

Investment Lifecycle and High Value/High Risk Guidelines

OVERVIEW



The Secretary
Department of Treasury and Finance
1 Treasury Place
Melbourne Victoria 3002
Australia
Telephone: +61 3 9651 5111
Facsimile: +61 3 9651 5298
www.dtf.vic.gov.au

Authorised by the Victorian Government
1 Treasury Place, Melbourne, 3002

© State of Victoria 2014



This work is licensed under a Creative Commons Attribution 3.0 Australia licence. You are free to re-use the work under that licence, on the condition that you credit the State of Victoria as author. The licence does not apply to any images, photographs or branding, including the Victorian Coat of Arms, the Victorian Government logo and the Department of Treasury and Finance logo.

Copyright queries may be directed to IPpolicy@dtf.vic.gov.au

If you would like to receive this publication in an accessible format please email information@dtf.vic.gov.au

This document is also available in PDF format at www.dtf.vic.gov.au

Acknowledgments

The Department of Treasury and Finance wishes to acknowledge those who contributed to the thinking, development and production of this guide. In particular, the agencies of the Victorian Government who participated in the consultation for this work, and Cube Management Solutions, which assisted in its development.

The Department of Treasury and Finance wishes to acknowledge United Kingdom HM Treasury and New Zealand Treasury, the following documents of those organisations were used as references in the development of this guide:

New Zealand Treasury (2012) *Better business cases for capital proposals toolkit: Overview* at <http://www.infrastructure.govt.nz/publications/betterbusinesscases/overview/bbc-overview.pdf>

HM Treasury (2011) *The Green Book: Appraisal and evaluation in Central Government* at http://www.hm-treasury.gov.uk/d/green_book_complete.pdf

Contents

Acknowledgments.....	iii
1. Introduction	5
1.1 What are the investment lifecycle and high value/high risk guidelines?	5
1.2 Purpose of this document	6
1.3 The recent history of Victorian investment guidelines	6
1.4 Investment management versus project management – understanding the difference.....	7
1.5 When to use the lifecycle guidelines	8
1.6 Who should use the lifecycle guidelines.....	9
2. The Victorian Government investment processes.....	10
2.1 Introduction	10
2.2 The investment lifecycle framework	11
2.3 Long-term planning and strategic asset management.....	13
2.4 Investment Management Standard.....	13
2.5 The High Value/High Risk process	14
2.6 Gateway review process.....	17
2.7 Design advice and review	19
3. Summary: Investment lifecycle and high value/high risk guidelines.....	20
3.1 Documents and tools.....	21
3.2 Stage 1: Conceptualise.....	22
3.3 Stage 2: Prove	26
3.4 Stage 3: Procure.....	30
3.5 Stage 4: Implement.....	32
3.6 Stage 5: Realise	34
4. Scalability and skills.....	35
4.1 Process outline based on size of investment.....	35
4.2 Cost accuracy	36
4.3 Investment development funding	37
4.4 Resourcing the investment lifecycle.....	37
4.5 Further information and training.....	40
5. Glossary	41

1. Introduction

1.1 What are the investment lifecycle and high value/high risk guidelines?

The investment lifecycle and high value/high risk guidelines (lifecycle guidelines) apply to all government departments, corporations, authorities and other bodies falling under the *Financial Management Act 1994*. The lifecycle guidelines support the development of business cases which are mandatory for capital investments with a total estimated investment (TEI) of \$10 million or more. But they can be used for investments of any type, complexity or cost.

The lifecycle guidelines provide practical assistance to those proposing investment projects in Victoria. They help shape proposals, inform investment decisions, monitor project delivery and track the benefits projects achieve. Using the guidelines will help ensure government investments provide maximum benefit to Victoria.

The guidelines emphasise the need to better align the policies, programs and projects of government departments and agencies with government priorities.

The process of planning, proposing and delivering investments is known as the investment lifecycle. The lifecycle guidelines aim to provide practical guidance and tools that assist in the process and, in turn, promote the best investment outcomes for Victoria. They help ensure the government:

- addresses the right problems and pursues the right benefits;
- chooses the best value for money investments;
- delivers investments as planned; and
- realises the *benefits* it set out to achieve.

To assist the government in this process, the information that government agencies provide throughout the investment lifecycle should constantly aspire to objectivity and the highest standards of probity when handling and presenting information and evidence. Equally important is that agencies aim to constantly improve the quality of analysis and information provided to government. As a stakeholder in this process, the lifecycle guidelines are designed to help you achieve those ends. They do this by stepping you through the process from the investment concept through to the beneficial delivery of an investment.

The lifecycle guidelines address five key stages (see Figure 1).



Figure 1 The five stages of the investment lifecycle framework

1.2 Purpose of this document

The purpose of this document is to:

- provide an introduction to and context for the investment lifecycle framework;
- describe how the investment lifecycle framework fits with other government investment processes;
- provide a summary of each stage of the investment lifecycle framework.

It is intended to address the needs of a broad range of public and private sector stakeholders involved at all stages of the investment lifecycle.

1.3 The recent history of Victorian investment guidelines

The Investment Evaluation Policy and Guidelines (IEPG) were introduced in 1996 to help ensure Victoria had the infrastructure in place to attract new business and contribute to a more productive economy.

The first business case guidelines incorporated documents covering strategic assessment, options analysis and business case development. This initiated a move towards consistent and better practice across a broad sector of government entities.

The 2008 lifecycle guidelines updated and extended the series to address tendering, implementation and benefit evaluation stages of the investment lifecycle.

The lifecycle guidelines and supporting tools have evolved significantly since 2008 and the 2012 lifecycle guidelines incorporate lessons learnt from its application.

1.3.1 2012 investment lifecycle series – what’s changed?

The 2012 lifecycle guidelines incorporate current preferred practice and user feedback, with improved presentation and worked examples to make them easier to understand and apply by including:

- **better practice** advice that identifies appropriate evolving best practice;
- **clear, scalable** and **integrated** guidance and expectations as you move through the investment lifecycle;
- **accessibility** to all levels of investment experience and competency; and
- **practical** elements such as worked examples, tools, tables and case studies.

Process changes

A major change to the 2012 lifecycle guidelines is the inclusion of HVHR processes reflecting a stronger risk management focus to the role of the central agencies and the Treasurer. The lifecycle guidelines incorporate clear direction on new processes that operate throughout the investment lifecycle, in particular High Value/High Risk (HVHR) investments, including information and communications technology (ICT) proposals.

The Department of Treasury and Finance’s (DTF’s) information requirements have changed across the investment lifecycle; please refer to the revised guidelines and associated tools, templates and technical guidelines at each stage of the investment lifecycle to obtain the appropriate information requirements for your investment or project.

The 2012 lifecycle guidelines also place a larger focus on skills and capabilities required throughout the investment lifecycle.

Previous versions of the investment lifecycle

The 2012 lifecycle guidelines make redundant all previous versions of the Lifecycle guidelines and the Investment Evaluation Policy and Guidelines (1996). All current and relevant information has been extracted from those documents and incorporated into the 2012 lifecycle guidelines.

1.4 Investment management versus project management – understanding the difference

One key to understanding the lifecycle guidelines is the distinction between the concepts of ‘investments’ and ‘projects’ (see Figure 2).

Over the past few decades, the tools of project management have been commonly used to support investment management. These tools primarily deal with whether a funded project is running to time and on budget. Project management tools were not intended to be used to help shape an investment or make decisions about which investments should be funded. *Investment* thinking, on the other hand, focuses on the benefits government is buying by addressing a problem, and the ultimate delivery of those benefits. Project management thinking does not generally help the investor in answering the question: ‘Will my investment deliver the expected benefits?’, whereas investment management thinking does.

Investment management considers a proposal, program or project from the viewpoint of the investor rather than the project manager. It represents a marked shift in thinking. The focus is different, the timescales are longer and the language used is not the same as for project management.

Good project management is critical to the success of an investment. However, investment management focuses beyond the time-limited parameters of project management. It does not diminish project management in any way but instead complements it. DTF’s Investment Management Standard (discussed further in section 2.4) provides a communications tool for investors to use in order to focus on the reason for the investment and the benefits it provides.



Figure 2 The different focuses of investment management vs. project management

1.5 When to use the lifecycle guidelines

The lifecycle guidelines support planning, appraisal and evaluation of any investment, whatever its type, complexity or cost (see Table 2).

Stage of investment	Use
At the start	<ul style="list-style-type: none">To analyse and/or create a proposal (including development of a project, program or policy).To understand the Lifecycle process to inform a government decision.To develop a funding submission for government consideration (strategic assessment, preliminary business case, full business case).To build organisational skills in investment management practices or facilitate investment proposal development.
In the middle	<ul style="list-style-type: none">To promote better investment and project management at a high level, and to coordinate investment functions and improve organisational efficiency or productivity.To understand the Lifecycle processes to procure or implement an investment.To apply governance and assurance processesTo seek relevant Treasurer sign-offs.
At the end	<ul style="list-style-type: none">To monitor and evaluate investments, projects or programs.To measure the success of an investment.

Table 1 When to use the lifecycle guidelines

1.6 Who should use the lifecycle guidelines

The lifecycle guidelines target a broad range of stakeholders, both internal and external to the public sector, involved at all stages of the investment lifecycle. The lifecycle guidelines are designed to be useful for those with varying levels of investment knowledge and a range of requirements. The audience and the benefits of the lifecycle guidelines for each group are outlined in Table 2.

Your role	Your functions	Benefits of the Lifecycle guidelines
Practitioner	<p>To plan, develop, propose, implement, analyse, monitor or assess investments of all types and size.</p> <p>This may include investors ('senior responsible owner'), business case developers, policy writers, project managers, specialist technical analysts.</p>	<ul style="list-style-type: none"> • Provides a best practice guide for the whole investment lifecycle. • Provides a whole-of-lifecycle approach for investment management. • Assists you through each stage of the investment management and implementation process, regardless of your experience and knowledge. • Provides technical guidance for specialist areas, e.g. stakeholder engagement and economic analysis.
Strategist	<p>To think about investment and portfolio management at a high level, and to coordinate investment functions, improve organisational efficiency or productivity.</p> <p>This may include organisational strategists, investment managers, academics, students and executives who need context for executing due diligence in managing their investment.</p>	<ul style="list-style-type: none"> • Provides a whole-of-lifecycle overarching framework that integrates the investment development, management and implementation process. • Discusses key concepts in investment management. • Explains how the framework fits together.
Facilitator	<p>To train organisations in investment management practices or facilitate investment proposal development.</p> <p>This may include accredited investment management facilitators, business case trainers, and training and development officers.</p>	<ul style="list-style-type: none"> • Provides information on the techniques and process of the lifecycle. • Assists you in teaching all levels of knowledge and experience.

Table 2 Who should use the lifecycle guidelines

2. The Victorian Government's investment processes

2.1 Introduction

The lifecycle guidelines interact with a number of related Victorian Government resource management processes, called the investment lifecycle framework. The investment lifecycle framework incorporates the:

- Government asset funding process;
- HVHR process;
- Gateway process;
- Long-term planning;
- Major projects performance reporting;
- Investment Management Standard (IMS); and
- Lifecycle guidelines.

The aim of this section is to show you how those processes fit together.

As demonstrated in Figure 3, progressing through each stage of the Victorian Government's investment lifecycle framework requires coordinated action from the government, departments and central agencies. These processes are guided by the policy, guidelines, support and tools of the investment lifecycle framework to ensure the investment process is managed in accordance with better practice. The process is kept in check by continual reporting, as well as assurance and monitoring processes throughout the life of an investment.

2.2 The investment lifecycle framework

Figure 3 outlines the relationships between Victoria's investment-related policies, processes, tools and guidelines.



Figure 3 Overview of the Victorian investment management framework: Processes and tools

The Victorian Government's investment processes

[Intentionally left blank]

2.3 Long-term planning and strategic asset management

Departmental long-term planning documents form an important part of the Government's planning process. Primarily, they facilitate Government to consider and prioritise service delivery needs and competing investment proposals on a Whole-of-Victorian-Government basis. They provide critical context to guide its short- and medium-term budget deliberations and resource allocation decisions. Thinking about investment need, shaping, prioritisation and implementation should be guided by departmental long-term planning. This provides Government with confidence in the efficacy of investment proposals.

Departmental long-term planning documents outline a department or agency's 10-year strategic vision and objectives for service delivery. The long-term planning process anticipates future demand for services. It considers the capacity of existing service delivery frameworks, including supporting infrastructure and assets, to meet future needs. It also promotes early identification of potential service delivery risks and challenges. This enables effective and efficient strategic responses to be developed to best meet long-term, portfolio-wide service delivery requirements.

Strategic responses to service delivery challenges may include one or more – or even all – of the following practices: demand management techniques; service delivery methodology change; service delivery scope and scale change; change to service procurement method or service providers; HR responses; and asset responses. New investments should align with a particular department's long-term vision, facilitate ongoing service delivery objectives, and enable service challenges and risks to be managed in a planned, timely and affordable way.

Departments should consider any investments in new or existing assets within the context of the overarching service delivery framework(s). An investment may be only part of a response to a service need or challenge, and investors will need to align existing and proposed service delivery mechanisms and supporting infrastructure. Departments must also consider the impacts of investments on current and future asset management responsibilities and requirements.

Departmental long-term planning and strategic asset management should be seen as a prequel to the investment lifecycle, e.g. a 'Stage 0', where investment needs are first identified and articulated. It should also be a reference to support an investment's development through each lifecycle phase. An outline of how long term planning relates to each stage of the lifecycle is provided in section 3 below.

2.4 Investment Management Standard

The Victorian Government's **Investment Management Standard** establishes a set of simple practices that enable organisations to direct their resources to the things that matter most.

The standard supports a structured way of thinking characterised by the use of simple logic (common sense), bringing together the best thinkers on a subject, evidence-based discussion and simple storytelling. It aims to eliminate unnecessary process.

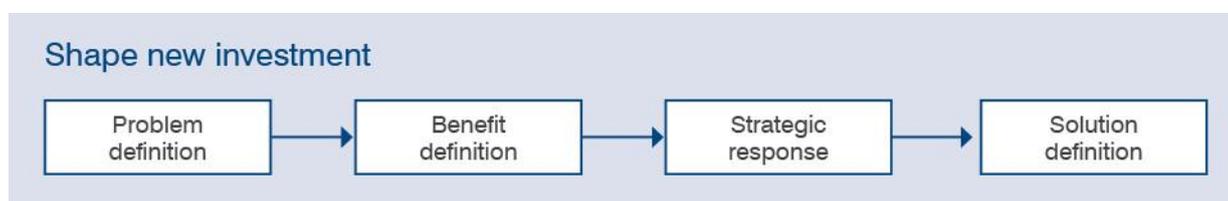
The first iteration of the practices was developed within the Victorian Government in 2003 and has since evolved to now support a diverse range of functions within an organisation. The practices are now in widespread use by governments and businesses across Australia and

New Zealand due to their simplicity, low cost of adoption and their impact in driving better outcomes and saving money.

Organisations currently use the practices to:

- shape investments that will deliver the best outcomes;
- determine whether the benefits expected of an investment are actually delivered;
- develop the logic of investment programs and prioritising candidate investments;
- evaluate the ultimate effectiveness of programs;
- develop new policy; and
- validate the effectiveness of an entire organisation and determine how it can be improved.

In shaping new investments, the practices use facilitated two-hour discussions (workshops) to address the four questions fundamental to investment decision making:



The number of workshops required is determined by the nature and complexity of an investment. The workshops produce documents which help to define a new investment and establishing a robust business case. These include:

- investment logic map;
- benefit management plan;
- strategic options analysis; and
- investment concept brief.

2.5 The High Value/High Risk process

In December 2010 the government approved a process of enhanced scrutiny for HVHR asset investments. The aim of this new process is to achieve greater rigour in investment development and oversight, increasing the likelihood of:

- project delivery on time, within budget and to the required quality; and
- realised benefits for Victorians.

2.5.1 Which investments are HVHR

An investment is considered HVHR if any of the following criteria are met:

- the TEI is more than \$100 million, regardless of funding source;
- the Gateway PPM identifies the investment as 'high risk'; or
- the government identifies the investment as warranting extra rigour – e.g. ICT projects, multi-sector funding sources.

2.5.2 Heightened DTF involvement

HVHR investments are subject to greater and ongoing Treasurer and central agency involvement across the investment lifecycle, with more rigorous assessment at each stage:

- project concept, feasibility and validation –preliminary business case, business case development and assessments;
- project tendering – expression of interest (EOI), request for tender (RFT), evaluation and contracts; and
- project implementation – schedule, budget, scope, governance and risk assessments.

All HVHR investments must:

- complete Gateway reviews; and
- send DTF risk mitigation(s) for any critical or urgent risks identified in Gateway review's recommendation action plan (RAP).

2.5.3 Treasurer's approval

HVHR investments require the Treasurer's approval at the following stages:

- business case – assessing the project's deliverability prior to government funding consideration; and
- tendering:
 - expression of interest, prior to release;
 - request for tender, prior to release;
 - preferred bid, prior to announcement; and
 - contracts, prior to signing and any major variations.

2.5.4 The HVHR process

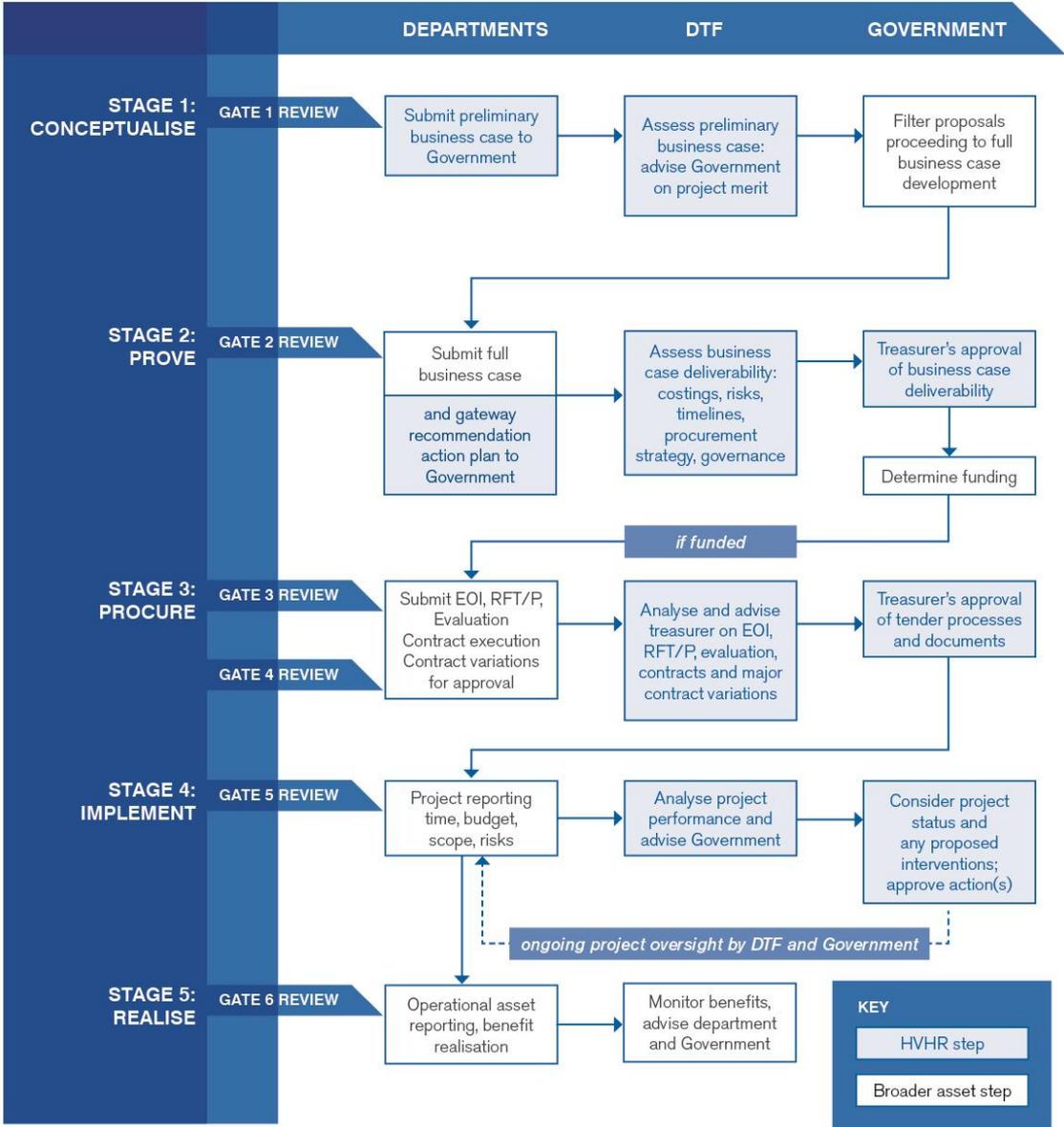


Figure 4 How an investment moves through the HVHR process

2.5.5 Information and communications technology

Projects with an ICT component are a special-case HVHR category. All of the policies, processes and tools in the Investment Lifecycle Framework support the development of robust business cases and delivery of ICT projects. However, there are some additional issues that arise specifically in relation to ICT projects. The Investment Lifecycle ICT Supplementary Guideline has been developed specifically for HVHR ICT projects to address the additional issues and considerations for this type of project. This guideline is in two parts and aligns with the five stages of the Investment Lifecycle Framework.

- **ICT Guideline: Business Case** – This guideline aligns to the ‘conceptualise’ and ‘prove’ stages of the Investment Lifecycle Framework and provides specific recommendations and considerations for building a robust preliminary business case and full business case for an HVHR ICT project.

- **ICT Guideline: Procure and Deliver** – This guideline aligns to the 'procure', 'implement' and 'realise' stages of the Investment Lifecycle Framework and provides specific recommendations and considerations for procurement, project delivery and business benefit realisation for an HVHR ICT project.

Common ICT issues

Many ICT-enabled projects experience significant cost overruns and time delays. These issues are commonly driven by:

- under developed business cases;
- poorly scoped projects, resulting in difficulties in estimating cost and insufficient specification of business requirements;
- poor project governance and project management;
- insufficient engagement with, and commitment from, stakeholders and users in developing or implementing technology solutions and business changes; and
- lack of contingency planning, identification of exit strategies or alternative options and failure to evaluate or exercise these options once a project has commenced.

Traditional budgeting

Traditional budgeting approaches place pressure on departments to make final decisions on ICT-enabled solutions before sufficient detail is available to reliably estimate cost and timelines. Departments are required to quantify the total or full lifecycle cost and timelines years in advance. This may include deciding between commercial off-the-shelf (COTS) and custom-built products before products are tested, evaluated and compared.

The fast pace of change in the ICT market also makes reliable total lifecycle cost difficult, as the detailed understanding and scoping of solutions has not been tested. Often agencies are only able to make informed decisions on technology solutions following detailed engagement with suppliers and as stages of an ICT project are being tested and implemented, rather than years in advance.

2.6 Gateway review process

2.6.1 Introduction

The Gateway review process delivers peer reviews to the project's senior responsible owner (SRO) at key decision points throughout the investment lifecycle.

The review provides advice on current progress of an investment and assurance that it can proceed successfully to the next stage. The review team also provide an indication regarding their confidence as to the likelihood for successful delivery of the project or program to time, cost and quality parameters.

Gateway reviews differ from other assurance processes because they provide a snapshot in time of projects throughout the entirety of their lifecycles. Gateway reviews should be seen as complementary to internal assurance processes, and not a substitute or replacement. The review is not an 'audit' and should not be regarded as an alternative to appropriate project and program management. Each review is short and focused on the work that is complete at the time, and is performed shortly before key decisions are made, to allow sufficient time for any recommendations to be implemented.

2.6.2 The role of the senior responsible owner

A Gateway review is conducted on a confidential basis for the SRO, who is usually the initiator of the review. The SRO has ownership of the report and is accountable for the implementation of any recommended remedial action and the progress of the program or project. It is important that the SRO is involved throughout the entire review process to ensure a collaborative, measured outcome.

2.6.3 Tailoring the review

The Gateway booklets provide guidance on the structure of each Gateway review, and what each Gateway review should achieve by providing detail on:

- the relevant areas of investigation (including the framework for thinking about key issues); and
- detailed guidance on the types of information and evidence the review team may require when considering various issues.

Discussions with the Gateway unit and review team about the project are the best way of ensuring the review has the appropriate focus.

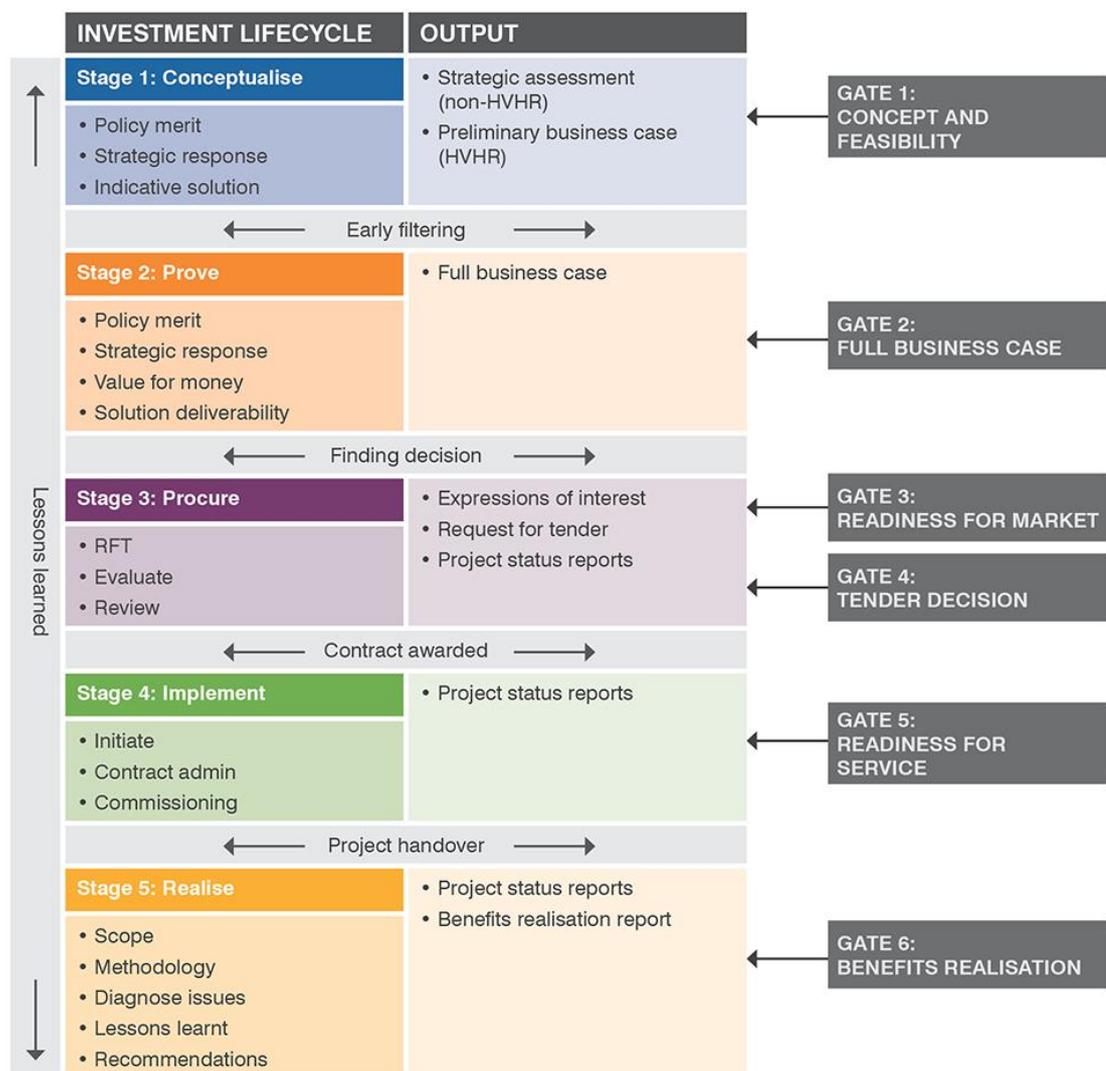


Figure 5 Gateway review process

2.7 Design advice and review

2.7.1 Office of the Victorian Government Architect

The Office of the Victorian Government Architect (OVGA) provides independent advice to government on architecture and urban design, and champions quality of design in the built environment. The OVGA supports public sector clients to embed design quality in their projects from project inception and feasibility stage, including providing assistance with writing the brief, defining the best procurement route, and selecting the right design team to match the brief.

The OVGA also provides support throughout the design development process, offering design review. This is offered by the OVGA in three ways; through the Victorian Design Review Panel, through Design Quality Teams (DQT) and through internal peer review, undertaken by the OVGA team.

2.7.2 Victorian Design Review Panel

The Victorian Design Review Panel (VDRP) has been established by the OVGA to offer design advice at key stages of the design process through formal independent peer review undertaken by a panel of highly experienced design and development professionals, a specialist technical panel and Government design specialists. The VDRP, the Panel Members and the Terms of Reference have been endorsed by the Victorian Government. The aim of the VDRP is to raise the design quality of proposals, achieve best value and ensure that all opportunities are realised for all Victorians in public projects.

The VDRP offers design review of significant projects that are seeking or have attained funding from State Government. It offers a structured design review process at the earliest stage of the project, during the feasibility and concept phase and then progressively as the design develops. The VDRP is directed and managed through the OVGA and is offered as a free service for Government clients and departments to support the delivery of high quality projects. It is advisory only and undertaken in a confidential environment.

3. Summary: Investment lifecycle and high value/high risk guidelines

The lifecycle guidelines are set out in five key stages. Each stage has its own guideline that will step you through the relevant processes. Note information on stage 0: Long-term planning is not covered by the lifecycle guidelines. Further information on long-term planning is available at 2.3 above and on the DTF website.



Summary: Investment lifecycle and high value/high risk guidelines

3.1 Documents and tools

The guidelines have six parts, an overview and one document for each of the five lifecycle stages.

STAGES	INVESTMENT LIFECYCLE AND HIGH VALUE/HIGH RISK GUIDELINES	INVESTMENT LIFECYCLE TOOLS, TEMPLATES AND EXAMPLES	INVESTMENT MANAGEMENT STANDARD TOOLS, TEMPLATES AND EXAMPLES	GATEWAY
Overview	Investment lifecycle overview			Gateway Overview
1 Conceptualise Confirm the need	Conceptualise guideline (strategic assessment and preliminary business case) Technical guidelines: - ICT	Investment decision-maker’s checklist Strategic assessment template Preliminary business case template Example strategic assessment: <i>Noojee Courts</i> Example preliminary business case: <i>Noojee Courts</i>	Investment logic map Benefits management plan Strategic options analysis Invest concept brief Facilitator tips and traps	Gateway booklet 1 (Concept and feasibility)
2 Prove Recommend an investment	Prove guideline (Full business case) Technical guidelines: - Procurement strategy - Project governance - Economic evaluation - ICT - Project budget - Project risk - Sustainability - Consultation	Investment decision-maker’s checklist Full business case template Example full business case: <i>Noojee Courts</i> Investment business plan template	As above	Gateway booklet 2 (Full business case)
3 Procure Award a contract	Procure guideline Technical guidelines: - Statement of requirements - RFT communications	Request for tender template Example RFT: <i>Noojee Courts</i>		Gateway booklet 3 (Readiness for market) Gateway booklet 4 (Tender decision)
4 Implement Deliver the solution	Implement guideline Technical guidelines: - Project risk management	Project wrap-up template Example project wrap-up: <i>Noojee Courts</i>	Investment review tool	Gateway booklet 5 (Readiness for service)
5 Realise Deliver the benefits	Realise guideline	Project evaluation template Example project evaluation: <i>Noojee Courts</i>	Benefit reporting tool	Gateway booklet 6 (Benefits evaluation)

Table 3 Overview of documents and tools of the Lifecycle guidelines

3.2 Stage 1: Conceptualise

'If I had only one hour to save the world, I would spend fifty-five minutes defining the problem, and only five minutes finding the solution.'

– Albert Einstein

3.2.1 Introduction

The problem is... to know what the problem is. To conceptualise is the first stage of the Lifecycle guidelines. The purpose of this stage is to identify a clear need that is in the Victorian Government's interest to address. Accordingly, long-term strategies should point to the policy and strategic rationale should be developed in this stage.

Key questions in justifying a call to action:

- What is the problem, issue or service need?
- What are the benefits of addressing the problem?
- What is the best strategy to address it?

3.2.2 Reasons for government intervention

The call to action that underlies most government interventions is usually founded in market failure or where there are clear government objectives that need to be met. Market failure occurs where the market has not and cannot deliver an efficient outcome. Government interventions in these scenarios seek to rectify this. Government objectives may result from:

- policy decisions;
- service needs; and/or
- investment ideas.

Government interventions are not always providing service delivery. Sometimes the most appropriate intervention relates to removing barriers.

3.2.3 Carrying out research

The first step in initiating an investment is carrying out research, which may cover analysing the:

- Department's long-term plan, ensuring the investment proposal aligns with the department's long-term service delivery requirements and objectives is particularly important at this stage;
- current market environment (e.g. cause of the market failure, employment levels);
- impacts on stakeholders;
- Evidence of the cause and effect of the problem;
- Factors driving the need for the investment (drivers);
- current and projected trends and published forecasts;
- project modelling; and
- technological developments.

3.2.4 Developing the policy and strategic case

The key task at this stage is to develop the policy and strategic case to support your proposal (see Figure 5).



Figure 6 Stage 1: Conceptualise – concept development process

Undertaking this process will enable agencies to identify, size up and prioritise the investments that they believe are most deserving of attention from government. Agencies are required to conduct this process internally; however, it is highly recommended that you use the tools to help as you move through this stage, engaging the services of an accredited IMS facilitator.

It is important at this stage that you assess the proposal against the agency’s long-term vision and objectives, as outlined in departmental long-term plans, to ensure they are in alignment.

The stage 1: conceptualise guideline has been developed to help you navigate through this process, indicating the level of detail that’s required for decision-makers to understand and assess submissions.

3.2.5 Role of the Investment Management Standard at this stage

The Investment Management Standard tools and workshops can assist you as you move through this stage. It is highly recommended that you engage an accredited facilitator to ensure you get the most robust outcome. The investment management tools and workshop processes are directly aligned with the process outlined in the lifecycle guidelines, *Stage 1: Conceptualise*. Depending on the scale, cost and risk of your proposal it may be necessary to undertake between one and four workshops. For further information see the IMS website at www.dtf.vic.gov.au/investmentmanagement. Tools include:

- investment logic map;
- investment concept brief;
- benefit map; and
- strategic options analysis tool.

3.2.6 Role of long-term planning at this stage

Ensure an identified need for an investment aligns with the department’s long-term service vision, outlined in its long term plan, and its asset management objectives. Ensure that the investment proposal has been considered in the context of a cohesive strategic response to a service delivery challenge: ensure asset initiatives support optimal operation of the overarching service delivery requirements, and implementation dependencies of other investment initiatives are identified.

3.2.7 Review your thinking: the investment decision-maker’s checklist (16 questions)

DTF has developed a set of questions to help guide and test thinking as agencies develop their investment proposals, the investment decision-maker’s checklist (16+Questions).

Throughout the development of their strategic assessment or preliminary business case, and prior to its submission, agencies should ensure they have considered the questions in Stage 1 of the investment decision-maker’s checklist. Agencies may not have answered all the questions in the affirmative at this stage; however, they need to demonstrate that they have considered each of them in developing their strategic assessment or preliminary business case.

3.2.8 Outputs for submission to government

Based on this examination and assessment, agencies are then required to develop one of the three following outputs for submission to government:

- a strategic assessment (for non-HVHR);
- a preliminary business case (for HVHR); **or**
- should an agency lack the resources to develop a strategic assessment, preliminary business case or full business case, they may prepare an investment development funding submission.

Outputs should be in accordance with DTF’s strategic assessment and preliminary business case templates. In developing a submission, agencies are strongly advised to also use other documents and tools of the Investment Lifecycle Framework, as outlined in the documents and tools table at 3.1 above.

3.2.9 If your project is HVHR

A preliminary business case is required to be submitted at the early filtering phase. HVHR investments also need to undertake Gateway review 1 prior to submitting a preliminary business case. Gate 1 assists the SRO in determining whether the project team has done sufficient work to allow a well-informed judgement as to whether or not the project should proceed to full business case stage.

Remember: HVHR investments are those with a TEI of \$100 million, identified through the Public Profile Model as ‘high risk’ or as otherwise nominated.

If you are unsure whether your proposal is HVHR, contact your DTF representative.

Gate 1 should occur in sufficient time to allow the project team to make any amendments to the preliminary business case before submission. The purpose of Gate 1 includes confirming that key documentation presents a compelling case to invest that demonstrates strong policy

Summary: Investment lifecycle and high value/high risk guidelines

and strategic merit and conducting a 'health check' of the organisation developing the proposal. For further information see the DTF website.

3.2.10 Insufficient funding?

If the department or agency has insufficient resources to undertake a full business case, it should complete an investment development funding submission. Section 4.3 and the Stage 1: Conceptualise Guideline explains this process in more detail.

Government decision point

On the basis of the strength of the policy and strategic strength of this proposal, is it worth proceeding to full business case stage at this time?

Based on the information provided and the policy and strategic merit of the proposal, Government will make a judgement on whether the proposal should proceed to full business case.

3.3 Stage 2: Prove

'He, who fails to plan, plans to fail.'

– Proverb

3.3.1 Introduction

Before committing to a particular investment the decision-maker needs to be confident that the proposal is worthwhile and has merit over others competing for budget. The purpose of stage 2: prove is to build on information developed in *Stage 1: Conceptualise* and provide a more detailed evaluation of the short-listed project options. It confirms that the proposal can achieve the benefits sought, and indicates the likely costs and risks to the State.

Key questions:

- Is there a compelling case to invest?
- Can the recommended solution really be delivered as planned?

3.3.2 Full business case

Demonstrating that there is a compelling case to invest, and that the investment can be delivered, is done through the development of a full business case that:

- revisits the policy and strategy case developed in Stage 1: Conceptualise and validates or amends the assumptions;
- develops project options;
- conducts a value-for-money evaluation and comparison of the project options; and
- for the recommended project or program solution, sets out the deliverability case:
 - commercial and financial (risk, costs, funding sources);
 - management (governance, organisational capability, stakeholders, project management); and
 - delivery case (change management, timelines, benefits management strategy).

Supplementary technical guidance on the development of the full business case is found on the Investment Lifecycle website, including the:

- procurement guideline;
- governance guideline;
- economic evaluation guideline;
- consultation guideline
- ICT guideline;
- project budget guideline;
- project risk guideline; and
- sustainability guideline.

3.3.3 Role of the Investment Management Standard at this stage

You should revisit your Investment Management Standard outputs (investment logic map, concept brief, benefits map etc.) to check that the information and assumptions are still valid, and amend as necessary.

3.3.4 Role of long-term planning at this stage

Reconfirm the investment need aligns with the department's long term service delivery vision and objectives. Consider the portfolio and WoVG perspectives: assess whether the service need or challenge being addressed is a current priority, and ensure implementation dependencies are articulated. Consider the asset management implications of the investment on a lifecycle basis.

3.3.5 Review your thinking – the investment decision-makers' checklist (16 questions)

Throughout the development of your business case, and prior to its submission, ensure the information aligns with Stage 1 and 2 of the investment decision-maker's checklist.

3.3.6 Outputs for submission to government

The key deliverable for this stage is the completion of a *full business case*.

Agencies should complete the full business case in accordance with DTF's full business case template. Key components of the business case include assessment of options from a whole-of-life perspective, a procurement strategy and a benefits management plan.

Summary: Investment lifecycle and high value/high risk guidelines

In developing a submission, agencies are strongly advised to also use other documents and tools of the Investment Lifecycle Framework, as outlined in

STAGES	INVESTMENT LIFECYCLE AND HIGH VALUE/HIGH RISK GUIDELINES	INVESTMENT LIFECYCLE TOOLS, TEMPLATES AND EXAMPLES	INVESTMENT MANAGEMENT STANDARD TOOLS, TEMPLATES AND EXAMPLES	GATEWAY
Overview	Investment lifecycle overview			Gateway Overview
1 Conceptualise Confirm the need	Conceptualise guideline (strategic assessment and preliminary business case) Technical guidelines: - ICT	Investment decision-maker's checklist Strategic assessment template Preliminary business case template Example strategic assessment: <i>Noojee Courts</i> Example preliminary business case: <i>Noojee Courts</i>	Investment logic map Benefits management plan Strategic options analysis Invest concept brief Facilitator tips and traps	Gateway booklet 1 (Concept and feasibility)
2 Prove Recommend an investment	Prove guideline (Full business case) Technical guidelines: - Procurement strategy - Project governance - Economic evaluation - ICT - Project budget - Project risk - Sustainability - Consultation	Investment decision-maker's checklist Full business case template Example full business case: <i>Noojee Courts</i> Investment business plan template	As above	Gateway booklet 2 (Full business case)
3 Procure Award a contract	Procure guideline Technical guidelines: - Statement of requirements - RFT communications	Request for tender template Example RFT: <i>Noojee Courts</i>		Gateway booklet 3 (Readiness for market) Gateway booklet 4 (Tender decision)
4 Implement Deliver the solution	Implement guideline Technical guidelines: - Project risk management	Project wrap-up template Example project wrap-up: <i>Noojee Courts</i>	Investment review tool	Gateway booklet 5 (Readiness for service)
5 Realise Deliver the benefits	Realise guideline	Project evaluation template Example project evaluation: <i>Noojee Courts</i>	Benefit reporting tool	Gateway booklet 6 (Benefits evaluation)

Table 3 Overview of documents and tools of the Lifecycle guidelines.

3.3.7 If your project is HVHR

Prior to submitting the full business case to government, you are required to submit to the Treasurer a (near final) draft version of the full business case for a robustness assessment.

A Gate 2 business case review must be undertaken prior to government considering the full business case. The purpose of Gate 2 is to:

- assess whether key documentation presents a compelling case to invest that is robust and proves that the investment can be delivered on time and on budget; and
- conduct a health check of the organisation developing the proposal to identify that the organisation has the capacity and capability to:
 - deliver a full business case; and

Summary: Investment lifecycle and high value/high risk guidelines

- transition to *Stage 3: Procure*.

Government decision point

Taking into consideration the merits of this investment, its merits relative to other competing investment proposals and the available budget, should this investment be funded?

Based on the information provided and the robustness and deliverability of the full business case submission, Government will make a judgement on whether the proposal should be funded.

For further Gate 2 reference and guidance go to the DTF website.

3.3.8 Investment business plan

After funding has been approved for your investment you are required to submit to DTF an investment business plan that extracts key information from the full business case. The purpose of the investment business plan is to ensure key information relating to the investment is captured in a form that is not subject to cabinet-in-confidence conventions. This way, agencies can return to the investment blueprint as outlined in the investment business plan, for reference or update, as the investment progresses.

3.4 Stage 3: Procure

'Make sure the market interface involves a shared understanding of the need with clear specifications and expectations.'

Following the decision to proceed and fund the proposal, the investment enters the project procurement process. This should be aligned with the procurement strategy developed in the business case. Tendering is a phase of the procurement process in which the government seeks offers from suitable suppliers and selects the one that offers best value for money.

Key question at this stage:

- What is the preferred procurement option?

Tendering is a communication process in which the government and prospective suppliers work together to establish a shared understanding of the project's requirements. Clarity in the statement of requirements is critical to provide tenderers with certainty on which they can plan and price offers and for government to avoid costly contractual amendments during delivery.

The outcome of the tendering process is a commercial one, achieved through a process that is formal and standard in government. However, tendering is not just a routine. It involves strategic considerations ranging from supplier market issues to internal resources and capabilities to the project's risk profile. These considerations can lead to refining the procurement strategy.

The tendering process needs to be tailored according to the requirements, relationships with and within the supplier market, and the existing commercial realities. Such matters need to be analysed before commencing a tendering process so that their implications for the process and outcome are clearly understood.

3.4.1 Role of long-term planning at this stage

Confirm that the procurement methodology is consistent with the service needs and aligns with the long-term service objectives of the department. Ensure that implementation dependencies are incorporated in the procurement approach. Ensure the tender response addresses the department's long-term service requirements. Note: Some investments take considerable time to progress through the investment lifecycle. Investment logic should be assessed against revised long term plans to ensure the service need has not evolved.

3.4.2 Outputs for submission to government

The key deliverable for this phase is the awarding of a contract to the successful tenderer. Prior to reaching this point it may be necessary to prepare and evaluate an:

- EOI; and
- RFT.

Project reporting commences in this stage of the lifecycle, and you are required to submit project status reports that report on time, budget, scope and risks.

3.4.3 If your project is HVHR

You are also required to submit your EOI, RFT, evaluation report and proposed contract to the Treasurer for a robustness assessment. Your project reports will also be analysed and you may receive requests to address concerns.

A Gate 3: Readiness for market and Gate 4: Tender decision review must be undertaken prior to going to tender and awarding the contract respectively. For further information, see the DTF website.

Internal decision point

For any investment, agencies should consider at this point whether the proposed contractual arrangements are sufficiently robust and flexible to deliver benefits sought within the required timeframe and budget.

For HVHR investments, the decision will have been informed by the Treasurer’s robustness assessment.

3.5 Stage 4: Implement

‘Share the vision and work together with stakeholders to deliver it.’

During the period when the solution is being implemented the project team will be focussing on managing the project delivery, but the investor needs to be monitoring more than just schedules and budgets. This broader governance focus is on: whether the solution is and remains robust in the period before moving into operation; how ready the organisation is to implement the business changes that occur before and after delivery; the effectiveness of contract management arrangements that are in place or being arranged; and whether there is a basis for evaluating ongoing performance.

Key questions to ensure the project is on track:

- Is the investment proceeding as planned?
- Is the investment logic still sound?

While the logic for an investment was clear at the time that the investment decision was made, inevitably things will change as time progresses. It is therefore necessary to periodically review the ongoing need for an investment and to confirm that the investment solution remains both valid and viable. One mechanism to do this is by undertaking periodic investment reviews. Where it is found that an investment solution is no longer valid or viable, it is recommended you contact your DTF representative. It may be appropriate to go back to government to obtain a decision on how to proceed.

Government decision point

Taking into consideration the ongoing need for the investment and the suitability of the existing solution and its delivery, a decision is taken to either continue to implement the planned solution, to change the previous solution or to discontinue the investment.

3.5.1 Project management standards

Project management is a formalised and structured approach to delivering a particular output delivering specifically defined products by a certain time, to a defined quality and with a given level of resources so that planned outcomes can be achieved.

Key principles of good project management are:

- Projects need a well-defined management plan 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 intended to deliver;
 - how the outcome is to be achieved; and
 - who is responsible for achievement.

A project management methodology (PMM) is a documented method of managing projects in a structured, logical and organised way, following defined steps.

Summary: Investment lifecycle and high value/high risk guidelines

The application of any general PMM requires appropriately considering the corporate and business culture that forms a particular project's environment.

DTF does not mandate a PMM, and recognises that departments may have established project management practices, and potentially use different PMMs according to the size and nature of their projects.

3.5.2 Role of long-term planning at this stage

Investment scope and scale change may be necessary throughout the implementation stage: identify, quantify and manage the impacts of such changes on the long-term service vision and objectives.

3.5.3 Outputs for submission to government

Project reporting continues in this stage of the lifecycle, and you are required to submit project status reports to DTF to monitor the project's implementation.

Investment reviews are conducted at predetermined time intervals during the project delivery phase in the investment lifecycle, with the objective to determine whether the logic for the investment remains valid. This information, considered with budget and schedule information, then allows the investor to make informed decisions regarding the future of the investment. If the project is identified through the Gateway PPM as being medium to high risk, a Gateway review process *Gate 5: Readiness for service* review may be undertaken prior to operational handover.

3.5.4 If your project is HVHR

If the project is HVHR, a Gate 5: Readiness for service review must be undertaken during implementation and prior to handover respectively.

For further Gate 5 reference and guidance go to the DTF website.

3.6 Stage 5: Realise

‘The only real mistake is the one from which we learn nothing.’

– John Powell

Frequently once the asset is commissioned and in operation, the investment is observed from the perspective of budget and schedule outcomes. From an investment perspective these are not the most important measures of success. The more important question is: Did the investment result in a value-for-money outcome?

Key questions:

- Are the benefits being delivered?
- What benefits were delivered?
- What lessons were learnt?

3.6.1 Benefits realisation review

The final guideline outlines factors to be examined when a project has been delivered, its operational status and the ability to deliver benefits as planned. This review provides the opportunity to capture the lessons learned during the project – both positive and negative – and confirm that the outcomes of the investment are being achieved. By undertaking this process, benefits that have not been delivered may be identified and ways to realise them developed. In addition, previously unrecognised benefits may be noted.

Using the key performance indicators (KPIs) identified and defined in the benefit management plan, it is now possible to implement a simple benefits tracking and reporting system. The Investment Management Standard provides a tool in which the expected benefits and KPIs and the actual achievement of these can be recorded. These are then depicted as two curves: one representing the expected achievement of benefits and the other representing the actual achievement.

3.6.2 Role of long-term planning at this stage

Investment scope and scale change may be necessary throughout the implementation stage: identify, quantify and manage the impacts of such changes on the long-term service vision and objectives.

3.6.3 If your project is HVHR

If the project is HVHR a Gate 6: Benefits realisation review will be undertaken. For further Gate 6 reference and guidance go to the DTF website.

Agency decision point

Taking into consideration the ongoing need for the investment and the suitability of the new solution and its delivery, central and line agencies will monitor the investment to assess whether the investment has delivered the benefits sought.

What should we learn from the investment process for future reference?

4. Scalability and skills

4.1 Process outline based on size of investment

By now, investors and project management teams should have a clear understanding of the five investment guideline documents and the questions they raise. You should also have a better understanding of the investment risk, size and cost. The assessment matrix (Table 4) allows investment team members to plot the investment’s cost and risk against the lifecycle and identify the work that needs to be done. The extent of uncertainty about risk or other issues should be made clear.

Complexity/ cost	Small/simple and low risk	Medium and medium risk	Complex and high value and/or high risk
Conceptualise	Conduct research Submit strategic assessment	Conduct research Submit strategic assessment	Conduct research Develop preliminary business case Gate 1 review occurs Submit preliminary business case
Prove	Revisit strategic assessment, validating its continuing accuracy Build evidence Submit full business case	Revisit strategic assessment, validating its continuing accuracy Build evidence Submit full business case	Revisit preliminary business case, validating its continuing accuracy Build evidence Submit draft full business case to the Treasurer for robustness assessment Gate 2 review occurs Submit final full business case to government for funding consideration
Procure	Develop procurement strategy Submit project status reports	Develop procurement strategy Tendering decision delivered Submit project status reports	Develop procurement strategy Gate 3 review occurs Submit EOI, RFT, evaluation and contract to the Treasurer for robustness assessment Gate 4 review occurs Tendering decision delivered Submit project status reports
Implement	Develop project management framework Submit project status reports	Develop project management framework and conduct investment review. Submit project status reports	Develop project management framework and investment review Produce project status reports Gate 5 review occurs

Complexity/ cost	Small/simple and low risk	Medium and medium risk	Complex and high value and/or high risk
Realise	Produce benefit realisation reports*	Produce benefit realisation reports	Produce benefit realisation reports Gate 6 review occurs

* optional

Table 4 Assessment process based on size and complexity of investment

Note:

This matrix is a guide to resources and requirements for projects of varying types, scale, complexity and risks. It is important to recognise that a small project for one department may constitute a large project for another; consequently, dollar values have been avoided. Departments may have additional requirements or pre-existing expertise that affect how they apply these tools.

The investment lifecycle website can help identify the most valuable support material for any phase of the investment.

4.2 Cost accuracy

The accuracy of cost estimates change as the project develops. Risk-adjusted costs are expected to be developed for different phases of the project’s development. Table 5 provides broad guidance on cost accuracy that might be expected through the project development phases.

STAGE	PROCESSES	ESTIMATE ACCURACY	MILESTONES	HVHR ONLY
1 Conceptualise	Investment logic Problem, benefits identification, strategic response, indicative solutions	Order of magnitude estimate type -40% to +60%	Strategic assessment	
	Project scoping Project option appraisal, define project scope (and options for further consideration) with concept design	Concept estimate -30% to +60%	Gate 1 - Concept and feasibility	✓
			Preliminary business case	✓
2 Prove	Pre-feasibility Assessment of project options, initial risk and environmental assessment	Developed concept estimate -20% to +40%	Internal project agency review	
	Feasibility Integration of risk assessment, preliminary design, financial model, whole of life costing and procurement strategy	Preliminary design estimate -15% to +25%	Gate 2 - Full business case	✓
			Full business case	
3 Procure	Procurement Staged tender process including tender preparation and evaluation	Tender estimate -10% to +15%	Gate 3 - Readiness for market	✓
			EOI RFT/P Preferred bid	
			Gate 4 - Tender decision	✓
	Negotiate contract price agreement	Tender price /contract -5% to +10%	Contract	

Table 5 Expected cost accuracy

Note: Proposals that are unable to comply with the indicated ranges of accuracy should explicitly identify the process adopted and the range of accuracy applicable. This may arise where a project is being fast-tracked for government consideration. In this event it is important to convey the uncertainty in the estimates that may, for example, reflect lack of clarity in scope or design.

Costs for the stages leading up to the business case phase of project development will necessarily have an element of uncertainty about them, but are useful to evaluate the investment and test the overall suitability and viability of a proposal.

A range of issues – including the asset class, the uniqueness of the project or facility, the level of building and construction activity in the market and the buoyancy of the broader economy – may influence the reliability of a proposal’s cost estimate.

4.3 Investment development funding

For some projects, especially high value / high risk projects, agencies may require assistance to fund proposal development. In general the strategic assessment development should be funded internally, but agencies may need to make an investment development funding submission to progress the proposal further.

The investment development funding submission should be based on the strategic assessment (see template), but will focus on the indicative costs, tasks and staging of the proposal development (with only a ball park estimate of the project funding for the indicative solution). If the agency has sufficient funding to develop the preliminary business case the submission should be based on this rather than the strategic assessment.

To allow more timely progression of proposal development, funding may be provided for development of:

- project scoping leading to the preliminary business case;
- pre-feasibility and assessment of project alternatives; and
- feasibility leading to the full business case;

with decision milestones for Government reconsideration of the proposal at preliminary business case and ultimately full business case for project funding. The project development funding process is intended to be flexible. This approach avoids the delays inherent in the annual budget process while retaining the option for Government to determine that the proposal should not progress, in which case the balance of funding would revert to Government.

Initially the investment development funding submission should form part of the budget process, but milestone decision for continuation of funding can be made out of cycle.

4.4 Resourcing the investment lifecycle

4.4.1 Managing and planning resources

In addition to obtaining the skills required to produce the lifecycle guidelines’ outputs, and before developing an investment proposal, departments and agencies are also encouraged to do the following.

- Ensure appropriate checks and balances are in place to verify and test ideas, information, analysis and technical data:
 - Consider quality assurance by establishing formal evaluation units within or across departments, to verify or peer review analysis and technical data outcomes.
 - Consult with the relevant DTF representative regularly as an investment progresses through the lifecycle.

Scalability and skills

- Maintain an accessible archive that houses information on each step of the investment development process, with appropriate document control.
- Prior to developing an investment, factor in the following resourcing requirements:
 - Assess the level of research that has been and needs to be conducted to support the proposal. Consider deferring a proposal if further research is required.
 - Assess the cost and availability of specialist resources that may be required.
 - Assess the cost and need for quality assurance.
 - Ensure stakeholders who are consulted are made aware of consultation outcomes.

4.4.2 Skills required

Moving your investment through the investment guidelines can be resource-intensive. The lifecycle guidelines emphasise the importance of considering broad, whole-of-government or cross-agency approaches (where appropriate) to ensure that common problems are being addressed in a coordinated and efficient way. However, lead responsibilities and accountabilities need to be clearly set out and not assumed.

Competencies and skills required through the investment lifecycle include capabilities in:

- high-level roles such as public policy development, long-term planning (e.g. transport and urban design) and governance;
- broad-based areas surrounding commercial and legal acumen, service delivery and stakeholder management, and the integration of these aspects in the policy context; and
- more specific application of technical skills in areas such as contract development and management, engineering and design, financial analysis, project costing, project and risk management and communications.

All of these skills are required to varying degrees in different stages to ensure the investment achieves the optimal value-for-money outcome in the public interest. The public interest is also served by balancing the requirement for in-house skill development and knowledge management with the efficiency of engaging appropriate private sector expertise. In this context it is worth noting that **government cannot transfer the risks surrounding protecting the public interest.**

In order to ensure that lifecycle guidelines outputs are developed to high standards, organisations should ensure staff are appropriately skilled at each step of the investment lifecycle process. Skills required for each step of the lifecycle guideline are outlined in Table 6.

Skills required	Conceptualise	Prove	Procure	Implement	Realise
Strategic thinking and planning	✓	✓	✓	✓	✓
Policy advice	✓	✓	✓	✓	✓
Governance	✓	✓	✓	✓	✓
Research/interpretation	✓	✓			✓
Project management		✓	✓	✓	✓
Business writing	✓	✓			

Scalability and skills

Skills required	Conceptualise	Prove	Procure	Implement	Realise
Communications/engagement		✓	✓	✓	✓
Governance design	✓	✓		✓	
Analysis	✓	✓			✓
Modelling	✓	✓		✓	
Operational/technical	✓	✓	✓	✓	✓
Risk management	✓	✓	✓	✓	✓
Demand management	✓	✓			✓
Social, environmental and economic evaluation		✓			
Financial analysis	✓	✓	✓		
Procurement		✓	✓		
Legal		✓	✓	✓	
Benefit evaluation	✓				✓

Table 6 Skills required over the lifecycle of an investment

4.4.3 Key roles

Stage 1: Conceptualise

Primarily carried out by the team developing the project, and may include departmental leaders, consultants and subject matter experts.

Stage 2: Prove

Developing the full business case requires further technical skills, particularly in relation to proving the proposal’s deliverability. Key roles include experienced project managers, commercial advisory professionals, engineers and designers as required.

Stage 3: Procure

Key roles include a project director, project manager and communications manager. A steering committee also needs to be in place. This part of the investment lifecycle relies largely on advice from professional in-house or contracted services, for example, quantity surveyors, architectural advisers, planning advisers, operational managers and other technical advisers such as procurement and risk advisers. An evaluation team to assess tenders against evaluation criteria to identify the most suitable offer is also required.

Stage 4: Implement

Project implementation officers will be required. The roles required may vary in accordance with the specific type of project being delivered. As well as the skills described in stage 3, additional roles may need to be filled, such as a contract manager.

Stage 5: Benefits

In evaluating the project after completion, a multidisciplinary team of project performance measurement professionals is required. It will be necessary for the team to draw on the documentation and personnel involved in the project throughout its life, from *Stage 1: Conceptualise*, through to project handover at the end of *Stage 6: Implement*.

4.5 Further information and training

At each stage of the investment lifecycle, the 2012 series incorporates general guidelines and a set of technical guidelines that provide further assistance on particular aspects of investment development. In addition the Lifecycle guidelines rely on core reference material and supplementary information from the Victorian Government and elsewhere. A web-linked resource directory is provided in each guide to allow easy access to these materials.

For further information or to discuss training or facilitation in relation to the lifecycle please email investmentlifecycle@dtf.vic.gov.au.

5. Glossary

Asset management framework: A series of processes and products that together assists agencies to fulfil the Victorian Government’s asset management obligations and policy objectives. The framework encompasses asset planning including preparation of long-term planning documents that guide investment planning in agencies.

Appraisal: The process of defining objectives, examining options and weighing up the costs, benefits, risks and uncertainties of those options before a decision is made.

Asset option: A means of satisfying service needs by investing in existing assets or creating new assets.

Assets: Any physical asset that must be acquired to enable the identified changes to occur. Examples of these are hospitals, pipelines, plants or computer systems.

Base case: The base case is a realistic option that involves the minimum expenditure to sustain existing standards of service delivery or to achieve previously agreed service standards. Therefore, the base case does not always mean ‘do nothing’; rather, it is the minimum essential expenditure option (e.g. carrying out obligatory works to meet safety and health regulations).

Benefit: The value that resolving the problem will provide to the organisation or its customers and consequently to government. Benefits are normally a positive consequence of responding to the identified *problem*. Each claimed benefit must be supported by key performance indicators (KPIs) that demonstrate the specific contribution of an investment to the benefits sought by the organisation. The practical application of this can be seen in the Benefit Framework.

Benefit management plan: A short document that specifies the benefits an investment will need to deliver to successfully address an identified problem. It includes the measures to be used as evidence that the benefits have been delivered. These measures are initially used to select the most suitable response to the problem. The benefits management plan also defines the dates the benefits are expected to be delivered, who is responsible for their delivery and how they will be reported.

Benefit reports: Regular reporting of the delivery of benefits, which are tracked and reported consistently with the benefit management plan.

Capital expenditure: Expenditure involved in creating or upgrading assets.

Change: The things that must be done by the business if the benefits are to be delivered. The changes provide detail of how the strategic response will be implemented to action the benefits.

Concept assessment: The phase of the project lifecycle during which a need is translated, where justified, into a proposal where outcomes, purpose, critical success factors and the level of strategic alignment are clearly defined.

Conceptualise stage: A precursor to the full business case, the strategic assessment is a high-level process that translates an investment concept into a robust proposal that demonstrates policy and strategic merit. It is intended as a cost-effective (around 1–5 per cent of the cost of a full business case) high-level decision-making process to allow decision-makers to consider the merits of a proposal and to determine whether the investment warrants further development. Undertaking the conceptualise stage is intended to provide decision-makers with a high degree of confidence that the investment they are considering responds to an immediate problem or need, has valuable benefits to the organisation, and is the right way and right thing to be investing in.

Cost: An expense incurred in the production of outputs.

Cost-benefit analysis: A technique that can express in a comparable (monetary) way the net effect of the costs and benefits associated with an investment proposal.

Demand management: A management technique used to identify and control demand for services.

Depreciation: The allocation of the cost of an asset over the years of its useful life.

Dis-benefits: A negative impact that is likely to occur as a direct consequence of successfully implementing a particular solution.

Disposal: The process in which an asset is disposed of or decommissioned – resulting in removal from an entity's balance sheet.

Dis-benefit: A negative impact that might occur as a direct consequence of implementing a particular solution.

Economic cost (or opportunity cost): The value of the most valuable of alternative uses.

Enabling asset: Any physical asset that must be built or purchased for the identified changes to occur. This may be, for example, a hospital, a pipeline or an ICT system.

Evaluation: The process of defining objectives, examining options and weighing up the costs and benefits before a decision is made to proceed.

Financial analysis: An investment evaluation technique that is confined to the cash-flow implications of alternative options and is undertaken from the perspective of the individual department or agency or government as a whole.

Full business case: A document that forms the basis of advice for executive decision making for an investment. It is a documented proposal to meet a clearly established service requirement. It considers alternative solutions, and identifies assumptions, benefits, costs and risks. The development of the business case is based on a clear statement of the problem and benefits from addressing that problem.

Gateway review process: A review of a procurement project or a program of works/activities carried out at critical points of a project/program's development by a team of experienced people, independent of the project team. These critical points are known as Gateways or Gates. There are six gateways during the lifecycle of a project and reoccurring program reviews for programs of works/activities.

High Value High Risk framework: HVHR projects are those that have a TEI of more than \$100 million, are classified 'high risk' using the Gateway Project Profile Model (PPM), or are nominated by the government as being part of the HVHR process.

Impact: The cost, benefit or risk (either financial or socioeconomic) arising from an investment option.

Investment: The commitment of the resources of an organisation with the expectation of receiving a benefit.

Investment concept brief: A two-page document that shows the logic underpinning an investment and identifies the likely costs, risks, dependencies and deliverables of the proposed solution. It summarises the merits of an investment and allows decision-makers to prioritise competing investments before proceeding to the business case.

Investment decision-maker's checklist: A tool that assists in shaping a robust business case. It is also used by DTF and DPC to assess business cases.

Investment logic map: A simple single-page depiction of the logic that underpins an investment. It provides the core focus for an investment and is modified to reflect any changes to the investment logic throughout its lifecycle.

Investment Management Standard: A best-practice approach applied over the life of an investment that aims to reduce the risk of investment failure, provide greater value-for-money and drive better outcomes. It has been designed to enable the investor to shape and control investments throughout their lifecycle.

Investment reviews: Formal scheduled periodic reviews that aim to confirm that the logic for an investment remains valid.

Investor: The person who has an identified business problem (or opportunity), will be responsible for making (or advocating) a decision to investment, and who will be responsible for delivering the expected benefits. This person is often referred to as the 'senior responsible owner'.

Lifecycle cost: The total cost of an item or system over its full life. It includes the cost of development, production, ownership (operation, maintenance, support) and disposal, if applicable.

Long-term planning: Outlines an agency's 10-year strategic vision and objectives for service delivery. It considers evolving demand and supply inputs for services and impacts of change on service delivery requirements. It also outlines the agency's preferred responses to manage and adapt to change.

Key performance indicator (KPI): An indicator that, with its associated measures and targets, will provide evidence that expected benefits have been delivered. The KPI selection criteria is used to determine the most suitable KPIs.

New asset option: Acquisition, transfer or commissioning of an existing asset, or creation of a new asset.

Non-asset option: Under this option, service capacity is met without creating additional assets. This could be done through reconfiguration of the way the services are provided

(contracting out, increased use of existing or private assets, or reduction of demand through selective targeting).

Optimism bias: This describes the tendency for base capital and operating costs, works duration and risks to be systematically underestimated during the business case development phase. This results in project budgets based on an optimistic outcome rather than on a rational weighting of gains, losses and the considered likelihood that adverse hazard events may impact on the project.

Partnerships Victoria: The Victorian framework for a whole-of-government approach to providing public infrastructure and related services through public–private partnerships.

The policy focuses on whole-of-life costing and full consideration of project risks and optimal risk allocation between the public and private sectors. There is a clear approach to value for money assessment and the public interest is protected by a formal public interest test and the retention of ‘core’ public services. Partnerships Victoria is most useful for major and complex capital projects with opportunities for innovation and risk transfer.

Preliminary business case: A precursor to the full business case required for HVHR projects. For a minimal cost (around 10–20 per cent of the cost of a full business case) the preliminary business case provides enough evidence to enable decision-makers to decide:

- Is this the right thing to invest in? (with a high level of certainty); and
- Can it be successfully delivered? (with a lower level of certainty).

Problem: The reason a new investment needs to be considered. It is effectively the ‘call to action’ for the investment. A lost opportunity or service need is considered to be a problem. Each problem statement is written in plain English and must communicate both what is broken or needed, and associated implications. In other words, the ‘problem’ should include both cause and effect.

Project alliancing: A form of procurement where the State or another government entity collaborates with one or more service providers to share the risks and responsibilities in delivering the capital phase of a project. It seeks to provide better value for money and improved project outcomes through a more integrated approach between the public and private sectors in the delivery of infrastructure. Project alliancing should generally only be considered in the delivery of complex and high-risk infrastructure projects, where risks are unpredictable and best managed collectively.

Project lifecycle: The stages of an asset between the identification of the need and the delivery and handover of an initiative.

Project option: These explore how the preferred strategic response might be implemented. They might be business changes that could be made or assets that could be acquired as a way of delivering the benefits expected from an investment (as specified in a benefit management plan). These must be consistent with the identified strategic response.

Project options analysis: A process in which a range of project options (both asset and non-asset) are evaluated. The most cost-effective options are then selected for more detailed evaluation through a business case.

Proposal: An idea for a policy, program or project that is under development and appraisal.

Recommended solution: The set of business changes and assets (project or program) that have been identified as the best option for responding to the identified problem based on value for money and the benefits that will be delivered.

Recommended action plan: In order to maintain the two core principles of the confidentiality and non-disclosure principles of the Gateway review process, a recommendation action plan (RAP) template was created. The RAP enables red flag recommendations from the Gateway report to be presented in a separate document for distribution to the Treasurer (via DTF), thus maintaining the overall confidentiality of the Gateway report. The RAP is used by projects to report risk mitigation responses to any red rated individual recommendations, without disclosing the overall assessment of the project and all recommendations.

Residual value: The net value applied to the asset at the end of the investment lifecycle or evaluation period; this may result in either a positive or a negative value.

Resources: Labour, materials and other inputs used to produce outputs.

Revenue: Inflows or other enhancements, or savings in outflows, of service potential or future economic benefits in the form of increases in assets or reductions in liabilities of the entity (other than those relating to contributions by owners) that result in an increase in equity during the reporting period.

Risk: Risk is often characterised by reference to potential events, consequences, or a combination of these, and how they can affect the successful deliver of the benefits expected of the investment. Risk is often expressed in terms of a combination of the consequences of an event or a change in circumstances, and the associated likelihood of occurrence.

Risk versus uncertainty: Uncertainty is the extent of variability in the capacity to achieve the desired outcomes or the outcomes themselves. Risks lead to uncertainty.

Scenario analysis: Scenario analysis is a procedure for providing the decision-maker with some information about the effect of risks and uncertainties on an investment. In a scenario analysis, a set of critical parameters and assumptions that define a particular scenario are identified and varied to reflect a best-case and a worst-case scenario.

Senior responsible owner (or project sponsor): The SRO is has accountability and responsibility for a project. The SRO is the effective link between the organisation's senior executive body and the management of a project. The Sponsor is also a core member of the Project Steering Committee usually the Chair. In addition to being an experienced executive well versed in the details of organisational stakeholder and client requirements and relationships, the sponsor needs to have experience in project management.

Social benefit: The estimated direct increase in the welfare of society from an economic action. It is the sum of the benefit to the agent performing the action, plus the benefit accruing to society as a result of the action.

Social cost: The estimated direct total cost to society of an economic activity. It is the sum of the opportunity costs of the resources used by the agent carrying out the activity, plus any additional costs imposed on society from the activity.

Strategic intervention: The high level strategic action that could be taken as a response to the identified problem. A valid strategic intervention must have the potential to deliver some or

all of the identified KPIs and their target measures. To ensure it is sufficiently high level, its implementation must also allow for more than one possible solution.

Strategic option: Comprises either one or a mix of strategic interventions. The *preferred* strategic option becomes the strategic response.

Strategic options analysis: Aims to identify and explore a range of possible strategic interventions to 'the problem' and determine the strategic response best suited to the need. The second aspect of the analysis is to explore a range of project options consistent with the preferred strategic response that will deliver the best result and provide a shortlist for detailed evaluation in the business case.

Value-for-Money: is a balanced benefit measure covering quality levels, performance standards, risk exposure, other policy effects and other considerations such as social and environmental impacts as well as cost. For capital assets, value for money should be assessed on a 'whole of life' or 'total cost of ownership' basis.

Value management: A technique that seeks to achieve optimum value for money, using a systematic review process. The essence of value management is a methodical study of all parts of the product or system to ensure that essential functional requirements are achieved at the lowest total cost. Value management examines the functions required from a product, functions actually performed, and roles of the product's components in achieving the required level of performance. Creative alternatives that will provide the desired functions better or a lower cost can also be explored.

Weighting and scoring: A technique that assigns weights to criteria, and then scores options in terms of how well they perform against those weighted criteria. Weighted scores are summed, and then used to rank options.

Whole-of-life costs: Whole of Life costs are all additional costs required to achieve the investment outcomes over the life of the asset or service delivery. This includes all costs (and revenues) needed to design, develop (construct and/or install) and operate any new asset, along with the costs and revenues associated with any service provision. All costs can be discounted to a Net Present Value to enable fair financial comparison of one investment proposition with another. A Whole of Life cost appraisal is especially important in ensuring project teams consider the long term operational costs of a project and consequently provide a new capital asset (if required) which optimises these investment outcomes.

