NEW ZEALAND INFRASTRUCTURE COMMISSION
Te Waihanga

JULY 2024

Infrastructure Priorities Assessment Framework

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Infrastructure Priorities Programme

New Zealand Infrastructure Commission / Te Waihanga

The New Zealand Infrastructure Commission Te Waihanga seeks to transform infrastructure for all New Zealanders. By doing so our goal is to lift the economic performance of Aotearoa and improve the wellbeing of all New Zealanders.

We are an autonomous Crown entity, listed under the Crown Entities Act 2004, with an independent board. We were established by the New Zealand Infrastructure Commission/Te Waihanga Act 2019 on 25 September 2019.

Information on the Commission is available at www.tewaihanga.govt.nz/

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Disclaimer

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Introduction

The Infrastructure Commission's role

Our role in assessing infrastructure proposals

The New Zealand Infrastructure Commission's main function is to "co-ordinate, develop, and promote an approach to infrastructure that encourages infrastructure, and services that result from the infrastructure, that improve the well-being of New Zealanders."[1]

Among other things, our legislation directs us:

> *to provide and co-ordinate information about current and proposed infrastructure projects*[2]

The Assessment Framework supports our work to implement this function in a consistent and transparent way. It outlines how we assess infrastructure proposals that are in the planning stage, and which are currently unfunded. It applies to proposals that directly relate to infrastructure (for example, maintenance of existing assets or construction of new assets) or to avoiding the need for future infrastructure spending.

The Framework assesses proposals against the strategic objectives and best practice decision-making principles outlined in *Rautaki Hanganga o Aotearoa: The New Zealand Infrastructure Strategy 2022–2052* (Infrastructure Strategy).

The importance of project planning and prioritisation

While New Zealand spends a significant amount on infrastructure, we are comparatively weak at translating those dollars into higher-quality infrastructure.[3]

The Infrastructure Strategy highlights that one way to change this is to improve our decision-making.

Compared with other OECD countries, New Zealand makes limited use of cost-benefit analysis to inform decision-making. It is one of only two countries where cost-benefit analysis does not play any decisive role in public infrastructure decision-making processes.[4]

While New Zealand has well-established guidance on preparing business cases for new public investments, compliance with these requirements lags behind. For instance, fewer than half of the initiatives reviewed by the Treasury's Capital Panel for the 2021 Budget had completed business cases.[5] Poor planning and investigation in turn increases the likelihood that projects will fail to deliver the benefits they expect, blow out on costs, or both.[6]

One of the Commission's roles is to improve planning and decision-making using the Infrastructure Priorities Programme (IPP), as part of its objective of improving outcomes for infrastructure delivery. The IPP is also designed to ensure that current processes for project assurance (for example, Treasury's Better Business Cases model) are being used.

1 Paragraph 9: https://www.legislation.govt.nz/act/public/2019/0051/latest/whole.html
2 Paragraph 10(e): https://www.legislation.govt.nz/act/public/2019/0051/latest/whole.html
3 https://media.umbraco.io/te-waihanga-30-year-strategy/2ilbayro/investment-gap-or-efficiency-gap.pdf
4 https://qdd.oecd.org/subject.aspx?Subject=17375f7e-fc6c-4a5f-81bf-5b7e6a1da53c
5 Te Tai Ōhanga – The Treasury. Treasury Report – Capital Panel Advice Budget 2021. Report No: T2021/465. File Number: ST-4-8-4-11-2. Wellington, New Zealand: The Treasury. August 2021.
6 Merrow, E.W, Industrial Megaprojects: Concepts, Strategies, and Practices for Success. Hoboken, New Jersey: John Wiley & Sons. 2011.

How and when will we use this Assessment Framework

Identifying infrastructure priorities, in addition to being a key part of the Commission's role, is an important component of the National Infrastructure Plan.

The National Infrastructure Plan is a long-term plan to inform infrastructure decision-making. It includes information on current projects (the Commission's National Infrastructure Pipeline), the assessment of infrastructure priorities, and future long-term infrastructure needs.

The Commission's assessment of projects using this Assessment Framework is the mechanism we will use to identify projects and proposals of national importance that are priorities. The result of these assessment will be a menu of high-quality vetted proposals available to decision-makers and the public.

In addition to the National Infrastructure Plan, this assessment framework will inform our advice on proposed infrastructure projects and programmes submitted to the Treasury for central government funding.[7] We will also use this assessment framework when we engage with infrastructure providers and project teams on specific projects or programmes.

The assessment framework is designed to provide consistent, standardised, and transparent advice for all of the processes.

This is not a project appraisal manual

The Assessment Framework is not a project appraisal manual. It does not advise infrastructure providers how to plan and evaluate infrastructure proposals. Nor does it introduce new requirements for project planning and evaluation.

Project teams should continue to use existing guidance, such as the Treasury's *Better Business Case* guidelines and *Guide to Social Cost Benefit Analysis*.

Instead, the Framework outlines how the Commission will assess proposals based on information that project applicants are expected to produce given:

- Investment Management System rules and settings
- existing central government proposal documents and templates (for example, Risk Profile Assessment, Strategic Assessment, Better Business Case)
- other existing guidance.[8]

The intent of the Framework is to help to reinforce and uphold existing requirements for public infrastructure project planning.

How we developed the Assessment Framework

This Assessment Framework was developed by drawing upon international best practice, engaging external reviewers, and testing preliminary framework over existing projects.

To understand best practice and develop key assessment parameters, we engaged Sense Partners/Hadron Group to examine project appraisal systems in other jurisdictions (Australia, South Korea, Chile, World Bank) and identify key features of best practice infrastructure project assessment processes.[9] We also engaged with Infrastructure Australia to understand lessons learnt over previous iterations of their Infrastructure Priority List, which has been operational for over a decade.

7 See Cabinet Paper CO (23) 9 on the Commission's role in this process.

8 https://www.treasury.govt.nz/information-and-services/state-sector-leadership/investment-management-system
https://www.treasury.govt.nz/information-and-services/state-sector-leadership/investment-management/think-investment-possibilities/risk-profile-assessment
https://www.treasury.govt.nz/information-and-services/state-sector-leadership/investment-management/better-business-cases-bbc/bbc-guidance/strategic-assessment
https://www.treasury.govt.nz/information-and-services/state-sector-leadership/investment-management/better-business-cases-bbc

9 Sense Partners/Hadron Group. 25 August 2023. Assessing infrastructure investments: Developing an Assessment Framework for New Zealand's Infrastructure Priority List.

Using this advice, we developed a draft Assessment Framework towards the end of 2023. In February 2024, we tested this framework against real project proposals sent to us for advice as part of Treasury's Budget 2024 process. This allowed us to see where the framework worked well and where it needed improvement.

Following this exercise, we developed the final framework with feedback from various infrastructure experts in New Zealand, as well as the United Kingdom's Institution for Civil Engineering – Enabling Better Infrastructure team.

While this Assessment Framework was developed using outside review and real-world application, international best practice shows that project assessment frameworks are most valuable when they are iterated. We expect to periodically review and update this assessment framework using a structured process, engaging key stakeholders for feedback.

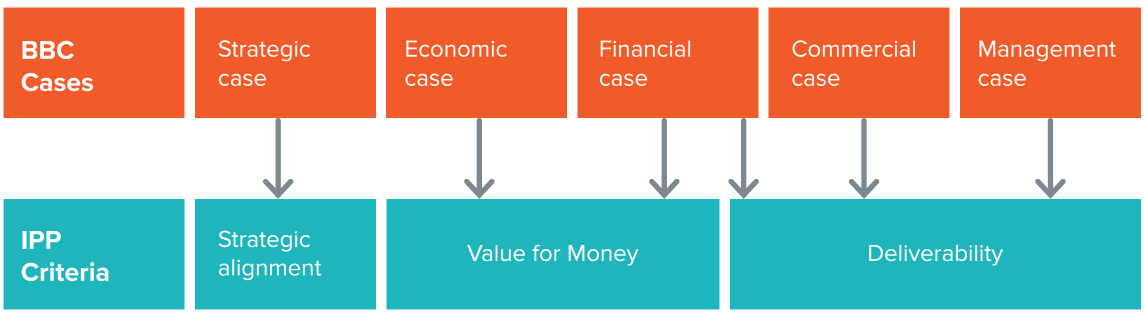
What we assess through this framework

To be assessed favourably against the Infrastructure Strategy, a proposal must satisfy all of three Assessment Criteria:

- **Strategic alignment:** Does a proposal support future infrastructure priorities and/or improve existing infrastructure systems and networks that New Zealanders need?
- **Value for money:** Does a proposal provide value to society above the costs required to deliver, operate, and maintain it?
- **Deliverability**: Can a proposal be successfully implemented and operated over its life?

These three criteria coincide with the five cases in the Better Business Case model.[10]

Figure 1: Mapping the Assessment Framework to Treasury's Better Business Case Five Case Model



The three assessment criteria are reviewed separately and considered to be equally important. We do not trade-off criteria against each other or weight them to arrive at an overall score for proposals.

Prior to assessment against these three criteria, proposals must pass a **triage** step to ensure that the required information is complete, that they relate to infrastructure, and that they are potentially of national importance.

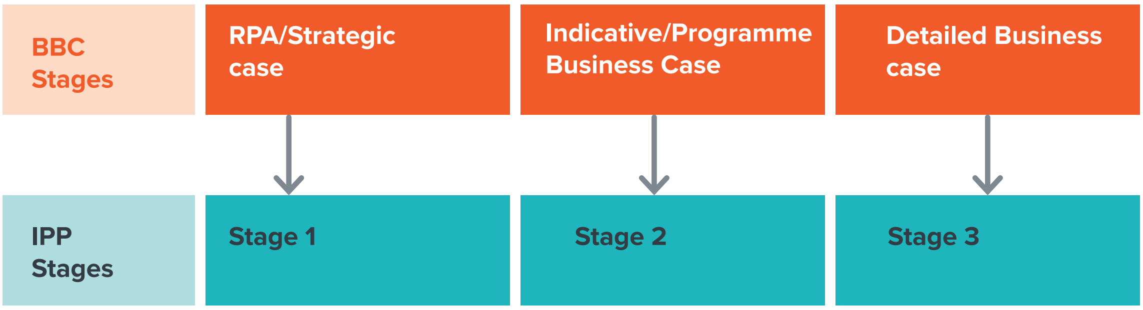
[10] https://www.treasury.govt.nz/information-and-services/state-sector-leadership/investment-management/better-business-cases

When we assess infrastructure proposals

The three criteria above will be assessed at three separate stages in the planning phase for an infrastructure project. These stages are aligned with the Treasury's *Better Business Case* guidance (Figure 2):

- **Stage 1** assesses a Strategic Assessment submission that identifies a problem or opportunity that may require an infrastructure solution
- **Stage 2** assesses an Indicative/Programme Business Case submission that identifies and assesses a set of options for addressing the problem or opportunity
- **Stage 3** assesses a Detailed Business Case submission that identifies a preferred option for addressing the problem or opportunity. This stage can be followed by a decision about whether to proceed with the project.

Figure 2: Assessment Process alignment with Treasury's Better Business Case guidance



It is important to review and assess proposals at all stages.[11] Stage 1 is critical to identifying longer-term infrastructure needs, while Stage 2 is where the priority list can most strongly influence project development and funding decisions, as well as provide transparency to the public on infrastructure decision-making. A Stage 3 assessment will provide the government and the public high-quality advice and transparency on project funding decisions.

[11] The assessment framework is designed to be flexible and not reliant upon assessments in previous stages. We anticipate receiving submissions for Stage 2 and Stage 3 assessments without having assessed a project at Stage 1.

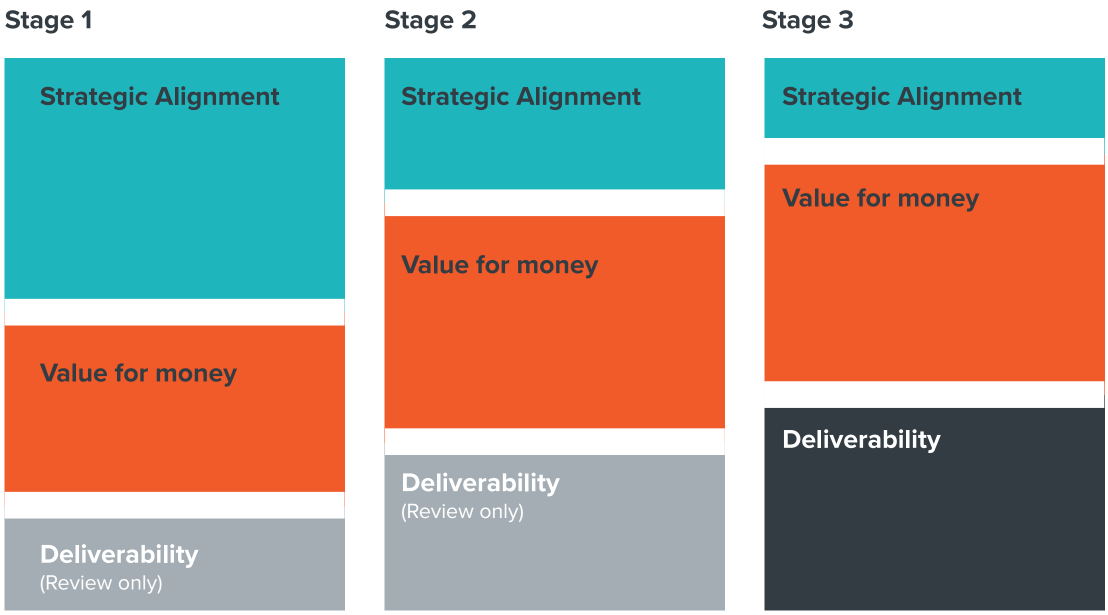
What we consider at each stage

The focus of assessments will change between stages to reflect the type of evidence that is expected to be available at each stage (Figure 3).

Strategic alignment is the core focus at Stage 1. It is also assessed at Stages 2 and 3 to ensure that the proposal still aligns and, where possible, quantifies the scale of contribution towards strategic objectives.

Moving from Stage 1 to 3, the assessment puts more focus on Value for Money and Deliverability. Deliverability is only used as a formal assessment criterion in Stage 3 as opposed to a review item in Stages 1 and 2.

Figure 3: Assessment focus evolves as proposals proceed through stages



To be assessed positively against the Assessment Framework, proposals need to receive a positive assessment against all three criteria at Stage 3, and both the Strategic Alignment and Value for Money criteria at Stage 1 or 2.

If a project does not pass at a later stage, we still may review whether it could receive a positive assessment at an earlier stage. For example, if a project is submitted for Stage 3 assessment but does not satisfy the requirements for Value for Money at Stage 3, we may review whether it would do so at Stage 2.

We also provide supporting guidance to help apply the Framework

The Assessment Framework lays out the foundational principles, parameters, and questions used to complete our assessments.

We also provide supporting guidance on key parts of the framework, such as the Strategic Alignment, Value for Money, and Deliverability assessment criteria. These documents are designed to provide more detail to applicants about how they can make strong cases for these criteria, methodologies for determining whether projects meet these criteria, and worked examples.

We will update supplementary guidance from time to time to ensure that it is up-to-date and that it incorporates feedback from users.

Assessing Stage 1 proposals

Defining problems and opportunities

A **Stage 1** proposal identifies a problem or opportunity that may require an infrastructure solution. This stage is aligned with the Strategic Assessment document required under the Treasury's *Better Business Case* guidance.[12]

A Strategic Assessment identifies a rationale to develop a business case to address a problem or opportunity. This work provides the basis of the Strategic Case for all later business case stages. However, at this stage little information may be available on the costs and benefits of options for addressing the problem or opportunity.

The value of Stage 1 assessments is that they can provide better visibility of long-term needs, help coordinate across proposals, and shape the options that are considered to address the problem or opportunity. However, there is more uncertainty about proposals at this stage, meaning that assessments are less conclusive.

Figure 4: Strengths and limitations of Stage 1 Strategic Assessments

Strengths	Limitations
• Better visibility of longer-term needs • Higher potential volume of submissions • Greater opportunity to influence option identification	• Limited information and evidence, which increases uncertainty • Existing templates may overly focus on solutions rather than underlying problems and opportunities • Greater risk of prioritising a project that turns out poorly

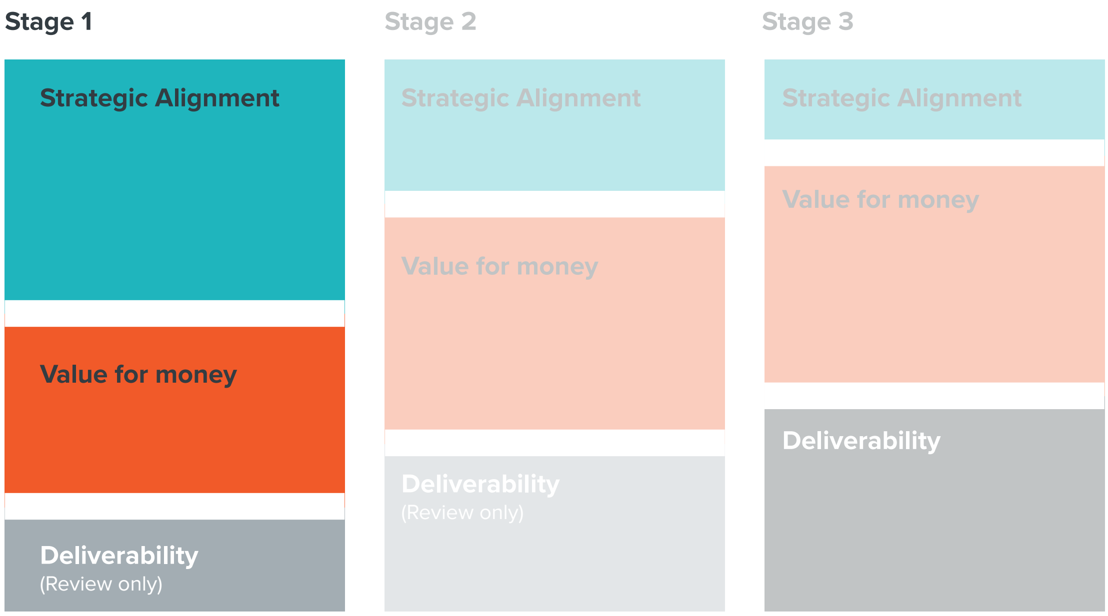
[12] https://www.treasury.govt.nz/information-and-services/state-sector-leadership/investment-management/better-business-cases/guidance

What we assess at Stage 1

At Stage 1, Strategic Alignment is the core focus of the assessment (Figure 5). Value for Money is a secondary assessment criterion, and Deliverability is used as a review question. The focus on Strategic Alignment reflects the high-level nature of early-stage proposal documentation in New Zealand (Risk Profile Assessment and Strategic Assessment). At Stage 1 we expect information on identifying problems and opportunities that may require infrastructure solutions.

Rather than using weightings and making trade-offs between these criteria, we have reflected the greater focus on Strategic Alignment in the types of questions we ask of proposals.

Figure 5: Assessment focus for Stage 1 proposals



Outcomes of a Stage 1 assessment

To be listed as a Stage 1 infrastructure priority, a project must receive either Amber or Green ratings against the Strategic Alignment and Value for Money criteria for this stage. The Deliverability criteria is a review criteria at this stage.

We will provide feedback to applicants detailing how we assessed them against our mandatory questions.

For projects that receive a Red rating in either of the categories, we will provide feedback to applicants with explanations of the ratings, as well as ways to improve any future applications.

Triage step

Prior to assessing proposals, we undertake a triage review to filter out submissions that do not warrant a full assessment. This helps ensure that the Commission is using its assessment resources efficiently, and that applicants find out sooner if their submission is not taken forward to assessment and why.

At each stage, we triage out proposals that answer 'no' to one or more of the following questions.

Stage 1 Triage questions

T1	Is there sufficient information to answer the assessment questions for this stage? Note: Our expectation is that this can be met by satisfying relevant Better Business Case guidelines.
T2	Does the submission directly relate to infrastructure or avoiding the need for future infrastructure spending?
T3	Is the proposal likely to be nationally important, indicated by whole-of-life costs that exceed a threshold of $50 million, evidence that the proposal could make a material contribution to the recommendations or objectives in the Infrastructure Strategy, or a combination of these factors?
T4	Has an investment decision already been made?

We will also triage out proposals that have already received funding. These projects are better assessed through deliverability assessments of committed projects or through post-implementation review, which are not in scope for the Interim Assessment Framework.

Stage 1: Strategic Alignment assessment

Strategic Alignment tests the extent to which a proposal supports future infrastructure priorities and/or improves existing infrastructure systems and networks that New Zealanders need.

Focus of assessment

At Stage 1, we include assessment questions on problem definition, alignment with the New Zealand Infrastructure Strategy or other sector or agency strategies, whether the proposal is nationally significant (i.e., is it of a scale or importance for a national infrastructure priority list), and whether problem/opportunity costs have been monetised (see Box 1).

The overall performance of the proposal against all assessment questions dictates the Strategic Alignment rating.

Assessment questions

Below is a list of questions that will test strategic alignment at Stage 1, along with a brief explanation of the purpose of these questions.

Stage 1 Strategic Alignment assessment questions

S1	Is there a clearly defined problem or opportunity?
	All proposals should have a clearly defined problem (or opportunity) that they seek to address, as this is a core foundation of a good business case.
S2	Have the costs of the problem or value of the opportunity been quantified or monetised? (See Box 1).
	All proposals should provide compelling evidence regarding the magnitude of the problem (or opportunity) they seek to address.
S3	Does the proposal make a meaningful contribution to the five strategic objectives set out in the Infrastructure Strategy (see Box 2)?
	Ideally, infrastructure proposals should make a substantial contribution to the strategic objectives in the Infrastructure Strategy.
S4	Does the proposal make a meaningful contribution to strategic outcomes identified in sector- or agency-level long-term strategy and planning documents?
S4a	If so, does the strategic/asset management document meet quality expectations outlined in relevant guidance documents?
	If the proposal does not make a substantial contribution to the Infrastructure Strategy, it should play a strong role in contributing to the sector's strategic objectives.
S5	Is the proposal addressing a national infrastructure priority?
	This question is intended to test the materiality or significance of the problem or opportunity.

Refer to Appendix A for the complete set of questions at all stages.

Box 1:

Problem and opportunity monetisation

Three main methods are available to size the magnitude of the problem, as outlined below.

Monetise the problem (preferred): The size of the problem is expressed in standardised monetary values in dollar terms. If possible, monetisation of problems should employ parameters published in official New Zealand guidance documents. Importantly, it shows the scale of different problems and opportunities, which can be used to consider what scale/type of solutions may be appropriate. It is also a step towards developing the base case in a cost-benefit analysis.

Quantify the problem: In some cases, it may be possible to measure the size of a problem, but there will not be a clear method to translate these measurements into monetary units, for example, declining numbers of a native species. In these cases, the problem should be clearly quantified, with a clear description of the unit of measurement that is being used.

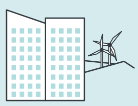
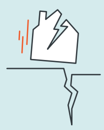
Qualitatively describe the problem: In some cases, it may be appropriate to qualitatively describe a problem where benefits cannot be easily monetised or quantified, for example, losses to cultural heritage. In these cases, the problem should be thoroughly described, with supporting evidence presented, for example, interviews with experts or those impacted.

Box 2:

The five Strategic Objectives

The Infrastructure Strategy lays out a plan for improving the wellbeing of New Zealanders through infrastructure over the next 30 years. To deliver this goal, the Infrastructure Strategy lays out five key objectives we need to work on. They are listed below:



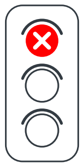
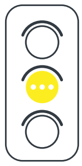
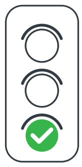

Enabling a net-zero carbon emissions Aotearoa	Supporting towns and regions to flourish	Building attractive and inclusive cities	Strenthening resilience to shocks and stresses	Moving to a circular economy
• Moving to a low-emissions energy sector • Reducing emissions produced by infrastructure	• Accessing safe and reliable infrastructure • Securing and integrating freight and supply chains and services • Use of technology to improve regional advantage	• Taking a long-term approach to infrastructure in our cities • Integrating land-use regulation and infrastructure • Easing pressure on infrastructure networks	• A coordinated approach to critical infrastructure investment • A planned approach to adapting climate change • Improving information and tools for resilience	• Setting a national direction for waste • Managing pressure on landfill and waste recovery facilities • Developing waste-to-energy for the waste we produce

In our Assessment Framework, all three stages require applicants to demonstrate how their project is aligned with at least one of these objectives.

Scoring

We use a traffic light system to score Strategic Alignment. For Stage 1 assessments, projects are scored based on whether the problem or opportunity is clearly defined and whether it is meaningfully aligned with the Infrastructure Strategy or other relevant strategy and planning documents.

Figure 6: Strategic Alignment traffic light scores at Stage 1

Circumstance – Stage 1 Assessments	Rating
The problem or opportunity is not clearly defined OR It is not meaningfully aligned with the Infrastructure Strategy or another relevant long-term strategy or plan	
The problem or opportunity is clearly defined and quantified AND It is meaningfully aligned with at least one strategic objective in the Infrastructure Strategy or another relevant long-term strategy or plan	
The problem or opportunity is clearly defined and quantified AND It is meaningfully aligned with more than one strategic objective in the Infrastructure Strategy or another relevant long-term strategy or plan	

Worked example

Worked example of a Stage 1 Strategic Alignment assessment

Figure 7 provides an illustrative of questions we would ask of a Stage 1 proposal that identifies an opportunity to replace an ageing fleet of diesel commuter rail trains with a lower-emission alternative.

In this hypothetical example, the problem or opportunity has been clearly defined and a qualitative assessment has identified that this proposal has the potential to contribute to the Infrastructure Strategy's first objective (enabling a net-zero carbon emissions Aotearoa) and its third objective (building attractive and inclusive cities). As a result, it has been scored as 'Green' on the Strategic Alignment criterion.

Figure 7: Assessing Stage 1 strategic alignment for new commuter rail rolling stock purchase

Question	Answer
Is there a clearly defined problem or opportunity?	**Yes.** The driver for the proposal (the need to renew ageing trains) is clearly outlined.
Have the costs of the problem or value of the opportunity been quantified or monetised?	**Yes.** Delays due to failing components on existing trains lead to additional travel times for commuters of $50 million per year.
Does the proposal align with the five strategic objectives set out in the Infrastructure Strategy?	**Yes.** This has been assessed against the 'Net-zero carbon emissions' and 'Attractive and inclusive cities' strategic objectives as it offers opportunities to both reduce carbon emissions and improve urban mobility.
Does the proposal make a meaningful contribution to agency- or sector-level strategies or asset management plans?	**Yes.** The renewal of rolling stock is identified as a priority in the agency's AMP from two years ago.
Is the proposal addressing a national infrastructure priority?	**Potentially.** The scale of carbon emissions from current train operations has been estimated but not compared against other emission reduction opportunities.
Strategic Alignment Assessment	**Green**

Stage 1: Value for Money assessment

Value for Money tests the extent to which a proposal provides value to society above the costs required to deliver, operate, and maintain it.

Focus of assessment

At Stage 1, the value for money assessment focuses on whether there is a substantial problem or opportunity that merits further investigation through a business case. The process focuses on what work has been completed to demonstrate that there is a significant problem or opportunity, and whether there could potentially be a solution to that problem which provides benefits that are larger than the cost of the project.

Assessment questions

Below is a list of assessment questions that will test value for money at Stage 1.

Questions at this stage focus on the size of the problem/opportunity, and whether the proposal identifies potential solutions that are right sized to the scale of the problem/opportunity. The aim of these questions is to help guide applicants towards investments that are likely to be cost-effective at addressing the problem.

At this stage, we do not expect applicants to identify and develop specific options to solve the problem. However, we would like to see that applicants are aware of the potential types of options available and have a broad understanding of the costs, compared to the size of the problem.

Evidence of this could include acknowledgement of previous work on the problem, an order of magnitude cost estimate based on previous projects, and a consideration of how the problem has evolved since then.

Stage 1 Value for Money assessment questions

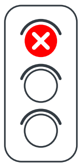
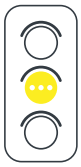
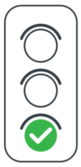
V1	Has the applicant considered potential options for investigation at later stages, such as: • reform options (policy, regulatory, governance) • better use of existing assets (including through pricing) • new capital investment?
	At this stage, a proposal should demonstrate an awareness of a range of potential ways to address the problem or opportunity that it has identified, without settling prematurely on a single solution.
V2	Has the applicant demonstrated that there is an approach to address the problem/opportunity that could potentially provide value for money? *At this stage, a proposal should have considered whether there are likely to be potential solutions that may represent value for money.*

Refer to Appendix A for the complete set of questions at all stages.

Scoring

We use a traffic light system to score Value for Money. For Stage 1 assessments, projects are scored based on whether there are likely to be any solutions that deliver positive value for money.

Figure 8: Value for Money traffic light scores at Stage 1

Circumstance – Stage 1 Assessments	Rating
A significant problem/opportunity has not been demonstrated OR There is a significant, monetised problem/opportunity, but it is unlikely that any option could deliver value for money	
There is a significant problem/opportunity, and there are options that could potentially deliver value for money OR There is a significant, monetised problem/opportunity, but it is uncertain whether there are options that could deliver value for money	
There is a significant problem/opportunity that has been monetised AND The proposal demonstrates that there are potential options that could deliver value for money	

Worked example of a Stage 1 Value for Money assessment

Figure 7 provides an illustrative of questions we would ask of a Stage 1 proposal that identifies an opportunity to replace an ageing fleet of diesel commuter rail trains with a lower-emission alternative. In this hypothetical example, the Stage 1 proposal has quantified the cost of emissions from the current diesel commuter trains. However, the proposal does not contain much detail about what options may be available, and hence it is unclear whether there are options that could deliver value for money.

As a result, it has been scored as 'Amber' against the Value for Money criterion.

Figure 9: Assessing Stage 1 value for money for new commuter rail rolling stock purchase

Question	Answer
Has the applicant demonstrated that there is an approach to address the problem/opportunity that could provide value for money?	The proposal has quantified the cost of the problem, and has outlined high-level options based upon preliminary option scoping for buying new trains but cost and value for money is unclear based on the information provided.
Has the applicant considered options for investigation at later stages?	
Value for Money Assessment	**Amber**

In conjunction with the 'Green' rating for Strategic Alignment, this would be sufficient for the proposal to be scored as aligned with the Infrastructure Strategy.

Stage 1: Deliverability

Deliverability tests the extent to which a proposal can be successfully implemented and operated over its life.

Focus of assessment

Deliverability is included as a review area for Stage 1 (Figure 10). The aim of this is to enable the Commission to review, identify, and make recommendations on the deliverability of early-stage proposals, which can then be addressed or mitigated in subsequent stages of planning.

Figure 10: Recommended approach for assessing deliverability

	Stage 1	Stage 2	Stage 3
	Review only	Review only	Review and assess
Approach and focus	Is appropriate planning underway to progress the proposal?	Is there appropriate consideration of the deliverability of options and capability of the proponent?	Is the project set up for successful delivery?
Outcome	Observations and recommendations	Observations and recommendations	Deliverability score and recommendations

Refer to Appendix A for the complete set of questions at all stages.

At Stage 1, the deliverability review focuses on whether it is appropriate for the applicant to continue the planning of the project, or whether it may be more appropriate for another applicant to be identified. To assess this, we ask questions related to governance arrangements and agency experience in delivering projects. The deliverability review also seeks to understand whether the problem or opportunity is sufficiently defined to form the basis for evaluating alternative options as the project progresses.

The outcomes of the Stage 1 deliverability review would not influence how a proposal is rated. However, the Commission can use the information gathered in this review to help influence and improve proposal development, including signalling where a project applicant needs to be identified prior to proceeding.

Assessment questions

At Stage 1, our deliverability review will focus on whether an applicant has considered the governance arrangements for any eventual project, including whether it is appropriate for the applicant to continue leading the planning process for the proposal, or whether it may be more appropriate to transfer it to another entity.

The results of these questions will form the basis for our deliverability findings but will not result in a formal assessment.

Stage 1 Deliverability review questions

D5	What are the governance arrangements for this project? Are they the usual arrangements for the organisation or has a bespoke governance arrangement been developed?
	This question allows us to identify what governance arrangements are in place.
D6	Are governance arrangements appropriate for a project of this size and complexity? Do they have the right membership? Is there clear accountability for project delivery?
	Appropriate governance structures should be in place for all stages of project development and delivery.
D7	Does the agency's track record for planning and delivery demonstrate that it has the expertise to deliver a project of this size and complexity?
	Ideally, proposals should be developed by agencies that have the capability to deliver them. In some cases, it may be appropriate for a project to initially be developed by one agency, and then transferred to another entity with capability at a later stage in project development.
D10	Is the project development at a level of maturity that is appropriate and sufficient for this project stage?
	Proposals should be developed further through project planning. At this stage project development is expected to be early-stage or preliminary.

Refer to Appendix A for the complete set of questions at all stages.

Assessing Stage 2 proposals

Assessing a shortlist of options

A **Stage 2** proposal identifies and assesses a set of options for addressing the problem or opportunity. This stage is aligned with the Indicative Business Case or Programme Business Case document required under the Treasury's *Better Business Case* guidance.[13]

An Indicative Business Case provides decision-makers with an early indication of the preferred way forward. It identifies and assesses a range of options for addressing the problem or opportunity to identify an approach or approaches that can be investigated further in a Detailed Business Case.

The value of Stage 2 assessments is that they provide more information on options for addressing a problem or opportunity at a stage at which projects are not yet funded or committed and at which there is some opportunity to influence option selection. However, information on these options is still in development and there may be constraints on identifying and assessing options that are not yet included.

Figure 11: Strengths and limitations of Stage 2 Indicative/Programme Business Cases

Strengths	Limitations
• Required to include a range of options	• Projects likely still near/medium term focused
• Projects are less likely to be funded or committed	• Cost-benefit analysis may not be consistently used across all submissions
• Some opportunity to influence option selection	• Limited opportunity to request new options for assessment or consideration

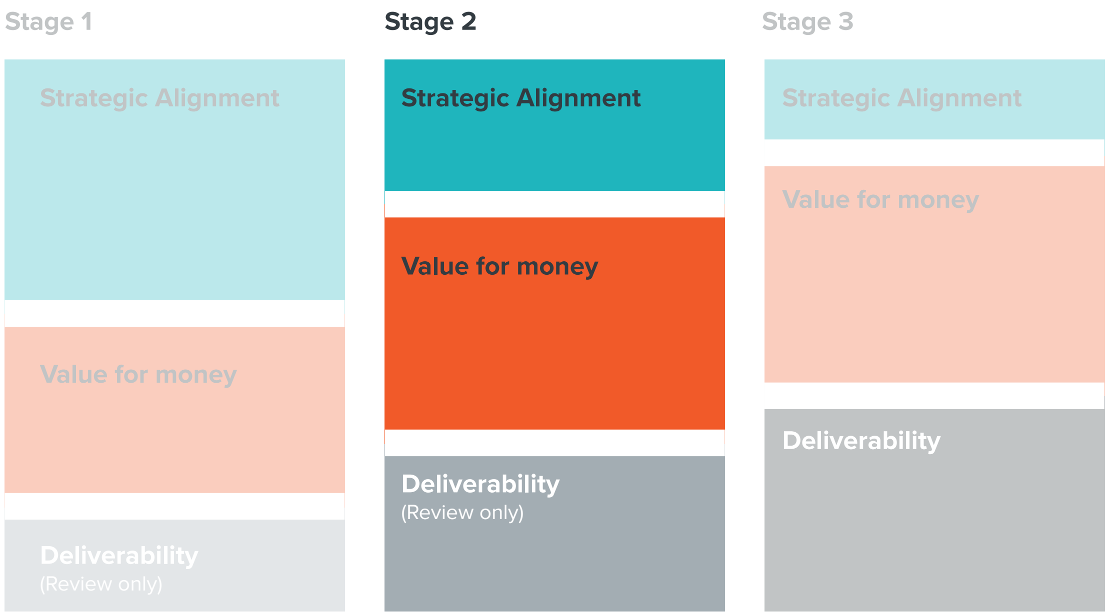
[13] https://www.treasury.govt.nz/information-and-services/state-sector-leadership/investment-management/better-business-cases/guidance

What we assess at Stage 2

At Stage 2, Strategic Alignment and Value for Money are the core focus of the assessment and are roughly equally important (Figure 12). A greater emphasis is also placed on Deliverability, which, like Stage 1, is used as a review question. This focus reflects the type of information that is expected to be available at Stage 2, which focuses primarily on identifying and assessing a set of potential options for addressing an infrastructure problem or opportunity.

Rather than using weightings and making trade-offs between these criteria, we have reflected the focus on different assessment criteria in the types of questions we ask of proposals.

Figure 12: Assessment focus for Stage 2 proposals



Outcomes of a Stage 2 assessment

To be listed as a Stage 2 infrastructure priority, a project must receive either Amber or Green ratings against the Strategic Alignment and Value for Money criteria for this stage. The Deliverability criteria is a review criteria at this stage.

For projects assessed negatively in either of the categories at Stage 2, we will provide feedback to applicants with explanations of the ratings, as well as ways to improve any future applications.

In some cases, an application negatively assessed at a later stage could be reassessed positively at an earlier stage. In these cases, we may ask applicants for additional information, if needed, to make this assessment.

Proposals that receive a Green or Amber rating for the two criteria are welcome to apply at Stage 3 once their Detailed Business Case is complete.

Triage step

Like Stage 1, prior to assessing proposals at this stage, we undertake a triage review to filter out submissions that do not warrant a full assessment.

At this stage, we will triage proposals using a similar approach to Stage 1.

Stage 2 Triage questions

T1	T1: Is there sufficient information to answer the assessment questions for this stage?
T1b	If no to T1, would the proposal pass the triage process for Stage 1?
T2	Does the submission directly relate to infrastructure or avoiding the need for future infrastructure spending?
T3	Is the proposal likely to be nationally important, indicated by whole-of-life costs that exceed a threshold of $50 million, evidence that the proposal could make a material contribution to the recommendations or objectives in the Infrastructure Strategy, or a combination of these factors?
T4	Has an investment decision already been made?

As with Stage 1, if a proposal has already received funding, we will triage it out of the assessment process.

Stage 2: Strategic Alignment assessment

Focus of assessment

At Stage 2, the focus of assessment shifts towards understanding the potential impact of a proposal on strategic objectives. At Stage 1, our assessment was focused on determining whether the proposal considered the strategic objectives. At this stage, we are seeking to determine, where possible, the quantifiable impact on those objectives.

Assessment questions

Below is a list of assessment questions that will test strategic alignment at Stage 2. These questions are the same as at Stage 1.

Stage 2 Strategic Alignment assessment questions

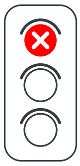
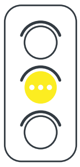
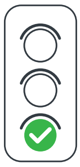
S1	Is there a clearly defined problem or opportunity?
	All proposals should have a clearly defined problem (or opportunity) that they seek to address, as this is a core foundation of a good business case.
S2	Have the costs of the problem or value of the opportunity been quantified or monetised? (See Box 1).
	All proposals should provide compelling evidence regarding the magnitude of the problem (or opportunity) they seek to address.
S3	Does the proposal make a meaningful contribution to the five strategic objectives set out in the Infrastructure Strategy (see Box 2)?
	Ideally, infrastructure proposals should make a substantial contribution to the strategic objectives in the New Zealand Infrastructure Strategy.
S4	Does the proposal make a meaningful contribution to strategic outcomes identified in sector- or agency-level long-term strategy and planning documents?
S4a	If so, does the strategic/asset management document meet quality expectations outlined in relevant guidance documents?
	If the proposal does not make a substantial contribution to the New Zealand Infrastructure Strategy, it should play a strong role in contributing to the sector's strategic objectives.
S5	Is the proposal addressing a national infrastructure priority?
	This question is intended to test the materiality or significance of the problem or opportunity.

Refer to Appendix A for the complete set of questions at all stages.

Scoring

We use a traffic light system to score Strategic Alignment. For Stage 2 assessments, projects are scored based on whether the problem or opportunity is clearly defined and whether it makes a meaningful, quantitative contribution to the Infrastructure Strategy or other relevant strategy and planning documents.

Figure 13: Strategic Alignment traffic light scores at Stage 2

Circumstance – Stage 2 Assessments	Rating
The problem or opportunity is not clearly defined or quantified OR It does not make a meaningful contribution to the Infrastructure Strategy or another relevant long-term strategy or plan OR It actively detracts from strategic objectives in the Infrastructure Strategy	
The problem or opportunity is clearly defined and quantified AND It makes a meaningful contribution to at least one strategic objective in the Infrastructure Strategy or another relevant long-term strategy or plan	
The problem or opportunity is clearly defined and quantified AND It makes a meaningful contribution to more than one strategic objective in the Infrastructure Strategy or another relevant long-term strategy or plan	

Worked example

Worked example of a Stage 2 Strategic Alignment assessment

Figure 14 provides an illustrative example of questions we would ask of a Stage 2 proposal that is investigating alternative options for replacing an ageing fleet of diesel commuter rail trains with a lower-emission alternative.

In this hypothetical example, the problem or opportunity has been clearly defined and a quantitative assessment has identified that this proposal has the potential to make a meaningful contribution to two strategic objectives by reducing carbon emissions and improving urban mobility. In addition, assessment against other strategic objectives highlights that it would not actively detract from any other strategic objectives.

As a result, it has been scored as 'Green' on the Strategic Alignment criterion.

Figure 14: Assessing Stage 2 strategic alignment for new commuter rail rolling stock purchase

Question	Answer
Is there a clearly defined problem or opportunity?	**Yes.** The driver for the proposal (the need to renew ageing trains) is clearly outlined.
Have the costs of the problem or value of the opportunity been quantified and monetised?	**Yes.** The value of the opportunity has been quantified, enabling consideration of quantitative contribution to strategic objectives.
Does the proposal make a meaningful/quantifiable contribution to the five strategic objectives set out in the Infrastructure Strategy?	**Yes.** This has been assessed against the 'Net-zero carbon emissions' and 'Attractive and inclusive cities' strategic objectives as it offers opportunities to both reduce carbon emissions and improve urban mobility.
Does the proposal make a meaningful contribution to strategic outcomes identified in sector- or agency-level long-term strategy and planning documents?	**Yes.** The project is identified as a priority in the agency's strategic and asset management plans. The relevant asset management plans were developed using Āpōpō's asset management planning guidelines.
Is the proposal addressing a national infrastructure priority?	**Potentially.** The scale of carbon emissions from current train operations has been estimated but not compared against other emission reduction opportunities.
Strategic Alignment Assessment	**Green**

Stage 2: Value for Money assessment

Focus of assessment

A Stage 1 assessment focuses on identifying problems and their scale. Stage 2 is about identifying ways to address that problem. A given problem can be addressed in multiple ways, each of which will have a different set of costs and benefits. Stage 2's Value for Money assessment focuses on ensuring that applicants consider a wide range of options that could solve the problem, and then identifying a shortlist that will do so in the most efficient way.

At Stage 2, the Value for Money assessment process involves questions on whether longlist options have been filtered appropriately, whether shortlist options have been developed sufficiently, if the proposals are assessed using an appropriate methodology and whether at least one of the final options (i.e., those proceeding to the detailed business case) is likely to provide value for money (Box 3).

Box 3:

Absolute vs. relative value for money

Our Assessment Framework will primarily focus on absolute value for money threshold, i.e., testing if the benefits of a project outweigh its costs.

In some cases, there may also be merit in considering relative value for money, i.e., testing whether a given option for addressing a problem has better value for money than other alternatives, even if the overall size of the benefits is unclear.

An example would be providing critical infrastructure to rural or remote populations. There may be a strong strategic case for this investment. However, traditional value for money evaluation tools, like cost-benefit analysis, may not provide a conclusive view on whether any of these options deliver absolute value for money. In these cases, tools like cost-effectiveness analysis can allow us to compare the relative value for money performance of alternative options.

If this is the case, we would also look to have applicants demonstrate that a wide range of options have been considered and that as many benefits as practical have been quantified. Cost-benefit analysis can still provide useful information on the gap between benefits and costs to achieve the relevant strategic objectives.

Assessment questions

The value for money assessment at Stage 2 contains a series of assessment questions that focus on whether options have been properly considered. The questions at this stage focus on how the proposal is approaching options analysis, and whether at least one shortlisted option is likely to provide value for money.

For applicants that submit programmes of proposed investments via a Programme Business Case, we add several further questions to test whether the preferred programme option optimises value for money.

Stage 2 Value for Money assessment questions

V3	Has a longlist of options been filtered appropriately?
	A wide range of options should be looked at to solve the problem. The range of options should include low-cost or non-built options alongside higher-cost ones.
V4	Have shortlisted options been developed to a reasonable maturity (for example, scope, cost)?
	Cost estimates at this stage are not expected to be precise but each option's scope should be appropriately developed to ensure that estimates are comparable.
V5	Has an appropriate methodology been used to assess the shortlisted options?
	In most cases, a cost-benefit analysis should be used to assess the shortlist options. Cost-effectiveness analysis may be appropriate in a limited set of cases, such as when there is an inability to monetise benefits.
V6	Do we have confidence that at least one of the final options will provide value for money?
	At this stage, the preferred option may not be known but there should be evidence that there is a way to solve the problem that will deliver value for money.
V9	Is the value for money analysis robust to different scenarios and sensitivity testing of assumptions?
	Assessment of the value for money of different options should hold up under a range of different scenarios and assumptions.
V20	Have sustainability and resilience been appropriately considered in the assessment of options?
	Carbon-emission impacts should be considered in all business cases. Making our infrastructure more resilient will enable us to recover faster from natural disasters as well as other shocks, minimising their impacts on our society and economy.
	Additional questions for Programme Business Cases
V11	How has the applicant determined whether the preferred approach (i.e., using a programme of investments over a project-by-project approach) will deliver value for money?
	The proposal should demonstrate why there is value in taking a programme approach to this investment.
V12	Are the set of projects within the preferred programme likely to optimise value for money?
	The preferred option should deliver better value for money than other alternatives, including doing nothing.
V13	Is the preferred programme of projects likely to optimise value for money under different scenarios and assumptions?
	The preferred option should be likely to provide value for money under a range of different scenarios and assumptions.
V14	Have whole-of-life costs been thoroughly assessed across the preferred programme of projects?
	Cost estimates at this stage are not expected to be precise but the elements of the programme should be appropriately developed to enable delivery.

Refer to Appendix A for the complete set of questions at all stages.

Value for Money methodologies

We will consider the methodologies that proposals use to test the value for money performance of alternative options. We recognise there are many tools available for assessing value for money.

Based upon research around best practices, we believe a strong Value for Money case will include a combination of four of the following tools.

- **Cost-Benefit Analysis (CBA)**: Systematically measures the effects of a project over its lifetime, including the project's social, economic, and environmental impacts. It does this by quantifying the present value of a project's costs and benefits. The output of a CBA is a Benefit-Cost Ratio (BCR), with ratios over 1 indicating that the project is net beneficial to society.
- **Scenario testing**: Assesses project outcomes under a range of possible futures to better understand and manage uncertainty. Scenarios can be modelled in detail or assessed qualitatively.
- **Qualitative risk assessment:** Identifies, estimates, and mitigates risks so the project has a clear enough future. Qualitative risk assessment involves:
    - identifying the full range of project risks
    - estimating their likelihood of occurrence and expected impact on the project
    - developing mitigations to key risks
    - reassessing risks after mitigations have been applied. Qualitative risk assessment is a useful tool for all proposals.
- **Sensitivity testing:** Determine the potential impacts of risks on project outcomes by varying key inputs and assumptions. Sensitivity analysis is used to test how the costs and benefits of each option change if there is a change in a particular input or assumption, set of inputs and assumptions, or set of assumed changes in the outcomes.[14]

We consider that **cost-benefit analysis** is the best available tool for measuring value for money.

This is because a robust CBA attempts to measure all economic, social, and environmental benefits of a project. Further, the assessment of all of these benefits under a single analysis allows them to be compared holistically and objectively. CBA also reveals the opportunity costs of investments.

In addition to providing a net-benefit assessment, cost-benefit analysis can also be used to compare and rank projects designed to address to the same problem. We expect to see use of cost-benefit analysis to assess and compare options at Stage 2.

There are other tools that are used in the optioneering process, but we will consider them as complementary to the tools above.

At Stage 2, many projects often use multi-criteria analysis (MCA) to narrow longlists down to shortlists. For projects that use MCA, we will consider whether costs are appropriately weighted, relative to benefits.

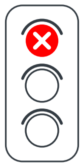
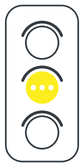
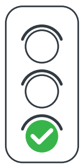
Economic Impact Analysis (EIA) is another tool that applicants could use to assess benefits of longlisted options. However, we consider its output as too narrow for determining whether options are likely to deliver value for money, and highlight that this type of analysis can lead to significant overstating of economic benefits. For these reasons, we do not consider EIA to be a suitable tool for assessing Value for Money at Stages 2 or 3.

[14] Sensitivity testing and Scenario analysis can look identical in practice. However, the purpose of these analyses is fundamentally different. Sensitivity analysis aims to determine the potential impacts of risks on project outcomes by varying inputs and assumptions to see how much they change expected outcomes. This also highlights which inputs have the largest impact on outputs. Scenario analysis helps to ensure that preferred options are robust to different futures and uncertainty by testing how robust options are against several alternative scenarios, rather than developing one assumed future.

Scoring

We use a traffic light system to score Value for Money. For Stage 2 assessments, projects are scored based on whether the Indicative Business Case/Programme Business Case has identified any options that are likely to deliver positive value for money.

Figure 15: Value for Money traffic light scores at Stage 2

Circumstance – Stage 2 Assessments	Rating
For projects: Identified solutions are unlikely to deliver positive value for money OR all relevant options have not been adequately considered. ***For programmes:*** The proposed set of projects, or a significant number of projects within the programme are unlikely to deliver positive value for money. The applicant has not tested whether the programme delivers value for money compared to alternative approaches or options.	
For projects: Relevant options have been considered and some of the identified solutions have the potential to deliver positive value for money under some scenarios. ***For programmes:*** Relevant options have been considered (for example, between programmes, and the series of projects within programmes). The identified options and their set of projects have potential to deliver value for money under some scenarios.	
For projects: Relevant options have been considered and some of the identified solutions have a high likelihood of delivering positive value for money. ***For programmes:*** Relevant options have been considered thoroughly (for example, between programmes, and the series of projects within programmes). The programme *and* individual projects within have a high likelihood of delivering positive value for money.	

Worked example of a Stage 2 Value for Money assessment

Figure 16 provides an illustrative example of questions we would ask of a Stage 2 proposal that is investigating alternative options for replacing an ageing fleet of diesel commuter rail trains with a lower-emission alternative.

In this hypothetical example, the Stage 2 proposal has explored a comprehensive list of options, developed a shortlist to a reasonable level of maturity, assessed the shortlist with appropriate methods, and identified at least one option that will provide value for money. As a result, it has been scored as 'Green' against the Value for Money criterion.

Figure 16: Assessing Stage 2 value for money proposed purchase of new commuter rail rolling stock

Question	Answer
Has a longlist of options been filtered appropriately?	**Yes**, using MCA. One of the weights was potential cost ranges and it was appropriately weighted in the analysis.
Have shortlisted options been developed to a reasonable maturity?	**Yes**, a detailed description, including scope and rough costs were included for each option.
Has an appropriate methodology been used to assess shortlisted options?	**Yes**. Cost-benefit analysis was used. Shortlist was created using cost-benefit ratios and MCA.
Will at least one of the final options provide value for money?	The analysis of the options provides confidence that one of them will.
Value for Money Assessment	**Green**

In conjunction with the 'Green' rating for Strategic Alignment, this would be sufficient for the proposal to be scored as aligned with the Infrastructure Strategy.

Stage 2: Deliverability

Focus of assessment

Deliverability is included as a review area for Stage 2. The aim of this is to enable the Commission to review and identify factors that would enhance the deliverability of proposals that have not yet reached the point of a delivery decision. Any issues can then be addressed or mitigated in subsequent stages of planning.

Figure 17: Recommended approach for assessing deliverability

	Stage 1	Stage 2	Stage 3
	Review only	Review only	Review and assess
Approach and focus	Is appropriate planning underway to progress the proposal?	Is there appropriate consideration of the deliverability of options and capability of the proponent?	Is the project set up for successful delivery?
Outcome	Observations and recommendations	Observations and recommendations	Deliverability score and recommendations

At Stage 2, the Deliverability review reaffirms the proposed governance arrangements and capability to deliver the project. Beyond this, it begins to examine the viability of commercial approaches to the project, the scope of the project and its risks.

At this stage, submissions will include a shortlist of options or a programme of projects that will still require further development prior to implementation, so the review does not aim to determine if all options are deliverable or not. Instead, the review should consider if these factors are being considered across all options and how they might inform the preferred solution. For programmes of projects, the review will examine individual projects that encompass the programme.

As in Stage 1, the review would lead to observations and recommendations that can help improve project development. In the case of a programme of projects, this would focus on actions that would need to be taken in the context of individual projects undertaken as part of the programme.

Assessment questions

At Stage 2, our deliverability review will focus on whether the proposal is creating the necessary foundation to ensure deliverability of the project. Questions used as part of the review address commercial approaches, governance, and the project's approach to risk management.

The results of these questions will form the basis for our deliverability findings but will not result in a formal assessment.

Stage 2 Deliverability review questions

	Review questions
D1	Are there demonstrably viable commercial approaches for the shortlisted options?
	Ideally, there should be some confidence that shortlisted options are feasible to procure and deliver.
D3	Is the development of the commercial approaches sufficient for this stage of the project?
	At this stage, commercial arrangements for procuring or delivering the investment are not expected to be mature, but early thinking about feasibility is beneficial.
D5	What are the governance arrangements for this project? Are they the usual arrangements for the organisation or has a bespoke governance arrangement been developed?
	This question allows us to identify what governance arrangements are in place.
D6	Are governance arrangements appropriate for a project of this size and complexity? Do they have the right membership? Is there clear accountability for project delivery?
	Appropriate governance structures should be in place for all stages of project development and delivery.
D7	Does the agency's track record for planning and delivery demonstrate that it has the expertise to deliver a project of this size and complexity?
	This question allows us to understand whether the agency has a successful track record of delivering similar projects.
D9	Is the applicant building the appropriate capacity to deliver the options?
	Ideally, proposals should be developed by agencies that have the capability to deliver them. In some cases, this may require capability development.
D10	Is the project development at a level of maturity that is appropriate and sufficient for this project stage?
	Proposals should be developed further through project planning. At this stage project development is expected to be early-stage or preliminary.
D11	Have ultimate asset owners and operators been involved in the business case process?
	It is important that the ultimate asset owners and operators are involved in the business case process to ensure that the asset that is delivered can be operated and used as intended.
D12	Has the applicant identified the delivery risks for the shortlisted options?
	Identifying, mitigating and managing the key risks to delivering the investment and realising the intended benefits is crucial to successful delivery.
D13	Are plans in place to address delivery risks?
	At this stage, risk management planning is not expected to be mature, but early thinking about risks and how to address them is beneficial.

Refer to Appendix A for the complete set of questions at all stages.

Scoring

At Stage 2, the Deliverability review would not result in a score or rating but instead observations and recommendations from the Commission for the applicant to consider and ideally address as the proposal moves forward.

Assessing Stage 3 proposals

Developing a preferred option

A **Stage 3** proposal identifies a preferred option for addressing the problem or opportunity. This stage provides information that decision-makers can use to choose whether to proceed with the project. This stage is aligned with the Detailed Business Case document required under the Treasury's *Better Business Case* guidance.[15]

A Detailed Business Case identifies a preferred option that should optimise value for money, and seeks approval from decision-makers to finalise the arrangements for successful implementation.

The value of Stage 3 assessments is that they provide the most detailed information on a specific investment proposal, at a stage at which comprehensive information on Value for Money and Deliverability should be available. However, these projects are likely to be focused on addressing immediate/pressing needs, and applicants may see independent review as a risk.

Figure 18: Strengths and limitations of Stage 3 Detailed Business Cases

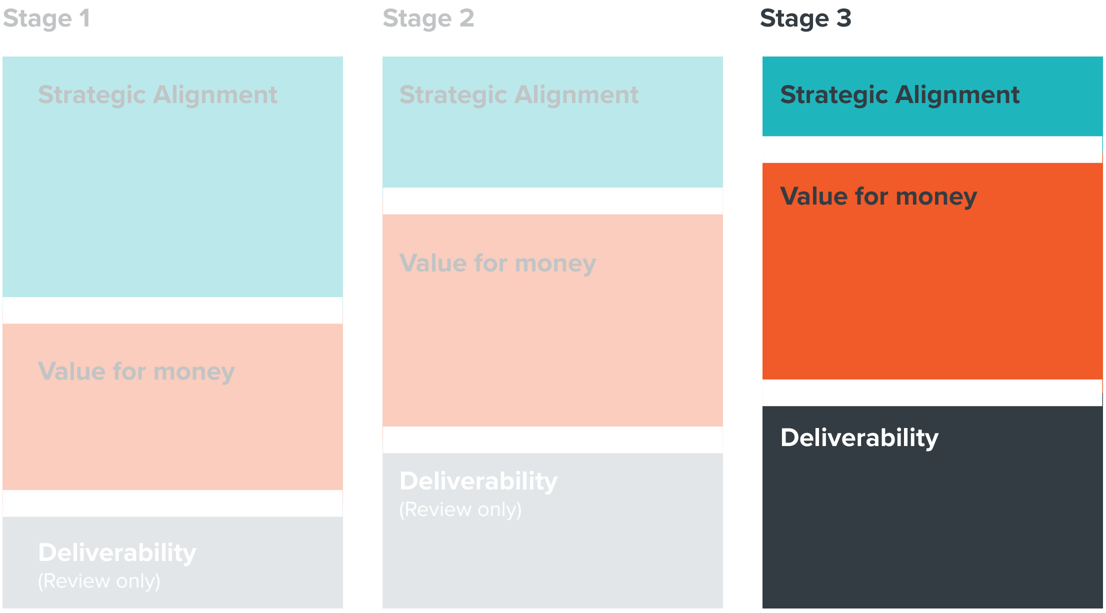
Strengths	Limitations
• Highest quality of evidence • Detailed cost-benefit analysis should have been completed • Comprehensive information available to assess Deliverability	• Projects may already have received in-principle commitment • Risk for applicants of negative review is highest • Value of review at this stage may be lower • Projects likely focused on immediate needs

[15] https://www.treasury.govt.nz/information-and-services/state-sector-leadership/investment-management/better-business-cases/guidance

What we assess at Stage 3

At Stage 3, value for money and deliverability are the core focus of the assessment and are roughly equally important (Figure 19). Less emphasis is placed on Strategic Alignment. This focus reflects the type of information that is expected to be available at Stage 3, which focuses primarily on identifying and assessing a preferred option for addressing an infrastructure problem or opportunity and developing it to a point where a funding decision can be made.

Figure 19: Assessment focus for Stage 3 proposals



Outcomes of a Stage 3 assessment

To be listed as an infrastructure priority, a project must receive either Amber or Green ratings across all three criteria.

As in Stage 2, an application negatively assessed at a later stage could be reassessed positively at an earlier stage. In these cases, we may ask applicants for additional information, if needed, to make this assessment.

If a project is assessed negatively for Strategic Alignment along with a negative assessment for Deliverability or Value for Money, we will provide feedback to the applicant to improve their project application but we would be unlikely assess the entire proposal at earlier stages.

Regardless of scoring outcome, we will provide feedback and explanations of our ratings to applicants.

Triage step

The triage step in Stage 3 is largely the same as Stage 2. We will triage proposals based on the following questions.

Stage 3 Triage questions

T1	T1: Is there sufficient information to answer the assessment questions for this stage?
T1a	If no to T1, would the proposal pass the triage process for Stage 2?
T1b	If no to T1 (and T1a if applicable), would the proposal pass the triage process for Stage 1?
T2	Does the submission directly relate to infrastructure or avoiding the need for future infrastructure spending?
T3	Is the proposal likely to be nationally important, indicated by whole-of-life costs that exceed a threshold of $50 million, evidence that the proposal could make a material contribution to the recommendations or objectives in the Infrastructure Strategy, or a combination of these factors?
T4	Has an investment decision already been made?

As with Stages 1 and 2, if a proposal has already received funding, we will triage it out of the assessment process.

Stage 3: Strategic Alignment assessment

Focus of assessment

At Stage 3, the focus of the assessment is on whether the project still aligns with strategic objectives in the Infrastructure Strategy, and developing a better understanding of what this impact will be.

The Strategic Alignment assessment for Stage 3 is similar to Stage 2. We will assess whether the preferred option meets one or more of the five strategic objectives in the Infrastructure Strategy. Like Stage 2, there is a focus on quantifying the impact the proposal will have on each of the five strategic objectives.

Assessment questions

Below is a list of assessment questions that will test strategic alignment at Stage 3. These questions are the same as at Stage 1 and Stage 2.

Stage 3 Strategic Alignment assessment questions

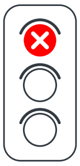
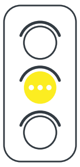
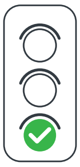
S1	Is there a clearly defined problem or opportunity?
	All proposals should have a clearly defined problem (or opportunity) that they seek to address, as this is a core foundation of a good business case.
S2	Have the costs of the problem or value of the opportunity been quantified or monetised? (See Box 1).
	All proposals should provide compelling evidence regarding the magnitude of the problem (or opportunity) they seek to address.
S3	Does the proposal make a meaningful contribution to the five strategic objectives set out in the Infrastructure Strategy (see Box 2)?
	Ideally, infrastructure proposals should make a substantial contribution to the strategic objectives in the Infrastructure Strategy.
S4	Does the proposal make a meaningful contribution to strategic outcomes identified in sector- or agency-level long-term strategy and planning documents?
S4a	If so, does the strategic/asset management document meet quality expectations outlined in relevant guidance documents?
	If the proposal does not make a substantial contribution to the Infrastructure Strategy, it should play a strong role in contributing to the sector's strategic objectives.
S5	Is the proposal addressing a national infrastructure priority?
	This question is intended to test the materiality or significance of the problem or opportunity.

Refer to Appendix A for the complete set of questions at all stages.

Scoring

We use a traffic light system to score Strategic Alignment. For Stage 3 assessments, projects are scored based on whether the problem or opportunity is clearly defined and whether it makes a meaningful, quantitative contribution to the Infrastructure Strategy or other relevant strategy and planning documents.

Figure 20: Strategic Alignment traffic light scores at Stage 3

Circumstance – Stage 3 Assessments	Rating
The problem or opportunity is not clearly defined or quantified OR It does not make a meaningful contribution to the Infrastructure Strategy or another relevant long-term strategy or plan OR It actively detracts from strategic objectives in the Infrastructure Strategy	
The problem or opportunity is clearly defined and quantified AND It makes a meaningful contribution to at least one strategic objective in the Infrastructure Strategy or another relevant long-term strategy or plan	
The problem or opportunity is clearly defined and quantified AND It makes a meaningful contribution to more than one strategic objective in the Infrastructure Strategy or another relevant long-term strategy or plan	

Worked example of a Stage 3 Strategic Alignment assessment

Figure 21 provides an illustrative example of questions we would ask of a Stage 3 proposal that has identified a preferred option for replacing an ageing fleet of diesel commuter rail trains with a lower-emission alternative.

In this hypothetical example, the problem or opportunity has been clearly defined and a quantitative assessment has identified that this proposal is likely to make a meaningful contribution to this strategic objective by reducing carbon emissions and improving urban mobility. In addition, assessment against other strategic objectives highlights that it would not actively detract from any other strategic objectives.

As a result, it has been scored as ‘Green’ on the Strategic Alignment criterion.

Figure 21: Assessing Stage 3 strategic alignment for new commuter rail rolling stock purchase

Question	Answer
Is there a clearly defined problem or opportunity?	**Yes.** The driver for the proposal (the need to renew ageing trains) is clearly outlined.
Have the costs of the problem or value of the opportunity been quantified and monetised?	**Yes.** The value of the opportunity has been quantified, enabling consideration of quantitative contribution to strategic objectives.
Does the proposal make a meaningful/quantifiable contribution to the five strategic objectives set out in the Infrastructure Strategy?	**Yes.** This has been assessed against the ‘Net-zero carbon emissions’ and ‘Attractive and inclusive cities’ strategic objectives as it offers opportunities to both reduce carbon emissions and improve urban mobility.
Does the proposal align with strategic outcomes identified in sector- or agency-level long-term strategy and planning documents?	**Yes.** The project is identified as a priority in the agency’s strategic and asset management plans. The relevant asset management plans were developed using Āpōpō’s asset management planning guidelines.
Strategic Alignment Assessment	**Green**

Stage 3: Value for Money assessment

Focus of assessment

At Stage 3, the assessment process includes questions on whether the preferred option maximises value for money, if whole-of-life costs have been thoroughly considered, and whether the preferred option will provide value for money under a reasonable range of scenarios.

The "reasonable" range of scenarios will depend on the unique characteristics of projects. For example, some proposals may be very sensitive to future climate scenarios, new population growth, user take up, or other factors. There may also be risks to projects that could drive higher than expected costs, lower than expected benefits, or both. These could include unique customisation requirements to meet physical location needs or a large amount of interdependencies.

In the first instance, we recommend requiring all applicants undertake sensitivity tests to standard valuation assumptions (i.e., changes to discount rates, changes to costs, and changes to benefits) alongside project-specific sensitivities. Applicants should carefully identify, consider, and test sensitivities that are most relevant to their project.

The strength of a proposal against these questions will determine the overall Value for Money rating.

Assessment questions

To assess value for money at Stage 3, the questions we will ask will focus on whether the applicant has employed a thorough analysis process and rigorous set of methodologies to assess whether the preferred option maximises value for money.

Questions asked at this stage first seek to reaffirm that the applicant has undertaken a proper optioneering process. They then test how likely it is that the preferred option will deliver value for money.

Stage 3 Value for Money assessment questions

V3	Has a longlist of options been filtered appropriately?
	A wide range of options should be looked at to solve the problem. The range of options should include low-cost or non-built options alongside higher-cost ones.
V4	Have shortlisted options been developed to a reasonable maturity (for example, scope, cost)?
	Cost estimates at this stage are not expected to be precise but each option's scope should be appropriately developed to ensure that estimates are comparable.
V5	Has an appropriate methodology been used to assess the shortlisted options?
	In most cases, a cost-benefit analysis should be used to assess the shortlist options. Cost-effectiveness analysis may appropriate in a limited set of cases, such as when there is an there is an inability to monetise benefits.
V7	Is the preferred option most likely to optimise value for money?
	The preferred option should deliver better value for money than other alternatives, including doing nothing.
V8	Have whole-of-life costs been thoroughly assessed?
	It is necessary to understand the ongoing costs of an investment as well as the up-front costs to test value for money.
V9	Is the value for money analysis robust to different scenarios and sensitivity testing of assumptions?
	The preferred option should be likely to provide value for money under a range of different scenarios and assumptions.
V10	Is the cost estimation appropriate for the project's stage? Is the project scope sufficiently developed to provide a high level of confidence in the cost estimate?
	Cost estimation should be appropriate for the stage of planning. It should be more detailed at this stage than at previous stages.
V20	Have sustainability and resilience been appropriately considered in the assessment of options?
	Carbon-emission impacts should be considered in all business cases. Making our infrastructure more resilient will enable us to recover faster from natural disasters as well as other shocks, minimising their impacts on our society and economy.

Refer to Appendix A for the complete set of questions at all stages.

Value for Money methodologies

As in Stage 2, Stage 3 Value for Money assessments should ideally rely on cost-benefit analysis to provide evidence for the questions above.

At Stage 3, we expect that the preferred option is in its fully scoped and designed form. We expect applicants to demonstrate not just that a project's cost will exceed its benefits in some scenarios, but that the project will likely deliver net positive benefits under a range of different scenarios given the project's characteristics. We expect candidates to appropriately test ranges around a project's costs and benefits. Examples of this include:

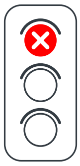
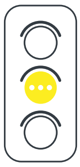
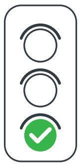
- sensitivity testing costs and benefits using different assumptions of model inputs (discount rates, time periods, inflation rates)
- adjusting costs and benefits upwards/downwards to account for areas such as project complexity, project size, location, and/or industry constraints.

While other tools (multi-criteria analysis, economic impact analysis, cost-effectiveness analysis, non-monetisation of costs and benefits) can help complement these other tools, we do not consider them sufficient to make a strong Value for Money case.

Scoring

We use a traffic light system to score Value for Money. For Stage 3 assessments, projects are scored based on whether the Detailed Business Case has identified a preferred option that is likely to maximise value for money.

Figure 22: Value for money traffic light scores at Stage 3

Circumstance – Stage 3 Assessments	Rating
The preferred solution is unlikely to maximise value for money. There is a lack of analysis to determine whether the solution will provide value for money and/or the project's Value for Money case is sensitive to even minor changes in costs and/or benefits.	
The preferred solution is likely to maximise value for money under some scenarios and alternative assumptions. Analysis indicates that the project could provide value for money, but it is modestly sensitive to changes in costs and/or benefits.	
The preferred solution is likely to maximise value for money under most scenarios and assumptions. There is robust analysis on the project's cost and benefits. The project demonstrates value for money even under significant changes to costs and/or benefits assumptions.	

Worked example of a Stage 3 Value for Money assessment

Figure 23 provides an illustrative example of questions we would ask of a Stage 3 proposal that has identified a preferred option for replacing an ageing fleet of diesel commuter rail trains with a lower-emission alternative.

In this hypothetical example, the Stage 3 proposal has identified an option with whole-of-life benefits that exceed whole-of-life costs under a central scenario, but only conducted limited sensitivity analysis on this result. As a result, it has been scored as 'Amber' against the Value for Money criterion.

Figure 23: Assessing Stage 3 value for money for proposed commuter rail rolling stock purchase

Question	Answer
Has a longlist of options been filtered appropriately?	**Yes**, using MCA. One of the weights was potential cost ranges and it was appropriately weighted in the analysis.
Have shortlisted options been developed to a reasonable maturity?	**Yes**, a detailed description, including scope and rough costs were included for each option.
Has an appropriate methodology been used to assess shortlisted options?	**Yes**. Cost-benefit analysis was used. Shortlist was created using cost-benefit ratios and MCA.
Does the preferred option maximise value for money?	**Yes**. Cost-benefit analysis and cost-effectiveness analysis were performed. The benefits of the proposal are likely to exceed costs under the central scenario.
Have whole-of-life costs been thoroughly assessed?	**Yes**. The proposal includes an examination of the whole-of-life costs of the assets.
Is the preferred option likely to provide value for money under a range of scenarios?	**Unclear**. Sensitivity testing is limited to a few input assumptions.
Value for Money Assessment	**Amber**

Stage 3: Deliverability

Focus of assessment

Unlike Stages 1 and 2, where deliverability was only a review, for Stage 3, deliverability is included as an assessment criterion as it is required for a proposal to be investment-ready (Figure 24).

Figure 24: Recommended approach for assessing deliverability at Stage 3

	Stage 1	Stage 2	Stage 3
	Review only	Review only	Review and assess
Approach and focus	Is appropriate planning underway to progress the proposal?	Is there appropriate consideration of the deliverability of options and capability of the proponent?	Is the project set up for successful delivery?
Outcome	Observations and recommendations	Observations and recommendations	Deliverability score and recommendations

At Stage 3, Deliverability assessments would result in a rating that influences whether a project receives a positive assessment or not. The intent is to determine if the project is set up for successful delivery. The focus is on ensuring the scope development, commercial approach, and delivery capabilities complement each other, minimising delivery risk for the project.

This requires using a comprehensive set of deliverability questions across project maturity, delivery strategy, delivery expertise, risk management, governance structure, commercial structure, sustainability, and resilience in design, change management and stakeholder management.

A project needs to consider market capacity as part of its delivery strategy, risk management and commerciality. If there are significant existing constraints, a project could still be considered deliverable as this issue could be addressed by choosing an appropriate timing for delivery.

Some aspects of project delivery may require further development and would potentially be addressed through an Implementation Business Case. In these cases, we would aim to determine whether there is sufficient confidence at this stage to assess the project as being investment ready.

Assessment questions

To assess Deliverability at Stage 3, we will ask a suite of questions that are relevant for determining whether a preferred option is investment ready.

Assessment questions form a comprehensive analysis of a project's commercial strategy, governance, risk management, and stakeholder engagement:

- Questions about commercial strategy test whether the applicant has sufficiently developed a commercial approach that is appropriate to progress to delivery.
- Governance questions focus on whether the applicant has the frameworks set up to deliver the project and there is sufficient experience and expertise to deliver the preferred option.
- Questions around project management focus on adequate definition of scope and risks to delivery, as well as testing whether the applicant has engaged relevant stakeholders and the construction sector.

Funding and financing arrangements are not part of the Deliverability assessment. Determining (or securing) appropriate funding and financing arrangements is outside the scope of the IPP Assessment Framework. However, at this stage applicants are likely to have taken steps to identify and consider different funding and financing options. While it will not directly feed into a project's score, if funding and financing arrangements options are presented, we may comment as part of our overall feedback to the applicant.

Stage 3 Deliverability assessment questions

D2	What is the currently preferred commercial approach and how mature is its development?
	Ideally, there should be some confidence that shortlisted options are feasible to procure and deliver.
D3	Is the development of the commercial approach sufficient for the project stage?
	At this stage, a detailed commercial approach should be developed for delivering the project.
D4	Is the preferred commercial approach appropriate and demonstrably viable?
	Timelines, procurement plans, and contractual arrangements should be developed at a high level of detail and should reflect the project's characteristics.
D5	What are the governance arrangements for this project? Are they the usual arrangements for the organisation or has a bespoke governance arrangement been developed?
	This question allows us to identify what governance arrangements are in place.
D6	Are governance arrangements appropriate for a project of this size and complexity? Do they have the right membership? Is there clear accountability for project delivery?
	Appropriate governance structures should be in place for all stages of project development and delivery.
D7	Does the agency's track record for planning and delivery demonstrate that it has the expertise to deliver a project of this size and complexity?
	This question allows us to understand whether the agency has a successful track record of delivering similar projects.
D8	Is there a delivery strategy and programme, and sufficient delivery expertise?
	Ideally, proposals should be developed by agencies that have the capability to deliver them. In some cases, this may require capability development.
D10	Is the project development at a level of maturity that is appropriate and sufficient for this project stage?
	Project development should become more mature as a proposal progresses through the planning process. By Stage 3 we would expect project development to be at an advanced stage of maturity.
D11	Have ultimate asset owners and operators been involved in the business case process?
	It is important that the ultimate asset owners and operators are involved in the business case process to ensure that the asset that is delivered can be operated and used as intended.
D12	Has the applicant identified the delivery risks for the shortlisted options?
	Identifying the key risks to delivering the investment and realising the intended benefits is crucial to successful delivery.

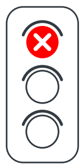
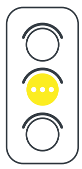
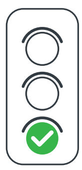
D13	Are plans in place to address delivery risks?
	Plans for mitigating and managing risks to delivery are essential at this stage to help ensure that the outcomes identified in the business case are delivered.
D14	Will the project, as scoped, be sufficient to deliver the desired benefits? If not, what further investments or changes will be necessary to deliver the desired benefits?
	Final scope and design decisions can have a material impact on the costs and benefits of the project.
D15	Have asset owners' needs and change management been appropriately considered?
	A smooth transition of an asset from its operating phase helps ensure that its net benefits will be realised.
D16	Has stakeholder management been appropriately considered?
	A strong stakeholder management process prevents late-stage scope or design changes that could materially impact delivery and net benefits of the investment.
D17	Has the applicant considered market capacity to deliver the project?
	Market capacity to deliver a project has a material impact on the key areas such as scope, design, timelines, and cost.

Refer to Appendix A for the complete set of questions at all stages.

Scoring

At Stage 3, we use a traffic light system to score Deliverability. Projects are scored based on whether the Detailed Business Case has identified a preferred option that is likely to be feasible to deliver.

Figure 25: Deliverability traffic light scores at Stage 3

Circumstance – Stage 3 Assessments	Rating
The preferred solution is unlikely to be deliverable without significant additional work.	
The preferred solution may be deliverable but either lack of information and/or outstanding questions precludes a positive assessment.	
The preferred solution has a high likelihood of being deliverable.	

Worked example of a Stage 3 Deliverability assessment

Figure 26 provides an illustrative example of questions we would ask of a Stage 3 proposal that has identified a preferred option for replacing an ageing fleet of diesel commuter rail trains with a lower-emission alternative.

In this hypothetical example, the Stage 3 proposal has adequately addressed most of the key deliverability factors, but the applicant lacks recent experience procuring rail rolling stock and as a result it is unclear whether it has the correct delivery experience. As a result, it has been scored as 'Amber' against the Deliverability criterion.

Figure 26: Assessing Stage 3 Deliverability for proposed commuter rail rolling stock purchase

Question	Answer
What is the currently preferred commercial approach and is the development of the commercial approach sufficient for the project stage?	Commercial approach has been detailed (EOI with closed negotiations), with sufficient market analysis to demonstrate viability.
Is the preferred commercial approach appropriate?	**Yes** – approach is in line with common industry expectations.
What are the governance arrangements for the project?	Standard governance arrangement is proposed.
Are the governance arrangements appropriate for a project of this size and complexity? Does it have the right membership?	**No** – there are no members with specific expertise in the procurement of rail rolling stock. Governance would benefit from independent member(s) with specific expertise.
Does the applicant's track record for planning and delivery demonstrate that they have the expertise to deliver this project?	**No** – there is no recent agency experience in the procurement of rail rolling stock. Personnel do not have sufficient experience. There is no demonstrable experience in the commercial and contractual negotiations required for the procurement of rail rolling stock.
Is the project development and scope at a level of maturity that is appropriate and sufficient for the project stage?	**Yes** – technical requirements are well established. Further development is unlikely to yield added value/risk mitigation.

Worked example

Have the ultimate asset owners and operators been appropriately involved in the process, and will the infrastructure be able to be used and operated in a way that is fit for purpose?	**Yes** – clear evidence of operator involvement in project and scope development. High confidence of ability for new stock to be fit for purpose.
Has the project identified the main risks and is there a plan in place to manage them? If not, are there substantial risks that need further investigation?	**Somewhat** – commercial risks have not been sufficiently identified or managed. Other key risks identified and managed appropriately.
Is there sufficient market capacity to deliver this investment?	**Yes** – scale or rolling stock required is well inside international supplier capacity.
Will the project, as scoped, be sufficient to deliver the benefits that are desired and outlined in the economic case? If not, what further investments or changes will be necessary to deliver the project benefits?	**Yes** – there is no concern additional investment will be required to deliver the desired benefits.
Deliverability Assessment	**Amber**

In conjunction with the 'Green' rating for Strategic Alignment and the 'Amber' rating for Value for Money, this would be sufficient for the proposal to be scored as aligned with the Infrastructure Strategy. However, review comments to the applicant would highlight areas where the proposal could and should be strengthened before an investment decision.

Appendix A: Assessment Questions by Stage

Question	Stage 1	Stage 2	Stage 3
Triage step			
T1. Is there sufficient information to answer the assessment questions for this stage?	✓	✓	✓
T1a. If no to T1, would the proposal pass the triage process for Stage 2?			✓
T1b. If no to T1 (and T1a if applicable), would the proposal pass the triage process for Stage 1?		✓	✓
T2. Does the submission directly relate to infrastructure or avoiding the need for future infrastructure spending?	✓	✓	✓
T3. Is the proposal likely to be nationally important, indicated by whole-of-life costs that exceed a threshold of $50 million, evidence that the proposal could make a material contribution to the recommendations or objectives in the Infrastructure Strategy, or a combination of these factors?	✓	✓	✓
T4. Has an investment decision already been made?	✓	✓	✓

Question	Stage 1	Stage 2	Stage 3
Strategic alignment			
S1. Is there a clearly defined problem or opportunity?	✓	✓	✓
S2. Have the costs of the problem or value of the opportunity been quantified or monetised?	✓	✓	✓
S3. Does the proposal make a meaningful contribution to the five strategic objectives set out in the Infrastructure Strategy?	✓	✓	✓
S4. Does the proposal make a meaningful contribution to strategic outcomes identified in sector- or agency-level long-term strategy and planning documents?	✓	✓	✓
S4a. If so, does the strategic/asset management document meet quality expectations outlined in relevant guidance documents?	✓	✓	✓
S5. Is the proposal addressing a national infrastructure priority?	✓	✓	✓

Question	Stage 1	Stage 2	Stage 3
Value for money			
V1. Has the applicant considered potential options for investigation at later stages, such as: • reform options (policy, regulatory, governance) • better use of existing assets (including through pricing) • new capital investment?	✓		
V2. Has the applicant demonstrated that there is an approach to address the problem/opportunity that could potentially provide value for money?	✓		
V3. Has a longlist of options been filtered appropriately?		✓	✓
V4. Have shortlisted options been developed to a reasonable maturity (for example, scope, cost)?		✓	✓
V5. Has an appropriate methodology been used to assess the shortlisted options?		✓	✓
V6. Do we have confidence that at least one of the final options will provide value for money?		✓	
V7. Is the preferred option most likely to optimise value for money?			✓
V8. Have whole-of-life costs been thoroughly assessed?			✓
V9. Is the value for money analysis robust to different scenarios and sensitivity testing of assumptions?		✓	✓
V10. Is the cost estimation appropriate for the project's stage? Is the project scope sufficiently developed to provide a high level of confidence in the cost estimate?			✓
V20. Have sustainability and resilience been appropriately considered in the assessment of options?		✓	✓
V11. *(For Programmes)* How has the applicant determined whether the preferred approach (i.e., using a programme of investments over a project-by-project approach) will deliver value for money?		✓	
V12. *(For Programmes)* Are the set of projects within the preferred programme likely to optimise value for money?		✓	
V13. *(For Programmes)* Is the preferred programme of projects likely to optimise value for money under different scenarios and assumptions?		✓	
V14. *(For Programmes)* Have whole-of-life costs been thoroughly assessed across the preferred programme of projects?		✓	

Question	Stage 1 (Review Only)	Stage 2 (Review Only)	Stage 3
Deliverability			
D1. Are there demonstrably viable commercial approaches for the shortlisted options?		✓	
D2. What is the currently preferred commercial approach and how mature is its development?			✓
D3. Is the development of the commercial approach sufficient for the project stage?		✓	✓
D4. Is the preferred commercial approach appropriate and demonstrably viable?			✓
D5. What are the governance arrangements for this project? Are they the usual arrangements for the organisation or has a bespoke governance arrangement been developed?	✓	✓	✓
D6. Are governance arrangements appropriate for a project of this size and complexity? Do they have the right membership? Is there clear accountability for project delivery?	✓	✓	✓
D7. Does the agency's track record for planning and delivery demonstrate that it has the expertise to deliver a project of this size and complexity?	✓	✓	✓
D8. Is there a delivery strategy and programme, and sufficient delivery expertise?			✓
D9. Is the applicant building the appropriate capacity to deliver the options?		✓	
D10. Is the project development at a level of maturity that is appropriate and sufficient for this project stage?	✓	✓	✓
D11. Have ultimate asset owners and operators been involved in the business case process?		✓	✓
D12. Has the applicant identified the delivery risks for the shortlisted options?		✓	✓
D13. Are plans in place to address delivery risks?		✓	✓
D14. Will the project, as scoped, be sufficient to deliver the desired benefits? If not, what further investments or changes will be necessary to deliver the desired benefits?			✓
D15. Have asset owners' needs and change management been appropriately considered?			✓
D16. Has stakeholder management been appropriately considered?			✓
D17. Has the applicant considered market capacity to deliver the project?			✓