



THE GREEN BOOK:
A TOPICAL BRIEFING

THE GREEN BOOK

HM Treasury's Guide to Appraisal and Evaluation in Central Government

The Treasury's Guide to Appraisal and Evaluation in Central Government or "Green Book" replaced previous, less thoroughly explored, rules for appraising proposed investment projects. The Guide covers all new policies, programmes and projects (revenue, capital or regulatory) and represents a fully-rounded publication, with much valuable material on the theory and logic that underlies the practical guidelines, comprising seven chapters and six annexes. The Green Book has its own website at: <http://greenbook.treasury.gov.uk/> and supplementary guidance has since been posted on the main Treasury website at: <http://www.hm-treasury.gov.uk>

The purpose of this briefing note is to help finance staff to understand the practical implications of the Green Book for their day to day work. Commentary on the content of the Green Book is in italics.

This note does not repeat the Green Book's discussion of the techniques used for investment appraisal, rather it identifies and comments on a selection of key issues.

Coverage

The Green Book is described as "binding guidance" for departments and for executive agencies. Its rules apply to all new policies, programmes

and projects, whether "revenue, capital or regulatory," and the stated purpose is to ensure that these initiatives are subject to comprehensive review – "that all government action is based on clear and robust assessments of how public interest is best promoted." Departments and agencies are expected to derive their own manuals and internal guidelines from the Green Book. The point here is that the Green Book is not just for projects where the costs and benefits are immediately identifiable in terms of cash. The figure below, extracted from the Green Book, sets out the main categories of activity which the Treasury foresees being covered by the guidelines:

Policy and programme development	Decisions on the level and type of services or other actions to be provided, or on the extent of regulation.
New or replacement capital projects	Decisions to undertake a project, its scale and location, timing, and the degree of private sector involvement.
Use or disposal of existing assets	Decisions to sell land, or other assets, replace or relocate facilities or operations, whether to contract out or market test services.
Specification of regulations	Decisions, for example, on standards for health and safety, environment quality, sustainability, or to balance the costs and benefits of regulatory standards and how they can be implemented.
Major procurement decisions	Decisions to purchase the delivery of services, works or goods, usually from private sector suppliers.

The guidelines can be distilled into a step by step process, and this will be the direction of this briefing note. The steps fall into a number of main stages of the evaluation process – within the stages, it is possible to vary the order in which some of the steps are taken.

The steps may take the form of responding to a question, (eg what is the purpose of the proposed project?), or may require some technical work (such as a discounted cash flow).

Although this note sets out the steps to be taken, it is not intended to provide a reporting format. There are no spaces for answers, checkboxes etc. However, users may find it helpful to download this briefing, and reformat it to suit their own circumstances.

Stage 1: Justification

Has the appropriate research been done, to clarify the requirement?

- Why does the Government need to act?
- What are the likely costs of intervention, and will they be less than the intended benefits?
- What adverse impact might be caused by intervention?
- What are the likely problems if Government does not intervene?

Although the questions talk of costs and impact, this stage does not involve detailed financial calculations. It is intended to set the scene, and to establish whether there are reasons to go further.

Stage 2: Objectives

What would the Government wish to achieve through intervention

- a) as an ideal outcome?
- b) as a minimum outcome?

How will success be measured?

Set out a schedule of targets. All targets should have either direct performance measures (eg % annual cost reduction) or an appropriate performance indicator (eg client satisfaction level). User should consider whether more than one indicator is needed to assess each target. Targets should be SMART (Specific, Measurable, Achievable, Relevant, Time-bound).

The SMART concept, and the next stage (Option Appraisal) are intentionally iterative – because, for example, it is often difficult to judge whether targets are achievable in realistic terms until a financial, risk, or other form of appraisal has been completed.

What are the criteria to be used when comparing different options? Cost measures will usually represent an important element. These criteria should be agreed before detailed work begins on Stage 3.

Are the objectives consistent with other departmental/Government policies?

Stage 3: Option Appraisal

1 Establish the Base Case. The Green Book defines this as the best estimate of the costs and benefits.

The purpose of having a Base Case is to set a benchmark for evaluating different options for dealing with the problem in hand. This Green Book approach differs from many previously used approaches, which start, for example, with a “do nothing” or “do the bare minimum” scenario. It should be noted that there is

a need to avoid selecting this kind of Base Case as the favoured option. It is suggested that the solution would be to attempt to identify the lowest cost means of achieving the Government’s ideal outcome, with a good probability rather than a certainty of success. However, The Green Book stresses the natural human tendency towards optimism when putting together a case for a proposed project. It is important to make a robust assessment of the material costs and benefits, and to state clearly the degree of uncertainty attaching to each key assumption.

In practice, Base Cases will be easy to identify for many initiatives. During the course of the Option Appraisal of more complex projects (see below), it may be that another Option is identified as a more suitable Base Case.

Financial Issues

What are the up front costs of the Base Case? When would they be spent? *(in most cases, analysis by fiscal year is sufficient)*

What are the continuing costs of the project, by fiscal year?

What are the cash inflows and/or cost savings of the project, by fiscal year?

How are the costs and benefits expected to change over time, relative to general price movements?

What are the taxation implications?

Non financial issues

What are the non financial costs or benefits of the proposal, eg

- Impact on other programmes?
- Different impacts on different sections of society?
- Expected changes in behaviour (eg from communication campaign)?

For each of the above, consider whether a proxy financial value could be established

What are the risks involved, eg

- Impact of failure or limited success?

- Impact of delays and/or cost increases?
- Failure of key partners or suppliers?

2 Establish the other options

How might the Base Case approach be varied, eg

- Additional expenditure to increase the chances of success
- Use of alternative partners or suppliers, possibly with different expenditure profiles

What other ways might there be of achieving either the ideal or the minimum outcome?

Is there scope for efficiencies through combination with other programmes?

The Green Book suggests various approaches to generating alternative options on pages 17 and 18.

Pages 19 to 36 contain a great deal of technical advice on the detail of preparing financial and other models for each option. Some of the main points are included in the Annex to this note.

It is very important that all options are identified, even if they are not all taken through to the detailed appraisal stage. If any options are excluded before detailed appraisal, the reasons should be recorded.

The financial and non-financial profile of each option should then be worked out, and the findings tabulated, eg

	Base Case	Option
Net Present Cost	£50m	£60m
Time to completion	4 years	3 years
Risk Level	High	Moderate

Stage 4: Developing and Implementing a Solution

Apply the pre-agreed criteria to the findings above. It is likely that more than one option will score well in

certain measures, and less well in others. Where there is no clear best option, the Green Book suggests using weighting or scoring techniques.

The problem here is that weightings and scorings can be largely subjective. If a department or agency has a standard system of weightings, then this approach may be helpful. Weightings or scorings for a one-off project however, are best avoided, and instead, the appraisal should, reduce the variables to those that are particularly important in the specific context of the project. Any variables where differences between the options are immaterial can also be discarded. The remaining leading options should be presented as alternatives, clearly stating the relative advantages and disadvantages.

The Green Book states that “consultation is important at this stage, regardless of whether it has taken place earlier. Procurement routes should also be considered, including the role of the private sector”. In practice, the procurement choice may well be a key part of the option appraisal stage.

The Green Book discusses the subject of presenting the results, making the point that decision-makers will be aided by clear, non-technical presentations that explain the options, assumptions, and supporting evidence. A checklist of contents is provided:

- Business cases (either Preliminary, Outline or Full) consisting of:
 - Strategic Case;
 - Economic Case (or Option Appraisal);
 - Financial Case (or Affordability);
 - Commercial Case;
 - Programme;
 - Project Management Case (or Achievability).
- Regulatory Impact Assessment
- Health Impact Assessment
- Environmental Appraisal
- Health and Safety Impact appraisal
- Consumer Impact Assessment
- Integrated Policy Appraisal (IPA)
- Evaluation and audit reports.

Additionally, a large number of impact and perspective issues, such as regional, European or rural perspectives, may need to be taken into account. The Green Book provides a checklist on pages 9 and 10.

Chapter 6 looks at associated issues, including consultation, involving the private sector, commercial agreements and procurement.

Stage 5: Evaluation

This stage takes place after the project, and applies the techniques used in the option appraisal to actual rather than forecast data. The intention is to enable users to learn from each project.

This term in the Green Book is comparable to the term “Post Implementation Review”, with which many practitioners will be familiar.

Chapter 6 deals with controls that should be in place during the lifetime of a project. These include:

Performance management and measurement – a checklist of measures is provided in 6.20 and 6.30

Financial reporting against plan
Managing the realisation of benefits
Contract management

The Green Book’s checklist for evaluation that compares against original appraisal is shown below:

	Appraisal	Evaluation
Aim	Ex ante assessment of whether action is worthwhile and impacts	Ex post assessment of whether action was worthwhile and impacts
Use of Output	Project procurement, policy and programme design	Feedback for: (a) future procurement, project management, (b) wider policy debate, and (c) future programme management.
Application	Projects, policies and	Projects, policies and programmes
Timing	Always prior to	<ul style="list-style-type: none"> ■ During implementation ('formative') ■ After implementation ('summative')
Data	Forecasted	Historic and current, estimated and actual. Estimates of counterfactuals
Method	Comparison of options against 'do nothing' option	Comparison of results against 'do nothing' option Comparison of actual outturns against target outturns/ alternative outturns
	Estimated assessment of risk	Assessment of risks that did or did not materialise
Analytical Techniques	Cost Benefit/ Effectiveness Analysis	Cost Benefit/ Effectiveness Analysis

	Appraisal	Evaluation
	Discounted cash flow analysis Multi-criteria analysis Other statistical analysis	Discounted cash flow analysis Multi-criteria analysis Other statistical analysis – eg: analysis of performance indicators
Decision Criteria	Comparison of NPV, NPC for different options Non quantifiable factors may be included if quantification impossible	Consideration of whether correct criteria were used
Audit and Enforcement	Public Accounts Committee (PAC), NAO, HMT, OGC Gateways 0, 1 Departmental arrangements	PAC, NAO, HMT, OGC Gateway 5, Departmental arrangements

The second half of the Green Book is concerned with detailed material on a number of both policy and technical issues that are linked to the subject of investment appraisal for public sector initiatives. These appear as a series of Annexes – it is beyond the scope of this note to cover the material contained, but the Annex titles are listed for ease of reference.

Annex 1, Government Intervention – discusses the rationale for government intervention

Annex 2, Valuing Non-Market Impacts – suggests approaches to establishing values which often cannot be directly established in financial terms

Annex 3, Land and Buildings – deals with issues relating to the valuation of this class of asset

Annex 4, Risk and Uncertainty – deals both with analysing and assessing risk for appraisal purposes, and with methods of managing and minimising risk

Annex 5, Distributional Impacts – explains methods of analysing the costs and benefits of proposals to different groups in society, and how to deal with issues in the context of appraisals

Annex 6, Discount Rate – explains the derivation of the 3.5% rate to be used in discounting appraisal models, and the declining rate for projects lasting for more than 30 years. International development projects should use discount rates appropriate to the local economy.