



Feidhmeannacht na Seirbhíse Sláinte
Health Service Executive

Procedure Title
Appraisal of Capital Projects

Procedure No. 019

	Print Name	Title	Date
Prepared by	Clodagh Hanratty	CATSO	14/09/06
Reviewed by	J.G. MacNamara	T.S.O	14/09/06
Corporate Authorisation	J.G. MacNamara	T.S.O.	14/09/06

INTRODUCTION

The purpose of this procedure is to give guidance in preparation of appraisals when seeking funding for capital projects .

Scope

This procedure applies to all capital projects.

Responsibility

It is the responsibility of the Technical Services Department to ensure that this procedure is implemented.

What is a project appraisal?

The project appraisal helps to document the decision-making process within organizations. It provides a means by which organizations can determine priorities and ensure support for cost effective proposals to establish new projects, continue or expand existing services and programs, or to undertake specific one-off projects.

A project appraisal, in the context of health services, is a well-defined argument which demonstrates that a particular program, service or project will result in benefits for the population served by the provider, and that the costs of implementing the project are identified, ratified and justified.

Project Appraisals also provide a means of ensuring that decisions made by managers are based on a sound understanding of what is being proposed, the competency of the managers to deliver, defined outputs and the relationship between the benefits and costs to be derived.

These project appraisal guidelines will benefit health service managers through:

- Assisting all managers and staff within organizations to prepare sound and well documented project appraisals using a consistent format and to enable merit based assessment of proposals.
- Increasing transparency in the decision-making process at both the line and senior manager level.
- Providing a record of decisions taken and the rationale behind those decisions.
- Promoting a broader, more consultative and collaborative approach to decision making.
- Ensure that available funds are allocated in a way that contributes to the achievement of agreed national and regional health priorities.

A project appraisal must convincingly demonstrate that the project is economically sound (through an option appraisal), is financially viable and will be well managed. In addition a project appraisal should show that the proposal has clearly identified benefits for patients.

Outline or Preliminary Project Appraisal

A preliminary appraisal identifies:

1. the nature of the problem to be solved or needs assessment
2. the kind of service that is provided is the kind of service required and is on the appropriate scale
3. the explicit objectives the project hopes to achieve
4. the various ways (options) in which the objectives can be met and includes the option of “doing nothing” or “doing the minimum” for baseline comparison
5. the constraints that apply
6. the costs and the benefits associated with each option and uses a variety of techniques to rank the options in order of merit and hence identify the preferred option. It enables managers to make a decision on whether the projects benefits are sufficient to warrant including the costs.

Outputs from the preliminary appraisal are:

- a) In the case of projects costing less than €5m a recommendation to proceed with the preferred option or alternatively to drop the project
- b) In the case of projects costing more than €5m a recommendation to proceed to a detailed appraisal or alternatively to drop the project
- c) Terms of reference for the detailed appraisal

Detailed Project Appraisal

A detailed Project appraisal provides a sound basis for deciding on whether to proceed with the project. It also serves as a base reference document for the project, setting out the circumstances prevailing when the decision was taken to proceed, which facilitates the assessment of the effects of changing circumstances on the project. It also provides the criteria for evaluating the project on completion. The detailed Project Appraisal should address:

- 1. The strategic context; where are we now; where do we want to be
- 2. The assessment of need
- 3. The objectives to be met e.g. specific services requirements identified
- 4. Constraints which impact on achieving the objectives e.g. limits on capital or revenue funding, staff availability, time limits.
- 5. A list of realistic options for meeting the objectives for appraisal. The initial list should be wide ranging and should include both options which require capital or not
- 6. Quantity costs. Costs should cover the expected list of the project and should include construction, property acquisition, risk and contingency costs. Where different solutions are likely to generate difference revenue costs there too should be included.
- 7. Identify and, where possible, quantify benefits
- 8. Analyse the main options. Different types of analyses will apply depending on whether the project is to be operated on a commercial basis or not. Commercial projects can be analysed using a Financial

Appraisal. Non-commercial projects can be analysed using Multi-Criteria Analysis (MCA) coupled with a cost effectiveness Analysis (CEA) for projects costing more than €5m. Multi-Criteria Analysis establishes preferences between options by reference to a specific set of objectives and measurable criteria to assess how well each option achieves the objectives. The Cost Effectiveness Analysis establishes the least cost way of achieving the projects objectives.

9. Identify the risks associated with each option and the potential adverse impact. Draw up a strategy to manage risk. Application of a good project management regime will help to minimize or eliminate many risks. Nevertheless there are many uncertainties about the development of capital projects and those that cannot be eliminated should be offset by insurance or other contingency funds. Realistic assumptions should be made about the future and should take account of past trends.
10. Each option should be tested under different assumptions about the future, costs or demographics for example. If any option yields acceptable results only with Particular combinations of circumstances then it is sensitive to variations and should probably not be chosen.
11. Identify the preferred option having regard to the costs, benefits and risks. If an option emerges which has the lowest costs and the maximum benefits it makes the selection easy. If on the other hand an option has high costs and few benefits it can be quickly eliminated. In practice the final choice often rests between a high cost benefit option and a low cost benefit option. In that case the appraisal team will have to make a judgment taking all factors into account.

The Detailed project appraisal should be accompanied by:

- The project management arrangements
- Project monitoring plan
- Cash Flow projections
- Procurement strategy

Post-project evaluation plan

Risk Management strategy

Scale of Appraisal

In preparing a project appraisal, the proposer should aim to provide the level of detail considered appropriate to the particular project. In particular, the same level of documentation is unlikely to be necessary when putting forward a case relating to an existing project, say for example small incremental developments to particular facilities, compared with a new one, or when putting forward a case for a project with a relatively small expenditure (ie less than €500,000) compared with a large expenditure or a project which has a significant ongoing additional revenue expenditure. Small and routine projects should be appraised with a readily applicable methodology which is used consistently and which reflects the general principles set out in this document. As a guide the following graduated scale of appraisal will apply:-

1. Small refurbishment projects costing less than €500,000 e.g. refurbishment or fit-out works require just a simple assessment
2. Projects costing between €0.5m and €5.0m should be subject to a single appraisal incorporating elements of the preliminary and detailed appraisal.
3. Projects costing between €5m and €50m should have a Multiple Criteria Analysis (MCA) carried out. However a Cost Benefit Analysis may be required if:
 - The project is specialized or complex or if it involves untried technology
 - Is a pilot project on which larger programmes may be modeled
 - Would generate significant on-going revenue costsThe adviser of the National development Finance Agency (NDFA) should be sought on means of financing where projects cost more than €20m
4. Projects costing over €50m require a Cost Benefit Analysis

The most important aspect of the documentation is that it is detailed enough to enable sound judgments to be made by other people about the relative merit of what is being proposed.

Preparing a Project Appraisal

1. Establishing the need

Define the problem and its cause

- Describe an identified unmet need or demand for a new project, the improvement of an existing project or its extension.
- Try to identify the cause of the problem rather than the symptom
- Identify and define the target population or clients of the project and its relationship and link to the National Health Strategy, HSE Corporate Plan and Service Plan.

Provide supporting data and information

- Provide data on the target population/client ground, current and projected demand and current relevant supply.
- State how need and demand were determined
- Indicate and substantiate how critical, urgent or important it is to satisfy unmet need and demand
- Identify why this need or demand is not able to be met within the existing service provision framework or by other agencies.
- If appropriate, provide evidence on any current service provided which address the problem. Discuss its efficiency and effectiveness, and whether or not it is able to meet the need or demand.
- Identify which stakeholders have been consulted, their broad views of the project, and what support there is from within and outside the organization. Indicate the proposed role of these stakeholders in the project.
- Identify the links with other health service initiatives, programs.

2. Define the project outcomes

- Define the project objectives and expected outcome(s) by setting out clearly what the project is attempting to achieve.
- Define the overall health outcome(s) of the project with reference to the Health Strategy.
- A project outcome is defined as the effect or impact on a community of an output or set of outputs provided from the project. Outcomes can be health or project (process) based.

3. Identify and compare alternative options and selecting the preferred option

Develop a range of options

- Describe the alternative approaches or options that have been considered to address the identified problem.
- Seek the opinions of a wide range of stakeholders to identify an option or options not previously thought about.
- Keep referring back to the project objectives and outcomes as they represent what you are trying to achieve.
- Generate a list of options for meeting the objectives for appraisal. The initial list should be side ranging and should include both options which require capital or not. The list (not exhaustive) should include:
 - “Do nothing” or “do minimum” option
 - Non-capital solutions such as:
 - Buy-in services
 - Contract with private sector
 - Deliver services in another location with space available
- Low capital solutions
- Make better use of existing facilities through refurbishing, re-servicing or rearranging existing space
- Rationalise use of space e.g. close partially used and unsuitable buildings and provide services in a smaller number of upgraded buildings
- Rationalise use of land/buildings to generate capital from disposals
- New build on the existing site through exchequer capital funding
- Joint venture solutions using private sector capital
- Lease/rental arrangements

Benefits Criteria

Decide on the benefits criteria against which each option will be measured. These fall into three categories:

- Benefits that are quantifiable financially e.g. a new building may reduce operating costs such as building maintenance or energy
- Benefits that are quantifiable but not financially e.g. better located and integrated services may result in more timely and effective therapeutic interventions.
- Benefits that cannot be easily quantified e.g. positive influence on staff morale from improvements in working environment.

Measure the benefits

This stage focuses on the non-financial benefits, financial benefits will be included in the cost analysis.

The Process is to score each option against a criterion and to apply a weighting to each criterion.

Measure the costs of each option

Capital (land, building, fees, equipment) and revenue costs are assessed to the degree of accuracy necessary to differentiate between options. A discounted cash flow (NPV) is used. The following conventions apply:

- Costs are assessed for the “do nothing” option often by simply extrapolating current running costs into the future. This establishes a baseline cost against which the cost of other options can be measured
- Costs are positive numbers and savings negative
- All cost estimates are stated in the same base year at a common price level. In this way the effects of inflation can be ignored unless it is expected to apply unevenly to cost types
- Sunk costs are ignored
- Full life costs are used. This will include maintenance costs and periodic replacement of plant and equipment in the life of the building
- Income from e.g. sales of land and expenditure e.g. payments to contractors must be allocated to the years in which they occur.
- Transition costs or enabling costs should be included. These may be both capital and revenue.

When all of the costs have been measured the question of affordability can be addressed. Also the least cost option can be identified.

Risk Assessment

Identify all risks and assess their impact. Look for opportunities to eliminate, minimize or mitigate the risks. Carry out a sensitivity analysis on the model and tests the robustness of the options to changes in the underlying assumptions.

Project Appraisal Conclusion

Identify the preferred option having regard to the costs, benefits and risks. If an option emerges which has the lowest costs and the maximum benefits it makes the selection easy. If on the other hand an option has high costs and few benefits it can be quickly eliminated. In practice the final choice often rests between a high cost benefit option and a low cost low benefit option. In that case the appraisal team will have to make a judgment taking all factors into account.

Provide a summary of the expected benefits, costs and risks of each option. Summarise the basis on which the preferred option was chosen and given the highest priority. Include reference to the achievement of the intended outcomes and outputs, broad cost considerations and feasibility of implementation.

Describe the proposed evaluation method

Briefly outline how the project, once implemented, will be evaluated and by whom and when.

Identify the methods and processes proposed for measuring the resulting outputs, project outcomes and, if possible, health outcomes.

Develop measures to monitor the progress and performance of the project. Indicate how these relate to the organizations and Health Departments key performance indicators. Performance indicators relate to achieving outputs and outcomes and are usually expressed as a unit, index or ratio. Performance indicators measure both the effectiveness and efficiency of the project.