

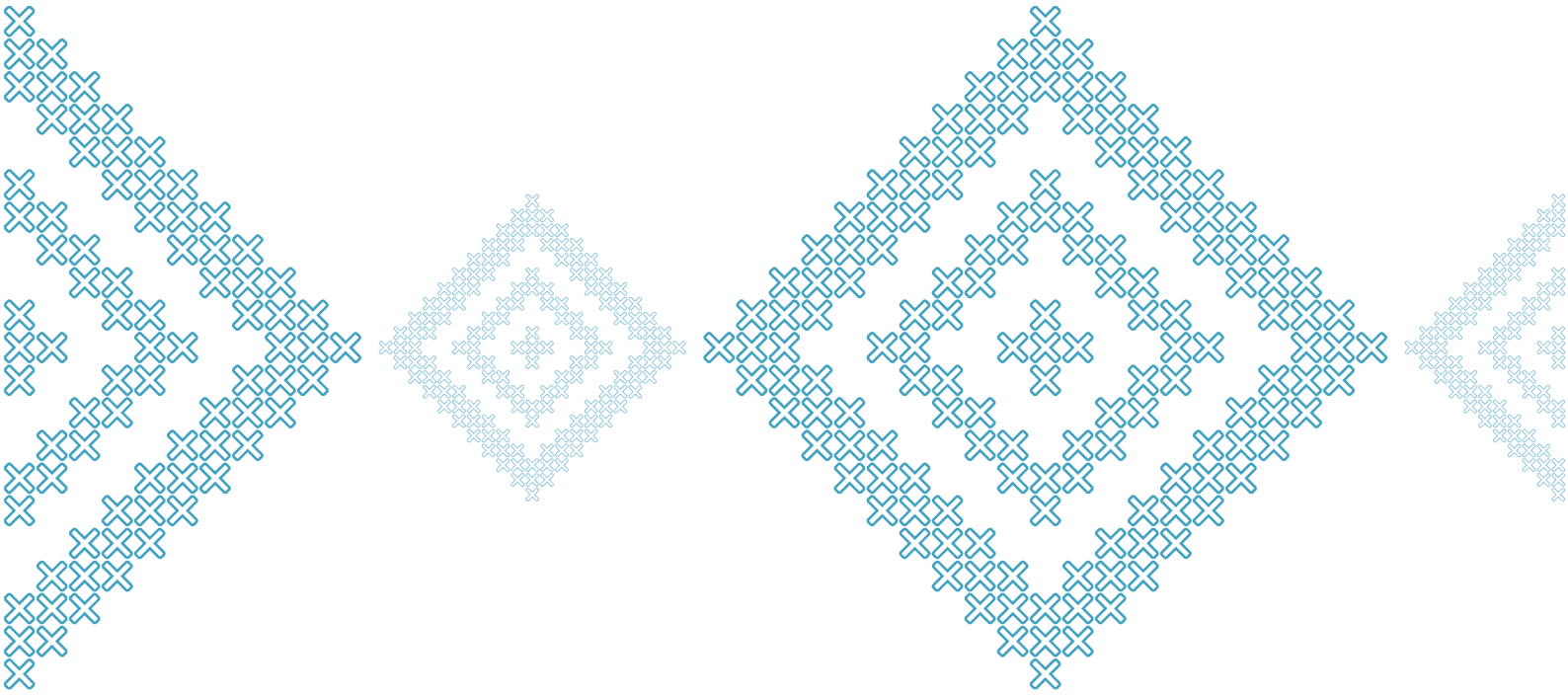


TE TAI ŌHANGA
THE TREASURY

GUIDANCE

Funding and financing framework

November 2024



© Crown Copyright



This work is licensed under the Creative Commons Attribution 4.0 International licence. In essence, you are free to copy, distribute and adapt the work, as long as you attribute the work to the Crown and abide by the other licence terms.

To view a copy of this licence, visit <https://creativecommons.org/licenses/by/4.0/>. Please note that no departmental or governmental emblem, logo or Coat of Arms may be used in any way which infringes any provision of the [Flags, Emblems, and Names Protection Act 1981](#). Attribution to the Crown should be in written form and not by reproduction of any such emblem, logo or Coat of Arms.

The Treasury URL at November for this document is <https://www.treasury.govt.nz/publications/guide/funding-and-financing-framework>

Contents

Executive summary	2
About this framework	4
Key definitions	5
Funding and financing principles	6
Funding and financing decision process	9
Appendix 1: Standalone funding and financing analysis	12
Appendix 2: Financing sources and revenue certainty	18
Financing sources	18
Certainty of project revenues	20
Appendix 3: Active management considerations	23
Capability	23
Active management	23
Appendix 4: Case study – Ultra Fast Broadband Initiative	24
Context	24

Executive summary

The Treasury's Funding and Financing Framework ("Framework") consists of a set of Principles and a Decision Process.

The objectives of the Framework are to:

- Broaden the funding base for investments and utilise private capital, where efficient
- Apply commercial disciplines to the Crown's approach to the provision of public capital.

This Framework will help the Crown make smarter and more informed funding and financing decisions. The approach set out in the Framework highlights the importance of investing public money in a way that provides the greatest benefit and makes sure each dollar goes as far as possible.

The Principles are:

- 1 Crown funding and/or financing should only be sought when all other sources have been exhausted
- 2 Crown capital should be deployed in an optimal form
- 3 Crown capital should be provided on the basis it is 'recycled' as soon as practical
- 4 The Crown should actively manage the financial risks associated with its investments.

The Crown should focus on finding ways for users or beneficiaries to fund new and existing assets or services, rather than defaulting to the use of grants. This approach is as much about preserving the Crown's balance sheet capacity for genuine funding gaps as it is about fairness and efficiency – people who benefit from an asset or service should help pay for it and usage should be regulated by market-driven pricing.

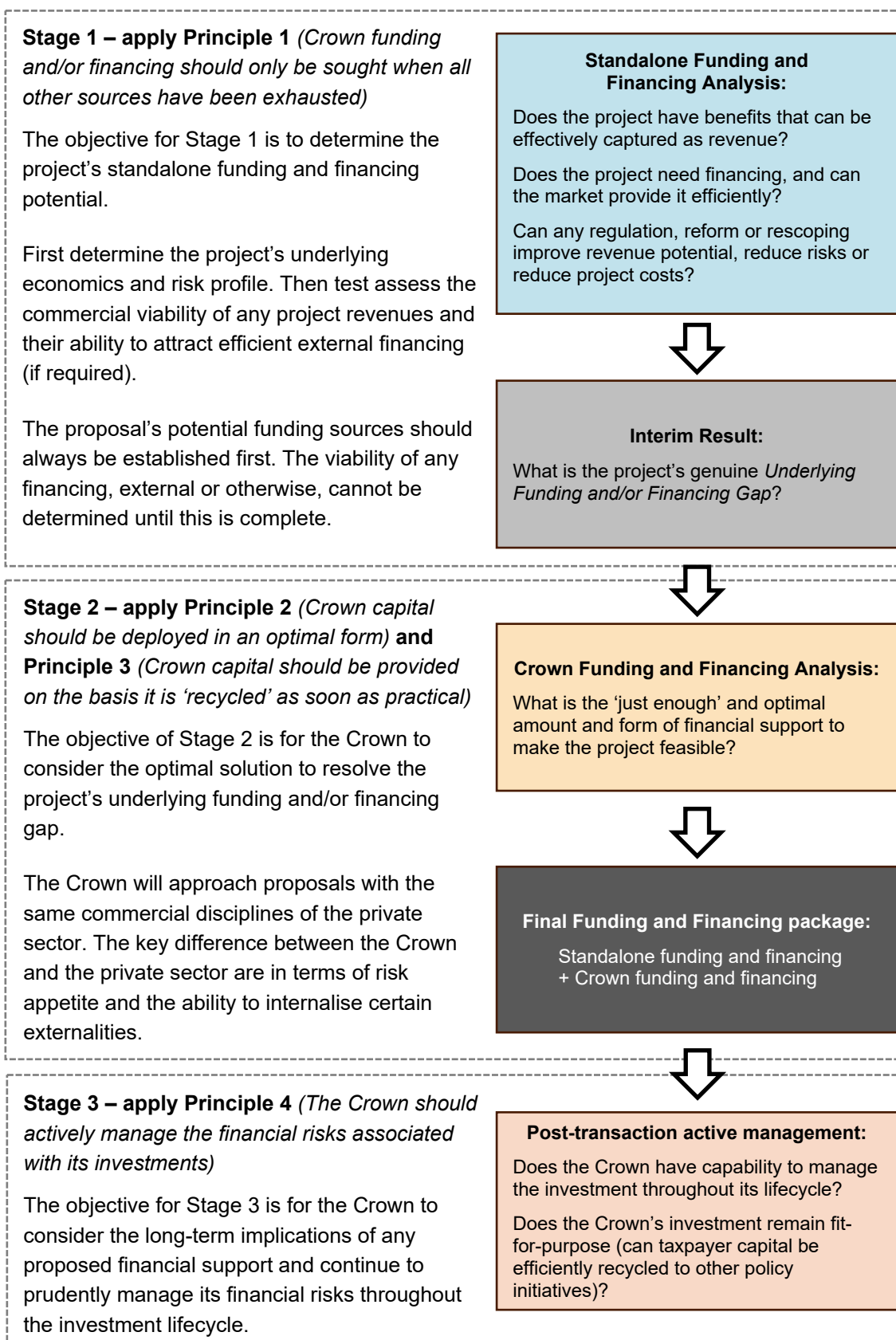
When financing is needed, the public sector should look at options from the private market. External financing comes with extra costs. These extra costs need to be weighed against the risks transferred and any additional benefits (such as improved asset and service delivery) private financing can provide.

The Crown will consider using its balance sheet capacity once these alternatives have been exhausted and will apply commercial disciplines when deciding how to financially support a proposal. Different proposals will need different types of funding or financing support – the Crown will look at the specific needs of each proposal and offer 'just enough' support to make the proposal feasible.

Finally, it is important the Crown actively manages its financial investments to make sure they remain fit-for-purpose and to check whether Crown involvement is still needed. Often, whether value-for-money is achieved will depend on how unforeseen challenges are managed throughout an investment's lifecycle. Equally, once a proposal can support itself financially, the Crown could step back and let the market take over. This approach allows taxpayer money can be 'recycled' into more policy initiatives.

Ultimately the Framework should support the Government to achieve its underlying policy objectives and fiscal strategy.

The **Decision Process** brings this all together in a stage-by-stage illustration and explanation of what each principle means for each stage.



About this framework

The Treasury has developed a Funding and Financing Framework (“Framework”) consisting of a set of Principles and a Decision Process to guide the Crown’s choices around how it structures its funding and/or financing support.

The Framework is a key tool to support the Crown in efficiently and effectively managing its balance sheet capacity – in line with the intent signalled in the Public Finance Act 1989.¹ A well-managed balance sheet contributes to higher living standards by supporting the provision of public services while also underpinning the economy’s overall performance.

Using the Crown’s balance sheet more strategically to achieve policy objectives can be effective and may in some cases provide better value for money than more traditional forms of support. At the same time, such strategies can generate different risks and challenges if it is not subject to appropriate policy frameworks, risk management and governance.

The Crown will continue to use its balance sheet to support policy objectives. The Principles will guide the Crown to preserve this capacity for initiatives where alternative funding and financing options are not available or when there is a policy decision to be the primary and/or only funder.

The underlying policy objectives and public outcomes sought should be determined before applying the Principles. The Principles may inform but should not dictate decision-making on the underlying policy objectives that drive a given proposal.

¹ A Guide to the Public Finance Act – November 2023
(<https://www.treasury.govt.nz/sites/default/files/2023-11/guide-pfa-nov23.pdf>)

Key definitions

Financing refers to raising capital to meet upfront costs of projects.² Financing comes in many forms but is always entered on the basis it is repayable and a return is required. Financing does not solve the funding gap but can reshape the funding gap, spreading it over longer periods and sometimes matching it with revenue arising from the capital investment.

If improperly structured and expensively priced, financing may increase the funding requirements through additional financing costs borne by users, beneficiaries, and taxpayers on top of existing capital and operating expenditure.

If effectively structured and efficiently priced, external financing enables the Crown to leverage private sector commercial discipline, innovation, and experience.

Funding³ refers to the ultimate way to pay for proposals (infrastructure or other investments). This funding requirement could be upfront and/or over time. It is sourced either directly from users and beneficiaries, or indirectly through the allocation of government (Crown or local) tax, rates, or levy-based revenue sources.

In the context of infrastructure, funding can come in during the construction stage to cover the gap between the total amount of upfront costs and financing available, or in the operations stage to repay the financing and operating costs, or both.

Crown capital refers to any monies provided by the Crown, including debt and equity financing, and grant payments.

Project or proposal refers to any capital and/or expenditure spending initiative, including for infrastructure or services.

Infrastructure⁴ refers to the fixed, long-lived structures that facilitate economic performance and wellbeing. Infrastructure includes buildings and physical networks, principally: transport, water, social assets, and communications infrastructure such as mobile and broadband infrastructure, however funded. Infrastructure does not include cultural assets, specialist military equipment or ICT business systems.

² Infrastructure projects typically have large upfront capital funding requirements during the development and construction stages and potential revenue streams that arise throughout the life of the asset. Infrastructure is therefore the most likely circumstance where the financing is required.

³ Revenue and funding are used interchangeably – both mean positive cash inflows. However, funding will commonly refer to situations where there is a non-market transaction (ie, tax or tax-like mechanisms are used to generate cash inflow). Whereas revenue will refer commonly refer to situations where there is a willing buyer and willing seller transacting at arm's-length (ie, a market transaction).

⁴ This definition is consistent with CO(23)9: Investment Management and Asset Performance in Departments and Other Entities.

Funding and financing principles

The objectives of the Funding and Financing Principles (“Principles”) are to:

- broaden the funding base for investments and utilise private capital, where efficient
- apply commercial disciplines to the Crown’s approach to the provision of public capital.

These objectives operate within the confines of the Government’s fiscal strategy and the underlying policy objective of any proposal.

Principles:

- 1 Crown funding and financing should only be sought when all other sources have been exhausted
- 2 Crown capital should be deployed in an optimal form
- 3 Crown capital should be provided on the basis it is ‘recycled’ as soon as practical
- 4 The Crown should actively manage the financial risks associated with its investments

Principle 1: Crown funding and financing should only be sought when all other sources have been exhausted

The Crown’s fiscal and balance sheet capacity is finite with multiple investments competing for its use and should not be used as a default option. The aim of this principle is to maximise non-Crown revenue sources and attract private sector investment in delivering public infrastructure and services, **where such partnerships provide good value for money**.

Exhausted, in the context of this principle, means:

- to the degree that is reasonable given the materiality of the funding source (and by extension its financing potential), and
- within the bounds of the given policy objective.

Standalone⁵ funding sources should always be assessed⁶ first. These are the sources that can be obtained directly from the users or beneficiaries of the proposal, without the Crown’s involvement. The feasibility of any financing, external or otherwise, can only be evaluated once this step is complete.

⁵ Standalone means without any additional intervention of the Crown. Standalone does not mean the project’s funding and financing potential that accrues to a standalone government entity. Projects should be evaluated for their funding and financing potential across the Crown and the private sector.

⁶ The Crown should use judgement on the degree of evaluation necessary for a project’s potential funding sources. This judgement should reflect the overall policy objective for the project.

The market should then be tested⁷ to see if it can offer efficient financing. However, external financing should not be used simply because it is available. For financing to be efficient, the pricing and terms must align with the risks transferred and non-financial benefits bought by external financiers.

See Appendix 1 for more information on standalone funding and financing analysis.

In some circumstances, the Crown may need to consider how regulation, reform⁸ or rescoping⁹ could enhance the proposal's potential for generating standalone revenue or reduce its underlying risks or funding needs.

Principle 2: Crown capital should be deployed in an optimal form

If there is a genuine funding and/or financing gap and the Government chooses to provide financial support, the form of that support should be determined by the proposal's underlying economics and risk profile.

The amount and terms of the Crown's financial assistance should be 'just enough' to achieve the Government's policy objectives. This includes charging capital costs that, as much as possible, reflect the creditworthiness and/or investment quality of the project on a standalone basis and align with market benchmarks.

This principle requires the Crown to tailor its financial support to the specific needs of each project, ensuring the assistance – both in amount and type – provides just enough support or risk mitigation to make the project viable.

See Appendix 2 for the types of financing that could be considered under various revenue circumstances.

The concept of 'just enough' also applies to the complexity of the arrangement. This means that the Crown should not create overly complicated financial instruments to account for every risk or design a 'perfect' transaction.

The structure of the Crown's funding support should not aim to achieve a particular financing outcome. Instead, any funding support should align with the proposal's underlying economics and risk profile. And any financing support should match the project's funding structure.

⁷ The Crown should use judgement on the degree of market testing necessary for each potential funding source. The Crown is not expected to engage the market to test every identified funding source.

⁸ Including reform of status quo contractual terms and associated operating procedures.

⁹ Rescoping includes both productive reductions in scope as well as adding complementary value-accretive investments to the original proposal to generate a net increase in funding potential.

Principle 3: Crown capital should be provided on the basis it is 'recycled' as soon as practical

If a genuine financing gap exists and the Government chooses to provide support, priority will be given to forms of assistance that serve as a 'bridge' to market alternatives. The Crown's capital should be refinanced by the market once the following conditions are met:

- the policy objective has been achieved, and
- the project economics and risk profile become commercially viable.

This approach enables the Crown's capital to be redeployed into new policy initiatives. More frequent capital recycling will expand the pool of projects that the Crown could choose to support.

See Appendix 4 for an example of a well-structured Crown financial 'bridge' to commercial viability.

Crown grants, whether provided upfront or as long-term contributions, should be reserved for situations where genuine funding gaps exist, and commercially viable revenue streams are not achievable in either the short or long term.

Principle 4: The Crown should actively manage the financial risks associated with its investments

Any form of funding or financing introduces new financial risks for the Crown. These risks must be carefully managed throughout the project's lifecycle, just as a private investor would.

The Crown should avoid entering arrangements it cannot effectively manage and should ensure that any bespoke structuring remains simple enough to execute, monitor, and manage. Complex arrangements that are not easily understood cannot be properly managed. This principle reinforces the need to be 'just enough' in terms of complexity.

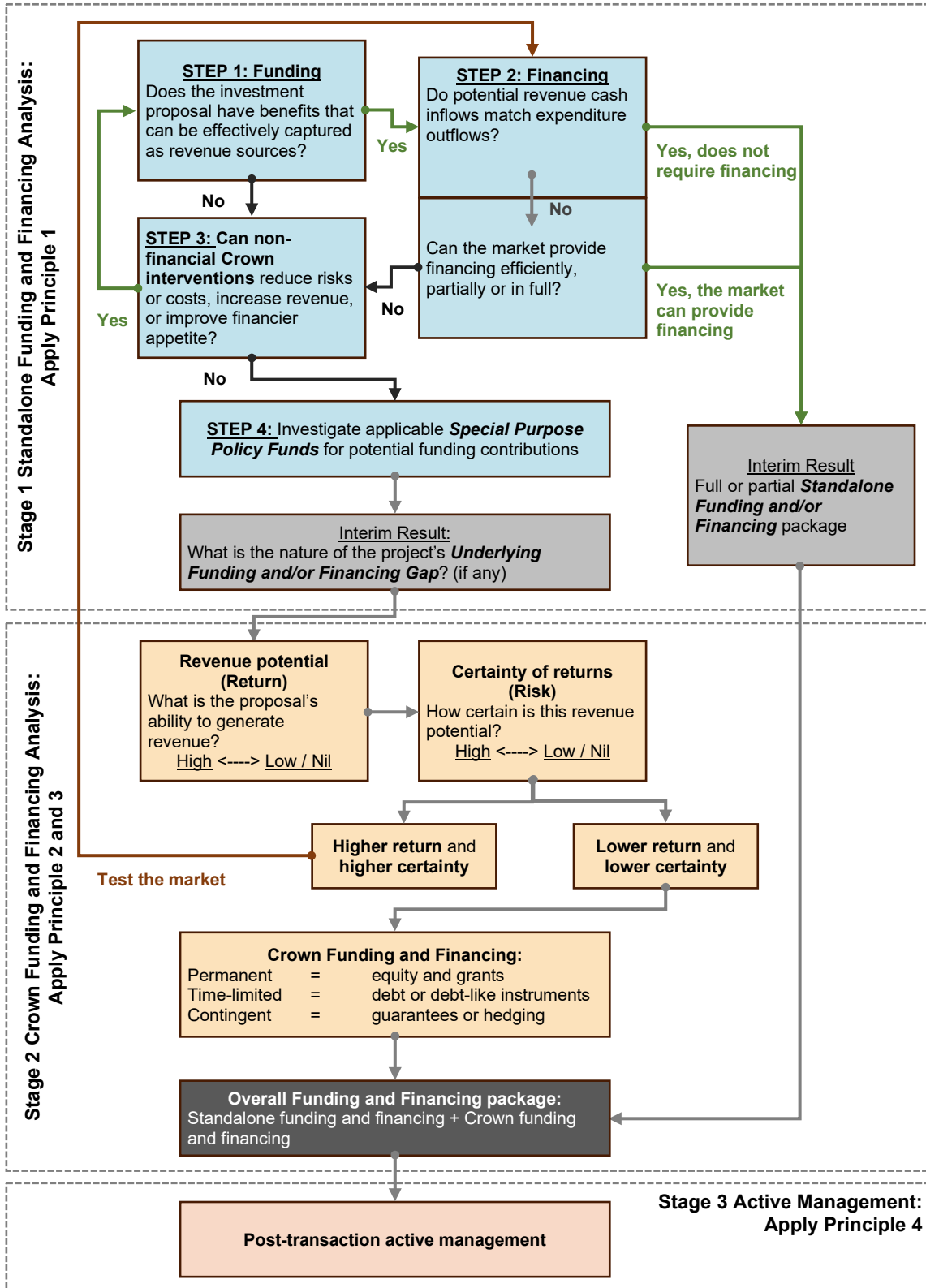
Post-financial close management is as crucial as pre-financial close deal-making. The success or failure of delivering value for money to taxpayers often hinges on how unforeseen situations are handled throughout the project lifecycle.¹⁰ This requires the Crown to have both the capacity and willingness to manage ongoing financial risks.

Additionally, the Crown faces moral hazard and reputational risks that private investors typically do not encounter. No financial instrument or contractual structure can fully eliminate the risk of further funding calls on the Crown. This should be considered when deciding which risks to transfer to the private sector and which to retain.

¹⁰ Where the Crown's financial support is permanent, ie, grant payments, there is minimal financial investment to actively manage. However, this does not mean other post-investment benefit realisation assessments should not occur.

Funding and financing decision process

This section provides an overview of the Funding and Financing Decision Process (“Decision Process”) and how the Principles align with each stage of the Decision Process. The below diagram is a high-level illustration – it does not include every possible scenario or illustrate the policy decisions that need to occur beforehand. It also assumes that the policy objectives are considered throughout Decision Process.



Stage 1: Standalone funding and financing analysis (apply Principle 1)

The objective for Stage 1 is to determine the project's standalone funding and financing potential. The proposal's potential funding sources should always be established before testing financing sources (if required).

The project's underlying economics and risk profile should be determined first. Using this information the Crown can then assess the commercial viability of any project revenues and their ability to attract efficient external financing (if required).

Projects will have different revenue potential. This can range from:

- *high and certain* – generating strong and predictable cashflows sufficient to support external financing of some or all expenditure, to
- *low and uncertain* – the probability of generating revenue from direct sources is unlikely and cannot support any external financing.

High and certain revenue (ie, commercially viable) should be banked as part of the project's standalone funding and financing package.

See Appendix 2 for the types of financing that could be considered under various revenue circumstances.

Prior to Stage 2 the Crown should investigate:

- whether revenue potential can be improved, or project funding requirements or underlying risks can be reduced, through regulation, reforms or rescoping
- any existing applicable *special purpose policy funds* for potential funding contributions.

See Appendix 1 for more information on standalone funding and financing analysis.

Stage 2: Crown funding and financing analysis (apply Principles 2 and 3)

The objective of Stage 2 is for the Crown to develop the optimal solution to resolve the project's underlying funding and/or financing gap. The Crown should draw on the project economics and risk profile determined in Stage 1 for this analysis.

The Crown should approach the project in the same manner as a private sector investor when deciding the amount and type of financial support to provide. The key difference between the Crown and private sector investors is risk appetite and the Crown's ability to internalise certain externalities.

Applying commercial disciplines, the Crown should evaluate the project's revenue potential and certainty of returns. As per Stage 1, if high and certain revenue sources are available, these should be banked as part of the project's standalone funding and financing package.

If low and uncertain revenue are available, the Crown should evaluate the risk profile of these revenue sources and structure its financial support to:

- 1 capture these revenues, where efficient, and/or
- 2 mitigate specific non-commercial risks, to improve the overall commercial viability of the project.

In general, the Crown's financial support may be:

- permanent = equity¹¹ and grants
- time-limited = debt or debt-like instruments
- contingent = guarantees and other contractual hedging instruments.

See Appendix 2 for the types of financing that could be considered under various revenue circumstances.

The optimal funding and/or financing of a proposal could be a mix of direct revenue sources and indirect funding sources, external financing and Crown financing. The Crown could also deploy a combination of financial instruments or bespoke financial structuring for any given project to achieve an optimal outcome.

Where the Crown is a co-investor or entering a long-term contractual relationship with the private sector, consideration of the partner/s expertise, track record and alignment to Crown long-term objectives will also be considered as part of any decision to provide Crown financial support.

Stage 3: Active management (apply Principle 4)

The objective of this stage is for the Crown to consider the long-term implications of any proposed funding and/or financing solution (standalone and/or Crown).

Applying Principles 1-3 is likely to result in the Crown utilising more complex financial instruments to achieve public outcomes.

The Crown's financial support should be reviewed periodically to ensure it is achieving its intended purpose (eg, mitigating a certain risk, temporarily filling a financing gap) and remains aligned with the policy objectives of the proposal.

If a project's economics or risk profile changes, the Crown should consider restructuring its investment. For example, debt financing must be continually assessed to ensure repayment, while equity investments should be monitored for expected returns.

If policy objectives have changed, the Crown should reassess its participation and adjust the structure of its financial support accordingly. If policy objectives have been met, the Crown should consider recycling its capital where applicable and if practical.

See Appendix 3 for further active management considerations.

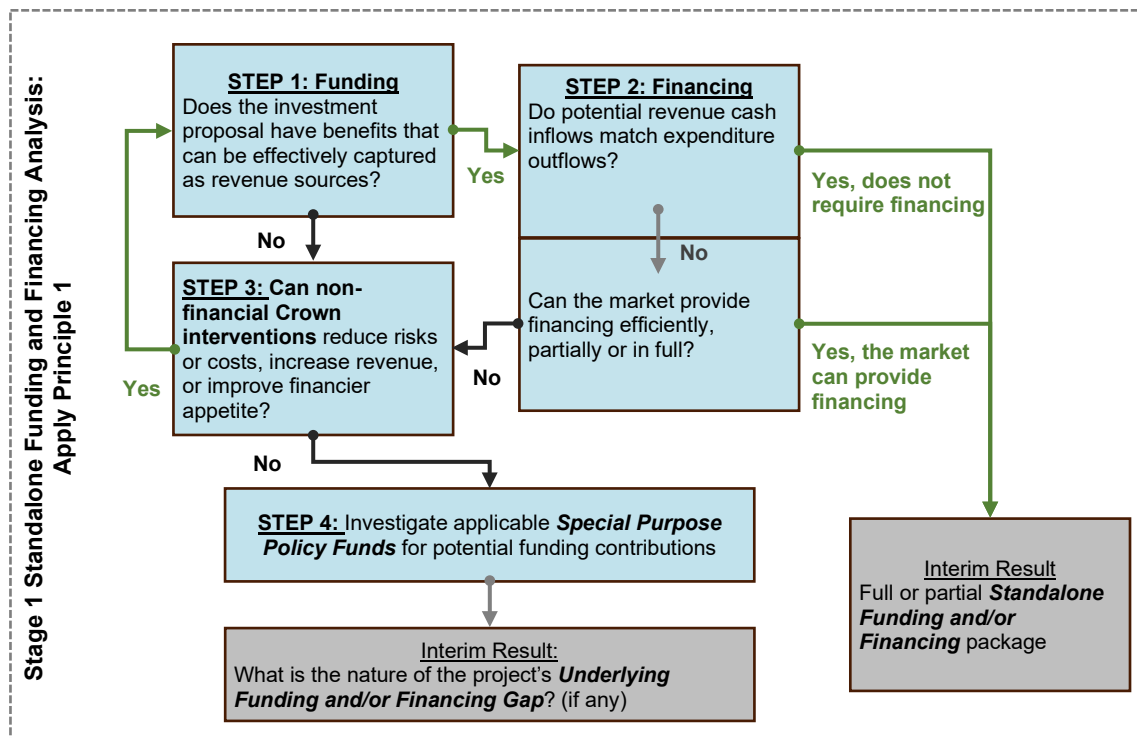
¹¹ Equity investments also carry additional project risks which the Crown may not be best placed to manage – this is another reason why the Crown will prefer debt or debt-like financing support.

Appendix 1: Standalone funding and financing analysis

Evaluating a proposal's standalone funding and financing position ensures all non-Crown options have been genuinely assessed. This analysis is required as part of Stage 1 of the Decision Process.

The analysis also provides the Crown the basis for applying Principle 2 and 3 in the Crown Funding and Financing Analysis stage.

Section of the Funding and Financing Decision Process Diagram:



The Standalone Funding and Financing Analysis stage of the Decision Process should identify:

- 1 The *Standalone Funding and/or Financing* package, comprising *high or moderate, and certain* revenue sources derived from benefits produced by the proposal, which:
 - a do not require financing (ie, revenue cash inflows match capital and/or operating expenditure outflows), and/or
 - b require financing and can be externally financed efficiently.
- 2 The *Underlying Funding and/or Financing Gap*, comprising:
 - a *Underlying Financing Gap* – *low and uncertain* revenue sources with *risk or return gaps* that cannot be externally financed, and/or
 - b *Underlying Funding Gap* – the proportion of the proposal's funding requirements that exceeds the *Standalone Funding and/or Financing* sources and any other relevant contributions (eg, special purpose policy funds).

See Appendix 2 for various revenue potential and return certainty scenarios.

Pre-requisite: Understand the funding requirement and risk profile

Structuring an optimal funding and/or financing solution requires an understanding of the proposal's:

- funding requirements for the project
- project demand- and supply-side risks
 - availability and viability of project revenues and other funding sources
 - delivery risks including design, construction, and operations.

Step 1 – Benefit attribution and capture: What are the proposal's benefits, and can they be effectively captured as revenue sources?

Beneficiary pays should guide all funding decisions. That is, the revenues used to economically support an investment should be derived from those who benefit from the investment. This is both fair and economically efficient. If beneficiaries are not prepared to pay, and there are no compelling social or broader economic benefits, the rationale for the investment should be re-examined.

Beneficiaries can include individuals, households or commercial entities that receive direct or indirect value, or receive a reduction in risks, at a point in time or gradually through time. The most appropriate mechanism and intermediary for capturing this value should then be identified for each beneficiary group. If the efficient mechanisms for capturing this value sit with different parts of the Crown or local authorities, then funding agreements should be sought to enable their financial contribution to the proposal.

Direct revenue sources are most efficient where:

- Beneficiaries are clearly identifiable, and those beneficiaries capture most of the benefits of the service, and
- It is administratively efficient to collect revenues from direct beneficiaries.

Direct revenue sources can be captured through market transactions (eg, user charges collected before consumption of services) or through a specific user-based tax (eg, collection of household rubbish disposal fees through rates).

Box 1: Pricing and charging principles

A range of resources¹² are available to guide government entities when setting pricing for goods or services:

- Electricity Authority: Distribution Pricing Principles
- Office of the Auditor-General: Setting and Administering Fees and Levies for Cost Recovery: Good Practice Guide
- The Treasury: Guidelines for Setting Charges in the Public Sector.

The Electricity Authority principles are most applicable to network infrastructure but is also a useful reference for setting economically efficient prices generally. The Office of the Auditor-General guide discusses the legal authority requirements to charge for goods and services, and expectations on how fees and levies are administered and managed. The Treasury guidelines helps government entities take proper account of relevant policy considerations when preparing charging regimes and to operate cost-recovery regimes transparently.

User charges should be reasonable and efficient. To the extent that user charges are appropriate, their application should satisfy the following:

- **Linkage with benefits:** charges should be linked to the value received by direct users, net of any negative externalities. Charges should not reflect benefits received by other users of the same asset (externalities) or other assets (cross-subsidisation). This does not rule out network charging if that is most efficient.
- **Cost reflective:** charges should reflect an accurate allocation of fixed and variable costs associated with delivering the direct benefits (ie, not externalities). Where there are different costs imposed by different users (residential vs commercial or on-peak vs off-peak) charges should be structured accordingly.
- **Choice:** users should have choice about whether to use the service so that consumption and therefore expenditure can be self-determined – without choice the charge is better characterised as a tax.

Direct revenue sources that are tax-based are not likely to explicitly satisfy the last characteristic of “choice”. However, there is usually implicit choice through the respective democratic and consultation processes.

Box 2: Capacity to pay and concessions

There are legitimate equity reasons why the Government may seek to reduce the cost impacts on certain groups of users. However, any concessions to users are better funded from budget allocations than by adjusting user charges.

An explicit, budget funded concession is more transparent and subject to fiscal scrutiny, and avoids ongoing mispricing of use of assets, which can undermine future funding and investment for that asset. Budget funding also recognises that concessions for equity purposes are a policy decision that should be funded by society at large (rather than just other users of the asset or service in question).

¹² <https://www.ea.govt.nz/industry/distribution/distribution-pricing/>
<https://oag.parliament.nz/2021/fees-and-levies/docs/fees-and-levies.pdf>
<https://www.treasury.govt.nz/sites/default/files/2017-04/settingcharges-apr17.pdf>

Direct revenue sources should be assessed for their revenue potential and return certainty. *High or moderate, and certain* revenue sources should be earmarked to be assessed in the next step for external financing.

Even if potential revenue sources are *low and uncertain*, they should still be identified and noted for evaluation as part of Step 3 (Regulation, Reform or Rescoping) and as part of the Crown's funding and financing analysis.¹³

See Appendix 2 for various revenue potential and return certainty scenarios.

At the end of this step, the project's potential revenue sources should be known, including estimated cashflow, risk profile and associated cost drivers.

Step 2 – Matching revenue inflows with expenditure outflows: Do any of the identified revenue sources require financing to match capital and operational expenditure?

Financing is a service that carries additional cost and should only be used when it provides value over and above those costs. The direct and indirect costs of financing include the cost of capital and operational requirements (including operating restrictions, covenants, and other terms and conditions), respectively.

Revenue with cashflow profiles that align with expenditure outflows (eg, public transport farebox cashflow align with operating costs) do not require any financing. These revenue sources should be banked as part of the *Standalone Funding and/or Financing* package – which will form part of the proposal's *Overall Funding and/or Financing* package.

Revenue sources with cashflow profiles that do not align with expenditure outflows (eg, convention centre booking fee cashflows do not align with upfront construction costs) will require financing.

Proposals that are service based are unlikely to have significant financing needs. Whereas large capital projects¹⁴ are unlikely to have standalone revenue sources that match capital funding requirements.

Direct user-based revenue sources should be investigated for external financing. In particular, *high and certain* revenue sources should be able to attract external financing efficiently.¹⁵ *Low and uncertain* revenue sources are not likely to be attractive for external financing and if pursued is likely to be inefficient – these will likely form part of the *Underlying Funding and/or Financing Gap* – which will be considered as part of the Crown's funding and/or financing decisions.

See Appendix 2 for various revenue potential and return certainty scenarios.

¹³ *Low and uncertain* revenue sources may become more viable in the future due to general changes to the economy or society, or because of non-financial Crown interventions (eg, regulation or reform).

¹⁴ Large capital projects typically have large upfront expenditure during the construction phase and can only generate revenue once the project is operational.

¹⁵ For financing to be efficient the pricing provided by capital providers should be commensurate to the risks that they bear and non-financial benefits provided.

Without commercially viable revenue sources, the Crown will likely remain a funder and any external financing is likely to impact the Crown's fiscal and balance sheet capacity. This scenario may still represent value-for-money if effectively structured and efficiently priced (ie, through alternative procurement models which are Crown funded but private sector financed).

Direct tax-based revenue sources (ie, is directly attributable to beneficiaries but can only be captured by a government entity) may not achieve value for money if externally financed. It is difficult to fully de-couple these revenue sources from the relevant government entity or the Crown in general. In these cases, external financing can attract risk premium that does not fully account for any implied Crown credit support.¹⁶

Evaluation of financing options is primarily about trading-off risk transfer and any non-financial benefits, with the cost of financing. External financing should only be pursued if this balance is struck. For example, if no risk transfer occurs then the cost of financing should reflect the time value of money only – this is typically the risk-free rate.

Revenue sources that require and can attract effective financing should be banked as part of the *Standalone Funding and/or Financing* package – these revenue sources will form part of the proposal's Overall Funding and/or Financing package.

Step 3 – Regulation, reforms, or rescoping

In some circumstances the Crown should consider how regulation, reform or rescoping may help the project to:

- generate incremental, and potentially commercially viable,¹⁷ revenue sources, or
- reduce the funding requirement or underlying risks of the proposal.

Regulation and reform can be significant undertakings but can yield positive outcomes for an individual project as well as the sector. These actions do not need to delay investments from proceeding. Regulation and reform can be progressed concurrently with the project and form part of the overall funding and financing plan.

See Appendix 4 for an example of a regulation and reform occurring prior to and throughout the project investment cycle.

¹⁶ Relevant Standard & Poors (S&P) credit rating frameworks includes consideration of the likelihood of government support for government and government-related entities.

¹⁷ Commercially viable cashflows means independent and predictable revenue streams able to provide a return of and on capital, that can be efficiently capitalised or leveraged by the external financiers. See Appendix 2 for various revenue potential and return certainty scenarios.

Box 3: Network charging

Possible regulation or reform that could improve the revenue potential of a project is the introduction of network-based charging to a system of highly integrated assets currently charged on an individual basis or by some other means.

It will be efficient for some forms of assets or services to be charged as a network. These assets or services provide value to users through direct usage of a specific part of the network and the availability of all other parts of the network. Existing examples of network charging in New Zealand include the electricity transmission and distribution, gas pipeline, fibre, and in some areas, public transport services.

Re-scoping is an immediate action that can reduce the size of any *Underlying Funding and/or Financing Gap*. Attempts at re-scoping must not jeopardise the original policy outcomes sought by the proposal.

Step 4 – Special purpose policy funds

Prior to confirming the quantum and nature of the proposal's *Underlying Funding and/or Financing Gap*, existing applicable special purpose policy funds should be evaluated for potential funding contributions.

Box 4: Notes for the Crown funding and/or financing decision making

Externalities

There will be situations where commercially viable revenue streams are genuinely not possible in the near- or long-term, creating genuine funding gaps. This situation is likely to occur where the benefits of a project are so dispersed that user-based revenue is not efficient. In these cases:

- direct users do not capture all the benefits – there are external community benefits (ie, externalities) that are enjoyed by others, or
- it is very hard to identify beneficiaries or very difficult to calculate the degree of benefit received by each.

In these cases, it is efficient for the Crown to internalise these externalities and provide long-term financial assistance, supported by the general taxpayer.

Asset recycling

In some cases, there may be opportunities for asset recycling to form part of the funding mix. Asset recycling should be considered a form of taxpayer funding. It is not a third source of funding separate to user charges or taxpayer funding. Asset recycling is a way of reallocating public funds between different forms of assets and should be seen as part of general taxpayer funding.

As a form of taxpayer funding, asset recycling is considered part of the Crown's funding and/or financing decision.

Appendix 2: Financing sources and revenue certainty

The sources of financing available for project development are determined by the project's returns, risk, size and policy outcomes. Financing can come from the Crown or external sources.

Financing sources

External sources

- Private equity investments with the right to control the asset and entitlement to the project's residual returns, either indefinitely or for a defined contractual term. Equity investors are interested in maximising total return on equity through dividend yield or project sale proceeds in the exit event.
- Private debt investments provide the investors contractual rights to receive debt principal repayments as per the agreed schedule and the return on the debt principal at the agreed rate. Debt instruments can have long-term maturities consistent with the project life or be refinanced multiple times during the project life. Debt investors are interested in increasing the project stability and minimising any project risks that may preclude debt service (insufficiency of operational cashflows, delays, taxation, etc).
 - Project default risks can be fully or partially transferred to debt investors.
 - Senior debt takes priority over other debt tranches.
 - Junior debt is repaid from residual cashflows after senior debt service. It carries the default risk of both senior and junior debt and is commonly provided at higher rates than senior debt tranches to compensate for the increased default risk.
- Hybrid instruments possess both debt and equity characteristics and include convertible bonds, mezzanine debt and preferred stocks. They provide credit support to senior and subordinated debt instruments but offer higher returns to compensate for this additional risk and can also provide equity return participation and equity conversion rights.

Crown sources¹⁸

- Crown equity as a sole investor or co-investor with private sector. Depending on the project requirements, the Crown can have market or concessional return expectations, participating jointly with other investors or through special equity classes.

¹⁸ There is not likely to be situations where it is efficient for the Crown will provide debt or equity on market terms. In situations where market terms are applicable for a proposal we would expect the market to provide the relevant financing.

- Crown debt includes the loans provided by the Crown to the project and/or to the sponsoring agency. These loans can be provided on market terms or include one or several concession elements:
 - Longer than market loan tenor
 - decreases project risks for other investors
 - reduces the project refinancing costs.
 - Lower than market interest rates and fees
 - reduces the project borrowing costs
 - increases returns for other investors.
 - Extended capitalisation period and deferred principal repayment
 - provides more ‘breathing space’ during ramp up and other early stages of the project
 - increases returns for other investors by bringing cashflows forward.
 - Subordination to private debt tranches
 - reduces the risks of senior debt investors and therefore the project’s borrowing costs
 - provides more depth to the project funding pool
 - increases returns for equity investors.
 - If a project uses concessional Crown loans, its ultimate funding will comprise project revenues and the Crown subsidy associated with the concessions made.
- Crown guarantees and similar contractual/risk hedging instruments represent contingent funding provided by the Crown to mitigate the risks for private sector investors:
 - Demand guarantees and price hedging – funding commitments by the Crown, which are conditional on the deterioration of the project economics to a certain threshold level.
 - Debt/equity underwriting – commitment by the Crown to provide financing if private sector financing cannot be secured.
 - Bridge financing provided by the Crown for early stages of high-risk projects to be refinanced by the private sector when the project risk decreases to the acceptable level.
- Crown payments (eg, grants, availability, lease, direct) provided on:
 - Conditional returnable basis – payment release is dependent on certain performance and/or development milestones to ensure policy outcomes are achieved. The payment and any agreed return on the payments shall be repaid if the project generates excess revenues. There is no obligation to repay the grant if no such revenues are generated.
 - Conditional non-returnable basis – these projects do not generate revenues that could be used to repay capital. The payment release is dependent on certain performance and/or development milestones to ensure policy outcomes are achieved.

Certainty of project revenues

Revenue sources

The costs of all expenditure are ultimately borne by users, beneficiaries and general taxpayers:

- Indirectly – allocation of tax or other government revenues through direct investment, grants and subsidies:
 - Tax-based funding is provided by government on behalf of direct and indirect beneficiaries¹⁹ – decision making is delegated by taxpayers to their elected representatives.
- Directly – revenues derived from users or beneficiary groups where there is a direct link between benefits received and the asset or service being provided:
 - User-based revenue (eg, swimming pool user-charges, public transport fares, road tolls, sale of development rights, licencing fees, processing fees for passports).
 - Tax-based revenue (eg, targeted rates for rubbish collection) – the benefits of tangible goods and/or services delivered must have a direct²⁰ link with beneficiary payees.

Revenue potential

Broadly, higher risks and lower returns make the project less attractive for private investors. The higher project risk is and/or the lower the project returns are, the more likely that the Crown will be required to be the source of project funding and financing.

Project revenues can be classified according to their ability to source external finance:

- Return potential (ability for project revenues to generate a return of capital and on capital), and
- Certainty of revenue (volatility of project revenues being realised according to forecasted amount and timing).

Table 1 outlines general relationships between project risks and returns and sources of project financing.

¹⁹ Although a direct link cannot be made between those who pay and those who benefit, the proposal generates net positive externalities and broad beneficiary groups can still be identified.

²⁰ The difference between direct tax-based revenue and indirect tax-based revenue is, in the former, the payee is the direct recipient of a tangible good, or tangible benefit of a service, in exchange for payment. A tangible benefit of a service refers to the measurable effects or direct outcomes that result from the service. A given payee may derive varying levels of benefit (eg, a household may only use half of their rubbish bin capacity each week but will pay the same as a neighbour that uses the full capacity) from a given good or service. However, the benefit (in the case of rubbish bins it's the capacity provided rather than the level of actual utilisation) received has an objective and (relatively) certain market value. Indirect tax-based revenue refers to situations where the benefit is intangible and unrealised until some uncertain trigger point in the future – for example the possible uplift of an individual's earning potential resulting from wider economic growth resulting from the provision of universal public healthcare.

Table 1: Financing sources by project risk and return certainty

	Return potential and revenue certainty	Revenue repays principal?	Revenue pays market return?	External debt	External equity	Crown debt on market terms	Crown debt on concession	Crown equity on market terms	Crown equity on concession	Crown guarantee etc	Returnable grant	Conditional grant
Commercially viable	High and certain – fully commercial	●	●	✓	✓							
	Moderate and certain – return gap	●	◐	✓	✓		✓		✓			
Commercially unviable	High and uncertain – risk gap	●	◐			✓		✓		✓		
	Moderate and uncertain – risk and return gap	●	◐				✓		✓	✓		
	Low and uncertain – funding gap	◐	○				✓		✓	✓	✓	
	No or unlikely	○	○									✓

Note, this table should be interpreted in the context of a project’s standalone funding and financing position. There may be projects that have *low and uncertain* revenue on a standalone basis, but if Crown provides funding and/or financing support, the project’s overall position changes to that of *high and certain* revenue. This would allow the project to be externally debt and equity financed. As such, all the Crown related financing sources can have the effect of making any given project viable for external debt and equity financing.

For the avoidance of doubt and in accordance with Principle 1 and Principle 2: **External financing should not be pursued just because it is available**, and the **Crown’s funding support should not be structured to achieve a specific financing outcome**.

The table indicates the likely sources of financing for each category of project revenue based on return potential and certainty:

- **High and certain** – these projects are **fully commercial** and generate returns sufficient to attract private sector equity and debt investors.
- **Moderate and certain** – the project has a **return gap**, generating below market returns at the given project risk level. This risk can be reliably measured and transferred to the private sector. However, the return gap needs to be closed through concessionary Crown debt or equity.
- **High and uncertain** – the project has a **risk gap** where revenue can potentially generate market returns, but the risk cannot be reliably measured and transferred to the private sector. This uncertainty would require Crown guarantees, underwrites, or other demand agreements to attract private sector capital.
- **Moderate and uncertain** – these projects have **risk and return gaps** that generate below market returns and the risk cannot be reliably measured and transferred to the private sector. Project returns need to be increased through Crown debt or concessional equity to become attractive to the private sector. Crown should take additional measures (eg, Crown guarantees, etc.) to transfer the risk to the private sector.
- **Low and uncertain** – these projects have **funding gaps** with revenues that are not sufficient to repay principal and can only attract private sector investments with Crown payments (eg, grants) to reduce the total capital requirement from the private sector. Crown payments should have return ability provisions to capture any excess revenue. There may also be a risk gap that requires further bridging.
- **Projects with no revenue** potential can only be funded through Crown payments.

Appendix 3: Active management considerations

Adequate resourcing should be allocated throughout the project lifecycle as part of the initial transaction structuring process.

Capability

Sophisticated financial arrangements will require advanced capability and expertise to manage. At the beginning of any funding and financing process it is important for agencies to consider their ability, in terms of both resourcing and expertise, to manage a complex transaction.

Each form of financial participation will expose the Crown to a different set of risks. These risks need to be prudently managed throughout the project and investment lifecycle just as a private investor would. This ensures the Crown's original policy objectives for involvement are achieved and value for money is maintained.

Financial arrangements that create a long-term contractual relationship (ie, public private partnerships) with a private sector partner will require strong commercial capability to be maintained over the entire duration of the contract. Depending on the agency, these capabilities could be maintained in-house or efficiently sourced from National Infrastructure Funding and Financing Limited, or a combination of both.

Active management

The Crown's investments in projects also need to be evaluated on a periodic basis to ensure its capital is managed to its original mandate and policy objectives. If the original objectives have been achieved, then the Crown should reassess its participation (Principle 3 should be applied). If the mandate or policy objectives have changed then the Crown should re-evaluate the form of its capital participation to ensure it remains fit-for-purpose (Principle 2 should be applied).

For example, debt financing is provided on the premise of repayment and its credit quality needs to be continually assessed. If at any time the lending is not expected to be repaid according to the terms specified, then the Crown needs to consider its options to restructure its investment or undertake other creditor actions.

Likewise, equity investments are provided with the expectation of achieving a return on capital and generally bear project development, construction and operational risks. If project economics change such that financial forecasts are no longer consistent with original expectations, then the Crown should consider options for re-capitalisation or other equity investor actions.

Historic investments by the Crown should also be reviewed. If these projects are now commercially viable then external refinancing should be investigated. If historic investments remain uncommercial then these should remain in active management and be re-evaluated periodically to ensure the Crown's funding and/or financing remains fit-for-purpose (Principle 4 should be applied).

Appendix 4: Case study – Ultra Fast Broadband Initiative

In the late 2000s the Government initiated an investment programme, Ultra Fast Broadband Initiative (“**UFBI**”), in fibre optics infrastructure.

Although UFBI’s actual decision-making process may not have explicitly followed the Principles or Decision Process set out in this document, the commercial model developed and deployed was aligned and exhibited many of the concepts encapsulated in the Principles and Decision Process.

The following is provided as an illustrative case study. It will focus on key steps and concepts rather than the specific quantum of return or certainty gaps. Some technical details have not been included to simplify the case study.

For the avoidance of doubt, this case study should not be taken as a complete recollection of events leading up to and during the UFBI.

Context

Prior to the UFBI investment programme, most consumers connected to the internet via the local copper cable network. Copper cables are significantly more restrictive in terms of bandwidth (ie, download and upload speed) than fibre optics cables. The Government held a policy position that providing a fibre network, thus enabling material increases to bandwidth for consumers, would yield productivity, economic and competitive gains for New Zealand.

The proposal was to provide fibre optical infrastructure to households and businesses, and drive end-user uptake as fast as possible.

Stage 1: Standalone Funding and Financing Analysis (apply Principle 1)

Standalone funding and financing

This proposal has direct user-based revenue sources. These revenue sources are from individuals, households and businesses that will pay for internet connectivity provided over the fibre optic network. There is a clear nexus between benefits provided and beneficiaries, potential users have choice over their usage, and the price paid for services could be determined by arms-length third parties through market-based transactions.

This meant it was administratively efficient to collect revenue from beneficiaries (ie, no theoretical calculation or bespoke legislation was required to capture value from the beneficiary to fund the project) and these revenues could be collected by private sector entities.

The revenue source was expected to be high enough to provide commercial returns, but there was significant uncertainty about when the revenues would arrive.²¹ This resulted in the private sector being unwilling to finance the investment (ie, to undertake the investment now in exchange for potential revenues in the future). At the time, the private sector determined that for the foreseeable future, investing and delivering a comprehensive fibre network would not yield commercial returns to their shareholders.

Revenue from potential users would also only be available once a material portion of the network was complete and operational. This meant the revenue cash flows did not match the profile of the expenditure outflows and there was a significant lag between initial capital expenditure outflow and when revenue was generated – financing was required.

Non-financial Crown interventions

Prior to structuring the Crown's funding and/or financing support, the project was re-scoped to a more efficient technical and commercial model. The original proposal was to provide fibre-*to*-the-premises. However, the programme was rescoped to provide fibre-*past*-the-premises. This rescoped programme would install fibre along the roads past each premises rather than along the roads and into the premises. The last leg of fibre from the road to the premise would only be installed once a resident requests a fibre internet connection.

The cost of installing the last leg was passed onto commercial providers (and end-users). This was commercially acceptable as there was a clear de-risking event at the point when a resident requests the fibre connection.

This re-scoping lowered the initial capital requirement and reduced the underlying funding and financing gap by shifting a portion of capital expenditure to external parties and a less risky point in the future (ie, when demand was activated).

Further, as part of wider Government initiatives, market reforms in the telecommunications industry were taken to enable greater retail and wholesale copper network competition. Regulation on wholesale copper network pricing was underway and any new fibre network would fall into the same regulatory framework. However, these changes did not fully mitigate the underlying uncertainty of demand for fibre.

An interim conclusion: the *return potential* is high but *certainty of revenue* is low. The project can potentially generate market returns, but revenue sources are too risky (ie, the expected net present value of revenue at the risk-adjusted discount rate was not sufficient to meet capital funding and return requirements) for the private sector to invest and finance the upfront capital expenditure. Productive re-scoping of the programme reduced but could not resolve this *risk gap*.

²¹ The economic case indicated that fibre network services would be in high demand in the foreseeable future – but when this critical point was reached was uncertain. This uncertainty was driven by internet products of the time not requiring higher bandwidth and the uncertain competitive responses from the incumbent monopoly copper network operator.

Stage 2 Crown Funding and Financing Analysis (apply Principles 2 and 3)

Understanding the funding and/or financing gap

There was consensus that fibre optics networks represented the most 'future-proof' technology for connectivity and that there would be significant demand for fibre-enabled services at some point in the future.

The market had sufficient experience in laying other types of vertical network infrastructure to be able to efficiently manage and price supply-side risks. Internet service providers, through international observations and existing internet operations, could also make reasonable assumptions that the steady-state utilisation and price would be sufficient to provide commercial returns.

The principal risk preventing private sector delivery of this network was the timing of when this demand would eventuate. The private sector understood there would be sufficient demand for this service but was unsure of whether it would arrive in 2 or 5 or 20 years – this *risk gap* was managed by the private sector by delaying investment.

Crown funding and financing should be structured to be 'just enough' to make the project feasible and achieve policy objectives

The Government's objective was to accelerate investment, so the Crown's intervention sought to mitigate the costs associated with the period when the network would have insufficient demand to deliver a commercial return on investment.

The Crown deployed a commercial model designed to:

- a Resolve the key driver of non-investment (ie, uncertainty of demand) – time-limited (bridging) financing of upfront capital expenditure was provided. The 'bridging' aspect is important because the risk being mitigated was expected to be temporary and efficient external refinancing was expected to be achievable once the project was sufficiently de-risked.
- b Invest just the right amount – the Crown's financing support was only provided to install fibre "past the premises"; the investment partner was responsible for financing the installation of fibre from the street to the premises.
- c Provide a natural exit for the Crown as soon as external refinancing was feasible – As demand increased, and households and businesses connected to the fibre network, the investment partner was contractually required to repay a commensurate amount of the Crown's financing of the network. This allowed the recycling of capital to be directly linked to increasing levels of commercial viability.

The investment partners only needed to provide financing when:

- a there was a clear customer commitment to take up service as per b) and c) above thereby mitigating timing of demand risks, and/or
- b build costs exceed the costs that they committed to (thereby allocating delivery risk to those best able to manage them – ie, the investment partners).

Stage 3 Active Management (apply Principle 4)

This commercial model was developed by the Treasury but there was no logical or capable agency able to deliver the model and manage the contracts with the private sector. A special purpose entity was established with the sole purpose of managing this programme of work. This allowed the required expertise to be sourced and retained over the life of the programme.

Commercial decisions were also able to be managed at an arm's-length from the Crown which, along with the well-structured commercial model, enabled the UFBI to be successfully delivered.