action by one individual or group on another individual or group and where there is no compensation for this effect. The absence of a compensation mechanism means that there is no way for those impacted to influence the level of the effect encountered. Positive externalities are expected to be rare (in comparison to negative externalities), since there is a strong motive for the market and relevant institutions to adapt in order to internalise these externalities (since they are valued by those who receive them there may be ways of making them pay for the benefits they receive).

| Examples of positive externalities include: |

| Security – If one person fits and anti-theft device (for example in a car) this has the effect of reducing the average pay-off to potential thieves in an area – thereby reducing the frequency thieves would visit a particular area and the likelihood of all residents experiencing a theft. |

| Brownfield land – a developer that builds on brownfield land may contribute to regeneration through the removal of derelict or contaminated sites which pose risks of damage to health or the environment and/or which blight neighbouring areas. If a development takes place on brownfield land as opposed to Greenfield then there will also be the avoided loss of benefits associated with the Greenfield land. |

• **Negative externality arguments** – Negative externalities are expected to be far more prevalent than positive ones for the same reason as above (i.e. there is actually an incentive to avoid the externalities being internalised (at least by those causing the externality)).
An example of a negative externality is contaminated land. The contamination of the land has had negative effects on the area for which the original contaminator was not/can not be made to pay compensation (historic costs). Other examples include the so-called broken-window effect. An asset such as a house, which is allowed to deteriorate in close proximity to another house, will drag down the value of the neighbouring asset.

- **Imperfect information arguments** – Economic agents may have imperfect information about the **quality** of goods and services and their **prices**. Acquiring this information can impose additional costs and these costs can deter particular types of activity or lead to reliance on inferior types of information leading to sub-optimal choices.

Examples of imperfect information include:

Investor perceptions – which may act in the detriment of particular areas/groups because of the additional transaction costs of acquiring information relative to other areas or groups. Developers may not invest in particular areas because they cannot cost-effectively acquire the information on which to base more accurate decision. Employers may make similar sub-optimal choices because they misperceive the attributes of a particular section or sections of the labour market. Improved decision making may result from providing information to decision-makers at a lower cost.

Demonstration effects – there is often very limited information on new techniques which lead to their slow adoption. The cost of acquiring this information in individual cases may be very high. However, if the information is provided centrally (securing economics of scale) through demonstration projects this may lead to quicker adoption.

- **Scale economy/diseconomy arguments** – indivisibilities or ‘lumpiness’ may give rise to problems associated with the scale of a particular intervention required. Scale economies can give rise to barriers to entry into specific markets.

The investment required for a particular area may be of a scale that it cannot be tackled by any one organisation or may be too small in order to attract an investor.

Particular services (provided by the market or state) may have a minimum economic size which makes provision in particular places (deprived areas, rural areas etc.) uneconomic.

Monopoly employers may be able to hold down wages in particular areas (e.g. one industry towns).

- **Market and institutional rigidity arguments** – There may often be significant institutional rigidities that prevent markets undergoing normal adjustments.

The planning system is an example of a rigidity which operates at a local level.

- **Risk based arguments** – risk is closely connected to the issue of information. Generally markets cope with risk by discounting it into prices. However in many cases this will not be achievable because of rigidities in the market or related institutions.

An example of market failures cased by risk in regeneration areas is that of asymmetric risk. A landowner may decline to trade at a prevailing price because the cost of holding on to a portfolio of sites may be very low relative to a possible future substantial offer on a few of them (hope value). In this case the average expected value of the portfolio of sites may exceed the current offers and the landowner lacks sufficient information to know which sites should be released. He may be enticed to continue in this ambivalent state by any offers received and consequently development will be deferred.

- **Path-dependency/lock-in arguments** – Theoretically efficient markets are based on rapid and costless adjustments – which do not occur in the real world. Where adjustment is costly or difficult, lock-in usually results. Cases of true lock-in tend to be
rare because there are significant benefits to those that can find away around the lock-in problem. Path-dependency has an important temporal context in that in the long run, it will be overcome. However the long-run may be too long in the case of regeneration areas.

An example of lock-in is in areas that have received a shock from an extreme event such as the closure of a plant. Reacting to this shock can take a long time to occur because of lock-in problems and there may therefore be a rationale for measures to increase the pace of change.

Areas may historically have built up a large proportion of local authority housing which may not be attractive to in-migrants or may hinder mobility of existing residents.

- **Structural adjustment arguments** – the speed of adjustment may impose additional social and economic costs requiring government intervention to defray some of the negative outcomes

  Prolonged periods of economic inactivity and unemployment (due to the conditions in the market for example) can erode skills and human capital exacerbating problems of poverty and social inclusion. Different groups may be affected in different ways by such processes. Those on low incomes may find it difficult to move away from such areas leaving them unsustainable as higher income groups move out and are not replaced.

- **Co-ordination failure arguments** – co-ordination failure arises where there are a large number of actors whose actions are interdependent. It cannot be expected that each agent acting independently could come to the best solution.

  Examples of co-ordination failure are widespread. Co-ordination failures feature in the inability of areas to exploit the benefits of agglomeration and clustering. Similar arguments apply to problems of land assembly and in overcoming planning inertia.

**Other failures**

A4-1.11 Distributional and institutional failures are two other concepts in discussing the rationale for intervention. In a 3R context distributional issues tend to reflect both concerns about equity or perceptions of equity between places (e.g. North versus South) or city centres versus suburban areas and concerns about people including deprived and excluded portions of the population.

A4-1.12 It is often difficult to separate distributional issues from the economic rationale given the interrelationships. For example exclusion blocks the normal route out of poverty (e.g. in terms of having a poor education or coming from an area with a poor reputation). This deprives the economy of workers, customers, entrepreneurs and taxpayers and costs society in terms of higher unemployment, poor health and high crime rates.

A4-1.13 Government or institutional failure may arise for a number of reasons. Many of these are the same as the conditions which cause markets to fail, but operate in cases where institutions have evolved to undertake allocation of non-market goods. This includes imperfect information, externalities or the distortionary effects of taxation. Intervention may be designed to overcome these problems (for example in terms of granting stamp duty exemption in deprived areas) or instigating planning reforms.
Market failures and the supply side

A4-1.14 The demonstration that the removal of a market failure leads to a supply side improvement (and the subsequent measurement of the scale of the impact) presents considerable analytical difficulties but will often be key in ensuring that 3R interventions receive the funding they require. The focus should be on the way in which the removal of the market failure leads to a change in productivity that would not arise in the absence of the intervention.

A4-1.15 This can be approached in a variety of ways including microeconomic (or bottom up) and macroeconomic (top down) approaches and each will have specific advantages and disadvantages in particular circumstances 18.

A4-1.16 In building a case for a supply side improvement a number of further issues need to be considered:

- The ‘supply side’ can be considered at any geographic scale. However, if the supply side is considered at a scale smaller than the national one, there may be the additional need to demonstrate that:
  - The improvement is not as the result of a deterioration elsewhere and/or
  - Tackling a market failure elsewhere would not have produced additional gains (and therefore imply an opportunity cost.)
  - The removal of a market failure is necessary to bring forward a supply side improvement but it is not sufficient.
  - The case for a supply side improvement needs to be made separately from the case for a market failure removal.
  - Other persisting market failures may mean that the removal of one does not have the desired (or even expected) effect.

A4-1.17 While supply side improvements can often be demonstrated at a local/regional level through a micro-economic approach, demonstration of such effects at a national level is likely to require macro-modeling – because of the need to take into account macroeconomic adjustments or the opportunity costs of intervening in one area as opposed to another.

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18 A bottom up microeconomic approach may fail to account for all types of interaction between variables, where as a top down macroeconomic analysis may not be sufficiently sensitive to the scale of the impacts.
Criteria for defining interventions

A4-1.18 The following sections provide further guidance in terms of best practice criteria for defining interventions. These focus on the rational and objectives, boundaries and activities. Issues are highlighted for each of these dimensions and then an example of a checklist is developed to ensure that the definition of the intervention is clear.

RATIONALE AND OBJECTIVES

A4-1.19 The rationale and the objectives should be clearly based on market, institutional and distributional failures. They should be clearly defined for the different spatial levels of analysis. They should be clearly linked to the ultimate goal of achieving sustainable development for the target area/group and have a clear relationship to local community priorities.

A4-1.20 When developing market, institutional and distributional failure arguments, appraisers and evaluators should respect the following principles:

● Be clear whether the problem being described is an instance of market, distributional or institutional failure, as the necessary intervention (and the impact of an intervention) will differ according to the nature of the problem. This may be achieved by first defining in very clear terms the overall aim (efficiency or equity) and the spatial level at which these aims apply, and then clearly describing the nature of the problem in terms of its root causes (as opposed to symptoms).

● Be clear about the spatial extent of the failures, as this determines the impact of the intervention.

● If a complex of failures is present be clear about the linkages. Are the failures related or independent? Will the correction of one failure be prevented from having its intended effect because of the presence of another failure (which is perhaps outside of control)? For example, an intervention which increases the effective supply of land in an area may not achieve its desired objectives if developers still misperceive the returns in that area.

● When discussing distributional failures be clear about whose perspective informs the relevant social objective. What evidence is there that this is a widely shared objective?

BOUNDARIES OF ANALYSIS (PEOPLE AND PLACES)

A4-1.21 Target areas should be clearly defined in relation to the size of the market or institutional/social context whose failure the intervention is seeking to address. Explanation should be provided if the market being affected is smaller/larger than usual (e.g. as a result of segmentation). The key stakeholders and the winners and losers from the intervention should also be clearly identified.

A4-1.22 The appraisal/evaluation should consider the impacts over a wider area than the immediate target area if the latter contains non-target areas or groups that are nevertheless subject of other priorities. For example, an intervention that provides affordable homes for key workers may meet the priorities for its target area. However, if this results in the displacement of asylum seekers to neighbouring areas then this needs to be taken into account.
ACTIVITIES

A4-1.23 The activities put in place by the intervention should clearly target and remove a constraint to the achievement of local sustainability and/or close a gap left by other streams of intervention. At the same time, they should not be prevented by other constraints.

A4-1.24 If the complex of intervention activities in itself constitutes a necessary but insufficient condition for the achievement of sustainable development in the target area, the appraisers/evaluators should point out what other interventions are/were required.

A4-1.25 Sound evidence and robust analysis should support all of the above.

Box A4-1.2 Example of questions based on the best practice criteria for the definition of a 3R intervention

Rationale and objectives

• Is the aim of the intervention economic efficiency or a social objective or both and at what spatial level?

• Have specific market and/or distributional failures been identified? Is there any supporting evidence? Are there any compounding institutional failures?

• To what extent would existing and planned interventions address these failures? What is the gap that needs to be closed by the intervention?

• Are the objectives of the intervention clearly related to the need for targeting identified failures/closing gaps that prevent the achievement of local spatial sustainability?

• Is it possible to establish a link between the specific objectives of the intervention and the three aims of local sustainable development (economic, environmental, and social)?

Boundaries of analysis (people and places)

• Have the target area and groups been clearly indicated? Are they consistent with the objectives of the intervention and with the size of the underlying market/social failures?

• Is there any other priority area outside the immediate target area that might be affected by the intervention? If yes, is it worth expanding (widening) the boundaries of analysis to include these areas?

Activities

• Are the activities implemented by the intervention explicitly targeting specific failures or closing identified gaps that prevent an area from reaching sustainable development? Are they necessary to achieve the sustainability goal?

• Are they sufficient to achieve local sustainability? If not, which other actions might be needed, and by whom?

• Are the planned activities subject to overarching constraints (e.g., planning constraints) that might restrict the set of feasible options for intervention?
Summary

A4-1.26 This Appendix provides additional material on the concepts and criteria relevant to definitions of interventions. It outlines the role of market failures in defining the intervention rationale – identifying the main issue as the occurrence of cumulative, multiple micro-spatial market failures. It describes various types of market failure arguments and provides examples in a 3R context. It identifies the links between these failures and supply side improvements. Finally, it provides some best practice criteria for the definition of interventions so that the rationale, objectives and context are clear.

A4-1.27 The Appendix makes it clear that market failures are imperfections in markets that prevent them from providing efficient outcomes. Interventions that improve the efficiency through which desired outcomes are delivered can be said to have removed or mitigated a market failure. Key issues that need to be borne in mind are summarised below.

- The fact that a market does not produce a socially desired outcome is not necessarily a case of market failure. Nevertheless there may still be a rationale to intervene to address a social objective.

- It is typically multiple market failures that are the cause of an area’s identified problems.

- The consequences of a particular market failure may be exacerbated when it occurs in combination with another failure.

- The removal of a market failure does not necessarily imply a supply side improvement. The case for a supply side improvement needs to be made separately.

- In addition to market failures, interventions may be justified in terms of distributional concerns or in terms of institutional problems.
ANNEX 5
Defining alternatives/comparators

Summary

A full summary of this Annex is provided at the end of the section. In brief, this section provides guidance in relation to the second stage of the appraisal and evaluation cycle – defining alternative options (appraisal) and actions (evaluation). The section discusses general principles and then turns to 3R specific issues including the relationship between options/actions and rationale/objectives; defining the policy-off situation – the reference case and counterfactual; reflecting trade-offs in options/actions; partnership and procurement issues, interdependence and irreversibility; and recognition of constraints. Appendix 5.1 provides further detail on constraints.
Introduction

A5.1 The generation of alternatives/comparators lies at the heart of assessment activity. General best practice principles on option development in an ex-ante appraisal context can be found in the Green Book. The Green Book and sources of guidance on evaluation like the MEANS Collection also address the issue of a definition of a counterfactual and other alternative actions in an ex-post evaluation context. However, some of the characteristics of 3R interventions raise specific issues in relation to these crucial stages of the assessment cycle.

General principles

A5.2 The basic principle in defining a set of alternative intervention options/actions is to identify the range of feasible scenarios that illustrate the true trade-offs implied by the intervention in question.

A5.3 Chapter 5 of the Green Book provides generic guidance on the development and review of options for appraisal. It states the purpose of option appraisal as ‘to help develop a value for money solution that meets the objectives of government action’. It guides that assessors should develop a list of possible actions, including a do-minimum and consider a range of options which reflect the nature of the project.

A5.4 The key points are:

- The options examined should reflect the range of actions which government could possibly take to achieve the identified objectives including a do minimum;
- The range depends on the nature of the objectives. A wider range should be considered before short-listing for detailed appraisal;
- Where a number of expenditures or actions are linked together the proposal should be appraised as a whole.

A5.5 The Green Book draws a parallel between the comparison of alternative options at the ex-ante appraisal stage and the comparison of actual outturns against target outturns and alternative outturns at an evaluation stage.

A5.6 These are general issues which arise in the context of option appraisal and evaluation of all government interventions, but which do tend to raise specific questions in relation to 3R policies. There are also specific issues that arise in relation to 3R interventions, and these are discussed in more detail below.

Defining options/actions in a 3R context

A5.7 This section briefly summarises some of the problems encountered in developing the options for appraisal of 3R interventions and in defining a counterfactual for evaluation. Few of these problems are entirely specific to 3R interventions, but they do tend to exhibit a specific 3R dimension. Compared to appraisals in other contexts the appraisals of 3R interventions have historically fallen behind in terms of the attention paid to the option development phase, and it is therefore worth restating here some general best practice principles.
OPTIONS/ACTIONS AND RATIONALE

A5.8 Annex 3 illustrated how the rationale for 3R interventions should be defined in terms of the market, distributional and institutional failures, and consideration of the gaps left by the other projects/programmes and policies that are being implemented in the target area. At the appraisal stage, the assessment of the rationale should also be the starting point for identifying a long list of intervention options with the potential for addressing these failures and setting the area back on a sustainable path. Attention should be paid to whether an option provides a necessary or sufficient solution to the area’s problems. Where options involve necessary but not sufficient action, other necessary actions should be detailed.

A5.9 At an ex-post evaluation stage, the assessment of the rationale for intervention should focus on whether the objectives of the intervention option actually implemented are still relevant to the needs that had originally been envisaged, and on whether alternative actions could have been more relevant in this sense.

OPTIONS/ACTIONS AND THE EVIDENCE BASE

A5.10 Ideally, an analysis of the evidence base and the results of the evaluation of previous interventions should inform the choice of alternative assessment scenarios. This helps identify those options that have the potential for delivering the desired outcomes.

A5.11 In practice, the evidence base in 3R contexts is often limited. Using the results of past intervention strategies in different areas to predict/estimate outcomes in the target area can be problematic because of the importance of context-related variables. Nonetheless, taking a broad look at appraisal and evaluation evidence can help build up composite pictures of how particular processes work in certain contexts. Programme logic and theory of change type approaches can also be useful here (see Annex 7).

DEFINING A REFERENCE CASE FOR APPRAISAL

A5.12 In 3R contexts it is rarely realistic that nothing happens, or that there is no change in the absence of intervention. The variables that affect local sustainable development are numerous and are constantly changing and it is important that these processes are given full consideration. Otherwise it is not possible to make a proper analysis leading to the set of options which fully recognise the trade-offs associated with an intervention.

A5.13 The specific factors that need to be considered to construct a reference case will vary according to the specific context of the intervention. Typically however the following variables will need to be looked at with reference to the target area:

- Changes in social, economic and environmental variables under a policy-off scenario (projected trends from the end year of baseline indicators);

- Impacts of investment or actions that the partners in the proposed 3R intervention are required to carry out in any case under existing legal/statutory constraints;

- Impacts of existing investments or actions by other public sector/private sector organisations;
• Planned/in the pipeline investments or actions by public sector/private sector organisations (in order of likelihood of implementation);

• Reactions of other parties to the actions being considered, but avoiding ‘tit for tat’ definition of the reference case.

A5.14 Planning and strategy documents (together with supporting documentation) of different organisations will therefore be an important source of information with which to develop a reference case.

A5.15 The reference case may represent the minimum legal/statutory course of action (which may include a do-nothing if this is possible) or the minimum intervention capable of achieving the stated objectives. In some cases a ‘do-minimum’ to comply with statutory commitments may not be well defined or involve a high level of intervention compared to any options. In such cases it may be necessary to have a range of do-minimum options reflecting possible courses of action. The fundamental purpose of the reference case is to compare more interventionist options. It is worth re-stating that such options should be feasible (i.e. no option should be presented which clearly could not be achieved for whatever reason).

Box A5.1 How should the planning framework influence the reference case?

To realise any hard-end or even soft-end use, planning permission must be sought from the relevant authorities. Due to this pivotal role the polices, decisions and views of the planning authorities are very important in option development – for example, there is little mileage in short-listing a residential option when the authorities have made it absolutely clear that housing will not be entertained under any circumstances. That said, how far should the planning framework influence the advancement of options and, crucially, how should it shape, if at all, the reference case?

Clearly, the planning framework in which the site sits is significant. An ‘allocated’ site, with the full support of the planning authorities is, assuming all other things being constant, more likely to come forward than an identical unallocated site which does not have the support of the planners. Though this will obviously have some bearing on option selection, as noted above, the impact on the reference case is subtler. The key point to emphasise is that just because a site has a planning allocation that, in itself, does not warrant this allocation becoming the reference case. The rationale behind this is quite straightforward: just because the land has a planning allocation/permission does not compel any body to bring this site forward in this use.

A5.16 The reference case should clearly distinguish what is expected to happen at each spatial area: site, locality, sub-region etc. Care should be taken to avoid mis-specification of the reference case by focussing on a narrower spatial scale than the area of interest.

A5.17 Often 3R interventions may involve impacts over very long timescales and it may be important to consider possible developments in the ‘state of the world’ for example long term demographic changes, technology and other fundamental shifts. Help in considering such changes is provided by various ‘Futures’ resources such as those provided by the European Commission relating to regional policy (http://foren.jrc.es/).

19 A common problem arises where a reference case is described solely in terms of what is expected to happen to a particular site, whereas the impacts occur more widely (e.g. in the locality). Such situations are often presented as ‘do nothing = nothing happens’ which may or may not be true of the site but is very unlikely to be true of the wider target area.
**DEFINING A COUNTERFACTUAL FOR EVALUATION**

A5.18 The challenge in defining a counterfactual for evaluation is similar to that of defining a reference case in appraisal. An appraisal looks forward to what is likely to happen under different options on the basis of predictions from existing data. An evaluation looks backwards to estimate what might have happened by attempting to gather otherwise missing data and making various adjustments to try to offset the impact of what was done as well as trying to strip out all other contextual changes. The amount of effort in defining the counterfactual will depend upon the circumstances. However, in all cases the process of defining the counterfactual should be clearly described and the implications for the evaluation recognised. In all cases, the reliability of the available evidence should be considered carefully. In order to minimise bias and the effects of measurement error; it may often be sensible to rely on a variety of sources of information (which can be compared to assess internal consistency) in constructing the counterfactual and to consider a number of scenarios reflecting alternative hypotheses.

A5.19 Given the variety of socio-economic factors that are addressed by 3R interventions, a number of different methodologies are typically used for defining counterfactuals in the evaluation of these interventions (see Box A5.2). There is a clear preference for using an approach which gives the most rigorous results and generally this will be randomized control trials. However, there are numerous limitations on such approaches in the 3R field for practical and ethical reasons.

**Box A5.2 Typical approaches to defining a counterfactual**

A counterfactual is a hypothetical alternative scenario against which evaluators compare outcomes of a policy. Invariably the counterfactual scenario that evaluators choose to compare intervention outcomes against is the ‘policy off’ scenario – i.e. what would have happened had the intervention not taken place. The estimation of counterfactuals is a core activity in most policy and programme evaluations because it helps evaluators to identify the actual impact of an intervention. Some of the more common approaches include (often, evaluations combine approaches):

- Before/after comparisons – simply comparing the pre- and post-situations;
- Longitudinal/interrupted time-series analysis – measuring over a prolonged period before and after an intervention to establish a better idea of impact;
- Qualitative retrospective analysis – estimating the impact of an initiative by asking key players and those affected what might have happened otherwise;
- Randomised control trials (experimental approach) – employing scientific controls to enable pre/post comparisons between randomly assigned treated and untreated groups;
- Matched comparison groups – comparing policy on/off outcomes for closely matched individuals;
- Matched area comparisons – comparing policy on/off outcomes for closely matched areas;
- Modelling – comparing outturns with counterfactuals modelled at the time of the original appraisal; or updating models/developing new models that seek retrospectively to reflect what might have happened otherwise.

A good overview of some key techniques is at: [http://www.dwp.gov.uk/asd/asd5/WP2.pdf](http://www.dwp.gov.uk/asd/asd5/WP2.pdf)
A5.20 Pending the availability of suitable data, the use of micro-econometric models (in particular, of time-series analysis) can also be contemplated. However, when interventions are targeted at the small area level, the lack of data of sufficient quality typically prevents the use of formal modelling approaches. In these cases, survey-based methods are likely to play a major role. The MEANS collection provides a range of guidance on tools for data capture.

TRADE-OFFS AND CHOICE OF OPTIONS/Actions

A5.21 At each level of intervention (project, programme or policy) the range of options/actions selected for assessment should reflect the true trade-offs implied by the specific intervention in question. For example the fact that an action needs to take place may have been justified at the programme level – the project assessment could then concentrate on different options for implementing the action.

A5.22 This general best practice principle applies equally to appraisal and evaluation. Most evaluations tend only to focus on the comparison between the intervention actually implemented and the ‘policy off’ scenario, but this is often not adequate. Often it will be necessary to consider a better than implementation action to determine if more could have been achieved and at what cost.

A5.23 The scope of the trade-offs at stake tends to change slightly in the move from the higher policy level to the project level, the focus switching progressively from the opportunity cost of public expenditure to alternative ways of delivering the same specific objectives.

GENERAL TRADE-OFFS

A5.24 General trade-offs that should always be assessed in appraisal and in evaluation are the following: concern about whether more could be obtained by using different policy instruments; concern about whether the same results could be achieved at a lesser cost; concern about whether better results could be achieved at the same cost; concern over the expected pay-off given differences in the risk of particular options.

A5.25 In addition for 3R interventions special attention should be paid to targeting, timing and intensity trade-offs.

TARGETING

A5.26 3R interventions are typically about directing change to particular areas or an area’s social groups. In many 3R contexts the organisation concerned will have some scope to choose the specific degree of spatial and group targeting for the intervention within the limits set by their institutional remit. For instance, having decided that training and skills development activities are a key priority for the area, a local regeneration partnership might decide to target the intervention at specific disadvantaged wards or housing estates or, alternatively, to implement a city-wide programme. Similarly, the partnership might decide to focus on workers of a particular sector. In terms of options/actions this suggests the consideration of a range of alternative scenarios differing in the degree of targeting.
INTENSITY/QUALITY OF INTERVENTION

A5.27 Often the main issue will be associated with the intensity/quality of the activities being considered. Interventions operated at higher levels of intensity may involve higher costs but deliver more and may therefore need specific appraisal.

TIMING

A5.28 The types of market and social failures addressed by 3R interventions are typically persistent. They may occur as a result of an area entering a self-reinforcing spiral of decline, which the area itself does not have the ability to correct. However, in many circumstances the changes delivered by 3R interventions might occur anyway, though to a different and potentially unacceptable or uncertain time scale. In other words, 3R interventions may deliver outcomes that would not be delivered at all without intervention or outcomes that are brought forward in time.

A5.29 It is also worth considering whether the quality of intervention might improve over time, as more evidence of what works becomes available and the actors of regeneration intervention gain a better understanding of the issues they are willing to tackle. As an example one might think of intervention aimed at easing the adjustment of a certain target area following the closure or the relocation of a plant that used to be a major local employer. In terms of options/actions this suggests the consideration of a range of alternative scenarios differing for the timing of intervention.

PARTNERSHIP AND CONSULTATION-BASED APPROACHES AND OPTION DEVELOPMENT

A5.30 Partnership and consultation-based approaches have become an increasingly common feature of 3R interventions and should also be reflected in appraisal and evaluation. In these circumstances, the ‘preferred option’ for appraisal often emerges as the result of a participatory and deliberative process involving all the local stakeholders, who then play a role in the delivery of the intervention.

A5.31 In such cases it is important that the process that led to the identification of a preferred option by the partnership is transparently documented in the appraisal report. There will be a loss of rigour in the appraisal process if alternative options are merely generated to provide support for a preferred option. It will also generally be useful for the preferred option to be unbundled (see Box A5.3) into different components (for which alternatives may be available/have been considered). These components can then be examined in more detail, alternatives considered before reconstruction back into the preferred option. Such an approach can form the basis of a transparent documentation of the option development.
Box A5.3 Example of deconstruction/reconstruction

It is worth recognising that when an appraisal takes place there is often a specific option which is being promoted at the preferred way forward. Often such preferred options will have been developed over several years in a participatory and deliberative process involving various stakeholders. One such case is illustrated by the REDI project (Regional E-Business Development Initiative).

The aim of the REDI initiative is to support SMEs (mainly firms with between 1-9 employees) across each of the six sub-regions of the West Midlands to capitalise on the opportunities presented by e-business. The West Midlands is lagging behind the majority of the UK regions on a number of key e-business indicators. These include the proportion of businesses that are connected, the proportion of businesses with access to the internet, the proportion of businesses with a website and the proportion of businesses with external mail. There is also evidence that the position of the West Midlands is deteriorating in respect of these indicators. The REDI initiative focuses on reversing this trend.

A large number of partners have been involved in the development of the REDI initiative over a period of 22 months including:

- Advatage West Midlands,
- Six sub-regional Business Links,
- UK Online for Business
- The Small Business Service.

The lead option has been developed over this period through a process of negotiation between the partners involved. As part of the appraisal process it was recognised that it was important to (a) unbundle the lead option to ensure that it represented value for money and (b) provide a transparent explanation of the way in which the preferred option had been developed. This process identified the key areas of negotiation and clearly documented how these had been resolved.

- Scope of ICT supplier involvement – considering how to engage with and deliver e-business services to SMEs. The original debate contrasted direct engagement with engagement through ICT suppliers. In the event ‘leverage’ approach using Business Link advisors and a trusted cohort of accredited ICT suppliers was adopted.

- The degree of focus on SMEs – discussions centred around the size and sectoral composition of the SMEs to be targeted. Micro-businesses were eventually selected for specific focus given the degree of market failure in this specific sector.

- Alternative management arrangements – given the range of partners issues of delivery were clearly important and discussions ranged over a number of possible formats from individual Business Links delivering separate components to a single BL delivering all parts.

At the time of appraisal this unbundling identified a number of ‘options’ within the preferred option which had previously been considered by the group in coming to the preferred option. The unbundling of these options allowed the appraisal to present a coherent ‘options appraisal’ in which alternatives for the different components were analysed and the process for developing the preferred option clearly elucidated. The components could then be reconstructed into the preferred option so that it could be compared to the reference case and other alternatives.

FUNDING AND PROCUREMENT/DELIVERY OPTIONS

A5.32 3R interventions often involve private finance alongside public funding. As well as providing finance the private sector may also be involved in procurement and delivery of outcomes. Usually it will be better to decide on the type and scale of intervention and then to decide on how it should be procured/delivered (public action, market stimulus, joint venture etc.). However, often it will be necessary to consider procurement and intervention
options together. In such cases it may not be possible to separate the options assessment from the procurement/delivery assessment because procurement/delivery itself has an impact upon the viability of outcomes delivered and costs of the options. Rather than undertake the option and procurement assessments one after the other it will be necessary to consider intervention options and procurement simultaneously. This will minimise the risk of finding lead options that are redundant at the procurement stage because the preferred procurement route is not available. Care should be taken to ensure that conflicts of interest (e.g. from suppliers) do not distort the appraisal process.

**INTERDEPENDENCE AND OPTION DEVELOPMENT**

A5.33 The Green Book addresses the impact of interdependence on option development. In particular, it recognises that ‘an option may affect, or be affected by, other expenditure across the public sector (for example, where its outputs or costs depend upon another project or the implementation of a related policy in another department).’ It guides that ‘where a number of expenditure or activities are linked together and the costs or benefits are mutually dependent, the proposal must be justified and, accordingly, must be appraised, as a whole (Green Book Para 5.5).’ At the same time however, the Green Book recommends that the contribution of the component parts of each proposal to achieving overall value for money is taken into account.

A5.34 In a 3R context, the multiplicity of actors and organisations involved in the delivery of interventions and the holistic nature of the underlying problems make the issue of interdependency very important. At the same time these very factors typically set a limit to the range of interdependent expenditure on which the partners in a regeneration intervention have effective control and can therefore explicitly assess as part of an intervention option. Practically there are limits to the mutually dependant activities ongoing in an area and hence the package that can effectively be appraised. Nonetheless, interdependencies should be recognised and their impact should be considered in the assessment of additionality (see Appendix 7.3). Assessments should be clear about the incremental action being proposed by a specific option and the assumptions made about related interdependent actions. The definition of contingent or strategy options can also be helpful here (see BoxA5.4).

**Box A5.4 Defining a contingent option**

Where the outcome of an intervention depends on the action of a body/group that is outside the control of those delivering the appraisal option, it can be useful to define strategic options which define actions in contingent terms related to possible outcomes.

A common example is where an outcome from a regeneration project depends upon the provision of transport infrastructure. A contingent option would be one in which the uncertainty associated with provision is recognised and actions are defined in terms of a strategy for dealing with possible outcomes (i.e. if A happens, then B, otherwise C).

**IRREVERSIBILITY AND OPTION DEVELOPMENT**

A5.35 The Green Book recommends that account should be taken of ‘irreversibility’, which applies when the selection of an option would rule out important, later investment opportunities, or would use resources now that might subsequently be preferred for a more important later use. The appraisal of different proposals should not ignore the option value of avoiding or delaying irreversible actions and the benefits of ensuring flexibility to respond to future changed conditions.
A5.36 The need to take irreversibility into account can be particularly relevant to option development in 3R interventions, as the latter often affects the built/natural environment in ways that are impossible or otherwise difficult to reverse. For example in land and property based regeneration projects choosing a flexible build option may involve a higher cost but also an option value in responding to changing market conditions.

A5.37 Section 5.65 to 5.75 of the Green Book suggests the use of Decision Trees and Scenario Analysis as a way of assessing options in a context characterised by risk and irreversibility. These techniques allow for the explicit inclusion of the ‘option value’ of postponed action into the appraisal.

THE ROLE OF CONSTRAINTS IN OPTION SHORT-LISTING

A5.38 The short-listing stage in appraisal should generate an informed view of the viability of government intervention in the specific context. In particular, the short-list (of options for appraisal) should be developed in a way that excludes only those options which are dominated by other options (i.e., they are poorer versions of the latter on all counts) or are clearly unsupportable because of existing real constraints (e.g., planning or physical barriers).

A5.39 Real constraints are certainly relevant to the 3R context as many 3R schemes involve intervention in the built/natural environment. In addition to these constraints, legal/statutory constraints, market constraints and political constraints can also play an important role in options short-listing for 3R appraisal because of the specific characteristics of these types of intervention (see Appendix 5.1).

A5.40 When eliminating options at the short-listing stage because of constraints or on other grounds, the reasons for this decision should always be explicitly and transparently discussed in the appraisal report.

Summary

A5.41 This Annex has provided guidance in relation to how assessments should go about defining the alternatives/comparators. The key points are summarised below.

A5.42 The basic principle in defining a set of alternative options/actions is to identify the range of feasible scenarios that illustrate the true trade-offs implied by an intervention. This is as true of evaluation as it is of appraisal although the focus, methods and approaches are different.

A5.43 In appraisal, the assessment of the rationale should be the starting point for identifying the long-list of intervention options recognising whether particular options are necessary or sufficient to solve the area’s problems. In evaluation, the focus is on identifying what did happen in the context of what would have happened in the absence of the intervention. Where possible, however, consideration should be given to whether there were alternative actions, which if pursued could have delivered more than the implemented action. Clear links should be established between the definition of these alternatives/comparators and the evidence base.

A5.44 A special case of the alternative/comparator is the ‘intervention off’ situation. In appraisal this is termed the reference case. In evaluation the term used is the ‘counterfactual’. Both
serve the same purpose by helping to identify the incremental impacts of the alternative options/actions.

A5.45 In 3R interventions a baseline (i.e. a snapshot in time) is not a sufficient basis for the ‘intervention-off’ case. It is generally unrealistic to assume ‘nothing happens’. The variables that affect spatial sustainable development are constantly changing and these processes need to be given full consideration. Having said that there are clearly diminishing returns in the amount of detail contained in a reference case and a principle of proportionality needs to be applied.

A5.46 The counterfactual serves the same purpose as a reference case but in an evaluation context. An appraisal looks forward to what is likely to happen in the reference case given predictions from existing data. An evaluation looks backwards to estimate what might have happened by attempting to gather otherwise missing data, making various adjustments to try to offset the impact of what was done and trying to strip out all other contextual changes.

A5.47 Options/actions should be defined so they give a clear picture of the trade-offs implied by an intervention. General tradeoffs to be considered should include whether more could be obtained using a different approach? Whether the same results could be achieved at less cost? Whether better results could be obtained at reduced cost? and whether the expected pay-off is adequate given the risk of particular options. In addition in 3R interventions specific attention should be paid to alternatives in terms of targeting particular areas or groups and in terms of the intervention’s timing.

A5.48 Due to the way that 3R interventions are delivered preferred options might often be identified before alternative options have been appraised. Often these emerge from participatory and deliberative processes involving local stakeholders and partnerships. In such cases it can appear a waste of time to consider alternatives and there can be pressure to define alternatives which make the preferred option look good. In such cases transparency in the appraisal documentation regarding the development of the preferred option is essential. Such transparency can be gained by unbundling the preferred option into component parts (for which alternatives may be available or have been considered) and then reconstructing it, having discussed alternatives.

A5.49 Usually it will be better to decide on the type and scale of intervention and then on how it should be procured/delivered. However, in many cases in 3R interventions it will be necessary to consider procurement and delivery simultaneously because procurement impacts on viability, outcomes delivered and cost.

A5.50 Interdependence and irreversibility may be a feature of 3R interventions and should be considered. Often the outcomes associated with an option will depend critically on some condition being met that is outside the control of the project in question. In such cases options should be defined so as to be contingent on the outcome of the outstanding issue. 3R interventions may often involve irreversible effects and may require analysis using decision trees, scenario analysis or real option theory.

A5.51 A wide range of constraints may affect the type of options that can be considered in a 3R context. Consideration should therefore be given to the full range of constraints: physical, legal/statutory, competitive, market-based, political and institutional. When eliminating options because of constraints or on other grounds, the reasons for this decision should always be explicitly and transparently discussed in the appraisal. Staying within constraints should not be presented as an objective of the intervention.
APPENDIX 5.1
Potential constraints in short-listing options for 3R intervention

Introduction

A5-1.1 The main text identified the importance of assessing the constraints that can typically emerge at the options short-listing stage in the appraisal of 3R interventions. Constraints are also relevant for evaluation as they are components of the counterfactual and need to be considered in terms of how they conditioned the outcomes delivered. This appendix addresses this issue in greater detail by discussing the following types of constraints:

- Physical constraints;
- Legal/statutory constraints;
- Competition and other market constraints;
- Political constraints.

Physical constraints

A5-1.2 When 3R schemes involve intervention on the natural/built environment, some of the options initially flagged up in the long list might have to be excluded in the short-listing phase because of factors such as:

- Incompatibility with the planning framework (e.g., Regional Planning Guidance, Urban Development Plan, etc.) when the LAs involved are not willing to consider alterations to the latter;

- Incompatibility with heritage constraints (e.g., conservation areas, listed buildings, proximity to main heritage sites) or environmental constraints (e.g., SSSIs, biodiversity areas, etc.) when forms of compensation are not an option;

- Engineering constraints (e.g., land subsidence preventing hard uses of a brownfield site, scale of proposals under a certain option triggering the need for off-site highways works for which no budget is available).
Legal/statutory constraints

A5-1.3 Legal and statutory constraints can narrow the range of options for intervention in every policy context. Facing prosecution as a consequence of a certain course of action (or inaction) would clearly not be an acceptable option for a public organisation; neither would be defaulting on statutory commitments towards funding departments.

A5-1.4 These issues can be particularly important in the 3R field because of the complex nature of the problem and the often-complex relationships between different organisations in charge of delivery, which mean that intervention often takes place against a complex legal and statutory background.

A5-1.5 For instance in terms of legal constraints, the health & safety issues associated with derelict/contaminated sites, can often determine the acceptable do-minimum intervention option for the public organisation. Similarly in terms of statutory obligations the programmed capital and revenue requirements that Central Government sets for the RDAs can affect the short-listing of options involving real-estate investments.

A5-1.6 It is worth stressing that meeting legal and statutory obligations should not be presented as an objective for intervention but more properly as a component of the reference case and as a constraint on the options that can be brought to the final appraisal stage.

Competition and other market constraints

A5-1.7 3R activities often take place ‘close to the market’; they are ingrained in market mechanisms. This means that market conditions and competition can impose constraints on the range of options being considered. For instance one of these constraints is competition, and the related issue of State Aids (see Box). Also, some options might be excluded from the shortlist when the demand for their deliverables is clearly not supported by market conditions (although perhaps they should not even be included in the long-list unless the rationale for intervention is clearly established on a thorough baselining exercise and gap analysis).

Box A5-1.1 State aids
Public intervention in the regeneration area can be constrained by EC State aid discipline as laid out by Article 87(1) of the Treaty of Rome.

Commission guidelines make it possible for Regional Development Agencies (RDAs) and English Partnerships (EP) to support private sector initial investment in a wide range of land and property regeneration projects which could not proceed without public sector support. Financial assistance must be appraised and delivered within the framework established for the Single Programme to ensure propriety and value for money.

Assistance may be given in any of a number of forms and a range of schemes have so far been notified:

• direct development;
• speculative gap funding;
• non-speculative gap funding;
• community regeneration;
Political constraint

A5-1.8 It was stressed in previous sections that holistic 3R interventions should typically be crosscutting in nature, interacting with the single-issue policies, programmes and projects that affect the target area and closing any gaps left by the latter.

A5-1.9 When proposals for 3R interventions overlap with other policy areas, it is important to make sure that they are consistent with the strategic framework that characterises the latter. For instance, a scheme that includes the re-launch of a small regional airport will clearly need to be checked against the National Aviation Strategy. Indeed, some of the intervention options flagged up initially might have to be dropped or modified at the short-listing stage if they are patently at odds with the strategic objectives set by other policies.

A5-1.10 However, the role played by political constraints in the short-listing of options for 3R interventions is not only associated with the top-down issue of consistency with central Government policies. The key role of effective partnership in ensuring the success of 3R intervention means that those options that do not respond to the needs expressed by local organisations in the private, public and voluntary sector and by local people will not be capable of delivering the intended outcomes. The options short-listed for the full appraisal should also meet local needs and aspirations.
ANNEX 6
Identifying and measuring inputs (costs)

Summary

A full summary is provided at the end of this annex but in brief the annex covers issues related to the identification and measurement of the costs of an intervention. Generic assessment issues, following guidance from the Treasury are set out. Supplementary issues, raised specifically in the context of 3R interventions are then discussed. These include: financial versus economic analysis of costs, valuation of voluntary costs and in-kind contributions, additional guidance on net costs, when and at what rate to discount costs, apportionment of costs between organisations, and the treatment of sunk costs.

Route Map of Annexes
Introduction

A6.1 This Chapter relates to the third stage of the appraisal and evaluation cycle and is about the identification and measurement of inputs – i.e. what is put into interventions (or given up) in order to secure the outcomes achieved. Generally these will be financial costs but other non-financial inputs (resources) are also relevant.

A6.2 In general terms the assessment of the costs of an intervention should follow the principles laid down in the Green Book. Section 5.14 to 5.23 of the Green Book set out the general principles to aid in cost estimation. The main points of this guidance are:

- Costs should be expressed in terms of relevant opportunity costs;
- Costs of goods and services that have already been incurred and are irrevocable should be ignored in an appraisal;
- It can be useful to distinguish between fixed, variable, semi-variable and step costs and between direct and indirect costs;
- Cost estimation can be difficult and it will normally involve input from accountants, economists and other specialists, depending on the type of appraisal;
- Depreciation and capital charges should not be included in an appraisal;
- Residual values should be included;
- Contingent liabilities—that is commitments to future expenditure if certain events occur should be appraised.

A6.3 Green Book sections 5.30 to 5.79 provide guidance on a number of other topics:

- Where costs are identified which are difficult to value and where it may be necessary to adopt specific valuation techniques (5.30 to 5.31);
- Undertaking adjustments to costs including adjusting for relative prices (5.32 to 5.47);
- Discounting (5.48 to 5.54);
- Adjusting for tax differences between options (5.55 to 5.56);
- Adjusting for risk (including optimism bias) (5.57 to 5.67); and
- Considering unvalued costs (5.76 to 5.79).

A6.4 Special considerations apply to land and buildings which are discussed in Annex 3 of the Green Book.
Specific issues relevant to 3R interventions

FINANCIAL VERSUS ECONOMIC ANALYSIS OF COSTS

A6.5 A fundamental distinction here is the difference between costs falling to the government (which will usually be funded from tax revenues) and costs falling to other organisations. This is particularly important in the context of 3R interventions because of the variety of organisations involved, the blurring of the line between public and private sectors and the importance of the voluntary sector.

Box A6.1 Institutions and organisations incurring costs to deliver 3R outcomes

The move to partnership delivery of regional and regeneration policies which occurred in the 1990s has created a situation in which for most activities there are a broad range of types of organisation incurring a variety of types of costs. A Local Strategic Partnership (LSP) for example will have a membership which includes a variety of public, private, community and voluntary sectors:

Public sector – local authorities, Local Learning and Skills Agencies, Small Business Service, Registered Social Landlords, Partner Agencies such as Countryside Agency, Regional Development Agencies, Government Offices.

Private Sector – local enterprises, business brokers, social enterprises (co-operatives, social firms, mutuals, fair trade organisations, trading arms of charities and community businesses), local employers

Community and voluntary sector – community service providers (charities etc.) as well as local interest representatives.

In the appraisal and evaluation of projects, programmes and policies it is important to be clear about the status of different organisations and the relevant concepts of costs that apply. Many of these organisations are involved in the delivery of 3R outcomes using funds raised from a variety of sources and as such will report costs in a variety of formats – depending on the requirements of the specific funding sources. Such financing relationships (funding cocktails) entail considerable responsibility in terms of the transparent accounting for costs.

A6.6 As 3R interventions take place close to the market, and often with a market lead in delivery, it is common for there to be a need for both a financial and an economic appraisal. The fact that there may be a wide range of interested parties in 3R intervention contexts can make it difficult to determine which approach is needed (and indeed who should be concerned with what results from the assessments)\(^\text{20}\). In contrast to many other areas of public sector choice, it is not a simple a question of public versus private sector as there are in addition:

- Public sector organisations operating in private markets (e.g. English Partnerships),
- Private sector organisations with public perspectives (e.g. the British Waterways P4 Joint venture), including so-called social enterprises (co-operatives, social firms, mutuals, fair trade organisations, trading arms of charities and community businesses).
- Voluntary and community led organisations.

\(^\text{20}\) For example a particular intervention may draw funds from the public sector, private sector and the voluntary sector and even from abroad. An economic analysis sets out to answer the question is the use of all these resources in the public interest. Each of the funders may also be interested from their own perspective – making a clear distinction between the economic case and the financial case to various parties is therefore essential.
A6.7 As well as different representatives of the above operating at different geographic levels, all public sector organisations must exercise at least as much financial control as a private firm.

A6.8 It is not as simple, therefore, as saying that public sector decisions should be guided by an economic appraisal, while the private sector should be guided by a financial appraisal. In practice both types of appraisal will need to be considered by the public sector and it is critical not to confuse the two approaches.

A6.9 In light of this it is expected that most 3R assessments will be undertaken using both a financial and an economic analysis, as necessary, but clearly distinguishing the purposes of the analysis and the results provided (see Appendix 6.1 for the principles to be followed in preparing a financial and economic analysis).

A6.10 A key role of financial analysis is often to help decide upon the financing of an intervention. This type of analysis can help in differentiating between different procurement options. This is a complex area and one where the advice of finance experts and accountants will often be required. A useful starting point however may be the European Commission's Guide to Financial Engineering Techniques (in the context of regional policy).

**VALUATION OF VOLUNTARY COSTS AND IN-KIND CONTRIBUTIONS**

A6.11 The increasingly important role played by voluntary, community and charitable organisations in 3R interventions raises several issues in relation to cost assessment. Account needs to be taken of the importance of non-financial costs such as gifts and contributions in kind as well as the costs incurred in the voluntary sector. This is important for two reasons: firstly there is the general need to properly account for the (opportunity) costs of interventions within the economic appraisal. Secondly, often funding from other bodies depends partly on contributions in-kind from parties involved and valuing these in-kind contributions is therefore necessary.

A6.12 Where projects receive goods and services free of charge through charitable donations, gifts, and contributions in kind, unpaid voluntary labour etc. these activities are not free of charge in an economic sense and account should be taken of them. At present there is limited practical guidance available, but there are a number of approaches. A fundamental distinction can be drawn between approaches that are input based and those that are output based. The following is an example in relation to labour, however, this can be generalised to non-labour contributions.

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**Box A6.2 Valuation of in kind contributions – example of unpaid labour**

Anheier et al (2001) distinguishes between output and input based methods for valuing unpaid work. **Output based valuations** attempt to place a value on the output of the unpaid labour by comparison to the market price in equivalent markets. **Input based valuation** attempts valuation by imputing a cost on the input either on the basis of the replacement cost or on the basis of the opportunity cost.

Output based valuations tend to be complex and have rarely been attempted in practice as they require fairly detailed analysis of what it is that volunteers produce – this can entail significant measurement difficulties. Input based valuations on the basis of opportunity costs tend to be criticised because they value the same activity differently depending on whom performs it. They also assume that the trade off is between unpaid work and paid work rather than between unpaid work and leisure time. Input based valuations based on replacement cost are much more common. They are based on the costs that would arise if the work done voluntarily were to be sourced from the paid labour market. The main issue is in the choice of the wage level for the
replacement cost. A ‘specialist’ approach attempts to place a value on the basis of the work of equivalent specialists (e.g. garden work is equated to the work of gardeners). A ‘generalist’ approach considers volunteers as multi-skilled workers, which may reflect the nature of volunteer work better.


A6.13 It is likely that the approach adopted will differ given the nature of the assessment and the availability of data. However, in all circumstances assessments should be clear about the method chosen, the rationale and the implications.

A6.14 In some cases it may be useful to consider voluntary contributions as a benefit arising to the donor or society in general. This is a conceptually challenging area and is likely to require bespoke stated or revealed preference studies, the design of which should include economists and other specialists.

ADDITIONAL GUIDANCE ON NET COSTS

A6.15 As a general principle the focus of the assessment of costs should be the net costs to the exchequer – as this makes it easier to compare projects that produce outputs that affect the level of exchequer funding. However, net costs are particularly difficult to define in terms of some 3R interventions because these are often aimed at raising the level of economic activity in specific areas or improving the status of particular groups. The level of economic activity itself may have consequences for the level of exchequer funding21.

A6.16 Two principle issues arise in terms of the treatment of receipts of asset sales and in accounting for changes in the level of tax receipts and tax funded expenditures.

A6.17 Past guidance (EGRUP, 1995) has stated that receipts from asset sales by the public sector should not be set off against gross expenditure, but should be recorded as a separate memorandum item. The rationale for this involves arguments around the potential for double counting, the possibility of land-value displacement and uncertainty surrounding the level of future land and asset receipts. The exclusion of asset sales, however, can give a very misleading picture as regards the true exchequer cost of the intervention.

A6.18 Past guidance did not distinguish sufficiently between the treatment of asset sales as a negative exchequer cost and the use of asset sale receipts as a measure of ‘development benefit’. Issues associated with the valuation of increases in asset values as a result of an intervention are discussed in Annex 7. In most cases, however, costs should be calculated on a net basis after the taking account of receipts to the exchequer from asset sales. Thus asset sales are considered to be a negative exchequer cost as opposed to a non-exchequer benefit. As future receipts may however be uncertain and dependent upon future market conditions it is good practice to report the gross public sector cost as well as the anticipated net public sector cost. In such cases the gross public sector cost can be taken as an additional indicator of the public sector cost exposure from the option.

21 This guidance is given with full recognition of the issues surrounding the uncertainty of receipts in land and property projects, in general reporting gross and net costs is likely to be necessary to maintain transparency in the assessment.
A6.19 A separate issue from that regarding the adjustment of costs and benefits for taxes is the issue of changes in the level of tax and tax funded expenditure that may arise because of the impact of the 3R intervention (as opposed to the tax implications of different expenditure streams themselves). Issues arising in terms of taxes and other tax-funded expenditure are only relevant at the national level of analysis. This is the level at which tax and tax funded expenditures flow. In addition there needs to be a demonstrable supply side impact at the aggregate level (i.e. there is no offsetting deterioration or foregone improvement elsewhere due to displacement or crowding out).

A6.20 This is unlikely to be important for all but the largest projects, although it may be more significant in terms of programmes and policies. The New Deal for Young People provides an example (Box A6.3) of how an aggregate supply side impact at the national level can be evaluated in terms of reductions in government expenditure on welfare benefits due to reduced unemployment and increases in tax revenue due to increased employment and national income.

**Box A6.3 Exchequer funding net of changes in tax and tax funded expenditure – example based on the New Deal for Young People**

By October 2001, 339,000 young people had moved from the NDYP into employment (including subsidised employment). NIESR and the NAO provided an evaluation of this outcome in the context of the national economy. The rationale for the intervention stems from the negative consequences of long-term unemployment in reducing skills and employability of those affected, which in turn reduces job search effectiveness and employment, thereby limiting the scope for the economy to be run at a higher level without causing inflation.

The gross cost of NDYP from 1998-99 to 2001-02 was estimated by NIESR to be £1.3bn. This gross cost, however, needs to be adjusted to allow for the effects of the intervention on the economy, including:

- The reduction in expenditure on Jobseeker’s Allowance and other welfare benefits, due to the reduction in unemployment; and
- The rise in tax revenue due to an increase in employment and national income.

NIESR used macro-economic modelling techniques to identify the magnitude of all the effects on the economy. This includes the impact on the whole youth labour market, employment as a whole (including age groups not eligible for NDYP), and effects on the economy as a whole (including private and public sector activity). They estimated that:

- For the £1.3 billion spent on the scheme government borrowing would only need to increase by £0.5 billion after the full effects on the economy are taken into account.
- Typically the gross spending on NDYP was of the order of £334 million per annum. Offsets (per annum) to this included increases in indirect taxes of £58 million and direct taxes of £64 million, and expenditure on social benefits would fall by £135 million.

Sources:

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22 A case by case approach is however needed as no matter what the size of a project the fiscal implications may be significant in the context of the individual intervention’s balance between costs and benefits. In addition certain types of intervention may also be more likely to give rise to tax and tax funded expenditure changes, for example those aimed at increasing participation in the labour force or specifically aimed at supply side changes.
A6.21 This example illustrates some of the issues associated with applying the ‘net of tax’ procedure and the importance of being clear about the mechanism through which the intervention effects the exchequer fiscal position. In this case these adjustments required detailed macro-economic modelling which is unlikely to available for anything but the largest projects but is more likely to be useful for the evaluation of programmes and policies. Evaluation evidence at this level could of course be used to inform appraisal and evaluation at lower levels of analysis.

WHEN AND AT WHAT RATE TO DISCOUNT COSTS

A6.22 In an economic analysis (one that considers economic costs and benefits and aims to answer questions such as is the best use of society’s scare resources) all costs and benefits should reflect true economic costs and benefits and should be discounted at the Social Time Preference Rate (currently set at 3.5%).

A6.23 3R interventions often require other types of analysis such as:

- affordability given current funding levels and commitments
- level of return given any rate of financial targets such as Required Rates of Return
- checks on viability/sustainability of private sector partners,
- calculation of the appropriate price of an asset to be sold into a private market
- calculation of the level of gap funding necessary to bring forward a specified private sector activity

A6.24 In these other types of analysis (i.e. financial rather than economic), the definition of costs may be different (e.g. they may include costs occurring to particular bodies that are not real economic costs – such as transfer payments) and other discount rates may be evident (e.g. private sector rates reflecting their opportunity cost of capital or rates reflecting a public sector body’s Required Rate of Return).

A6.25 While such information may be relevant in answering specific questions, where the worth to society as a whole needs to be considered, costs and benefits should be adjusted to reflect true economic costs and these then need to be discounted at the Social Time Preference Rate.

A6.26 Even where other questions are being addressed it will often be better to deal with these issues separately from time preference and then discount as appropriate using the Social Time Preference Rate.

APPORTIONMENT OF COSTS BETWEEN INTERVENTION OUTCOMES

A6.27 A common problem that arises in the evaluation of the costs of an intervention is that of cost allocation. This is particularly problematic in the case of joint costs. Joint costs are those that are incurred for more than one purpose. In the presence of joint costs it is necessary to develop and apply rules for cost allocation. There are three basic methods of cost allocation:
• Activity Based Costing – is the procedure whereby costs are allocated to specific outputs in a very detailed manner. In general this will only be possible within a specially designed accounting and reporting framework.

• Incremental Cost Analysis – this procedure relies on identifying a primary and a secondary activity. The costs of a particular activity can be defined as primary and the costs of another activity can be defined incrementally given this primary activity. The definition of an activity as primary should be based on clear criteria (e.g. demand, technological factors etc.).

• Stand Alone Cost Analysis – this procedure is based on the definition of the stand-alone costs of achieving each individual output where costs contribute to the achievement of multiple outputs. This method would identify the costs of three activities: (a) achieving the objectives simultaneously, (b) achieving the objectives of the first activity only, and (c) achieving the objectives of the second activity only.

A6.28 The general procedure adopted is summarised by example in Box A6.4. In general it is a matter of using available information to allocate costs on an incremental basis given the time order of the measures and the policies that require them. In evaluation this may be aided by specifying a detailed ‘policy time line’ from which the time-order of events can be used to say which activities are primary and which follow incrementally. This analysis does not work with truly joint costs – because no one cost can be identified as primary. However, cost allocation can still be achieved by looking at the joint, stand-alone and incremental costs together (see Box A6.4).

Box A6.4 Cost allocation using the cross subsidy principle
Neighbourhood Wardens/Street Wardens are activities funded under the New Deal for Communities. They have a number of objectives including preventing crime (e.g. reducing break-ins through increasing the likelihood that offenders will be seen and reported and found guilty) and improving amenity (e.g. removing graffiti). Both of these are largely achieved by an essential main activity – patrolling.

The most accurate method for allocating costs would be through the use of an activity based costing system. This is not possible in this case because the main activity (patrolling) is effectively a joint cost. How these costs can be allocated depends on whether or not it is possible to define one objective as primary and the other as secondary. Suppose in this case that the improved amenity is considered primary. In that case it is appropriate to accord the primary activity its full stand alone cost and the secondary activity is accorded only its incremental cost. Any other allocation would imply a cross subsidy between the outputs in that one was effectively paying for the other.

Suppose, however, that it is not possible to define either output as primary or secondary. In that case an allocation can be achieved by hypothetically assuming each is primary and then secondary. An allocation which satisfies the rule that

Stand alone cost > allocated cost > Incremental cost

For all items is the one which avoids any cross subsidy between the outputs.

Note that in neither of these cases is the appropriate allocation 50:50.

A numerical example is given below:
Identifying and measuring inputs (costs)

<table>
<thead>
<tr>
<th>Joint cost</th>
<th>Cost of project improving amenity (A) and reducing break-ins (B)</th>
<th>(AB)</th>
<th>100</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stand alone cost</td>
<td>SAC of reducing break-ins (B)</td>
<td>B</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td>SAC of improving amenity (A)</td>
<td>A</td>
<td>75</td>
</tr>
<tr>
<td>Incremental cost</td>
<td>IC of reduced break-ins (B) if improved amenity (A) is assumed to be the primary objective</td>
<td>(AB)-A</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>IC of improved amenity (A) if reduced break-ins (B) is the primary objective</td>
<td>(AB)-B</td>
<td>50</td>
</tr>
<tr>
<td>Allocated cost</td>
<td>Improved Amenity</td>
<td>Reduced Break-ins</td>
<td></td>
</tr>
<tr>
<td>Stand alone cost</td>
<td>75</td>
<td>50</td>
<td></td>
</tr>
<tr>
<td>Allocated cost</td>
<td>62.5</td>
<td>37.5</td>
<td></td>
</tr>
<tr>
<td>Incremental cost</td>
<td>50</td>
<td>25</td>
<td></td>
</tr>
</tbody>
</table>

Figures are notional £ per day. This costing is consistent with the notion that both activities share a core cost of patrolling (say £25/day) and each have their own costs of 25/day for break-ins (e.g. investigating specific incidents) and 50/day for amenity improvement (e.g. graffiti clean-up kits).

**SUNK COSTS**

A6.29 Sunk costs are often simply equated with all previous expenditure but this is not correct. Rather, sunk costs should be defined as the subset of previous expenditure which is genuinely irrecoverable. Sunk costs will typically be an important component in 3R interventions. Generic project appraisal guidance is that sunk costs (irrecoverable previous expenditure) should be ignored in appraisals. This is because, strictly-speaking, appraisals are only concerned with making forward-looking decisions in the current time period, and the only relevant quantities are those about which decisions can still be made. However, it is often useful to expand the scope of a ‘strict’ appraisal to include a partial ‘backward look’ (ex-post evaluation) of the value for money of previous decisions. In such cases, it is useful to present an (extra) assessment which includes sunk costs, to provide a view on the value for money of both previous and current decisions. To avoid confusion however, such ‘assessments’ (which have a backward-looking element) should not be called ‘appraisals’. Furthermore, the current decision should only be based on the assessment which excludes sunk costs.

A6.30 Whether or not any extra backward-looking assessment is done, appraisers should list the main sunk costs and explain why they are or are not an issue in a particular situation. This will help in appraisal transparency but also provides necessary information for evaluation.

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23 Often assessments may examine the case for future expenditure to ‘turn around’ a failing project. An appraisal may conclude that a future expenditure is justified to secure the benefits even though when judged as a whole (including the sunk costs) the intervention may be seen as poor value for money. A clear treatment of sunk costs in assessment will facilitate such an analysis. There are in fact two types of backward-looking assessments. One is focussed on a particular decision taken in some earlier appraisal and must therefore also exclude costs at the time already sunk or else it would lead to an unfair criticism of the decision. The other focuses on the project as a whole and must include all its costs.
Box A6.5 Issues associated with sunk costs in land and property appraisals

It is useful to make a distinction between irrecoverable costs or simply historic costs. Usually sunk costs are treated as historic costs, however, in appraisal it is important to identify and exclude from decision making any costs that cannot be recovered.

Careful attention needs to be paid to such costs. Inappropriate treatment of sunk costs can lead to the ‘salami slicing’ of project decisions. Items like site acquisition and basic site treatment costs may simply be ignored making the final project look better value for money than a comparable project where the site acquisition and basic treatment are cost decisions are taken at the same time as the development cost decision. While sunk costs should not bias a forward-looking decision on the use of an asset or resource, sunk costs should be clearly identified in order to enable an assessment of overall value for money and to provide the necessary information on which a future evaluation can take place.

A sunk cost may also have produced a benefit for the project site or target group and the output (e.g. enhanced asset value) that needs to be modelled in the appraisal especially in relation to the reference case/deadweight calculation. If a sunk cost has not produced a tangible asset value or benefit the reasons for this should be discussed and explained. For example a previous generation may have invested in the remediation of the subject land for development but no development may have emerged because the standard of remediation is no longer good enough for current development.

Typically appraisers should list the main sunk costs and explain why the costs are not an issue in this particular situation. Not only will this help in the transparency of the appraisal, but it will also be of assistance in the evaluation, where all costs for consideration will have been ‘sunk’ at some previous stage.

Summary

A6.31 This annex has provided guidance in relation to the identification and measurement of costs and other inputs. The key points are summarised below.

A6.32 A clear approach to identifying and measuring costs and other inputs is important in the context of 3R interventions because of the different organisations involved, the importance of partnerships, the blurring of the public and private sectors and the role of the voluntary sector.

A6.33 The fact that there may be a wide range of interested parties in 3R intervention contexts (and the consequence that they will be interested in different questions about costs), can make it difficult to determine whether a financial or an economic appraisal is required. Indeed this confusion can extend to who should be concerned with what results from what assessments. It is expected that in most cases 3R assessments will be undertaken using both financial and economic analysis but clearly distinguishing between the purposes of the analysis and the results provided.

A6.34 A financial analysis will typically be expected to provide detail on investments, operating costs and revenue and funding and be undertaken from the perspective of the financial stakeholders (of which government may be one). An economic appraisal translates this analysis to the perspective of society as a whole by recognising external costs, transfer payments and opportunity cost principles.

A6.35 Account needs to be taken of gifts, contributions in kind as well as costs incurred in the voluntary sector, as these inputs are not ‘free’ in an economic sense. A variety of approaches are available (output versus input based) but approaches based on replacement cost of inputs tend to be most widely used. The approach adopted will depend on the...
circumstances but the rationale and implications should be clearly stated. In some cases it may also be necessary to consider the benefits of voluntary giving accruing to the donor and society more generally.

A6.36 In general the focus should be on net costs to the exchequer. However net costs can be difficult to define in the case of 3R interventions as they are often aimed at altering levels of economic activity, which can in itself affect the need for funding.

A6.37 Asset sales (from the public to private sector), consequent on an intervention should be netted off the exchequer cost. Gross costs should also be reported particularly where there is some uncertainty at the appraisal stage in the level of such receipts that will be forthcoming.

A6.38 Typically it will not be necessary to adjust a financial appraisal for differences in the tax situation between options as a result of the project expenditures/revenues. However, 3R interventions may alter the level of tax and tax funded expenditure in the economy as a whole as a result of the outputs and these effects should be appraised and evaluated as far as possible.

A6.39 Tax issues are only relevant at the national level and in the context of a demonstrable supply side improvement. However, where supply side improvements at the national level can be identified the changes in the level of tax receipts and tax funded expenditure should be netted off the exchequer costs. The complexity of the tax system, however, will typically mean that macro-economic modelling is needed to identify the net impacts.

A6.40 The appropriate discount rate depends upon the perspective taken in the analysis and hence the criteria used to evaluate costs and benefits. In an economic analysis the perspective is social and all the costs and benefits included in the economic appraisal should be discounted at the Social Time Preference Rate (currently set at 3.5%) as this is the best current estimate of taxpayers’ and beneficiaries’ preference for benefits to accrue sooner rather than later. In a financial analysis where other criteria are used to value costs and benefits a rate appropriate to the body holding that perspective is appropriate.

A6.41 It is very important that costs are apportioned to outputs and outcomes as far as possible. This will aid in benchmarking the project in terms of value for money. Generally this can be done on an activity basis (activity based costing).

A6.42 Where this is not possible costs allocation should follow the principle that the correct allocation is where there is no cross-subsidy between outputs. Often this can be achieved by a simple pro-rata allocation but in other cases it will be necessary to apply techniques such as stand alone and incremental analysis. Generally costs should be allocated on an incremental basis using local/specific information (what primary outputs did the costs try to deliver?). Where joint costs remain unallocated they should be allocated by comparing the joint, stand-alone and incremental costs (so that there is no cross subsidy between outputs).

A6.43 Generic project appraisal guidance is that sunk costs should be ignored in appraisals and, taking a strict definition of appraisal, this point is reinforced here. Sunk costs do have relevance, however, for backward-looking assessments of overall value for money (beyond that of additional expenditure committed by a current decision), which can usefully accompany a strictly-defined ‘appraisal’. In any case, appraisers should always list the main sunk costs and explain why they are, or are not, an issue in a particular situation. This will help in appraisal transparency but also provide information necessary for evaluation.
APPENDIX 6.1
Guidelines on preparing financial and economic appraisals

A6-1.1 The nature of a financial and an economic analysis differ because of the perspective being taken and hence the criteria which are appropriate for quantifying costs and benefits. A financial appraisal is essentially an assessment of a project as a business proposition. It considers costs relevant to the business undertaking the project and its investors and financiers. An economic appraisal looks at the case using broader socio-economic criteria.

A6-1.2 A financial appraisal may be used to answer questions such as:

- Does the project have a sound business case?
- Does the project earn a rate of return sufficient to satisfy shareholders?
- Is the cash-flow sufficient to service the loans needed to finance the project?
- What assets are there that could serve as collateral for lenders?

A6-1.3 An economic appraisal however, is typically concerned with two questions:

- Does the project represent an effective use of scarce resources for society as a whole?
- Is the project the least-cost way (for society as a whole) of meeting this particular policy objective?

A6-1.4 It is possible for a project to pass an economic appraisal but to fail a financial appraisal. Similarly it is possible for a project to represent a good financial case but fail an economic appraisal. The different cases are summarised below.

- **A project that passes a financial appraisal and passes an economic appraisal.** These are ‘ideal’ projects that are both beneficial to society and attractive to private investors. There should be no need for government intervention, unless it there are an insufficient number of such project being brought forward.

- **A project that passes a financial appraisal but fails an economic appraisal.** These projects are attractive to the private sector, but impose costs on society that mean they should not go ahead. In theory, government regulation should prevent this situation arising.
• A project that fails a financial appraisal but passes an economic appraisal. These projects are beneficial to society but not attractive to private investors. Some additional support may be needed therefore to ensure they go ahead (e.g. gap funding).

• A project that fails both a financial and an economic appraisal. These projects are completely unviable, being neither beneficial to society nor attractive to the private sector.

A6-1.5 A financial appraisal will typically be the starting point in most 3R appraisals. The key ingredients of a financial appraisal may include:

- A table of investments;
- A table of operating costs and revenues;
- A table of financing sources.

A6-1.6 From these ingredients a wide range of further tables and analysis will be possible. Generally these will need to include:

- A total cumulative cash flow table to assist in determining the financial sustainability of the project given what is known about costs and revenues etc.;
- A net cash flow table showing the financial return on investment;
- A net cash flow showing the return on capital.

A6-1.7 In formulating these analyses, attention should be paid to the following principles:

- The time horizon will typically be the latest date for which forecasts are available. If these are shorter than the life of the assets employed residual values should be estimated as appropriate;
- Total project costs are the sum of investment costs (including land buildings etc) and operating costs (personnel, raw materials, energy etc.). These may differ from the ‘eligible costs’ specified by some programmes but are part of total costs nonetheless;
- Operating costs should exclude costs not giving rise to an effective monetary expenditure – for example depreciation, reserves for replacement costs etc.;
- Revenues should be those that accrue to the investor and be net of VAT. Indirect taxes should only be included if they are charged to the investor;
- Subsidies should be excluded;
- Prices will generally be in current terms because of the effects of price changes on financial returns;
- The discount rate should reflect the time preference/cost of capital of the body undertaking the appraisal. Depending on specific circumstances this may be the public sector or the private sector. Where it is the public sector the appropriate rate is the social time preference rate.
A6-1.8 An economic appraisal builds on the financial appraisal by making a number of adjustments to reflect the perspective of society as a whole as opposed to the investors/financial stakeholders. In undertaking the translation regard should be paid to the following principles:

- An economic analysis should include the opportunity cost of owned assets valued at the opportunity cost to society (not to financial stakeholders);

- Costs should generally be expressed in real terms. In particular, flows of costs in nominal terms from the financial appraisal should be deflated for the economic appraisal;

- An economic analysis should exclude repayment of grants as these are not economic costs;

- Ideally appraisals should be undertaken net of tax, but in practice tax adjustments are complicated, unlikely to materially affect the result and can generally be ignored. The Green Book guides that (Section 5.55) it is relatively rare for adjustments for taxation to be required since similar tax arrangements apply under all of the options considered. However, where tax is likely to materially affect the decision it should be considered;

- An economic analysis should exclude transfer payments which do not reflect real costs to society as a whole even though they may be real costs to the financial stakeholders (the Resource Accounting and Budgeting Cost of Capital Charge for land assets is an example here);

- An economic analysis should exclude financial costs such as depreciation, interest payments and finance costs as they represent transfers without a change in resources in the economy;

- An economic analysis should include European funds and lottery funds as a result of their opportunity cost.

A6-1.9 An economic analysis should include external costs (and benefits), which do represent costs (benefits) to society even though they do not affect financial stakeholders.
ANNEX 7
Identifying and measuring outputs/outcomes

Summary

A full summary of this annex is provided at the end of the document. In brief, the annex provides guidance on the identification, measurement and valuation of outputs and outcomes (Stage 4 of the assessment cycle). It provides a review of the general principles and then discusses 3R specific issues associated with the type of outcomes, type of intervention, and the context in which interventions are applied. The section is supported by three appendices on the use of indicators, valuation and calculating additionality (the latter a reference to a separate document prepared by English Partnerships).
Introduction

A7.1 The identification and measurement of benefits (outputs and outcomes) is central to the performance management of government interventions and should follow the general principles of the Government’s performance management framework. This framework is detailed in the **Choosing the right FABRIC (A Framework for Performance Information)** and in two further documents related to measuring performance in government departments and in Executive Agencies and Non-Departmental Public Bodies (see Annex on related guidance). These documents set out the general principles that should be applied.

**Box A7.1 Information systems for managing the performance of interventions**

In managing the performance of interventions it is useful to identify a chain which links the allocation of financial resources (exchequer costs) to outcomes.

Resources are the financial resources required for the intervention. Inputs are the sum of the resources (financial and other) and activities required for the intervention. Outputs are the immediate things produced by the intervention: these are typically measurable, and necessary but not sufficient for the delivery of desired outcomes. Outcomes are the intended results of the intervention in terms of its ultimate objectives.

As shown in the figure these are related in terms of overall value for money (outcomes achieved given the resources given up) as well as the individual components of economy, efficiency and effectiveness:

- **Economy** – the cost of the inputs being consumed – are the necessary inputs being secured at the minimum necessary cost?
- **Efficiency** – The ratio of inputs to outputs – are outputs being produced efficiently?
- **Effectiveness** – The link between outputs and outcomes – To what extent do outputs (like jobs) achieve the desired outcomes (sustainable economic development)?

In order to answer these questions, and determine overall value for money, it is necessary to have indicators to measure the different stages.

This approach is consistent with the Government’s recommended approach of cost-benefit analysis Green Book para 2.3) where the components of the value for money (VFM) assessment are expressed as far as possible in economic and monetary terms. The explicit focus on the components of VFM, however, also provides a rigorous approach capable of answering as wide a range of questions (in both appraisal and evaluation) as possible.

*Source: adapted from choosing the right FABRIC (A Framework for Performance Information)*
Of paramount importance within the general area of performance management is measurement of the achievement of objectives (desired outcomes). Chapter 5 and Annex 2 of the Green Book contain more guidance on this. The main issues covered are:

- Guidance on estimating the value of benefits (para 5.24 to 5.29):
  - Benefits should be valued unless it is clearly not practicable to do so;
  - Appraisals should take account of all benefits to the UK;
  - Actual or estimated market prices provide the first point of reference to value benefits;
  - Results from previous studies may sometimes be used (benefits transfer);
  - New studies may need to be commissioned. Where this is appropriate a central estimate together with a maximum and a minimum plausible valuation should be included;

- Adjusting benefit estimates to reflect distributional issues and changes in relative prices (5.33 to 5.47);

- Discounting benefits (5.48 to 5.54);

- Adjusting benefits for differences in tax (5.55 to 5.56);

- Allowing for risk and uncertainty (5.57-5.75);

- Considering unvalued costs and benefits (5.76 to 5.79).

Problems of identifying, measuring and valuing benefits arise with appraisal and evaluation of many government interventions, but they tend to be relatively severe in relation to the 3Rs. The aim of this Annex is to provide an overview of the 3R specific issues which typically condition the assessments that are undertaken – in terms of (a) the nature of the outcomes sought, (b) the nature of the interventions and (c) the context within which interventions produce outcomes.

This section is supported by three detailed appendices which provide further guidance on the selection and use of indicators (7.1), their valuation (7.2), and undertaking an analysis of additionality (7.3). The latter is a separate document prepared by, and available from, English Partnerships (The Additionality Guide).

3R specific issues

A wide range of issues need to be considered in the appraisal and evaluation of 3R intervention outcomes (Sefton, 2000). While few of these issues are entirely specific to 3R interventions, the fact that several issues may be present in individual cases presents significant additional analytical difficulties.
Box A7.2 Classification of issues associated with 3R outcomes
Sefton (2000) classifies issues as:

**The nature of the outcomes**: Whether objectives are clear or not and whether they are long term or short, single or multiple, quantitative or qualitative;

**The nature of the intervention** – The extent to which an intervention is a ‘mixed bag’ of activities, is dependant not only on the level of resources but the degree of implementation and applies to different units of analysis (individual, group or society);

**Context dependency** – The degree to which scale effects and external influences are important and the degree to which the involvement of beneficiaries alters outcomes.

These difficulties are encountered in most assessment work and techniques have been developed to help address many of them. In the case of 3R interventions, however, it is more likely that an assessment will have to deal with several of the problems within the same study and this compounds the problem. For example qualitative outcomes can be expressed using a scale, but if impacts are small and effected by other external influences, then a qualitative scale may not be sensitive enough to pick up changes in outcomes or isolate these from other effects.

Nature of outcomes

**SPECIFICATION OF OUTCOMES TO MEASURE THE ACHIEVEMENT OF OBJECTIVES**

A7.6 Outcome measurement is necessary to assess whether desired objectives have been achieved. Appraisals and evaluations must contain a clear description of the objectives of the intervention and the outcome measures chosen to assess achievement. There should be clarity about their relationship to ultimate government policy objectives.

A7.7 High-level central government objectives are generally clear, as set out in the Public Sector Agreements and associated Service Level Agreements. However, the degree of autonomy (and delegated authority) in the delivery, of the 3R interventions makes it important to recognise, incorporate and make consistent a multitude of locally defined objectives. Where different agencies are involved in delivery they may have their own objectives which may conflict. In some circumstances lack of clarity may be a natural consequence of the design of the intervention – e.g. if it is experimental or seeks to encourage innovative and diverse approaches. However, assessments should align (nest) objectives of different groups/levels as far as possible. This alignment and targeting of objectives is an essential step in any assessment. Where alignment cannot be achieved this should be clearly recognised and the implications noted.

A7.8 Many of the targeted objectives of 3R interventions may be process outcomes rather than delivery outcomes. For example, the involvement of the community in decision making and delivery may itself be a desired outcome. In these cases the way in which an outcome is delivered may be as or more important than the level of the outcome achieved. Assessments should clearly distinguish between process and delivery outcomes particularly where the achievement of one is at the expense of another or entails significant additional costs.

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24 It is recognised that many current PSAs are not defined in outcome terms. However, in the long run it is the intention that all PSAs relate to outcomes.
A7.9 Many objectives/outcomes have a number of dimensions and can be difficult to measure and express quantitatively. This can give rise to a perverse situation in which more weight is given to a secondary dimension that is easy to quantify (and value) as opposed to a more important dimension which is difficult to quantify. For example, the number of outputs like jobs tends to be easier to quantify than their quality, whereas it may be that the quality of the jobs is the real issue (for example in terms of increasing an area’s competitiveness). An awareness of this problem should generally be demonstrated and assessments should adopt the principle that it will often be better to measure important objectives imperfectly (for example through scales or scores) rather than ignore them or focus too much on more easily quantified impacts.

A7.10 A ‘Soft outcome’, is a particular type of outcome that is difficult to identify unambiguously and measure because they are related to behaviour, attitudes and experiences and can entail a high degree of subjectivity. An example is the confidence/self-esteem/motivation of the unemployed (see Box A7.3). Such outcomes are as valid as so-called ‘harder’ outcomes and should not be ignored. Assessments should recognise that typically, there will be some way in which soft (difficult to quantify) outcomes (or a related proxy or instrument variable/scale), can be measured (Guidance on the measurement of soft outcomes is given in IES (2000)).

Box A7.3 Measurement of soft outcomes and distance travelled
For interventions aimed at providing qualifications to increase the rate of participation in the labour market (hard outcomes) a framework has been developed to identify, measure and record soft outcomes such as key work skills, attitudinal skills, personal skills and practical skills. These vary in terms of the difficulty of measurement but not in terms of their importance: key work and practical skills are more easily measured but less tangible attitudinal outcomes (confidence, motivation, self-esteem) are equally important. In many cases it may appear only to be possible to record that an improvement has occurred rather than to quantify how much of an improvement has taken place. However, measurement can generally proceed through the use of scoring systems and scales.


A7.11 The principle of ‘distance travelled’ is a special case of a more general need to define and measure progress on intermediate stages towards final outcomes. Assessments should clearly identify the intermediate outputs associated with the delivery of outcomes.

A7.12 The focus on performance management cannot only be on outcomes. For each outcome intermediate measures (outputs) should also be identified. In many cases outputs will be more amenable to measurement than outcomes but in any case information on outputs and outcomes will typically be required to assess effectiveness i.e. the performance of an intervention in turning outputs into outcomes. The degree to which a specific appraisal/evaluation focuses on outputs and/or outcomes depends on the level of analysis. At a project level it can often be simpler to focus on the outputs, provided that outcomes have been evaluated at programme and policy level and a relationship between outputs and outcomes can be established. Programme evaluations, for example, may usefully define cost per output guide values (consistent with the cost-effective achievement of outcomes) which can be used as a guideline in appraisal.

25 The term does not include outcomes that are easily quantified but, because of a lack of information on cause and effect, are difficult to predict/determine from available information.
MULTIPLE OUTCOMES

A7.13 3R interventions typically generate several outcomes in different domains (for example outcomes related to health, social inclusion, the quality of the environment and economic activity) – making comparison difficult unless one intervention dominates on all outcome measures. Valuation of impacts serves a very important purpose here, allowing the impacts in different domains to be compared in a consistent manner.

A7.14 Ideally outputs and outcomes should be valued in money terms where possible. In the presence of multiple outcomes, valuation is especially desirable. Where valuation is not possible assessments should identify how best to quantify the impact and to identify priorities among the outcomes (at the very minimum between intended and unintended outcomes). The identification of primary outcomes will make cost-effectiveness analysis much easier. Taken to its extreme this prioritisation could lead to a system of weights for the outcomes. Where preferences can be expressed in terms of weights guidance on the use of multi-criteria approaches should be followed.26

A7.15 Valuation of impacts is also a very useful step in helping to make sure that there is no double counting of impacts – a principle of valuation of the multiple outcomes is that they should be additive in order to allow comparison. Additive outcomes, by definition, are not double counted. While the elimination of double counting of the outcomes of 3R interventions may be difficult, such double counting should always be identified, reported and the implications considered. Adapting existing frameworks for the categorisation of benefits is one of the simplest ways of avoiding double counting. This also provides a starting point for considering benefits which may not already be included but may potentially double count if they are added (see box A7.4). In general, however there is no easy solution to the problem of double counting but it can typically be minimised by a clear elucidation of the impact pathway, sticking to established frameworks for categorising benefits and seeking the advice of economists where possible.

Box A7.4 Frameworks to avoid the double counting of benefits
A number of frameworks exist to assist in ensuring all benefits are examined and that double counting is avoided:

- Market and non-market effects – the general distinction between costs and benefits that take place in the market and those that arise through external effects
- Total economic value – distinction between user benefits, non-user benefits and non-use benefits (existence and bequest values for example);
- First and second round effects – generally the benefits of an intervention will be reflected in the primary market. Impacts in secondary markets are only likely to be relevant under special circumstances.

Common sources of double counting error
The main source of double counting error in economic appraisals is in adding together observable impacts that are effectively different manifestations of the same underlying change. Often the pressure to quantify impacts within appraisals can lead to pressure to quantify what can be measured easily without considering the total impact and the best possible measures of individual components. Two examples are:

- If an intervention increases sales in market A (above that expected in the reference case) it would be incorrect to add to this increases in sales in markets supplying goods and services to A. This would effectively double count the same change;

Identifying and measuring outputs/outcomes

- In an intervention that produces travel time-savings for a particular area it may be possible also to measure a change in the level of economic activity or changes in the value of land. However, in the majority of cases these changes will simply reflect the working out of the time-savings and the distribution of the benefits to different parties.

In general however much will depend upon the way in which the benefits are actually measured and in some cases more complicated interactions may be involved which will mean that additional benefits can be observed. However, given that double counting is a complex area, where there is uncertainty, prior to adding different estimates of benefit together, it will generally be useful to discuss the issue with an expert.

A7.16 The reporting of multiple outcomes in mixed formats (monetary, quantified, qualitative) raises particular concerns regarding double counting. Often there is a concern to express effectively the same outcomes in a number of formats in order to capture several different dimensions of impact (see Box A7.5).

**Box A7.5 Mixed reporting of multiple impacts**

Consider an intervention aimed at raising the sustainable level of economic activity. It may be possible to estimate the additional value added as a result of a supply side improvement. It would be simple to convert such an estimate into an additional indicator of the number of additional jobs. These measures are effectively quantifying the same impact and it would be wrong to convey the impression that the jobs are somehow additional to the value added. In such cases it is helpful to nest the impacts for example by clearly presenting the results so that the jobs can be seen as a different characteristic of the wider impact on value added.

A7.17 Often interventions will give rise to multiple outputs that may need to be attributed to different actors or activities. The attribution of multiple outputs to actors and activities should be such that there is no (implicit) cross subsidy between the different funders or activities (i.e. the same logic of attribution of costs discussed in Annex 6).

**RECOGNISING AND ACCOUNTING FOR MULTIPLE PERSPECTIVES**

A7.18 Different partners will have a range of different objectives. Given the range of outcomes and actors involved a wide range of issues may need to be investigated within any one appraisal in order to meet the needs of different partners and/or interested parties. Often these will be linked (in the sense that the achievement of one partner’s objective is needed to achieve another partner’s) but at other times they may be separate and in conflict.

A7.19 A specific case of multiple perspectives arises in the context of arms length or delegated delivery of the outcomes of 3R interventions. Delegated delivery introduces additional problems particularly where the delegate undertakes actions on behalf of a number of funders (as in the case of the RDAs).

A7.20 Assessments must identify clearly the perspectives involved and the implications in terms of the tests (on outcome achievement) that are to be performed. A range of indicators (covering all areas on the intervention – resources, inputs, activities, outputs and outcomes) should be chosen to reflect these perspectives and the different tests that should be applied (see Annex 8 and Appendix 7.1 and 7.2).
Assessing the Impacts of Spatial Interventions

Box A7.6 Summary of Appendices 7.1 and 7.2 – Indicators for measuring impacts and approaches to valuation

Appendices 7.1 and 7.2 to this guidance provide further detailed guidance on the selection and use of indicators and their valuation. The main additional points of guidance concern:

**Indicators:**
- A ‘pick and mix’ approach is required, as there is no universally applicable set of indicators that will be appropriate for a particular intervention;
- A range of best practice guidance is available, and should be followed, on the choice of indicators and the development of indicator systems;
- Avoid re-inventing the wheel where possible. There is a range of indicators already in use in common indicator frameworks and the likelihood that an indicator has already been defined for the impacts considered for most interventions.

**Valuation:**
- Valuation of indicators (themselves or changes in the levels) will help to make outputs and outcomes comparable;
- Account should be taken of specific issues in the valuation of 3R impacts. These stem from two principle sources: (a) the inherent difficulty of valuing some impacts and (b) the difficulty of valuing impacts which may be different depending on the spatial boundary of the analysis adopted.
- The appendix provides guidance on the principles to be followed when looking at valuing employment, economic activity, productivity and competitiveness, distributional change, social capital, crime reduction/prevention, education and training and heritage and culture impacts.

LONG TIME FRAMES

A7.21 Often the achievement of certain outcomes would only be expected after many years (generations in some cases) but decision-makers need to make decisions in anticipation of these outcomes. For example, improvements in local skills though education may take many years to have an effect. Long time frames introduce greater uncertainty, partly because of the greater likelihood of changes in external variables. Nevertheless, it is important in these circumstances to avoid focussing only on short-term impacts where there are important long-term ones. The concept of a balanced scorecard can be useful in this regard (see Box A7.7). Although this is useful for considering long term delivery mechanisms it should not be seen as an alternative decision criterion and appraisers should be wary of using such an approach to justify otherwise high cost/low benefit projects.

**Box A7.7 Balanced scorecard**

The concept of the balanced scorecard was developed originally in the private sector to help managers avoid ignoring long term business development by focussing overly on short-term sales and profits. It achieves this by drawing a distinction between delivery of outcomes and maintenance of the process that will deliver future outcomes. Two useful inks are:

www.balancedscorecard.org


A7.22 The difficulty of valuing some outputs, coupled with the long-time frames involved raises the issue of discounting non-monetised outputs. The process of discounting reflects people’s valuations of impacts that are phased over time. The inability to value an output like a (non-additional) job is evidence of the limited understanding of society's preferences for such outputs. There are two components to this – how are the values of such outputs
expected to change over time and what rate should be used for discounting. It is often argued that given the nature of some outputs that cannot be valued (e.g. non-additional jobs) that no discount rate or a lower discount rate should be used. However, not discounting has paradoxical results and discounting at a different rate confuses the valuation and time preference concepts. In general therefore, the benefits of these outputs should be considered and where possible valued. Where benefits have been valued, the valuations may increase over time – but this rate of change may vary from one situation to the next. In most cases it will be best to approach such issues through sensitivity analysis. It is only likely to be material in a relatively small number of situations where bespoke analysis will typically be required.

DISTRIBUTIONAL ISSUES

A7.23 In 3R interventions ‘who benefits’ is typically a very important question and as such distributional analysis must always be a component of appraisal and evaluation (although often this need only be qualitative/descriptive). There are a variety of methods available (see Box). Quantitative distributational adjustments will often be useful. The Green Book gives guidance on the situations in which this is likely to be the case.

Box A7.8 Distributional Analysis methods in the context of regeneration, renewal and regional development.

Distributional Impact matrices are perhaps the most common form of distributional analysis. These can be as simple tick boxes (see for example the distributional impact matrix developed for the Integrated Policy Appraisal template) identifying whether particular groups over which specific objectives are held (gender, ethnic group, age, disabled, location etc.) are affected and in what way (e.g. positively or negatively). More advanced matrices would identify the impacts, together with weights, which could be applied to facilitate the comparison of options which affect different groups.

Lorenz curves are a specific technique that enables a distribution other than the normal to be identified. Curves can be constructed to display this information graphically; however the information can also be expressed textually. The following example illustrates lorenz type information calculated in the context of the SRB evaluation. This approach applies to outputs as well as outcomes even though the following example relates to inputs only.

Local authority district level analysis of SRB expenditure and the Index of Multiple Deprivation shows that around a third of all SRB expenditure has been targeted towards the twenty most deprived local authority districts (around 15% of the population). The top 56 districts (including the top 20) had almost two thirds of all SRB that was distributed to around a third of the population. The top 99 districts (including the top 56) received over 80% of all SRB funds for a population of around 48%. As a result the remaining 255 non-deprived local authority districts (around 51% of the population) were in receipt of the outstanding 18% of SRB.


A7.24 Distributional concerns extend over issues other than simply differing levels of income. As noted in the Green Book however these concerns are often correlated with income. One particularly useful area of analysis would be in linking the information available in the Index of Multiple Deprivation to help derive weights appropriate for distributional analysis. Such analysis would be useful in a variety of circumstances. However, at present there is no direct way of doing this.

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27 A useful starting point might be to assume a rate of increase in the value of the outputs is equivalent to the expected rate of growth in per capita consumption (currently 2% – see Green Book Annex 6)
Box A7.9 Distributional issues and the Index of Multiple Deprivation

In appraising the bids for the hosting of the European Capital of Culture in 2008 one of the identified criteria was the extent the bid would contribute towards urban renewal through; planned urban and regional re-development programmes; linking re-development to the city's current cultural heritage; and in forming partnerships with the Regional Development Agencies. In terms of economic activity, criteria also included the ability of the bid to create new employment and the ability to attract new tourists, both overseas and domestic. The criteria correctly focus on new employment and new tourism activity and hence the importance of additional resources to the area.

One area of analysis which was explored was the extent to which these new resources brought into the cities would benefit deprived communities and the extent to which the levels of deprivation in communities differed. It was quickly recognised that the ability of the new resources to impact on an area depended upon:

- The existing levels of deprivation as measured for example in the Indices of Multiple Deprivation; and
- The ability of the communities to sustain the resources levered in rather than simply leak it out again to other areas.

One area of interest was the extent to which distributional issues could assist in the choice between bids. In particular an attempt was to use the Indices of Multiple Deprivation as a means of applying the distributional weighting analysis recommended by the Green Book. While the indices clearly illustrated differences in the bid areas in terms of levels of deprivation, they do not contain the type of household income data that would facilitate the construction of distributional weights. In addition there is currently no similar source of information that would assist in determining, ex-ante, the extent to which different areas would be able to retain expenditure levered in for longer before eventually being dissipated to other parts of the economy.

A7.25 Finally it should be noted that distributional weights as identified in the Green Book reflect the value attached to a benefit by its recipient. £1 worth of benefit received by someone on a lower income is worth more than when it is received by someone on a higher income. This is separate from, although related to, the fact that society may attach additional value to the reduction in social inequalities. Where the reduction in social inequalities is also an issue, further sensitivity analysis may be appropriate for example by establishing the switching value that would alter the decision in a particular case. In general the best approach as identified in the Green Book is to consider in as broad a sense as possible the impacts proposals will have on different groups in society.

A7.26 In the case of other distributional impacts the Green Book provides guidance in the required approaches. This applies in the case of UK discrimination laws and the general approach to considering equality.

Nature of the intervention

MULTICIPACITY OF INTERVENTIONS

A7.27 In the 3R field, interventions tend to be a ‘mixed bag’ of different activities. This is particularly true in the context of partnership approaches which may bring actors, who undertake a wide range of activities together (to work in a co-ordinated manner) towards an overall outcome. Each of the individual interventions may react with each other and give rise to synergies that present analytical difficulties. In appraisal and evaluation of individual interventions it is important to be clear about what is assumed about related interventions in order to interpret the effectiveness of any one intervention. The sensitivity of results to changes in the assumptions about related interventions should be presented.
A7.28 For example a particular intervention on its own may have a more limited impact compared with when it is undertaken together with a related intervention. It should be made clear what is assumed about the related intervention (for example whether it is considered to be part of the reference case or counterfactual). Sensitivity of the results to these assumptions can be tested by adding or removing the effects of these interventions. A distinction drawn between planned, in-the-pipeline and more speculative interventions may be useful in appraisal.

DIFFERENCES IN IMPLEMENTATION

A7.29 A clear distinction should be drawn between operational interventions and those which are in a phase of development or learning (e.g. pilots). The focus of the appraisal and evaluation will differ in these situations. In pilots there is a great deal more emphasis on examining the mechanisms rather than the inputs and outputs since a key issue is whether the results are transferable at all.

A7.30 Within a programme there may be significant differences in implementation. The impact will depend not only on the conditions of the area (see context dependency) but also on the skills and abilities of those implementing the activities. Such effects can be difficult to appraise and evaluate, but may be central to the rationale for the intervention such as tackling co-ordination failure.

Box A7.10 Implementation effects and outcomes
Partnership structures are an important characteristic of many 3R interventions. They are a feature of the RDA Single Programme, various New Deals, Surestart, Health Action Zones, Education Action Zones, Community Safety Programmes, regeneration under SRB and New Deal for Communities, Invest to Save projects, Local Strategic Partnerships etc.

Despite this there is relatively little systematic research undertaken regarding the contribution to outcomes. Evaluations typically focus either on the way partnership affects the delivery process or the outcomes/impacts achieved rather than partnership effects on the delivery of outcomes (as would be revealed by comparing delivery under a range of partnership structures). The difficult issue has been to separate out the impacts that individual partners would have had working on their own compared to the additional outcomes secured through partnership. Although difficult to identify such impacts may be very relevant in the overall assessment of an intervention.

A7.31 The impact of differences in the implementation of the interventions should be made clear in the appraisal and evaluation and the implications discussed.

DIFFERENCES IN UNITS OF ANALYSIS

A7.32 The unit of analysis for 3R interventions may be individuals, or groups of various sizes. They may also take place at different spatial scales (local, neighbourhood, sub-regional, regional etc.). Typically the higher the unit of analysis (i.e. the more aggregated) the more complicated will be the measurement of impact because of the capacity for different effects to come into play (i.e. organisational effects, feedback etc.). In the assessment of 3R interventions it is important to be clear about the relationship between impacts at different units of analysis (individual/community, local, regional and national). Where necessary separate indicators will need to be developed to track change at these different units of analysis (see Box).
Box A7.11 Units of analysis
Different units of analysis may be appropriate for different interventions depending on the effects that are being examined. Skills and employment are impacts which are generally best addressed at the level of the individual. Income and deprivation, however, are often best measured at the household level. Social capital is generally seen not as a feature of individuals or households but of whole neighbourhoods and communities. Other issues such as sustainability or competitiveness on the other hand can only be looked at in terms of larger areas because of the inter linkages between economies.

ADDITIONALITY

A7.33 In assessing 3R interventions it is necessary to identify the extent to which the impacts are additional. This is the extent to which the impacts are better than those in the reference case/counterfactual after allowing for the range of factors that might alter the level of additionality (leakage, displacement, substitution, crowding out and multipliers) and the relevant spatial level. It is important to be clear about the spatial level at which additionality has been examined.

Box A7.12 Components of Additionality
Deadweight – The proportion of gross observed outputs/outcomes that occur under the reference case (in appraisal) or counterfactual (in evaluation).

Leakage – The proportion of outputs/outcomes which benefit those outside of the intervention’s target area or group.

Displacement – The proportion of the intervention’s outputs/outcomes accounted for by reduced outputs/outcomes elsewhere. Displacement may occur via the product and factor markets.

Substitution – an effect which arises where a firm substitutes one activity for a similar one to take advantage of public sector assistance.

Crowding out – the macro-economic effect arising from the government’s budget constraint which, at the national level, leads to the displacement of all outputs with the exception of those arising through supply side improvements.

Multiplier effects – Further economic activity (jobs, expenditure or income) associated with additional local income and local supplier purchases.

A range of evidence is available from the evaluation of previous projects and programmes about the magnitude of these effects in specific circumstances. This evidence is summarised in English Partnerships’ ‘Additionality Guide’ (referenced at Appendix 7.3 and formally part of this guidance). This should form the starting point for the assessment of additionality. The Additionality Guide also contains a review of the applicability of the different effects to different intervention areas, a description of the co-related factors and approaches available to estimate effects.

A7.34 The assessment of additionality should not be a mechanistic process. The recommended approach for assessing deadweight and other additionality factors is set out in detail in the Additionality Guide prepared by English Partnerships (referenced at Appendix 7.3). Key points of the Additionality Guide are:

- Deadweight should not be seen as an adjustment factor but should be seen as the outcomes achieved under the ‘policy off’ situation (i.e. whatever reference case the intervention option is being compared with);

Often this analysis is seen simply as a procedure to get from gross to net impacts as opposed to a tool to improve the robustness of the assessment.
• Leakage from target groups should be considered in addition to leakage from target areas;

• Substitution and displacement should be looked at separately rather than jointly, as the effects and mechanisms are distinct;

• Crowding out should be considered routinely at all levels where a project is part of a larger intervention;

• Multipliers should not be applied mechanistically without any consideration of the affected markets and whether they contain sufficient excess capacity to see activity increase;

• Consideration of additionality should be iterative and lead to a refinement of options and the relevant target area;

• In exploring supply side improvements consideration should be given to the extent to which particular interventions alter the scale of the additionality factors (e.g. reduce displacement or increase multipliers).

A7.35 Often in small project assessment it will not be possible to undertake any detailed assessment of additionality. In such cases project appraisal and evaluation should be informed by more detailed assessments done at the programme and policy level. Although non-additionality should be designed out of interventions this is not sufficient to negate the need for an analysis of additionality and many of the non-additionality effects will be beyond the control of those responsible for the designing the intervention.

Context dependency

A7.36 3R interventions are applied in varying localities and involve different people and organisations. If policy makers know that certain activities are more effective when undertaken in a particular way in certain circumstances, they will be better able to devise effective initiatives by combining and tailoring activities to the local conditions. Understanding the context into which an initiative was introduced and how it changes is, therefore, crucial to learning lessons – particularly if the initiative is a pilot that might be mainstreamed. Issues of context dependency are closely related to those of the nature of the intervention. However, regardless of the nature of the intervention, the outcomes produced in any one area will depend upon the context (local factors, unrelated to the intervention itself) into which they are introduced.

A7.37 As a matter of course, therefore, assessment should pay as much attention to issues of cause-and-effect, dose-and-response as to observed net benefits or cost-effectiveness in particular areas. Understanding the mechanisms as well as the magnitude of inputs and outputs is central to improving the performance of 3R interventions.
LOW-LEVELS OF EFFECT

A7.38 The impact of the intervention may be small relative to either the scale of the problem or the magnitude of external effects in particular areas. Low levels of effect can make the detection of change rather difficult and require the use of detailed modelling which may be able to isolate the impact of the intervention from the confounding factors.

AVERAGE AND MARGINAL CONDITIONS

A7.39 The assessment of 3R interventions should pay particular regard to the need for marginal analysis – an analytical approach which stresses the importance of the margins of an activity: what happens to the outputs, outcomes etc. as incremental changes are made to another variable.

ACTIVE IMPACTEES

A7.40 The impact of 3R interventions will typically vary greatly because the outcome depends upon the involvement of the impactees and in many cases will arise as a result of behavioural changes. It may therefore be necessary to develop indicators to measure ‘behavioural’ aspects related to the involvement of those impacted by the intervention. Often involvement of communities will be a specific goal of the intervention and this should be recognised in the structure of outcome indicators.

IMPORTANCE OF MECHANISMS

A7.41 Mechanisms are important because they influence the effectiveness of interventions. Focusing on the mechanisms at work helps in understanding the context dependency of the outputs and outcomes achieved. Where context dependency is important the appraisal and evaluation should make a specific point of identifying and explaining the mechanisms at work. Approaches such as ‘theory of change’ and ‘realistic evaluation’ can be useful in this regard (see Box A7.13).

Box A7.13 Context dependency, theory of change and realistic evaluation

Theory of Change and Realistic Evaluation are terms used to describe approaches to evaluation which emphasise the need to understand the mechanisms within social interventions because of the importance of context dependency and the need to answer questions such as what works, where and for whom?

This focus on context is key to the ‘theory of change’ approach used by ‘realistic evaluators’, who suggest that cause and effect are intertwined with changing contexts, represented by the formula context (C) + mechanism (M) = outcome (O). Realistic evaluators conclude that traditional experimental and quasi-experimental approaches treat programmes as ‘black boxes’, and argue that evaluation should focus instead on all the various small comparisons within and between different components to understand their linkages. A related, and increasingly popular option, is for evaluators to develop a programme theory (or ‘theory of change’) which clarifies the overall vision for the initiative and maps out a framework of hypotheses relating to causal assumptions about the mechanisms of change. These frameworks can help evaluators tease out mechanisms, develop hypotheses and measures and test relationships with differing contextual variables. Such approaches are not just useful for evaluators: they can also help appraisers relate options to differing contexts.
<table>
<thead>
<tr>
<th>Patrolling</th>
<th>Engaging</th>
<th>Promoting</th>
<th>Acting</th>
<th>Enbracing</th>
<th>Reporting</th>
<th>Supporting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduce fear of crime</td>
<td>Visit vulnerable groups.</td>
<td>Publicity and safety promotion.</td>
<td>n/a</td>
<td>n/a</td>
<td>Report to police and carry out fear of crime surveys.</td>
<td>Working with victims.</td>
</tr>
<tr>
<td>Reduce crime</td>
<td>Diversary activities for young people.</td>
<td>Publicity and safety promotion, liaising with neighbourhood watch groups, school visits and encouraging reporting.</td>
<td>n/a</td>
<td>n/a</td>
<td>Acting as a professional witness and reporting to police and CCTV control rooms.</td>
<td>Working with victims of crime and vulnerable groups.</td>
</tr>
<tr>
<td>Reduce anti-social behaviour</td>
<td>Diversary activities for young people.</td>
<td>School visits and encouraging reporting.</td>
<td>Responding to minor incidents of ASB.</td>
<td>n/a</td>
<td>Acting as a professional witness and informing police and ASB units.</td>
<td>Work with youth offending team, sign post drug users and street drinkers to appropriate services.</td>
</tr>
<tr>
<td>Improve street environment</td>
<td>Diversary activities and service awareness raising with potentially fly tippers.</td>
<td>Service awareness raising with residents and encouraging reporting of defects.</td>
<td>Investigate fly tipping and empty properties, large scale clear ups, sharps collections and involve community in clean up operations, and removal of racist and homophobic graffiti.</td>
<td>Fining street traders, posting removal notices on abandoned cars, fining dog owners.</td>
<td>Report defects and incidents of fly tipping and vandalism to appropriate agencies. Arranging for the removal of abandoned vehicles.</td>
<td>n/a</td>
</tr>
<tr>
<td>Build community confidence</td>
<td>Liase with community groups, residents and vulnerable groups.</td>
<td>Acting as a source of critical information for residents and visitors. Liase with community groups, residents and vulnerable groups. Promoting scheme services.</td>
<td>Organising community activities</td>
<td>n/a</td>
<td>n/a</td>
<td>Working with victims of crime and vulnerable groups.</td>
</tr>
<tr>
<td>Enhance Social inclusion</td>
<td>Liaise with excluded and hard to reach groups.</td>
<td>Encouraging reporting of homophobic and racist attacks.</td>
<td>Organising community activities</td>
<td>n/a</td>
<td>n/a</td>
<td>Working with victims from excluded and hard to reach groups.</td>
</tr>
</tbody>
</table>

The Street Wardens/Neighbourhood Wardens programme provides an example of the application of the Theory of Change approach to a specific evaluation. At the heart of this is the ‘concept mapping’ involved in looking at the way specific activities associated with the intervention affect various objectives and the context in which the mechanisms occur.

Once defined this model provides an overall framework for the development of hypotheses and related research questions.

Summary

A7.42 This chapter has provided guidance on the identification, measurement and valuation of outputs and outcomes in the context of 3R interventions. The key points of guidance are summarised below.

A7.43 Assessments involving the identification and measurement of outcomes must take account of a wide range of issues, which although they are not entirely specific to the 3Rs do tend to raise particular problems – often because they are encountered jointly with other problems.

A7.44 Assessments should contain a clear description of the objectives of the intervention and the outcome measures chosen to assess achievement. They should clearly distinguish between process and delivery outcomes particularly where the achievement of one is at the expense of another or entails significant additional costs.
A7.45 Assessments should adopt the principle that it will often be better to measure important objectives imperfectly (for example through scales or scores) rather than ignore them or focus too much on more easily quantified impacts. In addition it should be recognised that typically, there will be some way in which soft (difficult to quantify) outcomes (or a related proxy or instrument variable/scale), can be measured.

A7.46 Assessments should clearly identify and measure intermediate stages (resources, inputs, activities and outputs) in the delivery of outcomes.

A7.47 Ideally outputs and outcomes should be valued in money terms where possible. In the presence of multiple outcomes, valuation is especially desirable. Where valuation is not possible assessments should identify how best to quantify the impact and to identify priorities among the outcomes. Where preferences can be expressed in terms of weights, guidance on the use of multi-criteria approaches should be followed.

A7.48 While the elimination of double counting of the outcomes of 3R interventions may be difficult, such double counting should always be identified, reported and the implications considered.

A7.49 The attribution of multiple outputs to actors and activities should be such that there is no (implicit) cross subsidy between the different funders or activities (i.e. the same logic as that described in the attribution of costs to outcomes).

A7.50 Assessments must clearly identify the perspectives and the implications in terms of the tests that are to be performed. Some parts of the audience will be interested in the overall net benefit, others in the degree of economy, yet others in the transferability of results. To reflect this, a range of indicators (covering all areas of the intervention – resources, inputs, activities, outputs and outcomes – and their context) should be chosen to reflect the different perspectives and questions that may need to be examined. An assessment that delivers a yes/no answer to the question ‘is this intervention beneficial in cost terms’ will rarely be sufficient.

A7.51 Many 3R interventions may operate over very long time frames. Assessments should avoid the tendency to focus on short-term impacts at the expense of long-term impacts – the use of a balanced scorecard (i.e. ensuring that the options maintain the processes for the delivery of long-term outcomes as well as delivering immediate outputs) can be helpful in this regard.

A7.52 The difficulty of valuing some impacts together with the long time frames raises the issue of reflecting time preference for non-monetised impacts. This is a technically difficult area and, where it is material will generally require specific advice.

A7.53 In 3R interventions ‘who benefits’ is typically a very important question and distributional analysis must always be a component of appraisal and evaluation (although this will often only need to be qualitative). Quantitative distributional adjustments may also be useful. However, because of the uncertainties it is important that any adjustment does not reduce transparency – they should be undertaken to provide additional information to the unadjusted results.

A7.54 In those circumstances where a formal quantitative distributional adjustment is deemed necessary the approach advocated in the Green Book should be adopted through the use of distributional weights. Where the reduction in social inequalities is also an objective an additional adjustment may need to be made (for example by increasing the weights applied to the more disadvantaged groups).
In appraisal and evaluation of individual interventions it is important to be clear on what is assumed about related interventions in order to interpret the effectiveness of any one intervention. The sensitivity of results to changes in the assumptions about related interventions should be presented.

The impact of differences in the implementation of the interventions should also be made clear in the appraisal and evaluation and the implications discussed. Furthermore, it is important to be clear about the relationship between impacts at different units of analysis (individual/community, local, regional and national). Where necessary separate indicators will need to be developed to track change at these different levels.

In assessing 3R interventions it is necessary to identify the extent to which the impacts are additional. This is the extent to which the impacts are better than those in the reference case/counterfactual (which defines the deadweight) after allowing for the range of factors that might alter the level of additionality (leakage, displacement, substitution, crowding out and multipliers). It is important to be clear about the spatial level at which additionality has been established.

Detailed guidance is available on assessing the individual components of additionality and there is a significant evidence base related to some of the components. These methods will typically help to identify the additional impacts of interventions in local areas and often at a regional scale but are generally not sufficient to identify the national impact – detailed macro-economic modelling will often be required.

Often in small project assessment it will not be possible to undertake any detailed assessment of additionality. In such cases project appraisal and evaluation should be informed by more detailed assessments done at the programme and policy level. Although non-additionality should be designed out of interventions this is not sufficient to negate the need for an analysis of additionality and many of the non-additionality effects will be beyond the control of those responsible for designing the intervention.

3R interventions are applied in varying localities and involving different people and different organisations. Understanding the context into which interventions are introduced is therefore often crucial. Issues of context dependency are closely related to those of the nature of the intervention. However, regardless of the nature of the intervention, the outcomes produced in any one area will depend upon the context (local factors, unrelated to the intervention itself) into which they are introduced. Where context dependency is important the appraisal and evaluation should make a specific point of identifying and explaining the mechanisms at work.
APPENDIX 7.1

Indicators

Introduction

A7-1.1 Indicators can help in making objectives SMART, monitoring performance, drawing conclusions, making decisions about expenditure and priority and comparing outcomes across projects and areas. Annex 7 illustrated the way in which indicators can be used in the appraisal and evaluation of 3R interventions. While it is recognised that in many cases indicator systems can be taken as given (established at programme or policy level) this annex supports the main guidance by providing:

- A reference to classifications of indicators (Box A7-1.1) that will aid in understanding the different types of indicators and their purposes and how they fit within the overall framework discussed elsewhere. This section will be of help to those wishing to understand the range of different indicator types that may be applicable in a particular circumstance.

- A reference to criteria for the development of indicator frameworks (Box A7-1.2) and for the choice of indicators. These criteria are developed in the context of performance management for organisations as a whole, but are equally applicable to managing the performance of interventions and in particular their appraisal and evaluation. This section will also help those wishing to understand if their chosen indicators/systems are following available best practice.

- A discussion of a number of commonly available indicator frameworks which may be of use – either as a source of material or in giving guidance on how others have approached similar measurement problems. This appendix demonstrates that while the impacts of 3R interventions may be many and varied there is typically some way in which these impacts can be measured and quantified so as to aid in appraisal and evaluation.

Box A7-1.1 Indicator types

There are various typologies of indicators that can be helpful in understanding what types of indicators are needed and for what purpose. MEANS (1999) provides a helpful series of typologies:

Information based – a distinction based on the degree to which information has been processed – i.e. elementary (basic information), derived (ratio of elementary indicators) and compound indicators (weighted indicators).

Comparability based – a distinction based on the degree to which the indicators are comparable within an intervention or outside. Specific indicators are not comparable. Generic indicators are comparable within a programme. Key indicators are comparable more widely.

Scope based – a distinction based on whether an indicator is being influenced by the intervention (programme indicator) and or whether it provides information about the situation (context). In the terminology used here the distinction would be between intervention indicators and context indicators.
Identifying and measuring outputs/outcomes

Phase based – Distinction between the stage of the performance – i.e. resource, output, result and impact indicators. In the terminology used here the distinction would be between baseline, resource, input/activity, output, outcome (objective) and outcome (final) indicators.

Criteria based – Based on the use (test being performed) – i.e. relevance, efficiency, effectiveness value for money etc.

Cycle based – based on the different stages of appraisal and evaluation i.e. appraisal, monitoring and evaluation indicators etc.

Other useful distinctions and classifications include:

Measurement based – i.e. based on the distinction between the different ways in which indicators may be expressed – qualitative, quasi-quantified (scaled), quantified and monetised.

Scope based – in addition to the distinction between (intervention) programme and context indicators it is useful to distinguish between indicators capturing intended and unintended effects and also positive and negative effects.

Process based – a distinction between indicators aimed at measuring delivery outcomes and those concerned with the way outcomes are produced (process outcomes).

These types of indicators are not substitutes in that it is not necessary to choose one type for a particular intervention. Rather they should be seen as different ways of organising indicator information. There is no context-independent ‘right’ way of doing this – a pick-and-mix, case-by-case approach is required.

Box A7-1.2 Criteria for indicator systems and indicators
The government has proposed a series of criteria as guidance in the design of performance management systems and for the indicators that they contain. Again these are useful in the context of indicators for appraisal and evaluation.

Comprehensive information on criteria for indicators and indicator systems can be found in the Cross departmental report Choosing the Right Fabric: A Framework for Performance Information, a joint publication of HM Treasury, Cabinet Office, National Audit Office, Audit Commission and Office for National Statistics.

The FABRIC criteria for indicator systems are:

Performance information systems should be FOCUSED on the organisation’s aims and objectives. They should be APPROPRIATE to, and useful for, the stakeholders who are likely to use them. They should be BALANCED, giving a picture of what the organisation is doing, covering all significant areas of work. They should be ROBUST in order to withstand organisational changes or individuals/expertise leaving. They should be INTEGRATED into the organisation, being part of the business planning and management processes. Finally, systems should be COST-EFFECTIVE, balancing the benefits of the information and the costs of collection.

In addition individual indicators should be relevant to what the organisation is aiming to achieve and avoid perverse incentives so as not to encourage unwanted or wasteful behaviour. Indicators should be attributable – the activity measured must be capable of being influenced by actions that can be attributed to the organisation and accountability should be clear. Indicators should be well defined, with clear, unambiguous definitions so that data will be collected consistently, and the measure is easy to understand and use. Indicators should be timely and reliable. They should produce data regularly enough to track progress and quickly enough for the data to be useful. Indicators should be comparable and verifiable. Efforts to improve comparability will need to recognise the need to compare with either past periods or with similar programmes and situations.
Common indicator frameworks – examples of the measurement of 3R impacts

A7-1.2 It is a long-term aim to have a satisfactory set of common performance indicators that can enable comparisons of outputs and outcomes across intervention areas. There is currently no set of such indicators in the context of 3R interventions. Furthermore, it is expressly not the purpose of this annex to propose a common set, rather the aims of this section are to:

- Identify, discuss and facilitate access to currently available indicator sets/approaches,
- Identify issues that are relevant to a common framework.

A7-1.3 In addition, inclusion here does not necessarily imply that the indicator sets meet the criteria discussed (Box 7-1.2). They are simply presented as examples illustrating common indicator issues.

A7-1.4 Above all, the aim of this section is to demonstrate that whatever the impact a 3R intervention is considered to have, there is likely to be an existing indicator which provides a means of measurement and quantification (although perhaps not at the requisite geographical or other level) and this is an important and necessary step towards valuation. A more general list of indicators at regional and local levels is presented in Box A7-1.3.

A7-1.5 There are large numbers of relatively comprehensive performance indicator sets. Despite aiming to be comprehensive, these sets have been designed for specific purposes. The most comprehensive are those that have been designed for the monitoring and evaluation of very large interventions – with a wide variety of impacts. A number of examples are discussed in the following box.

**Box A7-1.3 Indicator sets/approaches**

EC (Structural Funds) Indicators for Monitoring and Evaluation: An indicative methodology – an example of a set of indicators developed to cover a very wide range of possible interventions.

RDAs common target framework – a range of indicators relevant to the work of the RDAs

DTI Common Core Impact Indicators for Assessing Effects of DTI Industrial Support Policies – indicators developed to detect the impact of industrial support policies.

Audit Commission Indicator Library/economic regeneration indicator/Quality of life indicators – a range of indicators defined mainly for local government

IES Soft outcomes and distance travelled work – indicators to quantify traditionally hard to measure impacts

ONS Social capital indicators – indicators covering this relatively new issue.

29 ODPM are in the process of developing a comprehensive set of indicators to track progress and help understand change in urban areas. This has led to the development of a Town and City Indicators Database (TCID).
EC STRUCTURAL FUND INDICATORS

A7-1.6 Perhaps the most comprehensive set of performance indicators developed so far, and relevant to 3R interventions, are those developed by the EC for the 2000-2006 programming period (the so-called Working Paper 3). These indicators cover a wide variety of impacts due to the large number of fields of intervention which are covered by the EC structural funds, Box A7-1.4 provides some examples.

<table>
<thead>
<tr>
<th>Box A7-1.4 Examples of EC output-result and impact indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Urban development</strong></td>
</tr>
<tr>
<td>Output</td>
</tr>
<tr>
<td>Community development and urban renewal projects supported</td>
</tr>
<tr>
<td><strong>Human resource development</strong></td>
</tr>
<tr>
<td>Output</td>
</tr>
<tr>
<td>Assistance to persons, systems and accompanying measures</td>
</tr>
<tr>
<td><strong>Research and Development. Technology and Innovation (RTDI)</strong></td>
</tr>
<tr>
<td>Output</td>
</tr>
<tr>
<td>Networking – joint R&amp;D projects, firms receiving support</td>
</tr>
</tbody>
</table>

Note that the EC terminology of output, result and impact roughly translates as Inputs/Activities, Outputs and Outcomes.


A7-1.7 In addition to a wide range of indicators and definitions covering this wide field of interventions the EC structural fund indicators also have a well-developed framework and methodology. This is largely the same as that applied in this document but there are some significant differences in the terminology (see Box A7-1.4).

RDA COMMON TARGET FRAMEWORK

A7-1.8 Following the adoption of the Single Programme, which provides the RDAs with a single resource drawn from four government departments, the RDAs adopted a three tier target framework (Box A7-1.5).
Box A7-1.5 RDA Indicator Framework

Tier 1 – Four high level policy aims which reflect the RDA statutory purpose set out in the RDAs Act: to promote 1) economic development and regionally balanced growth, 2) social cohesion and sustainable development, 3) employment and skills development and 4) enterprise, innovation, productivity and competitiveness.

Tier 2 – Eleven medium term regional outcomes that reflect the breadth of RDA activity and those Government Departmental Public Service Agreements that are relevant to RDA activity.

Tier 3 – Four core output indicators: Employment opportunities, Business Performance, Brownfield Land, and Education and skills. A further indicator on Strategic Added Value is also specified. Targets for these indicators are set and reported on an annual basis and represent the key RDA achievements in any one year. Performance against Tier 3 targets is among the information drawn on by Government offices in reporting to sponsor departments on RDA effectiveness.

Employment opportunities – defined as the total number of net job opportunities directly attributable to the RDA activity. This excludes construction jobs and jobs which are an input to the activity. The indicator converts part time and seasonal work to full time equivalents and defines ‘permanent’ as having a life expectancy of one year.

Business performance – defined as a new commercial entity that has commenced full time operation in the region. These may include new start-ups, spin-offs, new-to-region branches, foreign direct investment and not for profit social enterprises.

Brownfield land – taking the definition of PPG3 and the National Land Use Database categories, this is the total number of hectares remediated to an acceptable condition and/or recycled into an effective use as a direct result of RDA inputs and activities.

Education and skills – a learning opportunity is defined as a place on a vocational training or general educational course. This does not need to lead to a formal qualification, but should last at least one week and be relevant to the RDA’s strategy.

For more detailed explanation of the definitions see www.offpat.info/docs

In addition RDAs are also free to propose their own supplementary Tier 3 indicators which are specific to their own regional priorities.

DTI COMMON CORE IMPACT INDICATORS

The DTI has developed a set of common core impact indicators to ensure it has consistent and comparable definitions of relevant forms of evidence about the effects of policies, which can be used to inform assessment of the respective effectiveness in achieving its aims and objectives. The framework emphasises that a pick and mix approach is necessary not excluding the use of supplementary indicators where relevant. The indicators are seen as more than just performance indicators because of the need to track changes in unintended outcomes. The framework draws a focus on intermediate outcomes, recognising that these may not be sufficient to establish ultimate effects but represent evidence for which causal links can reasonably be established between observed outcomes and DTI policy actions. The framework includes generalised composite indicators within which more detailed specific indicators can be nested. The framework has been developed with a recognition of the need to strike a balance between the use of consistent definitions for the sake of comparability and the quest for more precise forms of evidence which may restrict comparability across assessments.
Box A7-1.6 Summary of DTI common core impact indicators
The framework sets out the levels of impact indicators and measures and their relationship to the hierarchy of aims, objectives and targets. Expenditure involves Inputs and Activities that give rise to Intermediate Economic Outcomes, which in turn lead to High Level Economic Outcomes. This framework maintains a distinction between the outcomes, measures and indicators of the outcomes and their relationship to objectives and targets. The framework is based on two main impact themes:

- the ability to generate income from given available resource inputs; and
- the availability, cost and quality of resource and technology inputs.

The income generation theme is decomposed into effects on firms and effects on market processes, networks and supply-chain relationships. The former differentiates between indicators of impact on performance outcomes, intermediate outcomes, capabilities and practices and processes/methods. The latter differentiates between evidence of R&D collaboration and supply chain relationships. The input availability impact theme identifies effects on technology (level and quality of R&D, dissemination), links between industry and the science base (e.g. collaboration), effects on finance (cost, acceptance) and on institutions that supply relevant business services.


AUDIT COMMISSION LIBRARY OF PERFORMANCE INDICATORS

A7.1.10 The Audit Commission maintains a library of local performance indicators, many of which are relevant to 3R interventions. The library includes indicators on biodiversity, community safety, cultural services, education, environmental services, highways and transport, housing, independent living for older people, planning and development, social services and street scene. Other indicators are in continual development (http://www.local-pi-library.gov.uk/library.shtml) including an indicator on economic regeneration (see Box A7-1.7).

Box A7-1.7 Audit Commission Indicators for economic regeneration
The Audit Commission developed a set of key indicators to help councils and their partners understand their local economy, measure the impact of their economic regeneration activities and enable benchmarking to improve performance. The indicators cover four main areas of economic regeneration:

- strengthening and diversifying the local economy;
- improving skills and access to quality employment;
- revitalising town and district centres; and
- tackling deprivation and lack of economic opportunities.

To meet different needs and circumstances, the set of key economic regeneration indicators includes contextual indicators and performance indicators. Contextual indicators, such as employment and business confidence, are affected by national and global trends and so cannot be attributed to local authority economic regeneration activities. However, they are important to obtain an understanding of the baseline position of an area and to monitor change, including the progress of LSPs and other inter-agency strategies that are concerned with economic well-being. Performance Indicators try to measure the impact and cost-effectiveness of particular programmes or interventions, such as different forms of business support.

The indicators are part of the joint IDeA/Audit Commission Library of Local Performance Indicators (LLPI). They also link to the Quality of Life indicators, with which they can be used in a wider regeneration context – social and environmental as well as economic.

See Audit Commission, Economic Regeneration – Performance Indicators March 2003 for more information.
A7-1.11 The Audit Commission has also produced a set of Sustainable Development/Quality of Life (QoL) Indicators. Quality of Life is defined in terms of those things that make an area a good place to live in. Surveys show that members of the public regularly specify certain issues as important including crime levels, health services, housing, shopping facilities, public transport, and education provision. A range of indicators have been piloted and developed. These are divided into three categories: economic; social; and environmental. A distinction is made between social indicators per se and those relating to community involvement issues. Detailed definitions are available at www.audit-commission.gov.uk/pis/quality-of-life-indicators.shtml.

IES SOFT OUTCOMES AND DISTANCE TRAVELLED

A7-1.12 The work on the soft outcome indicators and indicators of distance travelled illustrates how some rather difficult to measure outcomes can nevertheless be quantified. The following box gives examples of some core soft outcomes and indicators:

<table>
<thead>
<tr>
<th>Box A7-1.8 Core soft outcomes in the area of training: examples of possible indicators, measurement and assessment tools</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Key work skills</strong> – the acquisition of key skills e.g. team working, problem solving, numeracy, IT. Numbers of work placements, language and communication skills, placement completion rates, rates of sickness-related absence.</td>
</tr>
<tr>
<td><strong>Attitudinal skills</strong> – levels of motivation, confidence, recognition of prior skills, feelings of responsibility, self-esteem, personal and career aspirations.</td>
</tr>
<tr>
<td><strong>Personal skills</strong> – improved appearance/presentability, levels of attendance, timekeeping, personal hygiene, level of self-awareness, health and fitness, levels of concentration and/or engagement.</td>
</tr>
<tr>
<td><strong>Practical skills</strong> – ability to complete forms, to write a CV, to manage money and awareness of rights and responsibilities.</td>
</tr>
<tr>
<td><strong>Methods for collecting information on soft outcomes</strong> - drawing up individual actions, daily diaries and journals, diagnostic tests (e.g. psychometric), recording observations of group or individual activities.</td>
</tr>
<tr>
<td><strong>Methods of assessment</strong> – client or beneficiary self-assessment, employer assessment, project staff assessment, peer assessment.</td>
</tr>
</tbody>
</table>

SOCIAL CAPITAL INDICATORS

A7-1.13 This is a relatively new area of research but is nevertheless important in the context of many 3R interventions that may impact on community outcomes30. The ONS has developed a framework for the analysis of social capital (see Box A7-1.9). There are presently many definitions attached to the concept of social capital but some convergence towards the notion of networks and civic norms. The key indicators of social capital include social relations, formal and informal social networks, group membership, trust, reciprocity and civic engagement. Social capital is generally understood as the property of the group rather than the property of the individual.

30 A recent review of the issues can be found at http://www.cabinet-office.gov.uk/innovation/2001/futures/attachments/socialcapital.pdf
Identifying and measuring outputs/outcomes

Box A7-1.9 Topics addressed by social capital investigations

View of local area – This topic looks at the physical environment in which people live, the facilities in their area and whether they feel safe in the area. People’s feelings about their physical environment can relate to each of the other aspects of social capital.

Civic engagement – This looks at people’s role in their community, and whether they feel they can influence events within the community. Indicators of civic engagement and trust of civil institutions and processes are central to understanding social capital. It is measuring the amount of self-empowerment and control that people think they have and their involvement with the community.

Reciprocity and local trust – This looks at how many local people respondents know and trust, and whether people would do favours for them, or vice versa. Trust of the stranger is a central dimension of some concepts of social capital.

Social networks - This looks at how often respondents see or speak to relatives, friends or neighbours, and how many close friends or relatives live nearby. Social networks are seen as an important aspect of social capital, as the number and types of exchanges between people within the network, and shared identities that develop, can influence the amount of support an individual has, as well as giving access to other sources of help.

Social support – This looks at how many people the respondent could turn to if they needed help ranging from practical to financial to emotional support. This section also asks who they would turn to for help. The degree of individual support a person has can influence health outcomes and health behaviour.


A7-1.14 Various approaches have been used to measure social capital (see ONS, 2001 for a survey) but they generally focus on rates of participation in social networks and other activities. In addition, attitudes and behaviour can also be useful measures (e.g. in terms of beliefs about trust and honesty in others). A range of composite indicators have been developed (e.g. the Putman index) and the ONS have developed a Social Capital Matrix which brings together quantitative information from a range of surveys (e.g. the British Crime Survey and the General Household Survey).

Box A7-1.10 Indicator checklist

This checklist has been developed to aid in the process of considering indicators.

Indicator types

• To what extent does the basic (elementary indicator) information available need to be compounded or used to derive more complex indicators?

• Does the indicator need to be specific or does it need to be generic so that it can be compared with other interventions with the same impacts? Is there a need to compare the indicator even more widely?

• What context indicators are needed so that the intervention indicators can be understood?

• Are indicators that reveal unintended impacts as well as potential negative impacts needed?

• Are indicators needed for all components of the appraisal and evaluation (baseline, resource, input, output and outcome) or just some of them?

• What are the best ways of measuring the information for the indicator? Is it better to remain qualitative? Could the qualitative indicator be quasi-quantitative (i.e. scaled) or quantified? Is it possible to monetise it?

• What uses will the indicators be put to – relevance tests, effectiveness tests, cost-benefit tests etc?
• Are indicators needed for appraisal, monitoring and evaluation and should they be the same?

• Are indicators needed to reveal how the various intervention processes are working?

**Indicator frameworks**

• Is the framework focussed, appropriate, balanced, robust, integrated and cost-effective?

• Are the indicators relevant, attributable, well-defined, timely, reliable, comparable, verifiable and do they avoid perverse incentives?

**Other frameworks and indicators**

• What is the relationship between this framework and others that are commonly in use?

**Measurement and valuation**

• What is the best means of measuring the indicator and should it be in monetary terms?

• If in non-monetary terms how can values be attached to changes in the level of the indicator?

**Box A7-1.11 Indicator resources**

**NATIONAL**

A Better Quality of Life: A Strategy for Sustainable Development for the UK, plus several fact sheets
http://www.sustainable-development.gov.uk/uk_strategy/index.htm

Indicators in UK – homepage
http://www.sustainable-development.gov.uk/indicators/index.htm

Quality of Life Counts (national sustainable development indicators)
http://www.sustainable-development.gov.uk/sustainable/quality99/content.htm

Annual report on progress
http://www.sustainable-development.gov.uk/ann_rep/index.htm

Regional Quality of Life Counts (regional indicators)
http://www.sustainable-development.gov.uk/indicators/regional/rqol_index.htm

Local Quality of Life Counts (local indicators)

DEFRA's sustainable development homepage
http://www.defra.gov.uk/environment/sustainable/index.htm

Annual report of Green Ministers Committee

DTI Sustainable Development Strategy
http://www.dti.gov.uk/sustainability/index.htm

Scottish Sustainable Development Indicators site
http://www.sustainable.scotland.gov.uk/

**REGIONAL**

Regional competitiveness indicators http://www.dti.gov.uk/sd/rdi

Government guidance on preparing Regional Sustainable Development Frameworks

Examples of Regional Sustainable Development Frameworks:

  South East
  http://www.southeast-ra.gov.uk/regional_policies/sustainable_development/index.html

  Yorkshire and Humber
  http://www.rayh.gov.uk/rapolicy/susdev.asp (also contains guidance on appraisal)
Summary

A7-1.15 This Appendix has provided more detailed guidance on the measurement and valuation of impacts associated with 3R interventions. The key points are summarised in the following.

- There are a wide variety of indicator uses and no one framework or set of indicators will be appropriate. A ‘pick and mix’ approach is needed.

- Guidance is available to ensure that the frameworks adopted, and the individual indicators chosen, comply with best practice.

- It is unlikely that an intervention will need to develop an entirely new indicator of impact – it is more likely that an indicator already exists and can be adapted. The main issue is likely to be the appropriateness of the geographic scale.

- Some impacts are difficult to measure. However, there will typically be some way of quantifying the impacts using appropriate scales/scoring systems.
APPENDIX 7.2

Valuation

Introduction

A7-2.1 Appendix 7-1 provided guidance and resources relevant to the measurement of impacts of 3R interventions. Typically it will be useful not just to measure impacts through the use of indicators but also to be able to value them or changes in their levels. This section provides guidance on valuation in general and in the context of specific indicators.

Principles of valuation

A7-2.2 Some indicators are naturally measured in monetary terms. However, in other cases it may still be possible to express a value for a change in the level of some indicator in money terms. For example, an indicator of the level of crime in an area would be difficult to present in monetary terms. However, it would be possible to identify a willingness to pay for a change in the level of crime (for example through a stated preference survey).

A7-2.3 The most appropriate measure of willingness to pay is often the market price. In some circumstances, however, the market price is not the best measure and a corrected price (shadow price) needs to be used. Where market or shadow prices are not available the next best method may arise through an examination of behaviour and choice (revealed preference) or by eliciting, hypothetically, such preferences (stated preference). A less useful measure but one which may be helpful in some circumstances is the replacement cost (i.e. the cost of producing the good or service somewhere else). Often some combination of measures is appropriate to capture different components of the same good or service. In general the use of benchmark values which relate to the cost of providing similar outputs should not be used for valuation.

A7-2.4 The Green Book (Annex 2) provides guidance on the valuation of a range of outcomes that may arise from 3R interventions. These are discussed in the following sections.

31 Difficult both in the sense of measurement difficulties, the importance of qualitative aspects and in communicating with stakeholders (who may feel excluded by a purely monetary approach to crime statistics).

32 This practice, sometimes referred to as the regeneration value approach attempts to place a monetary value on outputs (jobs, hectares of land cleared etc.) by using expenditures incurred in other interventions or areas. As society has taken the decision to purchase these outputs at this cost it is often suggested that the values represent a revealed social valuation of the outputs. However, this is clearly a circular argument – if such values are wrong in the first instance this approach would perpetuate this error. In addition these are average rather than marginal valuations and are likely to be highly context dependent. Such benchmark values should generally not be employed as a means of valuation. Having established this there is more potential for the use of such values early in the screening stages of appraisal.
Identifying and measuring outputs/outcomes

- **Valuing time**

A7-2.5 Time savings may be relevant in the context of 3R interventions, for example where part of the intervention involves the provision of transport infrastructure and affects accessibility. The provision of premises in areas may also lead to time savings for firms taking up locations. Similarly, improvements in public services and other opportunities within local areas may provide time savings for those who previously had to travel outside of the local area to access them. Where time savings are an issue for a regeneration intervention further information is available in the Green Book.

- **Health benefits**

A7-2.6 Health benefits may arise directly from 3R interventions, for example through the provision of community facilities, or indirectly as a consequence of alleviating poverty and consequent under-investment in health prevention. Typically, health outcomes are quantified in terms of changes in Quality Adjusted Life Years (QALYs). Willingness to pay studies can be used to attach a value to these outcomes. Where changes in health status are likely to arise as a result of a 3R intervention, further information on valuation (including links to more detailed guidance) can be obtained from the Green Book.

- **Prevented fatalities/injuries**

A7-2.7 In some circumstances it may be necessary to consider the impact on risk of fatality and injury as a result of 3R interventions. The Land Stabilisation Programme, for example, involves reductions in the risk of subsidence, which may effect homes and businesses, and in some circumstances lead to a risk of death or injury. The Green Book provides guidance on how to use the Value of a Prevented Fatality (VPF) to estimate the impacts in monetary terms.

- **Environmental impacts**

A7-2.8 Changes in the provision of environmental goods and services may arise in a number of contexts as a result of a 3R intervention. Projects that remediate contaminated land may need to consider the environmental benefits (amenity, ecological etc.) that may arise from a soft end-use restoration (e.g. parkland) and which may be lost as a result of a hard end-use option (development for employment). Similarly such issues are relevant in considering for example the impact of liveability and quality of environments and the role these factors play in encouraging or discouraging private investment. Where such impacts are relevant the Green Book provides links to more detailed guidance which may be useful. Boxes A7-2.1 and A7-2.2 also summarises some experience in this area from 3R interventions.

**Box A7-2.1 Experience in valuing environmental impacts of 3R interventions – Greenfield Land**
A recent review of the literature on the value of Greenfield land suggests a range of present values per hectare for different types of undeveloped land:

- Urban core public space (city park) £10.8 million
- Urban finge (greenbelt) £0.2 million
- Urban fringe (forested land) £0.5 million
- Rural (forested land, amenity) £1.3 million
• Agricultural land (extensive) £0.6m
• Agricultural land (intensive) £0.02m
• Natural and semi-natural land (wetlands) £1.3m

ODPM (2002) Valuing the External Benefits of Undeveloped Land – A Review of the Literature. These are tentative values. A second stage of the study aims to provide more robust estimates.

Box A7-2.2 Experience in valuing the environmental impacts of 3R interventions – Millennium Communities

The Appraisal of the Millennium Communities project in New Islington, Manchester involved the valuation of a number of social benefits associated with the programme including:

• 100% reduction in site accidents during construction;
• 50% reduction in carbon emissions from construction and energy use;
• 20% reduction in water use;
• 50% reduction in construction and domestic waste;

These benefits amounted to a net present value of almost £4m.

VALUATION OF OTHER IMPACTS

A7-2.9 The Green Book guidance may be useful in the context of 3R interventions, particularly in the context of health and environmental outcomes. However, these represent a rather limited number of outcomes in the context of 3R interventions. The following sections provide guidance in relation to a number of other common 3R impacts.

VALUING CHANGES IN EMPLOYMENT

A7-2.10 In approaching this issue the first question to address is whether the employment arises as a result of a national supply side improvement which allows the productive capacity of the economy to expand without any increase in prices. If this is the case then this employment is genuinely additional at the national level and should be valued at the market rate. The additional job equates to additional output which can be valued, at the margin, at the marginal cost to the employer (gross wage plus non-wage labour costs such as national insurance and pensions, typically representing an uplift of 25%-30%).

A7-2.11 The presence of unemployment or under-utilised labour in an area is not sufficient to determine a job’s additionality because of adjustments (displacement, crowding out) in the labour market. However, this may not be the case where there are specific instances in which additional employment in a particular area/group does not affect the national wage bargain. Such a condition might arise for particular areas or groups assisted by 3R interventions. However specific labour market analysis will generally be required to reveal this effect.

A7-2.12 Where jobs are additional to a specific area only (i.e. there would be expected to be compensating losses in other areas) then it is not appropriate to value the jobs at the wage rate since the value attached to these employment opportunities is based on redistributive
concerns, or a desire to reduce the social problems associated with unemployment in particular areas, rather than for additional economic activity. In these cases it is possible to use the notion of a replacement cost (the amount government would spend creating these outputs elsewhere) or to interpret approved projects’ cost per unit costs as expressions of social willingness to pay to secure the benefits. However, there are many difficulties with such approaches, affecting the robustness of the results obtained, and it is not recommended.

A7-2.13 Generally in such cases it will be better to consider the impact of the reduction in unemployment on the social problems experienced by particular areas (health, crime, low educational attainment, family break-up etc.). This is particularly relevant where unemployment concentrated in particular areas leads to elevated and concentrated problems – for example because of the presence of feedback effects.

VALUING CHANGES IN ECONOMIC ACTIVITY

A7-2.14 The value of additional economic activity seems obvious, but it is important to see it from within the generalised framework of welfare theory. In welfare theoretic terms the same argument as that applied to labour above can be applied to other factors of production. If it is a truly net additional change in economic activity then this means that this economic activity occurs without any compensating reduction in activity elsewhere in the target area (but not necessarily the wider area or other priority areas). Hence the market value of the factors employed will represent the value of the additional activity. Typically, this can be measured in terms of value added (see Box A7-2.3).

Box A7-2.3 Components of value added

Value added is conceptually a useful economic measure as following its construction in terms of national accounting procedures it is simultaneously:

- The difference between the market price of an output and the value of the (non factor) inputs (raw materials, intermediate goods) consumed to generate that output, and
- The returns to the factors of production employed in generating that output, comprising wages and salaries, profits for owners of factors of production (capital) and rentals on land.

A7-2.15 However as with labour there will be a shadow price of the different factors of production, which should be taken into account. This represents the value of these factors if they are not otherwise used. It may be that some factors of production would have alternative uses, while others do not, hence a disaggregated approach may need to be applied.

A7-2.16 Again a specific case needs to be made because of the possibility that any improvement dissipates because of macro-economic adjustments.

VALUING CHANGES IN LAND VALUES

A7-2.17 Development value (i.e. the change in the value of land as a result of an intervention) is often identified as a potential measure of benefit. Technically the same principles apply as

\[\text{Note it will depend on the specific circumstances as to whether it is appropriate to value jobs (which will generally be an output rather than an outcome) or an increase in economic activity. Both valuations provide a view on the same underlying effect (productivity change). Typically valuation of a change in economic activity will be of primary importance, but it may still be useful to value jobs particularly if different options lead to different profiles of job creation as well as other impacts on value added.}\]
in the case of jobs and economic activity. Land value improvements in particular areas may simply reduce land values elsewhere (displacement) or may have risen anyway (deadweight). Additional care is however required in that land assets present particular valuation problems. Land values capitalise expected future returns and may therefore already reflect expected interventions. The low frequency of transactions and limited competition make land values difficult to compare. Land owners may also have unrealistic valuations based on historic uses which have not been modified to reflect current expectations.

A7-2.18 There is also a risk of double counting as the improvement of land value may simply reflect the receipt by the property sector of benefits already measured in an up-stream market. This may apply both to measures of economic activity and to values associated with additional jobs. Despite this potential double counting there may still be additional benefits to be counted. However, these are likely to arise as externalities (e.g. spill-over effects from areas that have witnessed land value gains to neighbouring areas) or distributional concerns (e.g. land values appreciating in certain locations or in the ownership of certain groups).

Productivity and competitiveness

A7-2.19 Productivity is a measure of how efficiently inputs (such as labour and capital) are turned into outputs. Labour productivity looks at how efficiently labour is used to produce outputs and is commonly measured in terms of gross value added per worker or per hour worked. Total factor productivity can be thought as a measure of how efficiently all units of input, not just labour, are used to produce outputs.

A7-2.20 Labour productivity growth at an aggregate level is due to three factors:

- Improving inputs at firms;
- Using inputs at firms more efficiently; and
- Changing market shares of high and low productivity firms\(^{34}\).

A7-2.21 Valuing an increase in labour productivity at a project or programme level needs to take into account all three processes by gathering evidence to the extent feasible on:

- effects on firms directly affected by the programme/project;
- wider effects on the productivity of other firms, for example via R&D or skills spillovers, or through supply chain linkages;
- effects on average aggregate productivity, resulting from changes in market shares of direct beneficiary firms relative to others\(^{35}\).

\(^{34}\) In other words, the ‘batting average’ effect which results when high productivity firms gain market share, or lower productivity firms lose market share or exit. Analysis of these types of effects has been carried out using longitudinal microdata on firms and plants. Recent work for DTI in this area is available at: http://www.dur.ac.uk/richard.harris/DTI_A.pdf.

\(^{35}\) See, for example, the analysis of ‘batting average’ effects of RSA in the reference cited above.
Identifying and measuring outputs/outcomes

A7.22 Competitiveness is often used in the wider sense in overall economic performance and is typically assessed using a batch of indicators. The best single measure of a nation’s competitiveness is high and rising levels of GDP per head of population. The term competitiveness is helpful in directing policy beyond the overall productivity numbers to a focus on the longer term determinants of economic performance such as skills, innovation, enterprise and investment.

### Box A7.2.4 DTI Competitiveness Indicators

The Indicators are divided into the five drivers of productivity, as set out in the document, ‘Productivity: The Evidence and the Government’s Approach’. The five drivers are:

- **Investment** – measures physical capital and ICT;
- **Innovation** – measures of the science base, technology, commercial exploitation of science and technology, and R&D;
- **Skills** – measures of human capital;
- **Enterprise** – measures of business formation, entrepreneurship and finance; and
- **Competitive Markets** – measures of openness, labour market flexibility, regulation and the institutional environment.

A7.23 Valuing the impact of increases in competitiveness on the economy is difficult, as impacts can be difficult to quantify, and may be very long term and uncertain. Evidence will be needed on indicators of impact on one or more of the factors that are believed to influence competitiveness of the economy, such as the level of innovation activity, and which reflect the specific aims and rationale of the programme under study. Estimates of the value of impact should take account of the best available evaluation evidence for similar types of programmes, and should include adjustments for additionality. More detailed guidance on evaluation of productivity/competitiveness impact is available from the DTI’s central evaluation web site at http://www.dti.gov.uk/about/evaluation.

### VALUING (SPATIAL) DISTRIBUTIONAL CHANGES

A7.24 The new Green Book provides a methodology for undertaking a distributional impact adjustment, where costs or impacts fall on different sections of society. This reflects the fact that £1 of benefit or cost is valued differently depending upon the income of the recipient. This is one type of distributional impact. Another is the value of directing additional benefits at specific areas and as a consequence, sectors of society. Positive increases in the welfare of these sectors positively affect the welfare of non-members (an externality).

A7.25 While in principle it would be possible to place a value on a spatial-redistribution change through for example stated preference work, this is in practice very difficult. Such work would in theory proceed by presenting a sample of individuals with a scenario in which two populations were given a different distribution of something that they valued. It would then be possible to determine a value for a particular distributional change. However, these valuations themselves are based on a particular distribution, which can make the results difficult to interpret.
VALUING THE PROVISION OF COMMUNITY FACILITIES

A7-2.26 Community facilities like post offices, village halls etc. all have value to the places in which they may be located. Often there will be a revenue stream associated with the facilities or they may be supported by a grant. Their value to the local population however may be wider and may involve use values (including the consumer surplus above any payments actually made) and non-use values (values associated with the option of using the facility in the future or in preserving it for descendants and later populations). Various methods can be used to identify use values (hedonic pricing, travel cost methods etc.). However, the non-use values will only be amenable to valuation through contingent valuation and contingent ranking exercises.

VALUING IMPROVEMENTS IN SOCIAL CAPITAL

A7-2.27 As noted earlier, this is a relatively new area of analysis in measurement, let alone in valuation terms. In principle it would be possible to value changes in the provision (quality and quantity) of social capital by reference to the relationship between this capital and the outcomes that policy makers are concerned with, namely: economic growth, improved health and more effective government. Alternatively it might be possible to identify willingness to pay as premia attached to house purchase decisions in areas with different levels of social capital. However, efforts at present are aimed largely at developing methods for measuring such outcomes and are a long way from valuation at present.

VALUING CRIME PREVENTION/REDUCTION

A7-2.28 Brand and Price (2000) provide perhaps the most comprehensive information available regarding the monetary value of crime prevention/reduction. The study provides ‘costs of crime’ related to a wide variety of offences. Benefits of reduced crime can be examined in terms of:

- Reduced expenses incurred in the anticipation of crime (security expenditure, insurance);
- Benefits from the avoided consequences of crime (retained property, avoided damage, avoided emotional and physical impacts, increased output, reduced expenditure on victim and health services);
- Benefits of reduced costs in responding to crime (i.e. avoided costs in the criminal justice system).

A7-2.29 Values are provided for crime against individuals and households (e.g. theft, criminal damage, and burglary), fraud and forgery, traffic and motoring offences and drug offences (see Box). The figures provided in this report are the best available but do have some very serious limitations and should not be used without a full understanding of their basis.

37 Crime indicator data is available at national, force, local authority and Basic Command Unit levels http://www.homeoffice.gov.uk/rds/pdfs2/hosb702.pdf
Box A7-2.5 Economic and social costs of crime
Average costs of crime (per incident) are provided for a range of categories of crime.

Crime against individuals and households e.g.
- Common Assault £540
- Robbery/Mugging £4700
- Burglary in a dwelling £2300
- Theft (not vehicle) £340
- Vehicle theft £890
- Criminal damage £510

Commercial and public sector victimisation e.g.
- Theft from a shop £100
- Theft of a commercial vehicle £9700
- Robbery or till snatch £5000
- Criminal damage £890

These costs include (where relevant/possible) costs in anticipation of crime (e.g. security expenditure, insurance administration), loss and damage to property, emotional and psychological impacts, lost output, costs of health and victim services as well as an apportionment of the costs of the criminal justice system.


VALUING IMPROVEMENTS IN EDUCATION/TRAINING

A7-2.30 3R interventions may have an impact on education and training outcomes, and it is sometimes possible to quantify these. Measurable impacts may occur as follows:

- By affecting individual productivity via participation in education and training or achievement of qualifications, 3R interventions may increase the productive capacity of the economy as a whole, or of the area subject to consideration;

- Improved education and training outcomes may lead to corresponding wider benefits, such as improved health, reduced crime and greater social cohesion.

A7-2.31 If an attempt is made to produce a quantifiable estimate of the impact on the productive capacity of the local or national economy, judgement is required regarding the size of the impact of the 3R intervention on individual education training outcomes, and the number of people likely to be affected. It may then be possible to estimate the impact on employment and earnings outcomes within the labour market, although it is necessary to consider whether offsetting changes will occur elsewhere.

A7-2.32 However, when, for example, data on earnings by level of qualification is used to proxy the likely impact of improved qualifications, various adjustments may be required. It is necessary to factor in employers’ labour costs and other costs not borne by the individual, plus any expected net impact on total employment. It is also important to account for the fact that the impact of education and training on a person who has obtained a qualification of their own accord may not be the same as that on a person who has obtained one as a result of a 3R intervention.
A7-2.33 The impact on attainment of further qualifications, and the associated costs, also needs to be considered. For example, somebody who obtains an NVQ Level 3 qualification as a result of a 3R intervention may become more likely to obtain a Level 4 qualification too.

A7-2.34 Finally, if appropriate evidence of a quantifiable causal link can be identified, it then may be possible to include other measurable impacts such as that on crime and health outcomes and social cohesion in the final calculation.

VALUING HERITAGE AND CULTURE IMPACTS

A7-2.35 Heritage and culture impacts may arise from a variety of 3R interventions. Often, cultural facilities such as museums are central to plans to revitalise areas for example by capitalising on their past heritage. 3R outcomes may arise due to the direct and indirect employment but also from funds spent in the local area by visitors. These impacts are separate from the cultural benefits that may accrue to the visitors themselves. From a 3R intervention assessment perspective the main issues which should be borne in mind are that:

- Valuation in this area tends to be highly context-specific and requires bespoke investigations. There are limited possibilities for the use of techniques such as benefits transfer;

- As with environmental impacts, irreversible impacts can be of significant importance.

A7-2.36 Where such impacts are relevant, the DCMS White Book on Option Appraisal of Expenditure Decisions provides guidance on using valuation techniques in the heritage and culture sector.

Summary

A7-2.37 This appendix has provided guidance in relation to the valuation of the benefits of 3R interventions. Valuation guidance is provided in the Green Book in relation to a number of outcomes which are relevant to the 3Rs (time savings, health, environment). This guidance focuses on the principles that should be taken into account when attempting to value outcomes which are more specific to 3R interventions. These include the valuation of jobs, economic activity and value added, productivity and competitiveness, community facilities, social capital, crime, education and culture and heritage.
APPENDIX 7.3

Additionality

The ‘Additionality Guide’ prepared by English Partnerships provides more detailed guidance on the consideration of the additionality of 3R interventions. This guide is formally annexed to the 3Rs guidance, and should therefore be considered binding best practice in the same sense.

The Additionality Guide is available at http://www.englishpartnerships.co.uk
ANNEX 8
Presentation of results

Summary

A full summary is provided at the end of this Annex. However, in brief it provides guidance on the fifth step in the assessment cycle – presentation and interpretation of results. The section overviews the general principles and then discusses 3R-specific issues such as dealing with risk and uncertainty, the use of benchmarking and reporting formats.
Introduction

A8.1 This Annex provides guidance on issues of presenting information and on interpreting it so that the audience (including decision-makers) can make the most effective use of it. Generic guidance is available in the Green Book in terms of ‘presenting the results’ (para 2.13 to 2.16).

A8.2 The main points are:

- Transparency is vital, enabling the reader to check calculations, supporting evidence and assumptions,
- Reports should be clear, logical and well founded.
- Summary reports should be as non-technical as possible and reports should be self-contained (in the sense that they provide sufficient evidence to support their conclusions/recommendations).
- Results of sensitivity and scenario analysis should be included giving decision makers an understanding of the range of potential costs and outcomes.

A8.3 In addition the following general issues should be considered:

- Who is the (primary) intended audience for the appraisal and evaluation results? Are there secondary audiences and how have these been catered for? What are the anticipated actions of the audience given the conclusions reached?
- Be clear about the context within which these results need to be interpreted. What were the results of previous evaluations? etc.,
- Acknowledge the strengths and weaknesses in the appraisal/evaluation. Where weaknesses have led to bias, attempt to identify the direction of this bias. Be clear about what would have been done differently with hindsight.
- Consider risk and uncertainty and the results of any sensitivity/scenario analysis. Have contingencies been included?
- Be transparent about the quality of the data and the assumptions employed.
- Make it clear what the objectives of the appraisal and evaluation were and whether these have been achieved.
- Identify clearly where further assessment is required and recommend possible approaches/actions.

A8.4 Within this general guidance, the following sections explore in more detail some aspects that are particularly relevant from the 3R intervention perspective:

- Risk and uncertainty
- Benchmarking
- Reporting formats and tests.
Risk and uncertainty

A8.5 General guidance on handling risk in appraisal and evaluation is available from a number of sources. Annex 4 of the Green Book provides guidance on issues such as optimism bias, use of expected values and irreversibility. More generally the framework for managing risk is set out in the so-called Orange Book (HM Treasury, 2001).

A8.6 Risk is relevant to both appraisal and evaluation. In appraisal the concern is to account for the risk and uncertainty; in evaluation the concern is to identify whether the risks foreseen actually occurred and whether strategies for dealing with risk were effective.

A8.7 Para 5.57 to 5.75 of the Green Book provide guidance on issues of risk and uncertainty relevant to appraisal and evaluation. The key points are summarised as follows.

- Para 5.57 to 5.58 identify the need for the assessment of risk and uncertainty in large and small interventions, the importance of identifying the expected value of risk, managing risks during implementation and communicating risk/bias to decision makers.

- Para 5.59 identifies the important role of risk management and the various steps involved.

- Para 5.61 to 5.64 discuss the need for specific adjustments for optimism bias and the principles that should be followed to reflect the circumstances in particular areas. Supplementary guidance on optimism bias is also available.

- Para 5.65 to 5.66 identify the role of risk premia in valuing risk, the relationship with more generic optimism bias and the usefulness of decision trees.

- Para 5.68 to 5.73 detail approaches to handling uncertainty and the essential role of sensitivity analysis and other approaches such as scenario analysis and Monte Carlo analysis.

- Para 5.74 and 5.75 discuss the translation of the analysis of risk and uncertainty into strategies for preventing risks and mitigating their impacts.

A8.8 Annex 4 of the Green Book covers some of these areas in more detail, in particular issues associated with risk management, transferring risk, optimism bias, Monte Carlo analysis, irreversible risk and the cost of variability in outcomes.

A8.9 The principles covered in the Green Book are as applicable to the 3R intervention context as to any other assessment. However, 3R interventions also raise specific issues associated with risk, upon which the following sections provide guidance. Issues related to uncertainty in the context of 3R interventions are summarised in the following box.
Box A8.1 Uncertainty in 3R interventions

There are three kinds of uncertainty that good planning and decision-making processes have to manage:

*Uncertainty about the context* that gave rise to the strategy in the first place and that it will seek to influence for the better. In 3R contexts this type of uncertainty is likely to be significant for the following reasons:

- Limitations in the evidence base on the root causes of 3R problems.
- Limitations in the evidence base on the links between regeneration activities and their final outcomes.
- System complexity, due to the multiplicity of variables that can affect the outcomes of interventions under the different domains (economic, environmental, and social).

*Uncertainty about relationships* between those likely to be directly affected by a strategy, and between these and other interested stakeholders who might not have been party to the strategy but nevertheless might be affected by it indirectly and/or inadvertently. In 3R interventions this uncertainty has increased, as the circle of those who need to be engaged is typically wide.

*Uncertainty about value judgements* that must enter into the assessment of costs and benefits where outcomes cannot be reduced to a common scale (e.g. monetary value). This type of uncertainty is likely to be particularly significant in 3R initiatives, where the ultimate aim of sustainability means that there is a need to take account of outcomes, the quantification of which might be difficult (e.g. environmental and social effects). This increases the likelihood that value judgements will have to be made.

*Source: Research on Area Based Regeneration Strategies, Report to EP, DETR and the RDAs*

**RISK, THE COST OF VARIABILITY AND DISADVANTAGE**

A8.10 The Green Book guides that in most cases the cost of variability is not likely to be significant\(^{38}\). Where it is significant and has not already been accounted for in the value of a cost or benefit then expected outcomes should receive a risk adjustment to allow for the cost of variability. Cases where results should be risk adjusted to reflect the cost of variability are where:

- Risks are concentrated disproportionately in the population,
- Risks are very large or where,
- Risks are correlated systematically with income or GDP.

A8.11 In many 3R interventions the first and final conditions are likely to be relevant. 3R interventions are characterised by concentrating resources at particular areas and interventions may well have a higher variability in areas where incomes are most depressed. In such cases a variability adjustment may well improve the information available to decision makers, by making the implications of the costs of variability (in terms of the choice of options or prioritisation of actions) clear.

\(^{38}\) As this risk tends to be diluted when spread across the public sector as a whole.
A8.12 Whether a risk adjustment alters the result of an appraisal, however, will depend on many factors. It is likely only to be significant for very large incremental changes in outcomes or where there is a fine balance between costs and outcomes.

CHANGES IN MARKET CONDITIONS

A8.13 The outcome of interventions may depend largely on general and especially local economic conditions. In most projects, this is also the case (e.g. the benefits of building a road are likely to be bigger if an economy booms than in a recession). However, as many 3R interventions work close to the market or rely on the market for delivery, changes in market conditions (e.g. business cycles) need to be fully incorporated into the risk analysis. Outcomes may be sensitive to the effect of other interventions, economic recovery or decline (including the possibility of a downward spiral). Scenario analysis may be a useful tool in this regard, as may calculation of the impact of systematic risk.

LIMITS IN THE EVIDENCE BASE

A8.14 A limited evidence base is a feature of most areas of intervention. However, this is particularly relevant in the case of 3R type interventions and this has implications in the context of risk assessment. Gaps in the evidence base will typically mean there is a need to apply assumptions in order to take forward the analysis. Assumptions should always be fully documented and bear a clear relationship to the existing evidence or theory base. Hierarchies of evidence can be useful to recognise the degree of confidence in particular assumptions and also to communicate this uncertainty to the audience. A useful tool for assumptions about quantitative data is the NUSAP formulation (see Box A8.2)

Box A8.2 NUSAP – Numeral Unit Spread Assessment Pedigree – The Management of Uncertainty and Quality in Quantitative Information
The notational system ‘NUSAP’ enables the different sorts of uncertainty in quantitative information to be displayed in a standardised and self-explanatory way.

Numeral; this will usually be an ordinary number; but when appropriate it can be a more general quantity, such as the expression ‘a million’.

Unit; which may be of the conventional sort (e.g. hectares), but which may also contain extra information, as the date at which the unit is valued (most commonly with money).

Spread; which generalises from the ‘random error’ of experiments or the ‘variance’ of statistics. Although Spread is usually conveyed by a number (either + , % or ‘factor of’) it is not an ordinary quantity, for its own inexactness is not of the same sort as that of measurements.

Assessment; this provides a place for a concise expression of the salient qualitative judgements about the information.

Pedigree; this is an evaluative description of the mode of production (and where relevant, of anticipated use) of the information.

Taken from NUSAP – The Management of Uncertainty and Quality in Quantitative Information, www.nusap.net

A8.15 Limits in the evidence base are particularly apparent in the case of optimism bias and it is hoped that data can be developed over time to improve the application of this approach in the area of 3R interventions. Optimism bias is the demonstrated tendency for appraisers to
be overly optimistic and explicit adjustments should be made for this. Such adjustments are intended to complement not replace existing good practice in terms of calculating project specific risk adjustments. As noted in the Green Book, adjustment for optimism bias should be empirically based, using data from past projects or similar projects elsewhere. Cross-departmental evidence for generic project categories is available and should be used in the absence of more specific evidence. Where more robust evidence is available this should be used.

A8.16 In the 3R field there is presently limited evidence on appropriate factors for considering optimism bias. Specific bodies are likely to hold the best data on optimism bias related to cost and timing and some limited evidence is available in relation to optimism bias for benefits. Some limited evidence from the City Challenge and SRB programme is presented in Box A8.3.

**Box A8.3 Optimism Bias**
The City Challenge Programme was launched in 1991 with the aim of transforming specific rundown inner city areas. It ran in 31 deprived urban areas from 1992 to 1998. Local authorities were invited to compete for City Challenge funding on behalf of cross-sectoral partnerships. Two City Challenge competitions were held. Eleven, so-called ‘Pacemaker’ Partnerships started in 1992 and were wound up in 1997. Twenty Round 2 winners, commenced in 1993 and finished in 1998.

The final evaluation of the programme has assessed the outputs that were achieved against targets set at bid stage and the actual expenditure against that budgeted. The table below presents a summary of the results. For each output the total variation seen across the Partnerships in terms of actual versus estimated results for outputs and expenditure is shown, for both rounds of the Programme.

**Actual outputs and expenditure compared with targets (lowest and highest points in range)**

### City Challenge Programme

<table>
<thead>
<tr>
<th>Outturns</th>
<th>Pacemaker</th>
<th>Round 2 1997/98</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dwellings completed/improved</td>
<td>−39%</td>
<td>143%</td>
</tr>
<tr>
<td></td>
<td>3%</td>
<td>648%</td>
</tr>
<tr>
<td>Jobs created/preserved</td>
<td>−50%</td>
<td>103%</td>
</tr>
<tr>
<td></td>
<td>−20%</td>
<td>188%</td>
</tr>
<tr>
<td>Land reclaimed/improved</td>
<td>−55%</td>
<td>243%</td>
</tr>
<tr>
<td></td>
<td>−63%</td>
<td>400%</td>
</tr>
<tr>
<td>Floorspace</td>
<td>−78%</td>
<td>679%</td>
</tr>
<tr>
<td></td>
<td>−65%</td>
<td>237%</td>
</tr>
<tr>
<td>Business start up</td>
<td>−39%</td>
<td>241%</td>
</tr>
<tr>
<td></td>
<td>−74%</td>
<td>237%</td>
</tr>
<tr>
<td>Private Sector</td>
<td>−62%</td>
<td>24%</td>
</tr>
<tr>
<td></td>
<td>−42%</td>
<td>984%</td>
</tr>
<tr>
<td>Expenditure</td>
<td>−8%</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td>−10%</td>
<td>0%</td>
</tr>
</tbody>
</table>

### Single Regeneration Budget Challenge Fund

<table>
<thead>
<tr>
<th>Outturns</th>
<th>Lowest</th>
<th>Highest</th>
</tr>
</thead>
<tbody>
<tr>
<td>Labour Market</td>
<td>−99%</td>
<td>601%</td>
</tr>
<tr>
<td>Enterprise Development</td>
<td>15%</td>
<td>149%</td>
</tr>
<tr>
<td>Housing</td>
<td>−83%</td>
<td>20%</td>
</tr>
<tr>
<td>Crime &amp; Safety</td>
<td>−34%</td>
<td>47%</td>
</tr>
<tr>
<td>Physical Reclamation</td>
<td>−94%</td>
<td>74%</td>
</tr>
<tr>
<td>Community Facilities</td>
<td>−38%</td>
<td>60%</td>
</tr>
<tr>
<td>Voluntary Sector</td>
<td>17%</td>
<td>153%</td>
</tr>
<tr>
<td>Childcare</td>
<td>9%</td>
<td>9%</td>
</tr>
</tbody>
</table>
The main conclusions to be drawn from this are:

- Actual expenditure was almost always greater than budgeted expenditure.
- There was a wide variety in actual versus estimated outputs. However overall, all of the original total target outputs were exceeded by the end of the Programme.
- Significantly more Pacemaker Partnerships failed to achieve their target outputs. Improvements to the Programme infrastructure and the ability to learn from the Pacemakers appears to have helped the second Round Partnerships.

### Benchmarking

**A8.17** The spatial focus of 3R interventions creates a great interest not only in comparing costs and outcomes across different types of interventions but also in terms of the same projects applied in different areas. Presentation and interpretation of the results of appraisal and evaluation can be usefully complemented through the use of benchmark information.

**A8.18** Benchmarks/guidelines (e.g. cost per job, cost per housing unit etc.) have been widely used in the assessment of regeneration interventions. However, the use of benchmarks presents some considerable difficulties. While the use of benchmarks in an appropriate manner can aid in the presentation and interpretation of results, inappropriate use can give rise to difficulties (e.g. in applying an incorrect benchmark or in using a benchmark where it is not appropriate).

**A8.19** Benchmarks can be helpful in the following circumstances:

- Where they provide contextual information relevant to a specific indicator,
- Where they have been developed through thorough analysis at a programme level to assist in project appraisal and evaluation.

**A8.20** When applied, benchmarks should be provided in a format that recognises:

- Differences in the characteristic of the benchmarked output (e.g. if cost per job, what type of job?)
- Differences in the context (e.g. the area where the job is created)
- Differences in the time at which the benchmark was derived.

**A8.21** Given the degree of delegation in 3R interventions, the large number of relatively small projects and the need for proportionality, the use of cost per output guidelines, derived at the programme level for use in project appraisal and evaluation, has significant merit.

**A8.22** Benchmark data is available from a number of large scale evaluations such as City Grant and the SRB challenge fund (see Box A8.4). Care should be taken in using such outputs as they typically relate to the cost of producing a basket of outputs, only some of which may be relevant in a particular situation. In addition a variety of benchmarks will often be available at different spatial scales and relating to gross and net costs – emphasising the need to be clear over the choice of benchmarks for particular situations.
Box A8.4 Sources of benchmark/guideline data
The following lists some generic sources of benchmark guideline data. Other sources may be available in relation to more specific interventions.

DETR (2000) Final Evaluation of City Challenge – provides information on the costs of a wide range of outputs including development (floorspace), housing (improved dwellings), transport (km of road), Environment (ha of land), training (qualification, jobs), business support (start-up, advice), net additional jobs (development and business services).

DETR (1998) Evaluation of the Single Regeneration Budget Challenge Fund, Partnership for Regeneration – An Interim Evaluation – provides data on jobs created/safeguarded, pupils with enhanced attainment, people trained with qualifications, young people receiving personal development, start up supported, businesses advised, dwellings built/improved, ha of land cleared, number of community safety beneficiaries, numbers using additional health, sports and cultural facilities, number of community/voluntary sector groups supported, number doing voluntary/community work, number of child care places provided.

Reporting formats and tests

A8.23 The Office of Government Commerce provide a business case template which is the standard document for project assessments. This will be adequate in many circumstances and should form the starting point in developing more specific reporting formats.

A8.24 It is likely in many cases that the costs and outcomes of 3R interventions will be expressed in a variety of formats. In such cases Multi-Criteria Analysis or less formal performance matrices using a variety of reporting formats are a useful way of summarising appraisal and evaluation results. MCA can be a particularly useful tool when reporting results where it has not been possible to value them. Where MCA is applied it should follow general best practice principles as set out in the MCA manual (see Box A8.5).

Box A8.5 Multi Criteria Analysis: A Manual (DTLR)
This MCA manual provides practical guidance on the application of these techniques. The manual provides a basic introduction to the area and more detailed guidance for specialists interested in applying the techniques to their own particular decision-making problems. The guidance sets out the stages involved in carrying out a multi-criteria analysis, up to and including the construction of a performance matrix, which sets out how each of the options being appraised performs on each of the criteria that form part of the analysis. It explains how to carry out a full multi-criteria decision analysis (MCDA) involving scoring of each option on each criterion, and then combining the scores by means of a system of weights to yield an overall ranking for each option. It provides detailed case studies in a number of areas of application and summarises some of the key lessons learned in the application of MCDA.

Further information is available from http://www.dtlr.gov.uk/about/multicriteria/

A8.25 A good example of the performance matrix approach is the Appraisal Summary Table developed to assess trunk road schemes (and later multi-modal transport projects/strategies). There is a need to define clearly the impacts which form the basis of the AST entries and the format for their display at different stages of the appraisal i.e. when and for what impacts should information be displayed:

- Qualitatively,
- Quantitatively,
- As monetary values.
Assessing the Impacts of Spatial Interventions

Another example is the matrix developed for the Integrated Policy Appraisal guidance (see Box A8.6). Both matrices make a clear distinction between the 3 aspects of sustainable development, thereby helping to identify any trade-offs that arise between these that may not be reflected in the level of monetary costs and benefits because of difficulties in valuation.

**Box A8.6 The Integrated Policy Appraisal Matrix**

The IPA contains the following impacts under the main headings of economic, social and environmental:

**Economic** – impacts on the public accounts, consumers and business

**Social** – public health and safety, crime

**Environmental** – climate change, air quality, landscape, land-use, bio-diversity and noise.

The matrix contains space to complete both quantitative measures of the impacts as well as qualitative descriptions.

The qualitative display of information need not be simply textual but can include the use of scales relevant to the particular impact. The quantitative display of information may take many formats and should relate as far as possible to existing numerical indicator values. Monetary values can be displayed in a variety of formats and should be presented in a way so that they can be considered alongside the costs of the intervention.

Qualitative details should always be provided in addition to quantitative and monetary dimensions – particularly where they relate information which is not well captured by the indicator or monetary values. While performance matrices can be very useful tools there are problems with the approach which should be borne in mind.

**Box A8.7 Difficulties with performance matrices**

- it can be a kind of pseudo-graphical representation, whereby white space indicates low impact and dense wording indicates high
- the weighting for each criterion is usually either not shown or not known
- there are usually overlaps between impacts, but this is not always clear and the robustness of each assessment is usually not shown
- sometimes the main impact of an appraisal belongs in only one or two cells of the matrix, and there is insufficient room to do justice to it
- sometimes a monetised or quantified cell needs more back-up text than a qualitative cell (particularly in the area of explaining winners and losers)

In an economic appraisal the overall criteria should be the net present values of costs and benefits (or net present costs in cost-effectiveness analysis). These are the criteria which should inform the main decision on the project together with whatever analysis is possible on the unquantified/unvalued impacts.

Where relevant, but not detracting from the above, reporting should also clearly identify any other ‘tests’ which have been performed and their relevance to other questions posed of the analysis. Tests are (formal or less formal) approaches to analysing the information presented by the chosen indicators. Some ‘tests’ require the indicator information to be presented in certain ways (e.g. valued in monetary terms). The appropriateness of the test
Box A8.8 Types of test

**Time trend** – (is the situation improving?). Looks at outcome indicators over different periods.

**Relevance** – are the indicators chosen relevant to the objectives?

**Least cost analysis** – (which of the alternatives is least cost?). Looks at the costs of two alternatives. As it ignores outcomes, it is not a useful tool when these alternatives produce different outcomes or show large differences in effectiveness.

**Unit (output) cost analysis** – (is the intervention producing the output efficiently?). Looks at the unit cost of producing a well defined output (e.g. a refurbished housing unit). Generally only useful for comparing the costs of producing outputs. As Cost-Effective Analysis but looks at outputs not outcomes.

**Cost effectiveness analysis** (CEA) – As unit cost analysis but looks at outcomes – requires an indicator of overall effectiveness (otherwise it should be referred to as cost consequences analysis).

**Cost-utility analysis** – where outcomes measured in terms of utility but utility is not measured in monetary terms (e.g. Quality-Adjusted Life Years)

**Risk-benefit analysis** – an approach used often in health and safety and environmental policy interventions that focus on the benefits of risk reduction.

**Cost-consequences analysis** – like CEA but where there are multiple outcomes which cannot be compared directly.

**Cost (resource) savings analysis** – like least cost but also attempts to define the resource savings that arise from the intervention.

**Cost-benefit analysis** – (is this an efficient use of resources, should more be spent in this area?). Costs and benefits measured in monetary terms.

**Value for money analysis** – specific combination of approaches involving economy, efficiency and effectiveness aspects.

**Cost (criteria) performance analysis** – Multi-Criteria Analysis is used to define outcomes and these are presented alongside costs of alternatives.

**Mixed matrix approaches** – incorporating both qualitative and quantitative information.

**Causality** – tests (or rather evidence) about the known level of causality from one indicator to another, e.g. is the causality based on accepted evidence, theory or assumptions?
Summary

A8.31 This Annex has provided guidance on the fifth step in the assessment cycle – presentation and interpretation of results. It has overviewed the general principles and discussed the 3R-specific issues in terms of dealing with risk and uncertainty. The main points are summarised below.

A8.32 The results of assessments may need to be risk adjusted in order to reflect the cost of variability. This might arise because the risks are concentrated disproportionately in the population (e.g. the most disadvantaged groups), risks are large or risks are correlated systematically with income. As a result the initial position faced by the beneficiaries (income, access to services, welfare etc.) has an important bearing on how risk trade-offs are considered. In such cases a variability adjustment may significantly improve the information available to decision makers, by making the implications of the costs of variability clear in terms of the relative certainty of the outcomes for different areas/groups.

A8.33 As many 3R interventions work close to the market (i.e. the market under different circumstances could supply them) or rely on the market for delivery, changes in market conditions (e.g. business cycles) need to be clearly addressed in the risk analysis of 3R interventions. Limits in the evidence base which are typical of most 3R assessments also place an increased focus on scenario and sensitivity analysis and a clear statement of any assumptions and their implications.

A8.34 The use of benchmarks for outputs and outcomes can be helpful in providing context in relation to the outputs of 3R interventions. However, care should be taken to establish the relevance of the benchmark in terms of the comparability of the characteristics of what is being compared, the context in which the values were derived (transferability) and the time of derivation.

A8.35 Given the variety of outputs and outcomes and the likely mixture of qualitative, quantitative and monetary information, performance matrices using a variety of reporting formats are likely to be the most useful method of displaying the results of 3R assessments.

A8.36 Reporting should also clearly identify any ‘tests’ which have been performed and their relevance to the questions posed in the appraisal or evaluation. This is likely to involve overall value for money tests as well as the individual components related to economy, efficiency and effectiveness. A variety of other tests may also be appropriate in different circumstances.
ANNEX 9
Related guidance and references

Summary

This annex supports the main document by providing a list of related guidance and references.

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### Route Map of Annexes

- **1. Audience, scope, principles**
- **2. 3R Interventions, aims, etc.**
- **3. Managing the assessment cycle**
- **4. Defining the problem**
- **5. Defining alternatives**
- **6. Identifying and measuring inputs**
- **7. Identifying and measuring outputs**
- **8. Presenting results**
- **9. Related guidance/ references**
- **10. Glossary and abbreviations**
- **11. Case studies**

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1.1 Non-3R guidance
4.1 Concepts and criteria
5.1 Analysis of constraints
6.1 Financial/economic analysis
7.1 Indicators
7.2 Valuation
7.3 Additionality
Guidance in this area is continually evolving. The following lists some individual reports as well as some useful websites where other material is available.

**AUDIT COMMISSION**
Publishes a number of reports relevant to regeneration including:
- Economic Regeneration – Performance Indicators – March 2003
- Economic Regeneration A Life’s Work – Local Authorities, economic development and economic regeneration
Publications can be found at http://www.audit-commission.gov.uk/

**COUNTRYSIDE AGENCY**
Publishes a range of reports relevant to rural disadvantage and regeneration including initiatives related to market towns. Countryside Agency publications can be found at http://www.countryside.gov.uk/publications/

**CABINET OFFICE**
A range of related documentation is available from the Cabinet Office. This includes guidance on:
- Regulatory Impact Assessment RIA Unit publications http://www.cabinet-office.gov.uk/regulation/Publications/Index.htm
The Cabinet Office website also provides a gateway to the Policy Hub website http://www.policyhub.gov.uk/default.jsp

**DEPARTMENT FOR CULTURE, MEDIA AND SPORT**
DCMS provides a range of documentation which may be of relevance in relation to culture, media and sport related interventions. In particular:
Publications are available at:

The former DETR/DTLR published a range of related guidance some of which is now available through the ODPM website. These include:


• Guidance and advice related to Planning can be found at http://www.planning.odpm.gov.uk/advice.htm

• Guidance on undertaking a Multi-criteria analysis – http://www.dtlr.gov.uk/about/multicriteria/

**DEPARTMENT FOR EDUCATION AND SKILLS**

DFES provide a range of guidance material which can be found through http://www.dfes.gov.uk/publications/

**DEPARTMENT OF HEALTH**

DoH provide a range of related health publications available from http://www.doh.gov.uk/help/publications.htm

**DEPARTMENT OF TRADE AND INDUSTRY**

DTI provides a range of guidance material related to industry and enterprise and specifically in terms of the Regional Development Agencies.

• Information relevant to the RDAs can be found at http://www.dti.gov.uk/regions/rdapage.htm

• Information relevant to the European structural funds can be found at http://www.dti.gov.uk/europe/structural.html. This includes the structural funds manual.

• Guidance on evaluation can be found at http://www.dti.gov.uk/about/evaluation/including guidance on preparing evaluation plans and links to various evaluation reports.

**DEPARTMENT FOR TRANSPORT**

Guidance on transport related matters including the guidance on preparing an Economic Impact Report can be found at http://www.dft.gov.uk/itwp/index.htm

**EUROPEAN GUIDANCE**

The European Commission provides a range of related guidance which can be accessed through the ‘Europa’ and ‘inferegio’ web sites http://www.europa.eu.int/comm/regional_policy/index_en.htm.

**ENGLISH PARTNERSHIPS**

EP provide a range of guidance relevant to their specific programmes and issues including best practice guides. These are available at http://www.englishpartnerships.gov.uk/pages/page_01.asp?PageID=202
OFFICE OF PROJECT APPRAISAL TRAINING

The OffPAT website provides links to a range of relevant guidance material including the Single Programme Appraisal Guidance and various appraisal advice notes. These can be found at http://www.offpat.info/publications.asp

HM TREASURY

The HM Treasury website provides the Green Book and related supplementary guidance – http://www.hm-treasury.gov.uk/economic_data_and_tools/greenbook/data_greenbook_index.cfm

DEPARTMENT FOR WORK AND PENSIONS

Research-related publications can be found at http://www.dwp.gov.uk/publications/index.htm

A series of working papers, including papers related to measuring labour market impacts, evaluation methods and measuring soft outcomes can be found at http://www.dwp.gov.uk/asd/asd5/wp-index.html

DEPARTMENT FOR ENVIRONMENT, FOOD AND RURAL AFFAIRS

Several links to additional guidance on environmental appraisal and valuation of environmental goods can be found at:

http://www.defra.gov.uk/environment/index.htm

SCOTTISH EXECUTIVE

A range of related material can be found using the Communities Scotland web site including guidance for Social Inclusion Partnerships

References


HMSO (1985) Evaluation of the Enterprise Zone

HMSO (1987) Evaluation of the Enterprise Zone

HMSO (1990) Evaluation of Regional Selective Assistance


HMSO (1995A) Evaluation of the Enterprise Zone

MEANS (1999) EC Structural Funds ‘Evaluating socio-economic programmes’ European Commission


Summary

The aim of this glossary is to provide definitions of the key concepts used in this guidance. Particular words or phrases often have a variety of meanings in the literature, or are used in different ways, and it is important to be clear about what they are intended to mean. A list of initials used in the text (as shorthand) is also given. The following definitions are a mixture of definitions taken from other guidance and definitions developed specifically for this guidance.

Route Map of Annexes

1. Audience, scope, principles
2. 3R Interventions, aims, etc.
3. Managing the assessment cycle
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5.1 Analysis of constraints
6.1 Financial/economic analysis
7.1 Indicators
7.2 Valuation
7.3 Additionality
Activity – The thing that is engaged in order to deliver outputs and outcomes. Activity needs to be differentiated from inputs because the same inputs used in different ways (activities) can lead to different outputs. Activity is also often used to describe a recurring intervention as opposed to a one-off project.

Additionality – An impact arising from an intervention is additional if it would not have occurred in the absence of the intervention. It is the extent to which a policy objective is undertaken on a larger scale, takes place at all, or earlier, or within a specific designated area, as a result of public sector intervention.

Alternatives – the course of action available in the future (appraisal) or which could have occurred (evaluation) over which assessment is made.

Appraisal – The process of defining objectives, examining options and weighing up the costs, benefits (monetised and non-monetised), risks and uncertainties of those options before a decision is made.

Assessment – term used to describe either appraisal or evaluation.

Balanced scorecard – a technique to help focus on long term processes of delivery as well as immediate outputs.

Basecase – term used in the Green Book to represent the best estimate of the costs and benefits of an option. Used elsewhere to describe the no-intervention case but not here, where the term reference case is used.

Baseline – A description of conditions existing at a point in time against which subsequent changes can be detected through monitoring. A baseline study is also required in order to establish what the conditions would be if development were not to take place. Conditions may not be stable even in the absence of development: there may be decline, improvement or cyclic conditions.

Benchmark – a comparative value used in setting targets for appraisal and evaluation.

Bending – the process of altering mainstream programmes in order to meet PSA floor targets in deprived areas, as in ‘bending main programmes’.

Benefits – the positive direct and indirect, intentional and unintentional consequences of an intervention.

Buffer zone – an area immediately around the target area which may be the focus of additional analysis to determine the extent of overspill/displacement.

Closed impact analysis – the explicit drawing of a boundary in an analysis in which effects outside are given zero weight.

Communities – an area/group with a clear and meaningful distinction -such as residents of a particular estate or racial group.

Comparator – the case against which a comparison can be made.

Context dependency – the property that the outcome of an input is affected by local factors. The extent to which the context needs to be taken into account in order to predict the output.

Contingency – an allowance included in the estimated cost of a project to cover unforeseen circumstances.

Control Group – A comparison group consisting of eligible people or organisations which have been excluded from all participation in an intervention by a process of random selection. Apart from non-participation in the intervention the control group is comparable to the group of participants – it should be exposed to the same external
(confounding) factors. Where random allocation is used the term Randomised Control Trial (RCT) is often used; where not the term comparison group may be used.

Cost benefit analysis (CBA) – A term used to describe analysis that seeks to quantify in money terms, as far as feasible, all the costs and benefits of a proposal, including items for which the market does not provide a satisfactory measure of economic value. The expression is used here to describe an analysis of all the welfare costs and benefits, including those that cannot be measured in monetary terms.

Cost effectiveness analysis (CEA) – Cost Effectiveness Analysis is the comparison of the costs of alternative ways of producing the same or similar outputs that are not given a monetary value.

Cost of capital – the cost of raising funds expressed as an annual percentage rate.

Cost of variability – the most a person/group is willing to pay to have a benefit which is certain, rather than one that is uncertain. This differs given the situation (income/welfare) of the person/group in question.

Costs – the totality of things including avoided benefits that needs to be given up to secure an outcome.

Counterfactual – The ‘reference case’ or counterfactual is a statement of what would have happened without policy intervention or if the policy intervention had taken a different (but specified) form. Any evaluation of a policy’s effects should be made relative to what would otherwise have happened. Usually it is not enough to describe the starting position or ‘baseline’ since this is likely to change over time.

Crowding out – The extent to which an increase in demand occasioned by government policy is offset by a decrease in private sector demand. Within the additionality framework it is the tendency for outputs (other than those that increase capacity growth through a supply side improvement) to be entirely offset because of macro-adjustments. Crowding out occurs if, for example, the level of public expenditure increases, but other variables in the economy adjust (in particular interest rates and the exchange rate), and cause the level of private sector expenditure to decline. Crowding out differs from displacement because it relates to wider economic effects. It is a macroeconomic rather than microeconomic phenomenon. It can be thought of as being ‘Indirect’ displacement in that its effects are like displacement but it occurs through macro-economic adjustment.

DCF – see Discounted Cash Flow.

Deadweight – Expenditure to promote a desired activity that would in fact have occurred without the expenditure. Within the additionality framework these are the outputs that would arise under the basecase/counterfactual.

Decision trees – a technique used in risk analysis to help determine the expected outcome.

Discount rate – the annual percentage rate at which the present value of a future pound, or other unit of account, is assumed to fall away through time.

Discounted cash flow (DCF) – A technique for appraising investments. It reflects the principle that the value to an investor (whether an individual or a firm) of a sum of money depends on when it is received.

Discounting – A method used to convert future costs or benefits to present values using a discount rate.

Displacement – The degree to which an increase in productive capacity promoted by government policy is offset by reductions in productive capacity elsewhere. Within the additionality framework it is the proportion of the project outputs accounted for by reduced
outputs elsewhere in the target area. It may occur in both the product and the factor markets.

Distance travelled – the progress a beneficiary makes towards harder outcomes as a result of the intervention.

Distributional (social) failure – a problem to be addressed by government intervention where necessary which is associated with a social (as opposed to economic) objective. This may involve notions of fairness or of redistribution.

Domain – As in one of the domains of sustainable development (economic, environmental or social) or an area of policy activity within the Neighbourhood Renewal agenda (worklessness, health etc.)

EGRUP – Evaluation Group on Regional and Urban Programmes – the title of the group which gave its name to the previous document which this guidance replaces.

Economic appraisal or evaluation – Appraisal or evaluation that takes into account a wide range of welfare costs and benefits including both the funding costs of a policy, programme or project, and a range of impacts elsewhere in the economy.

Economic cost (or benefit) – Cost or benefit used in economic appraisal or evaluation. An economic cost (or opportunity cost) is the value of the most valuable alternative use.

Economic efficiency – achieved when nobody can be made better off without someone else being made worse off.

Economy – relates to the cost of inputs being consumed. Economy measures can be used to indicate whether the right price was paid to acquire the necessary inputs.

Effectiveness – the extent to which outputs achieve the desired outcomes. Effectiveness measures are concerned with the strength of the relationship between a given intervention and outcomes.

Efficiency – Efficiency represents the relationship between outputs and inputs. Efficiency is the ratio of output to input.

Evaluation – Retrospective analysis of a project, programme, or policy to assess how successful or otherwise it has been, and what lessons can be learnt for the future. The terms ‘Policy evaluation’ and ‘Post-project evaluation’ are often used to describe evaluation in those two areas.

Ex-ante – before, as in ex ante appraisal

Ex-post evaluation – see summative evaluation.

Exchequer cost – A cost that falls or will ultimately fall upon taxpayers.

Exchequer revenue – revenue that acts ultimately to reduce claims upon taxpayers.

Externality costs or benefits – The non-market impacts of an intervention or activity which are not borne by those who generate them. Subsidies or taxes can be used to internalise externalities, so that decisions to produce or consume take account of external impacts.

Financial (monetary) costs/analysis – opportunity costs of goods and services as measured by the market price. Financial analysis is analysis using financial costs as the unit of measurement.

Financial appraisal – Analysis of cash flows. An appraisal that takes into account only the actual cash flows accruing over the lifetime of the asset.
Formative evaluation – Evaluation aimed at improving an intervention during its implementation. It focuses essentially on implementation procedures and their effectiveness and relevance. Sometimes called a process evaluation.

Hypothetical monopolist test – a test used in defining competition in an area mercado.

IMD – Index of Multiple Deprivation.

Impact evaluation – see Summative evaluation.

Impact – the consequences of an activity.

In-kind contributions – non-monetary contributions made by individuals or organisations that add value to a project and can be given a monetary value.

Income multiplier – The multiplier effect of the direct expenditure associated with a policy intervention on local, regional or national incomes.

Indicator – anything that is used to measure the condition of something of interest. Indicators are often used as variables in the modelling of changes in complex environmental systems.

Information asymmetry – Differences in information held by parties to a transaction where this information is relevant to determining an efficient contract or a fair price or for monitoring or rewarding performance.

Inputs/activities – are the direct products or services provided or funded by each regeneration project. The nature of the activities will differ according to the local circumstances.

Institutional failure – a problem associated with public sector delivery of goods and services as opposed to market delivery.

Integrated Impact Assessment – an approach which attempts to take an holistic assessment of impacts, including their mechanisms and drawing on the variety of disciplines associated with them without a pre-determined preference for one over the other.

Integrated Policy Appraisal – a tool devised by the former DTLR and used by a number of departments which brings together the various requirements for the assessment of policies using an Integrated Impact Assessment approach (see Bibliography for a reference).

Internal rate of return (IRR) – the discount rate that would give a project a net present value of zero.

Intervention – the activity of government through policies, programmes and projects but also involving regulation and fiscal measures.

Irreversibility – When a potential outcome cannot be reversed, or possibly reversed but only at unreasonable cost.

Leakage – the proportion of outputs/outcomes which benefit those outside the intervention’s target area or group.

Leverage – the extra private sector activity (or inputs such as private sector funds generated) that are a direct result of a policy intervention. Care is required in defining leverage, because of possible deadweight.

Local – as in a locality which may be a ward, a ten to fifteen mile radius of an area and will depend on the density of the settlement pattern.

Long run – the period over which all inputs, such as capital and equipment, can be varied.

Marginal Utility – The increase in satisfaction gained by a consumer from a small increase in the consumption of a good or service.
Market failure – anything that may prevent product or factor markets from operating freely, adjusting quickly, or that restricts the information available to producers, consumers or suppliers of resources. Examples include institutional constraints, monopoly or restricted competition, and externalities.

Market value – the price at which a commodity can be bought or sold, determined through the interaction of buyers and sellers in a market.

Materiality – the extent to which the consideration of something would affect the outcome or answer given the conditions faced (e.g. uncertainty, tolerance for imprecision etc.)

Matrix approach – Presentation of the results of an appraisal as a matrix of costs and benefits, not all of which may be valued in money terms. A form of impact statement.

Meta-analysis – an analysis and/or synthesis of other analysis employing criteria such as reliability, credibility and utility.

Moving baseline – Existing (baseline) state projected into the future assuming no development proceeds.

Multi-criteria analysis – Any structured approach to determine overall preferences among alternative options, where the options accomplish several objectives.

Multiplier – The second round effects on the level of economic activity (output, income or employment) associated with a policy intervention (e.g. when the employees of a new project spend their earnings and so increase consumer demand). There are several types of multiplier (income, local, long-run, short-run and supply) that are often estimated. The size of the multiplier depends on the period over which it is measured, and the geographical area considered.

NDC – New Deal for Communities.

NDPBs – Non Departmental Public Bodies.

NPV – Net Present Value.

NRU – Neighbourhood Renewal Unit.

Neighbourhood – an area which will often be larger than a site but smaller than a locality. See community.

Net Present Value (NPV) – the discounted value of a stream of either future costs or benefits. The term Net Present Value (NPV) is often used to describe the difference between the present value of a stream of costs and a stream of benefits. Specifically, in this guidance, it indicates the difference between the present value of the stream of net Non-Exchequer Benefits and the PV of Exchequer Funds.

No-intervention case – generally the case against which an intervention is compared. This will be the reference case in appraisal, or the counterfactual in evaluation.

Non-cash payments – costs arising from not charging the market rate for a good or service.

Non-financial costs – goods and services given free of charge (or at a reduced rate) through charitable donation, contributions in kind and unpaid voluntary labour.

Objective – These are the objectives being pursued by the strategy, expressed in terms of anticipated effects and timescales over which the funding may make a difference.

Opportunity cost (or Economic cost) – Value in most valuable alternative use.

Optimism bias – A tendency to be overly optimistic in the appraisal of costs and outcomes of policies, programmes and projects.

Option appraisal – the appraisal of multiple options chosen to achieve a specific objective.
Other priority areas – areas where there may be a concern about the positive and negative consequences of a project in addition to the target area. These may be other areas in the same programme or a different programme.

Outcome Indicators – the means by which it is possible to measure whether outcomes have been achieved.

Outcomes – the influence that the strategy has on the various domains (within the dimensions of environment, social and economic – quality of life conditions).

Outputs – The intermediate effects of a project’s actions. They represent the mechanism by which inputs and activities yield their intended outcomes.

Performance matrices – a method of displaying the results of an assessment which attempts to integrate the variety of information of interest to decision makers and deal with the various different formats (qualitative, numerical or monetised).

Policy priority area – a general term used to refer to any geographical area considered to be a priority for policies with regeneration objectives. Different policies often have different sets of priority areas, and coverage is often altered over time.

Policy – Setting social goals and establishing strategy for further attainment.

Principal-Agent – A framework for analysing relationships between a principal (e.g. Central Government) and an Agent (e.g. Agencies) in terms of risk, reward and incentives.

Problem – the issue to which the analysis provides the recommended solution/answer.

Process evaluation – see formative evaluation.

Programme logic – the set of hypotheses about the intervention in terms of cause and effect – linking objectives, inputs, resources, activities, outputs and outcomes.

Programme – a given policy intervention (or group of interventions) usually involving public expenditure.

Project – A discrete, one-off, form of activity or expenditure, often of a capital nature e.g. a new building, or new road. (The term ‘activity’ is used here to cover projects, as well as continuing activities).

Proportionality – the principle that the amount of something that is done varies in a direct relationship with whatever circumstances are deemed appropriate.


Rationale – The justification of a policy intervention in terms of the market failures it aims to correct, and how it is designed to correct them.

Real option theory – the use of option analysis to determine the effect of uncertainty on investment.

Realistic evaluation – an approach developed to help evaluation address measurement difficulties and determine causality within social systems. The aim is to develop an understanding of why a programme works, for whom and in what circumstances. It is based on the idea that outcomes can be understood by looking at the context and mechanisms.

Reference case – the term used in appraisal that is the equivalent of the counterfactual in evaluation. A reference case may be the do-nothing or the do-minimum depending on the circumstances.

Regeneration – the holistic process of reversing economic, social and physical decay in areas where it has reached a stage when market forces alone will not suffice.

Regional economic development – a regional perspective on economic growth.
Regulatory Impact Assessment – an approach developed by the Cabinet Office to provide a consistent approach to the assessment of the consequences of regulatory initiatives with the aim of promoting better regulation.

Renaissance – the process of making towns, cities and other areas 'liveable'.

Renewal – improvement in the situation of the most disadvantaged places and their communities, including the level and quality of the services they receive. Renewal objectives may be wide ranging but will seek to deliver improved work and business opportunities, improved residential attractiveness and improved public services.

Required rate of return (RRR) – A target average rate of return for a public sector trading body, usually expressed, for central government bodies, as a return on the current cost value of total capital employed.

Resources – Resources are the financial in-kind and time inputs made to each aspect of a strategy's implementation.

Resources/Resource cost – Terms used in a variety of senses, according to context. In resource accounting, 'resource costs' are accruals accounting costs expressed in real terms. In economic analysis a distinction is sometimes drawn between 'transfers', such as social security payments and 'resource costs' which are payments for goods or services. In departments and agencies 'resources' is sometimes used to describe expenditure from their budgets, or sometimes requirements of staffing.

Revealed preference – Willingness to pay for something which is non-marketed, but whose value can be inferred from consumer behaviours.

Risk – the likelihood, measured by its probability, that a particular event will occur.

SMART – Criteria for defining objectives – Specific, Measurable, Achievable, Relevant and Time Bound.

SSNIP test – see hypothetical monopolist test.

Scenario – An attempt, less precise than a forecast, to assess 'what would happen if...' ('simulation' is roughly synonymous).

Scheme – schemes consist of a package of projects where at the point of approval the projects remain largely unspecified.

Sensitivity analysis – analysis of the effects on an appraisal of varying the projected values of important variables.

Shadow price – the opportunity cost to society of participating in some form of economic activity. It is applied in circumstances where actual prices cannot be charged, or where prices do not reflect the true scarcity value of a good.

Social Inclusion – the objective of government policy aimed at reducing social exclusion which is a description of a process whereby people or areas suffer from a combination of linked problems such as unemployment, poor skills, low incomes, poor housing, high crime environments, bad health and family breakdown.

Social Rate of Time Preference – The value society attaches to present, as opposed to future, consumption.

Social capital – there are presently many definitions attached to the concept of social capital but some convergence towards the notion of networks and civic norms.

Soft outcomes – outcomes which cannot be easily measured (not that cannot be predicted). Judgement on achievement can be subjective.

Spatial sustainable development – see Box A2.1.
Spatially targeted interventions – interventions which have a focus on specific spatial areas, for example because problems are concentrated in those areas (e.g. contaminated land in old industrial areas) or the population targeted by the intervention is concentrated in particular areas (e.g. inner cities). Spatially targeted interventions are normally Area Based initiatives.

Stated preference – Willingness to pay for something that is non-marketed, as derived from people’s responses to questions about preferences for various combinations of situations, and/or controlled discussion groups. Some practical applications are described as ‘contingent valuation’.

Substitution – The situation in which a firm substitutes one activity for a similar activity (such as recruiting a different job applicant) to take advantage of government assistance.

Summative evaluation – evaluation aimed at accounting for actions, judging an intervention and for deciding on changes. Typically to provide information for an external funding body. Often termed an impact or ex-post evaluation.

Sunk costs – costs of goods and services that have already been irrevocably incurred or committed. This does not include any costs associated with assets already in ownership but which have alternative uses.

Switching point or switching value – The value of an uncertain cost or benefit at which the best way to proceed would switch, for example from approving to not approving a project, or from including or excluding some extra expenditure to preserve some environmental benefit.

Systematic risk – risk that is correlated with movements in the economic cycle and cannot therefore be diversified away.

TTWA – Travel to Work Area.

Theory of change – an approach based on a systematic and cumulative study of the links between activities, outcomes and contexts of an intervention. It has much in common with realistic evaluation.

Three R/3R – term used to refer to regeneration, renewal and regional economic development type interventions

Time preference rate – Preference for consumption (or other benefits) sooner rather than later, expressed as an annual percentage rate.

Total Economic Value – the sum of somethings use, option and existence value; a term used primarily in environmental economics.

Trade-Offs – Refers to the alternatives in a decision and their relevant costs and benefits.

Uncertainty – the condition in which the number of possible outcomes is greater than the number of actual outcomes and it is impossible to attach probabilities to each possible outcome.

Valuation – the act of ascribing a monetary value to something.

Value for Money – relationship between the resources consumed and the outcomes achieved. In procurement terms it is the optimum combination of whole-life cost and quality (or fitness for purpose to meet the user's requirements).

Weighting and scoring – A technique used to combine a number of outputs into a single overall measure of output, where one or more individual outputs cannot be valued in money terms.
ANNEX 11
Case Studies

Summary

This annex provides some background to the case studies. This background will help in interpreting the examples and boxes used throughout the other sections of the guidance.
Introduction

This annex provides background on the following case studies which were used as pilots during the preparation of this guidance:

• New Islington Millennium Community
• Markham Colliery
• Neighbourhood/Street Wardens
• Regional e-Business Development Initiative
• European City of Culture 2008

These are discussed in more detail below.

Comparison of key aspects of the case studies

**NEW ISLINGTON – MILLENNIUM COMMUNITY**

<table>
<thead>
<tr>
<th>Title</th>
<th>New Islington</th>
</tr>
</thead>
<tbody>
<tr>
<td>Policy Area</td>
<td>Millennium Communities</td>
</tr>
<tr>
<td>Lead</td>
<td>ODPM</td>
</tr>
<tr>
<td>Others</td>
<td>RTP/ERM</td>
</tr>
<tr>
<td>Assessment type</td>
<td>Appraisal</td>
</tr>
<tr>
<td>Intervention level</td>
<td>Project</td>
</tr>
<tr>
<td>Brief background to</td>
<td>New Islington (Manchester) is one of seven pilot development projects within the Millennium Communities Programme being delivered for Government by English Partnerships. The aim of the programme is to create exemplars of good practice in regeneration and housing development, resource and energy efficiency and carbon emissions reduction.</td>
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**MARKHAM – NATIONAL COALFIELDS PROGRAMME**

<table>
<thead>
<tr>
<th>Title</th>
<th>Markham Colliery</th>
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<tbody>
<tr>
<td>Policy Area</td>
<td>National Coalfields Programme</td>
</tr>
<tr>
<td>Lead</td>
<td>EP/ODPM</td>
</tr>
<tr>
<td>Others</td>
<td>CWA</td>
</tr>
<tr>
<td>Assessment type</td>
<td>Appraisal</td>
</tr>
<tr>
<td>Intervention level</td>
<td>Project</td>
</tr>
<tr>
<td>Brief background to</td>
<td>Markham Colliery is in Bolsover in the East Midlands. The colliery closed in 1993 with the loss of 637 jobs. At its height it employed almost 2,500 people. The aim of the appraisal is to determine best options for the use of the former colliery site that will help reverse the social and economic decline the area has experienced since the closure of the mine.</td>
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### NEIGHBOURHOOD/STREET WARDENS

<table>
<thead>
<tr>
<th>Title</th>
<th>Neighbourhood/Street Wardens (Neighbourhood Renewal Fund)</th>
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<tbody>
<tr>
<td>Policy Area</td>
<td>Neighbourhood Renewal</td>
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<tr>
<td>Lead</td>
<td>NRU/ODPM</td>
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<td>Others</td>
<td>Matrix MHA</td>
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<tr>
<td>Assessment type</td>
<td>Evaluation</td>
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<tr>
<td>Intervention level</td>
<td>Programme</td>
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</tbody>
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Brief background to the programme/project: The Street Wardens programme was established in 2001 and aims to improve the liveability of neighbourhoods by: improving the physical appearance of streets, deterring anti-social behaviour, reducing crime and the fear of crime and fostering social inclusion. There are currently around 100 funded schemes. The evaluation aims to identify what is working where any why and at what cost.

### REGIONAL E-BUSINESS DEVELOPMENT INITIATIVE

<table>
<thead>
<tr>
<th>Title</th>
<th>Regional e-Business Development Initiative</th>
</tr>
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<tbody>
<tr>
<td>Policy Area</td>
<td>Regional Economic Development</td>
</tr>
<tr>
<td>Lead</td>
<td>DTI/ODPM</td>
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<td>Others</td>
<td>DTZ/Pieda</td>
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<tr>
<td>Assessment type</td>
<td>Appraisal</td>
</tr>
<tr>
<td>Intervention level</td>
<td>Scheme</td>
</tr>
</tbody>
</table>

Brief background to the programme/project: The aim of the REDI scheme is to stimulate adoption of e-business amongst SMEs. The scheme responds to identified needs in the West Midlands area and also the Government ‘online for business’ agenda. The scheme aims to increase e-business support to current and potential users of ICT, maximise the take up of e-business and broadband, and improve the quality and performance of ICT suppliers and their engagement with SMEs.

### EUROPEAN CITY OF CULTURE 2008

<table>
<thead>
<tr>
<th>Title</th>
<th>European City of Culture 2008</th>
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<tbody>
<tr>
<td>Policy Area</td>
<td>Major events</td>
</tr>
<tr>
<td>Lead</td>
<td>DCMS</td>
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<td>None</td>
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<tr>
<td>Assessment type</td>
<td>Appraisal</td>
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<tr>
<td>Intervention level</td>
<td>Project</td>
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</table>

Brief background to the programme/project: Appraisal of bids for nomination as the UK’s European City of Culture for 2008. An original list of 12 cities has already been refined to 6 using a series of criteria and an expert panel. More detailed appraisal will lead to the selection of the winning bid. One of the criteria for evaluating the bids is the potential impact on regeneration, renewal and regional development outcomes.
Regeneration, renewal and regional development (the 3Rs) are interventions that have a specific spatial focus. As a result they often have distributional impacts and this document provides guidance specific to the assessment of these impacts.

This guidance is essential reading for those in central government and its agencies who are engaged in the appraisal and evaluation of 3R policies and programmes as well as being of benefit to anyone involved in the design, appraisal, delivery or evaluation of 3R interventions.