TE TAI ŌHANGA
THE TREASURY

Better Business Cases™

Guide to Developing a Detailed Business Case (DBC)

August 2019

New Zealand Government

Contents

About this Guidance

This guidance is to assist developers and reviewers to build better business cases using the Five Case Model, the New Zealand Government's accepted good practice standard.

This guidance document is intended for investors, senior responsible owners, workshop facilitators and business case developers preparing the Detailed Business Case. It is part of a comprehensive and structured toolkit of guides and templates to assist you at every stage of the business case development. This guidance can assist you whether you are considering an investment in change at the portfolio, programme or project level in either the public or the private sectors.

This guidance also provides a useful reference for business managers, project or programme managers, and other stakeholders who can either influence investment decisions or have an interest in the successful delivery of change.

The guidance outlined in this document applies until this document is updated or replaced.

What this Guidance is not

This guidance is not intended to comprehensively cover all the related aspects of business case development (although the guidance describes where other relevant guidance fits). These may include regulatory impact, economic assessment, procurement, risk management, Public Private Partnership (PPP), Treaty, programme/project management or assurance processes. You should refer to any relevant policies, rules, expectations and practices that apply to your specific organisation or sector.

Key Changes to this Guidance from the Previous Version

The key changes to this guidance from the previous version dated October 2018 are:

- Expansion of references to Wellbeing indicators, measures and data sources at relevant points in the guidance.
- Removal of detailed guidance on Public Private Partnerships; replaced with an overview Annex 1 with references and links to Cabinet requirements for consideration of alternative procurement, to procurement rules and the New Zealand Infrastructure Commission (both launching on 1 October 2019)
- More detailed guidance on expectations around the Commercial, Financial and Management cases at this indicative stage, including adding guidance to support the template where this was missing.
- Insertion of missing links, update of links, correction of typographical errors.

Questions and Feedback

General enquiries about the information contained in this guidance, not addressed in this guidance, can be directed to betterbusinesscases@treasury.govt.nz.

For Government agencies, any agency-specific questions should be addressed to your Treasury Vote team.

Further Information

This document is part of the Better Business Cases suite of guidance available at the Treasury website http://www.treasury.govt.nz/statesector/investmentmanagement/plan/bbc

The Detailed Business Case (DBC)

The Detailed Business Case *documents an organisation's thinking and planning* around a proposed project. It cannot be developed without the leadership and involvement of the key stakeholders within the organisation. We strongly recommend a facilitated workshop-based approach to each of the 5 cases, to ensure that key organisational stakeholders are engaged and have an opportunity to challenge and shape the direction of the investment proposal.

Purpose of a Detailed Business Case

The Detailed Business Case recommends a preferred option that optimises value for money, and seeks approval from decision-makers to finalise the arrangements for successful implementation.

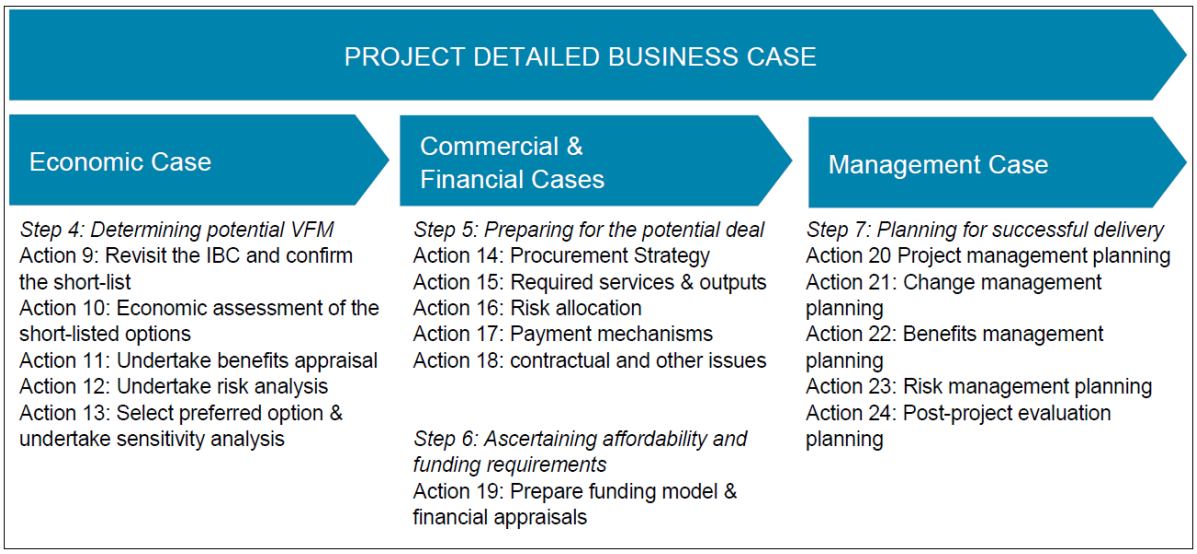
The Detailed Business Case typically follows an Indicative Business Case, which proposed the Preferred Way forward. For a project within a programme, it may instead follow the Programme Business Case. The Detailed Business Case:

- revisits and confirms the strategic case developed in the Indicative Business Case
- identifies the investment option which optimises value for money (VFM), by undertaking a more detailed analysis of the costs, benefits and risks of the short-listed options
- prepares the proposal for procurement
- plans in detail the necessary funding and management arrangements for the successful delivery of the initiative.
- informs a proposal to decision-makers to seek agreement to approach the market and finalise the arrangements for implementation of the project.

A Request for Proposal (RFP) may be issued once approval is granted, *except* for proposals that are likely to result in a non-traditional procurement such as a Public Private Partnership[1],

Detailed Business Case Steps and Actions

A Detailed Business Case includes the steps and actions shown below. See Annex 5 for an overview of all of the 34 BBC actions.



1 https://treasury.govt.nz/information-and-services/nz-economy/infrastructure/nz-infrastructure-commission/infrastructure-transactions-unit/pulic-private-partnerships/guidance

The remainder of this guidance is structured around each action by the applicable Case. The purpose of each action is described together with what is specifically required and what evidence should be provided. It also contains tips and examples to assist business case developers.

Private Public Partnerships (PPPs)

Where a non-traditional procurement option such as PPP procurement has been short-listed as part of the Indicative Business Case, additional analysis is required in relation to a number of the above actions. Additional guidance and requirements specific to projects considering PPP are boxed in green. More PPP guidance is also in Annex 1.

Suggested methods and tools

A variety of methods and tools can be used in the development of the Detailed Business Case. When considering the approach to be used, developers should consider the methods (and tools) that they will use. Reviewers will consider whether the methods (and tools) are suitable, proven, inclusive, and capability should exist to apply it.
http://www.treasury.govt.nz/statesector/investmentmanagement/plan

Revisiting the Case for Change

The first part of the Detailed Business Case involves two actions:

Action 27	Revisit the Case for Change
Action 9	Revisit the Case for Change and confirm the short-list

Action 27: Revisit the Case for Change

Purpose

The purpose of this action is to revisit, and either confirm or update, the case for change made in the Programme or Indicative Business Case.

What's expected?

The previous analysis and conclusions as part of the Programme or Indicative Business Case should be revisited and updated, where necessary. This is because a considerable amount of time may have passed since the initial analysis and the political and strategic environment may have significantly changed.

Revisit the Strategic Case

The appropriate stakeholders must review the Strategic Case in the previous business case, to ensure that:

- the investment objectives and planning assumptions still valid
- any outstanding differences at Indicative Business Case stage between stakeholders and customers been satisfactorily resolved
- any conditions made as part the earlier approval of the Indicative Business Case have been satisfactorily resolved.

If there are material changes then record these in full, with particular emphasis on:

- strategic context for the proposal
- agreed investment objectives
- business needs
- earlier scope and service requirements
- benefits, costs, risks, dependencies and constraints.

Action 9: Revisit the Indicative Business Case and confirm the short-list

Purpose

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

What's expected?

Revisit the previous analysis and conclusions as part of the Programme or Indicative Business Case and update it where necessary. This is because a considerable amount of time may have passed since the initial analysis and the economic environment or options available may have significantly changed.

Review the economic case

The appropriate stakeholders should 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 confirmed to ensure that the short-listed options are:

- likely to deliver the investment objectives and critical success factors
- likely to deliver sufficient benefits and deliver value for money
- still considered to be realistic and achievable.

Consider whether any of the short-listed options are 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 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?

If the change is significant and would impact on the selection of either the preferred way forward or any of the short-listed options, it may be necessary to seek reconfirmation from decision-makers prior to further developing the Detailed Business Case.

Suggested evidence

Clearly document the rationale for any significant changes or revisions.

Economic Case

Completing the Economic Case requires the following actions:

Action 10	Economic assessment of the short-listed options
Action 11	Non-monetary benefits and costs
Action 12	Risk & uncertainty
Action 23	The preferred option

Purpose of the Economic Case

In the Detailed Business Case, the purpose of the Economic Case is to undertake a more detailed analysis of the costs, benefits and risks of the short-listed options, and to recommend the preferred option to take forward to the market. 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
- assessment of risk and uncertainty.

Scale the level of analysis to the proposal

Before work starts the approach and effort of the analysis should be agreed with the monitoring agency and documented in the Scoping Document.

Tailor the level of analysis to the relative size and risks of the proposal. The standard of analysis varies from a full economic benefit-cost analysis to light financial analysis, depending on the scale and level of risk of the proposal. This is shown in the table below.

	Full Analysis		**Light Analysis**
Monetary benefits and costs	National economy	Organisation and selected sectors	Organisation
	All significant resource flows, including non-monetary costs and benefits	All significant resource flows that can be expressed in monetary terms	
Non-monetary benefits and costs	Multi-criteria decision analysis using expert facilitation and proprietary tools	Multi-criteria decision analysis	Ranking of non-monetary benefits and costs
Uncertainty	Quantitative risk analysis	Quantify risks and probabilities[2]	Single point adjustments of costs and benefits

Not all proposals require a full economic cost benefit analysis, a full multi-criteria analysis or quantitative risk analysis. Simpler forms 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: for example, the impacts of a new accounting package or a lease-versus-buy decision for property.

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2 *Consider risk modelling techniques that are less resource intensive than full quantitative risk analysis. For example, by using multi-point probability or decision-tree analysis to estimate the impacts of different outcomes on mid-point risk estimates.*

Action 10: Economic assessment of the short-listed Options

Purpose

This action undertakes an economic assessment of the short-listed options; this informs the recommendation of a preferred option in Action 13.

The purpose of this analysis is to ensure that decision-makers are well-informed about the implications and trade-offs of using economic resources and are provided with a consistent basis for assessing and ranking competing options.

What's expected?

If the previous Programme or Indicative Business Case was not developed with consideration of the Wellbeing priority, consider revisiting the benefits identified, through a wellbeing lens.

- www.treasury.govt.nz/information-and-services/nz-economy/living-standards/our-living-standards-framework/measuring-wellbeing-lsf-dashboard
- https://treasury.govt.nz/publications/template/wellbeing-domains-template

The Indicative Business Case guidance provides supporting information on sources of wellbeing indicators, measures and data.

Consider using the Treasury's benefit-cost analysis guidance:

- https://treasury.govt.nz/information-and-services/state-sector-leadership/investment-management/plan-investment-choices/cost-benefit-analysis-including-public-sector-discount-rates
- https://treasury.govt.nz/publications/guide/guide-social-cost-benefit-analysis

An assessment seeks to capture all benefits and costs regardless of to whom they accrue considering costs and benefits that may not be reflected in monetary transactions. A benefit is any gain in the wellbeing of individuals and society arising from the investment proposal. For example, 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. Different stakeholder groups derive different benefits (and disbenefits) from an investment proposal and will have different perspectives on the value added.

Undertaking an assessment of the short-list options involves the following steps:

1. Establish the assumptions and scope underlying the analysis, including discount and inflation assumptions:
    - As a risk-adjusted real discount rate is typically used, no further explicit allowances are necessary for price or wage inflation over the assessment period. Similarly, optimism bias is no longer included in the cost estimates as this could potentially double-count the risk adjustments included in the discount rate.
    - Use the Public Sector Discount Rate specified by the Treasury for project of this type (in the benefit[cost analysis guidance)
2. Determine an appropriate period for the analysis. This appraisal period typically matches the economic life of any proposed asset. In some cases it may be determined by the contractual term of the services. Where options have differing economic lives, a

single common appraisal period is required. Either residual values can be assumed for the longer term options or reinvestment of shorter term options.

3. Identify all significant monetary 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.
   - Benefits may be measureable in either monetary terms (financial or cash-releasing, such as avoided costs or efficiency savings) or non-monetary terms (quantifiable, such as reduced customer complaints). Qualitative benefits may be observable but not easily measured. Disbenefits have negative impacts on stakeholders.
   - The expectation is that further analysis is undertaken to assign monetary values to benefits wherever feasible. The level of effort on any analysis should be agreed with the monitoring agency to ensure it is fit for purpose. All benefits and costs that can reasonably be quantified in monetary terms should be included and subject to cost benefit analysis.
4. Assign monetary values to the benefits and costs, wherever possible. All monetary estimates should be expressed in current dollar terms. GST, depreciation, capital charges and financing costs are also typically excluded.
5. Discount the benefits and costs to present values using the appropriate Public Sector Discount Rate as specified by the Treasury[3]. Where a different discount rate is proposed, this should be tested as part of the Scoping/Point of Entry Document discussion.
6. Consider the effect of any intangible benefits and costs that cannot reliably be assigned monetary values
7. Assess risk and uncertainty
8. Identify the preferred option and test robustness using sensitivity analysis.

Suggested evidence

The approach and basis that has been used should be described including the collection of key assumptions and the involvement of key stakeholders.

Action 11: Non-monetary Benefits and Costs

Purpose

The purpose of this action is to assess the non-monetary benefits and costs of the Short-Listed options to inform the recommendation of a preferred option in Action 13.

What's expected?

Non-monetary benefits and costs can influence the choice of the preferred option. 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.

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3 http://www.treasury.govt.nz/publications/guidance/planning/costbenefitanalysis

Suggested evidence

The approach and basis that has been used should be described including the listring and description of key assumptions and the involvement of key stakeholders.

Action 12: Risk and Uncertainty

Purpose

Key stakeholders should review the key risks identified in Action 5, in the Indicative or Programme Business Case to confirm they are still valid. This action then assesses these risks for each of the Short-listed options; this informs the recommendation of a preferred option in Action 13.

What's expected

All estimated benefits, costs and timeframes are subject to risk and uncertainty which can influence the choice of the preferred option. Given the choice between two competing short-listed options with similar estimated costs and benefits, a decision-maker will more likely prefer the option that provides greater certainty of costs, benefits and timings of key deliverables.

We recommend that all significant risks be measured and quantified (in monetary terms) as early as possible. This risk analysis is also used to inform the development of the project Risk Register; all risks identified must be put into the register.

Projects where a Public Private Partnership is the preferred way forward

A detailed understanding of project risks is required to ensure that the Public Sector Comparator (PSC) is accurate and risk allocation is appropriate. We recommend seeking professional advice. See also Annex 1.

Suggested evidence

Demonstration that risks and uncertainty of the short-listed options have been measured and quantified using an appropriate method.

Methods and tools to help

A number of techniques can be used to quantify risk and uncertainty including Optimism Bias, Single-point probability analysis, and Quantitative Risk Analysis (QRA). A description of these techniques is in Annex 2.

Quantitative Risk Analysis is mandatory for high risk and large scale state sector agency investment proposals. While the use of quantitative risk analysis is recommended for all projects, the level of effort on any proposed analysis should be agreed with the monitoring agency to ensure it is fit for purpose for the decision being made.

Action 13: The Preferred Option

Purpose

The purpose of this action is to identify the preferred option and test its robustness using sensitivity analysis. The overall objective is to determine which of the short-listed options is likely to provide the best value for money (the optimal mix of benefits, costs and risks).

What's expected?

Identify the preferred option

Benefits may be measurable in either monetary terms or non-monetary terms. Qualitative benefits may be observable but not easily measured. Disbenefits have negative impacts on stakeholders.

The expectation is that further analysis is undertaken to assign monetary values to benefits wherever feasible. The level of effort on any analysis should be agreed with the monitoring agency to ensure it is fit-for-purpose. All benefits and costs that can reasonably be quantified in monetary terms should be included and subject to benefit-cost analysis.

If a robust economic benefit-cost analysis has been undertaken across all benefit and cost areas, the best option is likely to be the one with the highest, risk adjusted, net present value[4]. Where an option has significant benefits and/or costs that have not been monetised, these will influence the choice of the preferred option.

It is critical to provide decision-makers with a basis to inform trade-offs between competing short-listed options with different mixes of monetary and non-monetary benefits and costs.

The Detailed Business Case template includes an example of a combined benefit-cost analysis.

Document the assumptions and tools used to develop the benefit-cost analysis.

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4 *Using alternative measure, such as internal rate of return, equivalent annual cost, benefit-cost ratio and pay-back period methods may be desirable in certain cases.*

Example: Presenting combined benefit-cost analysis and multi-criteria decision analysis

In this example decision makers need to consider the potential for the higher non-monetary benefits of option three to out-weigh the extra monetary net benefits of option four.

	Note	Option 1:Do Nothing	Option 2: Do Minimum	Option 3: Less Ambitious	Option 4: Preferred Way Forward	Option 5: More Ambitious
Analysis 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	$34.2	$49.7	$70.7	$90.9
Cost-Benefit Analysis of monetary costs and benefits at the Public Sector Discount Rate						
Present Value of Benefits ($m)		$2	$25	$75	$115	$126
Present Value of Costs ($m)		$7	$23	$40	$52	$73
Benefit Cost Ratio		0.3:1	1.1:1	1.9:1	2.2:1	1.7:1
Net Present Value (NPV, $m)		**($5)**	**$2**	**$35**	**$63**	**$53**
NPV Rank (out of 5)		**5**	**4**	**3**	**1**	**2**
Multi-Criteria Decision Analysis of non-monetary benefits and costs (score out of 10)						
Improved management information (20% weight)		5	7	8	6	6
Greater inter-agency collaboration (40% weight)		2	5	7	4	5
More competitive marketplace (40% weight)		0	5	5	5	4
MCDA Rank (out of 5)		**5**	**2**	**1**	**3=**	**3=**

Test the robustness of the preferred option

Test the robustness of the preferred option recommendation to changes in key assumptions and/or variables by using sensitivity analysis.

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 is used to test the robustness of the options analysis.

Sensitivity analysis examines how net present values, benefits, costs or other outcomes vary as individual assumptions or variables are changed. 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.

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.

Annex 3 contains further guidance on the approaches that can be used to undertake sensitivity analysis.

Sensitivity analysis can address two key questions.

- Would the preferred option still be worthwhile pursuing if some of the key assumptions do not eventuate?
- What actions can be taken to manage the risks before accepting a particular option?

It is also possible to determine *switching values*.

- That is, how much would a given significant variable (for example an exchange rate or revenue forecast) have to change before an alternative option displaces the preferred option?

Consider providing an analysis of the benefit assumptions required to change in order to achieve a break-even Net Present Value.

Before recommending the preferred option, ensure that the analysis is reviewed and confirmed by independent reviewer(s) – internal or external. Stakeholders and decision-makers should be provided with assurance that the analysis is robust and reasoning is sound.

The preferred option – the rationale

This part of the business case needs to tell a compelling and evidence-based story that fully informs decision-makers of the trade-offs they are making between different options and of the robustness of the preferred solution.

Suggested evidence

The rationale for recommending the preferred option must be clear and evidence based. Sufficient evidence for the selection should be provided along with a clear audit trail for reviewers to check the assumptions, evidence and calculations leading up to the selection. Stakeholders and decision-makers should also be provided with assurance that the analysis is robust.

Commercial Case – Preparing for the Potential Deal

Completing the Commercial Case requires the following actions for the preferred option identified in the Economic Case:

Step 5	**Preparing for the potential deal**
Action 14	Determine the procurement strategy
Action 15	Determine the service streams and required outputs
Action 16	Outline potential risk apportionment
Action 17	Outline potential payment mechanisms
Action 18	Outline contractual issues and accountancy treatment

Purpose of the Commercial Case

The Commercial Case sets out the proposed deal in relation to the preferred option outlined in the Economic Case.

- A Commercial Case is not needed if there is no significant procurement, for example if services are provided in-house.

The Commercial Case sets out, prior to issuing requests for proposals, the plans for the procurement arrangements needed to implement the preferred solution. The Commercial Case considers:

- the procurement strategy and any Government requirements
- procurement plan and timetables
- service requirements
- risk sharing arrangements
- payment mechanisms, and
- any other contractual or accounting issues

The Commercial Case requires a solid understanding of procurement and contracts; **major projects should engage a commercial specialist** to assist in this part of the business case development if internal expertise is not available.

We recommend at least one facilitated workshop to cover this at the Indicative Business Case stage.

Procurement Rules

Government departments must, and state sector agencies are expected to, apply the Government Procurement Rules: https://www.procurement.govt.nz/procurement/principles-and-rules/government-procurement-rules. These Rules are supported by a set of guidance which agencies should use where appropriate.

- State sector agencies should already have engaged with the Ministry of Business Innovation & Employment (MBIE): www.procurement.govt.nz/procurement/ for advice and guidance.

The procurement lifecycle is in three distinct phases: planning, sourcing and managing. These phases are further divided into eight distinct, but interrelated stages. The eight stage process is detailed in MBIE's *Mastering Procurement: A Structured Approach to Strategic Procurement (2014)* https://www.procurement.govt.nz/procurement/guide-to-procurement/

Annex 1 provides more detail on alternative procurement options, including Public Private Partnerships, in the New Zealand context and in the Detailed Business Case.

Action 14: Determine procurement strategy and plan

Purpose

The procurement strategy focuses on how best to approach the market and procure the required services, subject to any prevailing rules and regulations. A Supply Positioning Model is described in *Mastering Procurement*.

This action revisits and updates the procurement strategy work documented in the Indicative Business Case, and builds on this to develop a detailed Procurement Plan.

Develop procurement plan

The procurement plan provides details of how the agency will approach the market, evaluate bids and decide on the preferred supplier. The purpose of the procurement plan is to:

- provide detailed planning for the approach to the 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 in the cross-functional tender team
- set realistic timelines that ensure that suppliers have sufficient time to develop meaningful responses.

We recommend that you seek advice from an experienced procurement practitioner when developing the procurement strategy and plan.

What's expected?

The development of an appropriate procurement process and plan that is proportionate to the nature, size, complexity, value and risk of the service or product being procured.

Where appropriate, consider collaborative arrangements. These arrangements can be successful where the parties have shared interests and objectives and there is mutual trust, openness and transparency.

Compared to conventional purchasing arrangements, collaborative approaches can potentially provide greater flexibility and better value for money through economies of scale, and reductions in procurement cost through pre-competition

Types of collaborative arrangements include Syndicated contracts, Common Capability contracts, and All-of-Government contracts.[5]

Provide a summary of the results of any Request for Information issued.

The procurement planning team should consider and document for inclusion in the DBC:

- procurement routes: how the organisation will approach the market, evaluate the offers, and identify the preferred supplier
    - Required preconditions and non-negotiable/disallowing requirements

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5 http://www.business.govt.nz/procurement/all-of-government-contracts/collaborative-contracts

- the process, roles and responsibilities for developing the detailed (eg RFP) documents.
- the process, roles and responsibilities for developing detailed evaluation criteria; the process for evaluating the bids (including the process for answering supplier questions, necessity for workshops and/or demonstrations) and for recommending and engaging with a preferred supplier.
- the evaluation model (lowest price conforming / simple score / weighted attribute (weighted score) / target price / Brook's Law)
- the negotiation strategy
- likely contract length
- the plan and timeline for the procurement process.

Projects where a Public Private Partnership is the preferred way forward

The Detailed Business Case must consider the procurement process specific to PPP transactions, and carry out a market sounding of the proposed solution. We recommend seeking professional advice. See also Annex 1.

Action 14a: A second market sounding

For a PPP proposal, a second market sounding is required during the preparation of the DBC (often late in the process) and serves two key purposes:

- It provides the procuring entity a final opportunity to test its proposed solution with the market. This is important as private sector parties will not respond positively to a project which it considers is underdeveloped or likely to change, and
- It allows private sector parties to understand the objectives and outcomes sought by the procuring entity and form credible consortia and teams to respond to a possible procurement process. It is important that procuring entities allow the market sufficient time prior to the release of an EOI to ensure complete and competitive responses.

Suggested evidence

The Procurement Plan must show that all of the above, and any other information the organisation considers relevant, has been considered and documented.

Evidence of guidance/review/support from NZ Government Procurement and of compliance with procurement rules.

Consider attaching the detailed procurement plan as an Annex to the DBC.

Methods and tools to help

The eight stage process is detailed in MBIE's *Mastering Procurement: A Structured Approach to Strategic Procurement (2014)*
https://www.procurement.govt.nz/procurement/guide-to-procurement/

We recommend that you seek advice from an experienced procurement practitioner when developing the procurement strategy and plan.

Action 15: Determine required outputs and service streams

Purpose

The purpose of this action is to specify the requirements for the service or asset to be procured, and thus to identify the scope and content of the potential deals to be made with

providers; this should be defined in terms of the project's service streams and required outputs. This analysis should be based on and align with the User Requirements documentation.

- Frame and group the requirements here in terms of outputs required, to keep options open for innovative approaches.
- Specify the quality and non-functional attributes of the services and outputs required, and the performance measures against which they will be assessed.
- Scope the potential deal so as to permit potential service providers to suggest innovative ways of meeting the project's requirements.

Consider capturing the following details to assist the potential service providers to scope their approach:

- The business area affected by the procurement
- The business environment and related activities
- The business objectives relevant to the procurement
- The scope of the procurement
- The required service streams
- The required outputs including: phases, service levels, performance measures, quality and non-functional attributes
- The stakeholders and customers for the outputs
- The options for variation in the existing and future scope for services
- The potential developments and further phases that may be required
- Consideration of ownership of residual assets

What's expected?

Clear definition of the scope and requirements for each of the likely procurements. This information will support contract management.

There should be reference and traceability to detailed User Requirements documentation.

The project plan for the procurement of its key outputs and activities should be outlined in this key business case, or referenced and attached as an appendix or supporting document.

Projects where a Public Private Partnerships is the preferred way forward

The Detailed Business Case must consider in detail the proposed project scope and bundling options, particularly in relation to service provision. We recommend seeking professional advice. See also Annex 1.

What's expected?

For further details on the preparation of a procurement requirements specification requirements refer to *Mastering Procurement: A Structured Approach to Strategic Procurement (2014)* https://www.procurement.govt.nz/procurement/guide-to-procurement/

Suggested evidence

A summary of the scope and requirements for each required procurement and a description of the process that was used to identify and agree them.

Action 16: Risk Allocation

Purpose

The purpose of this action is to consider how the risks may be balanced between the purchaser and the supplier(s), in the design, build, funding and operational phases or delivery could be shared between the public and private sectors.

The governing principle is that specific risks should be allocated to the party best able to manage it, subject to the risk premium. The intention is to optimise the allocation and sharing of risk, rather than to maximise the number of risks to be transferred to potential service providers for delivery of the project's projects.

Guiding principles

- The public sector should consider transferring risk to the private sector when the service provider is better able to influence the outcome than the procuring authority.
- The degree to which risks may be transferred depends on the specific proposal under consideration – hence the need to consider this project by project.
- The successful negotiation of risk transfer requires a clear understanding by the procuring authority 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 offers value for money – hence the need to identify and cost individual risks.
- The private sector should be encouraged to take the risks it can manage more effectively than the public sector; particularly where it has clear ownership, responsibility and control. Be aware that transfer of risk comes at a cost.
- The transfer of risks can generate incentives for the private sector to provide more timely, cost-effective and innovative solutions.

What's expected?

Consider the commercial risks and how they can best be managed. These risks must be in the risk register; roles and responsibilities for management of each key risk must to be clearly defined. This is especially important when the successful delivery of the project is subject to significant risk.

Document the assumptions underlying the risk allocation proposed.

Projects where a Public Private Partnership is the preferred way forward

The Detailed Business Case must provide a detailed risk allocation schedule to ensure that those risks which are proposed to be transferred to the private sector partner are well understood and valued for the PSC. We recommend seeking professional advice. See also Annex 1.

Suggested evidence

A summary of how commercial risks will be balanced between the purchaser and the supplier(s) and why this is appropriate.

Action 17: Payment Mechanisms

Purpose

The purpose is to define the mechanism(s) for the contracted services or products to be purchased.

What's expected?

Consideration of the expected pricing and payment mechanism. If it is properly constructed, the payment mechanism will incentivise the supplier to deliver services in accordance with the requirements of the procuring organisation. In particular consider:

- incentives for suppliers to provide value and innovate
- balance between risk and return
- the relationship between delivery of service outputs and performance of supplier (mechanisms and milestones).
- the process to manage change.

The payment mechanism is the formula against which payment for the contracted services to 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 supplier.

Projects where a Public Private Partnership is the preferred way forward

The performance regime is central to the development of a PPP-specific payment mechanism and this is discussed further below We recommend seeking professional advice.

Action 17a: Development of a performance regime

Additional analysis is required to consider the specific performance standards and penalties which may be applied in the PPP project agreement. This requires the procuring entity to determine how the asset and service will be funded (on either an availability or user charge model) as well as how payment will be linked to the specific performance of the service outcomes required.

The procuring entity will need to consider how the performance regime can incentivise the delivery of those outcomes through performance payments and abatements as well as penalties for incidents which are simply unacceptable to the procuring entity.

The procuring entity should consult with the Treasury ITU Team regarding the proposed performance regime.

Suggested evidence

Description of the intended pricing and payment mechanism and demonstration that this mechanism is appropriate.

Action 18: Contractual and Other Issues

Purpose

The purpose of this action is outline the intended contractual arrangements.

What's expected?

An appropriate form of contract between the organisation and the supplier will help to ensure high quality and cost effective outcomes.

Wherever possible, agencies should adopt a standard form of contract as appropriate for the procurement. This should include:

- Duration and break clauses
- Roles and responsibilities
- Payment/charging mechanisms
- Change control for new/updated requirements
- Remedies in the event of failure
- Treatment of intellectual property rights
- Dispute arrangements
- Allocation of risk
- Compliance with regulations
- Operational and contract administration Ts&Cs
- Options at end of contract.

Outline the proposed arrangements for contract management. This role should be filled early and be involved in the contracting process, which forms a sound basis for the ongoing management of the contract.

Projects where a Public Private Partnership is the preferred way forward

Consideration is required in relation to the PPP project agreement and any project specific matters which may require amendment to the Standard Form PPP Project Agreement. We recommend seeking professional advice.

Suggested evidence

Outline of the intended contractual arrangements including:

- *Form of contract and key contractual issues* - provide details of the type of contract that will best suit the nature of the procurement.
- *Ongoing contract management* – provide details of how the contract will be managed.
- *Accounting treatment* - provide details of the intended accounting treatment for the potential deal, including the relevant accounting standards.
- *Other implications* - 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.

Financial Case – Ascertaining Affordability and Funding Requirements

Purpose of the Financial Case

The purpose of the Financial Case is to determine the cost and revenue implications of the preferred option and plan the funding requirements, including driving value from existing finances.

The difference between the Economic and Financial Cases

The Economic Case focuses on assessing the **relative value for money** of alternative options; the Financial Case focuses on the **affordability and funding implications** of the short-listed option for the organisation. The table below shows the differences between the economic and financial cases.

Characteristic	Economic Case	Financial Case
Focus	Value for money of short-listed options, relative to the base option	Affordability of the preferred option,
Scope	National economy	Organisation(s) only
	All resource flows, including non-monetary costs and benefits, over the appraisal period	Direct financial and accounting impacts, only over the period to steady state
	Indifferent between capital and operating	Capital and operating detailed separately
GST and taxes	Excluded	Excluded
Depreciation	Excluded	Included
Interest, financing costs and any capital charges	Excluded	Included
Transfer payments[6]	Excluded	Included
Sunk costs	Excluded	Excluded[7]

Action 19: The Financial Costing Model

Purpose

The purpose of this action is to determine the affordability of the preferred option.

What's required?

Identify the funding required

For the preferred option, list all material financial expenditure and revenue items year-by-year over the operating life that was identified in Action 10 and identify the operating and

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6 *Payments for which no goods and services are obtained in return, for example social welfare benefits.*

7 *Sunk costs are costs already incurred that cannot be recovered if the proposal does not proceed; thus they do not relate to the decision being sought. Some sunk costs may be relevant to the funding sought and should be captured in the financial costing, such as the costs of developing the proposal, the business case, assurance or any decommissioning costs.*

capital funding that will be required. It is likely that accounting expertise will be required to assist with this analysis.

The table below is an example of the structure of the financial costing table for a hypothetical Crown and third party funded information technology project.

	000's				
Preferred Option	**Year 0**	**Year 1**	**Year 2**	**……..**	**Total**
Capital Expenditure: - Fixed assets - Software - Total Capital					
Operating Expenditure: - Personnel - Operating - Depreciation - Capital Charge - Total Operating					
Total Expenditure:					
Revenue: - Revenue Crown - Third Party Revenue					
Total Revenue:					
Capital funding required:					
Operating funding required:					

Assess affordability

Identify the sources of funding and consider any affordability gaps over the appraisal period, ie, the difference between the funding required in any year and funding available from other sources. Consider any required actions to close the gap such as adjusting the scope of the preferred option, phasing the implementation differently, negotiating preferred payments for services or finding additional sources of funding.

Also consider the risks and uncertainties that could affect the affordability of the project. This analysis can be based on the risk and sensitivity analysis undertaken previously in actions 12 and 13.

The risks and uncertainties will vary from project to project, but some key questions to consider are:

- Would the preferred option still be affordable if actual costs were 10% higher than expected?
- What if expected savings were to fall by 10%?
- What circumstances might cause saving targets to be breached?
- What if other income to the organisation were to be reduced by 10% or more?
- Is there a robust strategy in place to manage contingencies?

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
- appropriate contingencies have been made for risks and uncertainties.

Assess the impact on financial statements

The accounting 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.

Outline any funding contingencies

When the level of funding required is uncertain and subject to contingent events, it is possible to establish rules and limits for accessing additional contingent funding.

Using a method such as 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 approval from decision-makers, or provide additional evidence to support a request for additional funding. Annex 4 contains an example of establishing contingency arrangements in the public sector.

Projects where a Public Private Partnership is the preferred way forward

The project must develop a PSC to confirm that PPP procurement offers value for money over more conventional procurement approaches. We recommend seeking professional advice. See also Annex 1.

Action 19a: Development of a public sector comparator

Additional quantitative, or value for money, analysis is required for PPP procurement. This analysis compares the cost of procuring a project as a PPP with a PSC that represents the cost if the procuring entity were to deliver the asset and services itself using conventional procurement. This assessment requires detailed consideration of costs associated with:

- the design and construction of the asset
- the maintenance and management of the asset throughout a prescribed period of operations
- the delivery of services from the asset (where these are to be included under a DBFMO model), and
- those risks relating to the asset and service delivery that are proposed to be transferred to the private sector under PPP procurement.

The PSC must then be compared with a Proxy Bid Model (PBM), which in addition to those costs included within the PSC also seeks to replicate those additional costs associated with PPP procurement (such as additional procurement costs and private sector costs of financing the project). The DBC must satisfy decision makers that there is sufficient scope for the private sector to introduce innovation and whole of life cost savings (through asset design, maintenance and risk transfer) to offset any difference between the PSC and PBM.

This analysis is important as PPP procurement will only be approved for a project where it offers value for money over the life of the project; that is, a PPP must deliver the outcomes sought from the project for the same or lower cost than the procuring entity could have itself (as established by the PSC). This is safeguarded through the requirement for Cabinet approval of the value for money case before a PPP project agreement may be signed for any PPP project.

Treasury has published further guidance on the development of a PSC and quantitative value for money analysis: *http://www.treasury.govt.nz/statesector/ppp/guidance/public-sector-comparator*

Suggested evidence

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 organisation's finances
- fiscal impacts on the organisation(s) baseline(s).

Management Case – Planning for Successful Delivery

Completing the Management Case requires the following actions:

Step 7	**Planning for successful delivery**
Action 20	Project management planning– strategy, framework & plans
Action 21	Change and contract management planning – strategy, framework & plans
Action 22	Benefits realisation planning– strategy, framework & plans
Action 23	Risk management planning– strategy, framework & plans
Action 24	Plan project assurance and post-project evaluation – strategy, framework & plans

Purpose of the Management Case

The Management Case is concerned with putting in place the arrangements required to ensure successful delivery of the preferred option (the "project") and to manage project benefits and risks.

Many of the high-level delivery issues should have been already initially highlighted to decision-makers and stakeholders as part of the previous Programme or Indicative Business Case. The Detailed Business Case takes this to a further level of detail

Project planning should already be well advanced. The Senior Responsible Owner will have been appointed and the project initiated when the need for the investment was first identified, prior to the development of the Strategic Assessment. Initial analysis of risks and benefits associated with the preferred option has been undertaken in previous sections.

Action 20: Plan project management

Purpose

The purpose of this action is to develop the proposed project management framework, using a proven methodology for guiding investments through a controlled, well managed and visible processes to achieve the desired results and benefits. This assures decision-makers of the organisation's capacity and capability to deliver the initiative.

What's expected?

Programme management arrangements

This section is needed if the proposed project for capital investment and the delivery of the services is managed within the context of a wider programme and programme management process.

Describe how the project management arrangements integrate with the broader programme management.

Project management methodology

Name the methodology or combination of methodologies and frameworks that will be used to manage the project, and the organisation's experience in its use.

- Note that introduction of a new methodology carries risks and should itself be managed as a project.

If the organisation has an (Enterprise) Programme Management Office in place, plan to leverage and reference its project management resources – skills, processes and documents – for this project as appropriate.

Summarise key aspects of the proposed project management framework including:

- project structure (including an organisation chart)
- reporting arrangements
- governance arrangements including proposed Project Board / Steering Committee membership (roles and names)
- key roles and responsibilities (roles and names)
- appointed personnel (roles and names) and any vacancies
- assurance arrangements

Project planning

A project plan which includes:

- the key deliverables required and the activities required to deliver them
- the critical path, key milestones and decision gates
- contingency plans for the non-delivery of services as planned

Project roles and responsibilities

The intent is to provide assurance that the project will be well-organised and delivered by capable personnel.

Include a diagram of the project organisation structure. Where these have already been appointed name the individuals. Where the positions are vacant, outline the proposed recruitment processes and role descriptions. Include profiles and track records of any key personnel as an Annex.

Use of special advisors

The use of specialist advisors is encouraged where the necessary capabilities and competencies are in short supply for large, significant, complex and novel projects, and where an independent and impartial role is required to achieve the best results. This includes facilitating workshops.

The requirement for specialist advisors usually falls into five key categories in the project plan: legal, financial, commercial, technical, and project management (including experts/coaches for specific methods/approaches such as Agile development). The Business Case should indicate how and when this advice will be used along with expected costs.

Ownership of the Indicative Business Case and responsibility for its development must be retained by the Project Board. Organisations may outsource to get specialist skills for its completion, but must retain intellectual ownership of the thinking.

Personnel implications

Identify any personnel implications for the project. Public sector organisations are often obliged to involve their staff and their representatives in a process of continuous dialogue during significant projects involving considerable internal change. This is also best practice in terms of human resources policies. This information is also an input into the Change management planning for the project.

Project plan and milestones

Project delivery planning by this stage should be well advanced.

The project plan is used to control and track the progress and delivery of the project and resulting outcomes. It describes how, when and by whom a specific milestone or deliverable

will be achieved. It is the detailed analysis of how identified project targets, milestones, deliverables and products will be delivered to timescales, costs and quality.

It should also include key inter-dependencies, constraints and critical paths, and key points for monitoring (including any Gateway reviews). Inclusion of GANTT charts may be useful.

Include a summary of the project plan. Consider providing more detailed information as an Annex.

Suggested evidence

Demonstration that the project management methodology is proven and suitable for this project. A project governance diagram which illustrates the key governance bodies together with their role and membership. Detail of the project structure and plan including the points at which progress will be monitored, controlled and reviewed.

Action 21: Change management planning

Purpose

The purpose of this action is to define the change management strategy, framework and plans required for the successful delivery of the preferred option.

Change needs to be managed and embraced by individuals within the organisation, hence the need for a change management strategy (linked to benefits realisation); a change management framework (to manage anticipated and unexpected change) and a plan (to explain what will be delivered, by whom and when in terms of underlying activities).

What's expected?

Revisit the assessment of the change impact on the organisation, its customers and other stakeholders, which was documented in the Indicative or Programme business case.

The change management plan should set out the communication and developmental deliverables (eg training products) required for the delivery phase. These plans should indicate how relevant personnel within the organisation, including human resources and staff and union representatives, have been involved and have contributed to date.

Change management roles should be shown on the project organisation chart and be included in the key roles list.

Suggested evidence

The impact of the project should be described together with the change management approach including how service delivery, human resources and staff representatives, have contributed or been involved to date.

Action 22: Benefits Management Planning

Purpose

The purpose of this action is to plan for realisation of the benefits that have been identified and assessed in the Economic Case.

Note that for any Cabinet-approved investment, unless otherwise agreed by Cabinet, agencies must:

- report back to Cabinet within 12 months after the in-service date on the actual level of benefits achieved compared with those outlined in the Cabinet-approved investment

- provide information to Treasury at agreed intervals on the actual level of benefits achieved compared with those outlined in any significant investment.

What's expected?

Treasury provides detailed guidance for benefits realisation for programmes and projects: www.treasury.govt.nz/information-and-services/state-sector-leadership/investment-management/plan-investment-choices/benefits-guidance

Benefits map

Updated benefits maps, which identify how benefits relate to each other and to intended outcomes.

Benefits realisation plan

Updated Benefits Realisation Plan describing the approach to realising each of the project's benefits including how to identify, map, monitor and review the realisation process, and expected delivery dates wherever possible.

Benefits profiles

A profile for each benefit to be managed which includes:

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

Suggested evidence

Description of benefits management approach and attachment of the largely-complete Benefits Realisation Plan.

Action 23: Risk Management Planning

Purpose

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 lists that emerge during the course of the policy, programme or project lifecycle. Its purpose is to support better decision-making through understanding the risks inherent in a proposal and their likely impact. By managing risk, the expected costs of a proposal are lowered or the expected benefits increased; risk and benefit are two sides of the same coin, and successful delivery depends on the effective identification, management and mitigation of risk.

This is also a good time to run a Risk workshop to identify new or emerging risks.

What's expected?

The expectation is that organisations will already have good practice risk management processes in place that follow the joint Australian New Zealand Standard AS/NZS ISO 31000:2009 *Risk management - principles and guidelines*: *http://www.standards.co.nz/*

Risk management strategy

Summarise or link to organisational/programme/project strategies for the proactive and effective management of risk involve:

- regular risk reviews to identify possible risks, and establishing mechanisms to 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
- development of an issues management strategy, plan (including formal escalation processes) and register/log.

Outline the arrangements for the ongoing management of risk, 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

The plans for the management of associated risks should be documented in the risk register. This lists all the risks identified in this and earlier business cases and related project work, and the results of their analysis and evaluation and includes ownership and status information.

Suggested evidence

Description or link to the relevant risk and issues management strategy and plans. Comprehensive risk register and issues log, and evidence that they are regularly reviewed and updated, with new risks and issues added.

Action 24: Plan project assurance and post-project evaluation

Purpose

This action designs and puts in place the necessary arrangements for project assurance, quality assurance and post evaluation.

What's required?

Planning for project assurance, quality assurance and post-project evaluation.

Project Assurance

Gateway Reviews are mandated for significant projects and programmes in organisations in scope for Cabinet Office Circular CO(15)5, which have been assessed as High Risk (through completion and review of a Risk Profile Assessment) and thus require Gateway reviews.

- Engage with the Treasury's Investment Reviews team early, to ensure that Gateway or other Investment Reviews can be scheduled for appropriate points in the project: investmentreviews@treasury.govt.nz

Project assurance provides independent and impartial assessment that the project's investment objectives can be delivered successfully, and improves the prospects of achieving intended outcomes and benefits.

These projects also require an Operational & Benefits Realisation review, and must report to Cabinet on the achievement of benefits one year after go-live (refer CO(15)5).

Quality Assurance

Other forms of assurance include: Independent Quality Assurance; Independent Technical Assurance; security assurance.

ICT-enabled programmes and projects must develop an Assurance Plan and agree this with the Government Chief Digital Officer (GCDO).

- Engage with the GCDO early to ensure that the project meets its requirements in terms of assurance: GCDO@dia.govt.nz

Post project evaluation

Three to six months after the in-service date, a post-project evaluation should be held. Considerations include:

- Were the objectives of the project met? Were there any unexpected outcomes or issues?
- How well did the project meet key stakeholders needs?
- Were the critical success factors achieved?
- What were the key organisational lessons learned post-implementation?

Note also that for any Cabinet-approved investment, unless otherwise agreed by Cabinet, agencies must:

- report back to Cabinet within 12 months after the in-service date on the actual level of benefits achieved compared with those outlined in the Cabinet-approved investment
- provide information to Treasury at agreed intervals on the actual level of benefits achieved compared with those outlined in any significant investment

Suggested evidence

Outline of management arrangements for ensuring that the project assurance, quality assurance and post-project evaluation will take place, noting that this is a key responsibility of the Senior Responsible Owner.

Commissioner's/Chief Executive's Letter

A letter should be provided by the Commissioner or Chief Executive and included as Annex 1 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

- demonstrate that suitable contingency arrangements are in place to work with suppliers to address any current or unforeseen affordability pressures.

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Annex 1: Considering PPP and Alternative Procurement Options

The New Zealand PPP Model

In the New Zealand context, a Public Private Partnership (PPP) refers to a form of procurement based on a long-term contract for the delivery of a service, where the service involves the construction of a new asset or enhancing an existing asset. The project is privately financed on a non-recourse basis and full legal ownership is retained by the Crown.

On 1 October 2019 a new independent infrastructure body, the New Zealand Infrastructure Commission – Te Waihanga, is being established to help improve how New Zealand coordinates and plans our infrastructure, make the most of the infrastructure we already have, and plan long-term to ensure investment delivers what we need, where and when we need it. IT will also have procurement and delivery support functions. In the interim, an Infrastructure Transactions Unit (ITU) has been established in Treasury; this team will be incorporated into NZIC from October 2019.

PPP guidance: https://treasury.govt.nz/information-and-services/nz-economy/infrastructure/nz-infrastructure-commission/infrastructure-transactions-unit/public-private-partnerships/guidance

Contact the ITU itu@treasury.govt.nz.

Cabinet Mandated Consideration of PPP Procurement

For infrastructure projects agencies must evaluate all procurement options, including innovative and non-traditional approaches to procurement and alternative financing arrangements, including PPP procurement, and should select the procurement approach that best delivers the investment objectives while optimising whole of life costs.

- Note that current government policy precludes initiating the use of new Public Private Partnerships (PPPs) in the education, health and corrections sectors.

Cabinet approval is also required for investment proposals that have significant fiscal and policy implications and can affect the government's reputation in the marketplace. In particular:

- Cabinet approval is required for any innovative or non-traditional approaches to procurement, alternative financing arrangements or public private partnership (PPP) investment proposals, even if funded from agency baselines and balance sheets

Agencies must also apply the Government Procurement Rules: https://www.procurement.govt.nz/procurement/principles-and-rules/government-procurement-rules. These Rules are supported by a set of guidance which agencies should use where appropriate.

Considering PPP Procurement within the Detailed Business Case

Where PPP procurement is endorsed by Cabinet, the DBC will build on the analysis completed as part of the Programme or Indicative Business Case and Cabinet directive. Further qualitative analysis will be required as well as quantitative analysis in the form of compiling a Public Sector Comparator (PSC). Ideally, the scope of service provision to be

included within the PPP will be confirmed at this time together with finalisation of the project's key outcomes and an indicative performance regime and risk allocation.

A number of actions required to complete a DBC require additional analysis where PPP procurement is a short list option. These include:

- Action 12: Risk and Uncertainty – a detailed understanding of project risks is required to ensure that the PSC is accurate and risk allocation is appropriate
- Action 14: The Procurement Strategy – consideration of the procurement process specific to PPP transactions is required together with a market sounding of the proposed solution
- Action 15: Specify Requirements – further consideration of the project scope and bundling options (particularly in relation to service provision) is required
- Action 16: Risk Allocation – a detailed risk allocation schedule will be required to be completed to ensure that those risks which will be transferred to the private sector partner are well understood and valued for the PSC
- Action 17: Payment Mechanism – the performance regime is central to the development of a PPP specific payment mechanism and this is discussed further below
- Action 18: Contractual and Other Issues – consideration is required in relation to the PPP project agreement and any project specific matters which may require amendment to the Standard Form PPP Project Agreement
- Action 19: The Financial Costing Model – the development of a PSC will be required to confirm that PPP procurement offers value for money over more conventional procurement approaches.

While all of the above actions require a degree of additional analysis for PPP procurement, three (Actions 14, 17 and 19) specifically require additional components to consider PPP procurement.

Action 14a: A second market sounding

A second market sounding is required during the preparation of the DBC (often late in the process) and serves two key purposes:

- It provides the procuring entity a final opportunity to test its proposed solution with the market. This is important as private sector parties will not respond positively to a project which it considers is underdeveloped or likely to change, and
- It allows private sector parties to understand the objectives and outcomes sought by the procuring entity and form credible consortiums and teams to respond to a possible procurement process. It is important that procuring entities allow the market sufficient time prior to the release of an EOI to ensure complete and competitive responses.

Action 17a: Development of a performance regime

Additional analysis is required to consider the specific performance standards and penalties which may be applied in the PPP project agreement. This requires the procuring entity to determine how the asset and service will be funded (on either an availability or user charge model) as well as how payment will be linked to the specific performance of the service outcomes required.

The procuring entity will need to consider how the performance regime can incentivise the delivery of those outcomes through performance payments and abatements as well as penalties for incidents which are simply unacceptable to the procuring entity.

The procuring entity should consult with the Treasury ITU Team regarding the proposed performance regime.

Action 19a: Development of a public sector comparator

Additional quantitative, or value for money, analysis is required for PPP procurement. This analysis compares the cost of procuring a project as a PPP with a PSC that represents the cost if the procuring entity were to deliver the asset and services itself using conventional procurement. This assessment requires detailed consideration of costs associated with:

- the design and construction of the asset
- the maintenance and management of the asset throughout a prescribed period of operations
- the delivery of services from the asset (where these are to be included under a DBFMO model), and
- those risks relating to the asset and service delivery that are proposed to be transferred to the private sector under PPP procurement.

The PSC must then be compared with a Proxy Bid Model (PBM), which in addition to those costs included within the PSC also seeks to replicate those additional costs associated with PPP procurement (such as additional procurement costs and private sector costs of financing the project). The DBC must satisfy decision makers that there is sufficient scope for the private sector to introduce innovation and whole of life cost savings (through asset design, maintenance and risk transfer) to offset any difference between the PSC and PBM.

This analysis is important as PPP procurement will only be approved for a project where it offers value for money over the life of the project; that is, a PPP must deliver the outcomes sought from the project for the same or lower cost than the procuring entity could have itself (as established by the PSC). This is safeguarded through the requirement for Cabinet approval of the value for money case before a PPP project agreement may be signed for any PPP project.

Treasury has published further guidance on the development of a PSC and quantitative value for money analysis: *http://www.treasury.govt.nz/statesector/ppp/guidance/public-sector-comparator*

Annex 2: Techniques to Quantify Risk and Uncertainty

Optimism bias

The simplest form of quantification of risk is by applying optimism bias contingencies to costs or timeframes to reflect the systematic tendency for project teams to be over-optimistic about key parameters. The adjustments can be based on past empirical experience of similar projects and should be reduced at different stages of the business case development as progressively better estimates are made[8]. While simple, the disadvantages are that it reflects downside risks only and is unlikely to effectively manage or mitigate risks.

Single-point probability analysis

An expected value can be calculated for each significant risk by multiplying the likelihood of the risk occurring (probability) by the size of the consequence. This risk premium is expressed in monetary terms and provides an estimate of the cost of accepting all the risk.

It is best used when both the likelihood and consequence of the risk event can be estimated reasonably well. The disadvantage is that it provides no information about the underlying variability in outcomes or consequences, particularly at the extremes when decision-makers may prefer not to accept the risk of the event occurring.

Quantitative risk analysis (QRA)

For any risk, a range of possible outcomes (and consequences) is more likely. An output probability distribution provides a more complete picture of the possible outcomes and recognises that some of these outcomes are more likely to occur than others.

Quantitative risk analysis (QRA) 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.

QRA of costs is mandatory as part of the development of a Detailed Business Case (DBC) for high-value high-risk projects. The Ministry of Business Innovation and Employments consultancy panel maintains a list of accredited quantitative risk analysis experts for use by Government agencies.

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. 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.

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 consequence and modelling project outcomes based on simulations of each risk. The final probability distribution describes the range of outcomes and their relative likelihood.

The risk modelling process involves:

i. building the models

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8 https://www.gov.uk/government/publications/green-book-supplementary-guidance-optimism-bias

ii. including distributions for uncertain inputs

iii. simulating outcome distributions

iv. generating outcome graphs and tables, and

v. reviewing and revision as necessary.

Impacts, other than financial, must also be considered and documented.

Monte Carlo analysis

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. Using Monte Carlo analysis can require expert advice to develop the model and interpret the results.

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.

Annex 3: Approaches to Sensitivity Analysis

Sensitivity analysis should be undertaken using two approaches:

- scenario analysis
- switching values.

Scenario analysis – testing "what if"

Scenarios are useful in considering how options may be affected by future uncertainty. Scenarios should be chosen to draw attention to the major uncertainties and assumptions on which the success of the proposal depends.

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 and uncertainty process above.

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? 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

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 to model how the change would alter the choice of the preferred option.

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.

The table over the page is an example of an off-shore procurement of capital assets valued at $US23.9 million at an exchange rate of $NZ0.66 (based on option 3 in Table 2 above) and with different exchange rate and price discount scenarios.

Sensitivity Testing of Option 3	Conservative Scenario	Base Scenario	Optimistic Scenario
Exchange Rate ($NZ per US$)	$0.60	$0.66	$0.75
Negotiated purchase price discount	10%	15%	25%
Resultant Net Present Value (NPV)	**$29**	**$35**	**$40**

Various ‘what if’ scenarios can be constructed by varying the two factors, exchange rate and price discount. The resulting impacts on the overall options analysis and the robustness of the preferred option can then be considered.

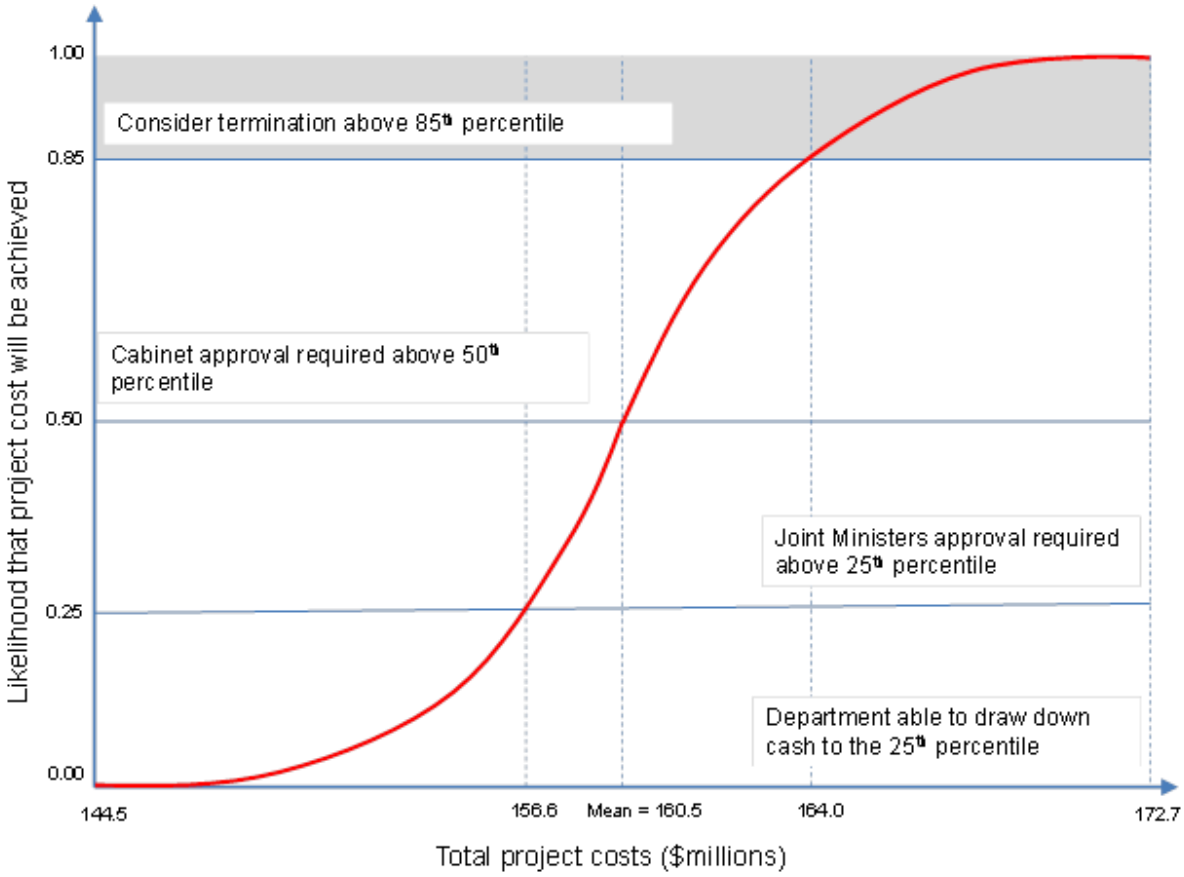
In the example above and keeping the purchase price discount constant at 15%, the analyst also determines that a worsening in the exchange rate is sufficient to change the choice of the preferred option from option 3 to option 4. The exchange rate of $0.60 is then a ‘switching value’. Switching value 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.

Annex 4: Example of establishing funding contingencies

For the Public sector example below, initial approved funding is set at the 50th percentile but subject to requirements that specify that the project may only draw down funding to cover project costs up to the 25th percentile. Drawdowns between the 25th and 50th percentiles require the approval of Joint Ministers. Funding costs over the 50th percentile require further Cabinet approval and additional evidence. Project costs over 85% would signal consideration of early termination.

The threshold limits and rules should be set as part of the discussions with the monitoring agency, and included in the Cabinet Paper recommendations made as part of approving the Detailed Business Case.

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



Annex 5: The 34 Better Business Cases™ actions

	Strategic Assessment	Programme Business Case	Single Stage Business Case: Project – Indicative Business Case	Single Stage Business Case: Project – Detailed Business Case	Implementation Business Case
Strategic Case	Action 1: The Case for Change Action 2: Strategic Context	Action 2: (revisit) Strategic Context Action 3: Investment Objectives, Existing Arrangements & Business Needs Action 4: Potential Business Scope & Key Service Requirements Action 5: Benefits, Risks, Constraints & Dependencies	Action 1: (revisit) Case for Change Action 2: (revisit) Strategic Context Action 3:Investment Objectives, Existing Arrangements & Business Needs Action 4: Potential Business Scope & Key Service Requirement Action 5: Benefits, Risks, Constraints & Dependencies	Action 27: Revisit the Case for Change	Action 27: Revisit the Case for Change
Economic Case		Action 6: Critical Success Factors Action 7: Long List Options & Initial Options Assessment Action 8: Recommended Preferred Way Forward	Action 6: Critical Success Factors Action 7: Long List Options & Initial Options Assessment Action 8: Recommended Preferred Way Forward	Action 9: Revisit the indicative Business Case & Confirm the Shortlist Action 10: Economic Assessment of the Shortlisted Options Action 11: Non-monetary Benefits & Costs Action 12: Risk & Uncertainty Action 13: The Preferred Option	Action 28: Revisit Detailed Business Case options
Commercial Case		Action 14: (high level) Procurement Strategy Action 15: (high level) Required services & outputs	Action 14: (high level) Procurement Strategy Action 15: (high level) Required services & outputs	Action 14: The Procurement Strategy Action 15: Required services & outputs Action 16: Risk Allocation Action 17: Payment Mechanisms Action 18: Contractual & Other Issues	Action 27: Evaluation of best & final offers Action 28: The negotiated deal & contractual arrangements
Financial Case		Action 19: (high level) Affordability & funding	Action 19: (high level) Affordability & funding	Action 19: Financial Costing Model	Action 29: Financial implications of the deal
Management Case		Action 20-24: Programme Management planning – strategy, framework and outline plans	Action 20-24: (high level) Project Management planning – strategy, framework and outline plans	Action 20: Project Management Planning Action 21: Change Management Planning Action 22: Benefits Management Planning Action 23: Risk Management Planning Action 24: Post Project Management Planning	Action 30: Finalise Project Management Arrangements Action 31: Finalise Change Arrangements Action 32: Finalise Benefits Arrangements Action 33: Finalise Risk Management Action 34: Finalise Post Project Evaluation Planning

Annex 6: References

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The Five Case Model is the best practice standard recommended by HM Treasury for the preparation of business cases, published as The Green Book: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/685903/The_Green_Book.pdf.