

# Better Business Cases for Capital Proposals Toolkit: Detailed Business Case

19 August 2011



**THE TREASURY**  
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## Acknowledgements

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- The Five Case Model is the best practice standard recommended by the HM Treasury for the preparation of business cases. Refer to 'Making Sense of Public Sector investments' (2001) by Courtney A Smith and Joe Flanagan and the business case guidance at [www.hm-treasury.gov.uk/data\\_greenbook\\_business.htm](http://www.hm-treasury.gov.uk/data_greenbook_business.htm)
- The State of Victoria Department of Treasury and Finance Investment Management Standard provides a set of tools, including the Investment Logic Map (ILM) adopted in this guidance. Refer to [www.dtf.vic.gov.au/investmentmanagement](http://www.dtf.vic.gov.au/investmentmanagement). This material is reproduced with permission and that copyright belongs to the State of Victoria. The State of Victoria is released from any liability associated with the subsequent use of the intellectual property associated with the material.

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# The Detailed Business Case – Overview

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## Purpose

1. The purpose of the Detailed Business Case is to:
  - identify the investment option which maximises value for money
  - prepare the proposal for procurement
  - plan the necessary funding and management arrangements for the successful delivery of the project, and
  - inform a proposal to Cabinet Ministers (or other decision-makers) to seek agreement to approach the market and finalise the arrangements for implementation of the project.
2. A Request for Proposal (RFP) may be issued once approval is granted. Where a Public Private Partnership (PPP) option has been short-listed as part of the initial options assessment, an alternative approach is required for seeking approval from Ministers and approaching the market. Refer to the National Infrastructure Unit of the Treasury for further guidance.<sup>1</sup>

## When should a Detailed Business Case be Prepared?

3. A Detailed Business Case is required as part of the two-stage approval process for investment proposals that require Cabinet approval.<sup>2</sup>
4. The Detailed Business Case builds on the previous Indicative Business Case by:
  - i. revisiting the case for change (the strategic case)
  - ii. providing a clear understanding of the likely relative value for money provided by the preferred option, by undertaking a more detailed analysis of the costs, benefits and risks of the short-listed options (the economic case)
  - iii. early consideration of the potential deal (the commercial case)
  - iv. ascertaining affordability and funding requirements (the financial case), and
  - v. planning for successful delivery (the management case).
5. High risk capital proposals may also be subject to Gateway review<sup>3</sup>. Gateway applies to all high risk capital programmes or projects undertaken by departments or Crown agents, irrespective of scale or funding source. Gateway provides independent external peer reviews at key decision points. If the capital proposal is subject to Gateway, the Detailed Business Case will assist to inform the Gate 2 (Delivery Strategy) review.

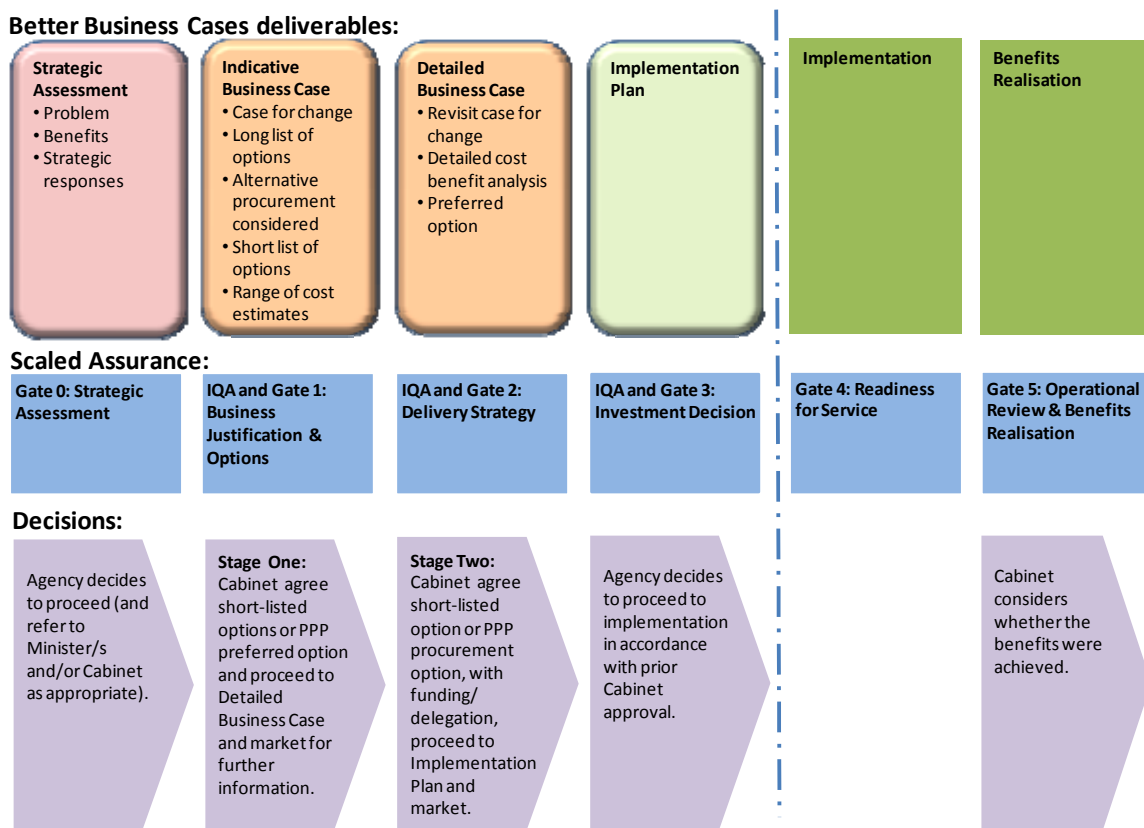
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<sup>1</sup> Refer to the PPP guidance maintained by the National Infrastructure Unit of the Treasury and available from <http://www.infrastructure.govt.nz/publications/pppguidance>

<sup>2</sup> Refer to Cabinet Office circular CO(10) 2 *Capital Asset Management in Departments and Crown Entities: Expectations* (from the DPMC web-site at <http://www.dPMC.govt.nz/cabinet/circulars/>) for further detail on proposals that require Cabinet approval.

<sup>3</sup> Refer to the SSC Gateway Review web-site at <http://www.ssc.govt.nz/gateway>

**Figure 1: The two stage business case development process**



Requirements may vary depending on the scalability rules, agency type, sector and/or solution options (eg PPP).

### Single stage business case

- A single stage business case Cabinet approval process may be permitted for investment proposals that are assessed as low risk and small scale. The Indicative Business Case and the Detailed Business Case requirements are typically combined into a single and simpler business case that encompasses actions two to 24, and with a lesser, fit for purpose, depth of analysis.<sup>4</sup>

### Gateway reviews

- High risk capital proposals may also be subject to SSC Gateway review. Gateway applies to all high risk capital programmes or projects undertaken by departments or Crown agents, irrespective of scale or funding source. Gateway provides independent external peer reviews at key decision points. If the capital proposal is subject to Gateway review, the Indicative Business Case will assist to inform the Gate 1 (Business Justification and Options) review.<sup>5</sup>

<sup>4</sup> A Strategic Assessment is not normally required. A fit for purpose level of analysis may be agreed that may not require an ILM, detailed cost-benefit analysis or quantitative risk analysis.

<sup>5</sup> Refer to the SSC Gateway Review web-site at <http://www.ssc.govt.nz/gateway>

## Revisiting the Strategic and Economic Cases

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8. As business case development can be protracted, a considerable amount of time may have passed since the initial analysis. The political, economic and policy environment may have significantly changed. The previous analysis and conclusions as part of the Indicative Business Case should be revisited and updated, where needed.

### Action 9: Revisit the Indicative Business Case and Confirm the Short List

9. The purpose of this action is to revisit, and either confirm or update, both the case for change and the short-listed options recommended for further consideration in this Detailed Business Case.

#### Revisiting the strategic case

10. The case for change should be reviewed and revised to reflect any changes due to:
  - any conditions made as part the Stage 1 approval of the Indicative Business Case
  - Ministers or stakeholders influencing the direction of the investment proposal, and/or
  - the time that has elapsed between Stage 1 approval and commencing work on the Detailed Business Case.

#### Reviewing the economic case

11. Review and refine earlier work on the long-list and the preferred way forward. The recommended short-list contained in the Indicative Business Case should be re-tested.
12. If there have been any changes in the underlying assumptions since the initial options assessment, are any of the short-list options now:
  - unlikely to deliver the investment objectives and critical success factors
  - unlikely to deliver sufficient benefits, noting the aim to improve value for money
  - clearly impractical or unfeasible, for example if the assumed technology or land is no longer available
  - clearly inferior to another option, due to significantly greater costs or lower benefits
  - likely to violate any of the constraints, for example by now being clearly unaffordable
  - sufficiently similar to allow detailed analysis of a single representative option, or
  - clearly too risky?
13. The rationale for any significant changes or revisions should be clearly documented. The intent is not to repeat the previous work already included in the Indicative Business Case, but to confirm that this analysis is still relevant and robust.

# Economic Case – Determining Potential Value for Money

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14. The purpose of this part of the economic case is to undertake a more detailed analysis of the costs, benefits and risks of the short-listed options. This should provide a clear understanding of the value for money likely to be provided by the preferred option in delivering the required services. This includes:
  - cost benefit analysis of the short-listed options
  - assessment of any intangible benefits and costs, and
  - assessment of risk and uncertainty.

## Action 10: Economic Assessment of the Short Listed Options

15. Treasury's expectation is that the assessment of the investment proposal will be undertaken from a national, economic perspective rather than a narrower all-of-government, agency, programme or project perspective. A national economy perspective is preferred because the actions of an organisation can impose costs or benefits on individuals or the nation as a whole (for example increasing the size of a programme operated by a particular Government department may require a large increase in income tax on individuals).
16. An economic assessment seeks to capture all benefits and costs regardless of to whom they accrue. Economic assessments also take into account costs and benefits that may not be reflected in monetary transactions. An economic benefit is any gain in the welfare of society arising from the investment proposal. It can include the time savings from reduced travelling times on a new motorway or the increase in quality of life years remaining as a result of a new pharmaceutical treatment.
17. An alternative to the national economy approach is to limit the scope of the analysis of costs and benefits to financial impacts on a single organisation. Examples may include the impacts of a new accounting package or a lease versus buy decision for property. This simpler form of financial analysis may be appropriate for proposals that are organisation-specific and have minimal impacts on either other organisations, individuals or the wider economy.

## Economic Cost Benefit Analysis is the preferred assessment method

18. There are various forms of economic assessment tools that can be used for ranking investment proposals, with increasing levels of complexity. Treasury's expectation is that cost benefit analysis (CBA) will be used, wherever possible, and should be undertaken from a national perspective rather than a narrower all-of-government, agency, programme or project perspective. This is often termed "economic cost benefit analysis".
19. Economic cost benefit analysis is flexible and can generally be applied to assess most proposals. It is the recommended, first-best, approach.
20. By identifying and quantifying all costs and benefits in monetary terms, it is possible to demonstrate that the expected benefits of a given option exceed the expected costs.

That is, to determine if there is a net benefit. Discounting should be applied to determine the net benefits in today's dollars, usually termed the net present value (NPV). The discounted net benefits can then be used to quantitatively rank between a given option and the base case, or between competing options.

21. Ministers and stakeholders can be provided with a consistent basis for assessing the trade-offs and relative value for money of competing options and are then better informed about the implications of using economic resources.
22. Cost benefit analysis has some limitations that mean it is not suitable for assessing every type of proposal. It can be difficult to assign monetary values to all costs and benefits. Where nominal monetary values cannot be assigned, it may be possible to estimate a range of monetary values for assessment purposes. A range-based approach for selected costs and/or benefits will generally provide a better basis for assessment than not assigning monetary values at all.
23. If there is not a sufficient base from which to conduct a full economic cost benefit analysis, a combination approach using cost benefit analysis for those costs and benefits that can reasonably be assigned monetary values may be used. Some intangible benefits and costs may not be reliably quantified in monetary values and may need to be assessed separately using multi-criteria analysis<sup>6</sup>. This approach is detailed in action 11.
24. The extent or depth of the analysis should be tailored to the relative size, impacts, and risks of the proposal. Not all proposals will require a full economic cost benefit analysis of all costs and benefits.
25. Talk to your Treasury vote team or monitoring agency for guidance on the scope and depth of analysis required and which assessment process to use.

## The Assessment Process

26. Undertaking a cost benefit analysis involves a series of steps:
  - i. Establish the assumptions and scope underlying the analysis. Should a national economic or agency-specific analysis be applied? Determine what additional economic analysis is required to produce suitable monetary estimates.
  - ii. Decide an appropriate period for the analysis. The 'appraisal period' typically matches the economic life of any proposed asset. Where options have differing economic lives a single common appraisal period is required and residual asset values can be assumed.
  - iii. Identify all significant benefits and costs. The monetary and non-monetary benefits in action five can be revisited and updated. All material direct and indirect, monetary and non-monetary costs should be included. Indirect costs as a result of the outcomes of the proposal may be incurred by the organisation, other agencies, users and other affected stakeholders.

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<sup>6</sup> Refer to the Treasury Cost Benefit Analysis Primer available at <http://www.treasury.govt.nz/publications/guidance/planning/costbenefitanalysis>

- iv. Assign monetary values to the benefits and costs, wherever possible. Document all assumptions made about the scale, timing and growth of benefits or costs over the appraisal period. All monetary estimates should be expressed in current dollar terms as allowance for general inflation is factored into the discount rate. GST, depreciation, capital charges and financing costs are also typically excluded.
  - v. Discount the benefits and costs to present values using the Public Sector Discount Rates specified from time to time by the Treasury.<sup>7</sup>
  - vi. Consider the effect of any intangible costs and benefits that cannot be reasonably and reliably assigned monetary values. Refer to action 11 for further guidance on the assessment and presentation of intangible costs and benefits.
  - vii. Assess risk and uncertainty where it can result in variations to benefit and cost estimates, and consequently on the options assessment. Refer to action 12 below.
  - viii. Identify the preferred option and undertake sensitivity analysis to test its robustness. Refer to action 13 below.
27. For further guidance on undertaking a cost-benefit analysis, refer to the Treasury Cost Benefit Analysis Primer.

## Action 11: Intangible Benefits and Costs

- 28. All benefits and costs that can be quantified in monetary terms should be included in the economic assessment and subject to economic cost benefit analysis. However, some benefits and costs may not be reliably or reasonably quantified in monetary values. These are termed intangible benefits or costs.
- 29. Intangibles cannot easily be included in the quantitative cost benefit analysis. However, significant intangible benefits and costs can influence the choice of the preferred option.
- 30. If intangibles are significant they should be explicitly highlighted and explained in the analysis so that decision-makers are aware of the value judgements and trade-offs involved in pursuing a particular option. This explanation can be quantitative, qualitative, descriptive, or a combination of these.
- 31. One approach is to use decision modelling tools to weight and score the intangible benefits and costs for each option. The preferred form of qualitative analysis for comparing unvalued benefits and costs is multi-criteria analysis.
- 32. Multi-criteria analysis is a tool for assessing and ranking alternative options against a given set of investment objectives. The alternative options can be assessed and scored (typically by a representative panel of stakeholders) against the criteria. The weighted overall scores provide a ranking of alternative options.
- 33. Multi-criteria analysis can be less rigorous than cost benefit analysis, but is relatively easy to implement and can be used to assess and compare options that involve both

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<sup>7</sup> Refer to the Public Sector discount rates published on the Treasury web-site at <http://www.treasury.govt.nz/publications/guidance/planning/costbenefitanalysis>

monetary and non-monetary impacts. It can aid decision-making by complementing the quantitative economic cost benefit analysis above.

34. The process and the reasoning behind the scores and weightings must be documented clearly to demonstrate that a robust analysis has been carried out. Again, it is important to recognise that the assigned weights and the scores given to options are value judgements. In order to assign weights and scores, negotiation and compromise needs to take place. It is the number of people involved in the panel process and their expertise that lends credibility to these value judgements. It is, therefore, worth spending some time choosing a representative 'benefits team' which should include stakeholders, customers (users), and business and technical representatives. The people involved should be named as part of the process.
35. The extent or depth of the analysis should be tailored to the relative size, impacts, and risks of the proposal. As with the Investment Logic Map (ILM) tool, a more robust assessment can be attained by using expert facilitators. Proprietary multi-criteria analysis tools are available and can be used to help ensure that the weighting and scoring processes are objective.
36. However not all proposals will justify or require a full multi-criteria analysis. If two comparable options have similar benefits and it is demonstrated that a multi-criteria analysis would not add further value to the analysis of intangibles, a cost-effectiveness analysis may provide an adequate low-cost alternative.
37. Talk to your Treasury vote team or monitoring agency for guidance on the scope and depth of analysis required and which assessment process to use.

## **Action 12: Risk and Uncertainty**

38. The aim of this action is to consider all significant risks that might create, enhance, prevent, degrade, accelerate or delay the achievement of the benefits associated with the investment proposal.
39. The benefits and costs estimated in the economic assessment are subject to risk and uncertainty. It is recommended that all significant risks should be measured and quantified (in monetary terms) as early as possible. The risks identified in action five should be revisited and updated.

### **Quantitative risk analysis modelling**

40. Quantitative risk analysis is a modelling technique that makes risks, and the financial impact of those risks, more explicit to decision-makers when considering the business case. This recognises that using single point estimates for comparing options can provide relatively limited information about the underlying trade-offs.
41. Quantitative risk analysis can provide a better understanding of the sources of risk to project outcomes and more accurate estimates of the likely costs or benefits.
42. Generally a quantitative risk analysis approach is considered to be superior to an approach that solely relies on optimism bias or contingencies. Quantitative risk analysis should be used as the first-best basis and is required for high risk, large scale investment proposals.

43. Quantitative risk analysis conducts detailed sensitivity analysis and analysis of the likely effect of these scenarios on project outcomes. This involves assessing each probability and impact and modelling project outcomes based on simulations of each risk. The final probability distribution describes the range of outcomes and their relative likelihood.
44. The risk modelling process involves:
  - i. building the models
  - ii. including distributions for uncertain inputs
  - iii. simulating outcome distributions
  - iv. generating outcome graphs and tables, and
  - v. reviewing and revision as necessary.
45. Impacts, other than financial, must also be considered and documented.

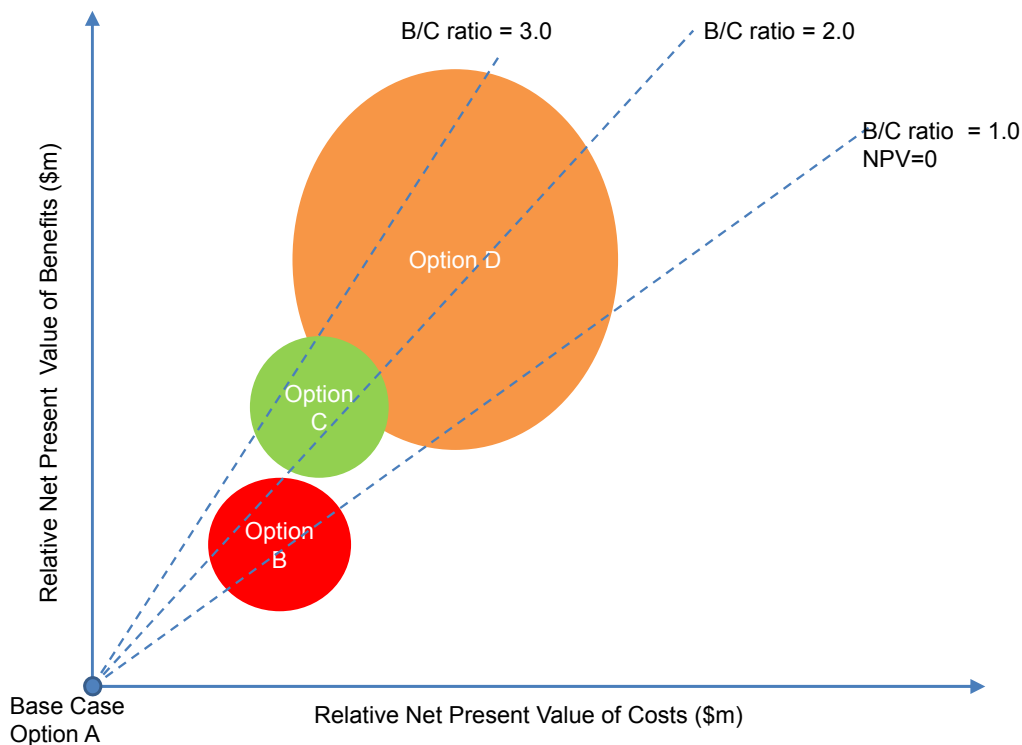
### Monte Carlo analysis

46. Monte Carlo analysis is a specific risk modelling technique that uses statistical sampling and probability distributions to simulate the effects of uncertain variables on model outcomes. The approach provides a systematic assessment of the combined effects of multiple sources of risk in key variables and can also allow for known correlations between these variables. Monte Carlo can require expert advice to develop the model and interpret the results.<sup>8</sup>
47. The Monte Carlo approach is more suited to proposals where there are several key variables with significant and/or correlated uncertainties, and when simpler sensitivity analysis approaches are unable to adequately describe the resulting variation in net benefits between competing options.
48. For each of the short-listed options, figure 2 below demonstrates a hypothetical relationship between relative benefits (the vertical axis), costs (the horizontal axis) and risks (the size of the coloured ovals). The ovals represent the 85<sup>th</sup> percentile confidence levels for the discounted values of benefits and costs around the point estimates. Often the choice is between low cost/low benefit and high cost, high benefit options. Options C and D have the same net present value (NPV) and benefit cost (B/C) ratios. However there is a higher level of uncertainty about the projected benefits for Option D.

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<sup>8</sup> Refer to the Treasury Cost Benefit Analysis Primer at <http://www.treasury.govt.nz/publications/guidance/planning/costbenefitanalysis>

**Figure 2:** Hypothetical 85<sup>th</sup> percentile limits for the benefits and costs for three options. Benefits and costs are compared to the reference base case Option A.



49. The extent or depth of the risk analysis should be tailored to the relative size, impacts, and risks of the proposal. Contact your Treasury vote team or monitoring agency in the first instance if you require guidance on the level of effort and the quantitative risk analysis approach required.
50. The State Services Commission maintains a panel of accredited quantitative risk analysis experts for use by Government agencies.<sup>9</sup>

### Action 13: The Preferred Option and Sensitivity Analysis

51. The purpose of this action is to identify the preferred option and test its robustness using sensitivity analysis.

#### Selecting the preferred option

52. The rationale for recommending the preferred option must be clear and defensible. Sufficient evidence for the selection should be provided along with a clear audit trail for decision-makers to check the assumptions, evidence and calculations leading up to the selection. Stakeholders and decision-makers should have assurance that the analysis and the selection processes are robust.
53. If a full cost benefit analysis has been undertaken, to the extent that all costs, benefits and risks have been quantified and valued robustly, the best option is likely to be the one with the highest, risk adjusted, net present value.

<sup>9</sup> Refer to the State Services Commission web-site at <http://www.ssc.govt.nz/node/5862>

- 54. In some cases the preferred option may not have the highest net present value due to some critical intangibles. Where the selection of the preferred option depends on a comparison between net present values and other non-monetary criteria, the multi-criteria approach in action 11 can be applied.
- 55. A multi-criteria analysis of intangible benefits can result in a judgement by stakeholders that intangible benefits are likely to out-weigh the results of the quantitative cost-benefit analysis alone and may alter the choice of the preferred option. If this is case, it is necessary to demonstrate to decision-makers the results of the detailed multi-criteria analysis of intangibles and the process undertaken. Decision-makers should be provided with sufficient evidence to inform any trade-offs. Details of the multi-criteria analysis process and results should be included as an appendix to the Detailed Business Case. [For example, the multi criteria analysis can be used to demonstrate why the intangible net benefits of a given option can outweigh the monetary net benefits of the preferred option from the cost benefit analysis.]
- 56. Fully involving stakeholders is very important in making judgements between quantitative and non-quantifiable factors.

**Table 1:** Example of [how to present] a combined cost benefit analysis/ multi-criteria analysis with [three] intangibles, prior to sensitivity testing.

	<b>Option 1: Do Nothing</b>	<b>Option 2: Do Minimum</b>	<b>Option 3: Preferred Minus</b>	<b>Option 4: Preferred</b>	<b>Option 5: Preferred Plus</b>
Appraisal Period (years)	20	20	20	20	20
Capital Costs (\$ m)	0.0	22.5	23.9	31.6	45.7
Whole of Life Costs (\$ m)	14.4	24.2	49.7	70.7	90.9
<b>Cost-Benefit Analysis (of [monetary costs and] benefits at the 2012 Public Sector Discount Rate 8.0%)</b>					
Net Present Value of Benefits (\$m)	2	25	75	115	126
Net Present Costs (\$m)	7	23	40	52	73
Benefit Cost ratio		1.1:1	1.9:1	2.2:1	1.7:1
<b>Net Present Value (NPV, \$m)</b>	<b>5</b>	<b>2</b>	<b>35</b>	<b>63</b>	<b>53</b>
<b>Multi-Criteria Analysis [ranking of intangible costs and benefits (if any)]</b>					
Criteria 1	1	3	3	5	1
Criteria 2	5	2	3	2	4
Criteria 3	3	2	5	1	3
<b>Preferred option</b>			<b>x</b>		

58. Deleted.
59. Deleted.
60. Often a choice will remain between high cost/high benefit options and low cost/low benefit options, such as the example illustrated in Figure 3. In these circumstances, decision-makers must be sufficiently well-informed to enable them to decide how to make these trade-offs.
61. Using the net present value method is the preferred Treasury approach. Using alternative techniques, such as internal rate of return and pay-back period methods may be desirable in certain cases. Refer to the Treasury Cost Benefit Analysis Primer and talk to your Treasury Vote team or monitoring agency for further guidance.

### **Sensitivity analysis – testing the robustness of the preferred option**

62. Sensitivity analysis is a form of quantitative analysis that examines how net present values, benefits, costs or other outcomes vary as individual assumptions or variables are changed. This approach can be used to test the robustness of the analysis.
63. Sensitivity analysis can help draw attention to those factors that require especially careful assessment or management. This analysis can address two key questions.
  - i. Would the preferred option still be worthwhile pursuing if some of the key assumptions do not eventuate?
  - ii. What actions can be taken to reduce the risks before accepting a particular option?
64. The sensitivity analysis needs to be well designed and clearly presented. The analysis should give a realistic picture of the extent to which the preferred option is still worthwhile pursuing even if there are significant changes in key variables.
65. The decision about which form of sensitivity analysis to undertake and the effort to invest should be made on a case-by-case basis, depending on the scale of the proposal, the degree of future uncertainty around key costs or benefits, and the risk tolerance of stakeholders.
66. In itself, sensitivity analysis may not change the preferred option. However, if small changes in the assumptions alter the ranking, it is an indication that the investment process should proceed cautiously, because it has non-robust elements in it. This means that a more detailed analysis and testing of the costs, benefits and risks of some of the options should be considered.

- 67. Sensitivity analysis should be undertaken using two approaches:
  - i. scenario analysis, and
  - ii. switching values.

**Scenario analysis – testing “what if”**

- 68. Scenarios are useful in considering how options may be affected by future uncertainty. Scenarios should be chosen to draw attention to the major uncertainties on which the success of the proposal depends.
- 69. Are there any variables (such as exchange rates, salary costs, demand drivers, timing or assumptions) that materially influence the net benefits? These key variables should be identified using the risk assessment process above.
- 70. The scenario analysis should then focus on asking “what if” questions and recalculating the expected Net Present Value for several scenarios. For example, what if one or more sensitive/key variables were changed by ±10% or ±50% or whatever is a realistic and possible variation. What if related Government policy altered or critical legislation is not passed? If these events occur, should the proposal proceed? Under what circumstances does the preferred option change?
- 71. A common approach is to test three scenarios:
  - i. pessimistic or conservative scenario
  - ii. most probable or base scenario, and
  - iii. optimistic scenario.

**Switching values**

- 72. This is a “what if” scenario test that highlights how much a given variable (eg an uncertain cost, benefit or key assumption) would have to change to alter the choice of the preferred option. Judgements may be necessary about how likely the change would alter the preferred choice of the preferred option.
- 73. Examples of variables that are likely to impact on the robustness of the choice of the preferred option may include growth of real wages, forecast revenues, demand, prices, and/or assumptions about the transfer of risk. An understanding of how costs fall into fixed, step, variable and semi-variable categories can also help in understanding the sensitivity of the costs of given options.

**Table 2:** Example of an off-shore procurement of capital assets of \$US23.8 million at an exchange rate of \$NZ0.80 (option 4 in Table 1 above)

	Conservative Scenario	Base Scenario	Optimistic Scenario
Exchange Rate (\$NZ per US\$)	\$0.69	\$0.80	\$0.88
Negotiated purchase price discount	10%	15%	25%
<b>Overall NPV of the preferred option 4 (\$million)</b>	<b>\$53.6</b>	<b>\$60.9</b>	<b>\$67.0</b>

74. In Table 2 above, keeping the purchase price discount constant at 10%, a fall in the exchange rate from \$0.80 to \$0.703 is sufficient to change the overall weighted scoring in Table 1 to switch the choice of the preferred option from option 4 to option 5. An exchange rate of \$0.703 therefore represents the 'switching value'.
75. Switching value analysis is an important input to the decision on whether or not a proposal should proceed. These risks need to be clearly highlighted to decision-makers to enable them to accurately assess the degree of robustness of the preferred option.

### **Presenting the preferred option and analysis**

76. It is important that the rationale for recommending the preferred option is clear and defensible. Decision-makers and stakeholders should have assurance that the analysis and the selection processes are robust.
77. Sufficient evidence for the selection should be provided along with a clear audit trail for decision-makers to check the assumptions, evidence and calculations leading up to the selection. The final presentation should explain:
- all major assumptions including the scope of the analysis
  - why certain costs and benefits have been included or excluded
  - the valuation methodologies employed to estimate costs and benefits
  - the discount rate employed (typically the Public Sector Discount Rate specified from time to time by the Treasury<sup>10</sup>)
  - any sensitivity analysis undertaken and any significant qualitative or non-monetary impacts identified (including externalities, deadweight losses, and behavioural effects)
  - the justification for the decision criteria employed
  - the final recommendation in a way that its implications and qualifications are easily understood by decision makers, and
  - the biases, limitations and deficiencies of the analysis.

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<sup>10</sup> Refer to the Public Sector discount rates published on the Treasury web-site at <http://www.treasury.govt.nz/publications/guidance/planning/costbenefitanalysis>

## Commercial Case – Preparing for the Potential Deal

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78. One of the key aspects of the Five Case Model is to ensure that detailed consideration of the potential deal occurs at early stages of the business case development process, rather than waiting until after final approval of the Detailed Business Case.

### Action 14: The Procurement Strategy

79. Procurement in the business case context covers all the aspects of the acquisition from external providers of the goods and services required to support the implementation of the preferred option.
80. The procurement strategy focuses on how best to procure the required services, subject to any prevailing rules.

### The New Zealand procurement framework

81. While New Zealand does not have any legislation or regulations governing public sector procurement, there is a framework based on policy, rules and guidelines that set out expectations and constraints. The responsibility for procurement procedures and decisions is devolved to the individual departments or agencies.<sup>11</sup>
82. New Zealand's Government procurement policy is based on the following principles:<sup>12</sup>
- best value for money over whole of life
  - open and effective competition
  - full and fair opportunity for domestic suppliers
  - improving business capabilities, including e-commerce capability
  - recognition of New Zealand's international trade obligations and interests; and
  - requiring sustainably produced goods and services wherever possible, having regard to economic, environmental and social impacts over their life cycle.
83. Government departments are required by Cabinet to follow the *Mandatory Rules for Procurement by Departments*, published by the Ministry of Economic Development (MED) in 2006. These rules set out mandatory standards and procedural requirements for the conduct of procurement by government departments. The rules reflect and reinforce New Zealand's *established policy of openness and transparency in government procurement*.
84. Other state sector agencies are encouraged to apply these rules in their own procurements.
85. Other relevant good practice guidance includes:
- *Procurement Guidance for Public Entities* -Office of the Controller and Auditor General (2008).<sup>13</sup> This good practice guide contains principles, considerations, and processes to assist public entities when procuring goods or services.

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<sup>11</sup> This section is based upon, and updates, the ICT procurement guidance provided by the Industry Capability network at <http://www.icn.govt.nz/Procurement/>

<sup>12</sup> Refer to the MED web-site at <http://www.procurement.govt.nz>

- *Public sector purchases, grants, and gifts: Managing Funding Arrangements with external parties*<sup>14</sup> - Office of the Controller and Auditor General (2008). This document explains the range of funding arrangements (including conventional purchasing contracts) and the circumstances in which they are suited.
  - *Guidelines for Contracting with Non-Government Organisations for Services Sought by the Crown*<sup>15</sup> - The Treasury (2003). These guidelines are for departments and Crown entities managing contracting and other funding arrangements with non-government organisations (NGOs).
86. Government3 was a programme led by the Ministry for the Environment for agencies to improve the sustainability of their activities<sup>16</sup>. The programme worked with agencies to give practical effect to the government's sustainability policies such as the Sustainable Development Programme of Action, the National Energy Efficiency and Conservation Strategy, the Climate Change Programme<sup>17</sup> and the New Zealand Waste Strategy.
87. While not currently part of the governing framework on procurement in the same way as the above policy, rules and guidelines, many government departments have signed up to Govt3 and are integrating the objectives of this programme into their own agency procurement policies and practices.
88. Government departments and agencies are encouraged to take a strategic approach to managing public funds. This means developing an understanding of the importance of procurement to achieving its overall public policy outcomes and business objectives and developing a procurement strategy. The agency can then clearly identify the most effective and efficient ways to source and secure its goods and services.
89. The Ministry of Economic Development is currently developing revised guidance for government agencies. The new guidance proposes a structured approach to strategic procurement that is intended to both support good procurement practice across government and help suppliers better engage with government agencies.

## Possible procurement approaches

90. A number of different procurement approaches may be possible for implementing the preferred solution. At one extreme, the provision of required services and the development of any assets may be delivered utilising in-house resources. Procurement may be limited to the conventional purchase of inputs not already held by the organisation.
91. At the other extreme, all the required services may be purchased from an external provider, who develops and owns the assets. The continuum of procurement options is shown below.

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<sup>13</sup> Available from the OAG web-site at <http://www.oag.govt.nz/2008/procurement-guide>

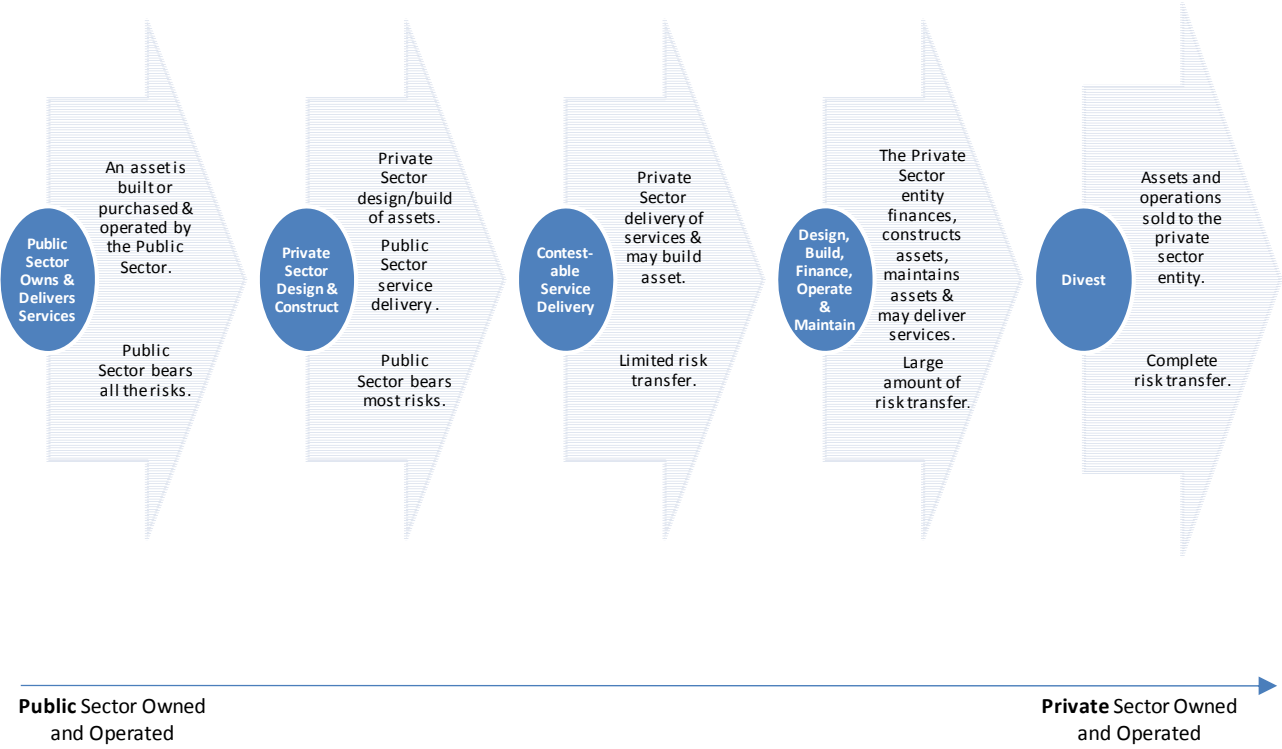
<sup>14</sup> Available from the OAG web-site at <http://www.oag.govt.nz/2008/funding-arrangements>

<sup>15</sup> Available at the Treasury web-site at <http://www.treasury.govt.nz/publications/guidance/mgmt/ngo>

<sup>16</sup> Refer to <http://www.mfe.govt.nz/issues/sustainable-industry/govt3/>

<sup>17</sup> The Ministry for the Environment consider that a key part of infrastructure resilience involves consideration of the potential impacts of climate change.

**Figure 3:** The continuum of major asset ownership and procurement approaches from full public to full private sector ownership



92. Depending on the approach taken, procurement may include one or more of:
- minor conventional purchasing
  - major conventional purchasing
  - conventional design and construct
  - alliance approaches, and
  - Private Public Partnerships (PPPs).

*Minor conventional purchasing*

93. All organisations have a range of goods and services that they buy regularly, that are of relatively low value, and that are able to be bought through ordinary procurement systems. Examples include consumables, such as stationery or catering, or short-term contracts for professional or consulting services.

*Major conventional purchasing*

94. Major conventional purchases are high value, possibly tens of millions of dollars, and invariably entail higher risks to the purchaser. Examples include building capital assets, information technology (ICT) contracts and significant health services.

*Conventional design and construct*

95. Conventional design and construct is best suited to projects that can be well-specified and where the specifications do not change. Once the project specification and concept design are completed, contractors can be selected on the basis of a competitive tender process to undertake the detailed design and construction. Many of the project risks are transferred to the contractors.

### *Alliance approach*

96. The Office of the Auditor General (OAG) has noted a growing pattern of managing major contracts through more strategic arrangements such as partnering and project alliances, even if they are developed within a market context.
97. The alliance method is a collaborative risk-sharing approach to contracting where all the participants work in an open manner to deliver the project. It is more suited to projects that cannot be clearly defined up-front, where there is a high likelihood of significant scope change and the risks are unpredictable.

### *Private Public Partnerships (PPPs)<sup>18</sup>*

98. Private Public Partnerships (PPPs) are long-term (25 to 35 year) contracts for the delivery of a service (a concession) that requires the construction of a facility or asset. PPP arrangements may be combinations of up to six basic components - design, build, maintain, operate, finance and ownership. Ownership can transfer back to Government at the end of the fixed term contract (eg, BOOT).
99. A Private Public Partnership is characterised by:
  - life-cycle responsibility transferred to private sector parties (for the term of the contract)
  - public sector specification of service requirements, not the form of assets, and
  - an appropriate transfer of risks from the public to private sector consortium of specialist parties.
100. All proposals requiring Cabinet approval that have whole of life costs (WOLC) in excess of \$25 million must include in the business case an evaluation of alternative procurement options, including a Private Public Partnership.<sup>19</sup>
101. A Private Public Partnership approach may be considered for large scale and long duration assets where:
  - the project is sufficiently complex that innovative approaches can be employed
  - outputs or outcomes can be well-specified, enabling clear performance specification
  - the assets are specific-purpose and can only be used for the purpose intended (such as a prison or hospital)
  - the service is durable and it is unlikely that the service requirements will not vary unpredictably over the life of the contract, and
  - there is a market appetite and depth (to attract multiple bidders).
102. Where the initial options assessment (undertaken in action 7) indicates that a Private Public Partnership may be a viable option for procurement and/or funding, an

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<sup>18</sup> Refer to the PPP guidance maintained by the National Infrastructure Unit of the Treasury and available from <http://www.infrastructure.govt.nz/publications/pppguidance>

<sup>19</sup> Refer to paragraph 18 of cabinet office circular CO(10) 2 Capital Asset Management in Departments and Crown Entities: Expectations available from <http://www.dpmmc.govt.nz/cabinet/circulars/co10/2.html>

alternative approach is necessary for seeking approval from Ministers and approaching the market. Refer to the National Infrastructure Unit of the Treasury for further guidance.<sup>20</sup>

### Collaborative procurement (shared services)

103. Strategic and ad-hoc collaborative arrangements, whether at international, national, sector, regional, inter-agency or organisational level should be considered. These commitments can be successful where the parties have shared interests and objectives and there is mutual trust, openness and transparency.
104. Compared to conventional purchasing arrangements, collaborative approaches can potentially provide:
  - greater flexibility
  - better value for money through improved economies of scale, and
  - reductions in procurement costs through pre-competition.

### Lease agreements

105. Leases are long-term contractual arrangements between the Crown and a third party for the on-going delivery of infrastructure needed to support government service delivery. Normally these contractual relationships would require a competitive tendering process.<sup>21</sup>
106. A variation on this theme is a sale and lease-back transaction, in which the Crown sells an existing property to the third party which then leases the property (with improvements) back to the Crown for an agreed period.

### The procurement lifecycle

107. The Ministry of Economic Development consider the procurement lifecycle in three distinct phases: planning, sourcing and managing. These phases are further divided into eight distinct, but interrelated stages. The eight stage process is demonstrated in the following diagram and detailed further in *Mastering Procurement: A Structured Approach to Strategic Procurement* - Ministry of Economic Development (2011).<sup>23</sup>

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<sup>20</sup> Refer to the PPP guidance maintained by the National Infrastructure Unit of the Treasury and available from <http://www.infrastructure.govt.nz/publications/pppguidance>

<sup>21</sup> Refer to Cabinet Office circular CO(10) 2 *Capital Asset Management in Departments and Crown Entities: Expectations* (from the DPMC web-site at <http://www.dPMC.govt.nz/cabinet/circulars/>) for further detail on proposals that require Cabinet approval.

<sup>23</sup> Refer to the MED web-site at <http://www.procurement.govt.nz>

**Figure 4:** The procurement lifecycle (Source: Ministry of Economic Development)



108. The eight stages correspond to different parts of the business case development process.

### Procurement Planning

109. The procurement plan should build on the business case and provide a link to implementation and delivery. A procurement plan outlines the methodology and approach, process and project management structure for implementation.

110. The purpose of a procurement plan is to:

- provide detailed planning for the approach to market, evaluation of offers and identification of the preferred supplier
- ensure the best supplier is selected for right reasons and at a price that represents value-for-money over the life of the contract
- assign roles and responsibilities, and
- set realistic timelines.

111. For further details on preparing the procurement plan and the links to the business case development process refer to the Ministry of Economic Development guidance in *Mastering Procurement: A Structured Approach to Strategic Procurement* (2011).<sup>24</sup>

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<sup>24</sup> Refer to the MED web-site at <http://www.procurement.govt.nz>

## Action 15: Service Requirements

112. The purpose of this action is to specify the service requirements to capture the scope and content of the potential deal. It builds on the work undertaken previously in action four.
113. Generally, there are three fundamental principles to bear in mind.
- i. As far as possible, requirements must be specified in terms of the desired outcomes and outputs to be produced. Therefore, the focus should not generally be on the processes which produce them or the inputs and technologies required.
  - ii. Specify the quality attributes of the services and outputs required and the performance measures against which they will be assessed.
  - iii. The deal must allow scope for the prospective service providers to suggest innovative ways of meeting the service requirements, including proposals which may require rethinking the business processes in place within the procuring organisation.
114. The expected outcomes are<sup>25</sup>:
- to buy the right quality and quantity to be delivered at the right time and place for the right price
  - that the intended results satisfy the needs, and
  - for a Request for Tender, that the right solution (goods/services) is clearly articulated, or for a Request for Proposal that the detailed public policy/business needs are clearly articulated.
115. The expected outputs are:
- i. detailed specification of requirements, and
  - ii. a specification endorsed by key stakeholders.
116. There are three key tasks as follows:
- a. Prepare specification of requirements
    - i. From the high-level statement of needs develop the detailed scope
    - ii. Consider cost and efficiency savings:
      - incorporate improvements from lessons learned
      - consider new technology
      - identify alternative delivery mechanisms and review for efficiency, and
      - amalgamate spend and decrease costs
    - iii. Identify mandatory and non-mandatory requirements

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<sup>25</sup> Reproduced from *Mastering Procurement: A Structured Approach to Strategic Procurement* (2011) available from the Ministry of Economic Development web-site at <http://www.procurement.govt.nz>

- iv. Identify timeline and key deliverable dates
  - v. Specify any sustainability requirements or preferences.
- b. Quality and Standards:
- i. Specify quality standards and measures, and
  - ii. Specify performance standards and measures.
- c. Good practice:
- i. Have the draft specification of requirements checked and endorsed by key stakeholders.
  - ii. Check that the final specification of requirements:
    - addresses the targeted outcomes and public policy/business objectives
    - meets the agreed stakeholder needs, and
    - covers whole-of-life of the contract deliverables
  - iii. Ensure design of specification is not structured or divided to avoid the application of the Mandatory Rules of Procurement or any other government or agency procurement policy requirements.

## Action 16: Risk Allocation

117. Consider how the service risks (design, build, funding and operational) may be apportioned between the public and private sectors. This is especially important when the successful delivery of the project is subject to significant risk, regardless of whether or not a Public Private Partnership (PPP) is being considered. For example, the Crown should not bear all the risks associated with a conventional design and build procurement.
118. The key principle is that risk should be allocated to the party best able to manage it. The objective is to optimally allocate risk, rather than maximising risk transfer.
119. The principles that should be considered include the following.
- i. The degree to which risk may be transferred depends on the specific proposal under consideration.
  - ii. Successful negotiation of risk transfer requires a clear understanding by the procuring organisation of the risks presented by a proposal, the broad impact that these risks may have on the service provider's incentives and financing costs (cost drivers) and the degree to which risk transfer maximises value for money. Hence the need to identify and evaluate individual risks in action 12 above.
  - iii. Where the private sector has clear ownership, responsibility and control, it should be encouraged to take all of those risks it can manage more effectively than the procuring organisation. If the procuring organisation seeks to reserve control, yet still seeks to transfer significant risk, there is a danger that the private sector will negotiate a price premium.

iv. Appropriate transfer of risk generates incentives for the private sector to supply timely, cost effective and more innovative solutions.

120. Consider transferring risk to the private sector whenever the service provider is better able to influence the outcome than the procuring organisation. Reinforce the transfer of risk by negotiating abatements or penalty for late or incomplete delivery.

121. A risk allocation table should be included that illustrates the risks borne by each party.

**Table 3:** A hypothetical example risk allocation table

Risk Category	Potential Risk Allocation		
	Public	Private	Shared
Design risk	25%	75%	✓
Construction and development risk	25%	75%	✓
Transition and implementation risk	60%	40%	✓
Availability and performance risk	0%	100%	✓
Operating risk	100%		
Variability of revenue risks	100%		
Termination risks	100%		
Technology and obsolescence risks	50%	50%	✓
Control risks	100%		
Residual value risks	100%		
Financing risks	100%		
Legislative risks	100%		
Other project risks	100%		

## Action 17: Payment Mechanisms

122. The payment mechanism is the formula against which payment for the contracted services will be made. The underlying aim of the payment mechanism and pricing structure is to reflect the optimum balance between risk and return in the contract. The approach should be to relate the payment to the delivery of service outputs and the performance of the service provider.

123. If it is properly constructed, the payment mechanism will incentivise the service provider to deliver services in accordance with the business imperatives of the procuring organisation in each of the three phases of the service:

- i. Pre-delivery Phase – up to the acceptable delivery of the service and commencement of the payment stream

- ii. Operational Phase – following acceptable delivery of the service up to the close of the primary contractual period, and
- iii. Extension Phase – post-primary contract period.

### The pre-delivery phase

124. Two types of payment mechanisms are important in the pre-delivery (design and build) phase:
- i. Fixed price/costs. This involves a fixed price for the delivery of agreed outputs within fixed timescales, with appropriate penalties for delays and cost over-runs.
  - ii. Payment on the delivery of agreed outputs. This links payment to the delivery of key service outputs and does not commence until the contracted services commence, as agreed. Payments to the service provider should only commence when off-setting benefits are realised by the procuring organisation. A service that fails to perform may result in termination of all payment streams and, in extreme circumstances, pass the rights to the underlying assets for the service to the procuring organisation.

### The operational phase

125. Types of payment mechanisms relevant in the operational phase include:
- i. Availability payment: This links a proportion of the payments to the availability of the service. For example, the contract could stipulate that the service must be available for a minimum of 95% of the time between contracted hours.
  - ii. Performance payment: This links a proportion of the payment to specified performance targets.
  - iii. Transaction/volume payment: This links a proportion of the payment to the achievement of specific business benefits. For example, the number of transactions or volume of business provided. This gives the service provider the incentive to optimise the level of productivity and to invest further in the underlying infrastructure, if increased levels of productivity are required.
  - iv. Incentive payment: Payment is linked to potential improvements in the overall performance of the procuring organisations processes. This encourages the service provider to deliver new ways of working and additional benefits that can be shared by both parties.
  - v. Cost of change: The cost of change can represent a major risk to the procuring organisation and should be mitigated through the contractual obligation to benchmark and market test the contracted services at regular intervals. If it is not possible to agree prices for anticipated future changes, the process for agreeing the cost of change should be established at the outset.
  - vi. Third party revenues: This element of the payment mechanism gives the service provider the incentive to develop and exploit alternative revenue streams and new businesses, where appropriate.

## The extension phase

126. Two payment mechanisms are relevant in the extension phase:
- i. Technological obsolescence: Contractual devices can be employed to encourage the service provider to consistently upgrade core technology. Firstly, various upgrades can be included in the initial price to ensure that the infrastructure underpinning the service is kept up-to-date. Secondly, a proportion of the service provider's initial recoverable investment could be deferred, with prior agreement, until the end of the contractual period.
  - ii. Contract currencies: These are variable measures that demonstrate the productivity and performance of contracted services. For example, the number of complaints received, or the proportion of users of the service requiring assistance. Reduced payments for under-performance can incentivise service providers to improve, as do enhanced payments for performing in excess of the minimum requirement specified in the contract.

## Action 18: Contractual and Other Issues

127. Outline the contractual arrangements for the procurement.

### Form of contract and key contractual issues

128. Decide the type of contract that will best suit the nature of the procurement. It is usual to seek legal advice at this stage. Options could include, for example, a contract for services, a service level agreement or a supply agreement for goods. You may be able to use the Government Model Contract templates or already have an appropriate contract template that can be used, or your legal adviser may need to draft a bespoke contract. Check if it may be appropriate to use an industry specific contract, for example Institute of Professional Engineering NZ (IPENZ) Conditions of Contract for Consultancy Services.<sup>26</sup>
129. There are two aspects to consider when choosing a contract form:
- i. Management of legal risk, and
  - ii. Control of delivery and costs.
130. Contract management arrangements and key contractual issues should be considered and recorded. These will vary from deal to deal, but the principal areas of the contract may include:
- the duration of the contract and any break clauses
  - the agreed deliverables
  - the respective roles and responsibilities of both the service provider and procuring organisation in relation to the proposed deal
  - the payment mechanism, including prices, tariffs and incentive payments

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<sup>26</sup> Reproduced from *Mastering Procurement: A Structured Approach to Strategic Procurement* (2011) available from the Ministry of Economic Development web-site at <http://www.procurement.govt.nz>

- change control (for new requirements and updated services)
- the procuring organisation's remedies in the event of failure on the part of the service provider to deliver the contracted services on time, to specification and price
- the treatment of intellectual property rights
- compliance with appropriate regulations
- operational and contract administration elements of the terms and conditions of service
- arrangements for the resolution of disputes and disagreements between the parties
- the agreed allocation of risk, and
- any options at the end of the contract.

### Accounting treatment

131. This section should provide details of the intended accounting treatment for the potential deal, including the relevant accounting standards.

### Other implications

132. State sector organisations may have requirements to consult staff and external agencies in respect of projects involving considerable internal change.

133. In addition to any GETS<sup>27</sup> reporting requirements, the Detailed Business Case should identify any implications arising from the proposed investment. These can include implications for privacy (for information systems that hold or provide personal information), other legislative issues or Treaty of Waitangi issues.

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<sup>27</sup> New Zealand Government Electronic Tenders Service. All New Zealand public sector agencies, including local authorities, are encouraged to publish information on GETS. Government departments are mandated to use GETS for the publication of all opportunities to tender above minimum thresholds (refer to [http://www.med.govt.nz/templates/Page\\_43367.aspx](http://www.med.govt.nz/templates/Page_43367.aspx))

# Financial Case – Ascertaining Affordability and Funding Requirements

134. The purpose of this part of the financial case is to determine the affordability and the fiscal impacts or funding requirements of the preferred option.

## Action 19: The Financial Costing Model

### Financial costing versus economic assessment

135. The cost benefit analysis approach in the economic case focuses on assessing the relative value for money of alternative options, taking into account resource costs and benefits from a national perspective to consider the impacts of the proposal on the wider economy.

136. In contrast, the financial case focuses on the affordability of the short-listed options evaluated in the economic case, with particular emphasis on the preferred option.

**Table 4:** Comparison between an economic assessment and a financial costing

Characteristic	Economic Assessment (economic cost benefit analysis)	Financial Costing
<b>Focus</b>	Value for money of short-listed options, relative to the base option	Affordability of the preferred option, compared to other short-listed options
<b>Scope</b>	National economy	Organisation only
	All resource flows, including non-monetary costs and benefits	Direct financial and accounting impacts only
	Indifferent between capital and operating	Capital and operating detailed separately
<b>GST and taxes</b>	Excluded	Excluded
<b>Depreciation</b>	Excluded	Included
<b>Capital charges</b>	Excluded	Included
<b>Interest and financing costs</b>	Excluded	Included
<b>Transfer payments</b>	Excluded	Included

## Assumptions and methodology

137. The financial costing takes into account those monetary cash flows in the earlier economic analysis of the preferred option that solely impact on the organisation and appropriations. These include accounting charges like transfer payments<sup>28</sup>, depreciation, capital charges, interest and other financing charges. Taxes are generally excluded as these typically impact equally across alternative options. GST is excluded to be consistent with the organisations and the Crown financial statements.
138. Decide an appropriate period for the analysis. The appraisal period typically matches the economic life of any proposed asset. For the preferred option, itemise all material financial expenditure and revenue items year by year over the appraisal period.

**Table 5:** Structure of the financial costing table for a hypothetical Crown and third party funded information technology project (over a five year appraisal period).

Preferred Option:	\$000s				
	Year 0	Year 1	Year 2	Year 3	Year 4
Capital Expenditure:					
- Hardware	(1)				
- Software	(2)				
- Total Capital	(3) = (1)+(2)				
Operating Expenditure:	(4)				
- Personnel	(5)				
- Operating	(6)				
- Depreciation	(7)				
- Capital charges	(8)				
- Total Operating	(9)=(4)+(5)+(6)+(7)+(8)				
<b>Total Expenditure<sup>29</sup>:</b>	(10)=(3)+(9)				
Revenue:					
- Revenue Crown	(11)				
- Third party revenue	(12)				
<b>Total Revenue:</b>	(13)=(11)+(12)				
<b>Capital funding required:</b>	(3)				
<b>Operating funding required:</b>	(10)-(13)				

139. The completed financial costing should provide a profile of capital and revenue funding requirements for the preferred option over the appraisal period.

<sup>28</sup> Transfer payments are defined as payments for which no goods and services are obtained in return, for example social welfare benefits.

<sup>29</sup> Note that the costs of any IQA, QRA, Gateway reviews or any decommissioning should also be included.

140. Repeat the costing for the other short-listed options and for different scenarios to test the robustness of the relative affordability of the preferred option.
141. It is expected that specialist accounting capability will be required to complete this analysis. If external advice is required to undertake this work, the assumptions, inputs and model need to be approved by the Chief Financial Officer. The Chief Financial Officer also needs to be responsible for updating the model as new and better information becomes available. Implications for financial recommendations and other related financial reporting also need to be managed.

### Assessing affordability issues

142. Affordability issues are one of the main reasons for delay at the point at which business cases are submitted for approval.
143. The financial costing should demonstrate affordability gaps, the difference between the funding required in any year over the appraisal period and funding available from other sources.
144. There are a number of risks which could affect the affordability of the project. The Detailed Business Case should summarise the results of the risk contingencies and sensitivity analysis which underpin the financial case, referencing the sensitivity analysis undertaken previously in actions 12 and 13.
145. The risks and uncertainties will vary from project to project, but some key questions to consider are:
  - Would the project be affordable if capital costs were to be 10% higher than expected?
  - What if the expected savings were to fall by 10%?
  - What circumstances might cause saving targets to be breached?
  - What if income to the organisation were to be reduced by 5% or more?
  - Is there a robust strategy in place to guard against these outcomes?
146. Assessing affordability also requires sound judgement of the organisation's business and requires that the:
  - balance sheet is healthy and has been correctly organised and properly accounts for current assets, current liabilities, long-term liabilities and capital
  - organisation is solvent and is not over-trading
  - cash flows are sound, and
  - appropriate contingencies have been made for risks and uncertainties.
147. The impacts of the proposal on the organisation's operating statements and balance sheet should be assessed to ensure on-going financial viability and sustainability. Both the current position and the likely outcome should be fully recorded in the Detailed Business Case. Various techniques can be used to help judge affordability, including financial analysis ratios (such as working capital ratio, return on capital employed, return on capital invested).

## Closing the affordability gaps

148. Affordability problems are most likely to occur in the early phases of the project, prior to realised benefits building up to the point at which they offset the initial costs of the investment. Affordability is more likely to be an issue where the pay-back period<sup>30</sup> is relatively long. Generally, assuming two projects with similar net present values, the project with shorter pay-back period is likely to be preferred.
149. If the affordability analysis reveals the preferred option is unaffordable, potential remedies include:<sup>31</sup>
- phasing the implementation of the preferred option differently
  - adopting a different design solution
  - altering the scope of the preferred option, for example, its functional content or the quantity and quality of the services offered
  - finding additional sources of funding, for example, disposal of surplus assets (if available) or further revenue support from within the organisation
  - considering different financing methods permitted within any regulations or constraints
  - negotiating more competitive or flexible prices from service providers
  - finding other ways of reducing costs and/or increasing savings, and/or
  - allowing the service provider to create additional revenue streams and new business and sharing in the resultant revenue streams.

## User fees

150. It may also be necessary to assess the implementation impact of the proposed deal on user charges in respect of services provided by the organisation. The organisation must be confident that third party revenue projections are robust.
151. Where an agency seeks to recover some or all of the costs of service provision from the users or direct beneficiaries of that service, the Government and the public want to be assured that the charges set both take proper account of efficiency, equity and fiscal concerns and are not excessive in relation to the costs incurred.
152. The Regulations Review Committee has adopted a practice of asking departments to demonstrate that fees were calculated in accordance with the principles of the Committee and any Treasury and Audit Office guidelines.
153. These principles are:
- The Crown cannot impose taxes without the explicit authority of Parliament. This implies that the Government cannot over-recover the cost of providing a service without the authority of an Act of Parliament.

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<sup>30</sup> Refer to the Treasury CBA Primer, Section 3.6., at <http://www.treasury.govt.nz/publications/guidance/planning/costbenefitanalysis>

<sup>31</sup> Note that these actions may also impact on the realisation of benefits.

- A fee should not be so high that it defeats the purpose of the enabling statute and is not in accordance with the general objects and intentions of the principal Act.

154. In general, public sector investments are difficult to justify if they lead to a significant increase in the prices charged for services.

## Presenting the Results

155. In addition to presenting the results of the financial modelling for the preferred option, also provide:

- a description of the model and the costing methodology used
- all key assumptions in the model including how these assumptions were derived and agreed (for example, discount rates, inflation, taxation, depreciation, cost savings)
- a description of the proposed funding arrangements
- contingencies for risks and uncertainties, including scenario testing on key assumptions (where required)
- capital and operating impacts on the organisations finances, and
- fiscal impacts on the Crown's baselines (where necessary).<sup>32</sup>

156. Detail the capital and revenue requirements for the preferred option. This should set out:

- the capital and operating consequences of the preferred option over the life span of the service and/or contract period, including any third party revenue
- any contingencies (in monetary terms and consistent with previous quantitative risk analysis) necessary to ensure that there is sufficient financial cover for risks and uncertainties
- how this compares with the original estimates provided in the Indicative Business Case or any constraints applied to the proposal, and
- capital and revenue funding sought by this business case.

157. Consideration should be given on any breakeven affordability requirements that may apply. For example, a requirement that the business case is fully funded within existing revenue baselines and third party revenue. Provide a funding statement showing which internal business units, partners and external organisations (if any) have agreed to provide resources.

158. Where external funding is required, the Chief Executives Statement should include a written statement of support. This should demonstrate that all alternative sources of funding have been considered and rejected, including an analysis of why all or part of the funding required cannot be met from existing resources and including identifying higher priority expenditure.

159. Highlight to the either the Treasury vote team or monitoring agency if the investment proposal is likely to result in additional or unexpected baseline pressures.

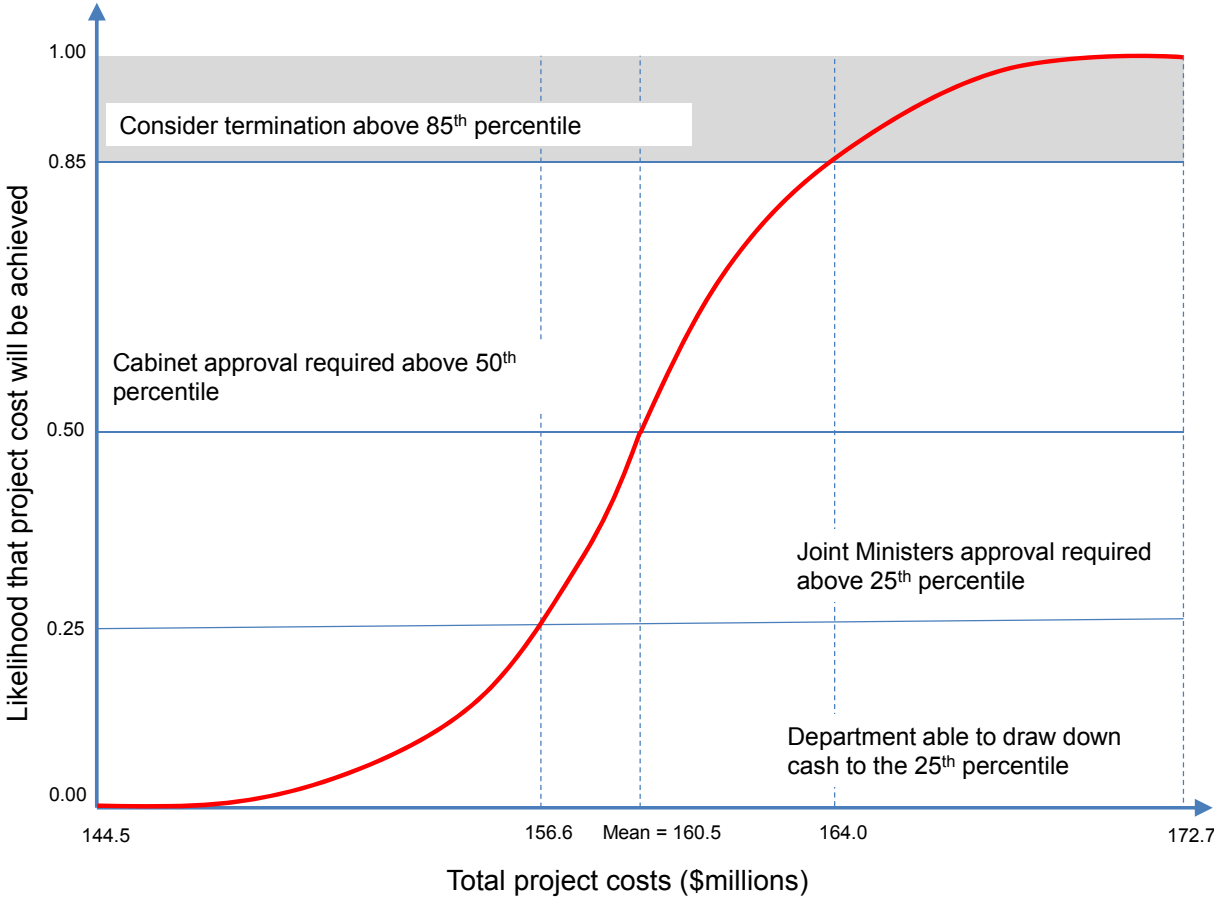
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<sup>32</sup> Refer to the Treasury guidance Writing Financial Recommendations for Cabinet and Joint Minister Papers: Technical Guide for Departments at <http://www.treasury.govt.nz/publications/guidance/planning/finrecs>

### Funding contingencies

- 160. Using quantitative risk analysis, funding recommendations can be set on the basis of a probability distribution of likely project costs. If project risks materialise, delegation limits can be set which determine the thresholds at which the organisation needs to seek approvals for additional funding. This can inform recommendations for appropriation limits and processes for drawing down contingency funding.
- 161. For example, appropriations could be set at the 50<sup>th</sup> percentile but subject to requirements that specify that a project may only draw down costs up to the 25<sup>th</sup> percentile. Contingency funding may be appropriated between the 25<sup>th</sup> and 50<sup>th</sup> percentiles, subject to delegations to the responsible or Joint Ministers. Funding costs over the 50<sup>th</sup> percentile would require further Cabinet approval.
- 162. The threshold levels should be set as part of the discussions with either the Treasury vote team or the monitoring agency.

**Figure 5:** An example of using estimated total nominal cumulative capital costs over a three year project development to inform appropriations and draw-down arrangements. The drawdown limits and decision authorities can be altered to be fit for purpose for the nature of the proposal.



# Management Case – Planning for Successful Delivery

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163. Project planning should already be well advanced. The earlier approval of the Strategic Assessment should have resulted in the appointment of the Senior Responsible Officer and the initiation of a project to deliver the various business case deliverables outlined in this guidance. The risks and benefits associated with the preferred option have already been identified and assessed.
164. This part of the management case is concerned with outlining the current project management arrangements and with putting in place any further arrangements required to ensure successful delivery and to manage project benefits and risks. Many of the more significant issues raised in the management case will have been initially highlighted to Ministers as part of the recommended preferred way forward presented as part of the Indicative Business Case.
165. While this guidance is based on the PRINCE2 (Projects IN Controlled Environment) project and MSP (Managing Successful Programmes) methodologies, this guidance is not intended to preclude the use of alternative management tools where these are recognised as good practice.

## Action 20: Project Management Planning

166. Summarise the project management strategy, framework and plans required for successful delivery. Note that this summary is in the context of a project (and possibly an over-arching programme of work) that is already well-progressed.
167. A robust project management methodology is required to guide the project through controlled, well managed and visible processes to achieve the desired results and benefits. The level of effort should be fit for purpose to reflect the scale, risk and complexity of the project.

### Project management strategy

168. The strategy for the successful delivery of the preferred option (the “project”) should be based on best practice project management principles and project management methodologies.
169. This guidance is based on the following key project management principles:
  - a project is a finite process with definite start and end dates
  - a project always needs to be managed in order to be successful
  - for genuine commitment to the project, all parties must be clear about why the project is needed, what it is designed to deliver, how the outcomes are to be achieved, and their roles and responsibilities.

### Project management framework

170. This section should summarise how the project is organised including:
  - the project structure (including an organisation chart)
  - reporting arrangements in relation to any over-arching programme (if applicable)

- key roles and responsibilities
  - profiles of key project team personnel
  - key vacancies and an outline of the intended recruitment processes to fill them, and
  - any other management and governance arrangements.
171. Much of the information above should be reproduced in the subsequent Implementation Plan.
172. The project board or steering committee represents three broad interests, including:
- a senior business role to represent interests of the organisation
  - a senior user role to represent the interest of end users or customers, and
  - a senior supplier to cover any technical aspects.
173. In addition, there may be other relevant stakeholders who should have their interests represented in project board forums.

### **Summarising the project plan**

174. An up-to-date summary should be included and address the following areas:
- the deliverables required
  - the activities required to deliver them
  - the activities required to validate the quality of the deliverables
  - the resources and time needed for all activities and any need for people with specific capabilities and competencies
  - the dependencies between activities and any associated constraints
  - when activities will occur (the inclusion of Gantt charts may be useful), and
  - the points at which progress will be monitored, controlled and reviewed. This includes key points during the business case development, such as Gateway reviews and any health checks.

### **Action 21: Change Management Planning**

175. Summarise the change management strategy, framework and plans required for the successful delivery of the preferred option.
176. Most investment proposals involve change and this change needs to be managed within the organisation, and possibly across multiple agencies.
177. The scope of change can range from elements of service improvement through to major business process re-engineering. Even where change is not the primary reason for investment, as in the case of a replacement service, opportunities to enhance underlying business processes should be considered where they improve the value for money of the investment.

## Change management strategy

178. The main aim of the change management strategy is to assess the potential impact of the proposed change on the culture, systems, processes and people working within the organisation.
179. Various management strategies can be adopted for implementing change, depending on the degree and pace of change required. In terms of degree, the required change may range from the introduction of greater automation, re-configuration of services, or the complete transformation of a business function. In terms of pace, the change may either be big bang or incremental, depending on the strategic drivers for change and the ability of the organisation to cope.
180. The organisation's choice of change management strategy should be set out in full, together with underlying communications and staff development strategies.

## Change management framework

181. If responsibility for delivery of the service change lies with the project steering committee and is a key sub-set of its activities, then the change management framework should be detailed.
182. The project may form part of a larger and longer-term change management programme. If so, describe the organisational structure and personnel required to direct, manage, implement and evaluate the change. Include the roles and responsibilities of the key personnel and their relationships to the project steering committee.

## Outlining the change management plan

183. For significant change management programmes, an outline of the change management plan should be provided, together with the communication and development deliverables (for example, training products) required for the implementation phase. It is important that this indicates how relevant personnel within the organisation, including human resources and staff representatives, have contributed or been involved to date.

## Action 22: Benefits Management Planning

184. Benefits management is a process that defines, measures and manages the benefits expected to be realised from the successful delivery of the preferred option. The expected benefits associated with the preferred option have already been identified in as part of the Strategic Assessment and initially assessed in the economic case.
185. Further guidance and templates are available from the Treasury Cross-Agency Project Management Office (PMO). The role of the Cross Agency PMO is to assist Ministers on all of Government and cross agency initiatives and in the administration of the Cross Agency Initiatives Process (CAIP).<sup>33</sup>
186. Note that high risk investment proposals may also be subject to Gateway Review 5 (Operational Review and Benefits Realisation) and Cabinet report back requirements.

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<sup>33</sup> Refer to <http://www.treasury.govt.nz/publications/guidance/planning/caip>

187. The level of monitoring effort, the frequency and audience for regular reporting will depend on the risks, scale and complexity of the investment proposal. For particularly large, high risk and complex projects, six-monthly report-backs to Cabinet Ministers may be appropriate. Contact your Treasury vote team or monitoring agency to agree the level of monitoring effort required.<sup>34</sup>

### Benefits management strategy

188. The benefits management strategy should establish the approach to realising benefits and the framework within which benefits realisation will be achieved. It sets out the rules for engagement on how to identify, map, monitor and review the benefits realisation process.

### Benefits map

189. Develop a benefits map to show how the benefits relate both to each other and the programme or project. A benefits map should illustrate the relationship between benefits, outcomes and outputs, so that realisation between the benefits can be managed and tracked.<sup>35</sup>

### Benefits register

190. Construct a benefits register. This register should include a benefits profile for each benefit identified in the benefits map. Benefit profiles are used to define each benefit (and dis-benefit), provide a detailed understanding of what will be involved and indicate how each benefit is to be realised.

191. For each significant benefit, the register should detail (in quantitative terms wherever possible):

- a description of the benefit
- the investment objectives supported
- current or baseline performance levels and the improvement (or deterioration) anticipated
- the business changes required
- any interdependencies between this and other benefits (inside or outside the project)
- the owner of the benefit, and
- a description of the measurement information (key performance indicators).

### Benefits realisation plan

192. Develop a benefits realisation plan to track the realisation of benefits and set review controls. The benefits realisation plan is a complete view of all the benefits, their dependencies and the expected realisation timescales and is derived from the benefits map and benefits profiles above.

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<sup>34</sup> Refer to the SSC Gateway guidance at <http://www.ssc.govt.nz/gateway>

<sup>35</sup> Further guidance and templates are available from the Treasury Cross-Agency Project Management Office.

193. The typical content of a benefits realisation plan includes:

- a schedule detailing when each benefit or group of benefits will be realised, including any interim targets and measures prior to full realisation
- appropriate milestones for when a benefits review could be carried out, during and after project execution
- dates when specific outcomes will be achieved that enable the benefits
- dependencies, and
- details of any handover or embedding activities to sustain the process of benefits realisation after the project is closed, including identification of benefit owners.

## **Action 23: Risk Management Planning**

194. The purpose of this action is to detail arrangements for the on-going management of risk. Risk management is a structured approach to identifying, assessing and controlling risks that emerge during the course of the business case development, the construction of any assets and then throughout the life of the asset. The expected risks associated with the preferred option have already been identified as part of the Strategic Assessment and assessed in actions five, 12 and 19.

195. The purpose of risk management is to support better decision making by understanding the risks inherent in an investment proposal and their likely impact. Risk mitigation can lower the expected costs of a proposal or increase the expected benefits.

196. Contact your Treasury vote team or monitoring agency to agree the level of effort required.

### **Risk management strategy**

197. Strategies for the active and effective management of risk involve:

- identifying possible risks in advance and putting mechanisms in place to either accept or minimise the likelihood of them materialising with adverse effects
- having processes in place to monitor risks, and access to reliable, up to date information about risks
- the right balance of control to mitigate against the adverse consequences of the risks, if they should materialise
- decision-making processes supported by a framework of risk analysis and evaluation
- establishing processes for reporting key risks to the project steering committee and escalating risks in dangers of requiring further management, and
- creation of an issues log.

198. The risk management strategy adopted should be fit for purpose.

## Risk management framework

199. A pragmatic approach to risk management at all levels involves:
- establishing a risk management framework, within which risks are identified and managed
  - senior management support, ownership and leadership of risk management policies
  - clear communication of organisational risk management policies to all staff, and
  - fully embedding risk management into business processes and ensuring it is applied consistently.
200. These actions should help establish an organisational culture that supports well thought out risk taking and innovation.
201. The arrangements for the management of risk should be outlined, together with the respective roles and responsibilities and reporting lines of the posts concerned. These should be made clear in relation to the overall project management arrangements.

## Risk register

202. The plans for the management of associated risks should be encapsulated within the risk register, which lists all the identified risks and the results of their analysis and evaluation. Information on the status of the risk is also included.
203. The risk register should be continuously updated and reviewed. At this stage in its development cover all phases of the project, with particular focus on the related project management and procurement risks.
204. For additional information on risk management refer to the joint Australian New Zealand Standard AS/NZS ISO 31000:2009 “Risk management - principles and guidelines”.<sup>36</sup>

## Action 24: Post Project Evaluation Planning

205. There are two purposes of post project evaluation.
- i. To improve project evaluation at all stages of a project from business case development to implementation of the project. This is often referred to as the project evaluation review.
  - ii. To determine if the project has delivered its anticipated improvements and benefits. This is often referred to as the post implementation review.
206. Outline the organisations strategy for both aspects of post project evaluation. In particular, note if the two aspects are to be undertaken jointly or separately. Milestones and measurements associated with post-project evaluation should align with benefits review dates and milestones defined in the benefits realisation plan.

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<sup>36</sup> AS/NZS ISO 31000:2009 “Risk management – principles and guidelines” is available from the Standards NZ web-site at <http://www.standards.co.nz/services/publications/default.htm>

207. A post project evaluation should include the following considerations:
- Were the objectives of the project met? Were there any unexpected outcomes or issues?
  - How well did the project meet key stakeholders needs?
  - Achievement of critical success factors (CSFs)?
  - Key organisational lessons learned post-implementation?
208. Outline management arrangements for ensuring that the post project evaluation will take place, noting that this is a key responsibility of the senior responsible owner.
209. Set out the timing and responsibility for post project evaluation arrangements. These should be incorporated in the project management plans.
210. Contact your Treasury vote team or monitoring agency on the level of monitoring likely to be required.

## **The Chief Executive's Statement**

211. A letter should be provided by the chief executive (or equivalent commissioner) and be included as an annex to the Detailed Business Case. This letter should:
- demonstrate that the chief executive has been actively involved in the development of the investment proposal through its various stages
  - confirm acceptance of the strategic aims and investment objectives of the investment proposal, its functional content, size and services
  - confirm that the financial costs of the proposal can be contained within the agreed and available budget and a willingness and ability to pay for the services at the specified price level
  - state the margins of leeway beyond which support must be revalidated, and
  - demonstrate that suitable contingency arrangements are in place to work with service providers to address any current or unforeseen affordability pressures.